Authorization for Credit Card Transactions

Department of Homeland Security

Form G-1450

How To Fill Out Form G-1450

1. Type or print legibly in black ink.
2. Complete the "**Applicant's/Petitioner's/Requester's Information**," "**Credit Card Billing Information**," and "**Credit Card Information**" sections and sign the authorization. **NOTE:** The credit card must be issued by a U.S. bank.
3. Place your Form G-1450 ON TOP of your application, petition, or request package.

NOTE: Failure to provide the requested information may result in DHS and your financial institution not accepting the payment. DHS cannot process credit card payments without an authorized signature.

NOTE: Please see the USCIS Form G-1450 website for additional information.

We recommend that you print or save a copy of your completed Form G-1450 to review in the future and for your records.

By completing this transaction, you agree that you have paid for a government service and that the filing fee, biometric services fee and all related financial transactions are final and not refundable, regardless of any action DHS takes on an application, petition, or request. You must submit all fees in the exact amounts. DHS will charge your credit card up to the amount you authorize below.

Please refer to the form(s) you are filing for additional information, or you may call the USCIS Customer Contact number at **1-800-375-5283**. For TTY (deaf or hard of hearing) call: **1-800-767-1833**.

Applicant's/Petitioner's/Requester's Information (Full Legal Name)		
Given Name (First Name) Gustavo Dartagnan	Middle Name (if any) N/A	Family Name (Last Name) XAVIER DO REGO

Credit Card Billing Information (Credit Card Holder's Name as it Appears on the Card)		
Given Name (First Name)	Middle Name (if any)	Family Name (Last Name)

Credit Card Holder's Billing Address:		
Street Number and Name	Apt. Ste. Flr. ☐ ☐ ☐	Number
City or Town	State	ZIP Code

Credit Card Holder's Signature and Contact Information:	
Credit Card Holder's Signature	
Credit Card Holder's Daytime Telephone Number	Credit Card Holder's Email Address

Credit Card Information		
Credit Card Number	**Credit Card Type:** ☐ Visa ☐ MasterCard ☐ American Express ☐ Discover	Authorized Payment Amount $ 715.00
Credit Card Expiration Date (mm/yyyy) CVV Code		

Authorization for Credit Card Transactions

Department of Homeland Security

Form G-1450

How To Fill Out Form G-1450

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2. Complete the "**Applicant's/Petitioner's/Requester's Information**," "**Credit Card Billing Information**," and "**Credit Card Information**" sections and sign the authorization. **NOTE:** The credit card must be issued by a U.S. bank.
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Applicant's/Petitioner's/Requester's Information (Full Legal Name)		
Given Name (First Name) Gustavo Dartagnan	Middle Name (if any) N/A	Family Name (Last Name) XAVIER DO REGO

Credit Card Billing Information (Credit Card Holder's Name as it Appears on the Card)		
Given Name (First Name)	Middle Name (if any)	Family Name (Last Name)

Credit Card Holder's Billing Address:		
Street Number and Name	Apt. Ste. Flr. ☐ ☐ ☐	Number
City or Town	State	ZIP Code

Credit Card Holder's Signature and Contact Information:	
Credit Card Holder's Signature	
Credit Card Holder's Daytime Telephone Number	Credit Card Holder's Email Address

Credit Card Information		
Credit Card Number	**Credit Card Type:** ☐ Visa ☐ MasterCard ☐ American Express ☐ Discover	Authorized Payment Amount $ 300.00
Credit Card Expiration Date (mm/yyyy) CVV Code		

Authorization for Credit Card Transactions

Department of Homeland Security

Form G-1450

How To Fill Out Form G-1450

1. Type or print legibly in black ink.
2. Complete the "**Applicant's/Petitioner's/Requester's Information**," "**Credit Card Billing Information**," and "**Credit Card Information**" sections and sign the authorization. **NOTE:** The credit card must be issued by a U.S. bank.
3. Place your Form G-1450 ON TOP of your application, petition, or request package.

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Please refer to the form(s) you are filing for additional information, or you may call the USCIS Customer Contact number at **1-800-375-5283**. For TTY (deaf or hard of hearing) call: **1-800-767-1833**.

Applicant's/Petitioner's/Requester's Information (Full Legal Name)		
Given Name (First Name) XAVIER DO REGO	Middle Name (if any) N/A	Family Name (Last Name) Gustavo Dartagnan

Credit Card Billing Information (Credit Card Holder's Name as it Appears on the Card)		
Given Name (First Name)	Middle Name (if any)	Family Name (Last Name)

Credit Card Holder's Billing Address:		
Street Number and Name	Apt. Ste. Flr. ☐ ☐ ☐	Number
City or Town	State	ZIP Code

Credit Card Holder's Signature and Contact Information:	
Credit Card Holder's Signature	
Credit Card Holder's Daytime Telephone Number	Credit Card Holder's Email Address

Credit Card Information		
Credit Card Number	**Credit Card Type:** ☐ Visa ☐ MasterCard ☐ American Express ☐ Discover	Authorized Payment Amount $ 2,965.00
Credit Card Expiration Date (mm/yyyy) CVV Code		

EB-2 IMMIGRANT PETITION
WITH REQUEST FOR A NATIONAL INTEREST WAIVER

Petitioner: REGO, Gustavo Dartagnan Xavier do

San Diego, CA - PO Box 90487

TABLE OF CONTENTS

Petitioner: REGO, Gustavo Dartagnan Xavier do
Type of Petition: Form I-140, EB-2 National Interest Waiver
Classification Sought: Immigration and Nationality Act § 203(b)(2)(B)

Forms	• Form G-1450 in the amount of $715 towards I-140 filing fee • Form G-1450 in the amount of $300 towards Asylum Program Fee • Form G-1450 in the amount of $2,965 towards Premium Processing Fee • Form G-1145 • Form G-28 • Form I-140 • ETA-9089, including Appendix A and Final Determination • I-907, Request for Premium Processing Service
Petition Cover Letter	• Summary of Cover Letter • Petition Cover Letter • Exhibit List
Exhibit A	• Resume
Exhibit B **ELIGIBILITY CRITERIA**	**Advanced Degree:** • Bachelor's degree in electrical engineering from Universidade Federal do Paraná, with transcripts and certified English translation • Graduate Program in Managerial Development from FAE Centro Universitário, with transcripts and certified English translation • Academic Credential Evaluation • Work records: - Employment records from GVT, Vivo, and Telefônica Brasil - Winprovit Purchase Order, Service Agreement, and contractor records - Brazilian company corporate records and registration
Exhibit C **NATIONAL INTEREST WAIVER**	**C.I - First Prong - Substantial Merit and National Importance:** • Business Plan for Dartagnan Telco Solutions • Research and Government Initiatives **C.II – Second Prong – Well-Positioned to Advance the Proposed Endeavor:** • All documents listed under Exhibit B • Specialized Training Programs and Professional Courses • Official GENBAND US LLC Invitation Letter • Record of Primary Project Contributions • License: - Professional License Documentation from CREA-PR - About CREA

	• Membership: - IEEE Communications Society 2026 Membership - IEEE Bylaws and About Us documentation • Evidence of High Salary: - Salary Changes - Individual Income Tax - Income Report - Glassdoor Salary Comparison • Letters of Support and Resume: - Mr. Andre Luiz Garcia Ruiz - Mr. Fernando Tauscheck - Mr. Juliano Boarão - Mr. Juliano Parreira dos Santos - Mr. Luis Carlos Beu - Mr. Leandro Braniak Alves - Mr. Rafael Avila Leite - Mr. Sergio Luiz de Lima - Mr. Pedro Javier Chia Luna - Mr. Darian Jose Rodriguez Del Carmen - Mr. Sergio Wolski • Tele.Síntese Annual Award for Innovation in Communications • Evidence of Financial Feasibility: - Accounting Statment - Corporate Documentation - Brazilian Tax Records - Property Registration - Property Appraisal Report
<u>Exhibit D</u> **PERSONAL DOCUMENTS**	• Birth Certificate and Corresponding Translation • Passport Biographical Page • U.S. Visa Page • Marriage Certificate and Corresponding Translation • Derivatives' Birth Certificates and Corresponding Translations • Derivatives' Passport Biographical Pages • Derivatives' U.S. Visa Pages

e-Notification of Application/Petition Acceptance

Department of Homeland Security
U.S. Citizenship and Immigration Services

USCIS
Form G-1145

What Is the Purpose of This Form?

Use this form to request an electronic notification (e-Notification) when U.S. Citizenship and Immigration Services accepts your immigration application. This service is available for applications filed at a USCIS Lockbox facility.

General Information

Complete the information below and clip this form to the first page of your application package. You will receive one e-mail and/or text message for each form you are filing.

We will send the e-Notification within 24 hours after we accept your application. Domestic customers will receive an e-mail and/or text message; overseas customers will only receive an e-mail. Undeliverable e-Notifications cannot be resent.

The e-mail or text message will display your receipt number and tell you how to get updated case status information. It will not include any personal information. The e-Notification does not grant any type of status or benefit; rather it is provided as a convenience to customers.

USCIS will also mail you a receipt notice (I-797C), which you will receive within 10 days after your application has been accepted; use this notice as proof of your pending application or petition.

USCIS Privacy Act Statement

AUTHORITIES: The information requested on this form is collected pursuant to section 103(a) of the Immigration and Nationality Act, as amended INA section 101, et seq.

PURPOSE: The primary purpose for providing the information on this form is to request an electronic notification when USCIS accepts immigration form. The information you provide will be used to send you a text and/or email message.

DISCLOSURE: The information you provide is voluntary. However, failure to provide the requested information may prevent USCIS from providing you a text and/or email message receipting your immigration form.

ROUTINE USES: The information provided on this form will be used by and disclosed to DHS personnel and contractors in accordance with approved routine uses, as described in the associated published system of records notices [**DHS/USCIS-007 - Benefits Information System and DHS/USCIS-001 - Alien File (A-File) and Central Index System (CIS)**, which can be found at **www.dhs.gov/privacy**]. The information may also be made available, as appropriate for law enforcement purposes or in the interest of national security.

Complete this form and clip it on top of the first page of your immigration form(s).

Applicant/Petitioner Full Last Name	Applicant/Petitioner Full First Name	Applicant/Petitioner Full Middle Name
XAVIER DO REGO	Gustavo Dartagnan	N/A
Email Address		Mobile Phone Number (Text Message)
gustavodartagnan@gmail.com		

Notice of Entry of Appearance as Attorney or Accredited Representative

Department of Homeland Security

DHS Form G-28
OMB No. 1615-0105
Expires 05/31/2021

Part 1. Information About Attorney or Accredited Representative

1. USCIS Online Account Number (if any)
▶ 0 0 7 4 9 2 6 2 5 4 3 8

Name of Attorney or Accredited Representative

2.a. Family Name (Last Name): HAVERROTH SILVA

2.b. Given Name (First Name): Otavio

2.c. Middle Name: N/A

Address of Attorney or Accredited Representative

3.a. Street Number and Name: PO Box 90487

3.b. ☐ Apt. ☐ Ste. ☐ Flr. N/A

3.c. City or Town: San Diego

3.d. State: CA 3.e. ZIP Code: 92169

3.f. Province: N/A

3.g. Postal Code: N/A

3.h. Country: USA

Contact Information of Attorney or Accredited Representative

4. Daytime Telephone Number: 5102419336

5. Mobile Telephone Number (if any): 5102419336

6. Email Address (if any): otavio@legalhs.com

7. Fax Number (if any): N/A

Part 2. Eligibility Information for Attorney or Accredited Representative

Select **all applicable** items.

1.a. ☒ I am an attorney eligible to practice law in, and a member in good standing of, the bar of the highest courts of the following states, possessions, territories, commonwealths, or the District of Columbia. If you need extra space to complete this section, use the space provided in **Part 6. Additional Information**.

Licensing Authority: California

1.b. Bar Number (if applicable): 343486

1.c. I (select **only one** box) ☒ am not ☐ am subject to any order suspending, enjoining, restraining, disbarring, or otherwise restricting me in the practice of law. If you are subject to any orders, use the space provided in **Part 6. Additional Information** to provide an explanation.

1.d. Name of Law Firm or Organization (if applicable): HS Law Corp

2.a. ☐ I am an accredited representative of the following qualified nonprofit religious, charitable, social service, or similar organization established in the United States and recognized by the Department of Justice in accordance with 8 CFR part 1292.

2.b. Name of Recognized Organization: N/A

2.c. Date of Accreditation (mm/dd/yyyy): N/A

3. ☐ I am associated with N/A, the attorney or accredited representative of record who previously filed Form G-28 in this case, and my appearance as an attorney or accredited representative for a limited purpose is at his or her request.

4.a. ☐ I am a law student or law graduate working under the direct supervision of the attorney or accredited representative of record on this form in accordance with the requirements in 8 CFR 292.1(a)(2).

4.b. Name of Law Student or Law Graduate: N/A

Part 3. Notice of Appearance as Attorney or Accredited Representative

If you need extra space to complete this section, use the space provided in **Part 6. Additional Information**.

This appearance relates to immigration matters before (select **only one** box):

1.a. ☒ U.S. Citizenship and Immigration Services (USCIS)

1.b. List the form numbers or specific matter in which appearance is entered.

I-140, ETA 9089, I-907

2.a. ☐ U.S. Immigration and Customs Enforcement (ICE)

2.b. List the specific matter in which appearance is entered.

N/A

3.a. ☐ U.S. Customs and Border Protection (CBP)

3.b. List the specific matter in which appearance is entered.

N/A

4. Receipt Number (if any)

► N/A

5. I enter my appearance as an attorney or accredited representative at the request of the (select **only one** box):

☐ Applicant ☒ Petitioner ☐ Requestor
☐ Beneficiary/Derivative ☐ Respondent (ICE, CBP)

Information About Client (Applicant, Petitioner, Requestor, Beneficiary or Derivative, Respondent, or Authorized Signatory for an Entity)

6.a. Family Name (Last Name) XAVIER DO REGO

6.b. Given Name (First Name) Gustavo Dartagnan

6.c. Middle Name N/A

7.a. Name of Entity (if applicable)

N/A

7.b. Title of Authorized Signatory for Entity (if applicable)

N/A

8. Client's USCIS Online Account Number (if any)

► N/A

9. Client's Alien Registration Number (A-Number) (if any)

► A- N/A

Client's Contact Information

10. Daytime Telephone Number

+55 (41) 98836-0365

11. Mobile Telephone Number (if any)

+55 (41) 98836-0365

12. Email Address (if any)

gustavodartagnan@gmail.com

Mailing Address of Client

NOTE: Provide the client's mailing address. **Do not** provide the business mailing address of the attorney or accredited representative **unless** it serves as the safe mailing address on the application or petition being filed with this Form G-28.

13.a. Street Number and Name PO Box 90487

13.b. ☐ Apt. ☐ Ste. ☐ Flr. N/A

13.c. City or Town San Diego

13.d. State CA **13.e.** ZIP Code 92169

13.f. Province N/A

13.g. Postal Code N/A

13.h. Country

USA

Part 4. Client's Consent to Representation and Signature

Consent to Representation and Release of Information

I have requested the representation of and consented to being represented by the attorney or accredited representative named in **Part 1.** of this form. According to the Privacy Act of 1974 and U.S. Department of Homeland Security (DHS) policy, I also consent to the disclosure to the named attorney or accredited representative of any records pertaining to me that appear in any system of records of USCIS, ICE, or CBP.

Part 4. Client's Consent to Representation and Signature (continued)

Options Regarding Receipt of USCIS Notices and Documents

USCIS will send notices to both a represented party (the client) and his, her, or its attorney or accredited representative either through mail or electronic delivery. USCIS will send all secure identity documents and Travel Documents to the client's U.S. mailing address.

If you want to have notices and/or secure identity documents sent to your attorney or accredited representative of record rather than to you, please select **all applicable** items below. You may change these elections through written notice to USCIS.

1.a. ☒ I request that USCIS send original notices on an application or petition to the business address of my attorney or accredited representative as listed in this form.

1.b. ☒ I request that USCIS send any secure identity document (Permanent Resident Card, Employment Authorization Document, or Travel Document) that I receive to the U.S. business address of my attorney or accredited representative (or to a designated military or diplomatic address in a foreign country (if permitted)).

NOTE: If your notice contains Form I-94, Arrival-Departure Record, USCIS will send the notice to the U.S. business address of your attorney or accredited representative. If you would rather have your Form I-94 sent directly to you, select **Item Number 1.c.**

1.c. ☐ I request that USCIS send my notice containing Form I-94 to me at my U.S. mailing address.

Signature of Client or Authorized Signatory for an Entity

2.a. Signature of Client or Authorized Signatory for an Entity

➡ Gustavo Dantagnan Xavier de Rego

2.b. Date of Signature (mm/dd/yyyy) 05/26/2026

Part 5. Signature of Attorney or Accredited Representative

I have read and understand the regulations and conditions contained in 8 CFR 103.2 and 292 governing appearances and representation before DHS. I declare under penalty of perjury under the laws of the United States that the information I have provided on this form is true and correct.

1. a. Signature of Attorney or Accredited Representative

1.b. Date of Signature (mm/dd/yyyy) 05/26/2026

2.a. Signature of Law Student or Law Graduate

N/A

2.b. Date of Signature (mm/dd/yyyy) N/A

Part 6. Additional Information

If you need extra space to provide any additional information within this form, use the space below. If you need more space than what is provided, you may make copies of this page to complete and file with this form or attach a separate sheet of paper. Type or print your name at the top of each sheet; indicate the **Page Number**, **Part Number**, and **Item Number** to which your answer refers; and sign and date each sheet.

1.a Family Name (Last Name): XAVIER DO REGO

1.b. Given Name (First Name): Gustavo Dartagnan

1.c. Middle Name: N/A

2.a. Page Number: N/A **2.b.** Part Number: N/A **2.c.** Item Number: N/A

2.d.

N/A

3.a. Page Number: N/A **3.b.** Part Number: N/A **3.c.** Item Number: N/A

3.d.

N/A

4.a. Page Number: N/A **4.b.** Part Number: N/A **4.c.** Item Number: N/A

4.d.

N/A

5.a. Page Number: N/A **5.b.** Part Number: N/A **5.c.** Item Number: N/A

5.d.

N/A

6.a. Page Number: N/A **6.b.** Part Number: N/A **6.c.** Item Number: N/A

6.d.

N/A

Immigrant Petition for Alien Workers

Department of Homeland Security
U.S. Citizenship and Immigration Services

USCIS
Form I-140
OMB No. 1615-0015
Expires 02/28/2027

For USCIS Use Only	Fee Stamp	Priority Date	Consulate	Action Block

Classification

- ☐ 203(b)(1)(A) Alien of Extraordinary Ability
- ☐ 203(b)(1)(B) Outstanding Professor or Researcher
- ☐ 203(b)(1)(C) Multinational Executive or Manager
- ☐ 203(b)(2) Member of Professions with Advanced Degree/Exceptional Ability
- ☐ 203(b)(3)(A)(i) Skilled Worker
- ☐ 203(b)(3)(A)(ii) Professional
- ☐ 203(b)(3)(A)(iii) Other Worker

Certification

- ☐ National Interest Waiver (NIW)
- ☐ Schedule A, Group I
- ☐ Schedule A, Group II

Remarks

To be completed by an Attorney or Accredited Representative (if any).	☒ Select this box if Form G-28 or Form G-28I is attached.	Attorney State Bar Number (if applicable)	Attorney or Accredited Representative USCIS Online Account Number (if any)
		343486	007492625438

► **START HERE - Type or print in black ink.**

Part 1. Information About the Person or Organization Filing This Petition

If an individual is filing this petition, answer **Item Numbers 1.a. - 1.c.** If a company or organization is filing this petition, answer **Item Number 2.**

1.a. Family Name (Last Name): XAVIER DO REGO

1.b. Given Name (First Name): Gustavo Dartagnan

1.c. Middle Name: N/A

2. Company or Organization Name: N/A

Mailing Address

(USCIS ZIP Code Lookup)

3.a. In Care Of Name: Otavio Haverroth Silva

3.b. Street Number and Name: PO Box 90487

3.c. ☐ Apt. ☐ Ste. ☐ Flr. N/A

3.d. City or Town: San Diego

3.e. State: CA **3.f.** ZIP Code: 92169

3.g. Province: N/A

3.h. Postal Code: N/A

3.i. Country: USA

Other Information

4. IRS Employer Identification Number (EIN) ► N/A

5. Are you a nonprofit organized as tax exempt or a governmental research organization? ☐ Yes ☒ No

6. Do you currently employ a total of 25 or fewer full-time equivalent employees in the United States, including all affiliates or subsidiaries of this company/organization? ☒ Yes ☐ No

7. U.S. Social Security Number (SSN) (if any) ► N/A

8. USCIS Online Account Number (if any) ► N/A

Part 2. Petition Type

This petition is being filed for (select **only one** box):

1.a. ☐ An alien of extraordinary ability.

1.b. ☐ An outstanding professor or researcher.

1.c. ☐ A multinational executive or manager.

1.d. ☐ A member of the professions holding an advanced degree or an alien of exceptional ability (who is **NOT** seeking a National Interest Waiver (NIW)).

1.e. ☐ A professional (at a minimum, possessing a bachelor's degree or a foreign degree equivalent to a U.S. bachelor's degree).

Part 2. Petition Type (continued)

1.f. ☐ A skilled worker (requiring at least two years of specialized training or experience).

1.g. ☐ Any other worker (requiring less than two years of training or experience).

1.h. ☒ An alien applying for an NIW (who **IS** a member of the professions holding an advanced degree or an alien of exceptional ability).

This petition is being filed (select **only one** box):

2.a. ☐ To amend a previously filed petition.

Previous Petition Receipt Number

► N/A

2.b. ☐ For the Schedule A, Group I or II designation.

Part 3. Information About the Person for Whom You Are Filing

1.a. Family Name (Last Name): XAVIER DO REGO

1.b. Given Name (First Name): Gustavo Dartagnan

1.c. Middle Name: N/A

Mailing Address

2.a. In Care Of Name: Otavio Haverroth Silva

2.b. Street Number and Name: PO Box 90487

2.c. ☐ Apt. ☐ Ste. ☐ Flr. N/A

2.d. City or Town: San Diego

2.e. State: CA **2.f.** ZIP Code: 92169

2.g. Province: N/A

2.h. Postal Code: N/A

2.i. Country: USA

Other Information

3. Date of Birth (mm/dd/yyyy): 09/23/1978

4. City/Town/Village of Birth: Campo Mourao

5. State or Province of Birth: Parana

6. Country of Birth: Brazil

7. Country of Citizenship or Nationality: Brazil

8. Alien Registration Number (A-Number) (if any)

► A- N/A

9. U.S. SSN (if any) ► N/A

Information About His or Her Last Arrival in the United States

If the person for whom you are filing is in the United States, provide the following information.

10. Date of Last Arrival (mm/dd/yyyy): N/A

11.a. Form I-94 Arrival-Departure Record Number

► N/A

11.b. Expiration Date of Authorized Stay Shown on Form I-94 (mm/dd/yyyy): N/A

11.c. Status on Form I-94 (for example, class of admission, or paroled, if paroled): N/A

12. Passport Number: N/A

13. Travel Document Number: N/A

14. Country of Issuance for Passport or Travel Document: N/A

15. Expiration Date for Passport or Travel Document (mm/dd/yyyy): N/A

Part 4. Processing Information

Provide the following information for the person named in **Part 3.** (select **only one** box):

1.a. ☒ Alien will apply for a visa abroad at a U.S. Embassy or U.S. Consulate at:

1.b. City or Town: Rio de Janeiro

1.c. Country: Brazil

2.a. ☐ Alien is in the United States and will apply for adjustment of status to that of lawful permanent resident.

Part 4. Processing Information (continued)

2.b. Alien's current country of residence or, if now in the United States, last country of permanent residence abroad.

Brazil

If you provided a United States address in **Part 3.**, provide the person's foreign address in **Item Numbers 3.a. - 3.f.**:

3.a. Street Number and Name: 1815 Sao Casemiro Ave

3.b. ☐ Apt. ☐ Ste. ☐ Flr. N/A

3.c. City or Town: Araucaria

3.d. Province: Parana

3.e. Postal Code: 83701990

3.f. Country: Brazil

If the person's native alphabet is other than Roman letters, type or print the person's foreign name and address in the native alphabet in **Item Numbers 4.a. - 5.g.**:

4.a. Family Name (Last Name): N/A

4.b. Given Name (First Name): N/A

4.c. Middle Name: N/A

Mailing Address

5.a. In Care Of Name: N/A

5.b. Street Number and Name: N/A

5.c. ☐ Apt. ☐ Ste. ☐ Flr. N/A

5.d. City or Town: N/A

5.e. Province: N/A

5.f. Postal Code: N/A

5.g. Country: N/A

If you answer "Yes" to **Item Numbers 6.a. - 10.**, provide the case number, office location, date of decision, and disposition of the decision in the space provided in **Part 11. Additional Information**.

6.a. Are you filing any other petitions or applications with this Form I-140? ☒ Yes ☐ No

6.b. If you answered "Yes" **to Item Number 6.a.**, select all applicable boxes:

- ☐ Form I-485
- ☐ Form I-131
- ☐ Form I-765
- ☒ Other (Provide an explanation in **Part 11. Additional Information**.)

7. Is the person for whom you are filing in removal proceedings? ☐ Yes ☒ No

8. Has any immigrant visa petition ever been filed by or on behalf of this person? ☐ Yes ☒ No

9. Are you filing this petition without an original labor certification because the original labor certification was previously submitted in support of another Form I-140? ☐ Yes ☒ No

10. If you are filing this petition without an original labor certification, are you requesting that U.S. Citizenship and Immigration Services (USCIS) request a duplicate labor certification from the Department of Labor (DOL)? ☐ Yes ☒ No

Part 5. Additional Information About the Petitioner

Type of petitioner (select **only one** box):

1.a. ☐ Employer

1.b. ☒ Self

1.c. ☐ Other (For example, Lawful Permanent Resident, U.S. citizen or any other person filing on behalf of the alien)

N/A

If a company or an organization is filing this petition, provide the following information:

2. Type of Business: N/A

3. Date Established (mm/dd/yyyy): N/A

4. Current Number of U.S. Employees: N/A

5. Gross Annual Income $ N/A

6. Net Annual Income $ N/A

7. NAICS Code ► N/A

8. Labor Certification DOL Case Number: N/A

Part 5. Additional Information About the Petitioner (continued)

9. Labor Certification DOL Filing Date (mm/dd/yyyy)

N/A

10. Labor Certification Expiration Date (mm/dd/yyyy)

N/A

If an individual is filing this petition, provide the following information.

11. Occupation

Senior Telecom Engineer

12. Annual Income $ N/A

Part 6. Basic Information About the Proposed Employment

1. Job Title

Chief Executives

2. SOC Code ▶ 11 - 1011

3. Nontechnical Job Description

See page 8.

4. Is this a full-time position? ☒ Yes ☐ No

5. If the answer to **Item Number 4.** is "No," how many hours per week for the position?

N/A

6. Is this a permanent position? ☒ Yes ☐ No

7. Is this a new position? ☒ Yes ☐ No

8. Wages (Specify hour, week, month, or year):

$ 100,000.00 per year

Worksite Location

For **Item Numbers 9.a. - 9.e.**, provide the address where the person will work if different from the address provided in **Part 1.**

9.a. Street Number and Name: To be determined

9.b. ☐ Apt. ☐ Ste. ☐ Flr. To be determined

9.c. City or Town: Dallas

9.d. State: TX **9.e.** ZIP Code: To be determined

Part 7. Information About the Spouse and All Children of the Person for Whom You Are Filing

For **Part 7.**, provide information on the spouse and all children related to the individual for whom you are filing this petition. Also, note if the individual will apply for a visa abroad or adjustment of status as the dependent of the individual for whom the petition is filed. If you need extra space to provide information about additional family members, use the space provided in **Part 11. Additional Information**.

Person 1

1.a. Family Name (Last Name): PERCIAK

1.b. Given Name (First Name): Milena Cristina

1.c. Middle Name: N/A

2. Date of Birth (mm/dd/yyyy): 08/05/1986

3. Country of Birth: Brazil

4. Relationship: Spouse

5. Is he or she applying for adjustment of status? ☐ Yes ☒ No

6. Is he or she applying for a visa abroad? ☒ Yes ☐ No

Person 2

7.a. Family Name (Last Name): PERCIAK XAVIER

7.b. Given Name (First Name): Miguel

7.c. Middle Name: N/A

8. Date of Birth (mm/dd/yyyy): 05/17/2023

9. Country of Birth: Brazil

10. Relationship: Son

11. Is he or she applying for adjustment of status? ☐ Yes ☒ No

12. Is he or she applying for a visa abroad? ☒ Yes ☐ No

Part 7. Information About Spouse and All Children of the Person for Whom You Are Filing (continued)

Person 3

13.a. Family Name (Last Name): PERCIAK XAVIER

13.b. Given Name (First Name): Veronica

13.c. Middle Name: N/A

14. Date of Birth (mm/dd/yyyy): 04/17/2025

15. Country of Birth: Brazil

16. Relationship: Daughter

17. Is he or she applying for adjustment of status? ☐ Yes ☒ No

18. Is he or she applying for a visa abroad? ☒ Yes ☐ No

Person 4

19.a. Family Name (Last Name): N/A

19.b. Given Name (First Name): N/A

19.c. Middle Name: N/A

20. Date of Birth (mm/dd/yyyy): N/A

21. Country of Birth: N/A

22. Relationship: N/A

23. Is he or she applying for adjustment of status? ☐ Yes ☐ No

24. Is he or she applying for a visa abroad? ☐ Yes ☐ No

Person 5

25.a. Family Name (Last Name): N/A

25.b. Given Name (First Name): N/A

25.c. Middle Name: N/A

26. Date of Birth (mm/dd/yyyy): N/A

27. Country of Birth: N/A

28. Relationship: N/A

29. Is he or she applying for adjustment of status? ☐ Yes ☐ No

30. Is he or she applying for a visa abroad? ☐ Yes ☐ No

Person 6

31.a. Family Name (Last Name): N/A

31.b. Given Name (First Name): N/A

31.c. Middle Name: N/A

32. Date of Birth (mm/dd/yyyy): N/A

33. Country of Birth: N/A

34. Relationship: N/A

35. Is he or she applying for adjustment of status? ☐ Yes ☐ No

36. Is he or she applying for a visa abroad? ☐ Yes ☐ No

Part 8. Contact Information, Certification, and Signature of the Petitioner or Authorized Signatory

Petitioner or Authorized Signatory's Contact Information

1.a. Petitioner's or Authorized Signatory's Family Name (Last Name)
XAVIER DO REGO

1.b. Petitioner's or Authorized Signatory's Given Name (First Name)
Gustavo Dartagnan

2. Petitioner's or Authorized Signatory's Title
N/A

3. Petitioner's or Authorized Signatory's Daytime Telephone Number
+55 (41) 98836-0365

4. Petitioner's or Authorized Signatory's Mobile Telephone Number (if any)
+55 (41) 98836-0365

5. Petitioner's or Authorized Signatory's Email Address (if any)
gustavodartagnan@gmail.com

Petitioner's or Authorized Signatory's Certification and Signature

If filing this petition on behalf of an organization, I certify that I am authorized to do so by the organization:

a. I reviewed and provided or authorized all of the responses and information in my petition;

b. I understood all of the responses and information contained in, and submitted with, my petition; and

c. All of the responses and information were complete, true, and correct at the time of filing

Furthermore, I authorize the release of any information from any and all of my records as authorized signatory and the petitioner's records that USCIS may need to determine the petitioner's eligibility for an immigration request and to other entities and persons where necessary for the administration and enforcement of U.S. immigration law.

6.a. Petitioner's or Authorized Signatory's Signature
Gustavo Dartagnan Xavier do Rego

6.b. Date of Signature (mm/dd/yyyy) 05/26/2026

Part 9. Interpreter's Contact Information, Certification, and Signature

Interpreter's Full Name

1.a. Interpreter's Family Name (Last Name)
N/A

1.b. Interpreter's Given Name (First Name)
N/A

2. Interpreter's Business or Organization Name
N/A

Interpreter's Contact Information

3. Interpreter's Daytime Telephone Number
N/A

4. Interpreter's Mobile Telephone Number (if any)
N/A

5. Interpreter's Email Address (if any)
N/A

Interpreter's Certification and Signature

I certify, under penalty of perjury, that I am fluent in English and N/A, and I have interpreted every question on the petition and Instructions and interpreted the petitioner's or authorized signatory's answers to the questions in that language, and the petitioner or authorized signatory informed me that they understood every instruction, question, and answer on the petition.

6.a. Interpreter's Signature
N/A

6.b. Date of Signature (mm/dd/yyyy) N/A

Part 10. Contact Information, Certification, and Signature of the Person Preparing this Petition, if Other Than the Petitioner or Authorized Signatory

Preparer's Full Name

1. Preparer's Family Name (Last Name)

HAVERROTH SILVA

Preparer's Given Name (First Name)

Otavio

2. Preparer's Business or Organization Name

HS Law Corp

Preparer's Contact Information

3. Preparer's Daytime Telephone Number

5102419336

4. Preparer's Mobile Telephone Number (if any)

5102419336

5. Preparer's Email Address (if any)

otavio@legalhs.com

Preparer's Certification and Signature

I certify, under penalty of perjury, that I prepared this petition for the petitioner or authorized signatory at their request and with express consent and that all of the responses and information contained in and submitted with the petition are complete, true, and correct and reflects only information provided by the petitioner or authorized signatory. The petitioner or authorized signatory reviewed the responses and information and informed me that they understand the responses and information in or submitted with the petition.

6. Preparer's Signature



Date of Signature (mm/dd/yyyy) 05/26/2026

Part 11. Additional Information

If you need extra space to provide any additional information within this petition, use the space below. If you need more space than what is provided, you may make copies of this page to complete and file with this petition or attach a separate sheet of paper. Type or print your name and A-Number (if any) at the top of each sheet; indicate the **Page Number**, **Part Number**, and **Item Number** to which your answer refers; and sign and date each sheet.

1. Family Name (Last Name): XAVIER DO REGO

Given Name (First Name): Gustavo Dartagnan

Middle Name: N/A

2. IRS EIN ▶ N/A

3.

Page Number	Part Number	Item Number
3	4	6.b

I-907

4.

Page Number	Part Number	Item Number
4	6	3

Leads company strategy and technical vision, designing telecommunications networks and guiding infrastructure development. Oversees teams to ensure reliable and efficient performance, provides client consulting, supports business development, and ensures compliance with industry standards.

5.

Page Number	Part Number	Item Number
N/A	N/A	N/A

N/A

6.

Page Number	Part Number	Item Number
N/A	N/A	N/A

N/A

7.

Page Number	Part Number	Item Number
N/A	N/A	N/A

N/A

Employment OMB Approval: 1205-0451
Expiration Date: 02/28/2029

Application for Permanent Employment Certification
Form ETA-9089 – Final Determination: Permanent Employment Certification Approval
U.S. Department of Labor

PERMANENT EMPLOYMENT CERTIFICATION APPROVAL

A. U.S. Government Agency Use Only

Pursuant to the provisions of Sections 212(a)(5)(A) of the Immigration and Nationality Act, as amended, the Department hereby certifies that there are not sufficient workers who are able, willing, and qualified, and who will be available at the time of application for a visa and admission into the United States and place needed to fill the job opportunities for which certification is sought, and the permanent employment of the foreign worker will not adversely affect the wages and working conditions of workers in the United States similarly employed.

Therefore, by virtue of the signature below, the Department hereby acknowledges granting certification for the following *Application for Permanent Employment Certification* (Form ETA-9089):

1. DOL Case Number		2. Case Status
3. Employer Legal Business Name		4. Employer FEIN
5. Foreign Worker's Last (family) Name		
6. Foreign Worker's First (given) Name		
7. Foreign Worker's Middle Name(s)		
8. Job Title		
9. SOC Code	10. SOC Occupational Title	
Labor Certification Validity Information		
11. Filing Date	12. Determination Date	13. Expiration Date
14. Department of Labor Office of Foreign Labor Certification *(electronic signature)*		

Pursuant to 20 CFR 656, the aforementioned permanent labor certification is valid only for the job opportunity, the foreign worker, and the area of intended employment specified on the approved Form ETA-9089, including all appendices and any modifications approved by the Department. The aforementioned filing date on this approved *Application for Permanent Employment Certification*, established under 20 CFR 656.17(c), may be used as a priority date by the Department of Homeland Security and the Department of State, as appropriate. This approved *Application for Permanent Employment Certification* will expire if not filed in support of *Immigrant Petition for Alien Workers* (Form I-140) with the Department of Homeland Security by the aforementioned expiration date.

The foreign worker covered by this approved *Application for Permanent Employment Certification* has declared under Section B below, under penalty of perjury, that the foreign worker has read and reviewed every page of Appendix A for this approved Form ETA-9089, takes full responsibility for the accuracy of all information contained therein, and intends to accept permanent employment in the job opportunity specified on the approved Form ETA-9089, including all appendices, offered by the employer if granted a visa or an adjustment of status based on this permanent labor certification.

The employer covered by this approved *Application for Permanent Employment Certification* has declared under Section D below under penalty of perjury that it has read and reviewed every page of this approved Form ETA-9089, including all appendices, and takes full responsibility for the accuracy of all information contained therein and all documentation supporting this approved *Application for Permanent Employment Certification*, including any representations made by the employer's authorized preparer, agent or attorney, as applicable.

PERM Case Number: _____ Case Status: _____ Determination Date: _____ Expiration Date: _____

OMB Approval: 1205-0451
Expiration Date:02/28/2029

Application for Permanent Employment Certification
Form ETA-9089 – Final Determination: Permanent Labor Certification Approval
U.S. Department of Labor

B. Foreign Worker Declaration

I declare under penalty of perjury that I have read and reviewed all information contained in Appendix A of this approved Form ETA-9089, and that to the best of my knowledge the information contained therein is true and accurate. *I understand that to knowingly and/or willfully furnish materially false information in the preparation of this form and any supplement thereto or to aid, abet, or counsel another to do so is a federal offense punishable by fines, imprisonment, or both (18 U.S.C. 2, 1001, 1546, 1621).*

I further declare that I am the person identified under Section A, Fields 5, 6, and 7 above. I did not participate in any activities involving the interviewing or consideration of U.S. workers and intend to accept permanent employment in the job opportunity specified on this approved Form ETA-9089, including all appendices, offered by the employer if granted a visa or an adjustment of status based on this permanent labor certification.

1. Signature *	2. Date Signed *
Gustavo Dontagnan Xavier de Rego	05/26/2026

C. Attorney or Agent Declaration

I declare under penalty of perjury that I am an attorney for the employer, or that I am an employee of, or hired by, the employer listed in Section C of the Form ETA-9089, and that I have been designated by that employer in accordance with 20 CFR 656.10(b) to act on its behalf in connection with this application.

I hereby certify that I have provided to the employer the entire Form ETA-9089, appendices, and all supporting documentation for review and to the best of my knowledge the information contained herein is true and accurate, including the employer's declaration regarding activities that I have undertaken on the employer's behalf in connection with this application. *I understand that to knowingly and/or willfully furnish materially false information in the preparation of this form and any supplement hereto or to aid, abet, or counsel another to do so is a federal offense punishable by fines, imprisonment, or both (18 U.S.C. 2, 1001, 1546, 1621).*

1. Attorney or Agent's Last (family) Name *	2. First (given) Name *	3. Middle Initial §
HAVERROTH SILVA	Otavio	N/A
4. Firm/Business Name § HS Law Corp		
5. Signature *	6. Date Signed *	
	05/26/2026	

D. Employer Declaration

I hereby designate the agent or attorney identified in Section C (if any) of the Form ETA-9089 to represent me for the purpose of labor certification and, by virtue of my signature in Field 5 below, **I take full responsibility** for the accuracy of any representations made by my agent or attorney, and my designated preparer identified in Section C above, on every page of the Form ETA-9089, including all appendices, and documentation supporting this application.

I declare under penalty of perjury that I have read and reviewed this application, including every page of the Form ETA-9089, appendices, and supporting documentation, and that to the best of my knowledge the information contained therein is true and accurate. *I understand that to knowingly and/or willfully furnish materially false information in the preparation of this form and any supplement thereto or to aid, abet, or counsel another to do so is a federal offense punishable by fines, imprisonment, or both (18 U.S.C. 2, 1001, 1546, 1621).*

1. Last (family) Name *	2. First (given) Name *	3. Middle Initial §
4. Title *		
5. Signature *	6. Date Signed *	

For Public Burden Statement, see the Instructions for Form ETA-9089.

PERM Case Number: _____ Case Status: _____ Determination Date: _____ Expiration Date: _____

OMB Approval: 1205-0451
Expiration Date:02/28/2029

Application for Permanent Employment Certification
Form ETA-9089 – Appendix A: Foreign Worker Information
U.S. Department of Labor

FOREIGN WORKER INFORMATION

A. Foreign Worker Contact Information

1. Foreign Worker's Last (family) Name * XAVIER DO REGO		
2. Foreign Worker's First (given) Name * Gustavo Dartagnan		
3. Foreign Worker's Middle Name(s) * N/A		
4. Address 1 *(current)* * 1815 Sao Casemiro Ave		
5. Address 2 *(apartment/suite/floor and number)* ***§*** N/A		
6. City * Araucaria	7. State * N/A	8. Postal Code * 83701990
9. Country * Brazil	10. Province ***§*** Parana	
11. Date of Birth *(mm/dd/yyyy)* * 09/23/1978	12. Class of Admission * N/A	13. Alien Registration Number (A#) (if applicable) * N/A
14. Country of Birth * Brazil		
15. Country of Citizenship or Nationality * Brazil		

B. Foreign Worker Education §

a. Educational Attainment Information 1

1. Education: U.S. Diploma/Degree attained relevant to the job opportunity ☐ None ☐ High School/GED ☐ Associate ☐ Bachelor's ☐ Master's ☐ Doctorate (PhD) ■ Other Degree (JD, MD, etc.)	
1a. If "Other Degree" in question 1, specify the diploma/degree attained Postgraduate Specialization	
1b. Specify major(s) and/or field(s) of study (may list more than one related major and more than one field) Management Development	
1c. Name of Institution that issued the degree/diploma FAE University Center	
1d. Name of Country of institution identified in question 1c Brazil	1e. Month/year attained (*mm/yyyy*) 06/2018

b. Educational Attainment Information 2

1. Education: U.S. Diploma/Degree attained relevant to the job opportunity ☐ None ☐ High School/GED ☐ Associate ■ Bachelor's ☐ Master's ☐ Doctorate (PhD) ☐ Other Degree (JD, MD, etc.)	
1a. If "Other Degree" in question 1, specify the diploma/degree attained	
1b. Specify major(s) and/or field(s) of study (may list more than one related major and more than one field) Electrical Engineering	
1c. Name of Institution that issued the degree/diploma Federal University of Parana	
1d. Name of Country of Institution identified in question 1c Brazil	1e. Month/year attained (*mm/yyyy*) 05/2006

PERM Case Number: _____ Case Status: _____ Determination Date: _____ Expiration Date: _____

***B. Foreign Worker Education** (continued)*

c. Educational Attainment Information 3

1. Education: U.S. Diploma/Degree attained relevant to the job opportunity ☐ None ☐ High School/GED ☐ Associate ☐ Bachelor's ☐ Master's ☐ Doctorate (PhD) ☐ Other Degree (JD, MD, etc.)	
1a. If "Other Degree" in question 1, specify the diploma/degree attained	
1b. Specify major(s) and/or field(s) of study (may list more than one related major and more than one field)	
1c. Name of Institution that issued the degree/diploma	
1d. Name of Country of Institution identified in question 1c	1e. Month/year attained (*mm/yyyy*)

d. Educational Attainment Information 4

1. Education: U.S. Diploma/Degree attained relevant to the job opportunity ☐ None ☐ High School/GED ☐ Associate's ☐ Bachelor's ☐ Master's ☐ Doctorate (PhD) ☐ Other Degree (JD, MD, etc.)	
1a. If "Other Degree" in question 1, specify the diploma/degree attained	
1b. Specify major(s) and/or field(s) of study (may list more than one related major and more than one field)	
1c. Name of Institution that issued the degree/diploma	
1d. Name of Country of Institution identified in question 1c	1e. Month/year attained (*mm/yyyy*)

e. Educational Attainment Information 5

1. Education: U.S. Diploma/Degree attained relevant to the job opportunity ☐ None ☐ High School/GED ☐ Associate's ☐ Bachelor's ☐ Master's ☐ Doctorate (PhD) ☐ Other Degree (JD, MD, etc.)	
1a. If "Other Degree" in question 1, specify the diploma/degree attained	
1b. Specify major(s) and/or field(s) of study (may list more than one related major and more than one field)	
1c. Name of Institution that issued the degree/diploma	
1d. Name of Country of Institution identified in question 1c	1e. Month/year attained (*mm/yyyy*)

C. Foreign Worker Training Qualifications §

a. Training, Certification(s), and/or License(s) Information 1

1. Name of Institution/School/Training provider Conselho Regional de Engenharia e Agronomia do Parana (CREA-PR)
1a. Name of training, coursework, experience received Professional License

1b. Training/Certifications/licenses attained (if applicable) PR-88187/D		
1c. Start date of training (*mm/yyyy*)	1d. End date of training (*mm/yyyy*)	1e. Month/year awarded (*mm/yyyy*)

b. Training, Certification(s), and/or License(s) Information 2

1. Name of Institution/School/Training provider BROADCOM and others		
1a. Name of training, coursework, experience received VMware VSAN: Management and Operations [V7]		
1b. Training/Certifications/Licenses attained (if applicable)		
1c. Start date of training (*mm/yyyy*)	1d. End date of training (*mm/yyyy*)	1e. Month/year awarded (*mm/yyyy*) 05/2022

c. Training, Certification(s), and/or License(s) Information 3

1. Name of Institution/School/Training provider BROADCOM and others		
1a. Name of training, coursework, experience received VMware vSAN: Troubleshooting [V7]		
1b. Training/certifications/licenses attained (if applicable)		
1c. Start date of training (*mm/yyyy*)	1d. End date of training (*mm/yyyy*)	1e. Month/year awarded (*mm/yyyy*) 05/2022

D. Foreign Worker Training Qualifications §

a. Skills, Abilities, and Proficiencies 1

1. Name of Employer/Institution/School/Training Provider Federal University of Parana	
1a. Country Brazil	1b. State, Territory, or Province Parana
1c. Description of specific skills, abilities, and/or proficiencies the foreign worker possesses or attained, which help establish whether the foreign worker meets the requirements identified for the job opportunity *(up to 1,500 characters)* Finished Intermediate Level English Course	

b. Skills, Abilities, and Proficiencies 2

1. Name of Employer/Institution/School/Training Provider	
Italian Culture Center - Parana	
1a. Country	1b. State, Territory, or Province
Brazil	Parana

1c. Description of specific skills, abilities, and/or proficiencies the foreign worker possesses or attained, which help establish whether the foreign worker meets the requirements identified for the job opportunity *(up to 1,500 characters)*

Italian Language – Level B1

E. Foreign Worker Work Experience §

a. Work Experience 1

1. Employer Name			
Winprovit			
1a. Address 1			
774 Vasco da Gama Ave			
1b. Address 2			
Space 08			
1c. City or Town			1d. Postal Code
Vila Nova de Gaia			4430247
1e. Country		1f. State, Territory, or Province	
Portugal		Porto District	
1g. Job Title			
SR Telecom Engineer			
1h. Start Date *(mm/yyyy)*	1i. End Date *(mm/yyyy)*	1j. Present	1k. Hours Worked Per Week
10/2022	Present	■ Yes ☐ No	40

1l. Job Duties: Specify details of the job (work tasks performed, use of tools/equipment, supervision, etc.) (*up to 3,500 characters*)

Managed telecommunications projects related to voice network infrastructure and system migrations.
Provided technical support for mobile and fixed voice network operations.
Developed and maintained Linux automation solutions to improve operational efficiency.
Designed and implemented Python-based software and automation tools for telecommunications systems.
Automated configuration, firmware upgrades, and backup processes for network devices.
Oversaw regulatory compliance initiatives, including FCC STIR/SHAKEN robocall mitigation requirements.
Developed monitoring and observability solutions integrating network performance indicators and operational alerts.
Supported network reliability, fault mitigation, and performance analysis through data-driven dashboards and reporting.

For Public Burden Statement, see the Instructions for Form ETA-9089.

OMB Approval: 1205-0451
Expiration Date: 02/28/2029

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Alura Online Education
Name of training: Python Brazil: data validation in the national standard
Month/year awarded: 04/2022

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Alura Online Education
Name of training: Python Collections part 1: lists and tuples
Month/year awarded: 04/2022

For Public Burden Statement, see the Instructions for Form ETA-9089.

OMB Approval: 1205-0451
Expiration Date: 02/28/2029

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Alura Online Education
Name of training: Python: understanding Object-Oriented Programming
Month/year awarded: 04/2022

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd
Name of training: UMG8900 Fundamental Training
Month/year awarded: 04/2012

For Public Burden Statement, see the Instructions for Form ETA-9089.

OMB Approval: 1205-0451
Expiration Date: 02/28/2029

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: MRFC System Fundamental and Data Configuration Training
Month/year awarded: 03/2012

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: IMS Overview Training
Month/year awarded: 02/2012

For Public Burden Statement, see the Instructions for Form ETA-9089.

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: CSC3300 Data Configuration Training
Month/year awarded: 03/2012

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: MRP6600 Data Configuration Training
Month/year awarded: 03/2012

For Public Burden Statement, see the Instructions for Form ETA-9089.

OMB Approval: 1205-0451
Expiration Date: 02/28/2029

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: ATS9900 Fundamental Training
Month/year awarded: 04/2012

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: IMS Operation and Maintenance Training
Month/year awarded: 02/2012

For Public Burden Statement, see the Instructions for Form ETA-9089.

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: HSS9820 Data Configuration Training
Month/year awarded: 03/2012

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: IMS ATCA Platform (Hardware/OMS2600) Training
Month/year awarded: 02/2012

For Public Burden Statement, see the Instructions for Form ETA-9089.

OMB Approval: 1205-0451
Expiration Date: 02/28/2029

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: OSTA2.0 Hardware Platform Training
Month/year awarded: 02/2012

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: IMS Operation and Maintenance Training SPG 2800
Month/year awarded: 02/2012

For Public Burden Statement, see the Instructions for Form ETA-9089.

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: 1CG9815 Operation and Maintenance Training
Month/year awarded: 05/2012

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: SSAR Training Center, Huawei Technologies Co., Ltd.
Name of training: CSC3300/HSS9820 Operation and Maintenance Training and Provisioning Suscribers
Month/year awarded: 03/2012

For Public Burden Statement, see the Instructions for Form ETA-9089.

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: FIAP – Centro Universitário
Name of training: DevOps & Agile Culture
Month/year awarded: 12/2020

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Acme Packet
Name of training: Net-Net Session Director Advanced Configuration
Month/year awarded: 11/2019

For Public Burden Statement, see the Instructions for Form ETA-9089.

OMB Approval: 1205-0451
Expiration Date: 02/28/2029

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Genband Knowledge Services
Name of training: A218 – C–20–Adaptive Application Engine (A2) Administration
Month/year awarded: 09/2011

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Genband Knowledge Services
Name of training: SP2K15 – Signaling Point 2000 Signaling Gateway Operations, Administration and Maintenance
Month/year awarded: 09/2011

For Public Burden Statement, see the Instructions for Form ETA-9089.

OMB Approval: 1205-0451
Expiration Date: 02/28/2029

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Genband Knowledge Services
Name of training: C2015 C20 Solution fault Management
Month/year awarded: 10/2011

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Genband Knowledge Services
Name of training: C2010 – C20 Solution Overview
Month/year awarded: 09/2011

For Public Burden Statement, see the Instructions for Form ETA-9089.

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Genband Knowledge Services
Name of training: ATCA15 – C20–ATCA Operations and Maintenance
Month/year awarded: 09/2011

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Genband Knowledge Services
Name of training: S330/S340 Basic Operations, Administration, Maintenance & Provisioning Course
Month/year awarded: 07/2011

For Public Burden Statement, see the Instructions for Form ETA-9089.

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Nortel
Name of training: 1775A CS 2000 – Compact/CS 2100 – Operations and Maintenace
Month/year awarded: 05/2010

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: IWF – Consultoria e Treinamento
Name of training: Signaling in NGN Networks
Month/year awarded: 04/2010

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SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Alcatel Lucent University
Name of training: Started Pack Enterprise
Month/year awarded: 09/2009

B. Supplemental Information 2 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Alcatel Lucent University
Name of training: VoIP Advanced
Month/year awarded: 10/2009

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SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	C	1a. Section Name or Category of Supplemental Information	**Foreign Worker Training Qualifications**

1b. Supplemental Information. *(up to 1,500 characters)*

Training, Certification(s), and/or License(s) Information
Name of institution: Alcatel Lucent University
Name of training: CPU Loading & Redundancy
Month/year awarded: 10/2009

B. Supplemental Information 2 §

1. Section and Item Number	E	1a. Section Name or Category of Supplemental Information	**Foreign Worker Work Experience**

1b. Supplemental Information. *(up to 1,500 characters)*

Work Experience
Employer name: Vivo/Telefonica Brazil
Address of Employer: 2197 Dr. Darios Lopes dos Santos St. Curitiba – Parana/Brazil 80210–010
Job title: Telecom Consultant
Start date – End date: 04/2018 – 09/2022
Job duties: Managed datacenter installations, infrastructure planning, and capacity optimization activities.Supported onboarding and deployment of Virtual Network Functions (VNFs) in VMware Telco Cloud environments.Prepared Requests for Quotation (RFQs) and evaluated technical proposals from vendors and service providers.Developed automation scripts and deployment templates for virtualized network environments.Provided troubleshooting and technical support for cloud and virtualized infrastructure systems.Collaborated with vendors and international teams on deployment, observability, and continuous delivery/testing initiatives.Developed systems to support telecommunications regulatory compliance and operational monitoring.Assisted in implementing and validating new virtualized

For Public Burden Statement, see the Instructions for Form ETA-9089.

OMB Approval: 1205-0451
Expiration Date: 02/28/2029

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	E	1a. Section Name or Category of Supplemental Information	**Foreign Worker Work Experience**

1b. Supplemental Information. *(up to 1,500 characters)*

Work Experience
Employer name: Vivo/Telefonica Brazil
Address of Employer: 2197 Dr. Darios Lopes dos Santos St. Curitiba – Parana/Brazil 80210-010
Job title: Telecom Specialist at Voice Core Engineering
Start date – End date: 05/2012 – 04/2018
Job duties: Planned network capacity expansions and infrastructure growth initiatives. Researched and evaluated new technologies for telecommunications product development.Provided technical leadership for voice network and telecommunications projects.Supported provisioning guidelines, process automation, and operational improvements.Prepared Requests for Quotation (RFQs) and evaluated technical proposals from vendors and partners.Assisted in the integration and expansion of voice and VoIP network infrastructures.Supported deployment of SIP-based telephony solutions and interconnection projects between telecom operators.Developed systems and tools for network usage analysis, capacity monitoring, and growth planning.

B. Supplemental Information 2 §

1. Section and Item Number	E	1a. Section Name or Category of Supplemental Information	**Foreign Worker Work Experience**

1b. Supplemental Information. *(up to 1,500 characters)*

Work Experience
Employer name: Vivo/Telefonica Brazil
Address of Employer: 2197 Dr. Darios Lopes dos Santos St. Curitiba – Parana/Brazil 80210-010
Job title: Senior Telecom Analyst – Specialized Voice Support
Start date – End date: 09/2009 – 05/2012
Job duties: Provided third-level technical support for NGN voice network operations.Supported network expansion projects and commissioning of new telecommunications equipment.Coordinated with vendors on complex technical issues and disaster recovery activities.Developed technical procedures, provisioning templates, and operational support tools for network management.Delivered technical training and guidance to junior support teams.Assisted in improving voice-network stability, service quality, and customer experience through standardized

For Public Burden Statement, see the Instructions for Form ETA-9089.

OMB Approval: 1205-0451
Expiration Date: 02/28/2029

SUPPLEMENTAL INFORMATION

A. Supplemental Information 1 §

1. Section and Item Number	E	1a. Section Name or Category of Supplemental Information	**Foreign Worker Work Experience**

1b. Supplemental Information. *(up to 1,500 characters)*

Work Experience
Employer name: Vivo/Telefonica Brazil
Address of Employer: 2197 Dr. Darios Lopes dos Santos St. Curitiba – Parana/Brazil 80210-010
Job title: Support Analyst – Vono Team
Start date – End date: 05/2008 – 09/2009
Job duties: Provided technical leadership for VoIP network operations and related infrastructure projects.Delivered technical support and research and development for VoIP services and platforms.Managed Asterisk-based VoIP environments, including dial-plan configuration and system integrations.Supported integration of telephony systems with databases, web services, and NGN network infrastructure.Implemented virtualization, version control, and security improvements for VoIP platforms.Developed and deployed new VoIP features and communication solutions to enhance customer services.Assisted in the creation and support of wholesale VoIP

B. Supplemental Information 2 §

1. Section and Item Number	E	1a. Section Name or Category of Supplemental Information	**Foreign Worker Work Experience**

1b. Supplemental Information. *(up to 1,500 characters)*

Work Experience
Employer name: Vivo/Telefonica Brazil
Address of Employer: 2197 Dr. Darios Lopes dos Santos St. Curitiba – Parana/Brazil 80210-010
Job title: Support Analyst – Corporate Support
Start date – End date: 06/2006 – 05/2008
Job duties: Supported new customer activations and configuration change requests for VoIP services.Provided technical support for IP PBX and VoIP-based communication products and platforms.Assisted with configuration, provisioning, and troubleshooting of voice communication systems.Developed configuration templates and automation tools to improve operational efficiency and reduce configuration

For Public Burden Statement, see the Instructions for Form ETA-9089.

SUMMARY OF COVER LETTER
Petitioner: **Gustavo Dartagnan Xavier do Rego ("Mr. Xavier")**
Type of Petition: **I-140, EB-2 National Interest Waiver**
Classification Sought: **INA §Act 203(b)(2)(B)**

This petition is submitted on behalf of Mr. Gustavo Dartagnan Xavier do Rego, an experienced telecommunications engineer with nearly two decades of work in telecommunications infrastructure engineering, carrier-grade voice networks, VoIP, SIP signaling, IMS environments, Session Border Controllers, Next Generation Networks, telecom cloud platforms, automation, observability, and network reliability. Mr. Xavier seeks EB-2 classification as a member of the professions holding an advanced degree equivalent, based on Carnegie Evaluations LLC's finding that his foreign academic credentials are equivalent in the United States to a Bachelor of Science in Electrical Engineering and one year of graduate study in Business Administration, together with his more than five years of progressive post-baccalaureate experience in telecommunications engineering, as documented in Exhibits B.I and B.II. Through Dartagnan Telco Solutions, Mr. Xavier proposes to establish and lead a Dallas-based telecommunications engineering and infrastructure optimization company that will provide specialized services in network architecture, advanced VoIP infrastructure, legacy modernization, performance engineering, AI-enabled observability, AIOps, automation, secure interconnection, compliance, and NextG/6G readiness. The proposed endeavor is designed to help telecommunications operators, enterprise organizations, technology companies, data centers, cloud infrastructure operators, and digital infrastructure providers improve the reliability, scalability, interoperability, and operational intelligence of their communication systems, as detailed in Exhibit C.I.

Mr. Xavier's petition seeks a waiver of the job offer and labor certification requirements under *Matter of Dhanasar*, 26 I&N Dec. 884 (AAO 2016), because his qualifications and proposed endeavor satisfy the three-prong test for a National Interest Waiver:

1. **Substantial Merit and National Importance:** Dartagnan Telco Solutions has substantial merit because it advances telecommunications infrastructure modernization, network reliability, AI-enabled observability, automation, interoperability, secure interconnection, and readiness for next-generation communication systems. The endeavor has national importance because it addresses infrastructure-level needs that support business continuity, emergency communications, healthcare systems, cloud computing, digital commerce, AI-enabled applications, and other communication-dependent sectors across the United States. Supporting evidence is provided in Exhibit C.I.
2. **Well Positioned to Advance the Proposed Endeavor:** Mr. Xavier is well positioned based on his academic background in Electrical Engineering, graduate-level management studies, professional licensure, specialized technical training, business track record, and nearly two decades of telecommunications engineering experience. His record includes work with GVT, Vivo, Telefônica Brasil, and U.S.-related engineering work supporting Optimum through Winprovit, including large-scale platform migration, network automation, observability systems, and carrier-grade voice infrastructure. Supporting documentation is provided in Exhibits B.I, B.II, and C.II.
3. **Balancing of Benefits to the United States:** On balance, waiving the job offer and labor certification requirements would benefit the United States because Mr. Xavier seeks to establish and lead an independent, specialized, multi-client telecommunications engineering company, rather than fill a conventional employer-sponsored role. The business plan projects a $100,000 initial investment, revenue growth from $533,000 in Year 1 to $3,069,936 by Year 5, direct employment growth from five professionals to 21 employees, and approximately 32 indirect jobs supported by Year 5. Requiring labor certification for a single employer would not properly capture the broader scope of the proposed endeavor.

Considering these factors, Mr. Xavier meets the requirements for EB-2 classification and satisfies all three prongs of the National Interest Waiver framework. We respectfully request a thorough review of the enclosed cover letter and supporting documentation. Based on the record submitted, favorable adjudication of this Form I-140 petition is respectfully requested.

Thank you for your attention to this matter.

Sincerely,



Otavio Haverroth Silva
California Bar # 343486

May 05, 2026.

VIA USPS

USCIS
Attn: Premium I-140
P.O. Box 660128
Dallas, TX 75266-0128

PREMIUM PROCESSING

Ref: I-140 Immigrant Visa Self-Petition of Mr. Gustavo Dartagnan Xavier do Rego – Request for National Interest Waiver under the EB-2 Classification along with form I-907, request for premium processing service.

STEM PROFESSIONAL AND PROPOSED ENDEAVOR

CIP Code 14.1004 – Telecommunications Engineering

Dear Immigration Officer,

Please note that our firm represents **Mr. Gustavo Dartagnan Xavier do Rego** (hereinafter "Mr. Xavier" or "the Petitioner") in his Form I-140 Immigrant Petition under the Employment-Based Second Preference category. Mr. Xavier respectfully seeks classification as a member of the professions holding an advanced degree equivalent. He further requests a waiver of the job offer and labor certification requirements pursuant to a National Interest Waiver under section 203(b)(2)(B)(i) of the Immigration and Nationality Act, as interpreted by USCIS under *Matter of Dhanasar*, 26 I&N Dec. 884 (AAO 2016).

Mr. Xavier is an experienced telecommunications engineer with nearly two decades of professional experience in telecommunications infrastructure engineering, voice network architecture, network modernization, automation, observability, and carrier-grade communication systems. His foreign academic credentials were evaluated by Carnegie Evaluations LLC as equivalent in the United States to a Bachelor of Science in Electrical Engineering and one year of graduate study in Business Administration. His continued specialization in VoIP infrastructure, SIP signaling, IMS environments, Session Border Controllers, Next Generation Networks, telecom cloud virtualization, automation, and network reliability further supports both his EB-2 eligibility and his ability to advance the proposed endeavor.

Through his proposed endeavor, Mr. Xavier seeks to strengthen and modernize telecommunications infrastructure across the United States by developing and implementing advanced engineering solutions that improve network reliability, automation, observability, interoperability, and readiness for next-generation communications technologies. To carry out and expand these activities, he intends to establish and lead Dartagnan Telco Solutions, which will serve as the operational platform

through which he will deliver specialized telecommunications engineering services to operators, enterprise organizations, technology companies, and digital infrastructure providers nationwide.

His more recent U.S.-related experience further demonstrates the execution capacity required for the proposed endeavor. As a Senior Telecom Engineer supporting Optimum through Winprovit, Mr. Xavier has performed telecommunications project management, technical support for mobile and fixed voice networks, Linux systems automation, Python-based development, configuration and firmware automation, migration support for more than 600 business customers, network device backup automation, and implementation of observability systems integrating KPIs from Nokia IMS into an OpenTelemetry-based platform. In the United States, Mr. Xavier will serve as Founder and Chief Telecommunications Architect of Dartagnan Telco Solutions, overseeing the company's technical strategy, telecommunications architecture, modernization projects, observability solutions, automation initiatives, client delivery, and engineering team development.

Upon establishing Mr. Xavier's eligibility for the EB-2 classification, the enclosed evidence will demonstrate that he satisfies all three prongs of *Matter of Dhanasar*:

- **The proposed endeavor has substantial merit and national importance** because it advances telecommunications infrastructure modernization, network reliability, operational resilience, observability, automation, interoperability, and readiness for next-generation communication systems in the United States.
- **Mr. Xavier is well positioned to advance the proposed endeavor** based on his academic credentials in Electrical Engineering, nearly two decades of specialized telecommunications engineering experience, professional licensure, technical training, business track record, and documented work with carrier-grade voice networks, telecom automation, platform migrations, and observability systems.
- **Waiving the job offer and labor certification requirements would benefit the United States** because the endeavor is entrepreneurial, specialized, multi-client, and infrastructure-oriented, allowing Mr. Xavier to deploy his telecommunications engineering expertise beyond a single employer-sponsored role.

For these reasons, **by preponderance of evidence**, Mr. Xavier respectfully requests that USCIS approve his Form I-140 petition under the EB-2 National Interest Waiver classification.

1. THE EB-2 CLASSIFICATION

1.1 ADVANCED DEGREE

Mr. Xavier's academic credentials were evaluated by Carnegie Evaluations, which determined that his education in Brazil is equivalent to a U.S. Bachelor of Science degree in Electrical Engineering awarded by a regionally accredited institution of higher education in the United States (Exhibit B).

In addition, Mr. Xavier possesses more than five years of progressive post-baccalaureate experience in the field of telecommunications engineering. Accordingly, pursuant to 8 C.F.R. § 204.5(k)(2) and § 204.5(k)(3)(i)(B), his academic credentials and professional experience collectively qualify him as a member of the professions holding an advanced degree for purposes of EB-2 classification.

Attached please find Mr. Xavier's professional experience evidence, as summarized below (Exhibits B and C.II):

- **Sr. Telecom Engineer, Contractor at Optimum through Winprovit, Bethpage, New York, October 2022 to Present:** After more than sixteen years of progressive telecommunications experience in Brazil, Mr. Xavier advanced to a senior telecommunications engineering role connected to the U.S. market. In this position, he performs telecommunications project management, technical support for mobile and fixed voice networks, Linux systems automation, and Python-based software development. His work includes automation of configuration and firmware upgrade processes for Adtran IADs, support for the migration of more than 600 B2B customers from Genband to Metaswitch, automated backups for more than 100 voice network devices, and support for telecom compliance initiatives, including the Robocall Mitigation Project related to FCC DA 24-73 and STIR/SHAKEN.
- **Advanced Telecom Observability and Network Reliability Work, Optimum through Winprovit, October 2022 to Present:** In his current senior role, Mr. Xavier has also worked on the development of an observability system integrating KPIs from Nokia IMS into an OpenTelemetry-based platform. This work includes dashboards, operational alerts, monitoring of emergency call volume, critical failure alerts, and the processing of approximately 75 million records per day and more than 8,000 KPIs. This reflects a progression from traditional telecommunications support into advanced network observability, automation, and reliability engineering.
- **Telecom Consultant / Telecom Specialist / Senior Telecom Analyst / Support Analyst, GVT, Vivo, and Telefônica Brasil, Curitiba, Paraná, Brazil, June 2006 to September 2022:** Following the completion of his Electrical Engineering degree, Mr. Xavier built a long-term career in major telecommunications operators in Brazil. His responsibilities progressively expanded across voice core engineering, VoIP infrastructure, IMS environments, Session Border Controllers, Next Generation Networks, IP Centrex, SIP signaling, network expansion, provisioning automation, troubleshooting, disaster recovery, and telecommunications platform integration.
- **Progressive Experience in Voice Core Engineering and Carrier-Grade Networks:** During his tenure with GVT, Vivo, and Telefônica Brasil, Mr. Xavier worked with complex carrier-grade voice networks and telecommunications platforms. His experience included technical support, network stabilization, service continuity, platform integration, and the deployment and optimization of systems used in large-scale telecommunications environments. This work demonstrates progressive post-baccalaureate experience directly related to the specialty of telecommunications engineering.
- **Progressive Experience in Telecom Cloud, Virtualization, and Network Modernization:** Mr. Xavier later expanded his technical scope into virtualization engineering and telecom cloud environments, including datacenter installations, capacity planning, onboarding of Virtual Network Functions in VMware Telco Cloud, technical analysis of RFQs and vendor proposals, HEAT templates, OVF scripts, and VNF deployment support. This progression shows the development of his expertise from traditional voice network engineering into modern cloud-based telecommunications infrastructure.
- **Progressive Experience in Automation, Interoperability, and Regulatory Support:** Mr. Xavier's career further includes automation of telecommunications templates and scripts to reduce configuration errors, integration of Huawei IMS with Genband NGN, integration of Vivo and GVT networks, deployment of SBCs for SIP-based telephony expansion, and development of CDR analysis tools for regulatory compliance with ANATEL requirements. These responsibilities show increasing technical complexity and a sustained progression in specialized telecommunications engineering.

- **Business and Professional Track Record in Telecommunications and Technology Consulting:** In addition to his employment history, Mr. Xavier established and operates Gustavo Dartagnan Xavier do Rego Consultoria em Tecnologia da Informação Ltda. in Brazil, which supports the continuity of his specialized professional activity in technology and telecommunications-related consulting. His business track record further reinforces the progressive and applied nature of his post-baccalaureate professional experience.

Thus, Mr. Xavier has demonstrated that he possesses more than five years of progressive post-baccalaureate experience in his field of specialization and qualifies as a member of the professions requiring an advanced degree, thereby fulfilling the requirements for the EB-2 preference category.

Pursuant to Section 8 CFR 204.5(k)(3)(i)(B) of the INA, a beneficiary may satisfy the advanced degree requirement by possessing:

- A master's or higher degree obtained in the U.S., or a foreign degree evaluated as equivalent to a U.S. master's or higher degree; or
- A bachelor's degree obtained in the U.S., or a foreign degree evaluated as equivalent to a U.S. bachelor's degree, plus 5 years of progressive professional experience acquired after obtaining the academic degree.

Mr. Xavier satisfies the advanced degree requirement, as established in Section 203(b)(2) of the Immigration and Nationality Act (INA) and in Section 8 CFR § 204.5(k)(3)(i)(B), by virtue of his foreign academic credential, equivalent to a U.S. Bachelor of Science degree in Electrical Engineering, combined with nearly two decades of progressive professional experience, acquired after the completion of his higher education, in positions within the field of telecommunications engineering.

Although eligibility for the EB-2 category requires meeting either the advanced degree criterion or the exceptional ability criterion, this petition relies primarily on Mr. Xavier's qualifications as a professional holding an advanced degree. Alternatively, the evidence submitted also demonstrates that he meets the standard for exceptional ability, thereby confirming his eligibility for the EB-2 classification.

2. THE PROPOSED ENDEAVOR

Strengthening U.S. Telecommunications Infrastructure Through Modernization, Observability, Automation, and NextG/6G Readiness

Mr. Xavier's proposed endeavor is to develop and implement advanced telecommunications solutions involving carrier-grade voice networks, VoIP infrastructure, SIP signaling, IMS environments, Session Border Controllers, Next Generation Networks, telecom cloud platforms, network automation, AI-enabled observability, AIOps, and telecommunications reliability engineering. To advance this endeavor, he intends to establish and lead Dartagnan Telco Solutions in the United States as a specialized telecommunications engineering and infrastructure optimization company. The company will be headquartered in Dallas, Texas, and will provide advanced telecommunications engineering services to clients across the United States, including telecommunications operators, enterprise organizations, technology companies, digital infrastructure providers, data centers, and cloud infrastructure operators. Although the company will be strategically based in Dallas, its service model is not limited to a local market. Because many telecommunications engineering services can be delivered remotely, Dartagnan Telco Solutions will be positioned to support clients nationwide while maintaining centralized operations in Texas (Exhibit C.I).

Dartagnan Telco Solutions' mission is to enhance the reliability, efficiency, security, and resilience of U.S. telecommunications networks by delivering advanced engineering solutions, AI-driven observability, AIOps, automation, and scalable system architectures that help organizations improve operational visibility, reduce service disruptions, modernize legacy systems, maintain service continuity, and prepare communication networks for evolving technological demands.

In practical terms, Dartagnan Telco Solutions will help organizations modernize legacy communication systems, optimize network performance, improve real-time operational visibility, reduce manual configuration risks, enhance interoperability, and prepare existing telecommunications environments for next-generation network demands. To accomplish this, the company will operate through a structured service model covering four integrated technical areas: telecommunications network architecture, advanced VoIP infrastructure, and legacy modernization; telecommunications performance engineering and optimization; AI-enabled telecom observability, AIOps, and automation; and telecommunications interconnection, compliance, security, and NextG readiness. Through these services, the company will design scalable communication architectures, support SIP signaling and IMS environments, integrate Session Border Controllers, conduct interoperability planning, analyze network performance indicators, improve call quality and signaling stability, implement predictive fault detection and root-cause analysis frameworks, automate incident response, and support secure migration from legacy systems to cloud-based, virtualized, distributed, and increasingly AI-enabled telecommunications environments.

The proposed endeavor provides the operational framework through which Mr. Xavier will apply his specialized telecommunications engineering expertise in the United States. Through Dartagnan Telco Solutions, he intends to deliver advanced engineering solutions aimed at improving the modernization, reliability, observability, automation, interoperability, and future-readiness of telecommunications infrastructure used by operators, enterprises, and digital infrastructure providers across the country.

3. NATIONAL INTEREST WAIVER
Framework Under *Matter of Dhanasar*

After establishing Mr. Xavier's eligibility for the EB-2 classification as a member of the professions holding an advanced degree equivalent, the petition must demonstrate that he also merits a waiver of the job offer and labor certification requirements in the national interest. USCIS evaluates National Interest Waiver requests under the three-prong framework set forth in *Matter of Dhanasar*, 26 I&N Dec. 884 (AAO 2016).

Under this framework, the Petitioner must show that: (1) the proposed endeavor has both substantial merit and national importance; (2) he is well-positioned to advance the proposed endeavor; and (3) on balance, it would be beneficial to the United States to waive the requirements of a job offer and labor certification.

As detailed below, Mr. Xavier satisfies each of these requirements. His proposed endeavor addresses the modernization, reliability, automation, observability, interoperability, and future-readiness of telecommunications infrastructure in the United States. His academic background, nearly two decades of specialized telecommunications engineering experience, U.S.-related technical work, professional licensure, business plan, and documented career achievements establish that he is well positioned to advance the endeavor. Finally, because the endeavor is entrepreneurial, specialized, multi-client, and infrastructure-oriented, the national interest would be better served by allowing Mr. Xavier to deploy his expertise through Dartagnan Telco Solutions rather than limiting his work to a single employer-sponsored position.

3.1 First Prong:
The Proposed Endeavor Has Substantial Merit and National Importance

Mr. Xavier's proposed endeavor satisfies the first prong of Matter of Dhanasar because it is directed toward strengthening U.S. telecommunications infrastructure through modernization, reliability, automation, observability, interoperability, and readiness for next-generation communication systems. Its merit and national importance arise from its relevance to communication networks that support businesses, emergency services, healthcare, cloud services, digital commerce, and other infrastructure-dependent sectors.

3.1.1 Substantial Merit

Under the first prong of *Matter of Dhanasar*, the Service first examines whether the proposed endeavor has substantial merit. USCIS guidance confirms that this inquiry is broad and may encompass several areas of recognized value. The USCIS Policy Manual provides:

> *"The endeavor's merit may be demonstrated in areas including, but not limited to, business, entrepreneurship, science, technology, culture, health, or education."*

This guidance is directly applicable to Mr. Xavier's case. His proposed endeavor does not rest on a generalized claim of private business activity, routine consulting, or ordinary information technology support. Rather, **Dartagnan Telco Solutions** sits at the intersection of several areas expressly recognized by USCIS as capable of demonstrating substantial merit: **technology, engineering, business, and entrepreneurship**. The endeavor is technological and engineering-based because it focuses on the design, implementation, modernization, optimization, and intelligent monitoring of telecommunications infrastructure, including carrier-grade voice networks, VoIP systems, SIP signaling, IMS environments, Session Border Controllers, Next Generation Networks, telecom cloud platforms, automation frameworks, and AI-enabled observability systems. It is also business-oriented and entrepreneurial because Mr. Xavier will establish and lead Dartagnan Telco Solutions in the United States as a specialized telecommunications engineering company supported by a defined investment structure, projected revenue growth, planned hiring, and a scalable service model.

The proposed endeavor has substantial merit because it addresses practical and technically complex needs within the U.S. telecommunications ecosystem. Modern communication environments increasingly depend on hybrid infrastructures where legacy systems must coexist with cloud-based, virtualized, distributed, and next-generation architectures. These environments require specialized engineering solutions to maintain reliability, interoperability, performance, security, and service continuity. Dartagnan Telco Solutions is designed to respond to these needs by providing advanced telecommunications network architecture, VoIP infrastructure modernization, performance engineering, AI-enabled observability, AIOps, automation, interconnection, compliance support, and NextG/6G readiness services. The company's business plan specifically identifies these service lines as central to its proposed operations in the United States.

The STEM character of the endeavor further reinforces its substantial merit. The USCIS Policy Manual recognizes the importance of progress in STEM fields, particularly where the proposed work relates to technologies or technical fields relevant to U.S. competitiveness or national security:

> *"USCIS recognizes the importance of progress in STEM fields and the essential role of persons with advanced STEM degrees in fostering this progress, especially in focused critical and emerging technologies or other STEM areas important to U.S. competitiveness or national security."*

The Policy Manual further provides:

> *"Many proposed endeavors that aim to advance STEM technologies and research, whether in academic or industry settings, not only have substantial merit in relation to U.S. science and technology interests but also have sufficiently broad potential implications to demonstrate national importance."*

In this case, the STEM designation is not presented as an independent basis for approval, but as further support for the technical nature and merit of the proposed endeavor. Mr. Xavier's work is most closely aligned with **CIP Code 14.1004, Telecommunications Engineering**, which appears on the DHS STEM Designated Degree Program List within the Engineering series. The same DHS list also includes **CIP Code 14.1001, Electrical and Electronics Engineering**, which corresponds to Mr. Xavier's evaluated academic background in Electrical Engineering. This alignment reinforces that the proposed endeavor is grounded in a recognized engineering field involving the development and application of advanced technologies to telecommunications infrastructure.

This technical character is important because Dartagnan Telco Solutions will not merely provide ordinary technical assistance or employer-specific support. The company will provide specialized solutions aimed at improving network reliability, operational visibility, automated incident response, signaling stability, call quality, system interoperability, infrastructure scalability, and transition readiness for future telecommunications environments. These activities have substantial merit because they address the performance and continuity of communication systems that support enterprise operations, digital infrastructure, cloud-based services, emergency communications, healthcare systems, financial systems, transportation, and digital commerce.

The industry context further reinforces the substantial merit of the proposed endeavor. The telecommunications sector is a large-scale infrastructure field undergoing rapid modernization: Deloitte reports that the global telecommunications industry was expected to generate approximately US$1.53 trillion in revenue in 2024 and that the U.S. Communications Infrastructure Index grew by nearly 30% from 2019 to 2024, reflecting continued expansion in communications infrastructure[1]. Ericsson also reports that global 5G subscriptions are expected to reach 2.9 billion by the end of 2025 and 6.4 billion by 2031, while 5G is expected to account for 43% of mobile data traffic by the end of 2025. In the United States[2], USTelecom reports that broadband providers invested nearly US$95 billion in communications infrastructure in the prior year and more than US$2 trillion in private capital since 1996[3]. These industry indicators show that Mr. Xavier's proposed work is aligned with a major infrastructure sector facing increasing demand for modernization, performance optimization, observability, automation, interoperability, and readiness for next-generation networks.

[1] https://www.deloitte.com/us/en/insights/industry/technology/technology-media-telecom-outlooks/telecommunications-industry-outlook/2025.html
[2] https://www.ericsson.com/en/reports-and-papers/mobility-report/reports/november-2025
[3] https://ustelecom.org/wp-content/uploads/2025/01/Broadband-2025.pdf

Financially, the company is projected to scale steadily over its first five years of operation. Sales are projected to increase from $533,000 in Year 1 to $3,069,936 by Year 5, while gross margin is projected to grow from $490,360 to $2,824,341 during the same period. The company's EBITDA is projected to rise from $51,465 in Year 1 to $375,605 in Year 5, and net profit is projected to increase from $37,569 to $268,716. The projected balance sheet also reflects growth in the company's net worth, from $97,569 in Year 1 to $623,303 by Year 5. These projections support the feasibility of the endeavor and demonstrate that the company is designed to develop from an initial specialized engineering operation into a scalable telecommunications services provider.



	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	$533,000	$1,175,265	$1,752,320	$2,355,118	$3,069,936
Gross Margin	$490,360	$1,081,244	$1,612,135	$2,166,709	$2,824,341
Net Profit	$37,569	$95,836	$155,500	$185,680	$268,716

Mr. Xavier's proposed endeavor has substantial merit because it advances technology, engineering, business, and entrepreneurship through specialized telecommunications engineering services. Dartagnan Telco Solutions will improve network modernization, reliability, observability, automation, interoperability, performance, and readiness for next-generation communications infrastructure, satisfying the substantial merit component of the first prong of *Matter of Dhanasar*.

3.1.2 National Importance

While substantial merit addresses the inherent value of the proposed endeavor, national importance focuses on its prospective impact and whether it may generate broader benefits beyond the Petitioner's own employment, private business interests, or direct customers. Mr. Xavier is not relying on the general importance of telecommunications engineering or entrepreneurship alone. His proposed endeavor is a specific telecommunications engineering initiative designed to improve the reliability, modernization, automation, observability, interoperability, and future-readiness of U.S. communication infrastructure through Dartagnan Telco Solutions.

Through this endeavor, Mr. Xavier intends to provide advanced engineering solutions for carrier-grade voice networks, VoIP infrastructure, SIP signaling, IMS environments, Session Border Controllers, Next Generation Networks, telecom cloud platforms, AI-enabled observability, AIOps, automation, and NextG/6G readiness. The company's model is designed to serve telecommunications operators, enterprise organizations, technology companies, digital infrastructure providers, data centers, and cloud infrastructure operators beyond a single employer or local market.

Accordingly, Dartagnan Telco Solutions' national importance rests on its broader prospective impact in three connected areas: strengthening the reliability and resilience of telecommunications infrastructure used by critical sectors; advancing modernization, automation, and intelligent network operations; and supporting the transition of U.S. telecommunications systems from legacy environments to cloud-based, virtualized, and next-generation architectures.

The market, policy, and industry research supporting this section is provided in ***Exhibit C.I****, with each source identified in the corresponding reference citation, including the source link, where the information is discussed.*

The Proposed Endeavor Has National or Even Global Implications Within a Particular Field

USCIS recognizes that a proposed endeavor may have national importance when it carries broader implications within a particular field, rather than merely benefiting the petitioner, a single employer, or a limited group of direct customers.

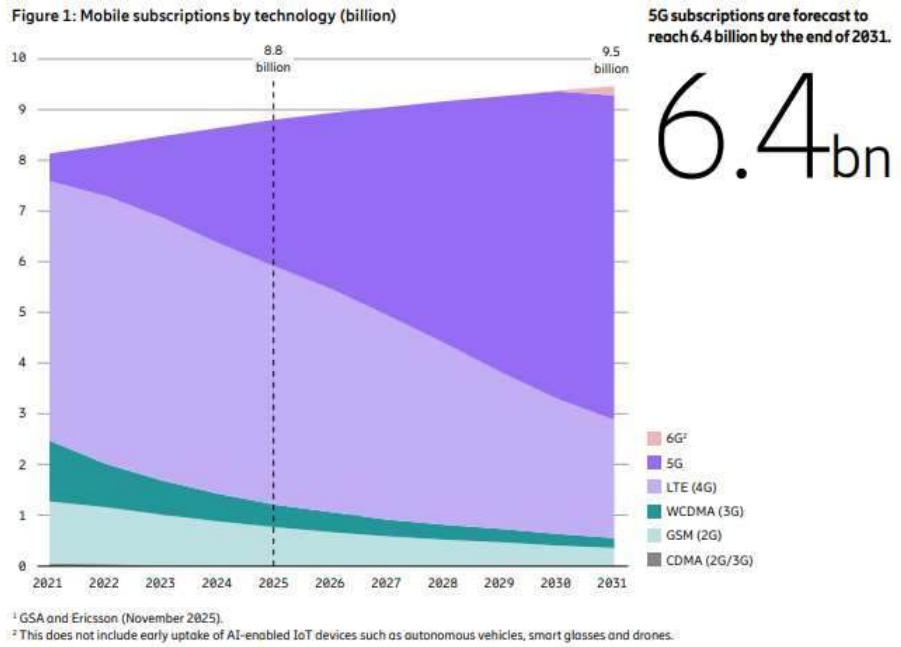
Mr. Xavier's proposed endeavor fits this framework because it is directed toward the modernization, reliability, automation, observability, interoperability, and future-readiness of telecommunications infrastructure. This is not a narrow local service area. Telecommunications engineering supports digital commerce, cloud services, enterprise operations, healthcare systems, emergency communications, financial systems, transportation, and the broader digital economy. Dartagnan Telco Solutions is specifically designed to help organizations modernize legacy systems, integrate cloud-based and next-generation technologies, improve interoperability, and strengthen long-term infrastructure resilience.

Industry data confirms the broader significance of this field. Deloitte reports that the global telecommunications industry was expected to generate approximately US$1.53 trillion in revenue in 2024, while also noting that the sector is navigating rapid digitization, generative AI, 5G monetization, and the path toward 6G. Deloitte also identifies nearly 30% growth in the U.S. Communications Infrastructure Index from 2019 to 2024, showing the continuing expansion and strategic importance of communications infrastructure4.

The global transition toward next-generation networks further supports the field-level importance of Mr. Xavier's work. Ericsson reports that 5G subscriptions are expected to reach 2.9 billion by the end of 2025, representing approximately one-third of all mobile subscriptions, and are forecast to reach 6.4 billion by the end of 2031. Ericsson also notes that 6G standardization has already begun and that future 6G networks are expected to incorporate standalone architecture, artificial intelligence, and integrated sensing and communication capabilities. These developments directly relate to Dartagnan Telco Solutions' focus on NextG/6G readiness, telecom cloud environments, AI-enabled observability, automation, and intelligent network operations.

[4] https://www.deloitte.com/us/en/insights/industry/technology/technology-media-telecom-outlooks/telecommunications-industry-outlook/2025.html

The increasing demand placed on communication networks also reinforces the importance of the proposed endeavor. Ericsson reports that mobile network data traffic grew 20% between Q3 2024 and Q3 2025, reflecting the rising complexity and volume of telecommunications operations. As networks carry more data and support more critical services, organizations require stronger performance engineering, real-time monitoring, automation, and incident response capabilities5. These are precisely the types of services that Dartagnan Telco Solutions proposes to provide.



This industry outlook illustrates the scale and direction of the global telecommunications transition that Mr. Xavier's proposed endeavor is designed to support. As 5G subscriptions continue to expand and next-generation networks move toward broader 6G readiness, telecommunications operators and infrastructure-dependent organizations will increasingly require specialized engineering solutions for modernization, interoperability, performance optimization, automation, and network reliability. Dartagnan Telco Solutions is therefore positioned within a field undergoing substantial technological transformation, rather than within a narrow or purely local service market.

The U.S. industry context is equally significant. USTelecom states that broadband networks are essential to U.S. competitiveness, disaster resilience, artificial intelligence, education, healthcare, and economic progress. It also reports that broadband providers invested nearly US$95 billion in U.S. communications infrastructure in the prior year and more than US$2 trillion in private capital since 19966. USTelecom also emphasizes the need to move away from outdated legacy networks and toward modern, faster, stronger broadband infrastructure, which aligns directly with Mr. Xavier's proposed focus on legacy modernization, phased migration, interoperability planning, and future-ready telecommunications architecture.

Accordingly, Mr. Xavier's proposed endeavor has national and potentially global implications within the telecommunications engineering field. Its importance does not rest on the general value of telecommunications alone, but on the specific infrastructure challenges the company will address: legacy modernization, VoIP and SIP architecture, IMS and SBC integration, performance

[5] https://www.ericsson.com/en/reports-and-papers/mobility-report/reports/november-2025
[6] https://ustelecom.org/wp-content/uploads/2025/01/Broadband-2025.pdf

optimization, AI-enabled observability, automation, secure interconnection, and NextG/6G readiness. By helping operators, enterprise organizations, data centers, cloud infrastructure providers, and digital infrastructure companies improve reliability, operational intelligence, interoperability, and future-readiness, Dartagnan Telco Solutions is positioned to contribute to a field that underpins the U.S. digital economy and remains central to global technological development.

The Proposed Endeavor Has Significant Potential to Employ U.S. Workers and Generate Positive Economic Effects

USCIS recognizes that, in evaluating national importance, the Service may consider whether an endeavor has significant potential to employ U.S. workers or generate positive economic effects. The Policy Manual provides:

> *"More specific considerations may include: whether the person's endeavor has the potential to generate considerable economic impact consistent, for example, with economic revitalization; and whether the person's endeavor may lead to potential job creation."*

Mr. Xavier's proposed endeavor satisfies this consideration because Dartagnan Telco Solutions is structured to create direct employment, support indirect job creation, generate tax revenue, and contribute to the broader telecommunications and digital infrastructure economy. The business plan projects workforce expansion from five professionals in Year 1 to 21 employees by Year 5, including telecommunications engineers, network optimization engineers, telecom automation and observability engineers, project managers, client support specialists, sales professionals, customer service representatives, and administrative personnel.

Personnel Plan					
	Year 1	Year 2	Year 3	Year 4	Year 5
Founder and Chief Telecommunications Architect	1	1	1	1	1
Telecommunications Engineer	1	1	2	2	3
Telecommunications Network Optimization Engineer	1	1	2	2	3
Telecommunications Project Manager	0	1	2	2	3
Client Support Specialist	0	1	1	2	2
Telecom Automation and Observability Engineer	1	1	1	2	2
Sales Telecommunications Engineer	0	1	1	2	2
Sales Representative	1	1	1	2	2
Administrative Manager	0	1	1	1	1
Customer Service Representatives	0	0	1	1	2
Total People	5	9	13	17	21

The business plan also projects indirect economic activity. Using Economic Policy Institute employment multipliers, the plan estimates that the company's 21 direct jobs by Year 5 would support approximately 32 indirect jobs. These indirect effects include the use of independent contractors, legal professionals, technicians, outsourced marketing services, vendors, and other service providers needed to support the company's operations.

Employment multipliers per 100 direct jobs, all private-sector industries

	Industry	Direct jobs	Supplier jobs*	Induced jobs**	Total indirect jobs
129	Computer systems design and related services	100.0	134.1	149.3	283.4
130	Management, scientific, and technical consulting services	100.0	91.1	116.5	207.6
131	Scientific research and development services	100.0	519.3	323.7	842.9
132	Advertising, public relations, and related services	100.0	460.9	270.7	731.6
133	Other professional, scientific, and technical services	100.0	70.8	83.6	154.3

The business plan also considers the company's potential contribution in the context of economically distressed communities in Dallas. Specifically, it identifies ZIP Code 75215 as a distressed community under the Distressed Communities Index, with a distress score of 94.1 and a ranking of 1,457 out of 1,578 ZIP codes in Texas. This local context reinforces the economic relevance of Dartagnan Telco Solutions' planned growth. While the proposed endeavor is national in scope and designed to serve clients across the United States, its Dallas-based operations may also contribute to local economic development by creating high-skilled employment opportunities, engaging contractors and service providers, generating tax revenue, and supporting business activity in a region facing socioeconomic challenges related to employment, income, educational attainment, and economic mobility.

Accordingly, these projections demonstrate that Dartagnan Telco Solutions has meaningful potential to generate positive economic effects through direct employment, indirect job creation, tax contributions, vendor activity, and localized economic impact in Dallas. The company's planned growth therefore supports the national importance of the proposed endeavor, while also showing that Mr. Xavier's work may contribute to U.S. economic productivity and employment beyond his own professional activity.

The Proposed Endeavor Impacts a Matter Described by Government Entities as Nationally Important and Subject to National Initiatives

The national importance of Mr. Xavier's proposed endeavor is further supported by recent federal policy statements identifying communications infrastructure, next-generation networks, AI infrastructure, and cybersecurity as matters of national priority. Dartagnan Telco Solutions is directly aligned with these priorities because the company will provide telecommunications engineering solutions focused on legacy modernization, network reliability, AI-enabled observability, automation, secure interconnection, and NextG/6G readiness.

The White House has expressly recognized the strategic importance of next-generation mobile communications networks. In its Presidential Memorandum titled Winning the 6G Race, the Administration7 stated:

> *"The next generation of mobile communications networks (6G) will be foundational to the national security, foreign policy, and economic prosperity of the United States."*

[7] https://www.whitehouse.gov/presidential-actions/2025/12/national-security-presidential-memorandum-nspm-8-0bda/

This policy statement is directly relevant to Mr. Xavier's proposed endeavor. Dartagnan Telco Solutions is designed to help U.S. organizations prepare for next-generation telecommunications environments through modernization of legacy systems, phased migration strategies, interoperability planning, telecom cloud adaptation, AI-enabled network operations, and NextG/6G readiness. These services correspond to the same national objective identified by the White House: maintaining U.S. leadership in advanced communications infrastructure.

The Administration has also emphasized that 6G networks will support emerging technologies and require faster, more resilient, and more secure communications capabilities. The White House Fact Sheet on winning the 6G race states that 6G will provide the foundation for technologies such as AI and robotics and will deliver faster speeds, ultra-low latency, and higher data capacity[8]. This reinforces the importance of Mr. Xavier's proposed work in telecommunications performance engineering, observability, automation, and infrastructure readiness.

The proposed endeavor also aligns with federal priorities concerning critical infrastructure resilience. In its Presidential Message on Critical Infrastructure Security and Resilience Month[9], the White House stated:

> *"Our Nation's critical infrastructure is foundational to every American's way of life, protecting our national security, facilitating our economic stability, and ensuring our public safety."*

The same statement specifically identifies communications as one of the sectors vital to national prosperity and emphasizes the modernization of systems and networks to make them more powerful, modern, and resilient. This is closely aligned with Dartagnan Telco Solutions' proposed focus on improving the reliability, visibility, continuity, and operational resilience of communication systems used by telecommunications operators, enterprises, emergency-related environments, healthcare systems, and other infrastructure-dependent sectors.

Mr. Xavier's endeavor is also consistent with national cybersecurity priorities. The White House has directed federal action on secure software development, border gateway security to address hijacking of network interconnections, post-quantum cryptography, updated encryption protocols, and AI-related vulnerability management[10]. These priorities directly correspond to Dartagnan Telco Solutions' proposed service line involving telecommunications interconnection, compliance, security, and NextG readiness, particularly where clients require secure SIP architecture, network interconnection reliability, monitoring, and resilience against technical vulnerabilities.

The connection between telecommunications infrastructure and broader technology policy is further reflected in the White House's AI-related initiatives. The Administration's AI Action Plan identifies infrastructure as one of its central pillars and emphasizes the need to build the infrastructure required for AI development, including data centers, energy systems, semiconductor capacity, secure AI systems, and critical infrastructure cybersecurity. In the telecommunications context, AI adoption increases the need for reliable, low-latency, high-capacity, and intelligently monitored networks[11]. Mr. Xavier's proposed AI-enabled observability and AIOps services are therefore not merely

[8] https://www.whitehouse.gov/fact-sheets/2025/12/fact-sheet-president-donald-j-trump-takes-action-to-win-the-6g-race/
[9] https://www.whitehouse.gov/briefings-statements/2025/11/presidential-message-on-critical-infrastructure-security-and-resilience-month/
[10] https://www.whitehouse.gov/fact-sheets/2025/06/fact-sheet-president-donald-j-trump-reprioritizes-cybersecurity-efforts-to-protect-america/
[11] https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf

internal business tools; they are engineering solutions that support the reliability and operational intelligence of the communications infrastructure needed for AI-enabled economic activity.

Accordingly, Mr. Xavier's proposed endeavor impacts matters that government entities have described as nationally important and subject to national initiatives: 6G leadership, communications infrastructure modernization, critical infrastructure resilience, cybersecurity, and AI infrastructure readiness. By establishing Dartagnan Telco Solutions to provide specialized telecommunications engineering services in these areas, Mr. Xavier seeks to advance work that is consistent with current federal priorities and materially connected to the modernization, security, and resilience of U.S. communications networks.

The record shows that Mr. Xavier's proposed endeavor carries the type of prospective impact contemplated under Matter of Dhanasar. Dartagnan Telco Solutions is not merely a private business vehicle or a source of individual employment for the Petitioner; it is designed to address infrastructure-level telecommunications needs involving network modernization, reliability, interoperability, automation, AI-enabled observability, secure interconnection, and readiness for next-generation communication systems. This work is significant because telecommunications networks support essential functions across the United States, including business continuity, emergency communications, healthcare systems, financial services, cloud computing, AI-enabled applications, transportation, digital commerce, and other infrastructure-dependent sectors. By improving the performance, continuity, and resilience of these communication systems, the proposed endeavor has the potential to enhance societal welfare, support economic productivity, strengthen critical digital infrastructure, and contribute to a field central to the country's public welfare, infrastructure resilience, and future technological leadership.

For these reasons, Mr. Xavier's proposed endeavor satisfies the national importance component of the first prong.

3.2 Second Prong:
The Self-Petitioner is Well-Positioned to Advance the Proposed Endeavor in the United States

Under the second prong of Matter of Dhanasar, the Service examines whether the Self-Petitioner is well positioned to advance the proposed endeavor, considering his education, skills, knowledge, record of success, relevant experience, progress toward the endeavor, and proposed plan.

Mr. Xavier satisfies this prong because his academic background in Electrical Engineering, nearly two decades of progressive experience in telecommunications engineering, specialized training, professional licensure, U.S.-related telecom engineering work, business track record, and documented achievements in carrier-grade voice networks, VoIP infrastructure, SIP signaling, IMS environments, SBCs, NGN platforms, telecom cloud, automation, observability, and network reliability directly support his ability to establish and lead Dartagnan Telco Solutions in the United States.

3.2.1 Education, Skills, Knowledge, and Record of Success:

Under the second prong of *Matter of Dhanasar*, the Service considers whether the Self-Petitioner is well positioned to advance the proposed endeavor. USCIS guidance identifies several relevant factors for this analysis, including the individual's education, skills, knowledge, record of success in related efforts, progress toward the proposed endeavor, and the credibility of the proposed plan.

> *"In evaluating whether the person is well positioned to advance the endeavor, USCIS considers factors including, but not limited to: the person's education, skills, knowledge, and record of success in related or similar efforts; evidence*

of a detailed proposal or plan… any progress towards achieving the proposed endeavor; and the interest or support garnered by the person from potential customers, users, investors, or other relevant entities or persons."

Mr. Xavier satisfies this standard because his education, technical background, professional trajectory, and documented record of telecommunications engineering work directly align with the proposed endeavor. His foreign academic credentials were evaluated by Carnegie Evaluations LLC[12] as equivalent in the United States to a **Bachelor of Science in Electrical Engineering** and **one year of graduate study in Business Administration**. His Electrical Engineering curriculum included coursework directly related to telecommunications and network infrastructure, including computer networks, principles of communication, antennas, digital communication, telecommunications systems planning, digital signal processing, transmission systems, computer programming, electronic devices, electricity and magnetism, and related engineering subjects. His graduate-level study in Business Administration further supports his ability to manage technical teams, evaluate operational strategy, and lead the proposed U.S. company.

Mr. Xavier's record further demonstrates a sustained commitment to professional development and technical specialization throughout his career. In addition to his academic credentials, he has **completed more than thirty specialized training programs and professional courses** covering advanced telecommunications systems, VoIP infrastructure, Next Generation Networks (NGN), Session Border Controllers, virtualization technologies, cloud-based telecommunications environments, infrastructure automation, DevOps methodologies, Python programming, and network observability. His training includes specialized coursework provided by industry-recognized organizations and technology vendors such as Alcatel-Lucent, GENBAND, VMware, FIAP, and Alura, covering subjects including VoIP Advanced, NGN Signaling, telecommunications platform administration, virtualization management, infrastructure troubleshooting, DevOps & Agile Culture, and Python-based automation and software development. Among these, he was the only professional his company selected to attend Genband's C2015 C20 – Solution Fault Management course in Raleigh, North Carolina (October 2011), per the official GENBAND US LLC invitation letter (Exhibit C.II). These continuing education efforts demonstrate his proactive commitment to maintaining expertise in rapidly evolving telecommunications technologies.

This academic foundation is reinforced by **nearly two decades of progressive experience in telecommunications engineering.** Mr. Xavier's career has centered on the same technical areas that define Dartagnan Telco Solutions' proposed services: carrier-grade voice networks, VoIP infrastructure, SIP signaling, IMS environments, Session Border Controllers, Next Generation Networks, telecom cloud platforms, automation, observability, network optimization, interoperability, and telecommunications reliability[13]. His background is therefore not merely generally related to the proposed endeavor; it is the technical basis on which the endeavor is built.

Mr. Xavier's professional record demonstrates sustained work in complex telecommunications environments. During his long tenure with GVT, Vivo, and Telefônica Brasil, he worked on voice

[12] Carnegie Evaluations LLC is an academic credential evaluation provider that assesses foreign educational credentials for U.S. equivalency purposes. In Mr. Xavier's case, Carnegie Evaluations LLC reviewed copies of his original diploma certificates and academic transcripts and issued an advisory evaluation based on the documentation provided and standard scholarly and professional reference sources.

[13] These terms refer to the technical systems and engineering methods that allow large-scale telecommunications networks to transmit voice, data, and signaling reliably. In general, they include the infrastructure used by carriers and enterprises to route calls, connect different network platforms, manage internet-based voice services, monitor network performance, automate technical processes, and keep communications systems stable during high-volume or critical operations. Their importance lies in ensuring that modern communication networks remain reliable, interoperable, secure, scalable, and capable of supporting essential services such as business communications, emergency calls, healthcare systems, cloud-based applications, and digital infrastructure.

core engineering, network expansion, provisioning automation, troubleshooting, disaster recovery, Huawei IMS integration with Genband NGN, integration of Vivo and GVT networks, deployment of SBCs for SIP-based telephony expansion, CDR analysis for regulatory compliance, and automation of templates and scripts to reduce configuration errors. This experience shows a progression from telecommunications support and analysis into specialized engineering work involving large-scale network modernization, interoperability, regulatory support, and operational continuity.

His more recent U.S.-related experience further confirms that he is well-positioned to execute the proposed endeavor in the United States. As a **Senior Telecom Engineer** supporting Optimum through Winprovit, Mr. Xavier has performed telecommunications project management, technical support for mobile and fixed voice networks, Linux systems automation, and Python-based development. His work includes automation of configuration and firmware upgrades for Adtran IADs, migration support for more than **600 B2B customers** from Genband to Metaswitch, automated backups for more than **100 voice network devices**, and support for the Robocall Mitigation Project related to FCC DA 24-73 and STIR/SHAKEN.

A particularly important part of his record is his work in telecommunications observability and intelligent network operations, which directly corresponds to one of the company's core service lines. Mr. Xavier developed a system integrating KPIs from Nokia IMS into an OpenTelemetry-based observability platform, including dashboards, operational alerts, emergency call volume monitoring, and critical failure alerts. The system is designed to process approximately **75 million records per day** and more than **8,000 KPIs**, demonstrating his ability to implement the type of data-driven monitoring, automation, and reliability solutions that Dartagnan Telco Solutions intends to offer in the United States.

This U.S. work is further evidenced by primary, assignee-specific project records in which Mr. Xavier is the assignee, documenting the Kafka/middleware integration that delivers KPIs to Grafana (Exhibit C.II — MFWE-148), the Zero Touch Response auto-remediation development and testing (MFWE-1318 and MFWE-1319), and the Mobile Platform health-status dashboards (OWR-3156). Executive (CPTO) communications corroborate these efforts, reporting 54 automated Zero Touch Response triggers designed to reduce Mean Time to Know and Mean Time to Repair, and a Kafka-based middleware that improves scalability and reduces third-party reliance, both improvements directly tied to Mr. Xavier through his assigned Jira tickets and consistent with the 45% downtime reduction independently attested by his supervisor, Mr. Darian Rodriguez in the letter of support.

Mr. Xavier's record of success is also reflected in his work on projects involving telecom cloud, virtualization, and advanced network modernization. His experience includes datacenter installations, capacity planning, onboarding Virtual Network Functions into VMware Telco Cloud, technical analysis of RFQs and vendor proposals, HEAT templates, OVF scripts, and VNF deployment support. His participation in the first local VNF homologation project in Brazil, as well as global initiatives involving continuous deployment, continuous testing, and observability, shows that his expertise extends beyond routine telecommunications operations into the modernization of complex infrastructure environments.

Mr. Xavier's entrepreneurial and managerial capacity is also supported by the corporate records of GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA. The Articles of Association identify Mr. Xavier as the sole member and manager of the company, with authority to legally represent the entity and perform management acts related to its corporate purpose. The company's registered activities include information technology consulting, technical support and maintenance, data processing, hosting services, web portals and content services, custom software development, customizable software development,

and web design. These records are important because they show that Mr. Xavier has already operated a formal business vehicle connected to technology services, which strengthens the credibility of his proposed role as Founder and Chief Telecommunications Architect of Dartagnan Telco Solutions in the United States.

The proposed endeavor is therefore a natural continuation of Mr. Xavier's established professional trajectory. Dartagnan Telco Solutions will rely on his demonstrated ability to design, modernize, automate, monitor, and optimize telecommunications infrastructure. As Founder and Chief Telecommunications Architect, he will lead the company's technical strategy, design advanced telecommunications architectures, oversee modernization and optimization projects, integrate observability and automation solutions, supervise engineering teams, and provide high-level technical consulting to telecommunications operators and enterprise clients. The business plan assigns him an active and central role in the company's execution, making his knowledge and experience directly material to the advancement of the proposed endeavor.

The documentary record **also includes professional registration and licensing** evidence that reinforces Mr. Xavier's formal standing in the engineering field. His materials identify professional license documentation from the Regional Council of Engineering and Agronomy of Paraná (CREA-PR), under registration number PR-88187/D, supporting that his academic and professional qualifications were recognized within the Brazilian engineering regulatory framework. This evidence is relevant to the second prong because it shows that Mr. Xavier's qualifications are not limited to academic credentials or self-reported experience; they are also supported by professional engineering registration documentation tied to the same technical field in which he proposes to advance the U.S. endeavor.

The record further includes Mr. Xavier's 2026 **Certificate of Membership in the IEEE Communications Society[14], identifying him as a member in good standing**. This professional affiliation is relevant because IEEE Communications Society is a global technical community dedicated to communications and networking technology, the same field in which Mr. Xavier has built his career and now proposes to advance Dartagnan Telco Solutions. While this membership is not presented as an independent basis for EB-2 eligibility, it provides additional corroborating evidence of Mr. Xavier's continued professional engagement with the telecommunications and communications engineering field. His affiliation with IEEE Communications Society reinforces the consistency between his academic background, professional registration documentation, technical experience, and proposed U.S. endeavor focused on telecommunications infrastructure modernization, network reliability, automation, observability, and next-generation communications readiness.

The record further documents Mr. Xavier's progressive compensation history and business earnings, which support the conclusion that his expertise has been valued in the marketplace. In addition, the accounting documentation for his Brazilian technology consulting company shows gross revenues of BRL 280,392.37 in 2023 (approximately USD 56,078), BRL 312,791.26 in 2024 (approximately USD 62,558), and BRL 335,171.89 in 2025 (approximately USD 67,034)[15]. This compensation and revenue history demonstrates that Mr. Xavier has not only accumulated

[14] IEEE Communications Society is a technical society within IEEE focused on communications and networking technology. Its official membership materials describe IEEE ComSoc as a global community of more than 40,000 engineers, educators, learners, leaders, and collaborators working to advance communications and networking technology. IEEE is described by IEEE ComSoc as the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

[15] For ease of reference, all U.S. dollar figures are approximate conversions based on an exchange rate of BRL 5.00 = USD 1.00. May vary depending on the applicable exchange rate at the time of conversion.

substantial technical experience, but has also consistently monetized his telecommunications and technology expertise through career advancement and successful professional consulting activities.

It also demonstrates that his current compensation as a **Telecommunications Engineer** reaches approximately **330,000,00 BRL** per year, which is higher than the standard salary for a Telecommunications Engineer in Brazil, currently reported at approximately **102.000,00 BRL** per year according to independent labor market data from Glassdoor[16]. This objective evidence of above-average compensation serves as a clear indicator of his high-level expertise and market recognition, proving that he is regarded as a top-tier professional in his field. Such professional and financial standing confirms that Mr. Xavier possesses the business acumen and technical value necessary to successfully establish and expand his business and ensuring that his expertise translates into tangible benefits for the U.S. business.

Accordingly, the record demonstrates that Mr. Xavier is well positioned to advance the proposed endeavor. His academic background, specialized telecommunications engineering skills, practical knowledge of carrier-grade communication systems, history of successful work in related infrastructure projects, and defined leadership role in Dartagnan Telco Solutions collectively establish the technical and managerial foundation required to carry the proposed endeavor forward in the United States.

The documents referenced in this section are included in Exhibits B, C.I, and C.II.

3.2.2 Independent Expert Testimonials Supporting the Petitioner's Qualifications and Impact:

The record also includes independent expert testimonials from telecommunications professionals, engineers, and senior industry colleagues who have first-hand knowledge of Mr. Xavier's technical work, professional trajectory, and contributions to complex telecommunications environments. These letters are relevant to the second prong because they do not merely offer general praise. They provide concrete examples of Mr. Xavier's work in VoIP, SIP, IMS, SBC, NGN, telecom cloud, automation, observability, interoperability, network stability, and carrier-grade infrastructure modernization.

USCIS guidance recognizes that expert letters may be probative when they are based on first-hand knowledge and provide specific examples of the petitioner's achievements:

> *"Letters may be persuasive when they are from experts in the person's field who have first-hand knowledge of the person's achievements, describe those achievements, provide specific examples of how the person is well positioned to advance the person's endeavor, and are supported by other independent evidence."*

The testimonial letters submitted on behalf of Mr. Xavier satisfy this evidentiary purpose. **Andre Luiz Garcia Ruiz**, employed by Canonical Brasil Serviços de Software Ltda. and working remotely in support of Canonical's U.S. branch, confirms that he has known Mr. Xavier since 2006, when both worked at GVT. His letter describes Mr. Xavier's involvement in the Vox3G project, which relied on Asterisk-based private branch exchange technology at a time when such systems were still emerging in the Brazilian telecommunications market. Mr. Ruiz further explains that Mr. Xavier developed configuration templates and automation tools hosted on a central server and used by teams across multiple cities, reducing human error, improving deployment consistency, and strengthening service stability. His testimony also confirms Mr. Xavier's later work involving

[16] https://www.glassdoor.com.br/Sal%C3%A1rios/engenheiro-de-telecomunicacoes-sal%C3%A1rio-SRCH_KO0,30.htm

telecom cloud, virtualized network functions, IMS core networks, and Telco Cloud environments. This letter directly supports Mr. Xavier's ability to advance Dartagnan Telco Solutions' proposed work in VoIP infrastructure, automation, telecom cloud adaptation, and carrier-grade network reliability.

Leandro Braniak Alves, whose professional background includes systems analysis, computer networks, and telecommunications operations, also provides first-hand testimonial evidence from Mr. Xavier's early years at GVT. Mr. Braniak confirms Mr. Xavier's work on Vox3G, VoxNG, Omni, Asterisk-based VoIP systems, client activation, troubleshooting, technical procedures, and automated equipment configuration templates. His letter is particularly probative because it links Mr. Xavier's technical work to measurable operational improvements, including reduced manual configuration risk, faster delivery timelines, and improved service consistency. Mr. Braniak further describes Mr. Xavier's work on the Vono product team, including management of Asterisk clusters integrated with Oracle databases, migration to NGN infrastructure through Session Server Trunks, replacement of legacy E1 EV2000 gateways, a 25% increase in installed call-handling capacity without additional hardware, correction of critical fraud and billing scenarios, development of Click2Call and Fax2Email functionalities, and support for Skype traffic exceeding two million minutes in fifteen days. This testimony demonstrates Mr. Xavier's ability to improve capacity, reliability, risk control, and operational performance in high-volume telecommunications environments.

Fernando Tauscheck, an electrical engineer with more than two decades of telecommunications experience, provides additional support from a professional who has known Mr. Xavier since their academic years at the Federal University of Paraná and followed his professional development through GVT and Vivo. His letter emphasizes Mr. Xavier's experience with Vono, NGN, SIP, Linux-based environments, IMS, Python and Linux automation, multi-vendor interoperability, and capacity planning. Mr. Tauscheck also highlights the uncommon combination of telecommunications architecture knowledge and practical automation skills in Python and Linux. This testimony reinforces that Mr. Xavier's qualifications are not limited to traditional telecom engineering, but include the automation, interoperability, and infrastructure modernization skills that are central to Dartagnan Telco Solutions' proposed services.

Juliano Boarão, Sector Manager at Petrobras, provides testimonial support from the perspective of a professional experienced in mission-critical telecommunications environments. His letter confirms that he has known Mr. Xavier since their Electrical Engineering studies at the Federal University of Paraná and has followed his development for nearly two decades. Mr. Boarão emphasizes Mr. Xavier's work involving Python and Linux-based automation, VoIP, IMS, Session Border Controllers, SIP, cloud-based virtual network functions, network modernization, regulatory projects, and observability solutions capable of processing millions of records daily. His testimony is relevant because it connects Mr. Xavier's technical profile to environments where reliability, service continuity, operational resilience, and infrastructure modernization are essential.

Juliano Parreira dos Santos, Telecommunications Consultant at Telefônica Brasil/Vivo, provides direct corroboration from a professional who worked with Mr. Xavier in large-scale telecommunications operations. His letter describes Mr. Xavier's Level 3 support work for voice networks, Huawei IMS integration, Session Border Controller deployment, Signaling Transfer Point automation, CDR analysis for ANATEL compliance, and participation in initiatives involving continuous deployment, continuous testing, and observability. Mr. Parreira also confirms that Mr. Xavier's work contributed to internalizing tasks previously performed by third parties, generating savings exceeding BRL 2 million, and supporting expansion from approximately 500,000 residential users to more than 3 million users. This testimony is significant because it connects Mr.

Xavier's qualifications to concrete operational results, including network expansion, regulatory support, automation, interoperability, and improved reliability in carrier-grade voice environments.

Luis Carlos Beu, Telecom Specialist at Telefônica Brasil/Vivo, further corroborates Mr. Xavier's long-term work in telecommunications engineering. His letter describes collaboration with Mr. Xavier beginning in 2006 and highlights his work with VoIP quality issues involving voice, fax, and payment terminals; migration of corporate clients to Alcatel-Lucent OmniPCX solutions; support for VoxNG during a period of critical instability; collaboration with global vendors such as Alcatel-Lucent and AudioCodes; and contributions to the Blue Eyes project. Mr. Beu also confirms Mr. Xavier's involvement in the Freedom project, which allowed users to use fixed telephone numbers through a smartphone application, reached more than 50,000 downloads in 156 cities, and received the Tele.Síntese Innovation Award in 2013. His testimony further discusses Mr. Xavier's work in GVT/Vivo integration, Huawei IMS, Telco Cloud, orchestration, and observability. This evidence supports the conclusion that Mr. Xavier has repeatedly worked on the same infrastructure challenges that his proposed U.S. company will address: modernization, interoperability, automation, telecom cloud adaptation, service continuity, and network evolution.

Rafael Avila Leite, from Ligga Telecom, also confirms Mr. Xavier's impact in NGN and voice network environments. His testimonial letter describes Mr. Xavier's work with VoxNG, Omni, Vox3G, Tier 3 technical support, planned maintenance, advanced troubleshooting, and mission-critical incident response. Mr. Avila Leite further explains that Mr. Xavier developed automated audit scripts for NGN Link configurations, reduced configuration failures, shortened root-cause analysis, mapped severe VoxNG failures between 2010 and 2011, eliminated incident backlog, and helped restore network stability. This testimony is particularly relevant because it demonstrates Mr. Xavier's ability to solve practical reliability and service-continuity problems in demanding telecommunications systems, which directly corresponds to Dartagnan Telco Solutions' proposed focus on performance engineering, observability, automation, and operational resilience.

Sergio Luiz de Lima, CEO of Alctel, provides testimonial support from the perspective of a telecommunications executive whose company worked with GVT on Alcatel IP PBX solutions. His letter describes Mr. Xavier's work involving Alcatel IP PBX/Vox3G, VoxNG testing environments, Mediatrix Integrated Access Device automation, Level 3 technical support, coordination with Alcatel-Lucent France during VoxNG instability, the Blue Eyes project, capacity planning, budget control, technical proposal analysis, network expansion, Huawei IMS interoperability, geographic redundancy through data center reconfiguration, and capacity gains through virtualization. Mr. de Lima also confirms that the VoxNG platform was recognized as the Best Communication Solution in the Cloud Telephony Category during the Alcatel-Lucent Dynamic Enterprise Awards in Chicago in 2012. This testimony reinforces that Mr. Xavier's work has involved complex infrastructure problems in carrier-grade networks, platform integration, automation, performance, capacity planning, redundancy, and service continuity.

Pedro Javier Chia Luna, a telecommunications professional at Telefônica Vivo with more than 28 years of experience in the sector, provides additional first-hand support. He confirms that he first met Mr. Xavier at GVT in 2007 and later invited him to join the Core Engineering team in 2012. His letter describes Mr. Xavier's technical work involving fax transmissions in NGN environments, migration impacts affecting corporate clients, Huawei IMS integration, documentation of call scenarios for high-value corporate services, licensing strategy for Session Border Controllers, capacity planning systems, and the first local certification of Virtual Network Functions in Brazil. Mr. Chia Luna also discusses Mr. Xavier's work on an urgent ANATEL-related call analysis system concerning robocalls, developed under a short regulatory deadline. This testimony is especially important because it confirms Mr. Xavier's role in core engineering, regulatory response, VNF certification, capacity planning, and high-value telecommunications service continuity.

Darian Jose Rodriguez Del Carmen, responsible for MVNO Mobile engineering activities at Optimum in Bethpage, New York, provides U.S.-related testimonial evidence regarding Mr. Xavier's recent work as a Senior Telecom Engineer. Mr. Rodriguez confirms that Mr. Xavier began supporting Optimum on October 3, 2022 in a contracted capacity under his direct supervision. His letter describes Mr. Xavier's work on the Robocall Mitigation Project, including support for compliance with FCC DA 24-73 and STIR/SHAKEN authentication protocols. Mr. Rodriguez also discusses Mr. Xavier's role in migrating corporate clients from a Genband legacy switch to Metaswitch, using Python and Linux automation to increase migration success from 60% to 100% and reduce the projected timeline from three years to one year. The project affected more than 600 active clients in more than 20 cities and 5 states, including organizations in healthcare, public safety, education, finance, and energy. His letter further confirms Mr. Xavier's automation of backups for more than 100 voice network devices and integration of Mobile IMS indicators into an OpenTelemetry platform monitoring more than 8,000 performance indicators and approximately 75 million records per day, contributing to a 45% reduction in critical downtime. This testimony strongly supports Mr. Xavier's ability to advance the proposed endeavor in the United States because it directly addresses telecom automation, compliance, migration, observability, reliability, and infrastructure modernization in U.S.-related telecommunications operations.

The record also includes **a professional recognition document** from **Sergio Wolski**, Specialized Support Manager, recognizing Mr. Xavier for outstanding contributions to network improvement initiatives that resulted in the stability of VOX-NG and VOX-IP services. This recognition is not merely a character endorsement; it provides documentary corroboration that Mr. Xavier's work produced recognized operational improvements in network stability and service reliability. It also aligns with the themes consistently described in the testimonial letters: VoIP platform improvement, NGN stabilization, infrastructure modernization, automation, technical troubleshooting, and measurable service-continuity gains.

The record also documents industry recognition connected to telecommunications projects to which Mr. Xavier contributed. During his tenure with Vivo/Telefônica Brasil, Mr. Xavier served as technical lead for the Freedom product, which enabled users to make and receive calls through Android and iOS applications using their plan allowances over Wi-Fi and 3G networks. Freedom received the Tele.Síntese **Annual Award for Innovation in Communications in 2013** (as published in the 2014 Tele.Síntese Yearbook[17] - Exhibit C.II), after evaluation among 165 projects and with participation from representatives of Brazil's Ministries of Communications and of Science, Technology and Innovation. The record further documents that the VoxNG platform, to which Mr. Xavier contributed through NGN support, configuration standardization, service-stability improvements, and voice-network optimization, was recognized by Alcatel-Lucent as the Best Communication Solution in the Cloud Telephony Category during the Dynamic Enterprise Awards in Chicago in 2012. The award was granted during a Market Analysts Conference, where eight finalist projects were evaluated by a panel of 25 analysts from leading international consulting firms, including Frost & Sullivan, IDC, Gartner, and Yankee Group. These recognitions strengthen the probative value of the testimonial letters because they show that Mr. Xavier's technical work was connected to projects acknowledged for innovation, cloud telephony, enterprise communication modernization, and reliable telecommunications service delivery.

The testimonial letters, professional materials, and recognition documents collectively corroborate Mr. Xavier's qualifications and record of impact in telecommunications engineering, showing that his expertise has produced measurable technical results and directly supports the conclusion that he is well-positioned to advance Dartagnan Telco Solutions in the United States.

[17] https://www.momentoeditorial.com.br/eventos/anuariots/ANUARIO_2014.pdf

The independent professional testimonial letters and recognitions referenced in this subsection are included in Exhibit C.II.

3.2.3 Plan for Future Activities:

Mr. Xavier has developed a concrete and detailed plan to advance the proposed endeavor in the United States through **Dartagnan Telco Solutions**, a Dallas-based telecommunications engineering and technology solutions company. The company will provide specialized services in telecommunications network architecture, VoIP infrastructure, legacy modernization, performance engineering, AI-enabled observability, AIOps, automation, secure interconnection, and NextG/6G readiness. Its service model is designed to support telecommunications operators, enterprise organizations, and digital infrastructure providers across the United States, including through remote delivery capabilities that allow the company to serve clients beyond Texas.

The business plan sets out a phased growth strategy. In its initial phase, Dartagnan Telco Solutions will focus on core telecommunications engineering and infrastructure optimization, including network architecture design, VoIP infrastructure implementation, performance optimization, and observability system deployment. As the company grows, it will expand into AI-driven operations, automation frameworks, and advanced observability solutions, helping clients move from reactive network management to proactive, data-driven operations. In its later stage, the company will support legacy modernization and NextG/6G readiness through phased migration strategies, interoperability planning, and infrastructure adaptation.

In addition to his technical and managerial qualifications, Mr. Xavier has developed a financially supported plan to launch and sustain the proposed enterprise. The business plan provides for an initial investment of $100,000, to be funded primarily through Mr. Xavier's personal capital contribution, meaning funds contributed by the Petitioner himself to support the company's formation and initial operations, which are secured by a **substantial personal real estate asset owned by the Petitioner.** Of this amount, $40,000 will be allocated to startup expenses, including legal and professional services, insurance, marketing, rent and deposit, website development, technology resources, office needs, and specialized telecommunications engineering tools and software, while the remaining $60,000 will be maintained as working capital reserves to support payroll, project development, client acquisition, and early operational expenses. The business plan further projects a break-even point at three monthly units, corresponding to approximately $39,755 in monthly revenue. The record also includes the **Property Appraisal Report**, demonstrating that the current market value of this real estate asset is **BRL 580,000**. Based on current exchange rates, this valuation represents approximately USD $112,200 (as of June 2026), amply covering the projected initial capital requirement. These materials support the feasibility of the proposed U.S. enterprise by showing a defined investment structure, projected operational reserves, documented prior business activity, and a history of monetizing his technical expertise through professional services.

Startup	
Requirements	
Startup Expenses	
Legal	$1,500
Insurance	$500
Marketing	$8,000
Rent/Deposit	$5,000
Website design	$2,000
Computers/Phones/Tablets	$2,500
Office furniture	$4,500
Stationery	$1,000
Equipment	$15,000
Total Startup Expenses	$40,000
Startup Assets	
Cash Required	$60,000
Startup Inventory	$0
Other Current Assets	$0
Long-term Assets	$0
Total Assets	$60,000
Total Requirements	$100,000

The company's future activities are also supported by a structured hiring plan. Dartagnan Telco Solutions is projected to begin operations with five professionals in Year 1 and expand to 21 employees by Year 5, including telecommunications engineers, network optimization engineers, telecom automation and observability engineers, project managers, client support specialists, sales professionals, customer service representatives, and administrative personnel. In addition to direct employment, the business plan estimates that the company's growth may support approximately 32 indirect jobs by Year 5 through independent contractors, outsourced marketing services, legal professionals, technicians, vendors, and other service providers needed to support business operations, client acquisition, compliance, and telecommunications engineering projects.

Dartagnan Telco Solutions combines a specialized technical mission with a defined commercial and operational plan. The company is not designed merely to generate revenue or create jobs, but to address infrastructure-level telecommunications needs in the United States by improving the performance, resilience, visibility, and continuity of communication systems that support business operations, digital services, emergency communications, healthcare systems, cloud computing, financial systems, transportation, and digital commerce. This plan is directly connected to Mr. Xavier's background, as the company will serve as the structured vehicle through which he will apply his established expertise in telecommunications infrastructure, VoIP networks, SIP signaling, carrier-grade communication systems, automation, observability, and network reliability. The record therefore demonstrates that the proposed endeavor is financially supported, technically coherent, operationally defined, and aligned with Mr. Xavier's professional record.

For these reasons, the Self-Petitioner respectfully requests that the Service find that Mr. Xavier is well positioned to advance the proposed endeavor and that the second prong of Matter of Dhanasar has been satisfied.

3.3 Third Prong:

On Balance, It Would be Beneficial to the United States to Waive the Requirement of a Job Offer and Labor Certification

Under the third prong of *Matter of Dhanasar*, the Service conducts a balancing analysis to determine whether, in light of the nature of the proposed endeavor and the Self-Petitioner's qualifications, the national interest would be better served by waiving the job offer and labor certification requirements. This inquiry recognizes that, in certain cases, the benefits of allowing a qualified individual to advance a specific endeavor may outweigh the ordinary protections served by the labor certification process.

For Mr. Xavier, this analysis is especially important because his proposed endeavor is not structured as a traditional employer-sponsored telecommunications position. He intends to establish and lead Dartagnan Telco Solutions as an entrepreneurial, specialized, and multi-client telecommunications engineering company focused on modernization, automation, observability, reliability, secure interconnection, and NextG/6G readiness. The question, therefore, is not simply whether he could work for a U.S. employer, but whether requiring him to do so would limit the broader infrastructure-oriented contributions that his proposed company is designed to provide.

In evaluating this prong, the Service may consider several factors, each of which is addressed below in relation to Mr. Xavier's qualifications, proposed business model, and expected U.S. impact:

- Whether, in light of the nature of the Self-Petitioner's qualifications or proposed endeavor, it would be impractical for him to secure a job offer or obtain labor certification;
- Whether, even assuming that other qualified U.S. workers are available, the United States would still benefit from the Self-Petitioner's contributions;
- Whether the national interest in the Self-Petitioner's contributions is sufficiently important or urgent to warrant forgoing the labor certification process;
- Whether the proposed endeavor may lead to the potential creation of U.S. jobs or other positive economic effects;
- Whether the Self-Petitioner will be self-employed or entrepreneurially engaged in a manner that generally does not adversely affect U.S. workers.

As shown below, these considerations weigh in favor of the requested waiver. Mr. Xavier's proposed endeavor is designed to deploy his specialized telecommunications engineering expertise through a company capable of serving multiple U.S. clients and infrastructure-dependent sectors, while also creating direct and indirect employment, generating economic activity, and supporting the modernization and resilience of U.S. communications infrastructure.

Mr. Xavier's proposed endeavor does not fit neatly within the traditional labor certification framework because it is not designed around a single employer, a fixed job opening, or a geographically limited position. He does not seek to occupy one conventional telecommunications engineering role for one company. Instead, he intends to establish and lead **Dartagnan Telco Solutions** as Founder and Chief Telecommunications Architect, providing specialized telecommunications engineering services to multiple U.S. clients, including telecommunications operators, enterprise organizations, technology companies, data centers, cloud infrastructure operators, and digital infrastructure providers. Because the labor certification process is generally structured around one employer and one defined position, it would not adequately capture the entrepreneurial, technical, and multi-client nature of the work Mr. Xavier proposes to undertake. **Accordingly, requiring a job offer and labor certification would be impractical in light of both the nature of the proposed endeavor and Mr. Xavier's intended role in advancing it.**

The United States would also benefit from Mr. Xavier's contributions even assuming that other qualified U.S. telecommunications professionals are available. His proposed value is not limited to filling an available engineering vacancy. Rather, it lies in applying nearly two decades of specialized

experience in carrier-grade voice networks, VoIP infrastructure, SIP signaling, IMS environments, Session Border Controllers, Next Generation Networks, telecom cloud platforms, automation, observability, interoperability, and network reliability to a company designed to serve multiple infrastructure-dependent clients. His recent U.S.-related work, including migration support for more than **600 B2B customers**, backup automation for more than **100 voice-network devices**, and observability work involving approximately **75 million records per day** and more than **8,000 KPIs**, further demonstrates that his expertise is directly tied to complex, high-impact telecommunications environments. **Therefore, the benefit to the United States is not simply the availability of one additional telecommunications professional, but the broader deployment of Mr. Xavier's proven infrastructure-oriented expertise through a specialized U.S. enterprise.**

The national interest in his proposed contributions also supports forgoing the labor certification process. Federal policy materials have identified next-generation communications networks, critical infrastructure resilience, cybersecurity, and AI-enabled infrastructure as nationally important priorities. Dartagnan Telco Solutions is directly aligned with those priorities because its proposed services focus on telecommunications modernization, AI-enabled observability, AIOps, automation, secure interconnection, legacy migration, network reliability, and NextG/6G readiness. These are not isolated private business objectives; they relate to the modernization and resilience of communications systems that support emergency communications, healthcare, cloud services, digital commerce, enterprise operations, and other infrastructure-dependent sectors. **This alignment shows that the requested waiver would advance nationally important infrastructure objectives, rather than merely facilitating Mr. Xavier's private employment.**

The proposed endeavor also has meaningful potential to create U.S. jobs and generate positive economic effects. The business plan projects that Dartagnan Telco Solutions will begin with **five professionals in Year 1** and expand to **21 employees by Year 5**, including telecommunications engineers, network optimization engineers, telecom automation and observability engineers, project managers, client support specialists, sales professionals, customer service representatives, and administrative personnel. The company's projected growth is supported by sales forecasts increasing from **$533,000 in Year 1** to **$3,069,936 by Year 5**. The plan further estimates that the company's **21 direct jobs** by Year 5 would support approximately **32 indirect jobs** through contractors, outsourced services, vendors, legal professionals, technicians, marketing support, and other service providers. **Thus, the waiver would not bypass the U.S. labor market to the detriment of U.S. workers; it would allow Mr. Xavier to build an enterprise specifically designed to employ, support, and collaborate with U.S. workers.**

Mr. Xavier's self-employment further weighs in favor of the waiver because it is structured in a manner that generally does not adversely affect U.S. workers. He is not seeking to replace or undercut a U.S. worker in a preexisting position. Instead, he seeks to create and operate a specialized telecommunications engineering company that will generate payroll, engage vendors and contractors, use outsourced services, and expand access to advanced telecommunications expertise for U.S. clients. His business model is additive to the U.S. market: it creates a platform for job creation, technical service delivery, infrastructure improvement, and collaboration within the telecommunications ecosystem. **Because Mr. Xavier's self-employment is designed to create economic activity and support U.S. workers rather than displace them, this factor weighs strongly in favor of waiving the job offer and labor certification requirements.**

For these reasons, the third prong is satisfied. Mr. Xavier's proposed endeavor is entrepreneurial, specialized, multi-client, and infrastructure-oriented; his qualifications are directly tied to the work he proposes to perform; the United States would benefit from his contributions even if other

qualified professionals exist; and the business plan demonstrates meaningful potential for direct employment, indirect job creation, and broader economic effects. **On balance, granting the waiver would better serve the national interest than requiring Mr. Xavier to pursue a single employer-sponsored labor certification that would limit the broader deployment of his telecommunications engineering expertise in the United States.**

4. FINAL CONSIDERATIONS

Based on the evidence submitted and the arguments presented above, it is **more likely than not** that:

1. **The Self-Petitioner, Mr. Gustavo Dartagnan Xavier do Rego, satisfies the underlying EB-2 classification** as a member of the professions holding an advanced degree equivalent, based on his foreign degree evaluated as equivalent to a U.S. Bachelor of Science in Electrical Engineering and his more than five years of progressive post-baccalaureate experience in telecommunications engineering.
2. **The proposed endeavor has substantial merit and national importance** because it is directed toward telecommunications infrastructure modernization, network reliability, automation, AI-enabled observability, interoperability, secure interconnection, and readiness for next-generation communication systems in the United States.
3. **The Self-Petitioner is well positioned to advance the proposed endeavor** based on his academic background, nearly two decades of specialized telecommunications engineering experience, professional licensure, technical training, record of success in carrier-grade voice networks and observability systems, business track record, and detailed plan to establish and lead Dartagnan Telco Solutions.
4. **On balance, it would be beneficial to the United States to waive the job offer and labor certification requirements** because the endeavor is entrepreneurial, specialized, multi-client, and infrastructure-oriented, with the potential to create U.S. jobs, generate indirect economic activity, and support the modernization and resilience of U.S. communications infrastructure.

Accordingly, the record demonstrates that Mr. Xavier satisfies the EB-2 classification requirements and meets all three prongs of the *Matter of Dhanasar* framework, pursuant to **INA §203(b)(2)(B)** His proposed endeavor is not limited to personal employment or the private interests of a single employer; rather, it is designed to apply his specialized telecommunications engineering expertise to infrastructure needs that affect operators, enterprises, digital infrastructure providers, and other communication-dependent sectors across the United States.

For the reasons set forth above, the Self-Petitioner respectfully requests that USCIS approve this petition and grant the requested National Interest Waiver.

Should you require any further information or documentation, please do not hesitate to contact our office. Thank you for your time and consideration.

Sincerely,



Otavio Haverroth Silva
California Bar # 343486

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Exhibit A - Petitioner's Resume

GUSTAVO DARTAGNAN XAVIER DO REGO

E-mail | gustavodartagnan@gmail.com

Telefone | +5541988360365

Electrical Engineer with an Emphasis in Telecommunications and a Postgraduate Specialization in Management Development (Leadership). With 19+ years of professional experience, including Infrastructure as a Service (IaaS), Cloud Computing, Voice over IP (VoIP) telecommunications projects, and the design and maintenance of complex VoIP solutions for carrier-grade networks.
Core competencies include Python, Cloud Computing, Session Initiation Protocol (SIP) Signaling, Linux Installation and Maintenance, Complex Systems Design, Session Border Controllers (SBC), IP Multimedia Subsystem (IMS), Next Generation Networks (NGN) and IP Centrex.

PROFESSIONAL EXPERIENCE

SR TELECOM ENGINEER

CONTRACTOR AT OPTIMUM (VIA WINPROVIT) | BETHPAGE, NY, USA

10/2022 – PRESENT

- ***Telecommunications project management.***
- ***Technical support for Mobile/Fixed Voice Networks.***
- ***Linux systems automation.***
- ***Python software development.***

Achievements:

- *Automated configuration and firmware upgrade of Adtran IADs (Integrated Access Devices), greatly accelerating the migration of 600+ B2B customers from Genband to Metaswitch platforms, with only one migration incident recorded.*
- *Oversight of the Robocall Mitigation Project to comply with FCC (Federal Communications Commission) DA 24-73 requirements for STIR/SHAKEN implementation.*
- *Automated daily backups for more than 100 voice-network devices.*
- *Developed a system integrating performance indicators from Nokia IMS (Internet Protocol Multimedia Subsystem) platform (3GPP XML format) into a new observability platform based on OpenTelemetry. Enabled creation of operational dashboards and alerts, for example, a graph of emergency call volume and alerting for major equipment failures. Handles more than 8,000 KPIs and processes approximately 75 million records daily, significantly improving network visibility and fault mitigation.*

TELECOM CONSULTANT

VIVO/TELEFONICA BRAZIL | CURITIBA, PARANÁ, BRAZIL

06/2006 – 09/2022

04/2018 - 09/2022 | Telecom Consultant at Virtualization Engineering

• Datacenter Installations and Capacity Planning.
• Onboarding of Virtual Network Functions (VNFs) in VMware Telco Cloud.
• Developed RFQs (Requests for Quotation) and analyzed technical proposals.
• Built HEAT templates and OVF scripts to automate VNF deployment.
• Troubleshooting and support for virtualized environments.

Achievements:

- *Conducted the first local VNF homologation in Brazil (previously performed only in Spain).*
- *Supported vendors in developing HEAT templates and Cloud configurations.*
- *Participated with a global team on a POC for CD/CT (Continuous Deployment/Continuous Testing) and Observability projects.*
- *Created a system to analyze Call Detail Records (CDRs) to comply with ANATEL regulation (Decision No. 160/2022/COGE/SCO), blocking users generating more than 100k short-duration calls per day.*

05/2012 - 04/2018 | Telecom Specialist at Voice Core Engineering

• Capacity and network expansions planning.
• Research of new technologies for product development.
• Technical Leadership on voice projects.
• Technical stakeholder for provisioning guidelines and automation.
• Developed RFQs (Requests for Quotation) and analyzed technical proposals.

Achievements:

- *Contributed to integration of Huawei IMS into the Genband NGN network.*
- *Technical Leadership of the product development called "Freedom", which enabled customers to use their fixed number in the smartphone app, awarded the Tele.Síntese Communications Innovation Prize (2013).*
- *Deployed SBCs to expand SIP-based telephony nationwide.*
- *Contributed to the VoIP interconnection project (use of VoIP call transport between telecoms operators).*
- *Integrated Vivo and GVT Voice networks.*
- *Developed a system to collect equipment usage data, enabling accurate capacity and growth planning.*

09/2009 - 05/2012 | Senior Telecom Analyst – Specialized Voice Support

• Third-level support for NGN voice network.
• Network expansions and commissioning of new equipment.
• Vendor interaction for complex issues and disaster recovery.

Achievements:

- *Delivered training and technical procedures for junior teams.*
- *Created provisioning templates and a shell script to analyze Genband SSTK configurations, increasing voice-network stability and quality.*
- *Applied a standard configuration for Alcatel OmniPCX (VoxNG), drastically reducing customer complaints.*
- *My contributions to the VoxIP/VoxNG projects were recognized.*
- *GVT product VoxNG was awarded "Best Communication Solution in Cloud Telephony" by Alcatel-Lucent (Chicago, 2012).*

05/2008 - 09/2009 | Support Analyst – Vono Team

• Technical Leadership of the VoIP Network.
• Technical support and R&D for Vono VoIP services.
• Managed Asterisk clusters and dial-plan logic integrated with Oracle DB and web services.

Achievements:

- *Asterisk version upgrade.*

- *Migrated platform to virtual machines, improving more than 25% in performance.*
- *Integrated IP-PBX cluster directly with GVT NGN network.*
- *Implemented version control for dial-plan and source code.*
- *Corrected critical security flaws.*
- *Created new features like Click2Call, audible balance, Fax2Email,etc..*
- *Created IP-authenticated wholesale VoIP solution used in wholesale sales (Skype, Varphonex, Nexus, etc.).*
- *Skype trial Traffic was over two million minutes in less than a month.*

06/2006 - 05/2008 | Support Analyst – Corporate Support

• New Customer Activations and Configuration Change Requests.

• Technical support for Vox3G (Asterisk-based IP PBX), VoxNG and other VoIP products.

Achievements:

- *Created configuration templates and automation tools, significantly improving team productivity and eliminating configuration errors.*

EDUCATION

06/2018 | POSTGRADUATE SPECIALIZATION IN MANAGEMENT DEVELOPMENT (LEADERSHIP)

FAE University Center

Curitiba, Paraná, Brazil

05/2006 | BACHELOR'S DEGREE IN ELECTRICAL ENGINEERING (TELECOMMUNICATIONS)

FEDERAL UNIVERSITY OF PARANÁ

Federal University of Paraná – Brazil

MAIN COURSES / SEMINARS

RIBBON COMMUNICATIONS (FORMER NORTEL AND GENBAND BRANDS) - 376H

- 10/2025 | RIBBON ANALYTICS BASICS – 16H
- 10/2025 | RIBBON ANALYTICS ADVANCED –16H
- 10/2011 | C2015 C20 SOLUTION FAULT MANAGEMENT – GENBAND - 40H
- 09/2011 | C2010 C20 SOLUTION OVERVIEW – GENBAND - 12H
- 09/2011 | ATCA15 C20-ATCA OPERATIONS AND MAINTENANCE – GENBAND - 24H
- 09/2011 | A218 C20 ADAPTATIVE APPLICATION ENGINE A2 ADMINISTRATION – GENBAND - 12H
- 09/2011 | 2SP2K15 – SIGNALING POINT 2000 SIGNALING GATEWAY OPERATIONS, ADMINISTRATION AND MAINTENANCE – GENBAND - 18H
- 06/2011 | S330 S340 OPERATIONS, ADMINISTRATION, MAINTENANCE AND PROVISIONING COURSE – GENBAND - 30H
- 05/2011 | AUDIO PROVISIONING IN A CARRIER VOICE OVER IP NETWORK – GENBAND - 24H
- 12/2010 | CALLP25 ADVANCED CALL PROCESSING TOOLS FOR TRUNKS – GENBAND - 40H
- 12/2010 | UXLA37 CS2000 UNIVERSAL TRANSLATIONS – GENBAND - 40H
- 12/2010 | VOIP35 CARRIER VOICE OVER IP CAPACITY PLANNING AND PERFORMANCE MONITORING – GENBAND - 24H
- 05/2010 | 1775A CS2000 - COMPACT CS2100 - OPERATIONS AND MAINTENANCE – NORTEL - 24H

- 05/2010 | CAG1755A CVOIP NETWORK FUNDAMENTALS – GREENFIELD - NORTEL - 24H
- 11/2009 | 2657A ADAPTIVE APPLICATION ENGINE STANDALONE PROVISIONING – NORTEL - 16H
- 11/2009 | SESSION SERVER OVERVIEW AND PROVISIONING – NORTEL - 16H

ALURA – ONLINE TECHNOLOGY COURSES - 124H

- 05/2022 | ANSIBLE: YOUR INFRASTRUCTURE AS CODE – 12H
- 04/2022 | VAGRANT: MANAGING VIRTUAL MACHINES – 12H
- 04/2022 | PYTHON: ADVANCING IN THE LANGUAGE – 12H
- 04/2022 | PYTHON: ADVANCING IN OBJECT-ORIENTED PROGRAMMING – 10H
- 04/2022 | PYTHON: UNDERSTANDING OBJECT-ORIENTED PROGRAMMING – 12H
- 04/2022 | PYTHON COLLECTIONS PART 2: SETS AND DICTIONARIES – 9H
- 04/2022 | PYTHON COLLECTIONS PART 1: LISTS AND TUPLES – 8H
- 04/2022 | PYTHON STRING: EXTRACTING INFORMATION FROM A URL – 8H
- 04/2022 | PYTHON BRAZIL: DATA VALIDATION IN THE NATIONAL STANDARD – 7H
- 03/2022 | PYTHON: GETTING STARTED WITH THE LANGUAGE – 12H
- 03/2022 | JENKINS AND DOCKER: CONTINUOUS DELIVERY PIPELINE – 12H
- 03/2022 | DOCKER: CREATING AND MANAGING CONTAINERS – 10H

01/2021 | AWS CLOUD PRACTITIONER ESSENTIALS – AWS - 6H

04/2020 | DEVOPS & AGILE CULTURE – FIAP - 60H

TELEFONICA/GVT INTERNAL TRAINING - 112H

- 08/2015 | LEAN 6 SIGMA METHODOLOGY – YELLOW BELT – TELEFONICA - 16H
- 09/2010 | MEDIA GATEWAY – GVT – 16H
- 08/2010 | NGN CENTRAL (INSTRUCTOR) – 20H
- 06/2010 | ADVANCED H248 MONITORING PROBES – GVT - 24H
- 04/2010 | H248 MONITORING PROBES – GVT - 8H
- 04/2010 | VOIP PRODUCT OPERATION – GVT - 20H
- 09/2009 | H248 PROTOCOL – GVT - 8H

HUAWEI IMS - 376H

- 06/2012 | IMANAGER M2000 TRAINING – 30H
- 05/2012 | ENS OPERATION AND MAINTENANCE TRAINING – 12H
- 05/2012 | ENS DATA CONFIGURATION AND SERVICE PROVISIONING TRAINING – 12H
- 05/2012 | ENS FUNDAMENTAL TRAINING – 12H
- 05/2012 | ICG9815 OPERATION AND MAINTENANCE TRAINING – 12H
- 05/2012 | ICG9815 DATA CONFIGURATION TRAINING – 12H
- 05/2012 | ICG9815 FUNDAMENTAL TRAINING – 12H
- 05/2012 | UMG8900 OPERATION AND MAINTENANCE TRAINING - 12H
- 05/2012 | UMG8900 DATA CONFIGURATION TRAINING – 12H
- 04/2012 | UMG8900 FUNDAMENTAL TRAINING - 12H
- 04/2012 | UGC3200 OPERATION AND MAINTENANCE TRAINING – 12H
- 04/2012 | UGC3200 CONFIGURATION AND NUMERICAL ANALYSIS – 18H
- 04/2012 | UGC3200 DATA CONFIGURATION AND INTERCONNECTION TRAINING -18H
- 04/2012 | UGC3200 FUNDAMENTAL TRAINING – 12H
- 04/2012 | ATS9900 PROVISIONING TRAINING – 12H
- 04/2012 | ATS9900 DATA CONFIGURATION TRAINING – 12H
- 04/2012 | ATS9900 FUNDAMENTAL TRAINING – 12H
- 03/2012 | MRP6600 CONFIGURATION TRAINING – 12H

- 03/2012 | MRP6600 FUNDAMENTAL TRAINING – 12H
- 03/2012 | MRFC SYSTEM FUNDAMENTAL AND DATA CONFIGURATION TRAINING – 12H
- 03/2012 | CSC3300/HSS9820 OPERATION AND MAINTENANCE TRAINING - PROVISIONING SUBSCRIBERS – 18H
- 03/2012 | HSS9820 DATA CONFIGURATION TRAINING - 12H
- 03/2012 | HSS9820 FUNDAMENTAL TRAINING – 12H
- 03/2012 | CSC3300 DATA CONFIGURATION TRAINING – 18H
- 02/2012 | CSC3300 FUNDAMENTAL TRAINING – 12H
- 02/2012 | IMS OPERATION AND MAINTENANCE TRAINING - 16H
- 02/2012 | IMS OPERATION AND MAINTENANCE TRAINING SPG 2800 – 12H
- 02/2012 | IMS ATCA PLATFORM HARDWARE OMS2600 TRAINING – 12H
- 02/2012 | OSTA20 HARDWARE PLATFORM TRAINING – 12H
- 02/2012 | IMS OVERVIEW TRAINING – 12H

ORACLE - ACME PACKET SESSION BORDER CONTROLLER - 80H

- 11/2012 | NET-NET SESSION DIRECTOR ADVANCED CONFIGURATION - 40H
- 08/2009 | NET-NET 4000 CONFIGURATION BASICS (CAB-C) - 40H

SIXBELL INTELLIGENT NETWORK - 36H

- 02/2011 | PLATFORM OPERATION AND MANAGEMENT - 16H
- 02/2011 | PLATFORM ADMINISTRATION - 16H
- 02/2011 | INTRODUCTION TO THE PLATFORM - 4H

ALCATEL LUCENT UNIVERSITY - OMNIPCX ENTERPRISE COMMUNICATION SERVER - 152H

- 10/2009 | VOIP ADVANCED – 40H
- 10/2009 | CPU LOADING AND REDUNDANCY – 32H
- 09/2009 | STARTER PACK ENTERPRISE – 80H

12/2009 | SIGNALING IN NGN NETWORKS – IWF CONSULTING AND TRAINING - 40 HOURS

12/2009 | ENGLISH – CELIN UFPR - BASIC TO INTERMEDIATE LEVEL – 420 HOURS

PROFESSIONAL LICENSE

CREA-PR

PR-88187/D

• HONORS & AWARDS

FREEDOM - PRÊMIO ANUÁRIO TELE.SÍNTESE INOVAÇÃO EM COMUNICAÇÕES – 10/2013

São Paulo, SP, Brazil

GVT received the Tele.Síntese Annual Award for Innovation in Communications during an industry event in São Paulo highlighting the leading innovations in communication and internet products and services in the Brazilian market. The application, launched that same year, ranked second place in the telecommunications service providers category. The smartphone solution, available for Android and iOS, enables users to make and receive calls using their plan allowances over Wi-Fi and 3G networks. Organized by Momento Editorial, the award

evaluated 165 projects and was supported by the Ministries of Communications and of Science, Technology and Innovation, whose representatives served on the judging panel. The recognition coincided with the release of the 2013 Tele.Síntese Innovation Yearbook, which highlighted service convergence and GVT's multi-screen initiatives, with this application featured as a key example.

- ***VOXNG - BEST COMMUNICATION SOLUTION IN THE CLOUD TELEPHONY CATEGORY – 06/2012***

  Chicago, IL, US

  Awarded by Alcatel-Lucent during the Dynamic Enterprise Awards, held as part of a Market Analysts Conference from June 26–28, 2012, in Chicago. Recognized as the best communication solution in the cloud telephony category for enterprises, the GVT solution was selected among the top global Alcatel-Lucent implementations. Eight projects reached the finalist stage, and the winning solution was chosen by a panel of 25 analysts from leading international consulting firms, including Frost & Sullivan, IDC, Gartner, and Yankee Group.

Exhibi B - Eligibility Criteria: Advanced Degree

Federative Republic of Brazil

FEDERAL UNIVERSITY OF PARANÁ

Diploma in Electrical Engineering

The President of the Federal University of Paraná, in the exercise of his duties and considering the completion of the Engineering Program in Electrical Engineering on May 10, 2006, hereby confers the degree in Electrical Engineering upon ***Gustavo Dartagnan Xavier do Rego****, Brazilian, born in the State of Paraná, on September 23, 1978, holder of Identity Card No. 6.129.994-7, issued by the Paraná Identification Institute, and grants him this diploma, with all the rights and privileges pertaining thereto.*

Curitiba, May 10, 2006.

-----// signature //-----
Gustavo Dartagnan Xavier do Rego
Graduate

-----// signature //-----
Prof. Dr. Carlos Augusto Moreira Júnior
President

I, Raphael Michels Fantinato de Moura, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Raphael Michels Fantinato de Moura. **Date: January 9, 2026.**

República Federativa do Brasil

UNIVERSIDADE FEDERAL DO PARANÁ

Diploma de Engenheiro Eletricista

O Reitor da Universidade Federal do Paraná, no uso de suas atribuições e tendo em vista a conclusão do Curso de Engenharia, área Eletricidade, habilitação Engenharia Elétrica, em 10 de maio de 2006, confere o título de Engenheiro Eletricista a **Gustavo Dartagnan Xavier do Rego**, brasileiro, natural do Estado do Paraná, nascido a 23 de setembro de 1978, portador da Carteira de Identidade n.º 6.129.994-7, expedida pelo Instituto de Identificação do Paraná, e outorga-lhe o presente diploma, a fim de que possa gozar de todos os direitos e prerrogativas legais.

Curitiba, 10 de maio de 2006.

Gustavo Dartagnan Xavier

Gustavo Dartagnan Xavier do Rego
Diplomado

Prof. Dr. Carlos Augusto Moreira Júnior
Reitor

FEDERAL UNIVERSITY OF PARANÁ
Rua XV de Novembro, 1299 – Downtown, Curitiba/PR, ZIP Code 80060-000
Phone: (41) 3360-5000 – https://ufpr.br/

STATEMENT

Process No. 23075.004232/2023-63

To whom it may concern,

The Diploma Office of the Federal University of Paraná hereby certifies the authenticity of the Engineering degree, Electrical Engineering field, awarded to graduate **GUSTAVO DARTAGNAN XAVIER DO REGO**. The diploma was issued on May 10, 2006, and registered on October 16, 2006 (registration no. 70470, book UF-152, page 82, process no. 23999/06-91. We hereby state that all information contained herein is true and consistent with our official records. This document also certifies that **GUSTAVO DARTAGNAN XAVIER DO REGO** has successfully completed all requirements necessary for the award of the aforementioned degree, in accordance with the academic regulations and institutional policies of this University. We remain at your disposal to provide any additional information at <diplomas@ufpr.br>.

Sincerely,

This document was electronically signed by **FLAVIA NETO VIEIRA**, **EDUCATIONAL AFFAIRS OFFICER**, on 10/31/2025, at 2:40 p.m., in accordance with Article 1, item III, subsection “b,” of Law No. 11,419/2006.

The authenticity of this document can be verified here by entering verification code **8329742** and CRC code **AA103261**.

I, Raphael Michels Fantinato de Moura, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Raphael Michels Fantinato de Moura. **Date: January 9, 2026.**

UNIVERSIDADE FEDERAL DO PARANÁ
Rua XV de Novembro, 1299, - Bairro Centro, Curitiba/PR, CEP 80060-000
Telefone: (41) 3360-5000 - https://ufpr.br/

DECLARAÇÃO

Processo nº 23075.004232/2023-63

A quem interessar possa,

A Unidade de Diplomas da Universidade Federal do Paraná declara a autenticidade do diploma do curso de Engenharia, área Eletricidade, habilitação Engenharia Elétrica do egresso **GUSTAVO DARTAGNAN XAVIER DO REGO**. O diploma foi emitido em 10 de maio de 2006 e registrado em 16 de outubro de 2006 (registro nº 70470, livro UF-152, fls. 82, processo 23999/06-91. Informamos que todos os dados são verdadeiros e que estão de acordo com nossos registros. Este documento atesta também que **GUSTAVO DARTAGNAN XAVIER DO REGO** completou com sucesso os requisitos necessários para a obtenção do referido diploma, de acordo com os regulamentos e políticas acadêmicas da instituição. Nos colocamos à disposição para prestar informações adicionais pelo endereço <diplomas@ufpr.br>.

Atenciosamente

Documento assinado eletronicamente por **FLAVIA NETO VIEIRA**, **TECNICO EM ASSUNTOS EDUCACIONAIS**, em 31/10/2025, às 14:40, conforme art. 1º, III, "b", da Lei 11.419/2006.

A autenticidade do documento pode ser conferida aqui informando o código verificador **8329742** e o código CRC **AA103261**.

Referência: Processo nº 23075.004232/2023-63 SEI nº 8329742

MINISTRY OF EDUCATION
FEDERAL UNIVERSITY OF PARANÁ

ACADEMIC TRANSCRIPT

IDENTIFICATION

Students' Name: GUSTAVO D XAVIER DO REGO

Enrollment No.: GRR19994106
Place of Birth: **State:**
Nationality: Brazilian **Date of Birth:** 09/23/1978

DOCUMENTS

Tipe of Document	Document Number	Issuing Authority	
Identity Card	61299947	SSP	PR

ADMISSION METHOD

Admission Method: University Entrance Examination **Term:** 1st Semester of 1999

Courses	Grades
Entrance Examination Score	5,520.00

UNDERGRADUATE PROGRAM

Electrical Engineering – Emphasis in Telecommunications

Decree No. 67,730/70 – Published in the Federal Official Gazette (DOU) on 12/10/1970, and Opinion No. 1,631/78 – Federal Council of Education (CFE) – Renewal of Recognition Ordinance No. 797/2010, DOU 12/15/2016

Date of Program Completion: 12/20/2005 **Date of Degree Conferral:** 05/10/2006

NOTES

Student Status: Graduated

CURITIBA, October 31, 2025

Authentication: 7CCC.4540.14C6.F587.F34C.FDC7.412B.915F
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Valid until: 10/21/2027

I, Raphael Michels Fantinato de Moura, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Raphael Michels Fantinato de Moura. **Date: January 9, 2026.**

MINISTÉRIO DA EDUCAÇÃO
UNIVERSIDADE FEDERAL DO PARANÁ

HISTÓRICO ESCOLAR

IDENTIFICAÇÃO

Nome Aluno: GUSTAVO D XAVIER DO REGO

Matrícula : GRR19994106
Naturalidade : **UF:**
Nacionalidade : Brasileira **Nascimento:** 23/09/1978

DOCUMENTOS

Tipo Documento	Número Documento	Órgão Emissor	
Carteira de Identidade	61299947	SSP	PR

FORMA DE INGRESSO

Forma de Ingresso: Vestibular **Período:** 1o. Semestre de 1999

Matérias	Notas
Escore do Vestibular	5.520,00

CURSO SUPERIOR

Engenharia Elétrica - Ênfase em Telecomunicações

Decreto nº 67730/70 - Publicado no D.O.U. 10/12/70 e Parecer 1631/78-CFE - Renovação de Reconhecimento Portaria 797/2010 - DOU 15/12/2016

Data de Conclusão do Curso: 20/12/2005 **Data da Colação de Grau:** 10/05/2006

OBSERVAÇÕES

Situação do Aluno **Formatura**

CURITIBA, 31 de Outubro de 2025

Autenticação: 7CCC.4540.14C6.F587.F34C.FDC7.412B.915F
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Validade: 21/10/2027

FEDERAL UNIVERSITY OF PARANÁ

Data: 10/31/2025
Hora: 1:03 p.m.

11.02.05.99.37 Academic Transcript (Student GPA) (Primary)

Program: 03B - Electrical Engineering Program – Emphasis in Telecommunications - Daytime **Version:** 2002

Enrollment No.: **GRR19994106**

Student's Name: **GUSTAVO D XAVIER DO REGO**

S.D.	Code	Course/Activity Name	Workload	Grade	Att.	Status	Location
Term:		**1st SEMESTER OF 1999**					
A	CF059	PHYSICS I	60	74.00	100.00	Passed	
A	CI228	COMPUTER LABORATORY I	60	100.00	100.00	Passed	
		Term Workload:	120			**Grade Point Average:** 0.8700	
Term:		**2nd SEMESTER OF 1999**					
	CM401	DIFFERENTIAL AND INTEGRAL CALCULUS A	180		0.00	Canceled	
	TE450	BASIC ELECTRICITY I	90	71.00	83.33	Passed	
A	CE003	Statistics II	60	71.00	83.33	Passed	
A	CF063	EXPERIMENTAL PHYSICS I	30	50.00	100.00	Passed	
A	CF060	PHYSICS II	60	23.00	60.00	Failed	
	CM402	ANALYTICAL GEOMETRY AND LINEAR ALGEBRA	180		0.00	Canceled	
A	CD404	DESCRIPTIVE GEOMETRY A	120	89.00	81.67	Passed	
A	TE040	INTRODUCTION TO ELECTRICAL ENGINEERING	30	71.00	50.00	Ex. (With Grade)	
A	CI208	Computer Programming	60	91.00	100.00	Passed	
	TQ409	GENERAL AND APPLIED CHEMISTRY	90	27.00	55.56	Failed	
		Term Workload:	390			**Grade Point Average:** 0.6339	
Term:		**2nd SEMESTER OF 2000**					
A	CM005	LINEAR ALGEBRA	60	90.00	83.33	Ex. (With Grade)	
	CM401	DIFFERENTIAL AND INTEGRAL CALCULUS A	180	50.00	100.00	Passed	
A	CM041	Calculus I	90	50.00	100.00	Ex. (With Grade)	
A	CM042	Calculus II	90	50.00	100.00	Ex. (With Grade)	
	TE451	BASIC ELECTRICITY II	90	0.00	6.67	Failed	
A	CM045	Analytical Geometry	60	90.00	83.33	Ex. (With Grade)	
	CM402	ANALYTICAL GEOMETRY AND LINEAR ALGEBRA	180	90.00	94.44	Passed	
		Term Workload:	660			**Grade Point Average:** 0.6000	
Term:		**1st SEMESTER OF 2001**					
A	CI202	Numerical Methods	60		0.00	Canceled	
		Term Workload:	0			**Grade Point Average:** 0.0000	
Term:		**1st SEMESTER OF 2002**					
A	CI202	Numerical Methods	60	65.00	76.67	Passed	
		Term Workload:	60			**Grade Point Average:** 0.6500	
Term:		**2nd SEMESTER OF 2002**					
	CM404	DIFFERENTIAL AND INTEGRAL CALCULUS B	150	50.00	93.33	Passed	
A	TE452	ELECTRIC CIRCUITS	180	6.00	71.11	Failed	
	TE463	ELECTROMECH. & ELEC. ENERGY CONVERSION	150		0.00	Canceled	
A	TE046	ELECTRONIC DEVICES	60	50.00	50.00	Ex. (With Grade)	
	TE451	BASIC ELECTRICITY II	90	50.00	90.00	Passed	
A	TE044	ELECTRICITY AND MAGNETISM	60	50.00	85.00	Ex. (With Grade)	
	TE457	BASIC ELECTRONICS	180	50.00	83.33	Passed	
	TH408	TRANSPORT PHENOMENA B	120		0.00	Canceled	
A	CF062	PHYSICS IV	60	50.00	85.00	Ex. (With Grade)	
A	TE047	ELECTRICAL ENGINEERING LABORATORY II	30	50.00	0.00	Ex. (With Grade)	
A	TE052	ELECTRICAL ENGINEERING LABORATORY III	30	50.00	0.00	Ex. (With Grade)	

A = Active I = Inactive

Authentication Code: 5BA9.B64E.33F4.6597.094D.2216.CFA5.7AA7
Verification available at: portaldoaluno.ufpr.br/usuario/publico/autenticacao/form.action
Valid until: 10/21/2027

FEDERAL UNIVERSITY OF PARANÁ

Data: 10/31/2025
Hora: 1:03 p.m.

11.02.05.99.37 Academic Transcript (Student GPA) (Primary)

Program: 03B - Electrical Engineering Program – Emphasis in Telecommunications - Daytime **Version:** 2002

Enrollment No.: **GRR19994106**

Student's Name: **GUSTAVO D XAVIER DO REGO**

S.D.	Code	Course/Activity Name	Workload	Grade	Att.	Status	Location
A	TE048	ELECTRICAL SYSTEMS MODELING	60	50.00	83.33	Ex. (With Grade)	
	TQ409	GENERAL AND APPLIED CHEMISTRY	90		0.00	Canceled	
A	TE043	ANALYTICAL TECHNIQUES FOR ELEC. ENGINEERING	60	50.00	83.33	Ex. (With Grade)	
		Term Workload:	780			**Grade Point Average:** 0.4175	
Term:		**1st SEMESTER OF 2003**					
	TQ028	MATERIALS SCIENCE	30	71.00	86.67	Passed	
I	TE041	ELECTRIC CIRCUITS I	45	51.00	100.00	Passed	
A	TE045	ELECTRIC CIRCUITS II	60	60.00	100.00	Passed	
A	TE054	LINEAR ELECTRONIC CIRCUITS	60		0.00	Canceled	
I	TE049	ENERGY CONVERSION	75	27.00	88.00	Failed	
A	TE050	DIGITAL ELECTRONICS I	60	64.00	80.00	Passed	
A	TH014	TRANSPORT PHENOMENA IN ELEC. ENGINEERING	60	73.00	90.00	Passed	
A	TE056	ELECTRICAL INSTALLATIONS	60	59.00	76.67	Passed	
A	TE066	ELECTRICAL MATERIALS	45	59.00	100.00	Passed	
A	TE060	PRINCIPLES OF COMMUNICATION	60	53.00	100.00	Passed	
A	TE055	LINEAR CONTROL SYSTEMS THEORY	60	73.00	100.00	Passed	
		Term Workload:	480			**Grade Point Average:** 0.5770	
Term:		**2nd SEMESTER OF 2003**					
A	TE084	ANTENNAS – TELECOMMUNICATIONS	60	53.00	100.00	Passed	
I	TE049	ENERGY CONVERSION	75	47.00	93.33	Failed	
A	TE065	ECOLOGY, ENVIRONMENT, AND ELEC. ENGINEERING	30	92.00	96.67	Passed	
A	TE058	TECHNICAL REPORT WRITING	30	71.00	90.00	Passed	
I	TE057	DIGITAL ELECTRONICS II	60	91.00	96.67	Passed	
A	TE106	OCCUPATIONAL SAFETY ENGINEERING	60	70.00	86.67	Passed	
A	CF064	EXPERIMENTAL PHYSICS II	30	60.00	93.33	Passed	
A	CF060	PHYSICS II	60	16.00	23.33	Failed	
A	TE064	PROJECT MANAGEMENT	60	86.00	86.67	Passed	
A	TE067	ELECTRICAL ENGINEERING LABORATORY V	30	73.00	100.00	Passed	
A	TE053	ELECTROMAGNETIC WAVES	60	72.00	75.00	Passed	
		Term Workload:	420			**Grade Point Average:** 0.6430	
Term:		**1st SEMESTER OF 2004**					
I	TQ072	MATERIALS SCIENCE AND ENGINEERING	60	60.00	100.00	Ex. (With Grade)	139
A	TE054	LINEAR ELECTRONIC CIRCUITS	60	36.00	80.00	Failed	
A	TE111	Digital Communication	60	70.00	86.67	Passed	
A	TE102	SWITCHING III – TELECOMMUNICATIONS	60	72.00	83.33	Passed	
I	TE049	ENERGY CONVERSION	75	43.00	100.00	Failed	
A	CD029	TECHNICAL DRAWING I	60	98.00	100.00	Passed	
A	TE059	ELECTRICAL ENGINEERING LABORATORY IV	30	97.00	100.00	Passed	
A	TE124	Microcontrollers	60	84.00	100.00	Passed	
A	TE081	TELECOMMUNICATIONS SYSTEMS PLANNING	60	79.00	83.33	Passed	
	TE072	DIGITAL SIGNAL PROCESSING I – ELECTRONICS	60	25.00	70.00	Failed	
A	TE099	TRANSMISSION SYSTEMS I – TELECOMMUNICATIONS	60	68.00	96.67	Passed	
A	HP070	SPECIAL TOPICS IN PSYCHOLOGY I	60	85.00	100.00	Passed	
		Term Workload:	510			**Grade Point Average:** 0.6632	

A = Active I = Inactive

Authentication Code: 5BA9.B64E.33F4.6597.094D.2216.CFA5.7AA7
Verification available at: portaldoaluno.ufpr.br/usuario/publico/autenticacao/form.action
Valid until: 10/21/2027

FEDERAL UNIVERSITY OF PARANÁ

Data: 10/31/2025
Hora: 1:03 p.m.

11.02.05.99.37 Academic Transcript (Student GPA) (Primary)

Program: 03B - Electrical Engineering Program – Emphasis in Telecommunications - Daytime **Version:** 2002

Enrollment No.: **GRR19994106**

Student's Name: **GUSTAVO D XAVIER DO REGO**

S.D.	Code	Course/Activity Name	Workload	Grade	Att.	Status	Location
Term:		**2nd SEMESTER OF 2004**					
A	TT008	Administration and Organization of Engineering Companies I	60	65.00	83.33	Passed	
A	TE054	LINEAR ELECTRONIC CIRCUITS	60	53.00	100.00	Passed	
A	TE103	SWITCHING IV – TELECOMMUNICATIONS	60	91.00	90.00	Passed	
I	TE063	PROCESS INSTRUMENTATION AND CONTROL	60	75.00	90.00	Passed	
A	TE061	INTRODUCTION TO ELECTRICAL POWER SYSTEMS	60	83.00	86.67	Passed	
A	TE042	ELECTRICAL ENGINEERING LABORATORY I	30	50.00	100.00	Ex. (With Grade)	
A	TE131	Power System Protection	60	90.00	100.00	Passed	
A	TE090	COMPUTER NETWORKS – ELECTRONICS	60	73.00	93.33	Passed	
		Term Workload:	450			**Grade Point Average:** 0.7400	
Term:		**1st SEMESTER OF 2005**					
A	AAC012	Formative Activities	10		100.00	Pass. (Without Grade)	
I	TE049	ENERGY CONVERSION	75	75.00	94.67	Passed	
A	TE062	POWER ELECTRONICS	60	59.00	86.67	Passed	
	TE104	SUPERVISED INTERNSHIP	585	90.00	100.00	Passed	
A	CF060	PHYSICS II	60	50.00	100.00	Passed	
		Term Workload:	790			**Grade Point Average:** 0.8310	
Term:		**2nd SEMESTER OF 2005**					
A	TE051	NONLINEAR CIRCUITS	60	50.00	100.00	Ex. (With Grade)	139
A	TE105	UNDERGRADUATE THESIS	300	79.00	100.00	Passed	
		Term Workload:	360			**Grade Point Average:** 0.7417	
		Term Workload:	5020			**Grade Point Average:** 0.6391	

Exemption location

139 Electrical Engineering Program – Emphasis in Electrical Power Engineering – Daytime

A = Active I = Inactive

Authentication Code: 5BA9.B64E.33F4.6597.094D.2216.CFA5.7AA7
Verification available at: portaldoaluno.ufpr.br/usuario/publico/autenticacao/form.action
Valid until: 10/21/2027

I, Raphael Michels Fantinato de Moura, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Raphael Michels Fantinato de Moura. **Date: January 12, 2026.**

UNIVERSIDADE FEDERAL DO PARANÁ

Data: 31/10/2025
Hora: 13:03

11.02.05.99.37 Histórico Escolar (IRA por Aluno) (Principal)

Curso: 03B - Curso de Engenharia Elétrica - Ênfase em Telecomunicações - Diurno **Versão:** 2002

Matrícula: GRR19994106

Nome Aluno: GUSTAVO D XAVIER DO REGO

S.D.	Código	Nome Disciplina/Atividade	C.H.	Média	Freq.	Situação	Local
Período:		**1o. Semestre de 1999**					
A	CF059	FISICA I	60	74,00	100,00	Aprovado	
A	CI228	LABORATORIO DE INFORMATICA I	60	100,00	100,00	Aprovado	
		Carga Horária no Período:	120		**Índice de Rendimento Acad.:**	0,8700	
Período:		**2o. Semestre de 1999**					
	CM401	CALCULO DIFERENCIAL E INTEGRAL A	180		0,00	Cancelado	
	TE450	ELETRICIDADE BASICA I	90	71,00	83,33	Aprovado	
A	CE003	Estatística II	60	71,00	83,33	Aprovado	
A	CF063	FISICA EXPERIMENTAL I	30	50,00	100,00	Aprovado	
A	CF060	FISICA II	60	23,00	60,00	Reprovado	
	CM402	GEOMETRIA ANALITICA E ALGEBRA LINEAR	180		0,00	Cancelado	
A	CD404	GEOMETRIA DESCRITIVA A	120	89,00	81,67	Aprovado	
A	TE040	INTRODUCAO A ENGENHARIA ELETRICA	30	71,00	50,00	Disp. c/nt	
A	CI208	Programação de Computadores	60	91,00	100,00	Aprovado	
	TQ409	QUIMICA GERAL E APLICADA A	90	27,00	55,56	Reprovado	
		Carga Horária no Período:	390		**Índice de Rendimento Acad.:**	0,6339	
Período:		**2o. Semestre de 2000**					
A	CM005	ÁLGEBRA LINEAR	60	90,00	83,33	Disp. c/nt	
	CM401	CALCULO DIFERENCIAL E INTEGRAL A	180	50,00	100,00	Aprovado	
A	CM041	Cálculo I	90	50,00	100,00	Disp. c/nt	
A	CM042	Cálculo II	90	50,00	100,00	Disp. c/nt	
	TE451	ELETRICIDADE BASICA II	90	0,00	6,67	Reprovado	
A	CM045	Geometria Analítica	60	90,00	83,33	Disp. c/nt	
	CM402	GEOMETRIA ANALITICA E ALGEBRA LINEAR	180	90,00	94,44	Aprovado	
		Carga Horária no Período:	660		**Índice de Rendimento Acad.:**	0,6000	
Período:		**1o. Semestre de 2001**					
A	CI202	Métodos Numéricos	60		0,00	Cancelado	
		Carga Horária no Período:	0		**Índice de Rendimento Acad.:**	0.0000	
Período:		**1o. Semestre de 2002**					
A	CI202	Métodos Numéricos	60	65,00	76,67	Aprovado	
		Carga Horária no Período:	60		**Índice de Rendimento Acad.:**	0,6500	
Período:		**2o. Semestre de 2002**					
	CM404	CALCULO DIFERENCIAL E INTEGRAL B	150	50,00	93,33	Aprovado	
A	TE452	CIRCUITOS ELETRICOS	180	6,00	71,11	Reprovado	
	TE463	CONVERSAO ELETROMECANICA DA E ELETRICA	150		0,00	Cancelado	
A	TE046	DISPOSITIVOS ELETRONICOS	60	50,00	50,00	Disp. c/nt	
	TE451	ELETRICIDADE BASICA II	90	50,00	90,00	Aprovado	
A	TE044	ELETRICIDADE E MAGNETISMO	60	50,00	85,00	Disp. c/nt	
	TE457	ELETRONICA BASICA	180	50,00	83,33	Aprovado	
	TH408	FENOMENOS DE TRANSPORTE B	120		0,00	Cancelado	
A	CF062	FISICA IV	60	50,00	85,00	Disp. c/nt	
A	TE047	LABORATORIO DE ENGENHARIA ELETRICA II	30	50,00	0,00	Disp. c/nt	
A	TE052	LABORATORIO DE ENGENHARIA ELETRICA III	30	50,00	0,00	Disp. c/nt	

A = Ativa I = Inativa

Autenticação: 5BA9.B64E.33F4.6597.094D.2216.CFA5.7AA7
Consultar em: portaldoaluno.ufpr.br/usuario/publico/autenticacao/form.action
Validade: 21/10/2027

UNIVERSIDADE FEDERAL DO PARANÁ

Data: 31/10/2025
Hora: 13:03

11.02.05.99.37 Histórico Escolar (IRA por Aluno) (Principal)

Curso: 03B - Curso de Engenharia Elétrica - Ênfase em Telecomunicações - Diurno **Versão:** 2002

Matrícula: GRR19994106

Nome Aluno: GUSTAVO D XAVIER DO REGO

S.D.	Código	Nome Disciplina/Atividade	C.H.	Média	Freq.	Situação	Local
A	TE048	MODELAGEM DE SISTEMAS ELETRICOS	60	50,00	83,33	Disp. c/nt	
	TQ409	QUIMICA GERAL E APLICADA A	90		0,00	Cancelado	
A	TE043	TECNICAS ANALITICAS PARA ENGENHARIA ELETRICA	60	50,00	83,33	Disp. c/nt	
		Carga Horária no Período:	780		**Índice de Rendimento Acad.:**		0,4175
Período:		**1o. Semestre de 2003**					
	TQ028	CIENCIA DOS MATERIAIS	30	71,00	86,67	Aprovado	
I	TE041	CIRCUITOS ELETRICOS I	45	51,00	100,00	Aprovado	
A	TE045	CIRCUITOS ELETRICOS II	60	60,00	100,00	Aprovado	
A	TE054	CIRUITOS ELETRONICOS LINEARES	60		0,00	Cancelado	
I	TE049	CONVERSAO DE ENERGIA	75	27,00	88,00	Reprovado	
A	TE050	ELETRONICA DIGITAL I	60	64,00	80,00	Aprovado	
A	TH014	FENOMENOS DE TRANSPORTE NA ENGENHARIA ELETRICA	60	73,00	90,00	Aprovado	
A	TE056	INSTALACOES ELETRICAS	60	59,00	76,67	Aprovado	
A	TE066	MATERIAIS ELETRICOS	45	59,00	100,00	Aprovado	
A	TE060	PRINCIPIOS DE COMUNICACAO	60	53,00	100,00	Aprovado	
A	TE055	TEORIA DE SISTEMAS LINEARES DE CONTROLE	60	73,00	100,00	Aprovado	
		Carga Horária no Período:	480		**Índice de Rendimento Acad.:**		0,5770
Período:		**2o. Semestre de 2003**					
A	TE084	ANTENAS - TELECOMUNICACOES	60	53,00	100,00	Aprovado	
I	TE049	CONVERSAO DE ENERGIA	75	47,00	93,33	Reprovado	
A	TE065	ECOLOGIA, AMBIENTE E A ENGENHARIA ELETRICA	30	92,00	96,67	Aprovado	
A	TE058	ELABORACAO DE RELATORIOS TECNICOS	30	71,00	90,00	Aprovado	
I	TE057	ELETRONICA DIGITAL II	60	91,00	96,67	Aprovado	
A	TE106	ENGENHARIA DE SEGURANCA DO TRABALHO	60	70,00	86,67	Aprovado	
A	CF064	FISICA EXPERIMENTAL II	30	60,00	93,33	Aprovado	
A	CF060	FISICA II	60	16,00	23,33	Reprovado	
A	TE064	GERENCIA DE PROJETOS	60	86,00	86,67	Aprovado	
A	TE067	LABORATORIO DE ENGENHARIA ELETRICA V	30	73,00	100,00	Aprovado	
A	TE053	ONDAS ELETROMAGNETICAS	60	72,00	75,00	Aprovado	
		Carga Horária no Período:	420		**Índice de Rendimento Acad.:**		0,6430
Período:		**1o. Semestre de 2004**					
I	TQ072	CIENCIAS E ENGENHARIA DOS MATERIAIS	60	60,00	100,00	Disp. c/nt	139
A	TE054	CIRUITOS ELETRONICOS LINEARES	60	36,00	80,00	Reprovado	
A	TE111	Comunicação Digital	60	70,00	86,67	Aprovado	
A	TE102	COMUTACAO III - TELECOMUNICACOES	60	72,00	83,33	Aprovado	
I	TE049	CONVERSAO DE ENERGIA	75	43,00	100,00	Reprovado	
A	CD029	DESENHO TECNICO I	60	98,00	100,00	Aprovado	
A	TE059	LABORATORIO DE ENGENHARIA ELETRICA IV	30	97,00	100,00	Aprovado	
A	TE124	Microcontroladores	60	84,00	100,00	Aprovado	
A	TE081	PLANEJAMENTO DE SISTEMAS DE TELECOMUNICACOES - TEL	60	79,00	83,33	Aprovado	
	TE072	PROCESSAMENTO DIGITAL DE SINAIS I - ELETRONICA	60	25,00	70,00	Reprovado	
A	TE099	SISTEMAS DE TRANSMISSAO I - TELECOMUNICACOES	60	68,00	96,67	Aprovado	
A	HP070	TOPICOS ESPECIAIS EM PSICOLOGIA I	60	85,00	100,00	Aprovado	
		Carga Horária no Período:	510		**Índice de Rendimento Acad.:**		0,6632

A = Ativa I = Inativa

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UNIVERSIDADE FEDERAL DO PARANÁ

Data: 31/10/2025
Hora: 13:03

11.02.05.99.37 Histórico Escolar (IRA por Aluno) (Principal)

Curso: 03B - Curso de Engenharia Elétrica - Ênfase em Telecomunicações - Diurno **Versão:** 2002

Matrícula: GRR19994106

Nome Aluno: GUSTAVO D XAVIER DO REGO

S.D.	Código	Nome Disciplina/Atividade	C.H.	Média	Freq.	Situação	Local
Período:		**2o. Semestre de 2004**					
A	TT008	Administração e Organização de Empresas de Engenharia I	60	65,00	83,33	Aprovado	
A	TE054	CIRUITOS ELETRONICOS LINEARES	60	53,00	100,00	Aprovado	
A	TE103	COMUTACAO IV - TELECOMUNICACOES	60	91,00	90,00	Aprovado	
I	TE063	INSTRUMENTACAO E CONTROLE DE PROCESSOS	60	75,00	90,00	Aprovado	
A	TE061	INTRODUCAO AOS SISTEMAS DE ENERGIA ELETRICA	60	83,00	86,67	Aprovado	
A	TE042	LABORATORIO DE ENGENHARIA ELETRICA I	30	50,00	100,00	Disp. c/nt	
A	TE131	Proteção de Sistemas Elétricos	60	90,00	100,00	Aprovado	
A	TE090	REDES DE COMPUTADORES - ELETRONICA	60	73,00	93,33	Aprovado	
		Carga Horária no Período:	450		**Índice de Rendimento Acad.:**		0,7400
Período:		**1o. Semestre de 2005**					
A	AAC012	Atividades Formativas	10		100,00	Aprov s/n	
I	TE049	CONVERSAO DE ENERGIA	75	75,00	94,67	Aprovado	
A	TE062	ELETRONICA DE POTENCIA	60	59,00	86,67	Aprovado	
	TE104	ESTAGIO SUPERVISIONADO	585	90,00	100,00	Aprovado	
A	CF060	FISICA II	60	50,00	100,00	Aprovado	
		Carga Horária no Período:	790		**Índice de Rendimento Acad.:**		0,8310
Período:		**2o. Semestre de 2005**					
A	TE051	CIRCUITOS NAO LINEARES	60	50,00	100,00	Disp. c/nt	139
A	TE105	PROJETO DE GRADUACAO	300	79,00	100,00	Aprovado	
		Carga Horária no Período:	360		**Índice de Rendimento Acad.:**		0,7417
		Total Carga Horária:	5020		**Índice de Rend. Acad. Geral:**		0,6391

Local Dispensa

139 Curso de Engenharia Elétrica - Ênfase em Eletrotécnica - Diurno

A = Ativa I = Inativa

Autenticação: 5BA9.B64E.33F4.6597.094D.2216.CFA5.7AA7
Consultar em: portaldoaluno.ufpr.br/usuario/publico/autenticacao/form.action
Validade: 21/10/2027

FAE
UNIVERSITY CENTER

FAE BUSINESS SCHOOL

Certificate

The Office of the President of FAE University Center, in the exercise of its authority, hereby confers this Specialization Certificate upon

GUSTAVO DARTAGNAN XAVIER DO REGO

in view of the completion of the Graduate Program in **MANAGERIAL DEVELOPMENT**, in the field of **BUSINESS ADMINISTRATION**, conducted from 04/11/2016 to 05/24/2018, with a total workload of 480 hours.

Curitiba, June 8, 2018

-----// signature //-----
Karla Adriane Fernandes Zeni
Coordinator of the Academic Records and Control Office

-----// signature //-----
Graduate

-----// signature //-----
José Vicente Bandeira de Mello Cordeiro
Director of Graduate Studies

CERTIFICATE

FAE University Center, reaccredited by Ministerial Ordinance No. 1,391 of 11/23/2012 - Federal Official Gazette (DOU) of 11/26/2012.

Registration No. 466, Book 42, Page 94
Curitiba, June 8, 2018.

I, Raphael Michels Fantinato de Moura, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Raphael Michels Fantinato de Moura. **Date: January 12, 2026.**

FAE
CENTRO UNIVERSITÁRIO

FAE BUSINESS SCHOOL

CERTIFICADO

A Reitoria da FAE Centro Universitário, no uso de suas atribuições, confere o presente Certificado de Especialização a

GUSTAVO DARTAGNAN XAVIER DO REGO

tendo em vista a conclusão do Curso de Pós-Graduação, em **DESENVOLVIMENTO GERENCIAL**, na Área de Conhecimento em **ADMINISTRAÇÃO**, no período de 11/04/2016 a 24/05/2018, com carga horária de 480 horas.

Curitiba, 8 de junho de 2018

Karla Adriane Fernandes Zeni
Coordenadora do Núcleo de Registro e Controle Acadêmico

Titulado

José Vicente Bandeira de Mello Cordeiro
Diretor de Pós-Graduação

CERTIFICADO

Registro nº 466 Livro 42 Fl. 94
Curitiba, 08 de junho de 2018

FAE UNIVERSITY CENTER

UNIVERSITY CENTER
Reaccredited by Ministerial Ordinance No. 1,391 of 11/23/2012 - Federal Official Gazette (DOU) of 11/26/2012
Rua 24 de Maio, 135 - Downtown - ZIP Code: 80230080 - CURITIBA - PR - PHONE: (41) 2105-9810

Academic Transcript

NAME			STUDENT REGISTRATION NO.
GUSTAVO DARTAGNAN XAVIER DO REGO			1001600639
DATE OF BIRTH	PLACE OR BIRTH	STATE	NATIONALITY
09/23/1978	CAMPO MOURÃO	PR	BRAZILIAN

IDENTIFICATION DOCUMENT		
NUMBER	ISSUING AUTHORITY	STATE
6.129.994-7	IIPR (Paraná Identification Institute)	PR

ACADEMIC BACKGROUND

PROGRAM	COMPLETION
ELECTRICAL ENGINEERING	2006

ACADEMIC TRANSCRIPT

PROGRAM	FIELD
MANAGERIAL DEVELOPMENT	BUSINESS ADMINISTRATION

COURSE INSTRUCTOR - DEGREE	**WORKLOAD**	**MODULE/ YEAR**	**% OF ATT.**	**GRADE**	**STATUS**
CONFLICT MANAGEMENT CIBELE BASTOS DA COSTA – MASTER'S	40	624/2016	100.0	9.0	Passed
ORGANIZATIONAL BEHAVIOR AND INTERVENTION CLEILA ELVIRA LYRA – MASTER'S	40	324/2016	100.0	8.8	Passed
INTERPERSONAL COMMUNICATION EUNICE MARIA NASCIMENTO – DOCTORATE	40	224/2016	100.0	9.5	Passed
TEAM DEVELOPMENT MARILDA LILI CORBELINI – DOCTORATE	40	324/2017	100.0	9.0	Passed
MANAGERIAL DEVELOPMENT VALMOR ROSSETTO – MASTER'S	40	435/2016	100.0	10.0	Passed
PROJECT MANAGEMENT FERNANDO GUIRAUD DE BRITO – MASTER'S	40	524/2017	100.0	9.6	Passed
STRATEGIC LEADERSHIP DANTE RICARDO QUADROS – DOCTORATE	40	135/2017	100.0	10.0	Passed
FINANCIAL OPERATIONS MARKET ANDRE DANIEL HAYASHI – MASTER'S	40	235/2018	100.0	9.4	Passed
NEGOTIATION IN THE BUSINESS ENVIRONMENT KASSEM MOHAMED EL SAYED – MASTER'S	40	735/2016	100.0	9.0	Passed
PEOPLE MANAGEMENT IN THE 21ST CENTURY NANCY MALSCHITZKY – DOCTORATE	40	524/2016	97.5	9.0	Passed
STRATEGIC PLANNING ROGER LAHORGUE CASTAGNO JUNIOR – MASTER'S	40	724/2017	100.0	9.0	Passed
PUBLIC SPEAKING TECHNIQUES NANCY MALSCHITZKY – DOCTORATE	40	624/2017	100.0	9.0	Passed

TOTAL WORKLOAD / PROGRAM CLASS	TOTAL WORKLOAD / SPECIALIZATION CLASS	OVERALL ATTENDANCE
480	240	99.8% ---// signature //---

Notes:	

MINIMUM ATTENDANCE FOR APPROVAL: 75%
MINIMUM GRADE FOR APPROVAL: 7.0

CURITIBA, June 8, 2018.

-----// signature //-----
Karla Adriane Fernandes Zeni
Coordinator of the Academic Records and Control Office

I, Raphael Michels Fantinato de Moura, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Raphael Michels Fantinato de Moura. **Date: January 12, 2026.**

FAE
CENTRO UNIVERSITÁRIO

FAE CENTRO UNIVERSITÁRIO

Recredenciada pela Portaria Ministerial nº 1.391 de 23/11/2012 - DOU de 26/11/2012

Rua 24 de Maio, 135 - Centro - CEP: 80230080 - CURITIBA - PR - FONE: (41) 2105-9810

Histórico Escolar

NOME			REGISTRO ACADÊMICO
GUSTAVO DARTAGNAN XAVIER DO REGO			1001600639
DATA DE NASCIMENTO	NATURALIDADE	UF	NACIONALIDADE
23/09/1978	CAMPO MOURÃO	PR	BRASILEIRA
DOCUMENTO DE IDENTIFICAÇÃO			
NÚMERO	ÓRGÃO EXPEDIDOR		UF
6.129.994-7	IIPR		PR

FORMAÇÃO ACADÊMICA

CURSO	CONCLUSÃO
ENGENHARIA ELÉTRICA	2006

HISTÓRICO ESCOLAR

CURSO	ÁREA
DESENVOLVIMENTO GERENCIAL	ADMINISTRAÇÃO

MATÉRIA PROFESSOR - TITULAÇÃO	CARGA HORÁRIA	MÓD / ANO	% DE FREQ.	NOTA	SITUAÇÃO
ADMINISTRAÇÃO DE CONFLITOS CIBELE BASTOS DA COSTA - MESTRE	40	624/2016	100,0	9.0	Aprovado
COMPORTAMENTO E INTERVENÇÃO ORGANIZACIONAL CLEILA ELVIRA LYRA - MESTRE	40	324/2016	100,0	8.8	Aprovado
COMUNICAÇÃO INTERPESSOAL EUNICE MARIA NASCIMENTO - DOUTORA	40	224/2016	100,0	9.5	Aprovado
DESENVOLVIMENTO DE EQUIPES MARILDA LILI CORBELINI - DOUTORA	40	324/2017	100,0	9.0	Aprovado
DESENVOLVIMENTO GERENCIAL VALMOR ROSSETTO - MESTRE	40	435/2016	100,0	10.0	Aprovado
GERENCIAMENTO DE PROJETOS FERNANDO GUIRAUD DE BRITO - MESTRE	40	524/2017	100,0	9.6	Aprovado
LIDERANÇA ESTRATÉGICA DANTE RICARDO QUADROS - DOUTOR	40	135/2017	100,0	10.0	Aprovado
MERCADO DE OPERAÇÕES FINANCEIRAS ANDRE DANIEL HAYASHI - MESTRE	40	235/2018	100,0	9.4	Aprovado
NEGOCIAÇÃO EM AMBIENTE EMPRESARIAL KASSEM MOHAMED EL SAYED - MESTRE	40	735/2016	100,0	9.0	Aprovado
O GESTOR DE PESSOAS NO SÉCULO XXI NANCY MALSCHITZKY - DOUTORA	40	524/2016	97,5	9.0	Aprovado
PLANEJAMENTO ESTRATÉGICO ROGER LAHORGUE CASTAGNO JUNIOR - MESTRE	40	724/2017	100,0	9.0	Aprovado
TÉCNICAS DE APRESENTAÇÃO EM PÚBLICO NANCY MALSCHITZKY - DOUTORA	40	624/2017	100,0	9.0	Aprovado

TOTAL DE HORAS / AULA DO CURSO	TOTAL DE HORAS / AULA DA ESPECIALIDADE	FREQUÊNCIA GLOBAL
480	240	99,8%

OBSERVAÇÕES:

FREQUÊNCIA MÍNIMA PARA APROVAÇÃO: 75%

NOTA MÍNIMA PARA APROVAÇÃO: 7,0

CURITIBA, 8 de junho de 2018.

Karla Adriane Fernandes Zeni
Coordenadora do Núcleo de Registro e Controle Acadêmico

Carnegie Evaluations LLC
315 East High Street, Bound Brook, New Jersey, 08805
Email: info@carnegieevaluations.com
Website: www.carnegieevaluations.com
Phone: (848)300-0099
Fax: (848) 300-5199

EVALUATION OF ACADEMICS

Carnegie Evaluations LLC, who specializes in the evaluation of foreign educational credentials, has prepared the following academic credential evaluation.

January 19, 2026

Name: **Mr. Gustavo Dartagnan Xavier do Rego**

Following is a description of Mr. Gustavo Dartagnan Xavier do Rego's foreign degrees:

Institution:	*Universidade Federal do Parana*
Degree:	*Titulo de Engenheiro Electricista*
Date of Award:	May 2006
Country:	Brazil

Institution:	*FAE Centro Universitario*
Degree:	*Curso de Pos-Graduacao em Desenvolvimento Gerencial*
Date of Award:	June 2018
Country:	Brazil

Academic Equivalency in the United States

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

ONE YEAR OF GRADUATE STUDY IN BUSINESS ADMINISTRATION.

Carnegie Evaluations LLC, offers this evaluation, after reviewing copies of the original diploma certificates and transcripts provided. This evaluation is advisory in nature and is based on the assumption that the submitted documents are accurate. There are no apparent grounds to disbelieve the authenticity and accuracy of the documentation presented on behalf of Mr. Gustavo Dartagnan Xavier do Rego. In addition, this evaluation is based upon standard scholarly and professional sources as referenced at the end of this document. Carnegie Evaluations LLC, is not responsible for how this evaluation report will be used and is not responsible for damages resulting from such use of this report.

DISCUSSION OF MR. GUSTAVO DARTAGNAN XAVIER DO REGO'S ACADEMICS

This credential evaluation is provided upon review of the degree certificates and transcripts awarded to Mr. Gustavo Dartagnan Xavier do Rego during the course of his academic career. An analysis of Mr. Gustavo Dartagnan Xavier do Rego's foreign educational courses for the *Titulo de Engenheiro Electricista* (translated as degree in Electrical Engineering) from *Universidade Federal do Parana* (translated as Federal University of Parana) and *Curso de Pos-Graduacao em Desenvolvimento Gerencial* (translated as Graduate program in Managerial Development) from *FAE Centro Universitario* (translated as FAE University Center) forms the basis for the following evaluation.

Mr. Gustavo Dartagnan Xavier do Rego graduated with a degree in Electrical Engineering from the Federal University of Parana in May 2006. Federal University of Parana is an accredited institution of higher education in Curitiba, Brazil. Admission to this program requires graduation from the U.S. equivalent of high school and competitive entrance examinations. Mr. Gustavo Dartagnan Xavier do Rego satisfactorily completed the academic course requirements for a degree in the Electrical Engineering program. He majored in Electrical Engineering and was awarded a *Titulo de Engenheiro Electricista* from the institute.

This is an undergraduate program of study that is equivalent to a degree of Bachelor of Science (B.S.) from an accredited institution of higher education in the United States. The academic criterion maintained by the Federal University of Parana is significantly similar to those parameters upheld by any other accredited colleges and universities in the United States.

The curriculum includes advanced bachelor's-level coursework and examinations Introduction to Electrical Power Systems, Administration and Organization of Engineering Companies, Linear Electronic Circuits, Process Instrumentation and Control, Power System Protection, Computer Networks – Electronics, Formative Activities, Energy Conversion, Power Electronics, Supervised Internship, Electrical Systems Modeling, General and Applied Chemistry, Analytical Techniques for Electrical Engineering, Materials Science, Electric Circuits, Digital Electronics, Transport Phenomena in Electrical Engineering, Electrical Installations, Electrical Materials, Principles of Communication, Linear Control Systems Theory, Antennas – Telecommunications, Ecology, Environment, and Electrical Engineering, Occupational Safety Engineering, Project Management, Electromagnetic Waves, Materials Science and Engineering, Digital Communication, Microcontrollers, Telecommunications Systems Planning, Digital Signal Processing – Electronics, Transmission Systems – Telecommunications, Introduction to Electrical Engineering, Computer Programming, Electric Circuits, Electromechanical and Electrical Energy Conversion, Electronic Devices, Electricity and Magnetism, Basic Electronics, and other related subjects.

Thereafter, Mr. Gustavo Dartagnan Xavier do Rego completed a Graduate program in Managerial Development from FAE University Center in June 2018. FAE University Center is an accredited institution of higher education in Curitiba, Brazil. Admission to this program requires graduation from bachelor's level studies and competitive entrance examinations. Mr. Gustavo Dartagnan Xavier do Rego satisfactorily completed the academic course requirements for a Graduate program. He majored in Business Administration and was awarded a *Curso de Pos-Graduacao em Desenvolvimento Gerencial* from the institute.

This is a two-year graduate program of study, which is substantially similar to the required coursework leading to completion of one year of Graduate-level studies from a regionally accredited University in the United States. The academic criterion maintained by FAE University Center is significantly similar to those parameters upheld by any other accredited colleges and universities in the United States.

The Graduate program in Managerial Development curriculum includes advanced graduate-level coursework and examinations in Conflict Management, Organizational Behavior and Intervention, Interpersonal Communication, Team Development, Managerial Development, Project Management, Strategic Leadership, Financial Operations Market, Negotiation in the Business Environment, People Management in the 21st Century, Strategic Planning, Public Speaking Techniques, and other related subjects.

Upon reviewing Mr. Gustavo Dartagnan Xavier do Rego's academic history, it becomes apparent that Mr. Gustavo Dartagnan Xavier do Rego has satisfied the course work requirements, which are substantially similar and equivalent to those required for the completion of a four-year Bachelor's degree program and one year of graduate level program at an accredited institution of higher education in the United States.

SUMMARY

On the basis of the academic reputations of Federal University of Parana, and FAE University Center, the nature and duration of the academic course work, and the grades attained in the courses, it is the judgment of Carnegie Evaluations LLC that Mr. Gustavo Dartagnan Xavier do Rego has attained the equivalent of a Bachelor of Science in Electrical Engineering and One year of graduate study in Business Administration from an accredited institution of higher education in the United States.

Carnegie Evaluations LLC represents this evaluation report to be an accurate and correct evaluation to the best of its knowledge and belief, pursuant to the requirements of the Citizenship and Immigration Services of the United States Department of Homeland Security. Carnegie Evaluations LLC does not represent that the documentation submitted to it by anyone for evaluation meets the evidentiary standards of any state or federal agency or any court. This evaluation report, as are all such reports provided by Carnegie Evaluations LLC, is advisory for the customer who requested it.

The foregoing evaluation of Mr. Gustavo Dartagnan Xavier do Rego has been reviewed and approved by me, Dr. Zach G. Zacharia, on January 19, 2026.

Sincerely,



Zach G. Zacharia, Ph.D.
Director, Carnegie Evaluations LLC.
Associate Professor of Supply Chain Management
Director, Lehigh Center for Supply Chain Research
Lehigh University

Evaluation Resources:

1. World Higher Education Database. International Association of Universities' Worldwide Database of Higher Education Institutions, Systems and Credentials. www.whed.net.
2. AACRAO EDGE. AACRAO Electronic Database for Global Education. https://www.aacrao.org/edge
3. Central Intelligence Agency (CIA). The World Factbook. https://www.cia.gov/the-world-factbook/
4. ENIC-NARIC. European Network of Information Centres in the European Region, National Academic Recognition Information Centres in the European Union. www.enic-naric.net.

Bio: Professor Zach G. Zacharia

I am the Interim Department Chair, Decision and Technology Analytics (DATA) Department, an Associate Professor of Supply Chain Management, and Director of the Center for Supply Chain Research Lehigh in the College of Business and Economics, Lehigh University, where I teach Graduate and Undergraduate courses in Supply Chain Operations Management and Logistics and Transportation. In addition, I am also a visiting Professor at the Indian Institute of Technology (IIT) in New Delhi, India. I graduated with a B.S. in Mechanical Engineering from the University of Calgary, an MBA from the University of Alberta, and a Ph.D. in Logistics with a minor in Marketing from the University of Tennessee. My current research interests include Collaboration/Coopetition within the Supply Chain, Supplier Satisfaction, and the Physical Internet.

Before joining Academia, I worked at the University of Tennessee, Center for Transportation Research, for six years as an Associate Director. I also worked at the Department of Transportation in Alberta, Canada, for ten years as an Equipment Engineer. I am a principal in BZS Consulting, which primarily focuses on teaching Supply Chain Operations Management and evaluating collaboration and procurement strategies across firms in a supply chain.

I have developed significant international contacts and collaborations with many affiliate schools in several countries in Europe, Asia, and South America. I have evaluated numerous portfolios of international students from countries around the world and have performed in-depth assessments of how these foreign courses are equated to corresponding courses in the United States.

I have 29 refereed publications, including 2 articles in the Journal of Operations Management, 8 articles in the *Journal of Business Logistics,* and articles in *Decision Sciences*, the *Journal of Supply Chain Management, Industrial Marketing Management, International Journal of Production Research, International Journal of Production and Operations Management, International Journal of Logistics Management, Journal of Retailing, Journal of Business and Industrial Marketing, Marketing Management, Supply Chain Management Review, Journal of International Technology and Information Management*, *Journal of Vehicle Design* and *Wall Street Journal*. As a member of a Supply Chain Research Group at the University of Tennessee, I co-authored a book titled "*Supply Chain Management*" (Sage Publications, December 2000). I also contributed a chapter on logistics service providers and new product development in the book titled *Managing Innovation: The New Competitive Edge for Logistics Service Providers*, Stephan M. Wagner ed.**,** Kuehne Foundation Book Series (2007).

Among the awards that Dr. Zacharia has received is the DATA Department Service Award (2023), Staub Faculty Excellence Award (2013) for the College of Business, Lehigh University, Best Paper Finalist (2010) from the Journal of Operations Management, Best Paper Award (2007) from NARTS and Best Dissertation Proposal Award (2000) from University of Arkansas. As a member of a Supply Chain Research Group at the University of Tennessee, he coauthored a book titled Supply Chain Management (Sage Publications, December 2000).

A. Biographical Information

Zach G. Zacharia, Ph.D.
Interim Department Chair, Decision and Technology Analytics Department
Associate Professor Supply Chain Management
Director, Center for Supply Chain Management Lehigh
Supply Chain Management Program Director
Department of Management, College of Business Administration and Economics
Lehigh University, 621 Taylor Street, Bethlehem, PA, 18015
Office: (610) 758-4433, Fax: (610) 758-6941
zgz208@lehigh.edu

EDUCATION

1996 - 2001 **THE UNIVERSITY OF TENNESSEE** **Knoxville, TN**
Doctor of Philosophy in Business Administration

- Major: Logistics, Minor: Marketing
- Dissertation Title: An Analysis of the Effect of Logistics Involvement in Cross-functional Integrated New Product Development Projects (Advisor: Dr. John T. Mentzer)

1988 – 1993 **THE UNIVERSITY OF ALBERTA** **Edmonton, AB**
Master of Business Administration

1981 - 1985 **THE UNIVERSITY OF CALGARY** **Calgary, AB**
Bachelor of Science, Mechanical Engineering

1980 - 1981 **RED DEER COLLGE** **Red Deer, AB**
Bachelor of Science

1979 – 1980 **THE UNIVERSITY OF ALBERTA** **Edmonton, AB**
Bachelor of Science

WORK EXPERIENCE SUMMARY

2016 – Present, Director, Center for Supply Chain Research Lehigh
2013 – Present, Associate Professor – Lehigh University
2008 – 2013 Assistant Professor – Lehigh University
2001 – 2008 Assistant Professor - Texas Christian University
1999 – 2001 Associate Director – Transportation Center, University of Tennessee
1997 – 1999 Assistant Director - Transportation Center, University of Tennessee
1995 – 1997 Senior Research Associate – University of Tennessee
1989 – 1995 Research Engineer – R&D Branch, Alberta Transportation & Utilities
1985 – 1989 Equipment Engineer – Alberta Transportation & Utilities

CONSULTING PROJECTS, EXECUTIVE EDUCATION

2023 Ecofriendly Behavior on Personal Transportation, AFIT, Dalton
2020 Financial Flow in SC, DiCentral, Houston

2020	Expert Witness – Real Estate Company, Bethlehem
2020	Lehigh University, Executive Education, Bethlehem
2019	Lehigh University, Executive Education, Bethlehem
2019	SC Collaboration in Drop Ship, DiCentral, Houston
2018	Coopetition in the Defense Industry, AFIT, Dayton
2018	IIT New Delhi, Executive Education, Delhi, India
2017	Lehigh University, Executive Education, Bethlehem
2016	IIT Madras, Global Initiative of Academic Networks, Chennai, India
2015	Morrison Executive Education, Santo Domingo, Dominican Republic
2014	CSCMP Executive Seminar, Bogota, Columbia
2012	Supply Chain Management Simulation, WAM Systems, Philadelphia
2010	Supply Chain Management Overview, Universidad de Piura, Peru
2007	Procurement of Capability Guidelines, Lockheed Martin Aeronautics
2002	Truck Safety Recommendations, University of Tennessee

B. Publications and Creative Activities

EDITORIAL ROLES (6)

- Senior Associate Editor- *International Journal of Logistics Management (2018-current)*
- Senior Editor- *Journal of Business Logistics (2016- current)*
- Special Issue Editor-(Physical Internet) - *Journal of Business Logistics (2018-2020)*
- Special Issue Editor- (Inter-Disciplinary Research) *Journal of Business Logistics (2014-2015)*
- Editorial Board Member – *Journal of Operations Management*
- Editorial Board Member –*Transportation Journal*
- Editorial Board Member – *Journal of Supply Chain Management*

DISSERTATION COMMITTEE MEMBER (2)

- Michael Plasch - *Supply Chain Collaboration - Investigating Motives, Drivers And Success Factors* – Johannes Kepler University Linz, Austria, 2021
- Kimberly K. Whitehead – *It's A Matter Of Give And Take: Exploring The Role Of Knowledge Transfer Within Supply Chain Collaboration* - University of Texas at Arlington, USA, 2014

BOOK CHAPTERS (5)

- **Zacharia, Zach G**. "Is there a role for Logistics Service Providers in New Product Development?" *Managing Innovation: The New Competitive Edge for Logistics Service Providers*, Stephan M. Wagner ed., Kuehne Foundation Book Series. Ch 7, 2008.
- Mentzer, John T., William J. DeWitt, James S. Keebler, Soonhong Min, Nancy W. Nix, Carlo D. Smith, and **Zach G. Zacharia**, "What is Supply Chain Management" *Supply Chain Management*, Thousand Oaks, CA: Sage Publications, Ch.1, 2000.
- **Zacharia, Zach G**., "R&D and New Product Development in Supply Chain Management" *Supply Chain Management*, John T. Mentzer ed.**,** Thousand Oaks, CA: Sage Publications, Ch.6, 2000.
- **Zacharia, Zach G**., "The Evolution and Growth of Production in Supply Chain Management" *Supply Chain Management*, John T. Mentzer ed., Thousand Oaks, CA: Sage Publications, Ch.8, 2000.
- **Zacharia, Zach G**, "The Evolution and Growth of Information Systems in Supply Chain Management" *Supply Chain Management*, John T. Mentzer ed., Thousand Oaks, CA: Sage Publications, Ch.11, 2000.

REFEREED PUBLICATIONS (29)

29. Varun Jain, Usha Mohan, Zach G. Zacharia, Nada R. Sanders (2022) "Improving patient satisfaction and outpatient diagnostic center efficiency using novel online real-time scheduling" *Operations Research for Health Care,* 32, 1-17, 100338

28. Saif Mir, Misty Blessley, **Zach Zacharia**, John Aloysius (2022) "Mending Fences in the Buyer-Supplier Relationship: The Role of Justice in Relationship Restoration" *Journal of Supply Chain Management*. Vol. 58, No. 3, 23 – 46.

27. Dev, Navin; Ravi Shankar; **Zach Zacharia**, Sanjeev Swami, (2021) "Supply chain resilience for managing the ripple effect in Industry 4.0 for green product diffusion" *International Journal of Physical Distribution & Logistics Management* Vol. 51 No. 8, 897-930.

26. Ballot, Eric, Benoit Montreuil, **Zach G. Zacharia**, (2021) "Physical Internet: First Results and Next Challenges" *Journal of Business Logistics* Vol 42 No. 1, 1 – 7.

25. Treiblmaier, Horst, Kristijan Mirkovski, Paul B. Lowry, **Zach G. Zacharia**, (2020) "The Physical Internet as a New Supply Chain Paradigm: A Systematic

Literature Review and a Comprehensive Framework" *International Journal of Logistics Management* Vol. 31 No. 2, 239-287.

24. **Zach G. Zacharia**, Michael Plasch, Usha Mohan, Markus Gerschberger (2019) "The Emerging Role of Coopetition Within Inter-Firm Relationships" *International Journal of Logistics Management* Vol. 30, No. 2, 414-437.

23. Soonhong Min, **Zach G. Zacharia**, Carlo D. Smith (2019) "Defining Supply Chain Management: In the Past, Present and Future" *Journal of Business Logistics* Vol. 40 No.1, 44-55.

22. Kimberly Whitehead, **Zach Zacharia**, Edmund Prater (2019) "Investigating the Role of Knowledge Transfer in Supply Chain Collaboration" *International Journal of Logistics Management"* Vol. 30, No. 1, 284-302.

21. Misty Blessly, Saif Mir, **Zach G. Zacharia**, John Aloysius (2018) "Breaching Relational Obligations In A Buyer-Supplier Relationship: Feelings Of Violation, Fairness Perceptions And Supplier Switching" *Industrial Marketing Management* Vol. 74, Oct, 215-226.

20. Faraz, Alireza, Nada R. Sanders, **Zach G. Zacharia**, Markus Gerschberger (2018) "Monitoring Type B Buyer-Supplier Relationships" *International Journal of Production Research* Vol. 56, No. 18, 6225-6239.

19. Whitehead, Kimberly, **Zach G. Zacharia**, Edmund Prater, (2016) "Absorptive Capacity Versus Distributive Capability: The Asymmetry of Knowledge Transfer" *International Journal of Operations and Production Management* Vol. 36, No 10, 1308-1332.

18. Nada R. Sanders, Brian R. Fugate, **Zach G. Zacharia**, (2016) "Interdisciplinary Research In SCM: Through the Lens of The Behavioral Theory of The Firm" *Journal of Business Logistics* Vol. 37, No 2, 107-112.

17. Nancy W. Nix, **Zach G. Zacharia,** (2014) "The Impact of Collaborative Engagement on Knowledge and Performance Gains in Episodic Collaborations" *International Journal of Logistics Management* Vol. 25, No 2, 245-269.

16. **Zach G. Zacharia,** Nada R. Sanders, Brian R. Fugate (2014) "The Evolving Role of Disciplines Within Supply Chain Management" *Journal of Supply Chain Management* Vol. 50, No 1, 73-88.

15. Nada R. Sanders, **Zach G. Zacharia**, Brian R. Fugate (2013) "The Interdisciplinary Future of Supply Chain Management Research" *Decision Sciences* Vol. 44, No. 3, 413-429.

14. Geoffrey T. Stewart, **Zach G. Zacharia,** Andrew B. Artis (2012) "Leveraging Relationship Orientation and its Impact on Relationship Outcomes" *Journal of Business and Industrial Marketing,* Vol. 27, No. 8, 644-658.

13. **Zach G. Zacharia,** Nancy W. Nix, Robert F. Lusch (2011) "Capabilities that Enhance Outcomes of an Episodic Supply Chain Collaboration" *Journal of Operations Management*, Vol. 29, No. 6, 591-603.

12. **Zach G. Zacharia,** Nada R. Sanders, Nancy W. Nix (2011) "The Emerging Role of the Third-Party Logistics Provider (3PL) as a Supply Chain Orchestrator" *Journal of Business Logistics*, Vol. 32, No. 1, 40-54.

11. Danny Lanier, Jr., William F. Wempe, **Zach G. Zacharia**, (2010) "Concentrated Supply Chain Membership and Financial Performance: Chain- and Firm-Level Perspectives" *Journal of Operations Management*, Vol.28, No.1, 1-16.

10. **Zach G. Zacharia**, Chad W. Autry, David S. Preston, Charles W. Lamb, (2009) "IT Alignment with Business Strategies in a Healthcare Organizations: An Empirical Analysis" *Journal of International Technology and Information Management*, Vol. 18, No. 3/4, 477-494.

9. **Zach G. Zacharia,** Nancy W. Nix and Robert F. Lusch, (2009) "An Analysis of Supply Chain Collaborations and Their Effect on Performance" *Journal of Business Logistics*, Vol. 30, No. 2, 101-123.

8. Chad W. Autry, **Zach G. Zacharia** and Charles W. Lamb, (2008) "A Logistics Strategy Taxonomy" *Journal of Business Logistics,* Vol. 29. No. 2, 53-74.

7. Nancy W. Nix, Robert F. Lusch, **Zach G. Zacharia**, and Wesley R. Bridges, (2008) "Competent Collaborations" *Marketing Management*, Vol. 17, No. 2, 18-24.

6. **Zach G. Zacharia** and John T. Mentzer (2007) "The Role of Logistics in New Product Development," *Journal of Business Logistics*, Vol. 28, No. 1, 83-110.

    a. Reprinted in:
    b. *Logistique and Management,* Vol. 16, No. 1, 35-53, (2008).

5. **Zach G. Zacharia** and John T. Mentzer (2004) "Logistics Salience In A Changing Environment," *Journal of Business Logistics*, Vol. 25, No. 1, 187-210.

    a. Reprinted in:
    b. *The ICFAI Journal of Supply Chain Management*, Vol. 3, No. 1, 53-72, (2006).

4. Mentzer, John T., William DeWitt, James S. Keebler, Soonhong Min, Nancy W. Nix, Carlo D. Smith, **Zach G. Zacharia** (2001) "Defining Supply Chain Management," *Journal of Business Logistics*, Vol. 22, No. 2, 1-25.

    c. Reprinted in:
    d. *Logistique and Management,* Vol. 9, No. 2, 3-19, (2001).

3. **Zacharia, Zach G**., John E. Tidwell and Stephen H. Richards (2001) "An Overview of Truck and Bus Safety:1999 Knoxville Symposium," *Journal of Vehicle Design*, Vol. 26, No. 4, 442-453.

2. Mentzer, John T., Min Soonhong and **Zach G. Zacharia** (2000) "The Nature of Interfirm Partnering in Supply Chain Management," *Journal of Retailing*, Winter, Vol. 76, Issue 4, 549-568.

1. **Zacharia, Zach G**. and Bart Jennings (1998) "The Use of Active Participation and Group Competition to Facilitate Training and Technology Transfer for Adult Learners," *Transportation Research Record,* No. 1637, 13-18.

PAPERS UNDER REVIEW (2)

- Zach G. Zacharia, Scott C. Ellis, Saif Mir, Robert J. Trent - "Gaining Advantage Through Social Exchange: How and Under What Conditions" (Revise and Resubmit)

- **Saif Mir, Timothy W. Breitbach, Zach G. Zacharia, Benjamin T. Hazen "Supplier Cultivation: An Accelerator Approach to Ecosystem Innovation" (Under Review)**

NON - REFEREED PUBLICATIONS (5)

5. **Zach G. Zacharia** (2020), What Every CFO Needs to Know about Supply Chains

4. **Zach G. Zacharia** (2019), Supply Chain Collaboration in Transformative Vertical Industries (Implications of Omnichannel and Drop Shipping)

3. Robert J. Trent, **Zach G. Zacharia,** (2012) "The Wisdom of Becoming a Preferred Customer," *Supply Chain Management Review* Vol. 16, No. 6, 10-18.

2. Nix, W. Nancy, Robert F. Lusch, **Zach G. Zacharia**, and Wesley R. Bridges, (2007) "The Hand That Feeds You – What Makes Some Collaborations with Suppliers Succeed – When So Many Fail?" *The Journal Report- Business Insight* (A Joint Venture with MIT *Sloan Management Review* and *Wall Street Journal*), Dow Jones and Company

1. **Zacharia, Zach G**. (1994) "Expert System Simplifies Bridge Paint Maintenance Programs," *Materials Performance,* June, 25 - 28.

CONFERENCE PROCEEDINGS (18)

18. **Zach Zacharia**, Timothy Breitbach, Ben Hazen, Saif Mir (2019) "Utilizing Accelerator Programs for adopting Innovations to Encourage the Adoption" *CSCMP Conference,* Anaheim, CA, September 15.
17. **Zach Zacharia**, Timothy Breitbach, Ben Hazen, Saif Mir (2018) "Utilizing Accelerator Programs to Encourage the Adoption of New Innovations in Large Organizations" *DSI Conference,* Chicago, IL, November 17.
16. Robert Weidmer, **Zach Zacharia**, (2018) "Competing Governance Mechanisms in Buyer-Supplier Relationships" *DSI Conference,* Chicago, IL, November 16.
15. **Zach Zacharia**, Michael Plasch, Usha Mohan, Markus Gerschberger (2017) "The Role of Coopetition in Buyer Supplier Relationships" *DSI Conference,* Washington, DC, November 18.
14. **Zach Zacharia**, Michael Plasch, Usha Mohan, Markus Gerschberger (2017) "Understanding the Antecedents and Outcomes of Coopetition" *CSCMP Academic Research Conference,* Atlanta, Georgia, September 24.
13. **Zach Zacharia**, Michael Plasch, Usha Mohan, Markus Gerschberger (2017) "The Evolving Role of Coopetition within the Supply Chain" *CSCMP European Research Seminar,* Barcelona, Spain, May 19.
12. Gouda, Sirish, **Zach Zacharia**, Haritha Saranga (2016) "Linking New Forms of Work Organization and External Integration: Mediating role of cross functional collaboration" *DSI Conference,* Austin, Texas, November 21.
11. Blessley, Misty, Saif Mir, **Zacharia, Zach G.,** John Aloysius (2016) "The role of apologies following transgressions in buyer-supplier relationships." *CSCMP Educator Conference,* Orlando, Florida, September 25.
10. Blessley, Misty, Saif Mir, **Zacharia, Zach G.,** John Aloysius (2016) "The role of transactional and relational psychological contract breach in supplier switching behavior." *CSCMP European Research Seminar,* Vienna, Austria, May 13.
9. Blessley, Misty, Saif Mir, **Zacharia, Zach G.,** John Aloysius (2015) "Should I stay or should I go? The role of transactional and relational psychological contract breach in supplier switching behavior." *CSCMP Educator Conference,* San Diego, California, September 27.
8. **Zacharia, Zach G.,** Nancy W. Nix and Robert F. Lusch (2007) "Supply Chain Collaborations: Project Performance and Business Performance" *18th North American Teaching and Research Conference,* Tempe, Arizona, March 29-31.

7. **Zacharia, Zach G.** (2005) "Team Based Learning in MBA and Undergraduate Supply Chain Management Classes" *16th North American Teaching and Research Conference,* Tempe, Arizona, March 17-19.

6. Nix, Nancy W., **Zach G. Zacharia** and Robert F. Lusch (2005) "Keys to Effective Supply Chain Collaboration" *16th North American Teaching and Research Conference,* Tempe, Arizona, March 17-19.

5. **Zacharia, Zach G.** and Marc E. Ruzicka (2003) "Experiential Learning: Live Business Cases in MBA Supply Management and Logistics Classes" *14th North American Teaching and Research Conference,* Tempe, Arizona , March 21- 23.

4. **Zacharia**, **Zach G** (2000) "The Evolution and Growth of Production in the Supply Chain", *Society for Marketing Advances Conference*, Orlando, Florida, November 8-10.

3. **Zacharia, Zach G**., John E. Tidwell and Stephen H. Richards (2000) "An Overview of Truck and Bus Safety:1999 Knoxville Symposium," *4th International Fatigue Management Conference*, Perth, Australia, March 19-2.

2. **Zacharia, Zach G**. and Bart Jennings (1998), "The Use of Active Participation and Group Competition to Facilitate Training and Technology Transfer for Adult Learners," *Transportation Research Board Conference Proceedings,* Washington, District of Columbia, January 4-8.

1. **Zacharia, Zach G**. (1992), "Bridge Paint Expert Systems"*, Second International Organization for Economic Cooperation and Development (OECD) Conference on Knowledge Based Expert Systems in Transportation*, Montreal, Canada, April 3-7.

CONFERENCE PRESENTATIONS (3)

3. **Zach Zacharia**, (2022) "Identifying and Ranking Supply Chain Risks" *WDSI Conference,* Waikoloa, HI, April 7.

2. Annibal Sodero**, Zach Zacharia**, (2022) "Antecedents and outcomes of drop-shipping adoption in the retail supply chain" Euroama Conference, Berlin, July 3rd

1. Saif Mir**, Zach Zacharia**, (2022) "Risks in Procurement and Sourcing" DSI Conference Houston, November 21

PODCASTS (5)

- **Zacharia, Zach G**. (2021), "Red Flags in the Supply Chain" https://business.lehigh.edu/blog/2021/zach-zacharia-red-flags-supply-chain (July 2nd)

- **Zacharia, Zach G**. (2021), "Red Flags in the Supply Chain" https://business.lehigh.edu/blog/2021/zach-zacharia-red-flags-supply-chain (July 2nd)

- **Zacharia, Zach G**. (2021), "Disruptive New Paradigm of the Physical Internet" https://business.lehigh.edu/blog/2021/zach-zacharia-disruptive-new-paradigm-physical-internet (June 3rd)

- **Zacharia, Zach G**. (2018), "Dealing with Disruptive Innovations in the Supply Chain" (https://cbe.lehigh.edu/blog/posts/dealing-disruptive-innovations-supply-chain) (October 24)

- **Zacharia, Zach G**. (2017), "Drop Shipping: A New Opportunity for Retailers and Suppliers" (https://cbe.lehigh.edu/blog/posts/drop-shipping-new-opportunity-retailers-and-suppliers) December 11

- **Zacharia, Zach G**. (2017), "What You Need to Know About the Physical Internet" (https://cbe.lehigh.edu/blog/posts/what-you-need-know-about-physical-internet (March 14) (Ranked 4th in Google Search for Physical Internet)

WORKING PAPERS (6)

- Zach Zacharia, Michael Plasch, Markus Gerschberger "Explorative and exploitative motives for coopetition" *Target: International Journal of Production Economics*

- Zach Zacharia, Annibal Sodero "Drop Shipping and its Effects on the New E-Commerce Retail Paradigm" *Target: Journal of Operations Management"*

- Zach Zacharia, Robert Wiedmer, Kimberly Whitehead "Competing Governance Mechanisms in Buyer-Supplier Relationships" *Target: Journal of Operations Management*

- Zach Zacharia, Cedric Heuchenne, Nada Sanders, Faraz, Alireza "Comparison of populations based on binary characteristics in the presence of non-response" *Target: Production Operations Management Journal*

- Zach Zacharia, Gopal Kumar "Environmental and social performance leads to supply chain performance? An analysis in context of sustainable collaboration" *Target: Supply Chain Management: An International Journal*

- Zach Zacharia, Benjamin Hazen, Timothy Breitbach, Saif Mir "How Accelerator Programs Facilitate Innovation Adoption in Large Organizations" *Target: Journal of Operations Management*

27. Honors and Awards (25)

2023	DATA Department Service Award, Lehigh University
2018	Teaching Innovation Grant, CBE, Lehigh University
2018	Senior Associate Editor for *International Journal of Logistics Management*
2017	Best Reviewer Award *Journal of Business Logistics*
2016	Editor for *Journal of Business Logistics News*
2016	Associate Editor for *Production Operations Management* Special Issue
2015	Associate Editor for *Journal of Business Logistics*
2015	Member of the *Transportation Journal* Editorial Board
2013	Robert and Christine Staub Faculty Excellence Award
2012	Member of the *Journal of Supply Chain Management* Editorial Board
2011	Best Paper Finalist for 2010 (*Journal of Operations Management*)
2011	Best Paper Award (European DSI Conference)
2010-2011	Council of Supply Chain Management Professional Educator Conference Chair
2010	Member of the *Journal of Operations Management* Editorial Board
2010	Member of the *Journal of Business Logistics* Editorial Board
2009-2010	Supply Chain Management Educator Conference Proceedings Editor
2007-2008	Council of Supply Chain Management Case Editor
2007	Best Paper Award (*NARTS-ISM Conference*)
2006	Tied for highest SPOT (Student Perception of Teaching) score
2005	Highest SPOT (Student Perception of Teaching) in INSC department
2000	Doctoral Dissertation Proposal Award (*University of Arkansas)*
2000	Outstanding Student Paper Award *(Society for Marketing Advances)*
2000	Finalist *(ISBM Doctoral Dissertation Award)*
2000	Scholarly Research Grant Recipient *(University of Tennessee)*
1999, 1997	Fellow *(Council of Logistics Management Doctoral Symposium)*

28. Research Funding (16)

2019	DiCentral – SCM and Financial Flow Research $20,000
2019	Ben Franklin Technology Partners and ESPI $20,000
2018	AFIT – Managing Customer Driven Coopettittion Projects $25,000
2017	DiCentral – Drop Shipment Research $20,000
2014-2015	International Travel Grant - One of 5 recipients selected across the entire University $5000
2011	Faculty Research Grant – Lehigh University (Principal Investigator), Catherine Ridings (Lehigh University) " Does investment in Supply Chain Management and Information Technology provide value for micro firms?" $4500
2009	Summer Research Grant – College of Business and Economics, Lehigh University (Principal Investigator), Nada R. Sanders (Lehigh University, Brian S. Fugate (Colorado State University) *"State of Supply Chain Management: A Visionary Perspective"* $3000
2002-2007	Charles Tandy American Enterprise Center Faculty Research Award *(Texas Christian University)* ($10,000/yr)
2003, 05, 07	Junior Faculty Research Grant *(Institute of Supply Management)* ($750/yr)
2005	Research Center for Teaching Excellence, Faculty Fellow Grant *(Texas Christian University)* ($2500)

F. Scholarly Presentations (79)

- **Zacharia, Zach G.,** "*Supply Chain Collaboration in Transformative Vertical Industries"* Retail Value Chain Federation Conference, Teaneck, New Jersey, May 6, 2019

- **Zacharia, Zach G.,** "*Theoretical and Conceptual Foundations of Supply Chain Management"* PhD Research Seminar, Indian Institute of Technology, New Delhi, January India, January 25, 2018.

- **Zach Zacharia**, Michael Plasch, Usha Mohan, Markus Gerschberger "*The Role of Coopetition in Buyer Supplier Relationships*" *DSI Conference,* Washington, DC, November 18, 2017

- **Zacharia, Zach G.,** "*Utilizing Drop Shipment to Improve Your Bottom Line"* Retail Value Chain Federation Conference, Phoenix, Arizona, November 6, 2017

- **Zach Zacharia**, Michael Plasch, Usha Mohan, Markus Gerschberger "*Understanding the Antecedents and Outcomes of Coopetition*" *CSCMP Academic Research Conference,* Atlanta, Georgia, September 24, 2017

- **Zacharia, Zach G.,** "*Complexity in Supply Chain Management"* PhD Research Seminar, Atlanta, Georgia, September 23, 2017

- **Zacharia, Zach G.,** "*Coopetition Research"* PhD Research Seminar, Atlanta, September 22, 2017

- **Zacharia, Zach G.,** "*Buyer Supplier Relationships"* PhD Research Seminar, Atlanta, September 21, 2017

- **Zacharia, Zach G.,** "*Publishing Research in American Supply Chain Journals"* Indian Institute of Technology, New Delhi, India, July 21, 2017.

- **Zacharia, Zach G.,** "*Transforming Traditional Networks Through the Use of Collaborative Environments"* Supply Chain Leaders in Action Conference, Naples, Florida June 5, 2017

- **Zach Zacharia**, Michael Plasch, Usha Mohan, Markus Gerschberger (2017) "*The Evolving Role of Coopetition within the Supply Chain*" CSCMP European Research Seminar*,* Barcelona, Spain, May 19.

- **Zacharia, Zach G.,** "*Logistics PhD programs in the US panel session"* Logistics Doctoral Symposium, Auburn University, Auburn, February 24, 2017.

- **Zacharia, Zach G.,** "*A Research Journey"* Indian Institute of Technology, Trichy, India, February 6, 2017.

- **Zacharia, Zach G.,** "*Orientation and Firm Infrastructure"* PhD Research Seminar, Logistikum, University of Applied Sciences, Steyr, Austria January 12, 2017

- **Zacharia, Zach G.,** "*Strategy"* PhD Research Seminar, Logistikum, University of Applied Sciences, Steyr, Austria January 11, 2017

- **Zacharia, Zach G.,** "*Conceptual Foundations from Procurement and Operations"* PhD Research Seminar, Logistikum, University of Applied Sciences, Steyr, Austria January 10, 2017

- **Zacharia, Zach G.,** "*Conceptual Foundations from Marketing and Logistics"* PhD Research Seminar, Logistikum, University of Applied Sciences, Steyr, Austria January 9, 2017

- **Zacharia, Zach G.,** "*Theoretical and Conceptual Foundations of Supply Chain Management"* PhD Research Seminar, Logistikum, University of Applied Sciences, Steyr, Austria August 10, 2016

- **Zacharia, Zach G.,** "*Philosophy of Science"* PhD Research Seminar, Logistikum, University of Applied Sciences, Steyr, Austria August 9, 2016

- **Zacharia, Zach G.,** " *Conceptual Foundations of Marketing"* PhD Research Seminar, Logistikum, University of Applied Sciences, Steyr, Austria August 8, 2016

- **Zacharia, Zach G.,** " *Conceptual Foundations of Operations"* PhD Research Seminar, Logistikum, University of Applied Sciences, Steyr, Austria August 10, 2016

- Gouda, Sirish, **Zach Zacharia**, Haritha Saranga (2016) "Linking New Forms of Work Organization and External Integration: Mediating role of cross functional collaboration" *DSI Conference,* Austin, Texas, November 21.

- Blessley, Misty, Saif Mir, **Zacharia, Zach G.,** John Aloysius (2016) "The role of apologies following transgressions in buyer-supplier relationships." *CSCMP Educator Conference,* Orlando, Florida, September 25.

- **Zacharia, Zach G.,** " *Increasing Efficiency and Reducing Cost within a Supply Chain"* Indian Institute of Technology, Madras, India, June 13 2016.

- Blessley, Misty, Saif Mir, **Zacharia, Zach G.,** John Aloysius (2016) "The role of transactional and relational psychological contract breach in supplier switching behavior." *CSCMP European Research Seminar,* Vienna, Austria, May 13.

- Bleasley, Misty, Mir, Saif, **Zacharia, Zach G.,** Aloysius, John " *Should I stay or should I go? The role of transactional and relational psychological contract breach in supplier switching behavior"* Council of Supply Chain Management Educator Conference, San Diego, September 27, 2015.

- **Zacharia, Zach G.,** "*Qualitative and Quantitative Research Paths in SCM"* , University of Arkansas, Fayetteville, Arkansas Feb 27, 2015.

- **Zacharia, Zach G.,** "*Publishing Research in American Supply Chain Journals"* Indian Institute of Management, Bangalore, India, January 13, 2015.

- **Zacharia, Zach G.,** Scott Ellis, Robert J. Trent "*Gaining Advantage Through Social Exchange: How and Under What Conditions"* Production Operation Management Conference, Atlanta, Georgia, May 10, 2014.

- Ellis, Scott, **Zacharia, Zach G.,** Jae-Young Oh "*The Role of Functional Congruence in Cross-Functional and Inter-organizational Collaboration"* Decision Sciences Institute Conference, Baltimore, Maryland, November 19, 2013.

- **Zacharia, Zach G.,** "*Supply Chain Management, Collaboration and their Role Across Businesses and People"* Congress of Latin American Engineering Students, Lima, Peru, October 29, 2013.

- **Zacharia, Zach G.,** Scott Ellis, "*Antecedents to Buyer-Engineer Knowledge Transfer"* Production Operation Management Conference, Denver, Colorado, May 4, 2013.

- **Zacharia, Zach G.,** "*Balancing Effective Research and Teaching"* – Invited Panel Presentation, Council of Supply Chain Management Doctoral Symposium, Atlanta, Georgia, October 1, 2012.

- **Zacharia, Zach G.,** "*What are some of the Factors That Affect the Relationship Between Cross Functional New Product Development and New Product Project Performance?"* Decision Sciences Institute Conference, Boston, Massachusetts, November 22, 2011.

- **Zacharia, Zach G.,** "*Supply Chain Security - An Academic Discussion and Future Research"* Invited Panel Presentation, Decision Sciences Institute Conference, Boston, Massachusetts, November 21, 2011.

- **Zacharia, Zach G.,** "*Conference Chairperson Opening Remarks"* Council of Supply Chain Management Educator Conference, Philadelphia, Pennsylvania, October 2, 2011.

- **Zacharia, Zach G.,** William F. Wempe William and Danny Lanier, Jr. "*Concentrated Supply Chain Membership and Financial Performance: Chain- and Firm-Level Perspectives"* Academy of Management Conference, San Antonio, Texas, August 12 – August 17, 2011.

- **Zacharia, Zach G.** and Catherine M. Ridings *"Does investment in Supply Chain Management and Information Technology provide value for micro firms?"* Production Operations Management Conference, Reno, Nevada, April 28-May 1, 2011.

- **Zacharia, Zach G.** and Robert J. Trent *"Supplier Satisfaction and Innovation Sharing"* Decision Sciences Institute Conference, San Diego, November 20-23, 2010.

- Christoph Bode, Stephan M. Wagner and **Zacharia, Zach G.,** "*The Effect of Cooperation, Supplier Development, and Relationship-Specific Investments on Suppliers' Willingness to Share Innovation"* Decision Sciences Institute Conference, San Diego, November 20-23, 2010.

- **Zacharia, Zach G.** *"Personal Career Development in Academia: What now and How"* Council of Supply Chain Management Professionals Doctoral Symposium, San Diego, September 27, 2010.

- **Zacharia, Zach G.** *"Supply Chain Management Overview"* Executive MBA Program, Universidad de Piura, Piura, Peru, June 12, 2010.

- **Zacharia, Zach G.** *"Supply Chain Management Collaboration Strategies"* CSCMP Roundtable, Lima, Peru, June 11, 2010.

- **Zacharia, Zach G.** and John R. MacDonald *"Are differences in Risk Planning Significant?"* Production and Operations Management Conference, Vancouver, Canada, May 7-10, 2010.

- **Zacharia, Zach G.** and Robert J. Trent *"Supplier Satisfaction – How does it matter?"* Production and Operations Management Conference, Vancouver, Canada, May 7-10, 2010.

- **Zacharia, Zach G.,** Nancy W. Nix, and Robert F. Lusch *"The Moderating Role of Absorptive Capability and Collaborative Communication in Organizational Learning"* 19th *North American Teaching and Research Conference,* Tempe, Arizona, March 11-12, 2010

- **Zacharia, Zach G.** and John R. MacDonald *"Risk Planning: Is it of Value"* Decision Sciences Institute Conference, New Orleans, LA, November 17, 2009.

- **Zacharia, Zach G.** *"When Should New Product Development Managers Consider Distribution Logistics"* Decision Sciences Institute Conference, New Orleans, LA, November 15, 2009.

- John R. MacDonald and **Zacharia, Zach G.** *"Risk and Disruption Management: The Impact of Behavioral Interference"* Behavioral Operations Conference, Syracuse, NY, June 26, 2009.

- **Zacharia, Zach G.,** Nancy W. Nix, and Robert F. Lusch *"The Moderating Role of Absorptive Capability and Collaborative Communication in Organizational Learning"* Production and Operation Management Conference, Orlando, FL, May 2, 2009.

- **Zacharia, Zach G.,** Nancy W. Nix and Robert F. Lusch "Supply Chain Collaborations: Project Performance and Business Performance" *18th North American Teaching and Research Conference,* Tempe, Arizona, March 29-31. (2007)

- **Zacharia, Zach G.,** Nancy W. Nix, and Robert F. Lusch *"The Moderating Role of Absorptive Capability and Collaborative Communication in Organizational Learning"* University of Tennessee, Knoxville, TN, November 7, 2006.

- **Zacharia, Zach G.,** Nancy W. Nix, and Robert F. Lusch *"The Moderating Role of Absorptive Capability and Collaborative Communication in Knowledge Acquisition"* DFWCSMP Roundtable meeting, Dallas, TX, October 12, 2006.

- **Zacharia, Zach G.,** *"Early Supplier Involvement"* National Council for Advanced Manufacturing, Washington, MD, June 7, 2006.

- **Zacharia, Zach G.,** Nancy W. Nix, and Robert F. Lusch *"Keys to Effective Supply Chain Collaboration and Knowledge Acquisition"* National Council for Advanced Manufacturing, Washington, MD, June 7, 2006.

- **Zacharia, Zach G.,** Nancy W. Nix, and Robert F. Lusch *"Keys to Effective Supply Chain Collaboration"* Supplier Network Working Group Meeting, Fort Worth, TX March 16, 2006.

- **Zacharia, Zach G.,** Nancy W. Nix, and Robert F. Lusch *"Keys to Effective Supply Chain Collaboration"* Institute of Supply Management Group Meeting, Fort Worth, Texas, January 3, 2006.

- **Zacharia, Zach G.** "Team Based Learning in MBA and Undergraduate Supply Chain Management Classes" *16th North American Teaching and Research Conference,* Tempe, Arizona, March 17-19. (2005)

- Nix, Nancy W., **Zach G. Zacharia** and Robert F. Lusch "Keys to Effective Supply Chain Collaboration" *16th North American Teaching and Research Conference,* Tempe, Arizona, March 17-19. (2005)

- **Zacharia, Zach G.,** *"Education Strategies"* Council of Logistics Roundtable Leadership Forum, Chicago, Illinois, June 11-12, 2004.
- **Zacharia, Zach G.,** and Nancy W. Nix, *"Supply Chain Collaboration – The role of a 3PL intermediary"* Society of Marketing Advances, New Orleans, Louisiana, November 6 - 8, 2003.
- **Zacharia, Zach G.,** Nancy W. Nix, and Robert F. Lusch *"Collaboration Effectiveness in the Supply Chain: A Knowledge and Capabilities Based Approach"* American Marketing Faculty Consortium, Dallas, Texas, October 30-November 2, 2003.

- **Zacharia, Zach G.,** *"What does it mean to be an education officer in your roundtable?"* Council of Logistics Roundtable Leadership Forum, Chicago, Illinois, June 6-7, 2003.

- Nix, Nancy W. and **Zach G. Zacharia**, Track Chairs "*Going Beyond the Hype: Getting and Measuring the Value from your Supply Chain Initiatives"* Council of Logistics Management Conference, Chicago, Illinois, September 23-27, 2003.
- **Zach G. Zacharia,** *Top 10 Truck Safety Recommendations*, Federal Motor Carrier Safety Administration, Washington, District of Columbia, October 16, 2002.
- **Zach G. Zacharia,** *Logistics Involvement in New Product Development*, University of Arkansas, Fayetteville, Arkansas, September 18, 2002.
- **Zach G. Zacharia,** "Supply and Value Chain Certificate Program" presented at the Supply and Value Chain Conference, Ft. Worth, Texas, February 8, 2002.
- **Zach G. Zacharia,** "*Tennessee Transportation Assistance Program*" presented at the Region 4 LTAP conference, St. Petersburg, Florida, May 16, 2001.
- **Zach G. Zacharia,** "*The Evolution and Growth of Production in the Supply Chain*", *2000 Society for Marketing Advances Conference*, Orlando, Florida, November 8. 2000.
- **Zach G. Zacharia,** and Soonhong Min "*The Nature of Interfirm Partnering in Supply Chain Management*" presented at American Marketing Association, Chicago, Illinois, August 5, 2000.
- **Zach G. Zacharia,** *"Searching the Internet and Web Page Design"* presented at University of Tennessee, Knoxville, Tennessee, April 17, 2000.
- **Zach G. Zacharia,** *"An Overview of Truck and Bus Safety: 1999 Knoxville Symposium* presented at the 4th International Fatigue Management Conference, Perth, Australia, March 19 – 22, 2000.
- **Zach G. Zacharia,** "*Traffic Safety and the Internet*" presented at the Governor Highway Safety Conference, Memphis, Tennessee, July 12-14, 1999.
- **Zach G. Zacharia,** "*Tennessee Transportation Assistance Program*" presented at the Asphalt Emulsion Users Conference, Nashville, Tennessee, November 19, 1998.
- **Zach G. Zacharia** and Barton R. Jennings "*The Use of Active Participation and Group Competition to Facilitate Training and Technology Transfer for Adult Learners*" Transportation Research Board Conference, Washington, District of Columbia, January 10-14, 1998.
- **Zach G. Zacharia,** "*Training Requirements for Local Governments*" presented at the National Transportation Training Conference, Reno, Nevada, October 7-9, 1997.
- **Zach G. Zacharia,** "*Logistics Thought: Key Messages and Implications from the Field of Marketing*," presented at the Council of Logistics Management Doctoral Symposium, Chicago, Illinois, October 3-4, 1997.

- **Zach G. Zacharia,** "*Navigating the Internet*" presented at the Southeast Local Roads Conference, Biloxi, Mississippi, September 24-26, 1997.
- **Zach G. Zacharia,** "*Bridge Paint Expert Systems,"* presented at the Second International Organization for Economic Cooperation and Development (OECD) Conference on Knowledge Based Expert Systems in Transportation, Montreal, Canada, June 14-16, 1992.

G. Teaching and Research Advising

COURSES:

Lehigh University (2008 – Present)

- SCM 186 - Supply Chain Management and Operations (Undergraduate 2008 - present)
- SCM 354 - Logistics and Transportation (Undergraduate 2008-present)
- GBUS 453 – Logistics and Transportation (Graduate 2013 – present)
- GBUS 492- Supply Chain Management Strategy (Graduate 2010- 2015) (Summer Course)
- Advising 14 Supply Chain Management Majors (2021)
- Advising 11 Supply Chain Management Majors (2020)
- Advising 21 Supply Chain Management Majors (2019)
- Advising 5 Supply Chain Management Majors (2018)
- Advising 24 Supply Chain Management Majors (2017)
- Advising 9 Supply Chain Management Majors (2016)
- Advising 27 Supply Chain Management Majors (2015)
- Advising 28 Supply Chain Management Majors (2014)
- Advising 24 Supply Chain Management Majors (2013)
- Advising 9 Supply Chain Management Majors (2012)
- Advising 10 Supply Chain Management Majors (2011)
- Advising 13 Supply Chain Management Majors (2010)
- Advising 6 Supply Chain Management Majors (2009)

Texas Christian University (2001 – 2008)

- Strategic Sourcing and Procurement (Professional MBA) 2007
- Business Simulation (Professional MBA) 2007
- Supply Chain Management Concepts (Full-Time MBA) 2005 – 2008
- Supply Chain Management Concepts (Professional MBA) 2001– 2008
- Logistics and Transportation (Professional MBA) 2001 - 2008
- Supply Chain Tools and Technologies (Professional MBA) 2002
- Logistics and Transportation (Undergraduate) 2001 - 2008
- Supply Chain Management Concepts (Undergraduate) 2003 – 2004
- Supply Chain Tools and Technologies (Undergraduate) 2003
- Procurement and Supply Management (Undergraduate) 2003

University of Tennessee (1996-2001)

- Introduction to Transportation (Undergraduate) Summer 1998
- Introduction to Logistics (Undergraduate) Summer 1999
- Marketing Management (Undergraduate) Spring 2000
- Global Logistics and Transportation (Undergraduate) Summer 2000

H. SERVICE

University

Faculty Compensation Committee (2016 – 2019)

College

Director, Center for Supply Chain Research Lehigh
Promotion and Tenure Committee (2021 – onwards)
Chair, Database and Software Committee (2018 – onwards)
Ph.D. Task Force (2017)
Undergraduate Core Curriculum Committee (2016)
Math Committee to Assess Assessment Results (2010)

Department

BIS Assistant Professor Search Chair – Tenure Track (2021-2021)
SCM Assistant Professor Search Chair – Tenure Track (2020-2020)
DATA Department Chair Search – Tenure Track (2019-2019)
SCM Assistant Professor Search Chair – Tenure Track (2018-2018)
SCM POP Search Chair (2017-2017)
Research Seminar Committee (2010-2011)
SCM Club Faculty Liaison (2009-2019)

Professional (Council of Supply Chain Management Professionals)

Education Committee Member -Lehigh Valley Roundtable (2015-onwards)
President – Lehigh Valley Roundtable (2012-2015)
Education Conference Chair (2010 – 2011)
Education Strategies Committee Member (2007 – 3-year term)
Case Editor (3-year term)
President – Dallas Roundtable (2007-2008)
Vice President – Dallas Roundtable (2006-2007)
Education chair – Dallas Roundtable (2004-2006)
Member (1999 – onwards)

External Service

Rockefeller Group – Expert Service Consulting (Jan 2020)

Exhibit B - Eligibility Criteria: Work Records

D E C L A R A T I O N

This is to certify, under penalty of law, that Mr. G**USTAVO DARTAGNAN XAVIER DO REGO**, enrolled with the CPF under No. **025.907.999-50**, holder of Employment Record Book and Social Security (CTPS) No. **33680**, Series **53**, was an employee of Telefônica Brasil S.A., CNPJ No. 02.558.157/0001-62, from **06/12/2006**, to **09/12/2022**, having last held the position of **TELECOM CONSULTANT**.

Duties included:

"Researching and proposing new network solutions and equipment aimed at improving network performance, ensuring alignment with network quality standards and resource optimization guidelines across all fixed and mobile network segments. Complying with the requirements for maintaining the Occupational Health and Safety Management System, and participating in Occupational Health and Safety programs. Being familiar with Telefônica's Environmental Policy and implementing it in daily activities to ensure best practices in the company's environmental management."

Telefônica Brasil S.A. has assumed all contractual obligations of Global Village Telecom – GVT and, for this reason, is authorized to issue all necessary declarations.

São Paulo, November 20, 2025.

In witness whereof, we hereby sign this declaration.

Respectfully,

PAULA CAROLINE MUNIZ RAMAL
Senior People Manager

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 15 2026

D E C L A R A Ç Ã O

Declaramos sob as penas da lei que, o(a) Sr(a) **GUSTAVO DARTAGNAN XAVIER DO REGO**, inscrito no CPF sob o nº **025.907.999-50**, portador(a) da Carteira de Trabalho e Previdência Social nº **33680** e Série **53**, foi colaborador(a) da Telefônica Brasil S.A. CNPJ nº.: 02.558.157/0001-62 de **12.06.2006** a **12.09.2022** e exerceu por último cargo **CONSULTOR TELECOM.**

As Atividades Incluem:
"Pesquisar e sugerir novas soluções e equipamentos de rede, visando melhorar a performance da rede, alinhamento com os padrões de qualidade de rede e diretrizes de otimização de recursos, para todos os segmentos da rede fixa e móvel. Cumprir os requisitos para manutenção do Sistema de Gestão de Saúde e Segurança Ocupacional, participar dos programas de Saúde e Segurança Ocupacional. Conhecer a Política de Meio Ambiente da Telefônica e implementar nas atividades desenvolvidas diariamente a fim de garantir as boas práticas para gestão ambiental da companhia."

A Telefônica Brasil S.A assumiu todas as obrigações contratuais da Global Village Telecom – GVT e por esta razão passa a assinar todas as declarações que se fizerem necessárias.

São Paulo, 20 de novembro de 2025

Por ser verdade, assinamos a presente declaração.

Atenciosamente,

PAULA CAROLINE MUNIZ RAMAL
Gerente SR Pessoas

Employment Digital Record

Date of Issue: 03/18/2021

Personal Information

Full Name
GUSTAVO DARTAGNAN XAVIER DO REGO

CPF
025.907.999-50

Sex
Male

Date of Birth
09/23/1978

Nationality
Brazilian

Mother's Name
BERNADETE CHIUZA XAVIER

Employment Records

06/12/2006 - 09/12/2022

Employer
TELEFONICA BRASIL S.A.
CNPJ RAIZ*: 02.558.157

Establishment
TELEFONICA BRASIL S.A.
CNPJ: 02.558.157/0694-48
AVENIDA DARIO LOPES DOS SANTOS 2197 B AND C TOWER
REBOUCAS CURITIBA PR

SECTOR 2 80210010

Position
TELECOM CONSULTANT

Occupation Code (CBO)
2124-10

Contract Type
Indefinite term

Contractual Salary
R$ 9.746,03 per month

Employment Relationship
Employee

Hiring Type
Transfer from a company within the same economic group

Source of Information
ESOCIAL (Digital Bookkeeping System for Fiscal, Social Security, and Labor Obligations)

ANNOTATIONS

09/12/2022 - Termination of employment contract

05/01/2022 - Salary set at R$ 9,746.03 per month

02/14/2022 - Vacation Period 02/14/2022 a 02/28/2022, accrual period not available

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ANNOTATIONS

due to the version of eSocial used

10/01/2021 – Salary set at R$ 9,179.38 per month

09/01/2021 – Salary set at R$ 8,826.33 per month

07/01/2021 – Salary set at R$ 6,619.75 per month

06/14/2021 – Vacation period from 06/14/2021 to 06/23/2021, accrual period not available due to the version of eSocial used

11/03/2020 – Vacation period from 11/03/2020 to 12/02/2020, accrual period not available due to the version of eSocial used

11/01/2020 – Salary set at R$ 8,826.33 per month

07/01/2020 – Salary set at R$ 6,619.75 per month, effective as of 07/01/2020

03/30/2020 – Vacation period from 03/30/2020 to 04/10/2020, accrual period not available due to the version of eSocial used

03/01/2020 – Salary set at R$ 8,826.33 per month, effective as of 03/01/2020

08/19/2019 – Vacation period from 08/19/2019 to 09/05/2019, accrual period not available due to the version of eSocial used

05/01/2019 – Salary set at R$ 8,546.02 per month, effective as of 05/01/2019

04/01/2019 – Vacation period from 04/01/2019 to 04/18/2019, accrual period not available due to the version of eSocial used

09/10/2018 – Vacation period from 09/10/2018 to 09/21/2018

08/01/2018 – Salary set at R$ 8,245.87 per month, effective as of 08/01/2018

04/02/2018 – Vacation period from 04/02/2018 to 04/16/2018

04/01/2016 – Salary set at R$ 8,105.64 per month

04/01/2016 – Contract type defined as indefinite-term

04/01/2016 – Establishment defined as TELEFÔNICA BRASIL S.A.

04/01/2016 to 09/12/2022 – Position held: Telecom Consultant

04/01/2016 – Employment relationship defined as employee

04/01/2016 to 09/12/2022 – Occupation Code (CBO): 2124-10

06/12/2006 – Admission

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NOTES

07/01/2021 - Reduction period 120 days - Reduction percentage: 25%

*Translator's Note: The term “Root CNPJ” refers to the first eight digits of the Brazilian Corporate Taxpayer Identification Number (CNPJ), which identify the legal entity (company) as a whole, regardless of its individual branches or establishments.

This document was digitally signed by Dataprev on 11/21/2025.
This document is only valid when accompanied by an official identification document.

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 15 2026

Carteira de Trabalho Digital

Data de emissão: 18/03/2021

Dados Pessoais

Nome civil

GUSTAVO DARTAGNAN XAVIER DO REGO

CPF	Sexo	Data de nascimento	Nacionalidade
025.907.999-50	**Masculino**	**23/09/1978**	**Brasileiro**

Nome da mãe

BERNADETE CHIUZA XAVIER

Contratos de trabalho

12/06/2006 - 12/09/2022

Empregador

TELEFONICA BRASIL S.A.
CNPJ RAIZ: 02.558.157

Estabelecimento

TELEFONICA BRASIL S.A.
CNPJ: 02.558.157/0694-48
AVENIDA DARIO LOPES DOS SANTOS 2197 TORRE B E C REBOUCAS CURITIBA PR **SETOR 2 80210010**

Cargo

CONSULTOR TELECOM

CBO Cargo

2124-10

Tipo de contrato

Prazo indeterminado

Salário contratual

R$ 9.746,03 por mês

Relação de trabalho

Empregado

Tipo de admissão

Transferência de empresa do mesmo grupo econômico

Fonte da informação

ESOCIAL

ANOTAÇÕES

12/09/2022 - Rescisão Contratual

01/05/2022 - Salário definido para R$ 9.746,03 Por mês

14/02/2022 - Férias 14/02/2022 a 28/02/2022 período aquisitivo não disponível em

Documento assinado digitalmente pela Dataprev em 21/11/2025.
Este documento somente é válido acompanhado de um documento de identificação oficial.

ANOTAÇÕES

razão da versão do eSocial utilizada
01/10/2021 - Salário definido para R$ 9.179,38 Por mês
01/09/2021 - Salário definido para R$ 8.826,33 Por mês
01/07/2021 - Salário definido para R$ 6.619,75 Por mês
14/06/2021 - Férias 14/06/2021 a 23/06/2021 período aquisitivo não disponível em razão da versão do eSocial utilizada
03/11/2020 - Férias 03/11/2020 a 02/12/2020 período aquisitivo não disponível em razão da versão do eSocial utilizada
01/11/2020 - Salário definido para R$ 8.826,33 Por mês
01/07/2020 - Salário definido para R$ 6.619,75 Por mês , com efeito a partir de 01/07/2020
30/03/2020 - Férias 30/03/2020 a 10/04/2020 período aquisitivo não disponível em razão da versão do eSocial utilizada
01/03/2020 - Salário definido para R$ 8.826,33 Por mês , com efeito a partir de 01/03/2020
19/08/2019 - Férias 19/08/2019 a 05/09/2019 período aquisitivo não disponível em razão da versão do eSocial utilizada
01/05/2019 - Salário definido para R$ 8.546,02 Por mês , com efeito a partir de 01/05/2019
01/04/2019 - Férias 01/04/2019 a 18/04/2019 período aquisitivo não disponível em razão da versão do eSocial utilizada
10/09/2018 - Férias 10/09/2018 a 21/09/2018
01/08/2018 - Salário definido para R$ 8.245,87 Por mês , com efeito a partir de 01/08/2018
02/04/2018 - Férias 02/04/2018 a 16/04/2018
01/04/2016 - Salário definido para R$ 8.105,64 Por mês
01/04/2016 - Tipo de contrato definido para Prazo indeterminado
01/04/2016 - Estabelecimento definido para TELEFONICA BRASIL S.A.
01/04/2016 a 12/09/2022 - Cargo exercido de Consultor Telecom
01/04/2016 - Relação de trabalho definida para Empregado
01/04/2016 a 12/09/2022 - CBO Cargo exercido 2124-10
12/06/2006 - Admissão

Documento assinado digitalmente pela Dataprev em 21/11/2025.
Este documento somente é válido acompanhado de um documento de identificação oficial.

OBSERVAÇÕES

01/07/2021 - Prazo da reducao 120 dias Percentual da reducao 25 %

TELEFÔNICA BRASIL S.A.
CNPJ: 02.558.157/0001-62
State Registration No.: 108383949112
Av. Engenheiro Luiz Carlos Berrini, 1376
ZIP Code: 04571-936
São Paulo – SP, Brazil

RECORD OF ANNOTATIONS AND UPDATES – EMPLOYMENT RECORD BOOK AND SOCIAL SECURITY (CTPS)

Employee Information

Name
Gustavo Dartagnan Xavier do Rego

Department
Corporate Voice Services Management

Employee ID	Admission Date	CTPS No./Series	PIS	CPF
03504958	06/12/2006	33680/53	12690812497	025.907.999-50

Date of Birth	Nationality	Place of Birth	Work Schedule
09/23/1978	Brazilian	Xapuri	Flexible Schedule 6

Parents

Father

Mother
Bernadete Chiuza Xavier

Union Contributions

Year	Union	Amount (R$)
2014	SIND EMP TELECOM PR	219.67
2015	SIND EMP TELECOM PR	235.07
2016	SIND EMP TELECOM PR	251.52

Salary Changes

Date of Change	Amount (R$)	Reason
01/01/2014	6,590.00	Collective Bargaining Agreement
12/01/2014	7,052.00	Collective Bargaining Agreement
03/01/2016	7,545.64	Collective Bargaining Agreement

Position Changes

Date of Change	From	To	CBO	Reason
06/12/2006		CORPORATE PROVISIONING TECHNICIAN (LEVEL PL)		Hire / Rehire
01/01/2014	CORPORATE PROVISIONING TECHNICIAN (LEVEL PL)	TECHNICAL CONSULTANT		Initial data upload
05/01/2014	TECHNICAL CONSULTANT	TELECOM SPECIALIST		Organizational change – Org. restructuring – Position reclassification
03/01/2016	TELECOM SPECIALIST	TELECOM CONSULTANT		Organizational change – Org. restructuring – Position reclassification

Vacation Records

Accrual Period	Leave Period
From 06/12/2006 to 06/11/2007	From 12/10/2007 to 12/29/2007
From 06/12/2006 to 06/11/2007	From 03/24/2008 to 04/02/2008
From 06/12/2007 to 06/11/2008	From 08/11/2008 to 08/30/2008
From 06/12/2007 to 06/11/2008	From 06/01/2009 to 06/10/2009
From 06/12/2008 to 06/11/2009	From 11/09/2009 to 11/28/2009
From 06/12/2008 to 06/11/2009	From 05/24/2010 to 06/02/2010

Requested Period: From 06/12/2006 to 05/25/2016
Print Date: 05/25/2016 – 2:49:42 PM
Authentication:

Paulina Ferreira Pantalião
HR Services Manager
Telefonica Brasil S/A

NOTE: This information reflects the employee's registration record and replaces the entries in the Employment Record Book, as well as any declarations that may otherwise be requested from the company, in accordance with Ordinance No. 41 of the Ministry of Labor and Employment (MTE), published in the Federal Official Gazette (D.O.U.) on 03/30/2007.

TELEFÔNICA BRASIL S.A.
CNPJ: 02.558.157/0001-62
State Registration No.: 108383949112
Av. Engenheiro Luiz Carlos Berrini, 1376
ZIP Code: 04571-936
São Paulo – SP, Brazil

RECORD OF ANNOTATIONS AND UPDATES – EMPLOYMENT RECORD BOOK AND SOCIAL SECURITY (CTPS)

Employee Information

Name
Gustavo Dartagnan Xavier do Rego

Department
Corporate Voice Services Management

Employee ID	Admission Date	CTPS No./Series	PIS	CPF
03504958	06/12/2006	33680/53	12690812497	025.907.999-50

Date of Birth	Nationality	Place of Birth	Work Schedule
09/23/1978	Brazilian	Xapuri	Flexible Schedule 6

Parents

Father

Mother
Bernadete Chiuza Xavier

Vacation Records

Accrual Period	Leave Period
From 06/12/2009 to 06/11/2010	From 11/16/2010 to 11/25/2010
From 06/12/2009 to 06/11/2010	From 03/14/2011 to 04/02/2011
From 06/12/2010 to 06/11/2011	From 11/28/2011 to 12/17/2011
From 06/12/2010 to 06/11/2011	From 05/28/2012 to 06/06/2012
From 06/12/2011 to 06/11/2012	From 05/02/2013 to 05/31/2013
From 06/12/2012 to 06/11/2013	From 05/05/2014 to 05/24/2014
From 06/12/2013 to 06/11/2014	From 01/26/2015 to 02/04/2015
From 06/12/2013 to 06/11/2014	From 05/04/2015 to 05/23/2015
From 06/12/2014 to 06/11/2015	From 04/04/2016 to 04/13/2016
From 06/12/2014 to 06/11/2015	From 05/03/2016 to 05/22/2016

General Annotations

Type of Annotation	Start Date	End Date	Notes
Organizational Change – Intercompany Transfer	04/01/2016	04/30/2016	From (Org. Unit): GVT Historical – To (Org. Unit): Fixed CX Management
Go live Data	05/01/2016	12/31/9999	From (Org. Unit): Fixed CX Management – To (Org. Unit): Corporate Voice Services Management

Requested Period: From 06/12/2006 to 05/25/2016
Print Date: 05/25/2016 – 2:49:42 PM
Authentication:

Paulina Ferreira Pantalião
HR Services Manager
Telefonica Brasil S/A

NOTE: This information reflects the employee's registration record and replaces the entries in the Employment Record Book, as well as any declarations that may otherwise be requested from the company, in accordance with Ordinance No. 41 of the Ministry of Labor and Employment (MTE), published in the Federal Official Gazette (D.O.U.) on 03/30/2007.

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 16 2026

Telefonica Brasil S.A
CNPJ: 02.558.157/0001-62
Inscr. Estadual: 108383949112
Av. Engenheiro Luiz Carlos Berrini 1376
CEP: 04571-936
São Paulo - SP

FICHA DE ANOTAÇÕES E ATUALIZAÇÕES DA CARTEIRA DE TRABALHO E PREVIDÊNCIA SOCIAL

Dados do Funcionário

Nome			Área	
Gustavo Dartagnan Xavier do Rego			Ger Servicos de Voz Corporativo	
Matrícula	**Data de Admissão**	**Nr. Cart. Trab./Série**	**PIS**	**CPF**
03504958	12.06.2006	33680/53	12690812497	025.907.999-50
Dt. Nascimento	**Nacionalidade**	**Naturalidade**	**Jornada**	
23.09.1978	Brasileiro	XAPURI	Horário Flexível 6	
Filiação:				
Pai		**Mãe**		
		Bernadete Chiuza Xavier		

Contribuições Sindicais

Ano	Sindicato	Valor - R$
2014	SIND EMPR EMP TELECOM PR	219,67
2015	SIND EMPR EMP TELECOM PR	235,07
2016	SIND EMPR EMP TELECOM PR	251,52

Alteração de Salário

Dt. Alteração	Valor - R$	Motivo
01.01.2014	6.590,00	Acordo Coletivo
01.12.2014	7.052,00	Acordo Coletivo
01.03.2016	7.545,64	Acordo Coletivo

Alteração de Cargo

Dt. Alteração	De	Para	CBO	Motivo
12.06.2006		TECNICO PROVISIONAMENTO CORPORATIVO PL		Admissão Reemprego
01.01.2014	TECNICO PROVISIONAMENTO CORPORATIVO PL	CONSULTOR TECNICO		Carga de dados iniciais Carga de dados iniciais
01.05.2014	CONSULTOR TECNICO	ESPECIALISTA TELECOM		Mudança Organizacional Reestrut Org Reclassif Cargo
01.03.2016	ESPECIALISTA TELECOM	CONSULTOR TELECOM		Mudança Organizacional Reestrut Org Reclassif Cargo

Anotações de Férias

Período de Aquisição	Período de Concessão
De 12.06.2006 a 11.06.2007	De 10.12.2007 a 29.12.2007
De 12.06.2006 a 11.06.2007	De 24.03.2008 a 02.04.2008
De 12.06.2007 a 11.06.2008	De 11.08.2008 a 30.08.2008
De 12.06.2007 a 11.06.2008	De 01.06.2009 a 10.06.2009
De 12.06.2008 a 11.06.2009	De 09.11.2009 a 28.11.2009
De 12.06.2008 a 11.06.2009	De 24.05.2010 a 02.06.2010

Paulina Ferreira Pantalião
Gerente de Serviços de RH
Telefonica Brasil S/A

Período Solicitado: De 12.06.2006 até 25.05.2016
Data de impressão: 25.05.2016 - 14:49:42
Autenticação:

NOTA: Estes dados refletem a ficha de registro do empregado, devendo substituir as anotações da carteira de trabalho, bem como toda e qualquer declaração a ser eventualmente solicitada à empresa, conforme disposto na portaria n° 41 do MTE, D.O.U. de 30/03/2007.

Telefonica Brasil S.A
CNPJ: 02.558.157/0001-62
Inscr. Estadual: 108383949112
Av. Engenheiro Luiz Carlos Berrini 1376
CEP: 04571-936
São Paulo - SP

FICHA DE ANOTAÇÕES E ATUALIZAÇÕES DA CARTEIRA DE TRABALHO E PREVIDÊNCIA SOCIAL

Dados do Funcionário

Nome			Área	
Gustavo Dartagnan Xavier do Rego			Ger Servicos de Voz Corporativo	
Matrícula	**Data de Admissão**	**Nr. Cart. Trab./Série**	**PIS**	**CPF**
03504958	12.06.2006	33680/53	12690812497	025.907.999-50
Dt. Nascimento	**Nacionalidade**	**Naturalidade**	**Jornada**	
23.09.1978	Brasileiro	XAPURI	Horário Flexível 6	
Filiação:				
Pai		**Mãe**		
		Bernadete Chiuza Xavier		

Anotações de Férias

Período de Aquisição	Período de Concessão
De 12.06.2009 a 11.06.2010	De 16.11.2010 a 25.11.2010
De 12.06.2009 a 11.06.2010	De 14.03.2011 a 02.04.2011
De 12.06.2010 a 11.06.2011	De 28.11.2011 a 17.12.2011
De 12.06.2010 a 11.06.2011	De 28.05.2012 a 06.06.2012
De 12.06.2011 a 11.06.2012	De 02.05.2013 a 31.05.2013
De 12.06.2012 a 11.06.2013	De 05.05.2014 a 24.05.2014
De 12.06.2013 a 11.06.2014	De 26.01.2015 a 04.02.2015
De 12.06.2013 a 11.06.2014	De 04.05.2015 a 23.05.2015
De 12.06.2014 a 11.06.2015	De 04.04.2016 a 13.04.2016
De 12.06.2014 a 11.06.2015	De 03.05.2016 a 22.05.2016

Anotações Gerais

Tipo de anotação	Data ini.	Data fim	Obs.
Mudança Organizacional Entre Empresas	01.04.2016	30.04.2016	De(U.O.): Historico GVT - Para(U.O.): Ger CX Fixo
Carga go live Carga go live	01.05.2016	31.12.9999	De(U.O.): Ger CX Fixo - Para(U.O.): Ger Servicos de Voz Corporativo

Período Solicitado: De 12.06.2006 até 25.05.2016
Data de impressão: 25.05.2016 - 14:49:42
Autenticação:

Paulina Ferreira Pantalião
Gerente de Serviços de RH
Telefonica Brasil S/A

NOTA: Estes dados refletem a ficha de registro do empregado, devendo substituir as anotações da carteira de trabalho, bem como toda e qualquer declaração a ser eventualmente solicitada à empresa, conforme disposto na portaria n° 41 do MTE, D.O.U. de 30/03/2007.

Purchase Order to Supplier

To:
GUSTAVO DARTAGNAN XAVIER DO REGO CONSUL
TECN INFO LTDA
R ESTADOS UNIDOS 2196
82.540-030 BOA VISTA CURITIBA

Delivery Details:

Reference No.: 250229
Order placed by: Magda Filipa Mota Santos

Currency: USD

Reference	Description	Qty.	Unit Price	Discount	Total
	Outsourcing Services				
	Gustavo Dartagnan Xavier do Rego – USD 27.50/hour				
PROF_PS_270	January 2025	176.00	28.57		5,028.78
PROF_PS_270	February 2025	160.00	28.57		4,571.61
PROF_PS_270	March 2025	168.00	28.57		4,800.19
PROF_PS_270	April 2025	160.00	28.57		4,571.61
PROF_PS_270	May 2025	168.00	28.57		4,800.19
PROF_PS_270	June 2025	152.00	28.57		4,343.03
PROF_PS_270	July 2025	184.00	28.57		5,257.36
PROF_PS_270	August 2025	160.00	28.57		4,571.61
PROF_PS_270	September 2025	176.00	28.57		5,028.78
PROF_PS_270	October 2025	184.00	28.57		5,257.36
PROF_PS_270	November2025	160.00	28.57		4,571.61
PROF_PS_270	December 2025	160.00	28.57		4,571.61

Delivery Date: 01/10/2025
Payment Terms: Immediate Payment

Subtotal	€57,373.82
Tax (if applicable):	
Total including VAT:	€57,373.82

All issued documentation must include the reference of this purchase order.
Invoices received without this information will be returned and not recorded
Orders delivered directly to our Clients must not be accompanied by invoices or delivery notes indicating prices.
The invoice, as well as proof of delivery, must be sent to Winprovit.

Billing and Document Submission Details:
Winprovit - Soluções Inteligentes, S.A.
Av. Vasco da Gama, No. 774 - Espaço 8
4430-247 Vila Nova de Gaia
Portugal
E-mail: financeiro@winprovit.pt
Tax ID (NIPC): 507478045

Reference	Description	Qty.	Unit Price	Discount	Total
	This Purchase Order may be subject to changes with				
	corrective adjustments to be issued subsequently				

Delivery Date: 01/10/2025

Payment Terms: Immediate Payment

Subtotal	€57,373.82
Tax (if applicable):	
Total including VAT:	€57,373.82

All issued documentation must include the reference of this purchase order.

Invoices received without this information will be returned and not recorded

Orders delivered directly to our Clients must not be accompanied by invoices or delivery notes indicating prices.
The invoice, as well as proof of delivery, must be sent to Winprovit.

Billing and Document Submission Details:

Winprovit - Soluções Inteligentes, S.A.
Av. Vasco da Gama, No. 774 - Espaço 8
4430-247 Vila Nova de Gaia
Portugal

E-mail: financeiro@winprovit.pt

Tax ID (NIPC): 507478045

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 13 2026

Nota de Encomenda a Fornecedor

Para:
GUSTAVO DARTAGNAN XAVIER DO REGO CONSUL
TECN INFO LTDA
R ESTADOS UNIDOS 2196
82.540-030 BOA VISTA CURITIBA

Dados para entrega:

N/ Referência: 250229
Encomenda efetuada por: Magda Filipa Mota Santos

Moeda: USD

Referência	Descrição	Qtd.	Valor Unitário	Desconto	Total
	Serviços de Outsourcing				
	Gustavo Dartagnan Xavier Do Rego - 27,50 USD/h				
PROF_PS_270	Janeiro 2025	176,00	28,57		5.028,78
PROF_PS_270	Fevereiro 2025	160,00	28,57		4.571,61
PROF_PS_270	Março 2025	168,00	28,57		4.800,19
PROF_PS_270	Abril 2025	160,00	28,57		4.571,61
PROF_PS_270	Maio 2025	168,00	28,57		4.800,19
PROF_PS_270	Junho 2025	152,00	28,57		4.343,03
PROF_PS_270	Julho 2025	184,00	28,57		5.257,36
PROF_PS_270	Agosto 2025	160,00	28,57		4.571,61
PROF_PS_270	Setembro 2025	176,00	28,57		5.028,78
PROF_PS_270	Outubro 2025	184,00	28,57		5.257,36
PROF_PS_270	Novembro 2025	160,00	28,57		4.571,61
PROF_PS_270	Dezembro 2025	160,00	28,57		4.571,61

Data de Entrega: 10.01.2025
Condições de Pagamento: Pronto Pagamento

Sub-Total	57 373,82 €
Imposto se aplicável	
Total com IVA	57 373,82 €

Toda a documentação emitida, deve mencionar a referência da presente encomenda a fornecedor.
As faturas recebidas sem esta informação serão devolvidas e não contabilizadas
Encomendas entregues diretamente aos nossos Clientes, não podem ser acompanhas de faturas ou guias de transporte com preço. A fatura, assim como a prova de entrega, deverão ser enviadas para a Winprovit.

Dados de faturação eenvio dedocumentação:
Winprovit - Soluções Inteligentes, S.A.
Av. Vasco da Gama, nº 774 - Espaço 8
4430-247 Vila Nova de Gaia
Portugal
E-mail: financeiro@winprovit.pt
NIPC:507478045

Referência	Descrição	Qtd.	Valor Unitário	Desconto	Total
	Esta Nota de Encomenda poderá sofrer alterações				
	sendo emitidos acertos retificativos à posteriori				

Data de Entrega: 10.01.2025

Condições de Pagamento: Pronto Pagamento

Sub-Total	57 373,82 €
Imposto se aplicável	
Total com IVA	57 373,82 €

Toda a documentação emitida, deve mencionar a referência da presente encomenda a fornecedor.

As faturas recebidas sem esta informação serão devolvidas e não contabilizadas

Encomendas entregues diretamente aos nossos Clientes, não podem ser acompanhas de faturas ou guias de transporte com preço. A fatura, assim como a prova de entrega, deverão ser enviadas para a Winprovit.

Dados de faturação e envio de documentação:
Winprovit - Soluções Inteligentes,S.A.
Av. Vasco da Gama, nº 774 - Espaço 8
4430-247 Vila Nova de Gaia
Portugal

E-mail: financeiro@winprovit.pt
NIPC: 507478045

SERVICE AGREEMENT

This Service Agreement (“Agreement”) is entered into between:

WINPROVIT SOLUÇÕES INTELIGENTES S.A., legal entity No. 507478045, registered with the Commercial Registry Office of Vila Nova de Gaia under the same number, with its registered office at Rua César das Neves, No. 163-2, 4200-002 Porto, with a share capital of €100,000.00 (one hundred thousand euros), hereinafter referred to as the **First Party**,

-and-

Corporate Name: GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA, registered with CNPJ No. 47.751.467/0001-37, with its registered office at Rua Estados Unidos, 2106, ZIP Code 82540-030, Boa Vista, Curitiba, Brazil, with a share capital of R$1,000.00 (one thousand reais), hereinafter referred to as the **Second Party** or **Service Provider**,

Each is individually referred to as a Party and collectively as the Parties.

WHEREAS:

I. The **First Party** is engaged in the provision of services in the field of information technology, including the development of projects in the areas of information technology and telecommunications;

II. Within the scope of its activities, or those of its clients, the **First Party** creates and develops IT projects;

III. The **First Party** acknowledges that the **Second Party** possesses the necessary know-how, autonomy, and technical expertise to perform the services;

IV. The services to be performed under this Agreement are essential for the execution of the IT project;

V. The **First Party** intends to contract the technical services of the **Service Provider**;

VI. The **Second Party** agrees to provide services to the **First Party**.

1. PURPOSE AND SCOPE OF SERVICES

1.1. The **First Party** hereby engages the **Second Party**, and the latter agrees to provide IT services in specific technologies, in accordance with the terms set forth in this Agreement. The services to be provided, hereinafter referred to as the “Services,” shall include the

enhancement of technical capabilities related to analysis and programming tasks in a mainframe environment.

1.2. The **First Party** agrees to review and approve each professional provided by the **Second Party** for the performance of the Services.

1.3. The **First Party** shall be responsible for directing and supervising the work performed by the designated professional or team described below:

- GUSTAVO DARTAGNAN XAVIER DO REGO, of legal age, from Brazil, holder of passport No. FV584800, valid until 04/01/2028.

1.4. All professionals provided by the **Second Party** to the **First Party** have signed the applicable Corporate Code of Conduct.

2. PLACE OF PERFORMANCE

2.1. The **First Party** agrees to provide an appropriate workplace for the performance of the Services by the professionals designated by the **Second Party**.

2.2. The **First Party** shall, whenever applicable, ensure a safe working environment in accordance with the applicable Portuguese labor legislation.

2.3. Any additional equipment, hardware, software, or licenses required for the performance of the Services shall be considered an integral part of the workplace and, as such, shall be the sole responsibility and property of the **First Party**.

2.4. During the term of this Agreement, and where justified, considering the context of the COVID-19 pandemic, the workplace shall be at the premises of the Service Provider.

3. PAYMENT TERMS

3.1. Upon issuance of the Monthly Purchase Order related to this Agreement, the **First Party** may issue invoices for the Services rendered in the immediately preceding month, in accordance with the amounts set forth below:

- US$ 26.00 (twenty-six U.S. dollars) per hour worked, for each professional specified in Clause 1.3 of this Agreement.

3.2. Any amounts related to extra or additional services not covered under this Agreement shall only be invoiced upon prior agreement between the Parties.

3.3. Payment shall be made within thirty (30) days from receipt of the relevant invoice, to the address indicated by the **First Party** in the preamble of this Agreement.

4. CONFIDENTIALITY

4.1. Within the scope of this Agreement, the **Second Party** and its professionals agree not to disclose to any third party any confidential material or information obtained in connection with the performance of the Services, except where the **First Party** requests such disclosure.

4.2. All information identified as “Confidential” and provided by one Party to the other shall remain the exclusive property of the disclosing Party. The receiving Party undertakes to ensure the same level of protection used for its own confidential information and shall not copy, publish, or disclose such information to third parties or to employees not directly involved in its handling, unless authorized by the **First Party**.

5. TERM AND TERMINATION

5.1. This Agreement shall become effective on the effective date set forth below and, unless terminated in accordance with Clause 5, shall remain in force until August thirty-one, two thousand twenty-three.

5.2. This Agreement may be terminated by either Party if the other Party fails to perform its obligations under this Agreement, by means of a termination notice.

5.3. Any communications regarding termination, non-renewal, or amendments to the terms of this Agreement must be notified to the other Party at least thirty (30) days in advance.

5.4. Notices issued under this Service Agreement must be sent by registered mail with acknowledgment of receipt.

5.5. The obligation of the **First Party** to pay for Services performed by the Service Provider before termination shall survive the termination of this Agreement.

6. GENERAL PROVISIONS

6.1. This Agreement constitutes the complete and exclusive statement of the deal between the Parties with respect to the subject matter hereof and supersedes all prior proposals, understandings, and agreements, whether oral or written, between the Parties relating to such subject matter. This Agreement may not be amended except by a written document signed by the legal representatives of the Parties.

6.2. This Agreement is governed by the laws of Portugal. Any dispute arising from the terms and conditions set forth herein that cannot be resolved by mutual agreement between the Parties shall be submitted to the courts of the District of Porto, with express waiver of any other jurisdiction.

In witness whereof, the Parties, through their legal representatives, execute this Agreement in two (2) counterparts of equal form and content.

Vila Nova de Gaia, October 3, 2022

For the First Party

WINPROVIT
Soluções Inteligentes S.A.
The Board of Directors

Name:
Position:

For the Second Party

Name: Gustavo Dartagnan Xavier do Rego
Position: Managing Partner

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 10 2026

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Contrato de Prestação de Serviços

O presente Contrato de Prestação de Serviços ("Contrato") é celebrado entre:

WINPROVIT – SOLUÇÕES INTELIGENTES SA, pessoa coletiva nº 507478045, matriculada na Conservatória do Registo Comercial de Vila Nova de Gaia sob o mesmo número, com sede Rua César das Neves, nº 163 - 2º, 4200-002 Porto, com o capital social de € 100.000,00 (Cem Mil Euros), adiante designada por **Primeira Contraente**,

– e –

Razão Social: **GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA,** CNPJ nº 47.751.467/0001-37, com sede em R Estados Unidos, 2196, 82.540-030 Boa Vista, Curitiba, Brasil, com o capital social de Reais_1.000,00 R$ (mil Reais), adiante designada por **Segunda Contraente ou Prestadora de Serviços**,

cada representando uma Contraente e em conjunto como as Contraentes

CONSIDERANDO QUE:

I. A **Primeira Contraente** dedica-se à prestação de serviços na área das tecnologias de informação, elaboração de projetos na área das tecnologias de informação e telecomunicações.
II. No âmbito da sua atividade, ou das dos seus/suas Clientes, a **Primeira Contraente** cria e desenvolve projetos informáticos.
III. A **Primeira Contraente** reconhece que a **Segunda Contraente** detém o *Know how* necessário, autonomia e competência técnica para os serviços a executar.
IV. Os serviços a executar ao abrigo do presente contrato são imprescindíveis para a efetivação do projeto informático a executar.
V. A **Primeira Contraente** deseja contratar os serviços técnicos da **Prestadora de Serviços**.
VI. A **Segunda Contraente** aceita prestar serviços à **Primeira Contraente**.

1. OBJECTO E ÂMBITO DOS SERVIÇOS

1.1. A **Primeira Contraente** vem contratar a **Segunda Contraente** e esta concorda em fornecer serviços de TI em tecnologias específicas, de acordo com o estipulado no presente contrato. Os serviços a prestar, adiante designados como "Serviços", englobam o reforço das

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competências técnicas relacionadas com tarefas de análise e programação em ambiente mainframe.

1.2. A **Primeira Contraente** concorda e valida cada colaborador fornecido pela **Segunda Contraente** para a implementação dos Serviços.

1.3. A **Primeira Contraente** é responsável por dirigir e supervisionar o trabalho desenvolvido pelo colaborador ou equipa designada e descritos abaixo:

- GUSTAVO DARTAGNAN XAVIER DO REGO, maior, natural do Brasil, passaporte com o nº FV584800, válido até 01/04/2028;

1.4. Todos os colaboradores fornecidos pela **Segunda Contraente** à **Primeira Contraente** assinaram o Código de Conduta empresarial em vigor.

2. LOCAL DE PRESTAÇÃO

2.1. A **Primeira Contraente** concorda em garantir um local de trabalho adequado à implementação dos Serviços pelos colaboradores designados pela **Segunda Contraente**.

2.2. A **Primeira Contraente**, sempre que aplicável, deve providenciar um ambiente de trabalho seguro, de acordo com a legislação laboral Portuguesa em vigor.

2.3. Qualquer equipamento adicional, hardware, software ou licenciamento necessário para a execução dos Serviços, são considerados parte integrante do local de trabalho e, como tal, da inteira responsabilidade e propriedade da **Primeira Contraente**.

2.4. Durante a vigência do contrato e enquanto se justificar, tendo em consideração o contexto de pandemia provocado pela COVID-19, o local de trabalho será nas instalações da Prestadora de Serviços.

3. CONDIÇÕES DE PAGAMENTO

3.1. A **Primeira Contraente**, se tiver a Nota de Encomenda Mensal referente a este contrato, poderá emitir faturação pelos Serviços prestados, referentes às prestações realizadas no mês imediatamente anterior, e de acordo com os valores definidos abaixo:

- US$ 26,00 (vinte e seis dólares), por cada hora de trabalho prestado, para cada colaborador especificado no ponto 1.3 deste contrato.

3.2. Valores referentes a serviços extras ou adicionais não contemplados no presente contrato, só serão faturados se houver acordo entre as partes.

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3.3. O prazo de pagamento é de 30 (trinta) dias, após receção da mesma, para a morada indicada pela **Primeira Contraente** no preâmbulo do presente Contrato.

4. CONFIDENCIALIDADE

4.1. No âmbito do presente contrato, a **Segunda Contraente** e os seus colaboradores concordam em não revelar a terceiros nenhum material ou informação confidencial adquirida no âmbito da prestação dos Serviços, exceto se esta passagem de informação for solicitada pela **Primeira Contraente**.

4.2. Toda a informação identificada como "Confidencial" fornecida por uma Parte à outra permanece propriedade exclusiva da Parte que forneceu a informação. A Parte recetora compromete-se a garantir o mesmo grau de segurança utilizado na proteção da sua própria informação confidencial e a não copiar, publicar ou divulgar a informação a terceiros ou a outros funcionários não essenciais ao tratamento da mesma, exceto se a **Primeira Contraente** autorizar.

5. VIGÊNCIA E CESSAÇÃO

5.1. O presente contrato produz efeitos na data efetiva definida em baixo e, desde que não resolvido de acordo com a cláusula 5ª, permanecerá em vigor até trinta e um de agosto de dois mil e vinte e três;

5.2. O presente contrato pode ser resolvido por qualquer Parte se a outra Parte falhar na execução das suas obrigações ao abrigo do presente Contrato, através de aviso de cessação;

5.3. As comunicações relacionadas com resolução, não renovação ou alterações às condições do presente Contrato devem ser notificadas à outra Parte com pelo menos 30 (trinta) dias de antecedência;

5.4. Notificações emitidas no âmbito do presente Contrato de Prestação de Serviços devem ser enviadas por carta registada com aviso de receção;

5.5. A obrigação da **Primeira Contraente** em efetuar o pagamento de Serviços realizados pelo Prestador de Serviços, antes da resolução mantém-se após a resolução do presente Contrato.

6. GERAL

6.1. O presente Contrato é a declaração completa e exclusiva do acordo entre as Partes relativas ao tema das presentes cláusulas e substitui todas as anteriores propostas, entendimentos e acordos, sejam de natureza oral ou escrita, entre as Partes, relativos ao tema abordado. Este contrato não pode ser modificado, exceto por documento escrito e assinado pelos representantes legais das Partes.

6.2. O presente contrato é redigido ao abrigo da legislação Portuguesa. Qualquer conflito resultante dos termos e condições enunciados, que não seja solucionado por acordo entre as Partes, será decidido pelo foro da Comarca do Porto, com expressa renúncia a qualquer outro.

Em testemunho e fiel cumprimento, as Partes através dos seus representantes legais, outorgam e assinam o presente acordo em duas vias.

Vila Nova de Gaia, dia 03 de outubro de 2022

WINPROVIT
Soluções Inteligentes, S.A.
A Administração

Pela Primeira Contraente

Nome: DAVID LOPES

Função:

Pela Segunda Contraente

Gustavo Dartagnan Xavier

Nome: Gustavo Dartagnan Xavier do Rego

Função: Sócio Administrador

WINPROVIT
WE IMPROVE IT

Avenida Vasco da Gama, N. 774
4430 - 246 Matamuae
Telf. +351 227 536 210
E-mail: geral@winprovit.pt

Date: February 4th, 2026
Subject: Employment Verification for Gustavo Dartagnan Xavier do Rego

To Whom It May Concern,

This letter is to formally verify the professional employment of **Mr. Gustavo Dartagnan Xavier do Rego** at **WINPROVIT**. Mr. Rego has been consistently assigned to provide high-level technical services for our client, **Optimum**, during his tenure.

- **Job Title:** Senior Telecommunications Engineer (Contractor)
- **Employment Period:** October 3rd, 2022, to Present
- **Employment Type:** Full-time (40 hours per week)

Roles and Responsibilities: In his capacity as a Senior Telecommunications Engineer, Mr. Rego has been responsible for the following core duties:

- **Project Management & Coordination:** Orchestrating complex telecommunications projects, ensuring alignment with federal regulations and technical specifications.
- **Voice Network Infrastructure Support:** Providing Tier-3 technical support for large-scale Voice over IP (VoIP) and IMS (IP Multimedia Subsystem) networks, ensuring high availability and reliability.
- **Software Development for Telecom:** Engineering custom scripts and software solutions to automate network monitoring and data extraction from YAML/configuration files.
- **Regulatory Compliance Engineering:** Implementing technical frameworks to meet telecommunications industry standards and federal mandates.

Key Achievements: During his tenure, Mr. Rego has demonstrated exceptional expertise through the following accomplishments:

- **Robocall Mitigation (STIR/SHAKEN):** Spearheaded the technical supervision of the Robocall Mitigation Project, ensuring the company's full compliance with **FCC DA 24-73** requirements, a critical mandate for national telecommunications security.
- **Infrastructure Modernization:** Successfully managed the technology upgrade for over **600+ Enterprise Business Customers**, migrating legacy systems to modern architectures without service disruption.
- **Network Observability:** Engineered the integration of **Nokia IMS** into a next-generation observability platform, significantly enhancing real-time monitoring and system fault detection.

Mr. Rego's contributions have been vital to the technical advancement, regulatory compliance, and operational stability of the telecommunications systems serving our clients across the United States.

Should you require any further information, please do not hesitate to contact us.

Sincerely,

Ricardo Figueira
Manager
ricardo.figueira@winprovit.pt
+351 962 130 631

ARTICLES OF ASSOCIATION FOR THE FORMATION OF A SINGLE-MEMBER LIMITED LIABILITY COMPANY

GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

By this private instrument of Articles of Association:

GUSTAVO DARTAGNAN XAVIER DO REGO, BRAZILIAN, MARRIED, under the Partial Community Property regime, BUSINESSMAN, born on 09/23/1978, holder of CPF No. 025.907.999-50, residing and domiciled in the City of Curitiba-PR, at RUA Estados Unidos, No. 2196, Boa Vista, ZIP Code: 82540-030;

Hereby resolves to form a single-member limited liability company, pursuant to Law No. 10,406/2002, under the following terms and conditions:

CLAUSE I – CORPORATE NAME (Art. 997, II, Civil Code)
The Company shall operate under the corporate name **GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA**, and shall use the trade name Dartagnan Consultoria em Tecnologia.

CLAUSE II – REGISTERED OFFICE (Art. 997, II, Civil Code)
The Company shall have its registered office at the following address: RUA ESTADOS UNIDOS, No. 2196, BOA VISTA, Curitiba - PR, ZIP Code: 82540-030.

CLAUSE III – CORPORATE PURPOSE (Art. 997, II, Civil Code)
The Company's corporate purpose shall be the performance of the following economic activities: TECHNICAL SUPPORT AND MAINTENANCE IN INFORMATION TECHNOLOGY; INFORMATION TECHNOLOGY CONSULTING; DATA PROCESSING; APPLICATION SERVICE PROVIDERS AND INTERNET HOSTING SERVICES; WEB PORTALS, CONTENT PROVIDERS AND INTERNET INFORMATION SERVICES; DEVELOPMENT OF SOFTWARE SYSTEMS AND CUSTOMIZABLE COMPUTER PROGRAMS; DEVELOPMENT OF SOFTWARE SYSTEMS AND CUSTOM COMPUTER PROGRAMS; AND WEB DESIGN, INCLUDING THE CREATION AND DEVELOPMENT OF INTERNET INTERFACES.

Sole Paragraph. At the registered office (headquarters), the Company shall carry out the following activities: TECHNICAL SUPPORT AND MAINTENANCE IN INFORMATION TECHNOLOGY; INFORMATION TECHNOLOGY CONSULTING; DATA PROCESSING; APPLICATION SERVICE PROVIDERS AND INTERNET HOSTING SERVICES; WEB PORTALS, CONTENT PROVIDERS AND INTERNET INFORMATION SERVICES; DEVELOPMENT OF SOFTWARE SYSTEMS AND CUSTOMIZABLE COMPUTER PROGRAMS; DEVELOPMENT OF SOFTWARE SYSTEMS AND CUSTOM COMPUTER PROGRAMS; AND WEB DESIGN, INCLUDING THE CREATION AND DEVELOPMENT OF INTERNET INTERFACES.

The Company shall engage in the following activities:

CNAE No. 6204-0/00 – Information Technology Consulting
CNAE No. 6202-3/00 – Development and Licensing of Customizable Computer Software
CNAE No. 6209-1/00 – Technical Support, Maintenance, and Other Information Technology Services
CNAE No. 6311-9/00 – Data Processing, Application Service Providers, and Internet Hosting Services
CNAE No. 6319-4/00 – Web Portals, Content Providers, and Other Internet Information Services
CNAE No. 6201-5/01 – Custom Computer Software Development
CNAE No. 6201-5/02 – Web Design

CLAUSE IV – COMMENCEMENT OF ACTIVITIES AND TERM (Art. 53, III, "f", Decree No. 1,800/96)
The Company shall commence its activities on 08/26/2022, and its term shall be indefinite.

CLAUSE V – CAPITAL (Arts. 997, III and IV, and 1,052 and 1,055, Civil Code)
The Company's capital shall be R$ 1,000.00 (one thousand Reais), divided into 1,000 (one thousand) quotas, with a nominal value of R$ 1.00 (one Real) each, fully paid in national currency.

Sole Paragraph. The capital has been subscribed and fully paid in by the member as follows:

Name of Member	No. of Quotas	Amount (R$)	%
GUSTAVO DARTAGNAN XAVIER DO REGO	1,000	1,000.00	100.00
TOTAL	1,000	1,000.00	100.00

CLAUSE VI – MANAGEMENT (Arts. 997, VI; 1,013; 1,015; 1,064, Civil Code)
The management of the Company shall be carried out by the member **GUSTAVO DARTAGNAN XAVIER DO REGO**, who shall legally represent the Company and may perform any and all management acts related to the corporate purpose.

Sole Paragraph. Acts involving the sale or encumbrance of real estate, when not included in the corporate purpose, shall depend on authorization by the majority.

CLAUSE VII – BALANCE SHEET (Art. 1,065, Civil Code)
At the end of each fiscal year, on December 31, the Manager shall render accounts of his administration, preparing the inventory, the balance sheet, and the income statement, with profits or losses allocated to the member(s).

CLAUSE VIII – MANAGER'S DECLARATION OF ELIGIBILITY (Art. 1,011, §1, Civil Code and Art. 37, II, Law No. 8,934/1994)
The Manager declares, under penalty of law, that he is not prevented from exercising the management of the Company by special law, nor by criminal conviction, nor by being under its effects, including penalties that temporarily prohibit access to public office; nor for bankruptcy-related crimes, malfeasance, bribery, corruption, embezzlement, or crimes against the popular economy, the national financial system, competition laws, consumer relations, public faith, or property.

CLAUSE IX – SALARY
The member may establish a monthly withdrawal, as salary for the managing member, in accordance with the applicable legal provisions.

CLAUSE X – DISTRIBUTION OF PROFITS
The Company may prepare interim or periodic balance sheets and distribute the profits evidenced therein.

CLAUSE XI – WITHDRAWAL OR DEATH OF MEMBER
In the event of withdrawal, death, or legal incapacity of any member, the Company shall continue its activities with the heirs, successors, or the incapacitated party, provided this is legally authorized. If this is not possible, or if there is no interest from such parties or the remaining member(s) in continuing the Company, it shall be liquidated after the preparation of a balance sheet as of the date of the event. Any resulting profit or loss shall be distributed or borne by the member(s) in proportion to their quotas.

Sole Paragraph. The same procedure shall apply in other cases where the Company is dissolved in relation to a member.

CLAUSE XII – TRANSFER OF QUOTAS
The quotas are indivisible and may not be assigned or transferred to third parties without the consent of the other member, who shall have the right of first refusal under equal conditions and price, and if the transfer is carried out, the corresponding amendment to these Articles of Association shall be executed.

CLAUSE XIII – LIABILITY
The liability of each member is limited to the value of their quotas; however, all members are jointly liable for the

full payment of the share capital.

CLAUSE XIV – SUPPLEMENTARY GOVERNANCE (Art. 1,053, Sole Paragraph, Civil Code)
By this instrument, the Company shall be governed, on a supplementary basis, by the rules applicable to corporations, pursuant to the sole paragraph of Article 1,053 of the Civil Code.

CLAUSE XV – COMPANY SIZE
The member declares that the Company qualifies as a Microenterprise (ME), pursuant to Complementary Law No. 123, dated December 14, 2006, and that it does not fall under any of the exclusion hypotheses set forth in §4 of Article 3 of said law (Art. 3, I, LC No. 123/2006).

CLAUSE XVI – JURISDICTION
The jurisdiction of the District of Curitiba-PR is hereby elected to settle any disputes arising from this Agreement, with express waiver of any other, however privileged it may be.

And, being in full agreement with all the terms set forth in this private instrument, the parties undertake to comply with this constitutive act and sign this instrument in a single copy to be filed and registered with the Commercial Registry of the State of Paraná.

Curitiba – PR, August 26, 2022

_____
GUSTAVO DARTAGNAN XAVIER DO REGO
Member / Manager

MINISTRY OF ECONOMY
Special Secretariat for Debureaucratization, Management, and Digital Government
Secretariat of Digital Government
National Department of Business Registration and Integration

ELECTRONIC SIGNATURE

We hereby certify that the corporate act of the company GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA has been digitally signed by:

IDENTIFICATION OF THE SIGNATORY(IES)	
CPF/CNPJ	Name
02590799950	GUSTAVO DARTAGNAN XAVIER DO REGO

PARANÁ
COMMERCIAL REGISTRY OF PARANÁ

I CERTIFY THE REGISTRATION ON 08/29/2022 12:00 PM UNDER NO. 41210979694.
Protocol: 225981092 dated 08/29/2022.
Verification Code: 12211405120 Head Office CNPJ: 47.751.467/0001-37.
NIRE: 41210979694. Effective Date of Registration: 08/26/2022.
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMAÇÃO LTDA

LEANDRO MARCOS RAYSEL BISCAIA
Secretary-General
www.empresafacil.pr.gov.br

The validity of this document, if printed, is subject to verification of its authenticity on the respective portals by entering the corresponding verification codes.

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 13 2026

CONTRATO SOCIAL DE CONSTITUIÇAO DE SOCIEDADE EMPRESARIA LIMITADA UNIPESSOAL

GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

Pelo presente instrumento particular de Contrato Social:

GUSTAVO DARTAGNAN XAVIER DO REGO , BRASILEIRO , CASADO(A), Comunhão Parcial, EMPRESÁRIO, nascido(a) em 23/09/1978, n° do CPF 025.907.999-50, residente e domiciliado na cidade de Curitiba - PR, na RUA Estados Unidos, nº 2196, Boa Vista, CEP: 82540-030;

Resolve, constituir uma sociedade limitada unipessoal, nos termos da Lei n° 10.406/2002, mediante as condições e cláusulas seguintes:

CLÁUSULA I - DO NOME EMPRESARIAL (art. 997, II, CC)
A sociedade adotará como nome empresarial: **GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA** , e usará a expressão Dartagnan Consultoria em Tecnologia como nome fantasia.

CLÁUSULA II - DA SEDE (art. 997, II, CC)
A sociedade terá sua sede no seguinte endereço: RUA ESTADOS UNIDOS, nº 2196, BOA VISTA, Curitiba - PR, CEP: 82540030.

CLÁUSULA III - DO OBJETO SOCIAL (art. 997, II, CC)
A sociedade terá por objeto o exercício das seguintes atividades econômica:EMPRESA DE SUPORTE TECNICO E MANUTENCAO EM TECNOLOGIA DA INFORMACAO, CONSULTORIA EM TECNOLOGIA DA INFORMACAO, TRATAMENTO DE DADOS, PROVEDORES DE SERVICOS DE APLICACAO E SERVICOS DE HOSPEDAGEM NA INTERNET, PORTAIS, PROVEDORES DE CONTEUDO E SERVICOS DE INFORMACAO NA INTERNET, DESENVOLVIMENTO DE SISTEMAS SOFTWARES E DE PROGRAMAS DE COMPUTADOR CUSTOMIZAVEIS, DESENVOLVIMENTO DE SISTEMAS SOFTWARES E DE PROGRAMAS DE COMPUTADOR SOB ENCOMENDA E WEB DESIGN, COM CRIACAO E DESENVOLVIMENTO DE INTERFACES PARA A INTERNET

Parágrafo único. Em estabelecimento eleito como Sede (Matriz) será(ão) exercida(s) a(s) atividade(s) de EMPRESA DE SUPORTE TECNICO E MANUTENCAO EM TECNOLOGIA DA INFORMACAO, CONSULTORIA EM TECNOLOGIA DA INFORMACAO, TRATAMENTO DE DADOS, PROVEDORES DE SERVICOS DE APLICACAO E SERVICOS DE HOSPEDAGEM NA INTERNET, PORTAIS, PROVEDORES DE CONTEUDO E SERVICOS DE INFORMACAO NA INTERNET, DESENVOLVIMENTO DE SISTEMAS SOFTWARES E DE PROGRAMAS DE COMPUTADOR CUSTOMIZAVEIS, DESENVOLVIMENTO DE SISTEMAS SOFTWARES E DE PROGRAMAS DE COMPUTADOR SOB ENCOMENDA E WEB DESIGN, COM CRIACAO E DESENVOLVIMENTO DE INTERFACES PARA A INTERNET.

E exercerá as seguintes atividades:

CNAE Nº 6204-0/00 - Consultoria em tecnologia da informação
CNAE Nº 6202-3/00 - Desenvolvimento e licenciamento de programas de computador customizáveis
CNAE Nº 6209-1/00 - Suporte técnico, manutenção e outros serviços em tecnologia da informação
CNAE Nº 6311-9/00 - Tratamento de dados, provedores de serviços de aplicação e serviços de hospedagem na internet
CNAE Nº 6319-4/00 - Portais, provedores de conteúdo e outros serviços de informação na internet
CNAE Nº 6201-5/01 - Desenvolvimento de programas de computador sob encomenda
CNAE Nº 6201-5/02 - Web design

CLÁUSULA IV - DO INÍCIO DAS ATIVIDADES E PRAZO DE DURAÇÃO (art. 53, III, F, Decreto n° 1.800/96)
A sociedade iniciará suas atividades em 26/08/2022 e seu prazo de duração será por tempo indeterminado.

CLÁUSULA V - DO CAPITAL (ART. 997, III e IV e ART. 1.052 e 1.055, CC)
O capital será de R$ 1.000,00 (um mil reais), dividido em 1000 quotas, no valor nominal de R$ 1,00 (um real) cada uma, formado por R$ 1.000,00 (um mil reais) em moeda corrente no Pais

CONTRATO SOCIAL DE CONSTITUIÇÃO DE SOCIEDADE EMPRESÁRIA LIMITADA UNIPESSOAL

GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

Parágrafo único. O capital encontra-se subscrito e integralizado pelos sócios da seguinte forma:

Nome do Sócio	Qtd Quotas	Valor Em R$	%
GUSTAVO DARTAGNAN XAVIER DO REGO	1000	1.000,00	100,00
TOTAL:	1000	1.000,00	100,00

CLÁUSULA VI - DA ADMINISTRAÇÃO (ART. 997, VI; 1.013, 1.015; 1.064, CC)
A administração da sociedade será exercida pelo sócio **GUSTAVO DARTAGNAN XAVIER DO REGO** que representará legalmente a sociedade e poderá praticar todo e qualquer ato de gestão pertinente ao objeto social.

Parágrafo único. Não constituindo o objeto social, a alienação ou a oneração de bens imóveis depende de autorização da maioria.

CLÁUSULA VII - DO BALANÇO PATRIMONIAL (art. 1.065, CC)
Ao término de cada exercício, em 31 de Dezembro, o administrador prestará contas justificadas de sua administração, procedendo à elaboração do inventário, do balanço patrimonial e do balanço de resultado econômico, cabendo ao(s) sócio(s), os lucros ou perdas apuradas.

CLÁUSULA VIII - DECLARAÇÃO DE DESIMPEDIMENTO DE ADMINISTRADOR (art. 1.011, § 1° CC e art. 37, II da Lei n° 8.934 de 1994)
O Administrador declara, sob as penas da lei, de que não está impedido de exercer a administração da empresa, por lei especial, ou em virtude de condenação criminal, ou por se encontrar sob os efeitos dela, a pena que vede, ainda que temporariamente, o acesso a cargos públicos; ou por crime falimentar, de prevaricação, peita ou suborno, concussão, peculato, ou contra a economia popular, contra o sistema financeiro nacional, contra normas de defesa da concorrência, contra as relações de consumo, fé pública, ou a propriedade.

CLÁUSULA IX - DO PRÓ LABORE
O sócio poderá, fixar uma retirada mensal, a título de pro labore para o sócio administrador, observadas as disposições regulamentares pertinentes.

CLÁUSULA X - DISTRIBUIÇÃO DE LUCROS
A sociedade poderá levantar balanços intermediários ou intercalares e distribuir os lucros evidenciados nos mesmos.

CLÁUSULA XI - DA RETIRADA OU FALECIMENTO DE SÓCIO
Retirando-se, falecendo ou interditado qualquer sócio, a sociedade continuará suas atividades com os herdeiros, sucessores e o incapaz, desde que autorizado legalmente. Não sendo possível ou inexistindo interesse destes ou do(s) sócio(s) remanescente(s) na continuidade da sociedade, esta será liquidada após a apuração do Balanço Patrimonial na data do evento. O resultado positivo ou negativo será distribuído ou suportado pelos sócios na proporção de suas quotas.

Parágrafo único - O mesmo procedimento será adotado em outros casos em que a sociedade se resolva em relação a seu sócio.

CLÁUSULA XII - DA CESSÃO DE QUOTAS
As quotas são indivisíveis e não poderão ser cedidas ou transferidas a terceiros sem o consentimento do outro sócio, a quem fica assegurado, em igualdade de condições e preço direito de preferência para a sua aquisição se postas à venda, formalizando, se realizada a cessão delas, a alteração contratual pertinente.

CLÁUSULA XIII - DA RESPONSABILIDADE
A responsabilidade de cada sócio é restrita ao valor das suas quotas, mas todos respondem solidariamente pela

CONTRATO SOCIAL DE CONSTITUIÇÃO DE SOCIEDADE EMPRESÁRIA LIMITADA UNIPESSOAL

GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

integralização do capital social.

CLÁUSULA XIV - DA REGÊNCIA SUPLETIVA (art. 1.053, parágrafo único CC).
Por este ato determina-se a regência supletiva da sociedade pelo regramento da sociedade anônima, conforme dispõe o parágrafo único do art. 1.053 do Código Civil.

CLÁUSULA XV - PORTE EMPRESARIAL
O sócio declara que a sociedade se enquadra como Microempresa - ME, nos termos da Lei Complementar nº 123, de 14 de dezembro de 2006, e que não se enquadra em qualquer das hipóteses de exclusão relacionadas no § 4º do art. 3º da mencionada lei. (art. 3º, I, LC nº 123, de 2006)

CLÁUSULA XVI - DO FORO
Fica eleito o Foro da Comarca de Curitiba - PR, para qualquer ação fundada neste contrato, renunciando-se a qualquer outro por muito especial que seja.

E por estarem em perfeito acordo, em tudo que neste instrumento particular foi lavrado, obrigam-se a cumprir o presente ato constitutivo, e assinam o presente instrumento em uma única via que será destinada ao registro e arquivamento na Junta Comercial do Estado do Paraná.

Curitiba - PR, 26 de agosto de 2022

_____
GUSTAVO DARTAGNAN XAVIER DO REGO
Sócio/Administrador

ASSINATURA ELETRÔNICA

Certificamos que o ato da empresa GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA consta assinado digitalmente por:

IDENTIFICAÇÃO DO(S) ASSINANTE(S)	
CPF/CNPJ	Nome
02590799950	GUSTAVO DARTAGNAN XAVIER DO REGO

PARANÁ
JUNTA COMERCIAL DO PARANÁ

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CÓDIGO DE VERIFICAÇÃO: 12211405120. CNPJ DA SEDE: 47751467000137.
NIRE: 41210979694. COM EFEITOS DO REGISTRO EM: 26/08/2022.
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

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FEDERATIVE REPUBLIC OF BRAZIL

NATIONAL REGISTER OF LEGAL ENTITIES

REGISTRATION NUMBER	CERTIFICATE OF ENROLLMENT AND REGISTRATION STATUS	DATE OF INCORPORATION
47.751.467/0001-37 **HEAD OFFICE**		**08/29/2022**

COMPANY NAME
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

TRADE NAME	SIZE
DARTAGNAN CONSULTORIA EM TECNOLOGIA	**ME (Microenterprise)**

CODE AND DESCRIPTION OF MAIN ECONOMIC ACTIVITY
62.04-0-00 - Information Technology Consulting

CODE AND DESCRIPTION OF SECONDARY ECONOMIC ACTIVITIES
62.01-5-01 – Custom Computer Software Development
62.01-5-02 – Web Design
62.02-3-00 – Development and Licensing of Customizable Computer Software
62.09-1-00 – Technical Support, Maintenance, and Other Information Technology Services
63.11-9-00 – Data Processing, Application Service Providers, and Internet Hosting Services
63.19-4-00 – Web Portals, Content Providers, and Other Internet Information Services

CODE AND DESCRIPTION OF LEGAL NATURE
206-2 - Limited Liability Company

ADDRESS	NUMBER	UNIT
R ESTADOS UNIDOS	**2196**	******

ZIP CODE	NEIGHBORHOOD/DISTRICT	CITY	STATE
82.540-030	**BOA VISTA**	**CURITIBA**	**PR**

EMAIL ADDRESS	PHONE NUMBER
MEUCNPJ@CONTABILIZEI.COM.BR	**(41) 9686-9828/ (0000) 0000-0000**

RESPONSIBLE FEDERAL ENTITY (RFE)
******

REGISTRATION STATUS	REGISTRATION STATUS DATE
ACTIVE	**08/29/2022**

REASON FOR REGISTRATION STATUS

SPECIAL STATUS	SPECIAL STATUS DATE
*******	*******

It was approved by Normative Instruction RFB No. 2.119, dated December 6, 2022.

It was issued on **03/16/2026** at **3:44:56 AM** (Brasília date and time).

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 13 2026

REPÚBLICA FEDERATIVA DO BRASIL

CADASTRO NACIONAL DA PESSOA JURÍDICA

NÚMERO DE INSCRIÇÃO	COMPROVANTE DE INSCRIÇÃO E DE SITUAÇÃO CADASTRAL	DATA DE ABERTURA
47.751.467/0001-37 **MATRIZ**		**29/08/2022**

NOME EMPRESARIAL
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

TÍTULO DO ESTABELECIMENTO (NOME DE FANTASIA)	PORTE
DARTAGNAN CONSULTORIA EM TECNOLOGIA	**ME**

CÓDIGO E DESCRIÇÃO DA ATIVIDADE ECONÔMICA PRINCIPAL
62.04-0-00 - Consultoria em tecnologia da informação

CÓDIGO E DESCRIÇÃO DAS ATIVIDADES ECONÔMICAS SECUNDÁRIAS
62.01-5-01 - Desenvolvimento de programas de computador sob encomenda
62.01-5-02 - Web design
62.02-3-00 - Desenvolvimento e licenciamento de programas de computador customizáveis
62.09-1-00 - Suporte técnico, manutenção e outros serviços em tecnologia da informação
63.11-9-00 - Tratamento de dados, provedores de serviços de aplicação e serviços de hospedagem na internet
63.19-4-00 - Portais, provedores de conteúdo e outros serviços de informação na internet

CÓDIGO E DESCRIÇÃO DA NATUREZA JURÍDICA
206-2 - Sociedade Empresária Limitada

LOGRADOURO	NÚMERO	COMPLEMENTO
R ESTADOS UNIDOS	**2196**	********

CEP	BAIRRO/DISTRITO	MUNICÍPIO	UF
82.540-030	**BOA VISTA**	**CURITIBA**	**PR**

ENDEREÇO ELETRÔNICO	TELEFONE
MEUCNPJ@CONTABILIZEI.COM.BR	**(41) 9686-9828/ (0000) 0000-0000**

ENTE FEDERATIVO RESPONSÁVEL (EFR)
*****

SITUAÇÃO CADASTRAL	DATA DA SITUAÇÃO CADASTRAL
ATIVA	**29/08/2022**

MOTIVO DE SITUAÇÃO CADASTRAL

SITUAÇÃO ESPECIAL	DATA DA SITUAÇÃO ESPECIAL
********	********

Aprovado pela Instrução Normativa RFB nº 2.119, de 06 de dezembro de 2022.

Emitido no dia **16/03/2026** às **15:44:56** (data e hora de Brasília).

Exhibit C.I - First Prong - Substancial Merit and National Importance

Dartagnan Telco Solutions

BUSINESS PLAN 2026

Name: Gustavo Dartagnan Xavier do Rego
Phone: +55 (41)98836-0365
E-mail: gustavodartagnan@gmail.com
Position: Founder and Chief Telecommunications Architect



Prepared by:
Nextus Plan

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APPENDIX 1

1.0 Executive Summary

Dartagnan Telco Solutions will be established by Mr. Gustavo Dartagnan Xavier do Rego as a technology-driven telecommunications engineering company focused on the development and implementation of AI-enabled network architecture, advanced VoIP infrastructure solutions, and intelligent telecommunications observability systems across the United States.

The company will be headquartered in Dallas, Texas, a major telecommunications and technology hub that continues to attract large-scale infrastructure investments and hosts a strong ecosystem of telecom providers, data centers, and network technology companies.[1] This strategic location enables the company to operate within one of the most relevant environments for telecommunications innovation and large-scale infrastructure deployment in the country.

Dartagnan Telco Solutions' core mission is to enhance the reliability, efficiency, and resilience of U.S. telecommunications networks through the integration of advanced engineering practices, artificial intelligence-driven operations (AIOps), and scalable system architectures. The company will support telecommunications providers, large enterprises, and infrastructure operators in designing and managing hybrid network environments that combine legacy systems with modern, cloud-based and next-generation communication technologies.

A central component of the company's approach is the implementation of AI-driven observability and automation frameworks, enabling predictive fault detection, anomaly identification, root-cause analysis, and intelligent incident response. These capabilities allow organizations to move beyond reactive network management toward proactive and self-optimizing telecommunications operations, improving service continuity and reducing operational risk in increasingly complex network environments.

In addition to supporting current telecommunications infrastructures, Dartagnan Telco Solutions will contribute to the technological readiness of networks for emerging NextG and 6G environments. As telecommunications systems evolve toward more distributed, virtualized, and AI-native architectures, organizations face significant challenges in adapting existing infrastructure while maintaining service continuity. The company will provide specialized engineering support for legacy system modernization, phased migration strategies, and interoperability planning, ensuring that organizations can transition to advanced network environments without disrupting critical services.

Founder Background

Mr. Gustavo Dartagnan Xavier do Rego holds a Bachelor's degree in Electrical Engineering with an emphasis in Telecommunications from the Federal University of Paraná and a postgraduate specialization in Management Development (Leadership) from FAE Centro Universitário. He has

[1] https://freestartupfunding.com/dallas-tech-hub

nearly 20 years of experience in telecommunications engineering, with deep expertise in carrier-grade voice networks, VoIP infrastructure, and large-scale telecommunications systems.

Throughout his career, Mr. Xavier has worked extensively with advanced technologies including Session Initiation Protocol (SIP), IP Multimedia Subsystem (IMS), Session Border Controllers (SBCs), Next Generation Networks (NGN), and cloud-based telecommunications platforms. His expertise also includes network automation, AI-supported observability systems, and large-scale performance monitoring environments capable of processing millions of network records daily.

Professionally, Mr. Xavier has contributed to telecommunications infrastructure projects in the United States, supporting system migrations, automation initiatives, and advanced monitoring platforms designed to improve network reliability and operational efficiency. His experience in managing complex, high-volume telecommunications environments directly supports the proposed endeavor of developing scalable, intelligent, and resilient telecommunications solutions.

As Founder and Chief Telecommunications Architect, Mr. Xavier will lead the company's strategic and technical direction, focusing on AI-enabled network operations, telecommunications modernization, and the design of resilient communication infrastructures aligned with future technological standards.

National Impact and Economic Relevance

Reliable telecommunications infrastructure is essential to the functioning of the modern economy and the delivery of critical services across the United States.[2] Communication networks support vital sectors such as healthcare, emergency services, public safety, financial systems, transportation, and digital commerce.[3] As communication technologies evolve and network complexity increases, the need for advanced operational intelligence, automation, and modernization of legacy infrastructure has become increasingly critical.

Despite technological advances, many telecommunications environments still rely on legacy systems that must coexist with modern, cloud-based and distributed architectures. This creates operational challenges related to visibility, fault detection, performance optimization, and system interoperability. Additionally, the increasing scale and complexity of telecommunications networks require AI-driven operational frameworks capable of processing large volumes of data and enabling real-time decision-making.

[2] https://www.cisa.gov/topics/critical-infrastructure-security-and-resilience/critical-infrastructure-sectors/communications-sector

[3] https://www.cisa.gov/topics/critical-infrastructure-security-and-resilience/resilience-services/infrastructure-dependency-primer/learn/communications

The company's services are designed to:

- Improve telecommunications network reliability and service availability
- Enable AI-driven monitoring, anomaly detection, and predictive maintenance
- Support the modernization and integration of legacy telecommunications systems
- Enhance operational visibility across complex and hybrid network environments
- Strengthen the resilience of communication systems supporting critical infrastructure

By supporting more reliable and efficient telecommunications systems, the company contributes directly to service continuity, public safety, and economic productivity, particularly in sectors that depend on uninterrupted communication services.

From an economic perspective, the company is designed to scale over time, generating revenue through specialized engineering services provided to telecommunications operators, enterprise clients, and infrastructure providers. As operations expand, Dartagnan Telco Solutions will create high-skilled employment opportunities in areas such as telecommunications engineering, AI-driven network operations, automation, project management, and technical consulting.

Alignment with U.S. National Priorities

Dartagnan Telco Solutions aligns with key U.S. national priorities related to infrastructure, technological leadership, and economic development, including:

- Strengthening the resilience and reliability of national telecommunications infrastructure
- Advancing AI-enabled operations in critical network environments (AIOps)
- Supporting the modernization of legacy systems and readiness for NextG and 6G technologies
- Enhancing the reliability of communication systems used in emergency services and essential sectors
- Promoting innovation in telecommunications engineering, automation, and network intelligence
- Supporting U.S. competitiveness in advanced communications technologies
- Expanding high-skilled employment opportunities in telecommunications and digital infrastructure sectors

Operating from Dallas with a flexible and technology-driven service model, Dartagnan Telco Solutions will support organizations across the United States while delivering advanced engineering solutions that improve the performance, security, and long-term resilience of the nation's communication infrastructure.

Through the integration of telecommunications expertise, artificial intelligence, and advanced operational frameworks, the company is positioned to play a meaningful role in the evolution, modernization, and future-readiness of telecommunications networks in the United States.

1.1 Nature and Scope of the Business

Dartagnan Telco Solutions will operate as a telecommunications engineering and technology solutions company focused on the design, implementation, and optimization of advanced, AI-enabled communication infrastructures across the United States. The company's scope includes the development and deployment of carrier-grade telecommunications architectures, Voice over IP (VoIP) systems, SIP-based communication networks, AI-driven observability platforms (AIOps), and automation technologies designed to improve the reliability, scalability, and security of modern and hybrid communication environments.

The company will support organizations operating in complex telecommunications ecosystems that combine legacy systems with cloud-based and next-generation technologies, providing structured engineering solutions that enable modernization, interoperability, and long-term infrastructure resilience. Projects and system implementations will follow established engineering methodologies focused on architecture design, signaling optimization, infrastructure automation, secure deployment, performance monitoring, regulatory compliance, and scalable network development.

Core Business Activities

1. Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions: Dartagnan Telco Solutions will provide engineering services for the design and implementation of telecommunications architectures supporting VoIP, SIP signaling, and IP Multimedia Subsystem (IMS) environments. These solutions will enable telecommunications providers and enterprise organizations to modernize legacy infrastructures, improve scalability, and support integration with cloud-based and next-generation communication systems.

2. Telecommunications Performance Engineering and Optimization: The company will deliver specialized services to enhance the performance, efficiency, and scalability of telecommunications infrastructures. This includes analyzing network performance indicators, identifying inefficiencies, and implementing improvements to optimize call quality, signaling stability, and system reliability. Key activities will include capacity planning, traffic engineering, signaling optimization, and performance tuning across large-scale and hybrid network environments.

3. AI-Enabled Telecom Observability, AIOps, and Automation Solutions: Dartagnan Telco Solutions will develop and implement AI-driven observability and automation frameworks designed to enhance operational visibility and enable intelligent network management. These solutions will support predictive fault detection, anomaly identification, root-cause analysis, and

automated incident response, allowing organizations to transition from reactive monitoring to proactive and self-optimizing telecommunications operations.

4. Telecommunications Interconnection, Compliance, Security, and NextG Readiness: The company will provide solutions focused on telecommunications interconnection, regulatory compliance, and network security, including SIP interconnection architecture between carriers and enterprise platforms. In addition, Dartagnan Telco Solutions will support infrastructure adaptation for emerging NextG and 6G environments, ensuring interoperability, secure communications, and continuity of services during the transition from legacy to advanced network architectures.

1.2 Mr. Gustavo Dartagnan Xavier do Rego's Expertise

Mr. Gustavo Dartagnan Xavier do Rego is an experienced telecommunications engineer with more than nineteen years of professional experience in telecommunications infrastructure engineering, voice network architecture, and large-scale carrier-grade communication systems. Throughout his career, he has worked extensively with telecommunications operators and technology platforms responsible for managing high-volume communication networks and critical voice services.

Mr. Xavier's professional expertise includes advanced telecommunications technologies such as Voice over IP (VoIP), Session Initiation Protocol (SIP) signaling, IP Multimedia Subsystem (IMS), Session Border Controllers (SBC), and Next Generation Network (NGN) architectures. In addition to his telecommunications expertise, he has developed strong technical capabilities in cloud-based infrastructure environments, network virtualization, Linux systems administration, and infrastructure automation using programming languages such as Python. His work also involves the development of advanced observability systems capable of monitoring telecommunications network performance indicators across large-scale infrastructures.

Through nearly two decades of experience working on complex telecommunications environments, Mr. Xavier has developed the technical knowledge and operational expertise required to design, implement, and optimize telecommunications networks used by service providers and enterprise organizations. His background in network automation, infrastructure monitoring, telecommunications signaling systems, and large-scale communication platform management provides a strong foundation for the establishment and leadership of Dartagnan Telco Solutions in the United States.

Professional Experience

Senior Telecommunications Engineer

Optimum (via Winprovit) – Bethpage, New York, United States

October 2022 – Present

Mr. Xavier currently serves as a Senior Telecommunications Engineer supporting telecommunications infrastructure projects in the United States. In this role, he contributes to telecommunications project management, technical support for mobile and fixed voice networks, Linux-based systems automation, and the development of Python-based software solutions designed to improve the efficiency and reliability of telecommunications infrastructures.

During this period, he developed automation systems used to configure and upgrade firmware for Adtran Integrated Access Devices (IADs), significantly accelerating the migration of more than 600 business customers from legacy telecommunications platforms to Metaswitch systems while maintaining network stability and minimizing operational disruptions. He also participated in initiatives related to robocall mitigation and telecommunications security, supporting compliance with Federal Communications Commission (FCC) requirements related to the implementation of STIR/SHAKEN authentication protocols.

Mr. Xavier also developed automated backup systems for telecommunications infrastructure components, improving operational resilience across more than one hundred network devices. In addition, he designed and implemented a telecommunications observability system capable of integrating performance indicators from the Nokia IP Multimedia Subsystem platform into an advanced monitoring environment based on OpenTelemetry technologies. This system processes tens of millions of operational records daily and monitors thousands of telecommunications performance indicators, enabling real-time monitoring dashboards and automated alerts capable of identifying network anomalies and potential service disruptions.

Telecommunications Consultant -

Vivo / Telefônica Brasil – Curitiba, Paraná, Brazil

June 2006 – September 2022

Mr. Xavier spent more than sixteen years working with Vivo / Telefônica Brasil, one of the largest telecommunications operators in Latin America. During this time, he held multiple technical roles supporting telecommunications infrastructure development, voice network operations, and telecommunications virtualization initiatives.

Telecom Consultant – Virtualization Engineering - April 2018 – September 2022

In this position, Mr. Xavier worked on telecommunications virtualization environments and datacenter infrastructure projects supporting modern telecommunications cloud platforms. His

responsibilities included datacenter installations, capacity planning, onboarding of Virtual Network Functions (VNFs) into VMware Telco Cloud infrastructures, and evaluation of technical proposals submitted by telecommunications equipment vendors.

During this period, Mr. Xavier conducted the first local Virtual Network Function homologation project in Brazil, which had previously been performed only by international teams. He also supported vendors in developing automation templates and cloud infrastructure configurations used to deploy telecommunications network functions. Additionally, he participated in international proof-of-concept initiatives focused on continuous deployment and testing methodologies as well as telecommunications observability systems designed to improve infrastructure monitoring capabilities.

Mr. Xavier also developed a system used to analyze Call Detail Records (CDRs) in order to comply with regulatory requirements established by ANATEL, the Brazilian telecommunications regulatory authority. This system automatically identified and blocked users generating excessive volumes of short-duration calls, helping to mitigate abusive traffic patterns within telecommunications networks.

Telecom Specialist – Voice Core Engineering - May 2012 – April 2018

During this period, Mr. Xavier served as a telecommunications specialist responsible for voice network engineering and infrastructure planning within the core telecommunications environment. His responsibilities included network capacity planning, evaluation of emerging telecommunications technologies, and technical leadership for large-scale voice network development projects.

Mr. Xavier contributed to the integration of Huawei IP Multimedia Subsystem technologies into existing Next Generation Network architectures, supporting the modernization of voice communication services. He also served as technical lead for the development of a telecommunications product known as Freedom, which allowed customers to use their fixed telephone numbers through smartphone applications, representing an early implementation of fixed-mobile convergence services. This product received national recognition through the Tele.Síntese Innovation in Communications Award in 2013.

In addition to these initiatives, Mr. Xavier supported nationwide deployments of Session Border Controllers used to expand SIP-based telecommunications services. He also contributed to VoIP interconnection projects between telecommunications operators, improving interoperability and efficiency in voice traffic routing. His work further included participation in the integration of telecommunications infrastructures following the merger of Vivo and GVT networks, as well as the development of systems used to monitor network equipment utilization in order to improve capacity planning and infrastructure expansion strategies.

Senior Telecom Analyst – Specialized Voice Support - September 2009 – May 2012

In this role, Mr. Xavier provided advanced technical support for Next Generation Network voice infrastructures and participated in telecommunications network expansion and commissioning projects. His responsibilities included working with telecommunications vendors to address complex infrastructure issues and supporting disaster recovery procedures for critical telecommunications systems.

During this period, Mr. Xavier developed provisioning templates and analytical scripts used to analyze telecommunications configurations and improve network stability. He also implemented standardized configuration procedures for Alcatel OmniPCX communication systems, which significantly reduced customer complaints related to telecommunications service performance. His work contributed to the development and improvement of the VoxIP and VoxNG telecommunications platforms, which later received international recognition for innovation in cloud-based telephony services.

Support Analyst – Vono VoIP Team - May 2008 – September 2009

Mr. Xavier worked on the development and operational support of VoIP telecommunications services within the Vono engineering team. His responsibilities included managing Asterisk-based communication clusters integrated with Oracle databases and web services.

During this period, he led the migration of telecommunications platforms to virtualized environments, improving infrastructure performance and operational efficiency. He also implemented version control procedures for telecommunications configuration systems and developed new communication services including Click-to-Call features, audible balance notifications, and Fax-to-Email functionality. Additionally, Mr. Xavier developed IP-authenticated wholesale VoIP solutions used by international telecommunications providers, supporting high volumes of communication traffic.

Support Analyst – Corporate Telecommunications Support - June 2006 – May 2008

Mr. Xavier began his professional career supporting enterprise telecommunications services. His responsibilities included customer activation procedures, configuration management, and technical support for enterprise VoIP communication systems such as Vox3G and VoxNG platforms.

During this period, he developed configuration templates and automation tools that significantly improved operational efficiency within telecommunications support teams and reduced configuration errors across complex telecommunications infrastructures.

Academic Background

Mr. Gustavo Dartagnan Xavier do Rego holds a postgraduate specialization in Management Development (Leadership) from FAE Centro Universitário in Curitiba, Brazil, completed in 2018.

This program provided advanced training in leadership, organizational management, and strategic decision-making.

He also holds a Bachelor's degree in Electrical Engineering with an emphasis in Telecommunications from the Federal University of Paraná, completed in 2006. This program provided extensive technical training in telecommunications engineering, signal processing, network systems, and communication infrastructure technologies.

Professional Training and Technical Certifications

Throughout his career, Mr. Xavier has completed extensive professional training programs related to telecommunications infrastructure engineering, network signaling systems, and telecommunications equipment platforms. His training includes advanced courses provided by leading telecommunications technology providers such as Ribbon Communications (formerly Nortel and Genband), Huawei IMS systems, Oracle Acme Packet Session Border Controller platforms, and Alcatel-Lucent enterprise communication systems.

In addition to telecommunications infrastructure training, Mr. Xavier has completed numerous technology and automation courses focusing on Python programming, infrastructure automation tools, DevOps methodologies, containerization technologies such as Docker, and cloud-based infrastructure management. He has also completed training programs in infrastructure automation using tools such as Ansible and in virtualization technologies used to manage large-scale telecommunications environments.

Professional License

Mr. Xavier holds a professional engineering license issued by the Regional Council of Engineering and Agronomy of Paraná (CREA-PR) in Brazil. This license certifies his qualifications as a licensed engineer authorized to practice in the fields of electrical and telecommunications engineering.

Awards and Professional Recognition

Mr. Xavier has contributed to telecommunications innovation projects that received industry recognition. The telecommunications product Freedom, developed during his tenure with Vivo / Telefônica Brasil, received the Tele.Síntese Innovation in Communications Award in 2013 for its contribution to the development of advanced telecommunications services.

In addition, the VoxNG telecommunications platform, to which Mr. Xavier contributed, received international recognition as the Best Communication Solution in the Cloud Telephony Category during the Alcatel-Lucent Dynamic Enterprise Awards held in Chicago. This award recognized innovative telecommunications solutions evaluated by leading technology analysts and industry experts.

Positioning to Advance the Proposed Endeavor

Mr. Xavier's extensive experience working with carrier-grade telecommunications infrastructures, network automation technologies, and large-scale communication systems

positions him strongly to lead the implementation of advanced telecommunications engineering solutions through Dartagnan Telco Solutions. His professional experience spans both telecommunications operators and international telecommunications environments, providing him with a comprehensive understanding of infrastructure reliability, network performance optimization, and telecommunications security requirements.

His work developing automation systems, observability platforms, and telecommunications network optimization tools demonstrates his capacity to design and implement solutions capable of improving communication reliability and operational efficiency. These capabilities align directly with the services that Dartagnan Telco Solutions intends to provide.

Given his nearly two decades of experience in telecommunications engineering, his deep technical expertise in voice network infrastructures, and his experience working on complex telecommunications systems used by large service providers, Mr. Xavier is well positioned to successfully advance the proposed endeavor and contribute to the modernization and resilience of telecommunications infrastructures across the United States.

2.0 The Company

Dartagnan Telco Solutions, strategically headquartered in Dallas, Texas, will operate as a telecommunications engineering and technology solutions company focused on advanced network architecture, VoIP infrastructure development, and telecommunications observability systems. The company will specialize in designing, implementing, and optimizing carrier-grade communication infrastructures used by telecommunications providers, enterprise organizations, and digital infrastructure operators across the United States.

By the fifth year of operation, Dartagnan Telco Solutions will establish a robust team structure that reflects its comprehensive approach to delivering advanced telecommunications engineering solutions. The envisioned team composition will include:

- **Founder and Chief Telecommunications Architect:** Mr. Gustavo Dartagnan Xavier do Rego, who will lead the technical and strategic direction of the company. With extensive experience in telecommunications infrastructure, VoIP networks, SIP signaling, and carrier-grade communication systems, he will oversee the design and implementation of advanced telecommunications architectures and guide the development of innovative network engineering solutions.
- **3 Telecommunications Engineers:** These professionals will focus on designing, implementing, and maintaining advanced telecommunications infrastructures, including VoIP systems, SIP signaling environments, and IP-based communication platforms used by telecommunications operators and enterprise organizations.
- **3 Telecommunications Network Optimization Engineers:** Responsible for improving network performance and reliability, these engineers will analyze network performance

indicators, identify operational inefficiencies, and implement solutions to enhance signaling stability, call quality, and telecommunications infrastructure scalability.

- **3 Telecommunications Project Managers:** These professionals will coordinate telecommunications infrastructure projects, manage engineering teams, and ensure the successful delivery of network implementation, modernization, and integration initiatives while maintaining compliance with technical standards and project timelines.
- **2 Client Support Specialists:** These specialists will provide technical assistance and operational support for client telecommunications infrastructures, ensuring that systems remain stable, efficient, and responsive to operational demands.
- **2 Telecom Automation and Observability Engineers:** These engineers will develop monitoring systems and automation tools designed to improve operational visibility across telecommunications networks. Their work will include implementing observability platforms, automating infrastructure management tasks, and improving real-time monitoring of telecommunications environments.
- **2 Sales Telecommunications Engineers:** These professionals will support the company's business development efforts by translating technical capabilities into practical solutions for telecommunications operators and enterprise clients. They will assist in solution design, technical proposals, and client consultations.
- **2 Sales Representatives:** Focused on expanding the company's market reach, these professionals will develop relationships with telecommunications operators, enterprise organizations, and technology infrastructure companies while supporting the company's growth strategy.
- **1 Administrative Manager:** This professional will oversee administrative operations, financial coordination, and organizational management, ensuring that the company maintains efficient internal operations and effective resource management.
- **2 Customer Service Representatives:** These team members will manage client communication, address operational inquiries, and ensure that clients receive consistent and responsive support throughout their engagement with the company.

Under Mr. Xavier's strategic leadership and technical expertise, Dartagnan Telco Solutions will focus on delivering high-quality telecommunications engineering solutions, and also on building a team of highly skilled professionals capable of addressing complex telecommunications infrastructure challenges. The company will prioritize continuous professional development, technical innovation, and adherence to industry best practices in order to maintain a strong competitive position within the telecommunications engineering sector.

With a focus on advanced telecommunications infrastructure, network automation technologies, and large-scale communication systems, Dartagnan Telco Solutions will position itself as a specialized engineering partner for organizations seeking to modernize and optimize their telecommunications environments. By combining technical expertise, innovative engineering solutions, and a strong commitment to service quality, the company will contribute

to strengthening the reliability and performance of communication infrastructures across the United States.

2.1 Company's Target

Dartagnan Telco Solutions will focus on delivering advanced telecommunications engineering solutions designed to address complex operational challenges in modern, hybrid communication environments, where legacy systems must coexist with cloud-based, virtualized, and next-generation network architectures.

The company's primary objective is to support organizations that depend on high-performance, resilient, and scalable telecommunications infrastructures, particularly those operating in mission-critical environments where network reliability, operational visibility, and service continuity are essential.

By integrating network architecture design, VoIP infrastructure, AI-driven observability (AIOps), automation, and performance engineering, Dartagnan Telco Solutions will help clients improve operational efficiency, reduce service disruptions, and modernize telecommunications infrastructures in line with evolving technological demands.

Primary Market Focus

1. Telecommunications Operators and Infrastructure Providers

Telecommunications operators manage large-scale, highly complex network environments that integrate legacy systems, IP-based infrastructures, and cloud-native platforms. These organizations face increasing challenges related to scalability, interoperability, and operational visibility.

Dartagnan Telco Solutions will support these operators by providing advanced network architecture design, signaling optimization, observability solutions, and infrastructure modernization strategies, enabling improved network performance, reduced downtime, and more efficient operations.

Secondary Market Focus

2. Technology Companies and Digital Infrastructure Providers

Technology companies and digital platforms rely on telecommunications systems to support real-time communications, cloud services, and distributed applications. Many operate hybrid environments where communication infrastructure must scale efficiently while maintaining performance and reliability.

The company will support these organizations by delivering optimized network architectures, AI-driven monitoring solutions, and automation frameworks that enhance operational efficiency and reduce infrastructure complexity.

3. Enterprise Organizations with Large-Scale Communication Needs

Large enterprises operate communication systems that support customer interaction, internal collaboration, and operational processes. These systems must function with high availability and minimal disruption, particularly in sectors such as finance, healthcare, and logistics.

Dartagnan Telco Solutions will assist enterprise clients by implementing scalable VoIP infrastructures, performance optimization strategies, and observability platforms that improve system reliability, operational visibility, and service continuity.

4. Data Centers and Cloud Infrastructure Operators

Data centers and cloud providers depend on reliable telecommunications connectivity to support distributed systems, real-time applications, and large-scale digital services. These environments require advanced traffic management, performance optimization, and continuous monitoring.

The company will work with these operators to design and optimize high-availability communication infrastructures, ensuring efficient traffic routing, real-time monitoring, and integration with cloud-native environments.

Long-Term Strategy and Vision

Dartagnan Telco Solutions aims to establish itself as a specialized provider of AI-enabled telecommunications engineering solutions across the United States. Over the long term, the company will:

- Expand services focused on AI-driven network operations (AIOps)
- Strengthen capabilities in legacy modernization and hybrid infrastructure management
- Support organizations preparing for NextG and 6G network evolution
- Develop advanced automation and observability platforms
- Expand its technical workforce to meet national demand

Through this strategy, the company will contribute to improving infrastructure resilience, strengthening digital connectivity, and supporting the evolution of telecommunications systems nationwide.

2.2 Needs for the Company's Services

The rapid expansion of digital communication services, cloud-based platforms, and data-driven technologies has significantly increased the demand for resilient, scalable, and intelligent telecommunications infrastructure in the United States. Telecommunications networks must support growing volumes of voice and data traffic while maintaining high levels of performance, reliability, and security across increasingly complex and distributed environments.

Despite these advancements, many organizations face critical operational challenges related to network complexity, limited visibility, inefficient management processes, and the need to modernize legacy systems while preparing for next-generation technologies. Under the leadership of Mr. Gustavo Dartagnan Xavier do Rego, Dartagnan Telco Solutions will address these challenges by delivering specialized, AI-enabled telecommunications engineering solutions.

1. Increasing Complexity of Telecommunications Networks

Modern telecommunications environments integrate VoIP systems, SIP signaling, Session Border Controllers (SBCs), IP Multimedia Subsystem (IMS), and cloud-based platforms within hybrid and distributed architectures. Managing these systems requires advanced engineering expertise to ensure interoperability, scalability, and service reliability. [4]

Dartagnan Telco Solutions will address this need by providing network architecture design, infrastructure optimization, and integration strategies that support stable and scalable communication environments.

2. Limited Visibility and Lack of Intelligent Network Operations

Many organizations lack real-time visibility into network performance and depend on traditional monitoring approaches that are insufficient for handling large-scale, data-intensive environments. [5] This limitation increases the risk of undetected failures, service disruptions, and operational inefficiencies.

The company will address this gap by implementing AI-driven observability and AIOps frameworks, enabling predictive fault detection, anomaly identification, root-cause analysis, and intelligent incident response. These capabilities support the transition from reactive monitoring to proactive and data-driven network operations.

3. Operational Inefficiencies and Limited Automation

Telecommunications infrastructures require continuous configuration, maintenance, and updates. Many organizations still rely on manual processes, increasing the risk of human error, service instability, and inefficient resource utilization. [6]

Dartagnan Telco Solutions will develop and implement automation tools and intelligent infrastructure management solutions that reduce manual intervention, streamline operations, and improve overall network efficiency and reliability.

[4] https://go.clearlyip.com/articles/voip-fundamentals-protocols-technologies
[5] https://tecknexus.com/telecoms-300b-problem-missing-network-observability/
[6] https://www.nobgp.com/info/hidden-costs-of-manual-network-configuration

4. Challenges in Legacy System Modernization and Next-Generation Readiness

A significant portion of telecommunications infrastructure in the United States still relies on legacy systems that must coexist with modern, cloud-based, and virtualized environments. Organizations face challenges in modernizing these systems while maintaining uninterrupted service and preparing for emerging NextG and 6G technologies. [7]

The company will support phased migration strategies, interoperability planning, and infrastructure adaptation, enabling organizations to transition toward advanced network architectures without disrupting critical communication services.

5. Growing Demand for Secure and Reliable Voice Communications

Voice communication remains a critical component of national telecommunications infrastructure, particularly in sectors such as emergency services, healthcare, and enterprise operations. Challenges related to call routing efficiency, signaling stability, and fraud prevention continue to impact service quality.

Dartagnan Telco Solutions will address these needs by designing optimized VoIP infrastructures, implementing secure interconnection frameworks, and enhancing signaling performance, ensuring reliable and secure communication across diverse environments.

Meeting the Demand for Advanced Telecommunications Engineering

To address these challenges, Dartagnan Telco Solutions will provide:

- Telecommunications network architecture and infrastructure design
- VoIP implementation and SIP signaling optimization
- AI-driven observability and AIOps solutions
- Automation and intelligent infrastructure management tools
- Network performance analysis and optimization services
- Legacy modernization and NextG/6G readiness support

By addressing these critical needs, Dartagnan Telco Solutions will contribute to strengthening telecommunications infrastructure resilience, improving operational efficiency, and supporting the evolution of communication networks in the United States, particularly in environments that require high availability, security, and technological adaptability.

2.3 Company's Expansion

Dallas, Texas provides a strong strategic foundation for the growth of Dartagnan Telco Solutions due to its concentration of telecommunications infrastructure, technology companies, and

[7] https://www.researchandmarkets.com/reports/6093668/enterprise-voice-communication-equipment

digital ecosystem. From this base, the company will expand through a structured, multi-phase strategy focused on technological evolution, service expansion, and national reach.

Phase 1: Core Telecommunications Engineering and Infrastructure Optimization

During its initial phase, Dartagnan Telco Solutions will focus on delivering core services, including telecommunications network architecture design, VoIP infrastructure implementation, network performance optimization, and observability system deployment.

This phase will establish the company's presence in the market by addressing immediate client needs related to network reliability, scalability, and performance improvement across existing telecommunications infrastructures.

Phase 2: AI-Driven Operations, Automation, and Advanced Observability

As the company grows, it will expand its capabilities by developing and implementing AI-enabled observability (AIOps), automation frameworks, and intelligent network management solutions.

This phase will focus on enabling clients to transition from reactive operations to proactive, data-driven, and self-optimizing network environments, improving efficiency, reducing operational risk, and enhancing service continuity.

Phase 3: Legacy Modernization and NextG / 6G Readiness

In its advanced stage of growth, Dartagnan Telco Solutions will support organizations in preparing for NextG and 6G network evolution, while addressing the challenges of legacy system coexistence and infrastructure transformation.

The company will provide engineering support for phased migration strategies, interoperability planning, and infrastructure adaptation, ensuring seamless integration between legacy and next-generation technologies.

Geographic Expansion

Following initial operations in Texas, the company will expand its services nationwide, supporting telecommunications projects across multiple regions. Due to the nature of telecommunications engineering services, Dartagnan Telco Solutions will leverage remote delivery models to efficiently serve clients across the United States without requiring extensive physical expansion.

Team Growth

To support expansion, the company will gradually build a multidisciplinary team, including telecommunications engineers, automation specialists, AIOps professionals, project managers, and technical consultants. Workforce growth will align with increasing demand and project complexity.

Strategic Partnerships

Dartagnan Telco Solutions will establish partnerships with telecommunications operators, cloud providers, data center operators, and technology companies, enabling participation in large-scale infrastructure projects and strengthening technical capabilities.

Continuous Technical Advancement

The company will invest in the continuous development of AI-driven solutions, automation tools, and advanced engineering methodologies, ensuring alignment with evolving telecommunications technologies and maintaining long-term competitiveness.

Long-Term Growth Outlook

Through this phased and technology-driven expansion strategy, Dartagnan Telco Solutions aims to become a recognized provider of advanced and AI-enabled telecommunications engineering services across the United States.

Under the leadership of Mr. Gustavo Dartagnan Xavier do Rego, the company will contribute to modernizing communication infrastructures, supporting next-generation network evolution, creating high-skilled jobs, and strengthening the resilience of telecommunications systems nationwide.

2.4 Company's Economic Benefits

Guided by the strategic leadership and technical expertise of Mr. Xavier, Dartagnan Telco Solutions will be positioned for significant growth and economic contribution over the next five years. The company's financial projections reflect a strong upward trajectory supported by the increasing demand for specialized telecommunications engineering services, including VoIP infrastructure optimization, telecommunications automation, and network observability solutions.

In its first year of operation, Dartagnan Telco Solutions is projected to generate $533,000 in sales, reflecting the initial demand for specialized telecommunications engineering services among telecommunications operators, enterprise organizations, and technology companies. As the company expands its client base and service capacity, sales are expected to increase steadily, reaching $3,069,936 by the fifth year of operation. Similarly, gross margins are projected to grow from $490,360 in the first year to $2,824,341 by year five, reflecting the scalability of engineering-driven service models and the increasing demand for specialized telecommunications infrastructure expertise. Net profits are expected to follow this upward trend, beginning at $37,569 in the first year and rising to $268,716 by the end of the fifth year.

The company's growth will also contribute to government revenues through federal, state, and payroll taxes. Federal and state tax contributions are projected to increase from $13,896 in the first year to $99,388 by the fifth year, reflecting the company's expanding operations and financial performance. Payroll taxes will grow from $35,845 in the first year to $213,308 by the

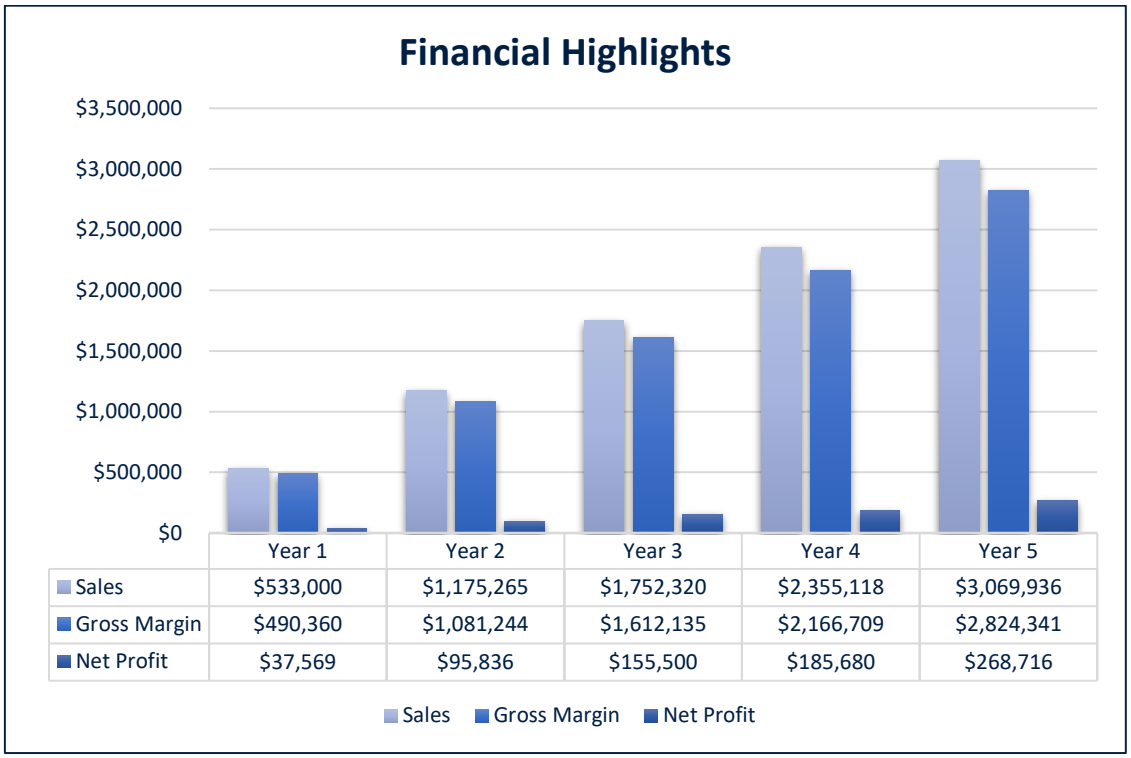
fifth year as the company hires additional engineers, technical specialists, and administrative staff to support its expanding operations.

Beyond its direct financial performance, Dartagnan Telco Solutions will contribute to the broader economy through the provision of specialized telecommunications engineering services that improve the reliability and efficiency of communication infrastructures. By supporting telecommunications operators, enterprise organizations, and digital infrastructure providers, the company will help strengthen network connectivity, enhance communication reliability, and support the digital transformation of businesses that depend on robust telecommunications systems. These improvements in communication infrastructure will help organizations operate more efficiently, improve service delivery, and support economic productivity across multiple industries.

As Dartagnan Telco Solutions continues to grow, its economic impact will extend beyond direct revenue generation to include job creation, technological innovation, and the strengthening of telecommunications infrastructure that supports the U.S. digital economy. Through its specialized engineering services and technical expertise, the company will contribute to improving the performance and resilience of telecommunications networks that serve businesses, institutions, and communities.

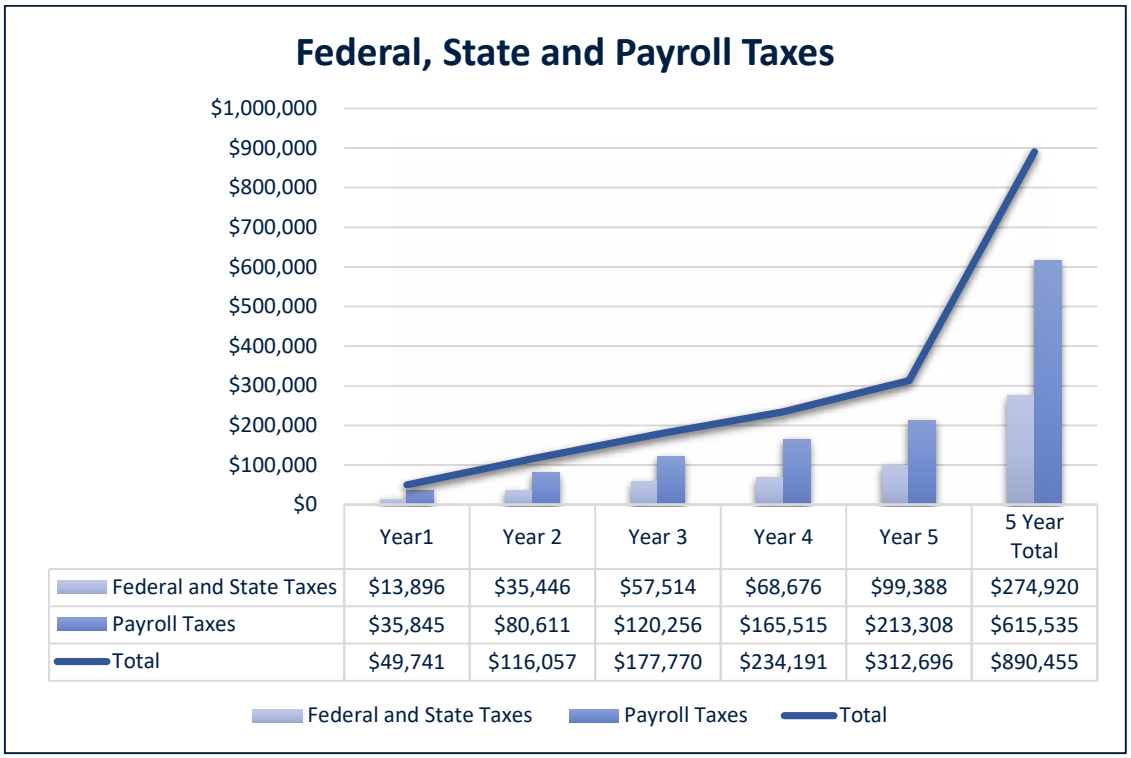
In summary, under the leadership of Mr. Xavier, Dartagnan Telco Solutions will be positioned to achieve sustained financial growth while contributing to the advancement of telecommunications infrastructure in the United States. Through a combination of technical expertise, strategic service development, and a commitment to engineering excellence, the company will support economic development, job creation, and technological progress within the telecommunications sector.

2.4.1 Financial Highlights Chart



	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	$533,000	$1,175,265	$1,752,320	$2,355,118	$3,069,936
Gross Margin	$490,360	$1,081,244	$1,612,135	$2,166,709	$2,824,341
Net Profit	$37,569	$95,836	$155,500	$185,680	$268,716

2.4.2 Federal, State and Payroll Taxes Chart



	Year1	Year 2	Year 3	Year 4	Year 5	5 Year Total
Federal and State Taxes	$13,896	$35,446	$57,514	$68,676	$99,388	$274,920
Payroll Taxes	$35,845	$80,611	$120,256	$165,515	$213,308	$615,535
Total	$49,741	$116,057	$177,770	$234,191	$312,696	$890,455

2.5 Summary of Investment

Dartagnan Telco Solutions, under the strategic guidance of Mr. Xavier, will allocate a total of **$100,000** for its initial setup and operational readiness in the telecommunications engineering sector. This investment will be funded primarily through personal equity contributed by Mr. Xavier, ensuring that the company has the financial resources necessary to establish a solid operational foundation and begin delivering specialized telecommunications engineering services.

The company's startup expenses will total $40,000 and will be allocated across several essential operational categories required to support the launch of Dartagnan Telco Solutions. These expenses will include $1,500 for legal and professional services to ensure proper company formation and regulatory compliance, as well as $500 allocated for business insurance to mitigate operational risks. Marketing and business development initiatives will receive an allocation of $8,000 to establish the company's brand presence and generate early client acquisition opportunities within the telecommunications and technology sectors.

An additional $5,000 will be allocated for office rent and deposit to secure a professional operational workspace. Website development and digital presence, which are essential for communicating the company's technical capabilities and attracting prospective clients, will require an investment of approximately $2,000. The acquisition of operational technology resources, including computers, phones, and tablets necessary for engineering analysis, client communications, and project management, will total approximately $5,500.

Office furniture and essential office supplies will each receive allocations of $4,500 to support daily administrative and operational activities. In addition, approximately $15,000 will be invested in specialized telecommunications engineering tools and software platforms required for network analysis, observability systems, infrastructure monitoring, and telecommunications testing environments.

To strengthen the company's financial stability during its initial operational phase, Dartagnan Telco Solutions will maintain $60,000 in working capital reserves. These funds will provide liquidity to support early operational expenses, including payroll, project development, client acquisition activities, and ongoing administrative costs as the company establishes its presence in the telecommunications engineering market.

With a total investment of $100,000, Dartagnan Telco Solutions will be well positioned to launch its operations and begin delivering specialized telecommunications engineering services. This financial commitment reflects Mr. Xavier's dedication to building a sustainable and technically advanced telecommunications engineering firm capable of supporting the growing demand for reliable communication infrastructures in the United States.

2.5.1 Startup Requirements Table

Startup	
Requirements	
Startup Expenses	
Legal	$1,500
Insurance	$500
Marketing	$8,000
Rent/Deposit	$5,000
Website design	$2,000
Computers/Phones/Tablets	$2,500
Office furniture	$4,500
Stationery	$1,000
Equipment	$15,000
Total Startup Expenses	$40,000
Startup Assets	
Cash Required	$60,000
Startup Inventory	$0
Other Current Assets	$0
Long-term Assets	$0
Total Assets	$60,000
Total Requirements	$100,000

3.0 Company's Services

Dartagnan Telco Solutions will provide specialized telecommunications engineering services focused on improving the reliability, scalability, security, and operational intelligence of communication infrastructures across the United States.

The company will support telecommunications operators, enterprise organizations, technology companies, and digital infrastructure providers that depend on high-performance, resilient communication systems. Under the leadership of Mr. Gustavo Dartagnan Xavier do Rego, Dartagnan Telco Solutions will deliver advanced engineering solutions that address complex challenges related to network modernization, performance optimization, AI-driven operations, and infrastructure interoperability.

The company's services are structured into four primary areas:

1. Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions

Dartagnan Telco Solutions will provide engineering services for the design and implementation of carrier-grade telecommunications architectures and VoIP infrastructures. These solutions will support organizations in building scalable and reliable communication environments capable of handling high volumes of voice traffic and digital communications.

The company will design and integrate systems based on technologies such as SIP signaling, IP Multimedia Subsystem (IMS), Session Border Controllers (SBCs), and cloud-based communication platforms, ensuring interoperability across multiple network environments.

A key component of this service is the modernization of legacy telecommunications systems, enabling organizations to transition from traditional telephony infrastructures to advanced IP-based and cloud-integrated environments. Dartagnan Telco Solutions will support architecture planning, signaling design, interoperability testing, and phased migration strategies that minimize service disruption while improving performance and scalability.

2. Telecommunications Performance Engineering and Optimization

Dartagnan Telco Solutions will deliver specialized performance engineering services aimed at improving network efficiency, signaling stability, and overall system reliability. As telecommunications infrastructures grow in scale and complexity, organizations face increasing challenges related to congestion, inefficient routing, and service degradation.

The company will analyze network performance indicators, identify operational bottlenecks, and implement optimization strategies focused on traffic engineering, signaling optimization, capacity planning, and load balancing. These services will improve call quality, increase call completion rates, and enhance the stability of communication systems across large-scale and hybrid network environments.

3. AI-Enabled Telecom Observability, AIOps, and Automation Solutions

Dartagnan Telco Solutions will implement AI-driven observability and AIOps frameworks designed to enhance operational visibility and enable intelligent telecommunications network management. Modern communication infrastructures generate large volumes of operational data that require advanced tools for effective analysis and decision-making.

The company will deploy observability platforms capable of integrating data from multiple systems and providing real-time insights into network performance and infrastructure health. These solutions will enable:

- Predictive fault detection
- Anomaly identification

- Root-cause analysis
- Intelligent and automated incident response

In addition, Dartagnan Telco Solutions will develop automation tools for infrastructure management, reducing manual intervention, minimizing operational errors, and improving overall efficiency. These capabilities will allow organizations to transition from reactive monitoring to proactive and self-optimizing network operations.

4. Telecommunications Interconnection, Compliance, Security, and NextG Readiness

The company will provide engineering solutions focused on telecommunications interconnection, regulatory compliance, and network security, ensuring reliable and secure communication between carriers, enterprise systems, and digital platforms.

Services will include the design and optimization of SIP interconnections, interoperability management, and implementation of security frameworks that protect communication infrastructures from fraud and operational risks.

Additionally, Dartagnan Telco Solutions will support organizations in preparing for NextG and 6G network evolution, providing engineering guidance for infrastructure adaptation, interoperability, and integration with emerging communication technologies. This includes enabling organizations to maintain service continuity while transitioning from legacy systems to more advanced, distributed, and AI-driven network architectures.

4.0 Industry Overview

The telecommunications industry plays a critical role in supporting the digital infrastructure that enables modern economic activity across the United States. Telecommunications networks form the backbone of digital communication, supporting voice services, internet connectivity, cloud computing platforms, enterprise communication systems, and a wide range of digital services used by businesses, institutions, and individuals. As digital technologies continue to expand, the demand for reliable, scalable, and secure telecommunications infrastructure has increased significantly.

Advancements in Voice over IP (VoIP), cloud communications, data center connectivity, and network virtualization have transformed the way communication networks are designed and operated. Traditional telecommunications systems based on legacy circuit-switched technologies are rapidly being replaced by IP-based communication platforms that enable more flexible, scalable, and cost-efficient communication services. This transition has created a growing demand for specialized telecommunications engineering expertise capable of designing and optimizing these complex infrastructures.

Telecommunications operators, technology companies, and enterprise organizations must continuously modernize their communication infrastructures in order to maintain service reliability, support growing data traffic, and integrate new technologies. Modern telecommunications environments often combine multiple technologies, including SIP signaling protocols, IP Multimedia Subsystem (IMS) platforms, Session Border Controllers (SBC), cloud communication services, and software-defined network infrastructures. The integration and management of these technologies require highly specialized engineering knowledge and continuous infrastructure optimization.

In addition to the growing complexity of telecommunications systems, organizations must also address challenges related to network reliability, operational efficiency, and real-time infrastructure monitoring. As communication networks support increasingly critical services, including emergency communications, healthcare systems, financial transactions, and digital collaboration platforms, maintaining high levels of network availability and performance has become essential. Service disruptions, signaling failures, or infrastructure misconfigurations can have significant operational and economic consequences for businesses and institutions that depend on reliable communication services.

The expansion of cloud computing, unified communications platforms, and digital collaboration technologies has further increased the importance of telecommunications infrastructure within the broader technology ecosystem. Businesses across nearly all industries rely on communication systems that support remote work environments, customer engagement platforms, and distributed operational structures. These developments have increased the need for advanced network architecture design, infrastructure automation, and telecommunications observability systems capable of monitoring network performance in real time.

Another important trend within the telecommunications industry is the increasing adoption of automation and observability technologies to improve infrastructure management and operational efficiency. Telecommunications networks generate vast amounts of operational data related to signaling activity, equipment performance, traffic patterns, and service availability. Advanced monitoring platforms and automation tools allow network operators to analyze this data in real time, detect anomalies, and respond quickly to potential infrastructure issues.

Furthermore, telecommunications networks must operate within a complex regulatory environment designed to ensure communication reliability, consumer protection, and infrastructure security. Telecommunications operators must comply with regulatory requirements related to network interconnection, signaling authentication, fraud prevention, and service availability. These regulatory frameworks require specialized technical expertise to implement and maintain compliant communication infrastructures.

Within this evolving industry landscape, telecommunications engineering firms play an essential role in supporting organizations that require specialized expertise to design, implement, and

optimize complex communication networks. These firms provide technical services that help telecommunications operators, enterprise organizations, and digital infrastructure providers maintain reliable communication systems while adapting to emerging technologies and increasing network demands.

Dartagnan Telco Solutions will operate within this dynamic and technologically advanced industry environment by providing specialized telecommunications engineering services that address the growing need for network architecture design, VoIP infrastructure optimization, telecommunications automation, and observability systems. By supporting the modernization and performance optimization of telecommunications infrastructures, the company will contribute to strengthening the reliability and efficiency of communication networks that support economic activity and digital connectivity throughout the United States.

4.1 Industry Analysis

The telecommunications industry is one of the most critical infrastructure sectors in the United States, supporting digital communications, cloud computing, enterprise connectivity, and large-scale data exchange across the national economy.[8] Telecommunications networks enable voice communication, internet connectivity, video conferencing, digital commerce, financial transactions, emergency communications, and a wide range of digital services used by businesses, institutions, and government agencies.[9]

Over the past decade, the telecommunications sector has experienced steady growth driven by the expansion of mobile networks, cloud services, and digital communication platforms. According to industry reports from IBISWorld and the U.S. Bureau of Economic Analysis, the U.S. telecommunications industry generated approximately **$463 billion in total revenue in 2024**, reflecting continued expansion in data services, digital communication platforms, and enterprise connectivity solutions.[10] Telecommunications services remain a foundational component of the U.S. digital economy, supporting industries such as finance, healthcare, logistics, technology, and e-commerce.

Historically, the telecommunications sector has evolved significantly as communication technologies transitioned from traditional circuit-switched systems to internet-based communication architectures. Voice over IP (VoIP) technologies, cloud communication platforms, and unified communication systems have increasingly replaced traditional telephony infrastructure. The VoIP market alone has experienced substantial growth in recent years. Industry analysis indicates that the **U.S. VoIP services market reached approximately $46 billion**

[8] https://www.cisa.gov/topics/critical-infrastructure-security-and-resilience/critical-infrastructure-sectors/communications-sector
[9] https://www.geeksforgeeks.org/computer-networks/telecom-networks/
[10] https://ibinterviewquestions.com/guides/tmt-investment-banking/telecom-business-model-wireless-wireline

in 2023 and is expected to continue expanding as businesses adopt cloud-based communication systems and internet-based telephony solutions.[11]

The broader telecommunications infrastructure market has also expanded in response to increased demand for high-speed data transmission, remote work technologies, and digital collaboration tools. The growth of cloud computing platforms, data centers, and software-as-a-service technologies has significantly increased the volume of voice and data traffic traveling through telecommunications networks. As organizations increasingly rely on digital communication platforms, the performance and reliability of telecommunications infrastructures have become more important than ever.

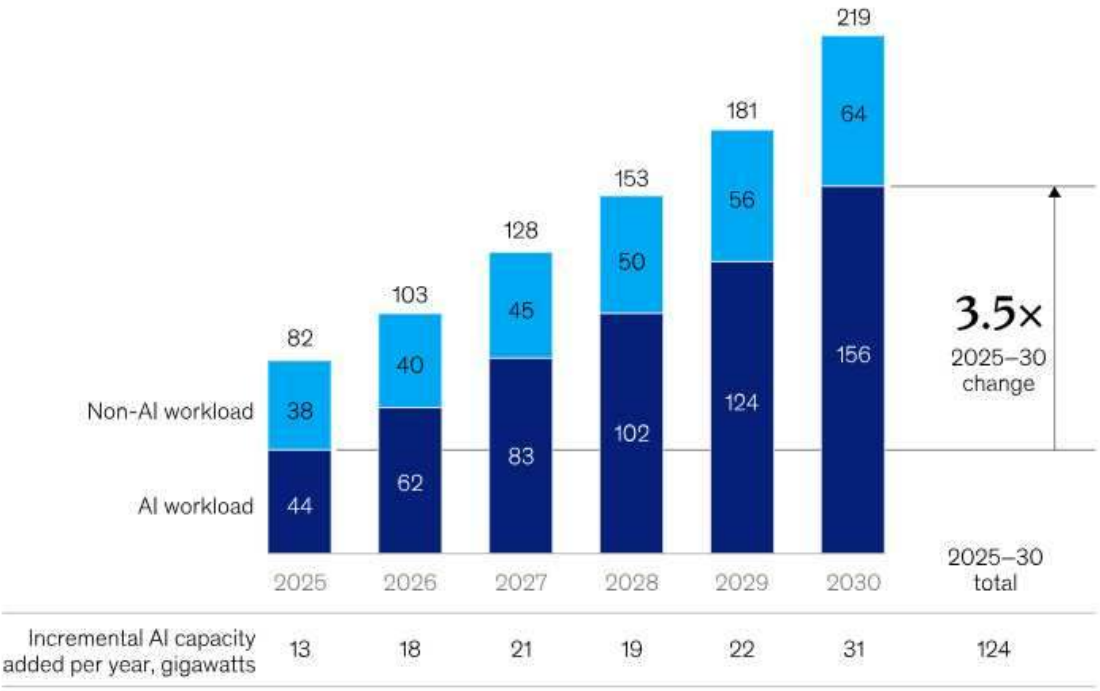
Current industry conditions indicate strong demand for telecommunications infrastructure modernization and network optimization services. Telecommunications providers and enterprise organizations must continuously upgrade network architectures to support increasing communication traffic, integrate cloud-based communication platforms, and maintain compliance with evolving regulatory standards. The complexity of modern communication networks requires advanced engineering expertise to ensure reliable signaling, efficient call routing, and secure network operations.

Looking forward, industry forecasts indicate continued growth in the telecommunications sector over the next decade. Analysts project that the **global telecommunications market will exceed $700 billion by 2030**, driven by the expansion of cloud communications, 5G infrastructure, unified communications platforms, and enterprise digital transformation initiatives.[12] Additionally, the VoIP and unified communications segments are expected to grow at **compound annual growth rates exceeding 10 percent**, reflecting increasing adoption of internet-based communication services by businesses and organizations.

[11] https://www.ibisworld.com/united-states/industry/voip/1269/

[12] https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-cost-of-compute-a-7-trillion-dollar-race-to-scale-data-centers

Estimated global data center capacity demand, 'continued momentum' scenario, gigawatts



Note: Figures may not sum to totals, because of rounding.
Source: McKinsey Data Center Demand Model; Gartner reports; IDC reports; Nvidia capital markets reports

Another key industry trend shaping the telecommunications sector is the increasing adoption of automation and observability technologies for infrastructure monitoring and network management. Telecommunications networks generate massive volumes of operational data related to signaling activity, call traffic, network performance indicators, and infrastructure utilization. Telecommunications operators and enterprise organizations increasingly rely on advanced monitoring platforms and automated infrastructure management systems to maintain service reliability and operational efficiency.

As the telecommunications industry continues to evolve, the demand for specialized telecommunications engineering expertise is expected to grow significantly. Many organizations lack the internal technical capabilities required to design and optimize modern communication infrastructures that integrate VoIP technologies, SIP signaling systems, Session Border Controllers, cloud communication platforms, and large-scale network monitoring systems.[13]

Dartagnan Telco Solutions will operate within this expanding market by providing specialized engineering services that support telecommunications infrastructure design, network performance optimization, automation solutions, and observability systems. Under the leadership of Mr. Xavier, the company will leverage extensive industry experience to help

[13] https://www.mdpi.com/1999-5903/17/4/133

telecommunications operators, technology companies, and enterprise organizations modernize their communication infrastructures and improve operational performance.

By supporting the implementation of reliable communication architectures, optimizing VoIP infrastructures, and deploying advanced monitoring and automation systems, Dartagnan Telco Solutions will contribute to strengthening the resilience and efficiency of telecommunications networks. These contributions will support the continued expansion of digital communication services and enhance the reliability of the telecommunications infrastructure that underpins the U.S. digital economy.

4.2 Industry Products and Services

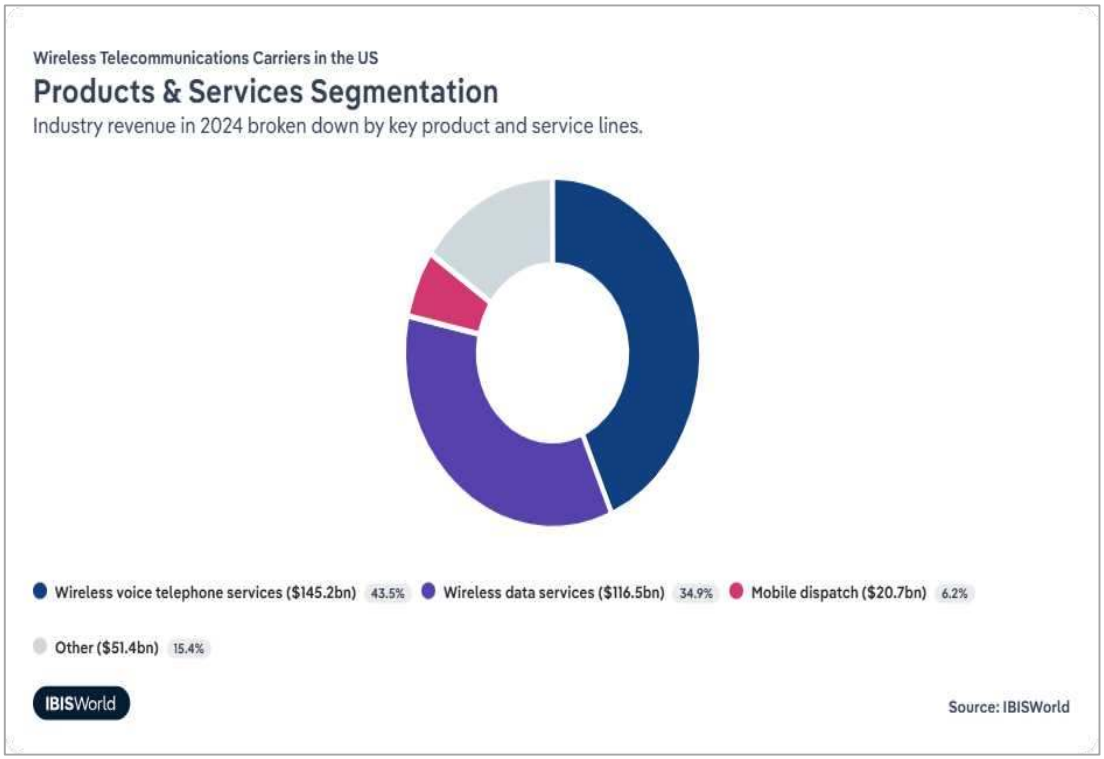
The telecommunications industry offers a wide range of products and services tailored to meet the needs of businesses, governments, and consumers. These include:

Wireless Telecommunications Products and Services:

Wireless calling is facing competition from internet-based calling services, while the 5G network rollout has increased consumer spending on mobile data. Mobile dispatch services are essential for businesses in the e-commerce and gig economy age, and equipment installation and repair are key to keeping customers satisfied with wireless services.

- **Wireless calling faces competition from internet-based calling:** The evolution from 2G to 5G wireless voice services has seen a shift in the industry, with newer technologies like 5G becoming more prevalent. The rise of Voice over the Internet services and Wi-Fi calling poses a threat to traditional wireless carriers, as consumers opt for internet-based calling options over traditional wireless telephone services.
- **5G network rollout has boosted consumer spending on mobile data:** The rollout of faster and more reliable 5G networks has led to increased consumer spending on mobile data, especially in light of the recent surge in mobile data usage post-COVID. While Wi-Fi remains a popular choice for internet access, wireless data services are still preferred for on-the-go connectivity and long-distance travel.
- **Mobile dispatch services support drives in the age of e-commerce and the gig economy:** Mobile dispatch systems play a crucial role in tracking products and services in industries ranging from food delivery to transportation. As the gig economy grows, these systems have become essential for businesses to track their products in real-time, utilizing GPS technology and mobile networks to transmit and receive crucial information.
- **Equipment installation and repair keep customers satisfied:** Beyond just wireless voice and data services, the telecommunications industry thrives on equipment installation, maintenance, and repair services. This sector has seen an uptick in revenue share as

consumers require more value-added services. Additionally, retail sales of mobile phone accessories and equipment rentals contribute significantly to revenue in this segment.[14]



Networking Equipment Products and Services:

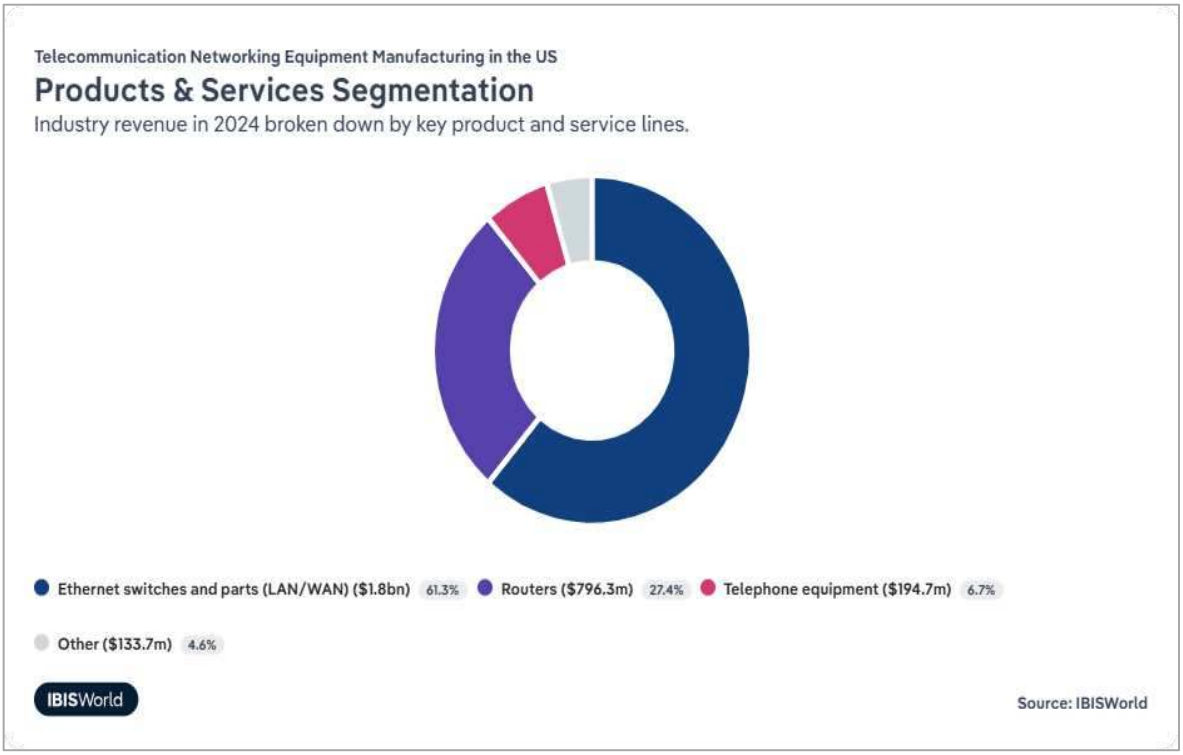
The use of mobile connections is increasing among businesses who have forgone physical offices resulting in fewer purchases of non-consumer grade modems. The decline in using wired telephone sets is due to the adoption of cell phones. Additionally, broadband internet is becoming more affordable, however, the increase in demand for high-speed connectivity has led to the adoption of multigigabit Ethernet standards and higher port densities of switches.

- **Businesses forgoing physical offices are using more mobile connections:** Telephone switches and network switches are important devices that ensure the proper transfer of voice and data between telephones and computers. To reduce the cost of purchasing non-consumer grade modems, many businesses that forgo physical offices are turning to broadband and mobile methods that are cheaper. This trend has drastically increased the usage of mobile connections.
- **Cell phones are causing consumers and businesses to ditch landlines:** Local area network (LAN) and wide area network (WAN) switches, bridges, and gateways are products that are crucial to the operations of data networks. Nevertheless, their usage is diminishing due to the

[14] https://my.ibisworld.com/us/en/industry/51721/products-and-markets#products-and-markets_products-and-services

increased adoption of cell phones among consumers and businesses leading to the decrease in buying wired telephone sets. The growing demand for high-speed connectivity has resulted in multigigabit Ethernet standards adoption and higher port densities in switches.

- **Internet service providers are expanding broadband connections:** Routers are devices that forward data packets from one type of network connection to another. This trend has led to making broadband internet more accessible and affordable for consumers. The growing work-from-home trend requires employees to establish internet connections resulting in home markets prioritizing connectivity like never before. However, businesses delay upgrading their office internet infrastructure as they remain vacant.[15]



Telecommunications Resellers Products and Services:

The telecommunications industry is currently shifting with the increasing adoption of mobile and wireless services as people demand high-speed internet and cellular services. In this industry, mobile services are the most sought-after services, which account for more than 50% of total industry revenue.[16] The shift to wireless services from fixed telephony services results from the growing demand for broadband-enabled mobile devices and the people's desire for convenience. The internet services category is emerging as a crucial business opportunity as mobile internet connections amplify the demand for internet and internet telephony services.

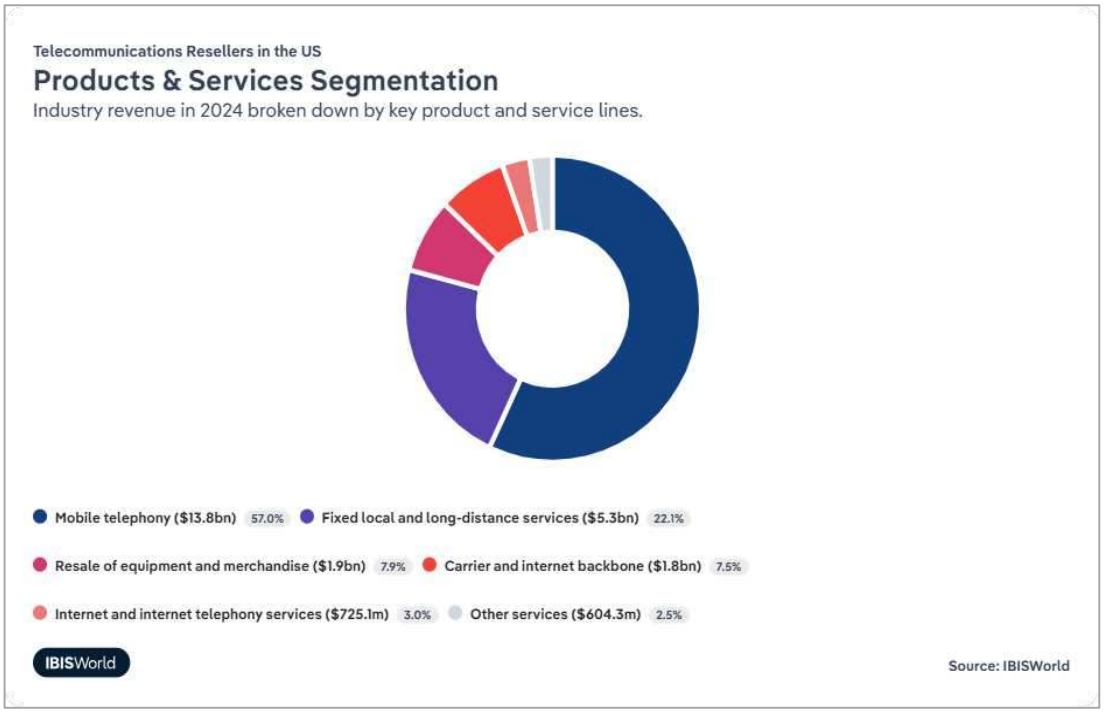
[15] https://my.ibisworld.com/us/en/industry/33421/products-and-markets

[16] https://my.ibisworld.com/us/en/industry/51791a/products-and-markets#products-and-markets__products-and-services

Fixed local and long-distance services are under threat from substitutes like voice over internet protocol. Consumer and business usage of mobile phones instead of fixed telephony services lead to a decline in demand. The remainder of consumer and business usage goes to internet and mobile connectivity services, leaving other peripheral product offerings, such as resale of equipment and caller ID, in decline as a share of revenue.

- **Mobile services continue their prominence as demand surges:** More than 50% of the total industry revenue comes from mobile services, including local and long-distance mobile phones and messaging. The sector's significant share of revenue reflects the shift towards wireless services in the telecommunications industry. This trend results from the rising demand for broadband-enabled mobile devices, which offer convenience and ample support for people's mobile lifestyles.
- **Internet services proliferate amid the pandemic:** Despite internet services' meager share of total revenue, it is quickly emerging as a crucial business opportunity, like mobile services. The trend follows the increasing number of mobile internet connections and mobile connectivity needs, leading to the rise in the proportion for internet and internet telephony services. The pandemic's impact on people's social lives and work-from-home situation also increased the demand for high-speed internet. However, an overall decline in consumer spending and business investment has not yet allowed this segment to maximize its potential.
- **Substitutes siphon away demand from fixed local and long-distance services:** Fixed local and long-distance services, which include landline telephones for local and long-distance calling, account for a quarter of the industry's total revenue. This segment's income generates from demand from businesses, but it is also threatened by increasing consumer and business usage of mobile phones. The emergence of low-cost or free services such as Voice over Internet Protocol also poses a looming threat to the fixed telephony services segment, which has resulted in a decline in its share of revenue.
- **Industry enterprises lease carrier infrastructure from upstream companies:** Interconnection and settlement charges for terminating domestic or international calls belong to carrier and internet backbone services. To provide such services, industry enterprises secure deals with upstream internet providers that own and maintain the necessary infrastructure to transmit data and interconnect different carrier networks.
- **Equipment warranties remain unattractive to cash-strapped consumers:** In addition to telecommunications services, industry players also engage in the resale of equipment and merchandise, including warranties and insurance on product offerings. The warranty-supported sales strategy, which has been gaining appeal among consumers with expanding disposable income, has not caught on with cost-conscious buyers.
- **Other services fail to catch on as they misalign with consumer preferences:** Services such as installation, cable and multichannel programming, and the resale of equipment are categorized as other services in the industry. However, these peripheral product offerings,

such as caller ID and installation, have been declining as a share of revenue. Consumers remain fixated on the internet and mobile connectivity services, such as the value-added features of calling options.[17]



These products and services reflect the industry's adaptation to evolving consumer needs, technological advancements, and competitive pressures. Dartagnan Telco Solutions is poised to align its offerings with these trends, focusing on innovative solutions in network security, data center optimization, and advanced telecommunications infrastructure.

The telecommunications industry is poised for significant growth and transformation. Innovations such as 5G technology, IoT integration, and data-driven applications will drive demand across all sub-industries. Dartagnan Telco Solutions is strategically positioned to capitalize on these trends by offering tailored solutions that address critical needs in network security, infrastructure design, and technological integration. By aligning its services with industry demands, Dartagnan Telco Solutions aims to establish itself as a leader in the evolving telecommunications landscape.

4.3 Business Location

Dartagnan Telco Solutions will be headquartered in Dallas, Texas, one of the most important telecommunications and technology hubs in the United States. The Dallas–Fort Worth metropolitan area hosts a strong concentration of telecommunications companies, technology

[17] https://my.ibisworld.com/us/en/industry/51791a/products-and-markets#products-and-markets_products-and-services

firms, data center operators, and digital infrastructure providers, making it an ideal location for a company specializing in advanced telecommunications engineering and network infrastructure solutions.

The Dallas–Fort Worth region has experienced significant economic and technological growth over the past decade. With a metropolitan population exceeding 7.7 million residents, the area represents one of the largest and fastest-growing metropolitan economies in the United States.[18] The region's strong technology ecosystem includes telecommunications providers, cloud computing companies, data center operators, and enterprise technology organizations that depend on highly reliable communication networks.

Dallas–Fort Worth has historically played a central role in the development of the U.S. telecommunications industry and continues to host major global companies such as AT&T, Ericsson, Nokia, and Texas Instruments. In particular, AT&T has reinforced the region's strategic importance by establishing its global headquarters in Plano, Texas, through a large-scale corporate redevelopment project associated with significant capital investment, workforce expansion, and long-term infrastructure development. [19] This initiative further strengthens the region's position as a leading center for telecommunications innovation and network infrastructure advancement.

In addition to telecommunications companies, the Dallas–Fort Worth area has become one of the largest data center markets in North America. Industry reports indicate that the region hosts over 150 data centers, supporting cloud computing platforms, digital communications services, and enterprise network infrastructures.[20] These facilities generate significant demand for reliable telecommunications connectivity, network optimization, and infrastructure monitoring services.

The region's strong technology workforce also provides access to highly skilled engineering and information technology professionals. According to workforce development data, the Dallas–Fort Worth metropolitan area employs more than 300,000 technology professionals, including network engineers, telecommunications specialists, and infrastructure architects.[21] This large talent pool supports continued innovation and technological development within the telecommunications and digital infrastructure sectors.

Another important factor supporting the selection of Dallas as the company's headquarters is Texas's business-friendly regulatory environment and strong economic growth. Texas consistently ranks among the top states for business expansion due to its competitive tax structure, strong infrastructure development, and large technology investment activity. The state's growing technology sector has attracted numerous technology companies and

[18] https://www.census.gov/newsroom/press-releases/2023/subcounty-metro-micro-estimates.html
[19] https://www.city-data.com/us-cities/The-South/Dallas-Economy.html
[20] https://www.credaily.com/briefs/data-centers-dallas-expansion-fuels-national-growth-leadership/
[21] https://www.dallasfed.org/research/indicators/dfw

telecommunications providers seeking to expand operations within a stable and innovation-oriented business environment.

From its Dallas headquarters, Dartagnan Telco Solutions will provide telecommunications engineering services to clients across the United States. Because many telecommunications engineering services can be delivered remotely, the company will be able to support telecommunications operators, enterprise organizations, and digital infrastructure providers nationwide while maintaining centralized operations in Texas.

The strategic location in Dallas will allow Dartagnan Telco Solutions to participate in a dynamic telecommunications ecosystem while supporting companies that depend on reliable communication infrastructures. The company's services will contribute to improving network performance, strengthening communication reliability, and supporting the modernization of telecommunications infrastructures that enable digital connectivity throughout the country.

Through its specialized engineering services, Dartagnan Telco Solutions will help organizations optimize communication networks, improve operational visibility, and enhance the resilience of telecommunications infrastructures that support business operations, digital services, and critical communication systems. These contributions will strengthen the telecommunications sector and support the continued expansion of the U.S. digital economy.

5.0 Strategy and Implementation

The Strategy and Implementation section will be critical to understanding how the company plans to position itself within its industry, attract customers, and grow.

Here are a few components of this section that Dartagnan Telco Solutions will incorporate:

1. **SWOT Analysis:** This will be an evaluation of the company's strengths, weaknesses, opportunities, and threats. It will help Dartagnan Telco Solutions identify its competitive advantages and areas for improvement, as well as potential risks and opportunities in the market.
2. **Website:** Dartagnan Telco Solutions' website will be a vital digital touchpoint, serving as a primary source of information for potential clients, partners, or investors. It will effectively communicate the company's values, services, and unique selling points.
3. **Digital Marketing:** This will include search engine optimization (SEO), email marketing, content marketing, and pay-per-click (PPC) advertising. A well-executed digital marketing strategy will help Dartagnan Telco Solutions attract, engage, and convert its target audience online.
4. **Social Media:** Platforms like LinkedIn, X, Facebook, and Instagram will allow the company to engage with its audience directly, share valuable content, and build brand awareness. The company's social media strategy will align with its overall marketing and branding strategy.

5. **Trade Shows:** Attending trade shows will provide opportunities for networking, brand exposure, and learning about industry trends. These events will be a great way for Dartagnan Telco Solutions to meet potential clients or partners in person.
6. **Referrals:** Word-of-mouth recommendations will remain a powerful way to attract new clients. By building strong relationships with its initial clients, Dartagnan Telco Solutions will aim to generate referrals. The company will also implement referral programs to encourage this.

In Sections 5.3 and 5.4, the company will detail its sales strategy and forecast. The sales strategy will cover how Dartagnan Telco Solutions plans to sell its services, including its approach to prospecting, closing deals, and retaining customers. The sales forecast, on the other hand, will provide a projection of future sales, based on market trends, growth strategies, and anticipated demand for its offerings.

5.1 Swot Analysis

A SWOT analysis is a strategic planning tool that helps businesses identify their internal strengths and weaknesses, as well as external opportunities and threats. By analyzing these factors, Dartagnan Telco Solutions can develop effective strategies to leverage its strengths and opportunities while mitigating risks and addressing weaknesses.

Strengths

- **Extensive Industry Experience:** Mr. Xavier brings more than 19 years of experience in telecommunications engineering, working with large-scale carrier-grade communication networks and advanced voice infrastructure systems.
- **Specialized Technical Expertise:** The company focuses on highly specialized areas such as VoIP architecture, SIP signaling, IMS platforms, and Session Border Controllers, which require advanced engineering knowledge and are in high demand across telecommunications networks.
- **Automation and Infrastructure Optimization Capabilities:** Dartagnan Telco Solutions will leverage automation technologies to streamline telecommunications infrastructure management and reduce operational inefficiencies.
- **Advanced Observability and Monitoring Expertise:** The company's focus on telecommunications observability platforms will allow clients to improve network monitoring capabilities and detect infrastructure issues before they impact service reliability.
- **Scalable Service Model:** Telecommunications engineering services can be delivered both remotely and on-site, allowing the company to serve clients across the United States without requiring extensive physical expansion.

- **Growing Demand for VoIP and Cloud Communications:** As organizations transition from legacy telephony systems to IP-based communication platforms, demand for specialized engineering services continues to increase.
- **Founder's International Telecommunications Experience:** Mr. Xavier's experience working with major telecommunications operators provides valuable insight into large-scale network operations and complex infrastructure environments.
- **Strategic Location in Dallas, Texas:** The Dallas–Fort Worth region is a major telecommunications and technology hub with access to a large technology workforce and numerous telecommunications infrastructure providers.

Weaknesses

- **Limited Initial Brand Recognition:** As a newly established company, Dartagnan Telco Solutions will initially face challenges in building brand awareness and establishing credibility within the telecommunications engineering market.
- **Dependence on Highly Specialized Talent:** Telecommunications engineering projects require highly skilled professionals, and recruiting experienced engineers may require competitive compensation.

Opportunities

- **Rapid Growth of VoIP and Unified Communications Markets:** Businesses increasingly rely on cloud communication platforms and VoIP technologies, creating strong demand for telecommunications infrastructure expertise.
- **Expansion of Cloud-Based Communication Services:** The growing adoption of cloud communication platforms requires advanced network architecture design and infrastructure optimization.
- **Increasing Network Complexity:** Telecommunications networks continue to evolve, creating demand for specialized engineering services capable of managing complex communication environments.
- **Telecommunications Infrastructure Modernization:** Many organizations are transitioning from legacy telephony systems to modern IP-based communication platforms.
- **Growth of Data Centers and Cloud Infrastructure:** The expansion of data center infrastructure across the United States increases demand for reliable telecommunications connectivity and network optimization services.
- **Automation in Telecommunications Infrastructure Management:** Telecommunications operators are increasingly adopting automation tools to improve operational efficiency and infrastructure management.
- **Increased Need for Telecommunications Observability Systems:** Organizations require real-time monitoring solutions to detect network performance issues and maintain service reliability.

- **Expansion of Digital Communication Technologies:** The growth of digital collaboration platforms, remote work technologies, and digital services continues to increase the importance of telecommunications infrastructure.

Threats

- **Competition from Established Telecommunications Engineering Firms:** Larger consulting and engineering firms already operate within the telecommunications sector and may compete for major infrastructure projects.
- **Rapid Technological Changes:** Telecommunications technologies evolve quickly, requiring continuous technical development and adaptation.

5.2 Website and Digital Marketing

Dartagnan Telco Solutions will prioritize the development of a robust online presence to establish credibility, reach its target audience, and support business growth. The company's website and digital marketing strategy will be integral components of its overall marketing plan, particularly as telecommunications engineering services are frequently sourced through digital channels by telecom operators, infrastructure providers, and enterprise technology teams.

Website

Dartagnan Telco Solutions' website will serve as the central hub for its digital presence. It will be designed to effectively communicate the company's technical capabilities, services, and industry expertise to telecommunications operators, enterprise organizations, and infrastructure providers across the United States.

Key Features of the Website:

1. **Professional Design:** The website will feature a modern and technically oriented layout that reflects the company's specialization in telecommunications infrastructure, network architecture, and advanced communication technologies.
2. **Service Offerings:** Detailed descriptions of the company's core services will be prominently presented, including Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions, Telecommunications Performance Engineering and Optimization, telecom observability and automation solutions, and telecommunications interconnection, compliance, and network security services.
3. **Technical Resources:** The website will include educational materials such as technical articles, whitepapers, architecture diagrams, and case studies related to VoIP systems, SIP interconnections, network reliability, and telecommunications automation. These resources will help position Dartagnan Telco Solutions as a knowledgeable contributor within the telecommunications engineering sector.

4. **Contact Options:** Multiple contact channels will be available, including an inquiry form, email contact, and direct communication options, allowing telecommunications operators and enterprise clients to request technical consultations and project discussions efficiently.
5. **Mobile Optimization:** The website will be fully optimized for mobile and tablet devices to ensure accessibility and usability across different platforms.
6. **Search Engine Optimization (SEO):** The website will be structured following SEO best practices to increase its visibility in search engines and attract organizations searching for telecommunications engineering expertise.

Digital Marketing

Dartagnan Telco Solutions will implement a targeted digital marketing strategy designed to engage telecommunications companies, technology organizations, and infrastructure providers. The company's digital marketing efforts will focus on building industry credibility, expanding brand visibility, and generating qualified leads.

Components of Digital Marketing:

1. **Search Engine Optimization (SEO):**

- The company will optimize its website content using industry-relevant keywords related to telecommunications network architecture, VoIP infrastructure, SIP interconnection, telecom automation, and network observability.
- SEO strategies will help attract telecommunications operators, cloud communication providers, and enterprise organizations searching for specialized telecommunications engineering expertise.

2. **Pay-Per-Click (PPC) Advertising:**

- Dartagnan Telco Solutions may invest in targeted advertising campaigns through platforms such as Google Ads and professional technology networks.
- Advertising campaigns will focus on technical keywords related to telecommunications engineering, VoIP network optimization, telecom observability systems, and SIP interconnection services.

3. **Email Marketing:**

- Email communication will be used to share technical insights, company updates, and relevant telecommunications industry developments with potential clients and professional contacts.
- Periodic newsletters may provide information about network optimization strategies, infrastructure monitoring solutions, and emerging telecommunications technologies.

4. **Content Marketing:**

- The company will regularly publish technical articles, case studies, and industry commentary addressing telecommunications infrastructure challenges and best practices.
- Content may include discussions on VoIP architecture optimization, SIP interoperability challenges, telecom network monitoring frameworks, and infrastructure automation strategies.

5. **Professional Networking and Social Media:**

- Platforms such as LinkedIn will be used to connect with telecommunications professionals, technology executives, and infrastructure operators.
- The company will share technical insights, project updates, and telecommunications industry developments to strengthen its professional visibility.

6. **Analytics and Reporting:**

- The company will track digital marketing performance using analytical tools to measure website traffic, engagement levels, and lead generation performance.
- These metrics will allow Dartagnan Telco Solutions to refine its marketing strategy and ensure effective outreach within the telecommunications sector.

By combining a technically informative website with a focused digital marketing strategy, Dartagnan Telco Solutions will establish a strong digital presence within the telecommunications engineering industry. These initiatives will support client acquisition, reinforce industry credibility, and contribute to the company's long-term growth.

5.3 Sales Strategy

A well-structured sales strategy will be essential for Dartagnan Telco Solutions to expand its client base and establish a strong presence in the telecommunications engineering sector. The company's sales approach will focus on attracting new clients while maintaining long-term relationships with telecommunications operators, technology providers, and enterprise organizations that rely on reliable communication infrastructure.

1. **Understanding the Customer:** Dartagnan Telco Solutions will conduct ongoing market research to better understand the operational challenges and infrastructure needs of telecommunications operators, cloud communication providers, and enterprise organizations. This understanding will allow the company to tailor its services to address issues such as network reliability, VoIP performance, infrastructure monitoring, and telecommunications interoperability.
2. **Unique Selling Proposition:** The company's value proposition will focus on its highly specialized expertise in telecommunications network architecture, VoIP infrastructure, SIP signaling environments, telecom observability platforms, and infrastructure automation. This

combination of expertise allows Dartagnan Telco Solutions to deliver solutions that improve network reliability, optimize communication performance, and strengthen telecommunications infrastructure resilience.

3. **Relationship Building:** Developing strong professional relationships with clients will be a key component of the company's sales strategy. By providing consistent technical support, clear communication, and reliable project execution, Dartagnan Telco Solutions will build long-term partnerships with telecommunications operators and enterprise clients.
4. **Leveraging Professional Referrals:** Satisfied clients and professional contacts may provide valuable referrals to other telecommunications organizations requiring specialized engineering expertise. Referrals will serve as an important channel for expanding the company's client base.
5. **Digital Engagement:** Digital channels, including the company's website, professional networking platforms, and technical publications, will be used to showcase the company's capabilities and connect with potential clients within the telecommunications industry.
6. **Technical Sales Support:** Sales activities will be supported by technical telecommunications engineers capable of explaining complex network architecture solutions and infrastructure optimization strategies to prospective clients.
7. **Performance Metrics:** The company will monitor sales performance using key metrics such as client acquisition rates, project conversion rates, and customer retention levels. These indicators will help refine the sales strategy and support sustainable business growth.

Through the implementation of this structured sales strategy, Dartagnan Telco Solutions will strengthen its market presence, expand its client network, and position itself as a trusted provider of telecommunications engineering solutions across the United States.

5.4 Sales Forecast

Dartagnan Telco Solutions will introduce a portfolio of specialized telecommunications engineering services designed to support telecommunications operators, enterprise organizations, and digital infrastructure providers across the United States. The company's sales forecast reflects a gradual market entry followed by steady expansion over a five-year period as demand increases for advanced telecommunications infrastructure design, network optimization, and automation solutions.

As telecommunications networks continue to evolve and organizations transition toward cloud-based communications and IP-based infrastructure, Dartagnan Telco Solutions expects increasing demand for its services. The company's projected sales growth reflects both the expansion of the telecommunications industry and the increasing need for specialized engineering expertise in areas such as VoIP architecture, SIP interconnection, network observability, and telecommunications infrastructure optimization.

Sales Forecast Details:

• **Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions:** This service is projected to begin with 12 projects in Year 1 and gradually increase to 57 projects by Year 5. The unit price is expected to rise from $18,000 in Year 1 to $21,879.11 in Year 5 as the company gains market presence and expands its client base. Total sales for this service are projected to grow from $216,000 in Year 1 to $1,252,675 by Year 5.

• **Telecommunications Performance Engineering and Optimization:** This service is expected to start with 11 projects in Year 1 and increase to 52 projects by Year 5. Unit pricing is projected to increase from $15,000 in Year 1 to $18,232.59 by Year 5. Total revenue from this service is expected to grow from $165,000 in Year 1 to $956,905 in Year 5 as more organizations seek network performance improvements and infrastructure optimization.

• **AI-Enabled Telecom Observability, AIOps, and Automation Solutions:** The company anticipates providing 8 projects in Year 1, increasing to 37 projects by Year 5. Unit prices are projected to increase from $12,000 in Year 1 to $14,586.08 in Year 5. As telecommunications operators adopt more advanced monitoring and automation platforms, total sales for this service are expected to grow from $96,000 in Year 1 to $543,383 by Year 5.

• **Telecommunications Interconnection, Compliance, Security, and NextG Readiness:** This service is forecasted to begin with 7 projects in Year 1 and expand to 33 projects by Year 5. Unit pricing is expected to increase from $8,000 in Year 1 to $9,724.05 by Year 5. Total sales for this service are projected to rise from $56,000 in Year 1 to $316,973 by Year 5.

Overall, Dartagnan Telco Solutions' total projected sales are expected to grow significantly, increasing from **$533,000 in Year 1 to $3,069,936 by Year 5**, reflecting the company's expanding client base and increasing demand for specialized telecommunications engineering services.

Direct Costs Forecast:

• **Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions:** Direct costs associated with delivering this service are projected to start at $17,280 in Year 1 and increase to $100,214 by Year 5 as project volume grows.

• **Telecommunications Performance Engineering and Optimization:** Direct costs are expected to begin at $13,200 in Year 1 and grow to $76,552 by Year 5 as the company expands its operational capacity.

• **AI-Enabled Telecom Observability, AIOps, and Automation Solutions:** Direct costs for this service are projected to increase from $7,680 in Year 1 to $43,471 by Year 5 as adoption of monitoring and automation solutions expands.

• **Telecommunications Interconnection, Compliance, Security, and NextG Readiness:** Direct costs are expected to begin at $4,480 in Year 1 and increase to $25,358 by Year 5 as the number of projects grows.

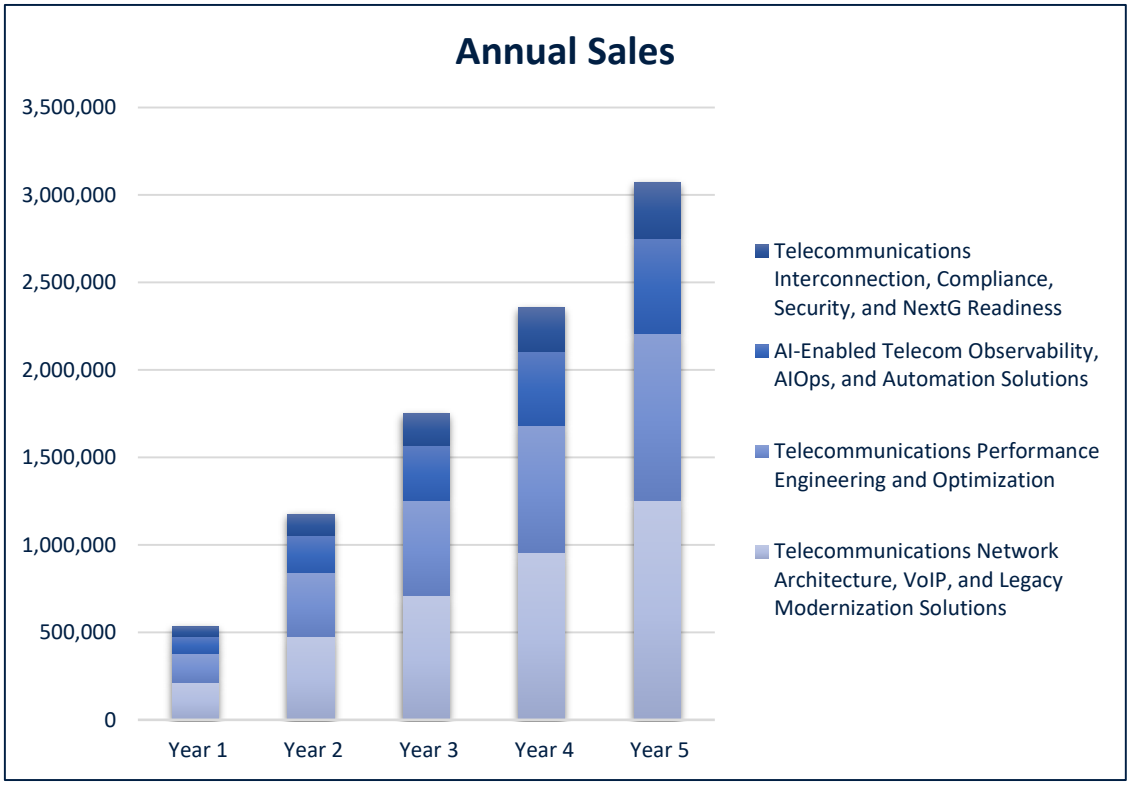
In total, the company's **direct costs of sales** are projected to increase from **$42,640 in Year 1 to $245,595 by Year 5**, reflecting the scaling of service delivery and operational growth.

This sales forecast demonstrates the strong market potential for Dartagnan Telco Solutions and highlights the company's capacity to scale its telecommunications engineering services in response to increasing industry demand. The projected growth trajectory illustrates the financial viability of the company while supporting its broader objective of improving telecommunications infrastructure reliability, performance, and operational visibility across the United States.

5.4.1 Annual Sales Forecast Table and Chart

Sales Forecast					
	Year 1	Year 2	Year 3	Year 4	Year 5
Unit Sales					
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions	12	25	36	46	57
Telecommunications Performance Engineering and Optimization	11	23	33	42	52
AI-Enabled Telecom Observability, AIOps, and Automation Solutions	8	17	24	31	37
Telecommunications Interconnection, Compliance, Security, and NextG Readiness	7	15	21	27	33
Total Unit Sales	38	80	113	145	180
Unit Prices	Year 1	Year 2	Year 3	Year 4	Year 5
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions	$18,000.00	$18,900.00	$19,845.00	$20,837.25	$21,879.11
Telecommunications Performance Engineering and Optimization	$15,000.00	$15,750.00	$16,537.50	$17,364.38	$18,232.59
AI-Enabled Telecom Observability, AIOps, and Automation Solutions	$12,000.00	$12,600.00	$13,230.00	$13,891.50	$14,586.08
Telecommunications Interconnection, Compliance, Security, and NextG Readiness	$8,000.00	$8,400.00	$8,820.00	$9,261.00	$9,724.05
Sales					
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions	$216,000	$476,280	$710,133	$954,419	$1,252,675
Telecommunications Performance Engineering and Optimization	$165,000	$363,825	$542,463	$729,070	$956,905
AI-Enabled Telecom Observability, AIOps, and Automation Solutions	$96,000	$211,680	$315,615	$424,186	$543,383
Telecommunications Interconnection, Compliance, Security, and NextG Readiness	$56,000	$123,480	$184,109	$247,442	$316,973

Total Sales	$533,000	$1,175,265	$1,752,320	$2,355,118	$3,069,936
Direct Unit Costs	Year 1	Year 2	Year 3	Year 4	Year 5
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions	$1,440.00	$1,512.00	$1,587.60	$1,666.98	$1,750.33
Telecommunications Performance Engineering and Optimization	$1,200.00	$1,260.00	$1,323.00	$1,389.15	$1,458.61
AI-Enabled Telecom Observability, AIOps, and Automation Solutions	$960.00	$1,008.00	$1,058.40	$1,111.32	$1,166.89
Telecommunications Interconnection, Compliance, Security, and NextG Readiness	$640.00	$672.00	$705.60	$740.88	$777.92
Direct Cost of Sales					
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions	$17,280	$38,102	$56,811	$76,354	$100,214
Telecommunications Performance Engineering and Optimization	$13,200	$29,106	$43,397	$58,326	$76,552
AI-Enabled Telecom Observability, AIOps, and Automation Solutions	$7,680	$16,934	$25,249	$33,935	$43,471
Telecommunications Interconnection, Compliance, Security, and NextG Readiness	$4,480	$9,878	$14,729	$19,795	$25,358
Subtotal Direct Cost of Sales	**$42,640**	**$94,021**	**$140,186**	**$188,409**	**$245,595**



6.0 Management Structure

As previously mentioned, Mr. Gustavo Dartagnan Xavier do Rego will be the Founder and Chief Telecommunications Architect of Dartagnan Telco Solutions. The Personnel Plan shows that the company expects to make gradual investments in personnel in the first years of operation, and by the year 5, the company will have 21 employees, including Mr. Gustavo Dartagnan Xavier do Rego.

6.1 Staffing Requirements

Dartagnan Telco Solutions has developed a structured personnel plan designed to support its operations and expansion within the telecommunications engineering and infrastructure optimization sector. This staffing strategy outlines the company's projected workforce structure, headcount growth, and salary framework over a five-year period, ensuring that human resources remain aligned with increasing service demand, operational capacity, and sustainable financial growth.

In Year 1, Dartagnan Telco Solutions will begin operations with an initial team of five professionals, including **Mr. Gustavo Dartagnan Xavier do Rego serving as Founder and Chief Telecommunications Architect**, with a salary reference of $100,000. As the company's founder and lead technical authority, Mr. Xavier will oversee telecommunications architecture design, project strategy, technical implementation, and client engagement. Hiring during the first year will occur progressively as service demand develops, supporting the company's gradual operational ramp-up and client acquisition. Consequently, certain salaries during the first year reflect partial-year employment for positions introduced later in the year.

Beginning in Year 2, all positions will be staffed on a full-year basis, and the company will expand its workforce in a structured and scalable manner. The personnel plan anticipates steady growth as Dartagnan Telco Solutions increases its capacity to deliver telecommunications engineering services to clients across the United States. By Year 5, the company is projected to employ **21 professionals** across engineering, project management, sales, and administrative functions.

Key roles and their progression in staffing and compensation include:

• **Founder and Chief Telecommunications Architect – Mr. Gustavo Dartagnan Xavier do Rego:** Mr. Xavier will lead the company's strategic and technical operations throughout the five-year period. His salary is projected to increase from $100,000 in Year 1 to $174,901 by Year 5, reflecting the company's growth and expanding leadership responsibilities.

• **Telecommunications Engineers:** The company will initially employ one Telecommunications Engineer in Year 1 with a salary of $95,200. As service demand grows, the number of engineers will expand to two positions in Year 3 and three positions by Year 5, supporting the design and implementation of telecommunications infrastructure solutions. Total compensation for this role will increase to $341,314 by Year 5.

• **Telecommunications Network Optimization Engineers:** One Network Optimization Engineer will be hired in Year 1 with a salary of $61,250. This team will expand to two professionals by Year 3 and three by Year 5 as the company increases its capacity to support network performance optimization and infrastructure efficiency initiatives. Total compensation for this role will reach $382,884 by Year 5.

• **Telecommunications Project Managers:** A Telecommunications Project Manager will be introduced in Year 2 with an annual salary of $75,600. As project activity expands, this role will grow to two positions by Year 3 and three positions by Year 5, supporting project coordination, client engagement, and infrastructure implementation. Total compensation for this role will reach $262,549 by Year 5.

• **Client Support Specialists:** Client Support Specialists will be introduced in Year 2 with one professional earning $85,680 annually. As the client base expands, the team will grow to two specialists by Year 4 and Year 5 to support customer operations and technical service coordination. Total compensation for this role will reach $198,371 by Year 5.

• **Telecom Automation and Observability Engineers:** One Telecom Automation and Observability Engineer will be hired in Year 1 with a salary of $30,000 during the partial first year. This role will focus on network monitoring platforms, automation tools, and telecommunications observability solutions. The team will expand to two professionals by Year 4 and Year 5, with total compensation reaching $218,791 by Year 5.

• **Sales Telecommunications Engineers:** A Sales Telecommunications Engineer will be introduced in Year 2 with a salary of $88,200. This role will support technical sales activities by assisting clients in identifying appropriate telecommunications architecture and optimization solutions. The team will expand to two professionals by Year 4 and Year 5, with total compensation reaching $204,205 by Year 5.

• **Sales Representatives:** One Sales Representative will be hired in Year 1 with a salary of $72,000 to support client acquisition and market outreach. This role will expand to two positions by Year 4 and Year 5, with total compensation reaching $175,033 by Year 5.

• **Administrative Manager:** An Administrative Manager will be introduced in Year 2 with a salary of $63,000, overseeing internal administrative operations, financial coordination, and organizational management. Compensation for this role will increase to $72,930 by Year 5.

• **Customer Service Representatives:** Customer Service Representatives will be introduced in Year 3 with one professional earning $46,305. As the company's client base expands, this team will grow to two representatives by Year 5 to ensure consistent client communication and service coordination. Total compensation for this role will reach $102,103 by Year 5.

Overall, the company's workforce will expand from **5 employees in Year 1 to 21 employees by Year 5**, reflecting Dartagnan Telco Solutions' planned operational growth and increasing demand for telecommunications engineering services. Total payroll is projected to grow from

$358,450 in Year 1 to $2,133,081 by Year 5, consistent with the company's phased hiring strategy and expanding service capacity.

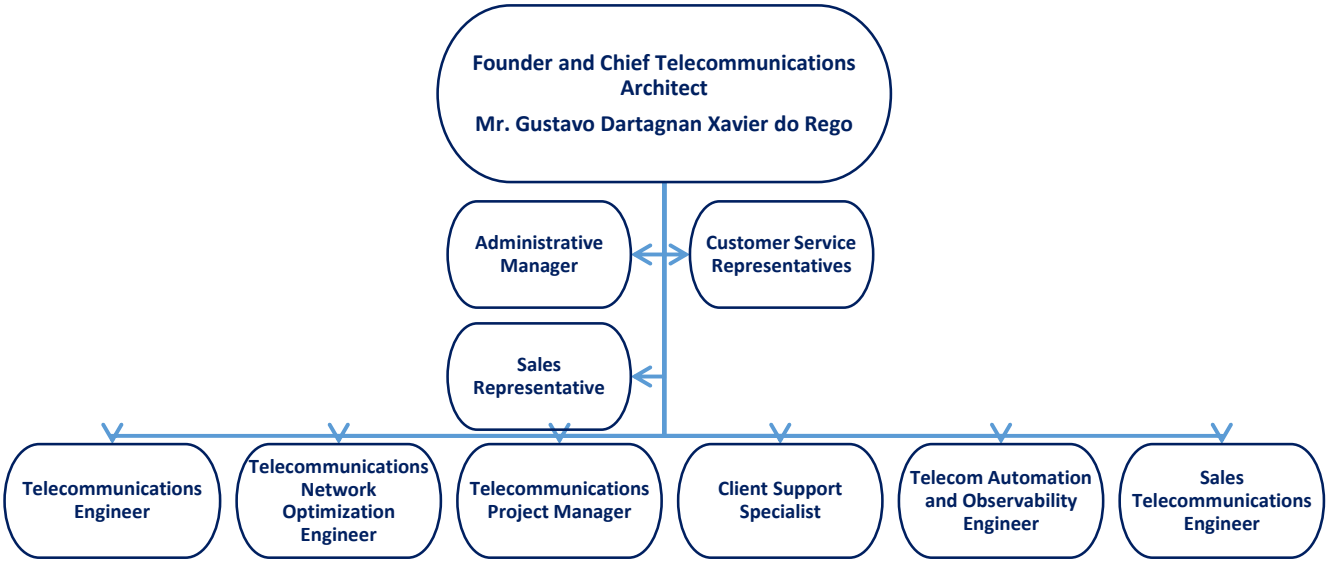
6.2 Annual Personnel Plan Table

Personnel Plan					
	Year 1	Year 2	Year 3	Year 4	Year 5
Founder and Chief Telecommunications Architect	$100,000	$115,000	$132,250	$152,087	$174,901
Telecommunications Engineer	$95,200	$98,280	$206,388	$216,707	$341,314
Telecommunications Network Optimization Engineer	$61,250	$110,250	$231,525	$243,101	$382,884
Telecommunications Project Manager	$0	$75,600	$158,760	$166,698	$262,549
Client Support Specialist	$0	$85,680	$89,964	$188,924	$198,371
Telecom Automation and Observability Engineer	$30,000	$94,500	$99,225	$208,373	$218,791
Sales Telecommunications Engineer	$0	$88,200	$92,610	$194,481	$204,205
Sales Representative	$72,000	$75,600	$79,380	$166,698	$175,033
Administrative Manager	$0	$63,000	$66,150	$69,458	$72,930
Customer Service Representatives	$0	$0	$46,305	$48,620	$102,103
Total People	5	9	13	17	21
Total Payroll	**$358,450**	**$806,110**	**$1,202,557**	**$1,655,148**	**$2,133,081**

6.3 Five-Year Personnel Plan Table

Personnel Plan					
	Year 1	Year 2	Year 3	Year 4	Year 5
Founder and Chief Telecommunications Architect	1	1	1	1	1
Telecommunications Engineer	1	1	2	2	3
Telecommunications Network Optimization Engineer	1	1	2	2	3
Telecommunications Project Manager	0	1	2	2	3
Client Support Specialist	0	1	1	2	2
Telecom Automation and Observability Engineer	1	1	1	2	2
Sales Telecommunications Engineer	0	1	1	2	2
Sales Representative	1	1	1	2	2
Administrative Manager	0	1	1	1	1
Customer Service Representatives	0	0	1	1	2
Total People	**5**	**9**	**13**	**17**	**21**

6.4 Organizational Chart – Year 5



6.5 Duties and Responsibilities

Founder and Chief Telecommunications Architect – Mr. Gustavo Dartagnan Xavier do Rego

- Lead the strategic direction and technical vision of Dartagnan Telco Solutions, overseeing all telecommunications architecture and engineering initiatives.
- Design advanced telecommunications network architectures, including VoIP, SIP signaling systems, IMS environments, and carrier-grade communication infrastructures.
- Oversee the development and implementation of network optimization strategies to improve service reliability, scalability, and performance.
- Lead the integration of observability, monitoring, and automation solutions to enhance telecommunications infrastructure visibility and operational efficiency.
- Provide high-level technical consulting to telecommunications operators and enterprise clients on network design, modernization, and interoperability challenges.
- Supervise engineering teams and guide the development of telecommunications infrastructure projects from planning through deployment.
- Ensure compliance with telecommunications industry standards, regulatory requirements, and best practices for network security and communications reliability.

- Support business development efforts by engaging with clients, identifying project opportunities, and establishing strategic partnerships within the telecommunications industry.

Telecommunications Engineer

- Design and implement telecommunications network infrastructure, including VoIP systems, SIP signaling environments, and enterprise communication platforms.
- Configure and maintain telecommunications equipment such as session border controllers, routers, and communication servers.
- Support the deployment and integration of telecommunications technologies within client environments.
- Perform technical analysis and troubleshooting to resolve network performance issues.

Telecommunications Network Optimization Engineer

- Analyze telecommunications network performance and identify opportunities for efficiency improvements.
- Implement network optimization strategies to enhance system reliability and call quality.
- Conduct performance testing and capacity planning for telecommunications infrastructures.
- Develop technical reports and recommendations to support network performance improvements.

Telecommunications Project Manager

- Coordinate telecommunications engineering projects from planning through implementation.
- Manage project timelines, resources, and technical deliverables to ensure successful completion.
- Communicate with clients to define project requirements and provide progress updates.
- Ensure projects meet operational, regulatory, and technical quality standards.

Client Support Specialist

- Provide operational support to clients using telecommunications infrastructure solutions.
- Assist with troubleshooting and resolving service issues related to network performance and communications systems.
- Coordinate with engineering teams to ensure efficient resolution of client technical requests.
- Maintain documentation and service records for client support activities.

Telecom Automation and Observability Engineer

- Develop automation tools to streamline telecommunications infrastructure monitoring and maintenance.
- Implement observability platforms that provide real-time monitoring of telecommunications network performance.
- Configure alerting systems and dashboards to detect potential infrastructure issues.
- Support the integration of automation technologies to improve operational efficiency.

Sales Telecommunications Engineer

- Support the sales team by providing technical expertise during client engagements and project discussions.
- Analyze client telecommunications infrastructure needs and recommend appropriate engineering solutions.
- Assist in preparing technical proposals and solution architectures for prospective clients.
- Collaborate with engineering teams to ensure proposed solutions align with project capabilities.

Sales Representative

- Identify potential clients and develop relationships with telecommunications operators and enterprise organizations.
- Promote the company's telecommunications engineering services to prospective clients.
- Prepare sales proposals and coordinate service agreements with clients.
- Maintain client relationships and support long-term business development initiatives.

Administrative Manager

- Oversee administrative operations and coordinate internal business processes.
- Manage company documentation, financial records, and operational reporting.
- Support human resources activities including hiring coordination and staff administration.
- Assist company leadership in organizational planning and operational management.

Customer Service Representatives

- Respond to client inquiries regarding services, project updates, and support requests.
- Coordinate communication between clients and internal technical teams.
- Maintain records of customer interactions and service requests.
- Support client satisfaction initiatives and ensure timely resolution of service issues.

7.0 Financial Summary

The financial plan for Dartagnan Telco Solutions is a critical analysis of the company's financial projections, including revenue, expenses, and overall financial performance. It offers a

comprehensive overview of the expected financial trajectory over a specific period of time and determines the company's financial feasibility. The plan encompasses essential aspects such as startup funding, profit and loss, cash flow, and balance sheet. The financial plan plays a crucial role in determining the company's success and helps in making informed decisions to ensure that the company achieves its financial objectives.

7.1 Break-even Analysis

The Break-even Analysis is an indispensable financial metric for Dartagnan Telco Solutions, offering crucial insights into when the company's total revenues will match its total costs. For Dartagnan Telco Solutions, this pivotal financial equilibrium is attained when monthly sales hit 3 units, leading to a break-even revenue of $39,755. This calculation rests on a set of fundamental assumptions:

1. **Average Revenue Per Unit**: The revenue expected from each unit sold is projected to average $14,026.32.
2. **Average Variable Cost Per Unit**: The average variable cost associated with each unit is estimated to be $1,122.11.
3. **Monthly Fixed Costs**: The company anticipates incurring consistent monthly fixed costs amounting to $36,575, which remain constant regardless of the number of units sold.

Grasping the break-even point is critical for guiding the strategic direction of Dartagnan Telco Solutions. It acts as a crucial benchmark for establishing attainable sales goals, judiciously managing expenditures, and steering the company toward financial health and profitability. Reaching this break-even point signifies a noteworthy achievement for the company, marking the transition from experiencing losses to starting to generate profits.

7.1.1 Break-even Analysis Table

Break-even Analysis	
Monthly Units Break-even	3
Monthly Revenue Break-even	$39,755
Assumptions:	
Average Per-Unit Revenue	$14,026.32
Average Per-Unit Variable Cost	$1,122.11
Estimated Monthly Fixed Cost	**$36,575**

7.2 Profit and Loss Assumptions

Dartagnan Telco Solutions has meticulously crafted a financial strategy to solidify its foothold in the telecommunications and network engineering sectors. The company is dedicated to investing in a highly skilled team, essential for delivering its specialized services, and anticipates an increase in direct sales costs in line with revenue growth. To expand its market presence,

Dartagnan Telco Solutions is executing an aggressive marketing strategy, leveraging digital advertising, social media engagement, and industry event participation to grow its client base and enhance its market standing.

The financial projections for Dartagnan Telco Solutions are optimistic, with sales expected to commence at $533,000 in Year 1, escalating to $3,069,936 by Year 5. Direct sales costs are projected to start at $42,640, incrementally rising to $245,595 over the five-year span. The gross margin is forecasted to consistently hold at 92%, increasing from $490,360 in the initial year to $2,824,341 by the fifth year.

Operating expenses are anticipated to grow from $438,895 in the first year to $2,456,237 by Year 5, reflecting the company's deliberate efforts towards strategic growth and expansion. Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) are set to rise from $51,465 in Year 1 to $375,605 by Year 5, indicating effective financial and operational management.

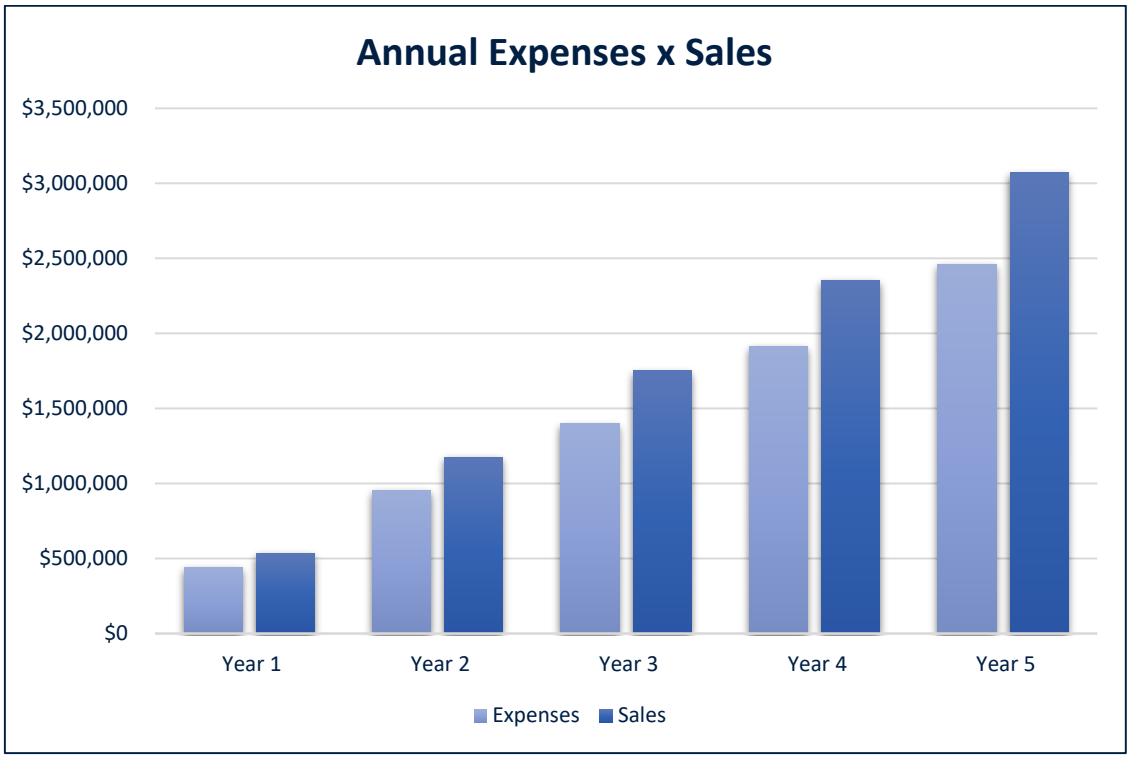
Net profit is also expected to demonstrate a positive trajectory, starting at $37,569 in the first year and increasing to $268,716 by Year 5. This results in a net profit margin that begins at 7.05% in Year 1 and adjusts to 8.75% by Year 5. The comprehensive financial outlook, including detailed sales and payroll figures, is elaborated in the appendix, offering a full perspective on Dartagnan Telco Solutions' financial path in its formative years.

7.2.1 Annual Profit and Loss Table and Charts

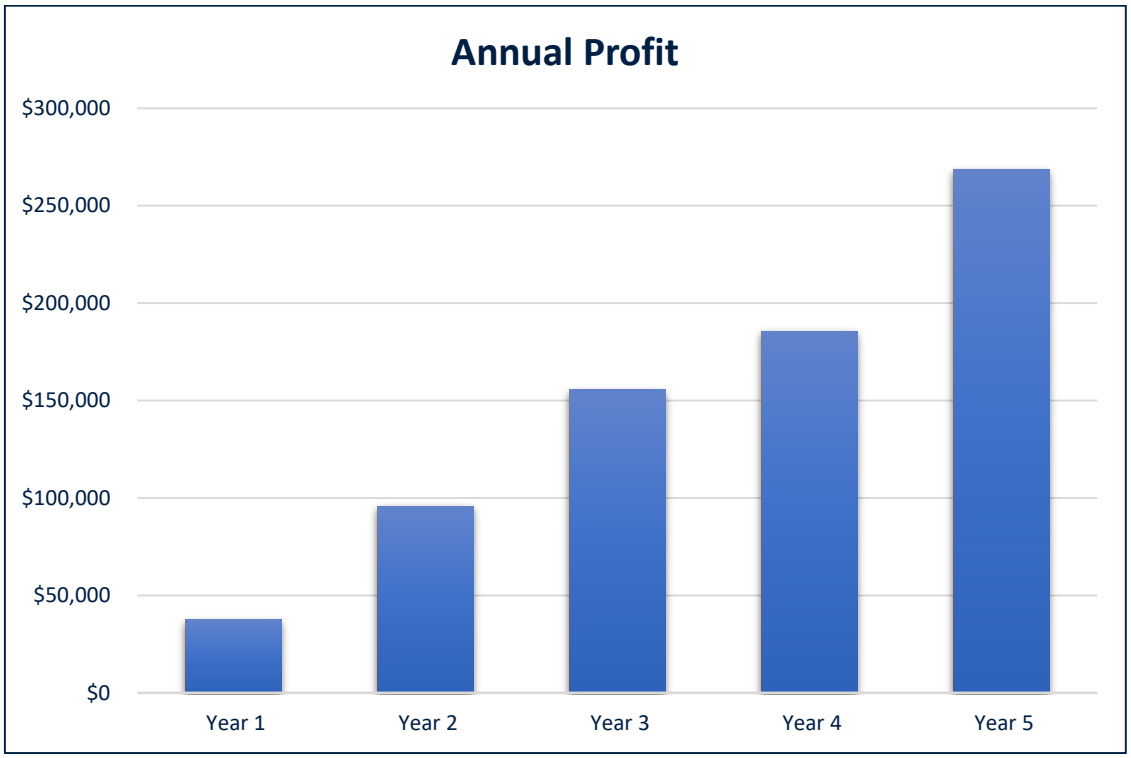
Pro Forma Profit and Loss					
	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	$533,000	$1,175,265	$1,752,320	$2,355,118	$3,069,936
Direct Cost of Sales	$42,640	$94,021	$140,186	$188,409	$245,595
Other Costs of Sales	$0	$0	$0	$0	$0
Total Cost of Sales	$42,640	$94,021	$140,186	$188,409	$245,595
Gross Margin	$490,360	$1,081,244	$1,612,135	$2,166,709	$2,824,341
Gross Margin %	92.00%	92.00%	92.00%	92.00%	92.00%
Expenses					
Payroll	$358,450	$806,110	$1,202,557	$1,655,148	$2,133,081
Payroll Taxes	$35,845	$80,611	$120,256	$165,515	$213,308
Depreciation	$0	$3,000	$4,500	$6,000	$7,500
Rent	$18,000	$21,600	$25,920	$31,104	$37,325
Insurance	$2,400	$2,880	$3,456	$4,147	$4,977
Marketing/Promotion	$6,000	$7,200	$8,640	$10,368	$12,442
Utilities/Internet/Phone	$1,800	$2,160	$2,592	$3,110	$3,732
Employees Education	$0	$8,000	$9,600	$11,520	$13,824
Equipment	$14,000	$16,000	$19,200	$23,040	$27,648
Accountant	$2,400	$2,400	$2,400	$2,400	$2,400
Total Operating Expenses	$438,895	$949,961	$1,399,121	$1,912,352	$2,456,237

Profit Before Interest and Taxes	$51,465	$131,283	$213,014	$254,357	$368,105
EBITDA	$51,465	$134,283	$217,514	$260,357	$375,605
Interest Expense	$0	$0	$0	$0	$0
Taxes Incurred	$13,896	$35,446	$57,514	$68,676	$99,388
Net Profit	$37,569	$95,836	$155,500	$185,680	$268,716
Net Profit/Sales	7.05%	8.15%	8.87%	7.88%	8.75%

7.2.2 Annual Expenses x Sales Chart



7.2.3 Annual Profit Chart



7.3 Cash Flow Assumptions

Dartagnan Telco Solutions' Pro Forma Cash Flow statement for the upcoming five years illustrates a robust financial path characterized by escalating cash inflows from operations and judiciously managed expenditures, culminating in consistent net cash flow growth.

In the initial year, the company anticipates a cash inflow from operations totaling $533,000, derived equally from cash sales and receivables. This pattern is expected to persist, with cash inflows forecasted to increase to $3,069,936 by the fifth year. Throughout this period, the company does not foresee any additional cash inflows from non-operational activities.

Expenditures are primarily composed of cash spending on operations and bill payments. Cash spending is projected to ascend from $358,450 in Year 1 to $2,133,081 by Year 5. Concurrently, bill payments are also expected to increase, from $115,591 in Year 1 to $648,117 in Year 5, leading to a total operational expenditure that is expected to surge from $474,041 in the first year to $2,781,198 by the fifth year.

The sole anticipated non-operational expenditure is dividend payments, commencing at $20,000 in Year 2 and escalating to $75,000 by Year 5. Consequently, total cash expenditures are projected to grow from $474,041 in Year 1 to $2,856,198 by Year 5.

The net cash flow, indicative of the differential between cash received and cash expended, is projected to consistently remain in positive territory throughout the five-year span. It is

expected to commence at $58,959 in Year 1, increasing to $213,738 by Year 5. Reflecting this upward trend, the cash balance is anticipated to grow from $118,959 at the start to $698,602 by the end of Year 5.

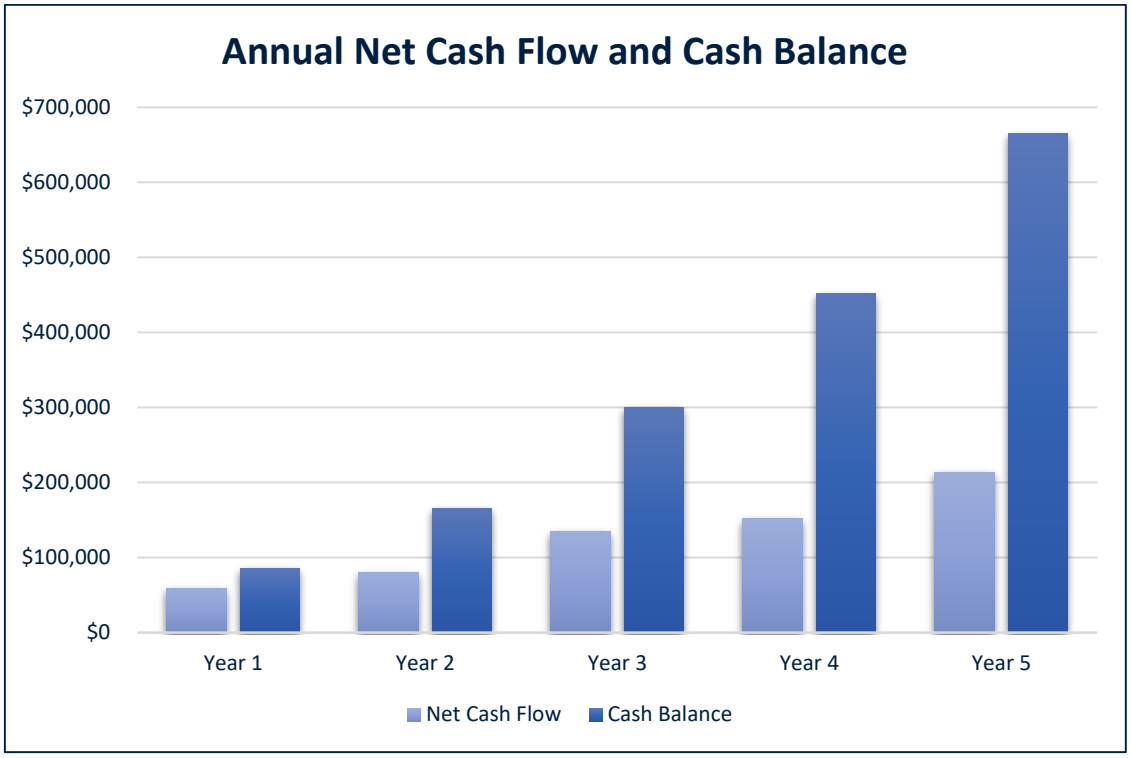
For a detailed exploration of the first-year sales and operational expenses, the appendices offer an exhaustive breakdown of the company's expected cash flow, elucidating revenue sources and cost allocations.

7.3.1 Annual Cash Flow Table and Chart

Pro Forma Cash Flow					
	Year 1	Year 2	Year 3	Year 4	Year 5
Cash Received					
Cash from Operations					
Cash Sales	$266,500	$587,633	$876,160	$1,177,559	$1,534,968
Cash from Receivables	$266,500	$587,633	$876,160	$1,177,559	$1,534,968
Subtotal Cash from Operations	$533,000	$1,175,265	$1,752,320	$2,355,118	$3,069,936
Additional Cash Received					
Non-Operating (Other) Income	$0	$0	$0	$0	$0
Sales Tax, VAT, HST/GST Received	$0	$0	$0	$0	$0
New Current Borrowing	$0	$0	$0	$0	$0
New Other Liabilities (interest-free)	$0	$0	$0	$0	$0
New Long-term Liabilities	$0	$0	$0	$0	$0
Sales of Other Current Assets	$0	$0	$0	$0	$0
Sales of Long-term Assets	$0	$0	$0	$0	$0
New Investment Received	$0	$0	$0	$0	$0
Subtotal Cash Received	$533,000	$1,175,265	$1,752,320	$2,355,118	$3,069,936
Expenditures	Year 1	Year 2	Year 3	Year 4	Year 5
Expenditures from Operations					
Cash Spending	$358,450	$806,110	$1,202,557	$1,655,148	$2,133,081
Bill Payments	$115,591	$269,490	$379,946	$498,548	$648,117
Subtotal Spent on Operations	$474,041	$1,075,600	$1,582,503	$2,153,696	$2,781,198
Additional Cash Spent					
Non-Operating (Other) Expense	$0	$0	$0	$0	$0
Sales Tax, VAT, HST/GST Paid Out	$0	$0	$0	$0	$0
Principal Repayment of Current Borrowing	$0	$0	$0	$0	$0
Other Liabilities Principal Repayment	$0	$0	$0	$0	$0
Long-term Liabilities Principal Repayment	$0	$0	$0	$0	$0
Purchase Other Current Assets	$0	$0	$0	$0	$0

Purchase Long-term Assets	$0	$0	$0	$0	$0
Dividends	$0	$20,000	$35,000	$50,000	$75,000
Subtotal Cash Spent	$474,041	$1,095,600	$1,617,503	$2,203,696	$2,856,198
Net Cash Flow	$58,959	$79,665	$134,817	$151,422	$213,738
Cash Balance	$118,959	$198,624	$333,441	$484,864	$698,602

7.3.2 Annual Net Cash Flow and Cash Balance Chart



7.4 Balance Sheet Assumptions

Dartagnan Telco Solutions' Pro Forma Balance Sheet for the forthcoming five years reveals a strong financial framework, marked by consistent asset growth and a robust capital base, highlighting the company's financial health and stability.

In the initial year, Dartagnan Telco Solutions' total current assets are valued at $118,959, entirely in cash, with this figure growing steadily to $698,602 by Year 5. The company strategically maintains accounts receivable and inventory at $0 throughout the period, with no additional current assets reported.

Long-term assets are initially reported at $0, with the company recognizing accumulated depreciation, which begins at $0 and rises to $21,000 by the fifth year. This leads to total long-term assets adjusting to a negative value of $21,000 by Year 5. Despite this, total assets follow an upward trajectory, starting at $118,959 in Year 1 and increasing to $698,602 by Year 5.

On the liabilities front, Dartagnan Telco Solutions starts with current liabilities of $21,390 in Year 1, primarily from accounts payable, which escalates to $54,299 by Year 5. The company does not engage in any current or long-term borrowing or accrue other liabilities during this timeframe.

Paid-in capital is consistently reported at $100,000 across the five years. Retained earnings, which initially show a deficit of $40,000, significantly improve to a positive $254,586 by Year 5, reflecting the company's ability to retain profits. Earnings exhibit a positive trajectory, beginning at $37,569 in Year 1 and surging to $268,716 by Year 5. As a result, the total capital, representing the company's net worth, grows from $97,569 in Year 1 to $623,303 by Year 5.

This progression in net worth signifies Dartagnan Telco Solutions' steadily enhancing financial position, as the company continues to expand its asset base and fortify its capital structure over the projected five-year period.

7.4.1 Annual Balance Sheet Table

Pro Forma Balance Sheet					
	Year 1	Year 2	Year 3	Year 4	Year 5
Assets					
Current Assets					
Cash	$118,959	$198,624	$333,441	$484,864	$698,602
Accounts Receivable	$0	$0	$0	$0	$0
Inventory	$0	$0	$0	$0	$0
Other Current Assets	$0	$0	$0	$0	$0
Total Current Assets	$118,959	$198,624	$333,441	$484,864	$698,602
Long-term Assets					
Long-term Assets	$0	$0	$0	$0	$0
Accumulated Depreciation	$0	$3,000	$7,500	$13,500	$21,000
Total Long-term Assets	$0	($3,000)	($7,500)	($13,500)	($21,000)
Total Assets	$118,959	$195,624	$325,941	$471,364	$677,602
Liabilities and Capital	Year 1	Year 2	Year 3	Year 4	Year 5
Current Liabilities					
Accounts Payable	$21,390	$22,218	$32,035	$41,777	$54,299
Current Borrowing	$0	$0	$0	$0	$0
Other Current Liabilities	$0	$0	$0	$0	$0
Subtotal Current Liabilities	$21,390	$22,218	$32,035	$41,777	$54,299
Long-term Liabilities	$0	$0	$0	$0	$0
Total Liabilities	$21,390	$22,218	$32,035	$41,777	$54,299
Paid-in Capital	$100,000	$100,000	$100,000	$100,000	$100,000
Retained Earnings	($40,000)	($22,431)	$38,406	$143,906	$254,586
Earnings	$37,569	$95,836	$155,500	$185,680	$268,716
Total Capital	$97,569	$173,406	$293,906	$429,586	$623,303
Total Liabilities and Capital	$118,959	$195,624	$325,941	$471,364	$677,602

Net Worth	$97,569	$173,406	$293,906	$429,586	$623,303

8.0 Mr. Gustavo Dartagnan Xavier do Rego's National-level Impact

Through the establishment of Dartagnan Telco Solutions, Mr. Gustavo Dartagnan Xavier do Rego will contribute to strengthening the resilience, intelligence, and future-readiness of telecommunications infrastructure in the United States, a critical component of the nation's economic stability, public safety systems, and digital transformation.

Telecommunications networks support essential sectors such as healthcare, emergency services, financial systems, transportation, and digital commerce. As these systems become more complex and data-intensive, the need for advanced engineering, intelligent operations, and infrastructure modernization has become increasingly critical at a national level.

Strengthening Telecommunications Infrastructure in the United States

Reliable telecommunications infrastructure is essential to ensure uninterrupted connectivity across critical sectors.[22] Network disruptions can impact emergency services, business operations, and essential communications.

Dartagnan Telco Solutions will contribute to strengthening infrastructure resilience by designing and optimizing high-performance, scalable, and fault-tolerant communication systems. Through advanced architecture design, performance engineering, and automation, the company will help organizations reduce service disruptions, improve system stability, and maintain continuous communication across complex network environments.

Advancing AI-Enabled Telecom Operations (AIOps)

Modern telecommunications networks generate large volumes of operational data that exceed the capabilities of traditional monitoring systems. As a result, organizations increasingly require AI-driven operational frameworks to maintain efficiency and reliability.

Dartagnan Telco Solutions will implement AI-enabled observability and AIOps solutions that support predictive fault detection, anomaly identification, root-cause analysis, and automated incident response. These capabilities enable organizations to transition from reactive network management to proactive and intelligent operations, improving performance, reducing downtime, and enhancing overall system reliability.

This advancement supports the broader adoption of artificial intelligence within critical infrastructure systems, aligning with national priorities related to digital innovation and infrastructure intelligence.

[22] https://www.cisa.gov/topics/critical-infrastructure-security-and-resilience/critical-infrastructure-sectors/communications-sector

Supporting Legacy Modernization and NextG / 6G Readiness

A significant portion of telecommunications infrastructure in the United States still relies on legacy systems that must coexist with modern, cloud-based, and virtualized environments. At the same time, the industry is evolving toward NextG and 6G technologies, which will require more distributed, software-driven, and AI-native network architectures.

Dartagnan Telco Solutions will support organizations in modernizing legacy systems, implementing phased migration strategies, and ensuring interoperability between existing and emerging technologies. By enabling seamless transitions and minimizing service disruption, the company will contribute to the technological evolution of U.S. telecommunications networks and support long-term infrastructure sustainability.

Enhancing Public Safety and Service Continuity

Reliable communication systems are essential for emergency response, public safety operations, and mission-critical services. Failures in telecommunications infrastructure can directly impact the ability of emergency responders and institutions to coordinate effectively.

Through network optimization, observability, and infrastructure monitoring, Dartagnan Telco Solutions will enhance the reliability, visibility, and operational continuity of communication systems used in critical environments. These improvements support emergency services, healthcare systems, and enterprise operations that depend on uninterrupted communication.

Supporting U.S. Technological Leadership and Economic Growth

The advancement of telecommunications infrastructure is directly linked to the United States' ability to maintain global leadership in technology and innovation. High-performance communication networks enable digital transformation, cloud computing, artificial intelligence applications, and the expansion of the digital economy.

By improving network performance, enabling AI-driven operations, and supporting infrastructure modernization, Dartagnan Telco Solutions will contribute to enhancing U.S. competitiveness in advanced telecommunications technologies.

Additionally, the company will generate economic impact through the creation of high-skilled employment opportunities in telecommunications engineering, automation, AI-driven operations, and technical consulting, supporting workforce development within the U.S. technology sector.

Conclusion

Mr. Xavier's proposed endeavor directly supports the modernization, resilience, and technological advancement of telecommunications infrastructure in the United States. By integrating advanced engineering practices, artificial intelligence, and next-generation readiness strategies, Dartagnan Telco Solutions will play a meaningful role in strengthening the nation's

communication systems, supporting public safety, and enabling continued economic and technological growth.

9.0 Indirect jobs creation - Economic Policy Institute

Each industry has backward linkages to economic sectors that provide the materials needed for the industry's output, just as each industry has forward linkages to the economic sectors where the industry's workers spend their income. Therefore, in addition to the jobs directly supported by an industry, a large number of indirect jobs may also be supported by that industry. The subtraction or addition of jobs and output in industries with strong backward and forward linkages to other economic sectors can cause large ripple effects.

According to the national job multipliers published by the Economy Policy Institute (EPI) on January 23, 2019,[23] 100 direct jobs in the Other Professional, Scientific, and Technical Services industry generate a total of 154.3 total indirect jobs, as demonstrated in the following table:

Employment multipliers per 100 direct jobs, all private-sector industries

	Industry	Direct jobs	Supplier jobs*	Induced jobs**	Total indirect jobs
129	Computer systems design and related services	100.0	134.1	149.3	283.4
130	Management, scientific, and technical consulting services	100.0	91.1	116.5	207.6
131	Scientific research and development services	100.0	519.3	323.7	842.9
132	Advertising, public relations, and related services	100.0	460.9	270.7	731.6
133	Other professional, scientific, and technical services	100.0	70.8	83.6	154.3

Since Mr. Xavier will create 21 direct jobs by the end of Year 5, the total number of indirect jobs to be generated in the same period will reach 32 according to the multipliers provided by the EPI. In addition to its in-house team, Dartagnan Telco Solutions will hire a number of independent contractors on a project basis, including legal professionals and technicians. Additionally, the company will mediate in the hiring of professionals that will perform services that are deemed to be required. Therefore, the company will stimulate the employment of a

[23] https://www.epi.org/publication/updated-employment-multipliers-for-the-u-s-economy/

number of workers of different profiles. Furthermore, the company will hire an outsourced marketing company to develop its website and work with marketing campaigns.

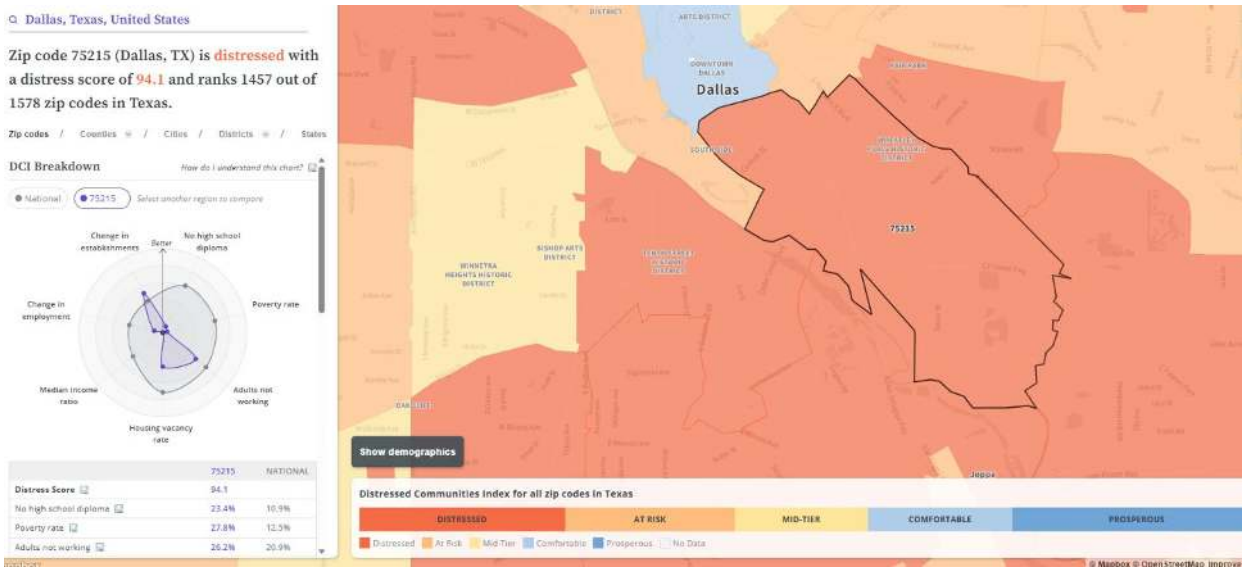
The direct and indirect job creation by Dartagnan Telco Solutions, as well as the utilization of independent contractors and outsourced services, will have a significant positive impact on the local and national economy, fostering job growth, generating income, and contributing to overall economic prosperity.

Dartagnan Telco Solutions' expansion plans, under the leadership of Mr. Gustavo Dartagnan Xavier do Rego, encompass the creation of direct and indirect employment opportunities, the payment of substantial taxes, and the utilization of local resources and services. By contributing to job creation, tax revenue, and economic growth, Dartagnan Telco Solutions aims to make a lasting and positive impact on both the local community and the broader U.S. economy.

9.1 Distressed Communities

This section explores the complex dynamics of economically distressed communities, focusing on a specific region in Dallas, Texas (ZIP Code 75215). Areas classified as distressed communities typically face significant socioeconomic challenges that affect employment opportunities, income levels, educational attainment, and overall economic mobility. Understanding these dynamics is essential for businesses and policymakers seeking to promote economic development, create employment opportunities, and improve local living conditions.

ZIP Code 75215 in Dallas, TX, is classified as a distressed community according to the Distressed Communities Index (DCI), with a distress score of 94.1, ranking 1457 out of 1578 zip codes in Texas. This classification indicates that the region faces considerable economic challenges when compared to other areas within the state and the nation.[24]



[24] https://eig.org/distressed-communities/?regions%5B0%5D=75215&geo=zctas&lat=32.76&lon=-96.78&z=12.36

For businesses seeking to establish operations in areas with economic challenges, understanding the demographic composition and socioeconomic conditions of the community provides important insights into workforce availability, community needs, and opportunities for economic engagement. This analysis examines the demographic and socioeconomic profile of ZIP Code 75215 and highlights potential opportunities for businesses to contribute to economic revitalization and community development.

Demographic and Socioeconomic Profile

• **Economic Distress:** The region has a very high distress score of 94.1, placing it among the most economically challenged areas in Texas. Several economic indicators contribute to this classification, including high poverty levels, lower median income relative to national averages, and limited employment growth in recent years.

• **Demographics:** The community is predominantly Black or African-American (63.3%), followed by Hispanic or Latino residents (22.7%), and Non-Hispanic White residents (11.4%), with smaller percentages representing other racial and ethnic groups. This diverse demographic composition highlights the importance of culturally aware business practices and community engagement initiatives.

• **Education Levels:** Educational attainment within the area reflects ongoing socioeconomic challenges. Approximately 23.4% of residents lack a high school diploma, which is significantly higher than the national average of 10.9%. While 33.8% of residents have a high school diploma, and 25.7% have some college education, only 17.2% hold a bachelor's degree or higher, which is below the national average of 34.3%. These figures indicate opportunities for businesses to provide workforce development and technical training programs that improve employment readiness.

• **Occupation and Employment:** Approximately 26.2% of adults in the community are not currently working, which is higher than the national average of 20.9%. This suggests the presence of an available labor force that could benefit from employment opportunities and skills development initiatives offered by local businesses.

• **Income and Poverty Rates:** The poverty rate in the area is approximately 27.8%, more than double the national average of 12.5%. Additionally, the median income ratio is only 47.3% of the national median, reflecting limited economic mobility and lower household income levels within the community.

Business Implications

• **Market Potential:** The economic conditions of the area highlight the importance of services that support economic development, job creation, and technological advancement. Businesses that introduce high-skilled employment opportunities and contribute to local economic growth can have a meaningful impact in communities facing economic challenges.

• **Workforce Opportunities:** The available labor force presents opportunities for businesses to hire locally and provide technical training programs. Companies operating in technology and telecommunications sectors may contribute to workforce development by offering specialized training and career pathways.

• **Community Engagement:** Businesses that invest in community engagement initiatives such as workforce development programs, educational outreach, and local hiring practices can play an important role in supporting economic revitalization. These efforts can also strengthen relationships with local stakeholders and contribute to long-term community development.

• **Economic Incentives:** Operating in distressed communities may qualify businesses for economic development incentives, including tax credits, grants, workforce training programs, and federal or state investment initiatives. These incentives are often designed to encourage business development and job creation in economically challenged regions.

• **Cultural Sensitivity:** Given the diverse demographic composition of the region, businesses operating in this community should adopt inclusive and culturally aware practices to ensure effective engagement with local residents and stakeholders.

Establishing operations in a distressed community such as ZIP Code 75215 in Dallas, Texas, presents both challenges and opportunities. By creating skilled employment opportunities, supporting workforce development, and contributing to economic activity within the region, businesses can play a meaningful role in improving local economic conditions. A business model that emphasizes job creation, community engagement, and economic participation can contribute positively to both the company's growth and the broader development of the local community.

APPENDIX

Monthly Sales Forecast Table

Sales Forecast													
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Unit Sales													
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions		0	1	1	0	1	1	1	2	1	2	1	1
Telecommunications Performance Engineering and Optimization		0	0	1	1	1	1	1	1	1	1	1	2
AI-Enabled Telecom Observability, AIOps, and Automation Solutions		0	0	0	1	0	1	1	1	1	1	0	2
Telecommunications Interconnection, Compliance, Security, and NextG Readiness		0	0	0	0	1	1	1	1	1	1	0	1
Total Unit Sales		0	1	2	2	3	4	4	5	4	5	2	6
Unit Prices		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions		$18,000.00	$18,000.00	$18,000.00	$18,000.00	$18,000.00	$18,000.00	$18,000.00	$18,000.00	$18,000.00	$18,000.00	$18,000.00	$18,000.00
Telecommunications Performance Engineering and Optimization		$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00	$15,000.00
AI-Enabled Telecom Observability, AIOps, and Automation Solutions		$12,000.00	$12,000.00	$12,000.00	$12,000.00	$12,000.00	$12,000.00	$12,000.00	$12,000.00	$12,000.00	$12,000.00	$12,000.00	$12,000.00
Telecommunications Interconnection, Compliance, Security, and NextG Readiness		$8,000.00	$8,000.00	$8,000.00	$8,000.00	$8,000.00	$8,000.00	$8,000.00	$8,000.00	$8,000.00	$8,000.00	$8,000.00	$8,000.00
Sales													
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions		$0	$18,000	$18,000	$0	$18,000	$18,000	$18,000	$36,000	$18,000	$36,000	$18,000	$18,000
Telecommunications Performance Engineering and Optimization		$0	$0	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$30,000

AI-Enabled Telecom Observability, AIOps, and Automation Solutions		$0	$0	$0	$12,000	$0	$12,000	$12,000	$12,000	$12,000	$12,000	$0	$24,000
Telecommunications Interconnection, Compliance, Security, and NextG Readiness		$0	$0	$0	$0	$8,000	$8,000	$8,000	$8,000	$8,000	$8,000	$0	$8,000
Total Sales		$0	$18,000	$33,000	$27,000	$41,000	$53,000	$53,000	$71,000	$53,000	$71,000	$33,000	$80,000
Direct Unit Costs		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions	8.00%	$1,440.00	$1,440.00	$1,440.00	$1,440.00	$1,440.00	$1,440.00	$1,440.00	$1,440.00	$1,440.00	$1,440.00	$1,440.00	$1,440.00
Telecommunications Performance Engineering and Optimization	8.00%	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00	$1,200.00
AI-Enabled Telecom Observability, AIOps, and Automation Solutions	8.00%	$960.00	$960.00	$960.00	$960.00	$960.00	$960.00	$960.00	$960.00	$960.00	$960.00	$960.00	$960.00
Telecommunications Interconnection, Compliance, Security, and NextG Readiness	8.00%	$640.00	$640.00	$640.00	$640.00	$640.00	$640.00	$640.00	$640.00	$640.00	$640.00	$640.00	$640.00
Direct Cost of Sales													
Telecommunications Network Architecture, VoIP, and Legacy Modernization Solutions		$0	$1,440	$1,440	$0	$1,440	$1,440	$1,440	$2,880	$1,440	$2,880	$1,440	$1,440
Telecommunications Performance Engineering and Optimization		$0	$0	$1,200	$1,200	$1,200	$1,200	$1,200	$1,200	$1,200	$1,200	$1,200	$2,400
AI-Enabled Telecom Observability, AIOps, and Automation Solutions		$0	$0	$0	$960	$0	$960	$960	$960	$960	$960	$0	$1,920
Telecommunications Interconnection, Compliance, Security, and NextG Readiness		$0	$0	$0	$0	$640	$640	$640	$640	$640	$640	$0	$640
Subtotal Direct Cost of Sales		**$0**	**$1,440**	**$2,640**	**$2,160**	**$3,280**	**$4,240**	**$4,240**	**$5,680**	**$4,240**	**$5,680**	**$2,640**	**$6,400**

Monthly Personnel Plan Table

Personnel Plan													
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Founder and Chief Telecommunications Architect - Mr. Gustavo Dartagnan Xavier do Rego		$0	$6,000	$6,000	$6,000	$8,000	$8,000	$10,000	$10,000	$10,000	$12,000	$12,000	$12,000
Telecommunications Engineer		$7,800	$7,800	$7,800	$7,800	$8,000	$8,000	$8,000	$8,000	$8,000	$8,000	$8,000	$8,000
Telecommunications Network Optimization Engineer		$0	$0	$0	$0	$0	$8,750	$8,750	$8,750	$8,750	$8,750	$8,750	$8,750
Telecommunications Project Manager		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Client Support Specialist		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Telecom Automation and Observability Engineer		$0	$0	$0	$0	$0	$0	$0	$0	$7,500	$7,500	$7,500	$7,500
Sales Telecommunications Engineer		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sales Representative		$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000
Administrative Manager		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Customer Service Representatives		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total People		3	3	3	3	3	4	4	4	5	5	5	5
Total Payroll		**$13,800**	**$19,800**	**$19,800**	**$19,800**	**$22,000**	**$30,750**	**$32,750**	**$32,750**	**$40,250**	**$42,250**	**$42,250**	**$42,250**

Monthly Profit and Loss Table

Pro Forma Profit and Loss													
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Sales		$0	$18,000	$33,000	$27,000	$41,000	$53,000	$53,000	$71,000	$53,000	$71,000	$33,000	$80,000
Direct Cost of Sales		$0	$1,440	$2,640	$2,160	$3,280	$4,240	$4,240	$5,680	$4,240	$5,680	$2,640	$6,400
Other Costs of Sales		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Cost of Sales		$0	$1,440	$2,640	$2,160	$3,280	$4,240	$4,240	$5,680	$4,240	$5,680	$2,640	$6,400
Gross Margin		$0	$16,560	$30,360	$24,840	$37,720	$48,760	$48,760	$65,320	$48,760	$65,320	$30,360	$73,600
Gross Margin %		0.00%	92.00%	92.00%	92.00%	92.00%	92.00%	92.00%	92.00%	92.00%	92.00%	92.00%	92.00%
Expenses													
Payroll		$13,800	$19,800	$19,800	$19,800	$22,000	$30,750	$32,750	$32,750	$40,250	$42,250	$42,250	$42,250
Payroll Taxes	10%	$1,380	$1,980	$1,980	$1,980	$2,200	$3,075	$3,275	$3,275	$4,025	$4,225	$4,225	$4,225
Depreciation		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Rent		$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
Insurance		$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
Marketing/Promotion		$500	$500	$500	$500	$500	$500	$500	$500	$500	$500	$500	$500
Utilities/Internet/Phone		$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150
Employees Education	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Equipment	0%	$0	$0	$0	$0	$0	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Accountant	0%	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200
Total Operating Expenses		$17,730	$24,330	$24,330	$24,330	$26,750	$38,375	$40,575	$40,575	$48,825	$51,025	$51,025	$51,025
Profit Before Interest and Taxes		($17,730)	($7,770)	$6,030	$510	$10,970	$10,385	$8,185	$24,745	($65)	$14,295	($20,665)	$22,575
EBITDA		($17,730)	($7,770)	$6,030	$510	$10,970	$10,385	$8,185	$24,745	($65)	$14,295	($20,665)	$22,575
Interest Expense		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Taxes Incurred		($4,787)	($2,098)	$1,628	$138	$2,962	$2,804	$2,210	$6,681	($18)	$3,860	($5,580)	$6,095
Net Other Income		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Net Profit		($12,943)	($5,672)	$4,402	$372	$8,008	$7,581	$5,975	$18,064	($47)	$10,435	($15,085)	$16,480
Net Profit/Sales		**0.00%**	**-31.51%**	**13.34%**	**1.38%**	**19.53%**	**14.30%**	**11.27%**	**25.44%**	**-0.09%**	**14.70%**	**-45.71%**	**20.60%**

Monthly Cash Flow Table

Pro Forma Cash Flow													
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Cash Received													
Cash from Operations													
Cash Sales		$0	$9,000	$16,500	$13,500	$20,500	$26,500	$26,500	$35,500	$26,500	$35,500	$16,500	$40,000
Cash from Receivables		$0	$9,000	$16,500	$13,500	$20,500	$26,500	$26,500	$35,500	$26,500	$35,500	$16,500	$40,000
Subtotal Cash from Operations		$0	$18,000	$33,000	$27,000	$41,000	$53,000	$53,000	$71,000	$53,000	$71,000	$33,000	$80,000
Additional Cash Received													
Non-Operating (Other) Income		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sales Tax, VAT, HST/GST Received	0.00%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
New Current Borrowing		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
New Other Liabilities (interest-free)		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
New Long-term Liabilities		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sales of Other Current Assets		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sales of Long-term Assets		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
New Investment Received		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Cash Received		$0	$18,000	$33,000	$27,000	$41,000	$53,000	$53,000	$71,000	$53,000	$71,000	$33,000	$80,000
Expenditures		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Expenditures from Operations													
Cash Spending		$13,800	$19,800	$19,800	$19,800	$22,000	$30,750	$32,750	$32,750	$40,250	$42,250	$42,250	$42,250
Bill Payments		($857)	($699)	$4,036	$8,732	$6,967	$11,114	$14,656	$14,472	$19,940	$12,981	$17,899	$6,350
Subtotal Spent on Operations		$12,943	$19,101	$23,836	$28,532	$28,967	$41,864	$47,406	$47,222	$60,190	$55,231	$60,149	$48,600
Additional Cash Spent													
Non-Operating (Other) Expense		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sales Tax, VAT, HST/GST Paid Out		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Principal Repayment of Current Borrowing		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Other Liabilities Principal Repayment		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Long-term Liabilities Principal Repayment		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Purchase Other Current Assets		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Purchase Long-term Assets		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Dividends		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Cash Spent		$12,943	$19,101	$23,836	$28,532	$28,967	$41,864	$47,406	$47,222	$60,190	$55,231	$60,149	$48,600
Net Cash Flow		($12,943)	($1,101)	$9,164	($1,532)	$12,033	$11,136	$5,594	$23,778	($7,190)	$15,769	($27,149)	$31,400
Cash Balance		$47,057	$45,957	$55,120	$53,588	$65,621	$76,757	$82,351	$106,129	$98,939	$114,708	$87,559	$118,959

Monthly Balance Sheet Table

Pro Forma Balance Sheet													
		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Assets	Starting Balances												
Current Assets													
Cash	$60,000	$47,057	$45,957	$55,120	$53,588	$65,621	$76,757	$82,351	$106,129	$98,939	$114,708	$87,559	$118,959
Accounts Receivable	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Inventory	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Other Current Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Current Assets	$60,000	$47,057	$45,957	$55,120	$53,588	$65,621	$76,757	$82,351	$106,129	$98,939	$114,708	$87,559	$118,959
Long-term Assets													
Long-term Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Accumulated Depreciation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Long-term Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Assets	$60,000	$47,057	$45,957	$55,120	$53,588	$65,621	$76,757	$82,351	$106,129	$98,939	$114,708	$87,559	$118,959
Liabilities and Capital		Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
Current Liabilities													
Accounts Payable	$0	$0	$4,572	$9,333	$7,429	$11,454	$15,009	$14,628	$20,342	$13,199	$18,533	$6,469	$21,390
Current Borrowing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Other Current Liabilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal Current Liabilities	$0	$0	$4,572	$9,333	$7,429	$11,454	$15,009	$14,628	$20,342	$13,199	$18,533	$6,469	$21,390
Long-term Liabilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Liabilities	$0	$0	$4,572	$9,333	$7,429	$11,454	$15,009	$14,628	$20,342	$13,199	$18,533	$6,469	$21,390
Paid-in Capital	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000
Retained Earnings	($40,000)	($40,000)	($40,000)	($40,000)	($40,000)	($40,000)	($40,000)	($40,000)	($40,000)	($40,000)	($40,000)	($40,000)	($40,000)
Earnings	$0	($12,943)	($18,615)	($14,213)	($13,841)	($5,833)	$1,748	$7,723	$25,787	$25,740	$36,175	$21,090	$37,569
Total Capital	$60,000	$47,057	$41,385	$45,787	$46,159	$54,167	$61,748	$67,723	$85,787	$85,740	$96,175	$81,090	$97,569
Total Liabilities and Capital	$60,000	$47,057	$45,957	$55,120	$53,588	$65,621	$76,757	$82,351	$106,129	$98,939	$114,708	$87,559	$118,959
Net Worth	$60,000	$47,057	$41,385	$45,787	$46,159	$54,167	$61,748	$67,723	$85,787	$85,740	$96,175	$81,090	$97,569

BANCO CENTRAL DO BRASIL

Currency Conversion

Quotation date 08/06/2026

Amount

580,000.00

Exchange from

Real (BRL)

To

Dólar dos Estados Unidos (USD)

Exchange result

Convert from: Real/BRL (790)
Value to convert: 580,000.00

To: Dólar dos Estados Unidos/USD (220)
Exchange result: 112,196.5374

Base date for conversion: 06/08/2026
Rate:
1 Real/BRL (790) = 0.1934423 Dólar dos Estados Unidos/USD (220)
1 Dólar dos Estados Unidos/USD (220) = 5.1695 Real/BRL (790)

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Winning the 6G Race

whitehouse.gov/presidential-actions/2025/12/national-security-presidential-memorandum-nspm-8-0bda

Micah Stopperich December 20, 2025



Presidential Actions

MEMORANDUM FOR THE SECRETARY OF STATETHE SECRETARY OF WARTHE SECRETARY OF COMMERCETHE SECRETARY OF TRANSPORTATIONTHE SECRETARY OF ENERGYTHE SECRETARY OF HOMELAND SECURITYTHE DIRECTOR OF THE OFFICE OF MANAGEMENT AND BUDGETTHE DIRECTOR OF NATIONAL INTELLIGENCE THE CHAIRMAN OF THE FEDERAL COMMUNICATIONS COMMISSIONTHE ASSISTANT TO THE PRESIDENT FOR ECONOMIC POLICYTHE ASSISTANT TO THE PRESIDENT FOR SCIENCE AND TECHNOLOGYTHE ASSISTANT TO THE PRESIDENT FOR NATIONAL SECURITY AFFAIRS SUBJECT: Winning the 6G Race By the authority vested in me as President by the Constitution and the laws of the United States of America, I hereby direct: Section 1. Purpose. The next generation of mobile communications networks (6G) will be foundational to the national security, foreign policy, and economic prosperity of the United States. This technology will play a pivotal role in the development and adoption of emerging technologies like artificial intelligence, robotics, and implantable technologies. 6G will also provide faster, more resilient, and more secure communication networks that can be utilized for national security and public safety purposes. It is the policy of the United States to lead the world in 6G development. Certain steps are necessary to achieve the goal of this policy, including steadfastly advancing American interests in the international standards bodies that will play a crucial role in 6G development, and identifying a significant volume of radiofrequency spectrum that can be harmonized for 6G

networks internationally. My Administration has been studying multiple spectrum bands this year to determine what Federal spectrum can be reallocated to commercial use for 6G development without undermining national security missions that occur in those bands. Consistent with the preliminary conclusions of those evaluations, I am hereby directing the following actions to ensure America's leadership in 6G development. Sec. 2. Spectrum Relocation. (a) The Assistant Secretary of Commerce for Communications and Information (Assistant Secretary) shall, in consultation with the Assistant to the President for Economic Policy and the Assistant to the President for Science and Technology, immediately commence studies in consultation with Federal incumbents with operations between the 7.125-7.4 GHz spectrum frequencies to determine how to relocate their affected systems to other frequencies, including 7.4-8.4 GHz. (b) No later than 12 months from the date of this memorandum, the Assistant Secretary shall submit to the President, through the Assistant to the President for Economic Policy, the Assistant to the President for Science and Technology, and the Assistant to the President for National Security Affairs, results of the studies required under subsection (a) of this section, including estimated transition costs and timelines as determined by the Assistant Secretary. This submission by the Assistant Secretary shall also demonstrate how such relocation of systems will not materially impair the national security missions or electric grid operations that occur in the 7.125-7.4 GHz band, as identified by the Secretary of War and the Director of National Intelligence. (c) This section shall not apply to systems at fixed geographic sites that are used for satellite telemetry uplink and radio astronomy as identified by the Assistant Secretary. Sec. 3. Spectrum Designation. Pursuant to section 40002(c)(2)(A) of the One Big Beautiful Bill Act (Public Law 119-21), the Assistant Secretary shall immediately begin the process of identifying the band of spectrum frequencies at 7.125-7.4 GHz for reallocation for full-power commercial licensed use cases. Sec. 4. Spectrum Studies. Pursuant to section 40002(f) of the One Big Beautiful Bill Act, the Assistant Secretary shall immediately begin the process to commence studies on the 2.69-2.9 GHz and the 4.4-4.94 GHz spectrum frequencies to determine whether portions of those bands can feasibly be reallocated for full-power commercial licensed use cases. Sec. 5. Diplomatic Engagement. The Secretary of State shall, in coordination with the Assistant to the President for Economic Policy, the Assistant to the President for Science and Technology, the Assistant Secretary, the Chairman of the Federal Communications Commission, and any other official the Secretary of State deems appropriate, advance the objectives identified in section 1 of this memorandum through diplomatic engagements. These efforts shall include building a coalition of industry and foreign partners that supports the United States' positions on Agenda Item 1.7 at the International Telecommunication Union's World Radiocommunication Conference-27. Sec. 6. General Provisions. (a) Nothing in this memorandum shall be construed to impair or otherwise affect: (i) the authority granted by law to an executive department or agency, or the head thereof; or (ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals. (b) This memorandum shall be implemented consistent with applicable law and subject to the availability of appropriations. (c) This memorandum is not intended to, and does not, create any right or benefit, substantive or

procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.
DONALD J. TRUMP

THE WHITE HOUSE



Winning the Race

AMERICA'S AI ACTION PLAN

JULY 2025

"Today, a new frontier of scientific discovery lies before us, defined by transformative technologies such as artificial intelligence... Breakthroughs in these fields have the potential to reshape the global balance of power, spark entirely new industries, and revolutionize the way we live and work. As our global competitors race to exploit these technologies, it is a national security imperative for the United States to achieve and maintain unquestioned and unchallenged global technological dominance. To secure our future, we must harness the full power of American innovation."

Donald J. Trump

45th and 47th President of the United States

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Introduction

The United States is in a race to achieve global dominance in artificial intelligence (AI). Whoever has the largest AI ecosystem will set global AI standards and reap broad economic and military benefits. Just like we won the space race, it is imperative that the United States and its allies win this race. President Trump took decisive steps toward achieving this goal during his first days in office by signing Executive Order 14179, "Removing Barriers to American Leadership in Artificial Intelligence," calling for America to retain dominance in this global race and directing the creation of an AI Action Plan.[1]

Winning the AI race will usher in a new golden age of human flourishing, economic competitiveness, and national security for the American people. AI will enable Americans to discover new materials, synthesize new chemicals, manufacture new drugs, and develop new methods to harness energy—an industrial revolution. It will enable radically new forms of education, media, and communication—an information revolution. And it will enable altogether new intellectual achievements: unraveling ancient scrolls once thought unreadable, making breakthroughs in scientific and mathematical theory, and creating new kinds of digital and physical art—a *renaissance*.

An industrial revolution, an information revolution, and a renaissance—all at once. This is the potential that AI presents. The opportunity that stands before us is both inspiring and humbling. And it is ours to seize, or to lose.

America's AI Action Plan has three pillars: innovation, infrastructure, and international diplomacy and security. The United States needs to innovate faster and more comprehensively than our competitors in the development and distribution of new AI technology across every field, and dismantle unnecessary regulatory barriers that hinder the private sector in doing so. As Vice President Vance remarked at the Paris AI Action Summit in February, restricting AI development with onerous regulation "would not only unfairly benefit incumbents… it would mean paralyzing one of the most promising technologies we have seen in generations."[2] That is why President Trump rescinded the Biden Administration's dangerous actions on day one.

We need to build and maintain vast AI infrastructure and the energy to power it. To do that, we will continue to reject radical climate dogma and bureaucratic red tape, as the Administration has done since Inauguration Day. Simply put, we need to "Build, Baby, Build!"

We need to establish American AI—from our advanced semiconductors to our models to our applications—as the gold standard for AI worldwide and ensure our allies are building on American technology.

Several principles cut across each of these three pillars. First, American workers are central to the Trump Administration's AI policy. The Administration will ensure that our Nation's workers and their families gain from the opportunities created in this technological revolution. The AI infrastructure buildout will create high-paying jobs for American workers. And the

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[1] Executive Order 14179 of January 23, 2025, "Removing Barriers to American Leadership in Artificial Intelligence," Federal Register 90 (20) 8741, www.govinfo.gov/content/pkg/FR-2025-01-31/pdf/2025-02172.pdf.

[2] J.D. Vance, "Remarks by the Vice President at the Artificial Intelligence Action Summit in Paris, France," February 11, 2025, www.presidency.ucsb.edu/documents/remarks-the-vice-president-the-artificial-intelligence-action-summit-paris-france.

breakthroughs in medicine, manufacturing, and many other fields that AI will make possible will increase the standard of living for all Americans. AI will improve the lives of Americans by complementing their work—not replacing it.

Second, our AI systems must be free from ideological bias and be designed to pursue objective truth rather than social engineering agendas when users seek factual information or analysis. AI systems are becoming essential tools, profoundly shaping how Americans consume information, but these tools must also be trustworthy.

Finally, we must prevent our advanced technologies from being misused or stolen by malicious actors as well as monitor for emerging and unforeseen risks from AI. Doing so will require constant vigilance.

This Action Plan sets forth clear policy goals for near-term execution by the Federal government. The Action Plan's objective is to articulate policy recommendations that this Administration can deliver for the American people to achieve the President's vision of global AI dominance. The AI race is America's to win, and this Action Plan is our roadmap to victory.

Michael J. Kratsios
Assistant to the President for Science and Technology

David O. Sacks
Special Advisor for AI and Crypto

Marco A. Rubio
Assistant to the President for National Security Affairs

Pillar I: Accelerate AI Innovation

America must have the most powerful AI systems in the world, but we must also lead the world in creative and transformative application of these systems. Achieving these goals requires the Federal government to create the conditions where private-sector-led innovation can flourish.

Remove Red Tape and Onerous Regulation

To maintain global leadership in AI, America's private sector must be unencumbered by bureaucratic red tape. President Trump has already taken multiple steps toward this goal, including rescinding Biden Executive Order 14110 on AI that foreshadowed an onerous regulatory regime.[3] AI is far too important to smother in bureaucracy at this early stage, whether at the state or Federal level. The Federal government should not allow AI-related Federal funding to be directed toward states with burdensome AI regulations that waste these funds, but should also not interfere with states' rights to pass prudent laws that are not unduly restrictive to innovation.

Recommended Policy Actions

- Led by the Office of Science and Technology Policy (OSTP), launch a Request for Information from businesses and the public at large about current Federal regulations that hinder AI innovation and adoption, and work with relevant Federal agencies to take appropriate action.
- Led by the Office of Management and Budget (OMB) and consistent with Executive Order 14192 of January 31, 2025, "Unleashing Prosperity Through Deregulation," work with all Federal agencies to identify, revise, or repeal regulations, rules, memoranda, administrative orders, guidance documents, policy statements, and interagency agreements that unnecessarily hinder AI development or deployment.[4]
- Led by OMB, work with Federal agencies that have AI-related discretionary funding programs to ensure, consistent with applicable law, that they consider a state's AI regulatory climate when making funding decisions and limit funding if the state's AI regulatory regimes may hinder the effectiveness of that funding or award.
- Led by the Federal Communications Commission (FCC), evaluate whether state AI regulations interfere with the agency's ability to carry out its obligations and authorities under the Communications Act of 1934.[5]
- Review all Federal Trade Commission (FTC) investigations commenced under the previous administration to ensure that they do not advance theories of liability that unduly burden AI innovation. Furthermore, review all FTC final orders, consent decrees,

[3] Executive Order 14110 of October 30, 2023, "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence," Federal Register 88 (210) 75191, www.govinfo.gov/content/pkg/FR-2023-11-01/pdf/2023-24283.pdf.
[4] Executive Order 14192 of January 31, 2025, "Unleashing Prosperity Through Deregulation," Federal Register 90 (24) 9065, www.govinfo.gov/content/pkg/FR-2025-02-06/pdf/2025-02345.pdf.
[5] Communications Act of 1934, 47 U.S.C. §§ 151-646.

and injunctions, and, where appropriate, seek to modify or set-aside any that unduly burden AI innovation.

Ensure that Frontier AI Protects Free Speech and American Values

AI systems will play a profound role in how we educate our children, do our jobs, and consume media. It is essential that these systems be built from the ground up with freedom of speech and expression in mind, and that U.S. government policy does not interfere with that objective. We must ensure that free speech flourishes in the era of AI and that AI procured by the Federal government objectively reflects truth rather than social engineering agendas.

Recommended Policy Actions

- Led by the Department of Commerce (DOC) through the National Institute of Standards and Technology (NIST), revise the NIST AI Risk Management Framework to eliminate references to misinformation, Diversity, Equity, and Inclusion, and climate change.[6]
- Update Federal procurement guidelines to ensure that the government only contracts with frontier large language model (LLM) developers who ensure that their systems are objective and free from top-down ideological bias.
- Led by DOC through NIST's Center for AI Standards and Innovation (CAISI), conduct research and, as appropriate, publish evaluations of frontier models from the People's Republic of China for alignment with Chinese Communist Party talking points and censorship.

Encourage Open-Source and Open-Weight AI

Open-source and open-weight AI models are made freely available by developers for anyone in the world to download and modify. Models distributed this way have unique value for innovation because startups can use them flexibly without being dependent on a closed model provider. They also benefit commercial and government adoption of AI because many businesses and governments have sensitive data that they cannot send to closed model vendors. And they are essential for academic research, which often relies on access to the weights and training data of a model to perform scientifically rigorous experiments.

We need to ensure America has leading open models founded on American values. Open-source and open-weight models could become global standards in some areas of business and in academic research worldwide. For that reason, they also have geostrategic value. While the decision of whether and how to release an open or closed model is fundamentally up to the developer, the Federal government should create a supportive environment for open models.

Recommended Policy Actions

- Ensure access to large-scale computing power for startups and academics by improving the financial market for compute. Currently, a company seeking to use large-scale compute must often sign long-term contracts with hyperscalers—far beyond the

[6] National Institute of Standards and Technology, "Artificial Intelligence Risk Management Framework (AI RMF 1.0)," (Gaithersburg, MD: National Institute of Standards and Technology, 2023), www.doi.org/10.6028/NIST.AI.100-1.

budgetary reach of most academics and many startups. America has solved this problem before with other goods through financial markets, such as spot and forward markets for commodities. Through collaboration with industry, NIST at DOC, OSTP, and the National Science Foundation's (NSF) National AI Research Resource (NAIRR) pilot, the Federal government can accelerate the maturation of a healthy financial market for compute.

- Partner with leading technology companies to increase the research community's access to world-class private sector computing, models, data, and software resources as part of the NAIRR pilot.
- Build the foundations for a lean and sustainable NAIRR operations capability that can connect an increasing number of researchers and educators across the country to critical AI resources.
- Continue to foster the next generation of AI breakthroughs by publishing a new National AI Research and Development (R&D) Strategic Plan, led by OSTP, to guide Federal AI research investments.
- Led by DOC through the National Telecommunications and Information Administration (NTIA), convene stakeholders to help drive adoption of open-source and open-weight models by small and medium-sized businesses.

Enable AI Adoption

Today, the bottleneck to harnessing AI's full potential is not necessarily the availability of models, tools, or applications. Rather, it is the limited and slow adoption of AI, particularly within large, established organizations. Many of America's most critical sectors, such as healthcare, are especially slow to adopt due to a variety of factors, including distrust or lack of understanding of the technology, a complex regulatory landscape, and a lack of clear governance and risk mitigation standards. A coordinated Federal effort would be beneficial in establishing a dynamic, "try-first" culture for AI across American industry.

Recommended Policy Actions

- Establish regulatory sandboxes or AI Centers of Excellence around the country where researchers, startups, and established enterprises can rapidly deploy and test AI tools while committing to open sharing of data and results. These efforts would be enabled by regulatory agencies such as the Food and Drug Administration (FDA) and the Securities and Exchange Commission (SEC), with support from DOC through its AI evaluation initiatives at NIST.
- Launch several domain-specific efforts (e.g., in healthcare, energy, and agriculture), led by NIST at DOC, to convene a broad range of public, private, and academic stakeholders to accelerate the development and adoption of national standards for AI systems and to measure how much AI increases productivity at realistic tasks in those domains.
- Led by the Department of Defense (DOD) in coordination with the Office of the Director of National Intelligence (ODNI), regularly update joint DOD-Intelligence Community (IC) assessments of the comparative level of adoption of AI tools by the United States, its competitors, and its adversaries' national security establishments, and establish an

approach for continuous adaptation of the DOD and IC's respective AI adoption initiatives based on these AI net assessments.

- Prioritize, collect, and distribute intelligence on foreign frontier AI projects that may have national security implications, via collaboration between the IC, the Department of Energy (DOE), CAISI at DOC, the National Security Council (NSC), and OSTP.

Empower American Workers in the Age of AI

The Trump Administration supports a worker-first AI agenda. By accelerating productivity and creating entirely new industries, AI can help America build an economy that delivers more pathways to economic opportunity for American workers. But it will also transform how work gets done across all industries and occupations, demanding a serious workforce response to help workers navigate that transition. The Trump Administration has already taken significant steps to lead on this front, including the April 2025 Executive Orders 14277 and 14278, "Advancing Artificial Intelligence Education for American Youth" and "Preparing Americans for High-Paying Skilled Trade Jobs of the Future."[7, 8] To continue delivering on this vision, the Trump Administration will advance a priority set of actions to expand AI literacy and skills development, continuously evaluate AI's impact on the labor market, and pilot new innovations to rapidly retrain and help workers thrive in an AI-driven economy.

Recommended Policy Actions

- Led by the Department of Labor (DOL), the Department of Education (ED), NSF, and DOC, prioritize AI skill development as a core objective of relevant education and workforce funding streams. This should include promoting the integration of AI skill development into relevant programs, including career and technical education (CTE), workforce training, apprenticeships, and other federally supported skills initiatives.
- Led by the Department of the Treasury, issue guidance clarifying that many AI literacy and AI skill development programs may qualify as eligible educational assistance under Section 132 of the Internal Revenue Code, given AI's widespread impact reshaping the tasks and skills required across industries and occupations.[9] In applicable situations, this will enable employers to offer tax-free reimbursement for AI-related training and help scale private-sector investment in AI skill development, preserving jobs for American workers.
- Led by the Bureau of Labor Statistics (BLS) and DOC through the Census Bureau and the Bureau of Economic Analysis (BEA), study AI's impact on the labor market by using data they already collect on these topics, such as the firm-level AI adoption trends the Census Bureau tracks in its Business Trends and Outlook Survey. These agencies could then provide analysis of AI adoption, job creation, displacement, and wage effects.
- Establish the AI Workforce Research Hub under DOL to lead a sustained Federal effort to evaluate the impact of AI on the labor market and the experience of the American

[7] Executive Order 14277 of April 23, 2025: "Advancing Artificial Intelligence Education for American Youth," Federal Register 90 (80) 17519, www.govinfo.gov/content/pkg/FR-2025-04-28/pdf/2025-07368.pdf.
[8] Executive Order 14278 of April 23, 2025: "Preparing Americans for High-Paying Skilled Trade Jobs of the Future," Federal Register 90 (80) 17525, www.govinfo.gov/content/pkg/FR-2025-04-28/pdf/2025-07369.pdf.
[9] Revenue Act of 1978, 26 U.S.C. § 132.

worker, in collaboration with BLS and DOC through the Census Bureau and BEA. The Hub would produce recurring analyses, conduct scenario planning for a range of potential AI impact levels, and generate actionable insights to inform workforce and education policy.

- Led by DOL, leverage available discretionary funding, where appropriate, to fund rapid retraining for individuals impacted by AI-related job displacement. Issue clarifying guidance to help states identify eligible dislocated workers in sectors undergoing significant structural change tied to AI adoption, as well as guidance clarifying how state Rapid Response funds can be used to proactively upskill workers at risk of future displacement.
- At DOL and DOC, rapidly pilot new approaches to workforce challenges created by AI, which may include areas such as rapid retraining needs driven by worker displacement and shifting skill requirements for entry-level roles. These pilots should be carried out by states and workforce intermediaries using existing authorities under the Workforce Innovation and Opportunity Act and the Public Works and Economic Development Act, and should be designed to identify surface scalable, performance-driven strategies that help the workforce system adapt to the speed and complexity of AI-driven labor market change.[10, 11]

Support Next-Generation Manufacturing

AI will enable a wide range of new innovations in the physical world: autonomous drones, self-driving cars, robotics, and other inventions for which terminology does not yet exist. It is crucial that America and our trusted allies be world-class manufacturers of these next-generation technologies. AI, robotics, and related technologies create opportunities for novel capabilities in manufacturing and logistics, including ones with applications to defense and national security. The Federal government should prioritize investment in these emerging technologies and usher in a new industrial renaissance.

Recommended Policy Actions

- Invest in developing and scaling foundational and translational manufacturing technologies via DOD, DOC, DOE, NSF, and other Federal agencies using the Small Business Innovation Research program, the Small Business Technology Transfer program, research grants, CHIPS R&D programs, Stevenson-Wydler Technology Innovation Act authorities, Title III of the Defense Production Act, Other Transaction Authority, and other authorities.[12, 13, 14, 15]
- Led by DOC through NTIA, convene industry and government stakeholders to identify supply chain challenges to American robotics and drone manufacturing.

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[10] Workforce Innovation and Opportunity Act of 2014, 29 U.S.C. §§ 3101-3361.
[11] Public Works and Economic Development Act of 1965, 42 U.S.C. §§ 3121-3233.
[12] William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, 15 U.S.C. § 4656.
[13] Stevenson-Wydler Technology Innovation Act of 1980, Pub. L. No. 96-480, 94 Stat. 2311 (codified as amended in scattered sections of 15 U.S.C.).
[14] Defense Production Act of 1950, 50 U.S.C. §§ 4551-4568.
[15] National Defense Authorization Act for Fiscal years 1990 and 1991, 10 U.S.C. §§ 4021-4022.

Invest in AI-Enabled Science

Like many other domains, science itself will be transformed by AI. AI systems can already generate models of protein structures, novel materials, and much else. Increasingly powerful general-purpose models show promise in formulating hypotheses and designing experiments. These nascent capabilities promise to accelerate scientific advancement. They will only do so, however, with critical changes in the way science is conducted, including the enabling scientific infrastructure. AI-enabled predictions are of little use if scientists cannot also increase the scale of experimentation. Basic science today is often a labor-intensive process; the AI era will require more scientific and engineering research to transform theories into industrial-scale enterprises. This, in turn, will necessitate new infrastructure and support of new kinds of scientific organizations.

Recommended Policy Actions

- Through NSF, DOE, NIST at DOC, and other Federal partners, invest in automated cloud-enabled labs for a range of scientific fields, including engineering, materials science, chemistry, biology, and neuroscience, built by, as appropriate, the private sector, Federal agencies, and research institutions in coordination and collaboration with DOE National Laboratories.
- Use long-term agreements to support Focused-Research Organizations or other similar entities using AI and other emerging technologies to make fundamental scientific advancements.
- Incentivize researchers to release more high-quality datasets publicly by considering the impact of scientific and engineering datasets from a researchers' prior funded efforts in the review of proposals for new projects.
- Require federally funded researchers to disclose non-proprietary, non-sensitive datasets that are used by AI models during the course of research and experimentation.

Build World-Class Scientific Datasets

High-quality data has become a national strategic asset as governments pursue AI innovation goals and capitalize on the technology's economic benefits. Other countries, including our adversaries, have raced ahead of us in amassing vast troves of scientific data. The United States must lead the creation of the world's largest and highest quality AI-ready scientific datasets, while maintaining respect for individual rights and ensuring civil liberties, privacy, and confidentiality protections.

Recommended Policy Actions

- Direct the National Science and Technology Council (NSTC) Machine Learning and AI Subcommittee to make recommendations on minimum data quality standards for the use of biological, materials science, chemical, physical, and other scientific data modalities in AI model training.
- Promulgate the OMB regulations required in the Confidential Information Protection and Statistical Efficiency Act of 2018 on presumption of accessibility and expanding secure access, which will lower barriers and break down silos to accessing Federal data,

ultimately facilitating the improved use of AI for evidence building by statistical agencies while protecting confidential data from inappropriate access and use.[16]

- Establish secure compute environments within NSF and DOE to enable secure AI use-cases for controlled access to restricted Federal data.
- Create an online portal for NSF's National Secure Data Service (NSDS) demonstration project to provide the public and Federal agencies with a front door to AI use-cases involving controlled access to restricted Federal data.
- Explore the creation of a whole-genome sequencing program for life on Federal lands, led by the NSTC and including members of the U.S. Department of Agriculture, DOE, NIH, NSF, the Department of Interior, and Cooperative Ecosystem Studies Units to collaborate on the development of an initiative to establish a whole genome sequencing program for life on Federal lands (to include all biological domains). This new data would be a valuable resource in training future biological foundation models.

Advance the Science of AI

Just as LLMs and generative AI systems represented a paradigm shift in the science of AI, future breakthroughs may similarly transform what is possible with AI. It is imperative that the United States remain the leading pioneer of such breakthroughs, and this begins with strategic, targeted investment in the most promising paths at the frontier.

Recommended Policy Actions

- Prioritize investment in theoretical, computational, and experimental research to preserve America's leadership in discovering new and transformative paradigms that advance the capabilities of AI, reflecting this priority in the forthcoming National AI R&D Strategic Plan.

Invest in AI Interpretability, Control, and Robustness Breakthroughs

Today, the inner workings of frontier AI systems are poorly understood. Technologists know how LLMs work at a high level, but often cannot explain why a model produced a specific output. This can make it hard to predict the behavior of any specific AI system. This lack of predictability, in turn, can make it challenging to use advanced AI in defense, national security, or other applications where lives are at stake. The United States will be better able to use AI systems to their fullest potential in high-stakes national security domains if we make fundamental breakthroughs on these research problems.

Recommended Policy Actions

- Launch a technology development program led by the Defense Advanced Research Projects Agency in collaboration with CAISI at DOC and NSF, to advance AI interpretability, AI control systems, and adversarial robustness.

[16] Confidential Information Protection and Statistical Efficiency Act of 2018, 44 U.S.C. §§ 3561-3583.

- Prioritize fundamental advancements in AI interpretability, control, and robustness as part of the forthcoming National AI R&D Strategic Plan.
- The DOD, DOE, CAISI at DOC, the Department of Homeland Security (DHS), NSF, and academic partners should coordinate an AI hackathon initiative to solicit the best and brightest from U.S. academia to test AI systems for transparency, effectiveness, use control, and security vulnerabilities.

Build an AI Evaluations Ecosystem

Evaluations are how the AI industry assesses the performance and reliability of AI systems. Rigorous evaluations can be a critical tool in defining and measuring AI reliability and performance in regulated industries. Over time, regulators should explore the use of evaluations in their application of existing law to AI systems.

Recommended Policy Actions

- Publish guidelines and resources through NIST at DOC, including CAISI, for Federal agencies to conduct their own evaluations of AI systems for their distinct missions and operations and for compliance with existing law.
- Support the development of the science of measuring and evaluating AI models, led by NIST at DOC, DOE, NSF, and other Federal science agencies.
- Convene meetings at least twice per year under the auspices of CAISI at DOC for Federal agencies and the research community to share learnings and best practices on building AI evaluations.
- Invest, via DOE and NSF, in the development of AI testbeds for piloting AI systems in secure, real-world settings, allowing researchers to prototype new AI systems and translate them to the market. Such testbeds would encourage participation by broad multistakeholder teams and span a wide variety of economic verticals touched by AI, including agriculture, transportation, and healthcare delivery.
- Led by DOC, convene the NIST AI Consortium to empower the collaborative establishment of new measurement science that will enable the identification of proven, scalable, and interoperable techniques and metrics to promote the development of AI.

Accelerate AI Adoption in Government

With AI tools in use, the Federal government can serve the public with far greater efficiency and effectiveness. Use cases include accelerating slow and often manual internal processes, streamlining public interactions, and many others. Taken together, transformative use of AI can help deliver the highly responsive government the American people expect and deserve.

OMB has already advanced AI adoption in government by reducing onerous rules imposed by the Biden Administration.[17, 18] Now is the time to build on this success.

Recommended Policy Actions

- Formalize the Chief Artificial Intelligence Officer Council (CAIOC) as the primary venue for interagency coordination and collaboration on AI adoption. Through the CAIOC, initiate strategic coordination and collaboration with relevant Federal executive councils, to include: the President's Management Council, Chief Data Officer Council, Chief Information Officer Council, Interagency Council on Statistical Policy, Chief Human Capital Officer Council, and Federal Privacy Council.
- Create a talent-exchange program designed to allow rapid details of Federal staff to other agencies in need of specialized AI talent (e.g., data scientists and software engineers), with input from the Office of Personnel Management.
- Create an AI procurement toolbox managed by the General Services Administration (GSA), in coordination with OMB, that facilitates uniformity across the Federal enterprise to the greatest extent practicable. This system would allow any Federal agency to easily choose among multiple models in a manner compliant with relevant privacy, data governance, and transparency laws. Agencies should also have ample flexibility to customize models to their own ends, as well as to see a catalog of other agency AI uses (based on OMB's pre-existing AI Use Case Inventory).
- Implement an Advanced Technology Transfer and Capability Sharing Program with GSA to quickly transfer advanced AI capabilities and use cases between agencies.
- Mandate that all Federal agencies ensure—to the maximum extent practicable—that all employees whose work could benefit from access to frontier language models have access to, and appropriate training for, such tools.
- Convene, under the auspices of OMB, a cohort of agencies with High Impact Service Providers to pilot and increase the use of AI to improve the delivery of services to the public.

Drive Adoption of AI within the Department of Defense

AI has the potential to transform both the warfighting and back-office operations of the DOD. The United States must aggressively adopt AI within its Armed Forces if it is to maintain its global military preeminence while also ensuring, as outlined throughout this Action Plan, that its use of AI is secure and reliable. Because the DOD has unique operational needs within the Federal government, it merits specific policy actions to drive AI adoption.

[17] Office of Management and Budget, "Accelerating Federal Use of AI through Innovation, Governance, and Public Trust (M-25-21)," (Washington, DC: Executive Office of the President, 2025), www.whitehouse.gov/wp-content/uploads/2025/02/M-25-21-Accelerating-Federal-Use-of-AI-through-Innovation-Governance-and-Public-Trust.pdf.

[18] Office of Management and Budget, "Driving Efficient Acquisition of Artificial Intelligence in Government (M-25 22)," (Washington, DC: Executive Office of the President, 2025), www.whitehouse.gov/wp-content/uploads/2025/02/M-25-22-Driving-Efficient-Acquisition-of-Artificial-Intelligence-in-Government.pdf.

Recommended Policy Actions

- Identify the talent and skills DOD's workforce requires to leverage AI at scale. Based on this identification, implement talent development programs to meet AI workforce requirements and drive the effective employment of AI-enabled capabilities.
- Establish an AI & Autonomous Systems Virtual Proving Ground at DOD, beginning with scoping the technical, geographic, security, and resourcing requirements necessary for such a facility.
- Develop a streamlined process within DOD for classifying, evaluating, and optimizing workflows involved in its major operational and enabling functions, aiming to develop a list of priority workflows for automation with AI. When a workflow is successfully automated, DOD should strive to permanently transition that workflow to the AI-based implementation as quickly as practicable.
- Prioritize DOD-led agreements with cloud service providers, operators of computing infrastructure, and other relevant private sector entities to codify priority access to computing resources in the event of a national emergency so that DOD is prepared to fully leverage these technologies during a significant conflict.
- Grow our Senior Military Colleges into hubs of AI research, development, and talent building, teaching core AI skills and literacy to future generations. Foster AI-specific curriculum, including in AI use, development, and infrastructure management, in the Senior Military Colleges throughout majors.

Protect Commercial and Government AI Innovations

Maintaining American leadership in AI necessitates that the U.S. government work closely with industry to appropriately balance the dissemination of cutting-edge AI technologies with national security concerns. It is also essential for the U.S. government to effectively address security risks to American AI companies, talent, intellectual property, and systems.

Recommended Policy Actions

- Led by DOD, DHS, CAISI at DOC, and other appropriate members of the IC, collaborate with leading American AI developers to enable the private sector to actively protect AI innovations from security risks, including malicious cyber actors, insider threats, and others.

Combat Synthetic Media in the Legal System

One risk of AI that has become apparent to many Americans is malicious deepfakes, whether they be audio recordings, videos, or photos. While President Trump has already signed the TAKE IT DOWN Act, which was championed by First Lady Melania Trump and intended to protect against sexually explicit, non-consensual deepfakes, additional action is needed. [19] In particular, AI-generated media may present novel challenges to the legal system. For example, fake evidence could be used to attempt to deny justice to both plaintiffs and

[19] TAKE IT DOWN Act, Pub. L. No. 119-12, 139 Stat. 55 (2025) (codified as 47 U.S.C. § 223(h)).

defendants. The Administration must give the courts and law enforcement the tools they need to overcome these new challenges.

Recommended Policy Actions

- Led by NIST at DOC, consider developing NIST's *Guardians of Forensic Evidence* deepfake evaluation program into a formal guideline and a companion voluntary forensic benchmark.[20]
- Led by the Department of Justice (DOJ), issue guidance to agencies that engage in adjudications to explore adopting a deepfake standard similar to the proposed Federal Rules of Evidence Rule 901(c) under consideration by the Advisory Committee on Evidence Rules.
- Led by DOJ's Office of Legal Policy, file formal comments on any proposed deepfake-related additions to the Federal Rules of Evidence.

[20] Haiying Guan, James Horan, and Andrew Zhang, "Guardians of Forensic Evidence: Evaluating Analytic Systems Against AI-Generated Deepfakes," (Gaithersburg, MD: National Institute of Standards and Technology, January 27, 2025), www.nist.gov/publications/guardians-forensic-evidence-evaluating-analytic-systems-against-ai-generated-deepfakes.

Pillar II: Build American AI Infrastructure

AI is the first digital service in modern life that challenges America to build vastly greater energy generation than we have today. American energy capacity has stagnated since the 1970s while China has rapidly built out their grid. America's path to AI dominance depends on changing this troubling trend.

Create Streamlined Permitting for Data Centers, Semiconductor Manufacturing Facilities, and Energy Infrastructure while Guaranteeing Security

Like most general-purpose technologies of the past, AI will require new infrastructure—factories to produce chips, data centers to run those chips, and new sources of energy to power it all. America's environmental permitting system and other regulations make it almost impossible to build this infrastructure in the United States with the speed that is required. Additionally, this infrastructure must also not be built with any adversarial technology that could undermine U.S. AI dominance.

Fortunately, the Trump Administration has made unprecedented progress in reforming this system. Since taking office, President Trump has already reformed National Environmental Policy Act (NEPA) regulations across almost every relevant Federal agency, jumpstarted a permitting technology modernization program, created the National Energy Dominance Council (NEDC), and launched the United States Investment Accelerator.[21, 22, 23, 24] Now is the time to build on that momentum.

Recommended Policy Actions

- Establish new Categorical Exclusions under NEPA to cover data center-related actions that normally do not have a significant effect on the environment. Where possible, adopt Categorical Exclusions already established by other agencies so that each relevant agency can proceed with maximum efficiency.
- Expand the use of the FAST-41 process to cover all data center and data center energy projects eligible under the Fixing America's Surface Transportation Act of 2015.[25]
- Explore the need for a nationwide Clean Water Act Section 404 permit for data centers, and, if adopted, ensure that this permit does not require a Pre-Construction Notification and covers development sites consistent with the size of a modern AI data center. [26]
- Expedite environmental permitting by streamlining or reducing regulations promulgated under the Clean Air Act, the Clean Water Act, the Comprehensive

[21] Executive Order 14156 of January 20, 2025, "Declaring a National Energy Emergency," Federal Register 90 (18) 8433, www.govinfo.gov/content/pkg/FR-2025-01-29/pdf/2025-02003.pdf.
[22] Presidential Memorandum of April 15, 2025, "Updating Permitting Technology for the 21st Century," www.whitehouse.gov/presidential-actions/2025/04/updating-permitting-technology-for-the-21st-century/.
[23] Executive Order 14213 of February 14, 2025, "Establishing the National Energy Dominance Council," Federal Register 90 (33) 9945, www.govinfo.gov/content/pkg/FR-2025-02-20/pdf/2025-02928.pdf.
[24] Executive Order 14255 of March 31, 2025, "Establishing the United States Investment Accelerator," Federal Register 90 (63) 14701, www.govinfo.gov/content/pkg/FR-2025-04-03/pdf/2025-05908.pdf.
[25] Fixing America's Surface Transportation Act, 42 U.S.C. §§ 4370m-4370m-11.
[26] Clean Water Act of 1972, 33 U.S.C. § 1344.

Environmental Response, Compensation, and Liability Act, and other relevant related laws.[27, 28]

- Make Federal lands available for data center construction and the construction of power generation infrastructure for those data centers by directing agencies with significant land portfolios to identify sites suited to large-scale development.
- Maintain security guardrails to prohibit adversaries from inserting sensitive inputs to this infrastructure. Ensure that the domestic AI computing stack is built on American products and that the infrastructure that supports AI development such as energy and telecommunications are free from foreign adversary information and communications technology and services (ICTS)—including software and relevant hardware.
- Expand efforts to apply AI to accelerate and improve environmental reviews, such as through expanding the number of agencies participating in DOE's PermitAI project.[29]

Develop a Grid to Match the Pace of AI Innovation

The U.S. electric grid is one of the largest and most complex machines on Earth. It, too, will need to be upgraded to support data centers and other energy-intensive industries of the future. The power grid is the lifeblood of the modern economy and a cornerstone of national security, but it is facing a confluence of challenges that demand strategic foresight and decisive action. Escalating demand driven by electrification and the technological advancements of AI are increasing pressures on the grid. The United States must develop a comprehensive strategy to enhance and expand the power grid designed not just to weather these challenges, but to ensure the grid's continued strength and capacity for future growth.

Recommended Policy Actions

- Stabilize the grid of today as much as possible. This initial phase acknowledges the need to safeguard existing assets and ensures an uninterrupted and affordable supply of power. The United States must prevent the premature decommissioning of critical power generation resources and explore innovative ways to harness existing capacity, such as leveraging extant backup power sources to bolster grid reliability during peak demand. A key element of this stabilization is to ensure every corner of the electric grid is in compliance with nationwide standards for resource adequacy and sufficient power generation capacity is consistently available across the country.
- Optimize existing grid resources as much as possible. This involves implementing strategies to enhance the efficiency and performance of the transmission system. The United States must explore solutions like advanced grid management technologies and upgrades to power lines that can increase the amount of electricity transmitted along existing routes. Furthermore, the United States should investigate new and novel ways for large power consumers to manage their power consumption during critical grid periods to enhance reliability and unlock additional power on the system.

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[27] Clean Air Act of 1963, 42 U.S.C. §§ 7401-7671q.
[28] Comprehensive Environmental Response, Compensation, and Liability Act of 1980. 42 U.S.C. §§ 9601-9675.
[29] Office of Policy, U.S. Department of Energy, "Faster, Better Permitting with PermitAI," (Washington, D.C., July 10, 2025), www.energy.gov/policy/articles/faster-better-permitting-permitai.

- Prioritize the interconnection of reliable, dispatchable power sources as quickly as possible and embrace new energy generation sources at the technological frontier (e.g., enhanced geothermal, nuclear fission, and nuclear fusion). Reform power markets to align financial incentives with the goal of grid stability, ensuring that investment in power generation reflects the system's needs.
- Create a strategic blueprint for navigating the complex energy landscape of the 21st century. By stabilizing the grid of today, optimizing existing grid resources, and growing the grid for the future, the United States can rise to the challenge of winning the AI race while also delivering a reliable and affordable power grid for all Americans.

Restore American Semiconductor Manufacturing

America jump-started modern technology with the invention of the semiconductor. Now America must bring semiconductor manufacturing back to U.S. soil. A revitalized U.S. chip industry will generate thousands of high-paying jobs, reinforce our technological leadership, and protect our supply chains from disruption by foreign rivals. The Trump Administration will lead that revitalization without making bad deals for the American taxpayer or saddling companies with sweeping ideological agendas.

Recommended Policy Actions

- Led by DOC's revamped CHIPS Program Office, continue focusing on delivering a strong return on investment for the American taxpayer and removing all extraneous policy requirements for CHIPS-funded semiconductor manufacturing projects. DOC and other relevant Federal agencies should also collaborate to streamline regulations that slow semiconductor manufacturing efforts.
- Led by DOC, review semiconductor grant and research programs to ensure that they accelerate the integration of advanced AI tools into semiconductor manufacturing.

Build High-Security Data Centers for Military and Intelligence Community Usage

Because AI systems are particularly well-suited to processing raw intelligence data today, and because of the vastly expanded capabilities AI systems could have in the future, it is likely that AI will be used with some of the U.S. government's most sensitive data. The data centers where these models are deployed must be resistant to attacks by the most determined and capable nation-state actors.

Recommended Policy Actions

- Create new technical standards for high-security AI data centers, led by DOD, the IC, NSC, and NIST at DOC, including CAISI, in collaboration with industry and, as appropriate, relevant Federally Funded Research and Development Centers.
- Advance agency adoption of classified compute environments to support scalable and secure AI workloads.

Train a Skilled Workforce for AI Infrastructure

To build the infrastructure needed to power America's AI future, we must also invest in the workforce that will build, operate, and maintain it—including roles such as electricians, advanced HVAC technicians, and a host of other high-paying occupations. To address the shortages in many of these critical jobs, the Trump Administration should identify the priority roles that underpin AI infrastructure, develop modern skills frameworks, support industry-driven training, and expand early pipelines through general education, CTE, and Registered Apprenticeships to fuel American AI leadership.

Recommended Policy Actions

- Led by DOL and DOC, create a national initiative to identify high-priority occupations essential to the buildout of AI-related infrastructure. This effort would convene employers, industry groups, and other workforce stakeholders to develop or identify national skill frameworks and competency models for these roles. These frameworks would provide voluntary guidance that may inform curriculum design, credential development, and alignment of workforce investments.
- Through DOL, DOE, ED, NSF, and DOC, partner with state and local governments and workforce system stakeholders to support the creation of industry-driven training programs that address workforce needs tied to priority AI infrastructure occupations. These programs should be co-developed by employers and training partners to ensure individuals who complete the program are job-ready and directly connected to the hiring process. Models could also be explored that incentivize employer upskilling of incumbent workers into priority occupations. DOC should integrate these training models as a core workforce component of its infrastructure investment programs. Funding for this strategy will be prioritized based on a program's ability to address identified pipeline gaps and deliver talent outcomes aligned to employer demand.
- Led by DOL, ED, and NSF, partner with education and workforce system stakeholders to expand early career exposure programs and pre-apprenticeships that engage middle and high school students in priority AI infrastructure occupations. These efforts should focus on creating awareness and excitement about these jobs, aligning with local employer needs, and providing on-ramps into high-quality training and Registered Apprenticeship programs.
- Through the ED Office of Career, Technical, and Adult Education, provide guidance to state and local CTE systems about how to update programs of study to align with priority AI infrastructure occupations. This includes refreshing curriculum, expanding dual enrollment options, and strengthening connections between CTE programs, employers, and training providers serving AI infrastructure occupations.
- Led by DOL, expand the use of Registered Apprenticeships in occupations critical to AI infrastructure. Efforts should focus on streamlining the launch of new programs in priority industries and occupations and removing barriers to employer adoption, including simplifying registration, supporting intermediaries, and aligning program design with employer needs.
- Led by DOE, expand the hands-on research training and development opportunities for undergraduate, graduate, and postgraduate students and educators, leveraging

expertise and capabilities in AI across its national laboratories. This should include partnering with community colleges and technical/career colleges to prepare new workers and help transition the existing workforce to fill critical AI roles.

Bolster Critical Infrastructure Cybersecurity

As AI systems advance in coding and software engineering capabilities, their utility as tools of both cyber offense and defense will expand. Maintaining a robust defensive posture will be especially important for owners of critical infrastructure, many of whom operate with limited financial resources. Fortunately, AI systems themselves can be excellent defensive tools. With continued adoption of AI-enabled cyberdefensive tools, providers of critical infrastructure can stay ahead of emerging threats.

However, the use of AI in cyber and critical infrastructure exposes those AI systems to adversarial threats. All use of AI in safety-critical or homeland security applications should entail the use of secure-by-design, robust, and resilient AI systems that are instrumented to detect performance shifts, and alert to potential malicious activities like data poisoning or adversarial example attacks.

Recommended Policy Actions

- Establish an AI Information Sharing and Analysis Center (AI-ISAC), led by DHS, in collaboration with CAISI at DOC and the Office of the National Cyber Director, to promote the sharing of AI-security threat information and intelligence across U.S. critical infrastructure sectors.
- Led by DHS, issue and maintain guidance to private sector entities on remediating and responding to AI-specific vulnerabilities and threats.
- Ensure collaborative and consolidated sharing of known AI vulnerabilities from within Federal agencies to the private sector as appropriate. This process should take advantage of existing cyber vulnerability sharing mechanisms.

Promote Secure-By-Design AI Technologies and Applications

AI systems are susceptible to some classes of adversarial inputs (e.g., data poisoning and privacy attacks), which puts their performance at risk. The U.S. government has a responsibility to ensure the AI systems it relies on—particularly for national security applications—are protected against spurious or malicious inputs. While much work has been done to advance the field of AI Assurance, promoting resilient and secure AI development and deployment should be a core activity of the U.S. government.

Recommended Policy Actions

- Led by DOD in collaboration with NIST at DOC and ODNI, continue to refine DOD's Responsible AI and Generative AI Frameworks, Roadmaps, and Toolkits.
- Led by ODNI in consultation with DOD and CAISI at DOC, publish an IC Standard on AI Assurance under the auspices of Intelligence Community Directive 505 on Artificial Intelligence.

Promote Mature Federal Capacity for AI Incident Response

The proliferation of AI technologies means that prudent planning is required to ensure that, if systems fail, the impacts to critical services or infrastructure are minimized and response is imminent. To prepare for such an eventuality, the U.S. government should promote the development and incorporation of AI Incident Response actions into existing incident response doctrine and best-practices for both the public and private sectors.

Recommended Policy Actions

- Led by NIST at DOC, including CAISI, partner with the AI and cybersecurity industries to ensure AI is included in the establishment of standards, response frameworks, best-practices, and technical capabilities (e.g., fly-away kits) of incident response teams.
- Modify the Cybersecurity and Infrastructure Security Agency's Cybersecurity Incident & Vulnerability Response Playbooks to incorporate considerations for AI systems and to include requirements for Chief Information Security Officers to consult with Chief AI Officers, Senior Agency Officials for Privacy, CAISI at DOC, and other agency officials as appropriate. Agencies should update their subordinate playbooks accordingly.
- Led by DOD, DHS, and ODNI, in coordination with OSTP, NSC, OMB, and the Office of the National Cyber Director, encourage the responsible sharing of AI vulnerability information as part of ongoing efforts to implement Executive Order 14306, "Sustaining Select Efforts to Strengthen the Nation's Cybersecurity and Amending Executive Order 13694 and Executive Order 14144."[30]

[30] Executive Order 14306 of June 6, 2025, "Sustaining Select Efforts To Strengthen the Nation's Cybersecurity and Amending Executive Order 13694 and Executive Order 14144," Federal Register 90 (111) 24723, www.govinfo.gov/content/pkg/FR-2025-06-11/pdf/2025-10804.pdf.

Pillar III: Lead in International AI Diplomacy and Security

To succeed in the global AI competition, America must do more than promote AI within its own borders. The United States must also drive adoption of American AI systems, computing hardware, and standards throughout the world. America currently is the global leader on data center construction, computing hardware performance, and models. It is imperative that the United States leverage this advantage into an enduring global alliance, while preventing our adversaries from free-riding on our innovation and investment.

Export American AI to Allies and Partners

The United States must meet global demand for AI by exporting its full AI technology stack—hardware, models, software, applications, and standards—to all countries willing to join America's AI alliance. A failure to meet this demand would be an unforced error, causing these countries to turn to our rivals. The distribution and diffusion of American technology will stop our strategic rivals from making our allies dependent on foreign adversary technology.

Recommended Policy Actions

- Establish and operationalize a program within DOC aimed at gathering proposals from industry consortia for full-stack AI export packages. Once consortia are selected by DOC, the Economic Diplomacy Action Group, the U.S. Trade and Development Agency, the Export-Import Bank, the U.S. International Development Finance Corporation, and the Department of State (DOS) should coordinate with DOC to facilitate deals that meet U.S.-approved security requirements and standards.

Counter Chinese Influence in International Governance Bodies

A large number of international bodies, including the United Nations, the Organisation for Economic Co-operation and Development, G7, G20, International Telecommunication Union, Internet Corporation for Assigned Names and Numbers, and others have proposed AI governance frameworks and AI development strategies. The United States supports like-minded nations working together to encourage the development of AI in line with our shared values. But too many of these efforts have advocated for burdensome regulations, vague "codes of conduct" that promote cultural agendas that do not align with American values, or have been influenced by Chinese companies attempting to shape standards for facial recognition and surveillance.

Recommended Policy Actions

- Led by DOS and DOC, leverage the U.S. position in international diplomatic and standard-setting bodies to vigorously advocate for international AI governance approaches that promote innovation, reflect American values, and counter authoritarian influence.

Strengthen AI Compute Export Control Enforcement

Advanced AI compute is essential to the AI era, enabling both economic dynamism and novel military capabilities. Denying our foreign adversaries access to this resource, then, is a matter of both geostrategic competition and national security. Therefore, we should pursue creative approaches to export control enforcement.

Recommended Policy Actions

- Led by DOC, OSTP, and NSC in collaboration with industry, explore leveraging new and existing location verification features on advanced AI compute to ensure that the chips are not in countries of concern.
- Establish a new effort led by DOC to collaborate with IC officials on global chip export control enforcement. This would include monitoring emerging technology developments in AI compute to ensure full coverage of possible countries or regions where chips are being diverted. This enhanced monitoring could then be used to expand and increase end-use monitoring in countries where there is a high risk of diversion of advanced, U.S.-origin AI compute, especially where there is not a Bureau of Industry and Security Export Control Officer present in-country.

Plug Loopholes in Existing Semiconductor Manufacturing Export Controls

Semiconductors are among the most complex inventions ever conceived by man. America and its close allies hold near-monopolies on many critical components and processes in the semiconductor manufacturing pipeline. We must continue to lead the world with pathbreaking research and new inventions in semiconductor manufacturing, but the United States must also prevent our adversaries from using our innovations to their own ends in ways that undermine our national security. This requires new measures to address gaps in semiconductor manufacturing export controls, coupled with enhanced enforcement.

Recommended Policy Actions

- Led by DOC, develop new export controls on semiconductor manufacturing sub-systems. Currently, the United States and its allies impose export controls on major systems necessary for semiconductor manufacturing, but do not control many of the component sub-systems.

Align Protection Measures Globally

America must impose strong export controls on sensitive technologies. We should encourage partners and allies to follow U.S. controls, and not backfill. If they do, America should use tools such as the Foreign Direct Product Rule and secondary tariffs to achieve greater international alignment.

Recommended Policy Actions

- Led by DOC and DOS and in coordination with NSC, DOE, and NSF, develop, implement, and share information on complementary technology protection measures, including in basic research and higher education, to mitigate risks from strategic adversaries and

concerning entities. This work should build on existing efforts underway at DOS and DOC, or, where necessary, involve new diplomatic campaigns.

- Develop a technology diplomacy strategic plan for an AI global alliance to align incentives and policy levers across government to induce key allies to adopt complementary AI protection systems and export controls across the supply chain, led by DOS in coordination with DOC, DOD, and DOE. This plan should aim to ensure that American allies do not supply adversaries with technologies on which the U.S. is seeking to impose export controls.
- Expand new initiatives for promoting plurilateral controls for the AI tech stack, avoiding the sole reliance on multilateral treaty bodies to accomplish this objective, while also encompassing existing U.S. controls and all future controls to level the playing field between U.S. and allied controls.
- Led by DOC and DOD, coordinate with allies to ensure that they adopt U.S. export controls, work together with the U.S to develop new controls, and prohibit U.S. adversaries from supplying their defense-industrial base or acquiring controlling stakes in defense suppliers.

Ensure that the U.S. Government is at the Forefront of Evaluating National Security Risks in Frontier Models

The most powerful AI systems may pose novel national security risks in the near future in areas such as cyberattacks and the development of chemical, biological, radiological, nuclear, or explosives (CBRNE) weapons, as well as novel security vulnerabilities. Because America currently leads on AI capabilities, the risks present in American frontier models are likely to be a preview for what foreign adversaries will possess in the near future. Understanding the nature of these risks as they emerge is vital for national defense and homeland security.

Recommended Policy Actions

- Evaluate frontier AI systems for national security risks in partnership with frontier AI developers, led by CAISI at DOC in collaboration with other agencies with relevant expertise in CBRNE and cyber risks.
- Led by CAISI at DOC in collaboration with national security agencies, evaluate and assess potential security vulnerabilities and malign foreign influence arising from the use of adversaries' AI systems in critical infrastructure and elsewhere in the American economy, including the possibility of backdoors and other malicious behavior. These evaluations should include assessments of the capabilities of U.S. and adversary AI systems, the adoption of foreign AI systems, and the state of international AI competition.
- Prioritize the recruitment of leading AI researchers at Federal agencies, including NIST and CAISI within DOC, DOE, DOD, and the IC, to ensure that the Federal government can continue to offer cutting-edge evaluations and analysis of AI systems.
- Build, maintain, and update as necessary national security-related AI evaluations through collaboration between CAISI at DOC, national security agencies, and relevant research institutions.

Invest in Biosecurity

AI will unlock nearly limitless potential in biology: cures for new diseases, novel industrial use cases, and more. At the same time, it could create new pathways for malicious actors to synthesize harmful pathogens and other biomolecules. The solution to this problem is a multi-tiered approach designed to screen for malicious actors, along with new tools and infrastructure for more effective screening. As these tools, policies, and enforcement mechanisms mature, it will be essential to work with allies and partners to ensure international adoption.

Recommended Policy Actions

- Require all institutions receiving Federal funding for scientific research to use nucleic acid synthesis tools and synthesis providers that have robust nucleic acid sequence screening and customer verification procedures. Create enforcement mechanisms for this requirement rather than relying on voluntary attestation.
- Led by OSTP, convene government and industry actors to develop a mechanism to facilitate data sharing between nucleic acid synthesis providers to screen for potentially fraudulent or malicious customers.
- Build, maintain, and update as necessary national security-related AI evaluations through collaboration between CAISI at DOC, national security agencies, and relevant research institutions.

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THE WHITE HOUSE

WASHINGTON

Broadband
2025

Unlocking the Future Faster

USTELECOM | THE BROADBAND ASSOCIATION

An Open Letter to President Donald Trump and the 119th Congress

On behalf of USTelecom members and the hundreds of thousands of people they employ who design, build and manage our nation's world-class broadband networks, I congratulate you as you answer the call to public service and begin your terms in office.

As innovators and connectors, we also extend our hand in partnership as we work together to shape new policies for a new era of American innovation.

The broadband technology we deliver offers policymakers the most responsive, efficient and effective means available to meet the critical needs of our citizens, our communities and our economy. From strengthening U.S. competitiveness, to fostering resilience in the wake of natural disasters, to unlocking the possibilities of AI, to delivering world-class education and healthcare, ever stronger, faster and more resilient broadband networks are essential to virtually all progress.

Broadband providers have delivered a strong foundation to build on. Our sector invested nearly $95 billion last year in U.S. communications infrastructure, committing over $2 trillion of private capital since 1996. Since 2015, as inflation ate away at household purchasing power with rising grocery prices, rents and energy bills, prices for the most popular broadband services actually declined by roughly 60%.

This progress is fueled by the fact that consumers have an abundance of broadband service choices today – from wired to mobile and fixed wireless to satellite and beyond – all competing to attract and keep customers. From a policy standpoint, broadband's transformative contributions have occurred not because of, but in spite of, profoundly outmoded government policies, which over time have too often revealed themselves as a feature, not a bug of U.S. innovation policy.

It is time to turn the page.

The good news? As the saying goes, there are few challenges that can't be solved by turning things on and off again. A hard reset of the relationship between government and the private sector, and how they work efficiently and dynamically together to advance U.S. interests, is long overdue.

What follows are actions that can be taken quickly to exercise bold leadership and put our nation on the fast track toward unlocking the future faster. Broadband providers stand ready to roll up our sleeves and work with the new Administration and Congress to get the job done.



Jonathan Spalter
President and CEO, USTelecom



Key Priorities

CHAMPION THE NETWORKS OF THE FUTURE

Outdated regulations that force telecommunications companies to maintain decades-old copper phone lines are a prime target for common-sense reform. This red tape directly undermines the clear priority to maximize resources to extend the reach, resilience and capacity of high-speed broadband.

Instead, market by market, providers are required to engage in long 'Mother may I' processes seeking government permission to stop providing plain old telephone service and deploy their own capital to meet consumer demand for modern, faster, stronger broadband networks.

Copper phone lines require massive expense and effort to maintain. As manufacturers stop producing outdated equipment, some network operators must resort to scouring eBay for parts.

Most Americans have abandoned their landlines for cell phones and other more advanced technologies. Moving away from regulations that force companies to preserve outmoded and unwanted technologies will enhance investment in the broadband networks of the future that consumers and our economy demand.

Copper phone lines require massive expense and effort to maintain. As manufacturers stop producing outdated equipment, some network operators must resort to scouring eBay for parts.

SECURE AND REFORM UNIVERSAL SERVICE

Americans voted for their elected representatives with the expectation that their vision for our nation and its governance will make their lives better. The country's longstanding commitment to universal service – connecting everyone, regardless of geography, to affordable, reliable communications – is essential to delivering on that promise.

The Universal Service Fund helps overcome the substantial cost barriers to connecting rural America. But the USF is now facing an existential threat in the courts. Legislative action is urgently needed to both reaffirm the clear bipartisan intent of Congress to maintain this commitment and reform how the program is funded.

Reform must begin by requiring Big Tech companies that benefit massively from universal connectivity to join in contributing to this vital national commitment.

PUT THE PEDAL TO THE METAL ON BROADBAND DEPLOYMENT

In 2021, Congress enacted historic, bipartisan legislation aimed at finishing the job of connecting all communities to high-speed broadband. Yet administration of the resulting $42.5 billion BEAD Program has been bogged down under the weight of entirely unrelated political objectives and social mandates.

Given these developments, there is broad and understandable frustration about just how far program implementation has strayed from the original intent of Congress. Everyone wants to deploy broadband and reach universal connectivity. However, every unrelated kitchen sink issue we pile on top of that important objective slows the process, limits efficiency and effectiveness and fails to deliver the responsive, impactful government that Americans are crystal clear they want to see more of today.

The new NTIA should roll back rate regulation and other requirements that Congress never asked for, while retaining a significant role for fiber, the high-speed broadband gold standard. This would shed the unwanted baggage and accelerate what matters most— getting the work of connecting everyone done.

The new NTIA should roll back rate regulation and other requirements that Congress never asked for.

Restoring a tight focus on the mission—broadband deployment—can dramatically accelerate efforts to fill gaps in high-speed service, helping unlock economic opportunities and access to innovation throughout our country. Simply put, government can achieve far more in this instance by doing far less.

REVIEW ALL LEGACY REGULATIONS WITH FRESH, MODERN EYES

Bold leadership in removing outdated rules, many that pre-date the internet itself, could immediately and dramatically invigorate U.S. competitiveness and expand economic and other opportunities throughout our country. The fact that we had a 20-year debate over whether internet access should be treated like telephone service exemplifies the disconnect.

Much of our nation's status quo communications policy relates to a world of rotary phones and landlines, and telephone and television monopolies, when Amazon was a river and googol a complex math term. Yet rules, both large and small, written for that era persist — from requiring companies to maintain outdated networks to mandating quarterly reports on payphone usage. In fact, New York City removed its last public payphone in 2022.

The new Administration should look at the regulations on the books with fresh eyes and a new mindset, asking some clear, common-sense questions: Does this rule make sense for American consumers in the modern world? Does it advance the nation's interests? Is it the best use of both government and industry's time and resources? Less money for nonsensical compliance means more money to invest in high-quality broadband service. Slimming the rulebooks and trimming the paperwork will help deliver the impactful, responsive governance America needs without the tax on time and cost that excessive bureaucracy takes.

BREAK THE FEDERAL PERMITTING LOG JAM

A functioning government is a non-partisan mandate. Yet nowhere is the ability of the gears of government to grind all progress to a halt more glaringly apparent than in the painfully slow process of obtaining the federal permits broadband providers require to make universal connectivity a reality. The longstanding frustration is palpable. Permitting requests can languish for months and even years. In Utah, one provider waited almost three years for permission to simply repair an existing fiber optic line on federal lands.

In Utah, one provider waited almost **three years** for permission to simply repair an existing fiber optic line on federal lands.

The fix is straightforward: Congress should green light speeding up approvals for more broadband projects on federal lands. With a third of our nation's land under federal control, federal permitting reform would provide an immediate adrenaline shot to the capacity, sophistication, reach and security of our nation's information infrastructure.

Legislation cleared the House last Congress and is poised and ready to move again. Leadership and a sense of urgency can get it over the finish line.

MODEL EFFICIENT, EFFECTIVE GOVERNMENT ON CYBERSECURITY

Cybersecurity threats against our country, its critical infrastructure and our people have never been greater or more complex. Traditional government bureaucracy and top-down regulation have little chance of keeping pace with well-funded, agile and highly skilled state actors and criminal syndicates seeking to do our nation and our people harm.

The White House should lead a coordinated effort capable of slicing through bureaucratic silos to ensure agencies not only work efficiently with one another, but shoulder-to-shoulder with critical infrastructure providers toward a shared objective— keeping our nation secure. The bad guys in countries like China and North Korea don't face bureaucratic barriers; neither should the good guys—in government, industry and beyond—who need to be able to work together quickly, with agility and intelligence, to keep us safe.

The Connected Road Ahead

Efficient, focused public and private investment in modern broadband networks not only keeps us all connected but also moves our nation and its economy forward as the undisputed global leader in the information age. The combination of advances in artificial intelligence, quantum networks and other innovations propelled by world-leading broadband infrastructure hold tremendous possibility for our nation. Yet, all too often, the rules governing our connected nation are counterproductive artifacts of a different era. It is imperative that government policies don't merely catch up with citizens' lives today, but accelerate the arrival of what's next.

Broadband providers stand ready to work with the Trump Administration and Congress to focus on timely government action that walks the talk of efficient, effective government. We must empower all of the nation with the full potential for opportunity and innovation that broadband makes possible.

2025 telecom industry outlook | Deloitte Insights

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February 19, 2025



Telecom stocks increased in value during 2024, up about 11% for the year.[1] However, this fell short of the S&P 500 or NASDAQ gains, which were up about 25% and 30%, respectively.[2] At trade shows like the Mobile World Congress (MWC) in Barcelona, in the press, and in meetings, telecom CEOs are asking, “How can we turn ourselves into a growth industry once again, and see higher stock valuations?”[3]

The telecom industry has experienced higher periods of revenue-growth cycles over the last 100 years, driven by wireline a century ago, and more recently by providing mobile connectivity and internet broadband. At other times, the industry is seen as a slow but steady sector, with single-digit revenue growth, solid dividend yields (about 4% globally on average,),[4] and often being able to cut costs so that profitability rises slightly faster than revenues.

That’s where the industry is in 2024, and as it looks at 2025 and beyond to 2030, telecoms are expected to work to keep cutting costs, keep capital expenditures under control, monetize their past investments, and use mergers and acquisitions (M&A) to drive value.[5] Growth-oriented telecoms will likely also find ways to grow revenues faster than core connectivity growth would suggest. However, the market for telecoms is rapidly evolving. As new technologies and digitization of the economy continue to flourish at rapid pace, telecoms will be faced with difficult investment choices.

This outlook focuses on three of those difficult choices, and we have a full chapter on each:

1. In 2025, the most discussed source of growth for many industries is generative AI, and telcos are asking how they can share in that excitement.[6]
2. At the same time, telcos are roughly at the midpoint between the launch of 5G and the expected launch of 6G, and they want to confirm that they can shape 6G to be more profitable than 5G has so far been.
3. Finally, after years of divesting noncore assets, telcos are getting primed to deploy M&A strategies in pursuit of growth.[7]

Telecom “fast facts”

Below, we’ve put together some “fast facts” that give an overview of some important statistics that make up this critical but sometimes underappreciated industry:

> Globally, the telecommunications industry is expected to have revenues of about US$1.53 trillion in 2024, up about 3% over the prior year.[8] Both in 2024 and out to 2028, growth is expected to be higher in Asia Pacific and Europe, Middle East, and Africa, with growth in the Americas being around 1% annually. All three regions are expected to surpass half a trillion dollars in revenue each by 2027.[9] By market cap, the sector is about US$2.6 trillion globally (figure 1).

- Telco stocks globally were up about 11% in 2024, but there was significant regional variation: North American telcos were up over 20% while Latin American and Caribbean telcos were down about 14%, with Asia-Pacific and European players up by 11% to 12%, and Africa and the Middle East remaining flat.[10]
- Global telecoms are experiencing positive financial conditions: Revenues are growing, operating expenses are being contained, capital expenditures are declining, average revenue per user (ARPU) is up a bit (by 2%, to about US$28) and earnings before interest, taxes, depreciation, and amortization (EBITDA) margins were just over 38% in early 2024.[11]
- By the end of 2025, it is expected that just under 5 billion people will have mobile internet access, up from 4.6 billion in 2023.[12] Although 96% of the world’s population have mobile internet available in 2023, that means that 4%, or about 350 million, experience a coverage gap (which only represents where they live, not where they travel, suggesting the actual coverage gap is even larger).[13] Further, 39% of the population, or 3.1 billion people, have mobile connectivity available, but are nonetheless not connected for a variety of reasons, which is the usage gap.[14] Around 19 million jobs were directly supported by the mobile ecosystem in 2023.[15]

The US Communications Infrastructure Index (CII)

US and global communications infrastructure providers have a century-plus track record of innovating and scaling to meet existing consumer and business connectivity needs and investing to meet future needs, most recently handling the spike and shift in demand due to COVID-19–driven restrictions.

To answer the question “Are we prepared for another shift?” Deloitte has created the communications infrastructure index for the United States. Composed of 20 key metrics, updated annually, the CII shows almost 30% growth across the combined metrics from 2019 to 2024, and even sets an aspirational goal for further growth to 2030 (figure 2).

Show more

Telcos and gen AI: How can the industry profit from this tech?

Telcos are using gen AI to reduce costs, become more efficient, and offer new services. Some are building new gen AI data centers to sell training and inference to others. What role does connectivity play in these data centers?

There is a gen AI gold rush expected over the next five years. Spending estimates range from hundreds of billions to over a trillion dollars on the physical layer required for gen AI: chips, data centers, and electricity.[16] Close to another hundred billion US dollars will likely be spent on the software and services layer.[17] Telcos should focus on the opportunity to participate by connecting all of those different pieces of hardware and software. And shouldn’t telcos, whose business is all about connectivity, be able to profit in some way?

There are gen AI markets for connectivity: Inside the data centers there are miles of mainly copper (and some fiber) cables for transmitting data from board to board and rack to rack. Serving this market is worth billions in 2025,[18] but much of this connectivity is provided by data centers and chipmakers and have never been provided by telcos.

There are also massive, long-haul fiber networks ranging from tens to thousands of miles long. These connect (for example) a hyperscaler’s data centers across a region or continent, or even stretch along the seabed, connecting data centers across continents.[19] Sometimes these new fiber networks are being built to support sovereign AI—that is, the need to keep all the AI data inside a given country or region.

Historically, those fiber networks were massive expenditures, built by only the largest telcos or (in the undersea case) built by consortia of telcos, to spread the cost across many players.[20] In 2025, it looks like some of the major gen AI players are building at least some of this connection

capacity, but largely on their own or with companies that are specialists in long-haul fiber.[21] Telcos may want to think about how they can continue to be a relevant player in the part of the connectivity space, rather than just ceding it to the gen AI behemoths.[22] For context, it is estimated that big tech players will spend over US$100 billion on network capex between 2024 and 2030, representing 5% to 10% of their total capex in that period, up from only about 4% to 5% of capex for a network historically.[23]

Where the opportunities could be greater are for connecting billions of consumers and enterprises. Telcos already serve these large markets, and as consumers and businesses start sending larger amounts of data over wireline and wireless networks, that growth might translate to higher revenues. A recent research report suggests that direct gen AI data traffic could be in exabyte by 2033.[24]

The immediate challenge is that many gen AI use cases for both consumer and enterprise markets are not exactly bandwidth hogs: In 2025, they tend to be text-based (so small file sizes) and users may expect answers in seconds rather than milliseconds,[25] which can limit how telcos can monetize the traffic. Users will likely pay a premium for ultra-low latency, but if latency isn't an issue, they are unlikely to pay a premium.

> Telcos may want to think about how they can continue to be a relevant player in the part of the connectivity space, rather than just ceding it to the gen AI behemoths.

A longer-term challenge is on-device edge computing. Even if users start doing a lot more with creating, consuming, and sharing gen AI video in real time (requiring much larger file transmission and lower latency), the majority of devices (smartphones, PCs, wearables, or Internet of Things (IoT) devices in factories and ports) are expected to soon have onboard gen AI processing chips.[26] These gen accelerators, combined with emerging smaller language AI models, may mean that network connectivity is less of an issue. Instead of a consumer recording a video, sending the raw image to the cloud for AI processing, then the cloud sending it back, the image could be enhanced or altered locally, with less need for high-speed or low-latency connectivity.

Of course, small models might not work well. The chips on consumer and enterprise edge devices might not be powerful enough or might be too power inefficient with unacceptably short battery life. In which case, telcos may be lifted by a wave of gen AI usage. But that's unlikely to be in 2025, or even 2026.

Another potential source of gen AI monetization is what's being called AI Radio Access Network (RAN). At the top of every cell tower are a bunch of radios and antennas. There is also a powerful processor or processors for controlling those radios and antennas. In 2024, a consortium (the AI-RAN Alliance) was formed to look at the idea of adding the same kind of generative AI chips found in data centers or enterprise edge servers (a mix of GPUs and CPUs) to every tower.[27] The idea would be that they could run the RAN, help make it more open, flexible, and responsive, dynamically configure the network in real time, and be able to perform gen AI inference or training

as service with any extra capacity left over, generating incremental revenues.[28] At this time, a number of original equipment manufacturers (OEMs, including ones who currently account for over 95% of RAN sales), telcos, and chip companies are part of the alliance.[29] Some expect AI RAN to be a logical successor to Open RAN and be built on top of it, and may even be what 6G turns out to be.

Strategic questions to consider:

- How can telcos deal with disintermediation from big tech companies who are building their own long-haul point to point fiber networks?
- Should telcos build their own gen AI data centers and sell training and inference as a service to third parties? Equally, if they deploy AI RAN, can they make money from selling underutilized gen AI processing capacity?
- Will consumer gen AI move from its current low need for connectivity (small files, latency doesn't matter) to something that might drive connectivity revenues with larger files to transmit and latency becoming important?
- Equally, will the rise of on device gen AI processors for smartphones, computers and IoT devices increase the need for connectivity, or decrease it?

Between generations: Telcos get to say what they want (and don't want) in 6G

Higher speeds and costs without use cases or monetization may not be the answers for 6G in 2030 and beyond. What might be, and how can telcos shape the standard?

The year 2024 marked the halfway point for the 5G wireless standard: six years since it first launched, and six to go before the expected launch of the next generation standard (6G) in 2030. Globally, telcos are becoming increasingly clear and vocal on what they *don't* want from 6G.[30]

Some have indicated they don't want another wholesale upgrade, requiring hundreds of billions of dollars of worldwide spending, delivering speeds higher than most consumers or enterprises need or will pay for, with no near-term monetization, and eventual monetization relying on use cases that are either far off, unlikely, or niche.[31]

To be clear, each successive wireless generation is an intentional overshoot: You don't define a standard to barely meet customer needs in year one and still have it be useful a decade later. In the first year or two after launch, telcos complained that 3G and 4G offered speeds and features that no one needed or would pay for.[32] But it is now six years since 5G launched, and telcos are often (aside from providing fixed wireless access for home broadband) unable to find large use cases that require 5G speeds and features.[33]

What may be more worrying is that not only were there seemingly few additional use cases driving 5G adoption and monetization in 2024, but there may not be many more for 2025 or even 2026 either. Things that require extreme speeds, low latencies, network slicing or high device densities, such as augmented or virtual reality (AR/VR) goggles, self-driving cars, or remote telesurgery are not expected to see broad adoption until the end of this decade, if at all. As an example, AR/VR sales actually declined in 2024, with products being canceled and design teams being shrunk or eliminated.[34]

One possible source of 5G or potential 6G demand is generative AI.[35] But probably not in 2025: most gen AI applications are small text files that have latency measured in seconds rather than the milliseconds 5G can provide.[36] One estimate (from an equipment vendor) suggests that direct consumer and enterprise gen AI data traffic could be a few percent of global wide area network (WAN) traffic—but not until 2033.[37]

In Deloitte's view, what might 6G look like if it were more focused on meeting customers' future needs and generating positive returns on investment (ROI) for telcos?

- Premium performance features for gen AI services that enterprises and hyperscalers would find valuable enough to pay extra for.
- Tech features that can flow directly through to the business support systems (BSSs) that customers can buy on demand.
- 6G—in line with 5G and 4G before it—could see the cost per gigabyte of data fall yet again, ideally by about an order of magnitude, or more or less a 90% reduction.
- It should not only support but be optimized for heterogenous networks, or het nets. Any given transmission should be able to be seamlessly and rapidly switched between or even carried across a mix of connection technologies, ranging from terrestrial cellular, satellites, and especially Wi-Fi, both in the home and workplace, and increasingly outdoors. The majority of wireless traffic for consumers are already being carried on Wi-Fi.
- 6G should be even more sustainable, consuming less energy per GB than 5G, ideally another order of magnitude in reduction.
- 6G should be more affordable, reducing the global usage gap (those who live where cell service is available, but do not subscribe, in part due to affordability of services) from over 2 billion people in 2024.
- Historically, each new generation of wireless was accompanied by making available large blocks of new spectrum. Additional large blocks of desirable spectrum are unlikely to be available when 6G launches, so 6G will likely need to work in shared bands (for example, with military having priority, but cellular able to use it when not used by the military) or sharing data transmission across multiple spectrum bands simultaneously.

> One possible source of 5G or potential 6G demand is generative AI.

Strategic questions to consider:

- How can telcos best make their 6G vision and need for monetization clear to the industry bodies that will be defining the 6G standard?
- If the 6G standard evolves differently from 5G's, does that mean it will no longer be defined in the late 2020s and deployed around 2030, as previously expected? If 6G is delayed, what impact would that have on wireless infrastructure and the need for spectrum?
- More specifically, the OEMs that make wireless network equipment tend to see revenues rise when each new standard is deployed: If 6G comes late, or doesn't need new equipment, what would that mean for the OEMs?

Telecom M&A: Lots of deals and new PE partners with creative structures may be likely

The industry has been doing large numbers of M&A deals annually for the past five years, but in 2025, private equity could become even more active as partners begin to implement more creative deal structures.

Globally, telecom M&A has been at high levels for the last decade. Along with acquisitions to drive growth, some companies have been looking to shed noncore assets, hoping to improve their return on invested capital, reduce debt, and become more focused.[38] People who invest in telecom companies may not be valuing certain assets as highly as new financial partners, specifically as private equity (PE) investors might.

Telcos shedding assets is not new: As of 2023, 97% of all cell towers in the United States and Mexico were owned by someone different from their original telco owners—often by PE and infrastructure funds.[39]

But what has been fluctuating is the level of PE activity (figure 3). For context, the share of financial buyers for telco M&A has grown from just over 60% in 2021 to over 80% in the first half of 2024.[40] There was US$28 billion of PE-backed telco M&A deals globally in 2021 and US$20 billion in 2022.[41] Rising interest rates and a pause after a divestment wave saw activity slow down to just US$2.7 billion during the second half of 2023 and the first half of 2024.[42]

But as telcos start divesting again, PE is back with record levels of dry powder— over US$300 billion of available capital to invest in longer-duration, high-yield infrastructure assets.[43] Telco deal value soared to over US$11 billion in the second half of 2024.[44] Not only is activity higher, but there are new types of deals, as well.[45]

Telcos have opportunities to unlock value from assets previously considered core which is likely contributing to deeper conversations about what is core and noncore (as opposed to tower divestment, which was perhaps a more obvious decision). As an example, Canada's Rogers Communications announced it had sold a minority interest in a portion of its wireless backhaul transport infrastructure for US$5 billion, with more than one US PE firm apparently bidding.[46] This

is a relatively new trend: Deals are being structured to match the criteria of specific types of financial buyers—joint ventures (JVs), structured as “devcos” (a type of private sector development partner that helps build and grow companies in specific markets) are an example.

Going forward, PE investors are also likely to be more heavily involved as telecom companies look to build and connect generative AI data centers. M&A around data centers has recently doubled from 2019 to 2022.[47]

In the telco sector, this creates opportunities for telcos to partner with PE firms that tend to have a lower cost of capital and can share in the upside from value creation. As one sample market, over 15 global telecoms have announced they will build their own gen AI data centers, using the training and inference capacity to offer new services, and selling gen AI as a service to others, largely driven by data-sovereignty needs.[48] Some PE firms are already participating in these initiatives, which includes hyperscalers that have been taken private by PE firms over the last three years.[49] While PE investors offer several advantages, a trend from PE often includes more scrutiny on price, governance structure, management, and technical teams. This can include exploring how telcos’ natural advantages in connectivity can be leveraged when creating gen AI factories.

Another potentially interesting market will be connecting these and other gen AI data centers, both at the continental level and also via subsea fiber optic cables. Fiber optic deals represented the largest subsector share (11.3%) of all closed M&A infrastructure deal volume during 2024, ranking even ahead of data center activity, which only represented 10.7% of total infrastructure M&A activity.[50] These fiber optic deals were completed primarily in Europe and North America, which represented 46.4% and 24.6% of closed fiber optic deal activity in 2024, respectively.[51] This market is capital-intensive and is increasingly being viewed by as an emerging asset class by some PE and infrastructure investors, although (as discussed in the section on AI monetization) big tech players are increasingly building their own networks, rather than relying on or even partnering with telcos.[52]

Strategic questions to consider:

1. How can telecom companies achieve more than their share of growth by partnering with PE investors to access new markets and strategies?
2. What opportunities exist to monetize legacy assets and free up capital to invest in growth-oriented projects?
3. Is it better to divest of noncore assets completely, or structure into a new JV with PE investment to provide fresh growth capital while maintaining a controlling interest in legacy assets or businesses?

What's new in 5G and gen AI devices for 2025?

Some industry trends like fixed wireless access (FWA) are staying strong, some like Open RAN and 5G Standalone (SA) are staying slow, while others like gen AI smartphones and B/OSS modernization are a whole new thing.

In 2025, we predict the telecommunications industry will likely see continued growth in FWA and generative AI integration on smartphones. While FWA is expected to expand globally, providing connectivity to millions, the US market will likely experience more measured growth. Additionally, telecom providers are expected to prioritize modernization efforts to enhance operational efficiency and customer experience through their BSSs and OSSs (operational support systems), paving the way for a more integrated and responsive digital infrastructure.

However, the journey toward multi-vendor Open RAN and the rollout of 5G SA networks will likely remain slow, potentially having impacts on vendor choice and even the eventual rollout of 6G.

FWA is making waves in the United States, capturing the attention of both consumers and telecom providers alike. This technology, which uses 5G to deliver internet to homes and businesses, has become a cost-effective alternative to traditional broadband, especially in less densely populated areas. In fact, by the end of 2024, it's anticipated that over ten million homes in the United States will be connected through FWA.[53] The benefits of FWA include competitive pricing and decent speeds for consumers, and lower deployment costs for broadband providers. However, after an initial surge, FWA growth slowed slightly in early 2024, and some analysts expect 2025 to see a slower expansion rate in the United States.[54] Despite this, Deloitte predicts that FWA will maintain a steady momentum globally, with net additions rising by about 20% annually in 2025 and 2026.[55] This growth will likely be driven by enterprise demand and technological advancements, helping FWA remain a vital telecom revenue stream, even as it shakes up the traditional broadband market. As an example, in our new CII, fixed wireless has had an impact on broadband pricing as ARPUs have come down in the United States.[56]

However, the changes in telecoms go beyond FWA. Telcos are now rethinking their foundational infrastructure to keep up with shifting customer expectations and the pursuit of digital growth. Historically, telecom providers have operated separate BSSs and OSSs, creating a somewhat fragmented system that wasn't always agile or cost-effective.[57] Now, modernization is on the horizon. Providers may be increasingly looking to integrate automation and intelligence, with the potential to merge BSSs and OSSs into a single, seamless platform. This shift could help streamline processes and capture new revenue streams in a rapidly evolving digital landscape. Deloitte predicts that, by 2025, the combined OSS and BSS market will be worth US$70 billion, with cloud-based solutions, application programming interfaces (APIs), and a unified, service-centric model leading the way.[58] This push toward modernization could accelerate growth and offer providers greater efficiency, enhanced security, and, importantly, a better customer experience.

As telecoms evolve and embrace new technologies, smartphones—billions of consumers' constant companions—are also experiencing a shift.[59] Smartphones have revolutionized daily life, replaced multiple devices, and changed how individuals communicate, work, and even play. Yet, in recent years, updates have been tended to be incremental, leaving some wondering if there's anything new to get excited about. Major smartphone providers are now experimenting with on-device gen AI to add new, intelligent features, promising a more personalized and adaptive user experience.[60] Deloitte predicts that this new tech will help boost global smartphone shipments by 7% in 2025, as consumers explore what gen AI can do.[61] Early adopters are already enthusiastic, though widespread adoption could hinge on whether gen AI can deliver genuine value. For now, gen AI offers the potential to make smartphones more intelligent and more attuned to individual needs. The coming year should be exciting for telecoms and consumers as we see how this technology transforms personal computing.

> As telecoms evolve and embrace new technologies, smartphones—billions of consumers' constant companions—are also experiencing a shift.

Amid rapid advancements in FWA, gen AI, and BSS/OSS modernization, the shift to multi-vendor Open RAN is progressing at a more cautious pace. Multi-vendor Open RAN has historically been seen as a game-changer for telecom, aiming to give mobile network operators more flexibility in choosing equipment vendors. In theory, Open RAN's multivendor approach could allow operators to select from a wider range of providers, fostering competition and innovation. However, the reality is a bit more complex.[62]

Deloitte's predictions indicate that the shift to Open RAN is expected to be slow, with no new major multi-vendor deployments likely in 2025.[63] While many telecom operators are exploring Open RAN, integrating its components isn't straightforward, and for now, the market is still dominated by a few big players.[64] As part of US strategy, Open RAN is intended to boost economic security and reduce dependence on foreign suppliers, but building a fully functional multi-vendor environment will take time.[65] To be clear, many of the Open RAN principles have been accepted by larger OEMs, and they are integrating these features into their products.[66] While this isn't yet multi-vendor, it could be considered "mission accomplished" for Open RAN given new innovations promised in xApps and rApps (network automation tools that maximize the network's operational efficiency).[67]

While multi-vendor Open RAN faces its own set of challenges, the rollout of 5G SA networks isn't faring much better. As of March 2024, only 49 out of 585 operators had deployed or launched 5G SA networks, which offer full 5G capabilities but also require a significant financial commitment.[68] Many operators are holding back on large-scale 5G SA investments, likely due to uncertainties about revenue generation. Deloitte predicts that fewer than 20 additional 5G SA networks will come online by 2025, especially as current 4G and 5G non-standalone (NSA) networks meet most application needs.[69] Yet, delays in deploying 5G SA could slow 6G development, making it important for operators to consider phased investments and innovative revenue models that support future tech while meeting today's needs.

As the telecom industry navigates these innovations and challenges, the future is a blend of promise and uncertainty. Open RAN, 5G, FWA, infrastructure modernization, and gen AI–enhanced smartphones, each represent a piece of the evolving puzzle. And while the transformation may be happening one step at a time, the future looks bright for a more flexible, efficient, and user-centered telecom industry.

Strategic questions to consider:

1. How can companies design and implement a comprehensive digital transformation roadmap that seamlessly integrates BSSs and OSSs, ensuring minimal disruption to ongoing operations?
2. How can companies develop a comprehensive risk management framework to address the complexities and potential vulnerabilities associated with multi-vendor Open RAN?
3. What innovative use cases and applications can be developed to fully leverage the capabilities of 5G SA networks, driving new revenue streams and market opportunities?
4. How can companies capitalize on the initial success of FWA to sustain long-term growth, and what strategies can be implemented to counteract the anticipated slower (but still strong) expansion rate of FWA in 2025?
5. Could telcos decide to skip 5G SA altogether, and move directly from 5G NSA to 6G?

Signposts for the future

We’re taking a new approach, to the signposts for 2025: making them much more precise, quantified, and with some attempts to predict what will happen in the year for each signpost.

1. After a couple of years of underperforming, both in terms of overall indices and especially tech stocks, we will be seeing how telecom stocks do. Telcos usually pay high dividends and trade at low multiples and are historically seen as defensive stocks. If 2025 has less robust market performance than the last two years, this could be a year for telcos to shine, at least on a relative basis.
2. Fifteen telcos have announced that they will build gen AI data centers. Will many more follow, and what kinds of revenues will they be able to generate by selling gen AI as a service? We predict we might see a few more join, but it seems unlikely that most telcos will choose this path.
3. AI RAN is a variant of the AI factory, and only a couple of telcos have started deploying it in 2024. We are skeptical that we will see mass adoption of AI RAN in 2025 but will keep our eyes open.
4. We expect FWA to keep growing globally at about 20% year over year. We think it’s unlikely to do much better than that, but after a couple of years of strong growth we will be looking to see if growth weakens suddenly. We don’t think it will, but as the sole current path for 5G monetization, any unexpected FWA weakness would matter.

5. Equally, we expect new multi-vendor Open RAN and 5G SA deployments to remain slow, but any surprise on the upside on either of those might suggest some big shifts in the OEM market. In our 2023 Outlook, we said that low levels of RAN spending might mean OEM consolidation. That hasn't happened yet, but if RAN spending doesn't pick up soon, it remains a likely outcome.
6. Finally, we're expecting our new US-only CII to record small but reasonable growth. From an estimated 127 in 2024 (up slightly from 2023) the index could creep up to 132 in 2025, although low capex and weak employment figures are likely headwinds.

Perspectives from the Global Telecom Outlook, 2025–2029

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Florian Gröne

How telecoms can win in the age of AI



- Insight
- 27 minute read
- February 13, 2026

Booming AI infrastructure investment is reshaping telecom economics. To protect margins, operators can monetise AI-era connectivity while reinventing their business models.

The takeaways

- Global telecom traffic is soaring amid flat-to-down ARPU and modest revenue growth, making AI-enabled cost control and efficiency essential.
- AI and data centres are driving a new infrastructure investment super-cycle. Telecoms can capture growth by delivering AI-era connectivity and sovereignty solutions.
- To stay competitive, operators are adopting simpler ‘puretone’ portfolio models and AI-native ‘TelcOS’ operations.

In recent years, telecom operators have paved new information highways in the form of 5G for mobile devices and fibre-optic lines for homes and businesses. Now those highways are becoming more crowded. With each passing day, billions of users stream more and sharper video, move data in real time, connect cars and factories, and increasingly use artificial intelligence (AI)-powered services. But in a continuation of a long-standing trend, while usage by all measures is soaring, revenue isn't. According to PwC's Global Telecom Outlook, global telecom service revenue is set to rise from US$1.15 trillion in 2024 to roughly $1.32 trillion in 2029, representing a steady, but unremarkable, compound annual growth rate (CAGR) of around 2.8%.

The underlying reason for the sombre revenue outlook? Consumers' flat-to-down willingness to pay. Although regional growth rates vary widely, monthly average revenue per user (ARPU) globally for mobile is expected to tick down marginally to $6.20 in 2029 from $6.32 in 2024. What's more, fixed broadband ARPU inched up to only $19.81 in 2024 from $19.73 in 2023, dampened by a decline in fixed voice revenue that will cause overall fixed ARPU to keep falling throughout the studied period. The combination of slow revenue growth and declining ARPU is a structural change, requiring a resetting of the telecom margin model. Integrating AI can help by lowering service costs, reducing downtime, improving capital allocation, and raising productivity—but only if paired with product simplification, legacy shutdowns, footprint reduction, and vendor consolidation.

Meanwhile, with value in motion across the global economy, two other parts of the digital landscape are accelerating at a head-snapping pace: AI and data centres. Hyperscalers and investors are racing to build large compute clusters that require high-capacity, low-latency, reliable interconnection. They will secure connectivity the fastest and cheapest way possible: buy fibre from operators—or build their own.

Here's the fundamental risk: Telecoms' capex spending on long-lived assets like towers, radios, and fibre as a share of revenue stepped down from 26.9% in 2022 to 22.9% in 2024, though we expect it to register a marginally positive 0.62% CAGR later in the period as 5G-Advanced and early 6G roll out. But if backhaul and data centre interconnect don't keep pace, the compute economy will grow around the networks operators built.

This shift creates a choice. Defend a shrinking margin pool or reposition around AI infrastructure. That means investing where traffic and capital are concentrating, simplifying the portfolio, and aligning the operating model to capture data centre, fibre, and edge demand.

Despite these significant challenges, the AI and data centre story presents tremendous opportunities for efficiency, growth, and fundamental reinvention. In this article, we explain how telecom operators can leverage AI and the associated infrastructure buildout to accelerate their growth. We share where the money will flow; what to build (and where); and why many telecoms are reshaping themselves into simpler, more focused businesses to match where value is shifting.

Telecoms are striving to maintain their position and relevance in the connect and compute value chain and increase the value they create. It's a tough ask, one that's made more challenging by widely differing market dynamics and growth rates in worldwide territories.

As telecoms look to develop their strategies for success in this fragmented global environment, they must take account of five forces fundamentally reshaping the economics of the telecom industry.

Fibre first—with FWA as a filler. Globally, fibre is now the upgrade path of choice, with fixed wireless access (FWA) serving as a bridge technology that uses headroom capacity on 4G/5G mobile networks to provide fixed broadband connectivity wirelessly to homes and businesses. For operators, the goal with FWA is to ride the fibre wave and tap into monetisation opportunities beyond the pure speed that fibre offers. For consumers, this might mean pairing multi-gig tiers with managed Wi-Fi, cybersecurity, smart home, and gaming/assured-latency bundles. For enterprise customers, it means leaning on software-defined wide area networks (SD-WAN), secure access service edge (SASE), and edge security.

The migration to fibre is being led by countries such as Singapore, now an all-fibre nation pushing towards 10 gigabits per second (Gbps), and China, which has 206.8 million gigabit fibre users and 10 Gbps pilots underway. Ongoing fibre expansion in markets such as France, Japan, the UAE, and Switzerland further underlines the readiness for 5–10 Gbps positioning.

Surgical deployment of 5G SA and 5G-Advanced. Given the tight return on invested capital (ROIC), operators are carefully pacing their rollouts of 5G Standalone (5G SA). They're mostly choosing to invest in cases where slicing/FWA, campus networks, and enterprise service-level agreements (SLAs) can provide a decent payback. Here, different territories are offering tactical cues on both building scale and aligning capex with regulation. On scale, China is piloting 5G-Advanced widely, with 4.2 million 5G sites and concerted commercial promotion efforts; India has moved early to conduct one of the few nationwide SA deployments to date. On capex/regulatory alignment, 5G SA in Germany is being marketed as "5G+," reflecting the government's commitment to becoming a leading market for 5G networks and applications.

Capex discipline and asset-light models. As capex intensity declines and capital costs rise, operators need to keep balance sheets flexible and aligned with infrastructure time horizons. Actions targeted to achieve these goals include expanding TowerCo, neutral fibre, sharing strategies, and wholesale models. Asset separations can also play a role, as with the 2024 Telecom Italia SpA TIM NetCo carve-out in Italy that set a precedent for Europe. And selective consolidation is set to continue to reset market structures and support efforts to lift 5G quality in some territories. Examples to date include the 2025 Vodafone–Three merger in the UK, and two mobile mergers in Taiwan that created a three–mobile network operator (MNO) market from 2023.

IOT stacks climbing towards platforms. As IOT solutions evolve and escalate to the platform level, the reality remains that most growth in IOT value tends to accrue to application enablement platform (AEP) and consulting providers, not to telecom operators. PwC's Global Telecom Outlook projects a roughly 31% CAGR for AEPs from 2024 to 2029 and nearly $250 billion in revenue in 2029 as connectivity revenues hold steady for the period, below $10 billion in annual revenues. To counter this imbalance, telecoms are looking to move beyond pursuing relatively low-margin connectivity. They are instead seeking to prioritise AEP-led solutions and vertical plays in such segments as smart cities and automotive. This shift will build momentum for embedded SIMs (eSIM/iSIM), hybrid terrestrial–satellite coverage, and lower-complexity 5G connectivity for IOT devices using Reduced Capability (RedCap) and enhanced Reduced Capability (eRedCap) profiles, as 5G SA coverage expands. Regional leaders in the evolution of IOT include the US (AEP implementation at scale), Germany (AEP implementation at pace), and the UAE and South Korea (fast growth rates off relatively smaller bases).

AI everywhere—as both lever and load. AI can bring enhanced efficiency and effectiveness to every functional domain: marketing and sales, customer operations, IT, software development/engineering, network and field operations, and the back office. In fact, AI will ultimately become the operating fabric on which telecoms run. Yet it also adds demand from AI-related services and applications. An important consideration here is the bifurcated impact of data traffic driven by AI inference (i.e. user-originated and agent-to-agent traffic) and model training (i.e. traffic between hyperscale/large compute clusters). AI inference doesn't yet add much traffic on public networks, as it mainly shifts patterns from 'mostly download' to 'more balanced upload and download.' But it does have a more meaningful second-order effect on data centre interconnect (DCI) networks, as user requests trigger clusters talking to one another. By contrast, AI model training is driving massive traffic growth and upgrades in the backbone. But this growth generally stays within the data centre networks, and doesn't impact the public networks operated by telecoms—and hence doesn't show up in their capex agenda.

As we highlighted earlier, over the next five years, we will see two capex cycles diverge.

Telecoms' capex intensity is easing after a decade of 5G and fibre build. According to the Global Telecom Outlook findings, capex will lag revenue growth through 2029 as many markets approach the end of their 5G non-standalone (NSA) and first-wave fibre cycles.

On the other side, AI infrastructure is accelerating into a multiyear super-cycle. Capital is flowing into hyperscale campuses, power-hungry AI clusters, and adjacencies such as grid interconnects and onsite power generation. Data centres are now framed as 'backbone' infrastructure for the digital economy, with investors pushing to scale quickly while hardening against supply chain and power constraints. The recent series of large-ticket deals underscores the trend, and points to continued private-capital interest in AI-ready capacity. Examples include the $500 billion Stargate Project AI infrastructure investment in the US, involving OpenAI, Oracle, Japan's Softbank, and

the UAE's MGX; the EU's €20 billion (US$23.5 billion) InvestAI and AI Gigafactory programme, backed by the European Investment Bank; and Saudi Arabia's $100 billion Project Transcendence, focused on making Saudi Arabia a world leader in AI and analytics.

At first glance, the mismatch between the telecom network and AI infrastructure capex cycles looks dramatic, threatening to decouple compute from connectivity. However, overlay these contrasting cycles with today's geopolitical fracturing and advancing sovereignty agenda, and what emerges is a once-in-a-generation opportunity for legacy carriers.

One play here for telecoms is participating in the AI infrastructure super-cycle not just as providers of DCI, but as investors in assets such as data centres and edge infrastructure. But more importantly, factors that used to be constraints for telecoms globally—territorial licence, regulatory oversight, universal service obligations—are now becoming assets. In a world where sovereign AI infrastructure, AI models, and supply chains are increasingly mandated or strongly preferred, operators can carve out national 'mega-scaler' roles that global platforms cannot easily penetrate or replicate.

We see four arenas where telecoms have both a right to play and—with the appropriate degree of focus—a good chance of winning:

Enterprise and wholesale connectivity for AI-era workloads. Telecoms can build and price for east-west traffic, while also prioritising 10/400 Gbps backhaul upgrades, DCI wave services, dark-fibre/managed wavelength products, and low-jitter metro rings tuned for AI training/serving. Where grid and planning allow, they might co-site edge rooms (Tier 2/3, 100–500 kW) on their own premises to terminate DCI and host latency-sensitive micro-clusters.

Converged consumer/small- and midsize-business broadband as the national access fabric. To play in this space, telecoms can continue migrating households and small businesses to gigabit-class fibre and 5G, including FWA, using mobile/fixed network convergence and bundle economics to bolster ARPU in a flat macro environment. Governments and investors value this ubiquitous, regulated layer, seeing it as critical to domestic AI adoption and national productivity. The global data shows broadband ARPU is stable or slightly rising as fibre's share climbs—underlining the fact that quality can still be monetised. All this points to the opportunity to integrate AI into the converged bundle value proposition. Operators are already adding AI applications to their subscription bundles as perks in the same way they offer various streaming services.

Sovereign cloud, GPU-as-a-Service (GPUaaS), and trusted edge for resilience, national security, and regulatory needs. Telecoms can partner with sovereign capital and national clouds to complement, not replace, hyperscalers—providing domestically sited capacity that satisfies national security and defence needs as well as residency, sectoral, and security controls in sectors such as health, finance, and government. PwC's deal and macro signals indicate that investor appetite for AI infrastructure remains high. Telecoms can capitalise by anchoring the connectivity-plus-compliance layer that makes sovereign AI usable at scale. Additionally, rising

defence spending, especially in Europe, means the sovereign information and communications technology (ICT) opportunity for telecoms will accelerate given the pivotal role digital and communications technology plays in military and defence applications, including cybersecurity.

Hybrid terrestrial–non-terrestrial connectivity as a resilience layer. Steps here can include securing satellite capacity to harden rural backhaul and critical routes, while preparing for direct-to-device augmentation to enhance population coverage, public safety, and IOT continuity. Telecoms might also bundle satellite with multiprotocol label switching (MPLS)/SD-WAN and 5G slicing to deliver SLA-backed reach for distributed AI data ingestion and inference. Activity and investment involving satellite communications is on the rise globally. Examples include the acquisition of a growing number of national satellite spectrum licences by Elon Musk's Starlink; Saudi Arabia's creation of the Neo Space Group; and the agreement between Airbus, Leonardo, and Thales to jointly create a leading European player in satellite and space systems manufacturing and services. The technology sovereignty agenda clearly plays a role in some of these initiatives, as territories look to secure their position and autonomy in the future satellite ecosystem.

Implications for capital, partnerships, and operating model

Playing in any or all four arenas has significant implications for telecoms in areas as varied as capex, ecosystem collaboration, and operating models. One important change is shifting capital allocation towards 'AI-adjacent' transport, targeting spending at domains with clearer pass-through to enterprise revenue; these include backhaul, DCI and metro fibre densification, coherent optics, and synchronisation upgrades. Another important change is building a tariff-ready, sovereign supply chain, with dual-sourced vendor stacks across domains like optics, routers, power, and cooling. PwC's tariff guidance emphasises integrating customs, transfer pricing, and vendor selection into the same decision loop.

Further enabling actions in securing a domestic mega-scaler role include co-investing at the edge. Where permitting and power are constraints for hyperscalers, telecoms can contribute sites, rights-of-way, and interconnects, while partners bring construction equity and long-term offtake. Community-integrated models can also unlock siting—at the same time strengthening the social licence to expand.

Finally, telecoms should look to make speed a measurable advantage by tackling slow decision processes and risk aversion. One way to do this is by embedding a stage-gate 'time-to-light' metric across build programmes and using portfolio rebalancing to kill or double down on initiatives quickly. Another way is for telecoms to adopt a 'puretone' approach by reconfiguring their business unit and functional structures to create clearer organising logic around their various and integrated business models. The defining feature of puretone business model archetypes is that they sharpen focus while enabling proximity to demand—two characteristics that align with both the telecom industry's trajectory and the AI infrastructure cycle.

Capitalising on the AI infrastructure opportunity is one of several imperatives compelling telecoms to shift to a puretone model. Another is the performance and capital constraints mentioned earlier. A third is the benefits such a shift offers from a cost-discipline perspective. The clarity and separation of puretone businesses forces greater P&L transparency and exposes areas where cost structures are not competitive—or perhaps are artificially distorted through internal cross-charges, transfer prices, or internal subsidies. The effect is that the puretone approach provides a clear and honest open-book view of the business's economics and enables it to focus on realigning cost to optimal levels.

PwC's Business Model Reinvention (BMR) Pressure Index shows current reinvention pressure at a level on par with that of the dot-com era, driven by declining returns, technology shifts, and regulatory scrutiny. Across more than 30 carriers we analysed, the operators progressing furthest on unbundling into puretone businesses and diversification commanded EV/EBITDA premiums of 30% to 50% over traditional integrated peers. Examples include Telstra's 2020 InfraCo separation and Jio Platforms's ecosystem build in the same year, attracting more than $20 billion of strategic capital.

Reinvention is about choosing where to play and creating the right model with the right capital and operating autonomy. As the digital infrastructure cycle unfolds and telecoms seek ways to derive value from it, they should consider four main puretone archetypes:

Targeted InfraCo/NetCo: Put capital where proximity and wholesale demand are provable. The data centre (DC)/AI cycle will proceed with or without telecoms, and owning the inter- and intra-DC connective fabric provides access to a contractable, growing wholesale value pool. The InfraCo/NetCo model directs infrastructure capital at open-access fibre, metro rings, dark fibre, and DCI. It can be financed via co-ownership to optimise capital costs while preserving service access for ServeCo and SolutionCo.

SolutionCo (enterprise and public sector): Prioritise outcomes over access. The enterprise buyer wants assured connectivity with security and observability. The SolutionCo model packages managed connectivity, SD-WAN/secure access service edge (SASE), zero-trust security, and life-cycle automation with clear SLAs and site-specific economics. It extends into private 5G/local area network, industrial Wi-Fi, and edge computing to deliver latency-sensitive outcomes in manufacturing, logistics, healthcare, and utilities. And where sovereignty matters, it brokers sovereign cloud and AI linked to compliant networks.

ServeCo (direct-to-consumer): Defend ARPU, grow lifetime value. In a world of flat mobile ARPU, modest fixed-broadband uplift, and eroding speed-based differentiation, ServeCo wins by converging fibre and mobile and attaching digital services like premium wi-fi/mesh, security, entertainment, cloud storage, and home support. Fibre migrations boost ARPU, while bundles reduce churn. BMR Index evidence shows ServeCo patterns scaling via super-app-style aggregation and embedded finance in markets with wallet penetration. Examples include M-Pesa, MoMo, and STC Pay.

PlatformCo/BrokerCo: Aggregate what customers already buy. Multi-cloud and hybrid architectures increase complexity; buyers will pay to simplify sourcing, governance, and observability. This archetype acts as a neutral marketplace for the likes of wholesale broadband, cloud/edge, and security, curating multi-vendor services under a single contract. Fast-growing segments include GPU-as-a-Service and global business services (GBS)-as-a-platform. Vodafone Intelligent Solutions and Orange/Deutsche Telekom's BuyIn are among the telecoms externalising capabilities as a revenue line.

How to build and operate the reinvented portfolio

Deals are the operating lever for reinventing to puretone models. Some examples? In fixed network separation, TIM sold its fixed NetCo to KKR in 2024. In portfolio rationalisation, Telefónica exited most of Latin America over the last several years, and Vodafone sold operations in Spain, Italy, and Hungary from 2023 to 2025. And in tower monetisation, the TowerCo wave (Totem, Vantage, Telxius, GD Towers) of the 2020s reflects softwarised networks' lower need to own sites.

Once the reinvented puretone business has been created, operating it successfully requires three sets of interconnected attributes:

Autonomy with accountability. Our BMR Index diagnostics show that the strongest drivers of reinvention progress are accountable leadership and clarity in mission. These are design choices, not outcomes.

Resilience and sovereignty. To navigate tariff and policy volatility, portfolios need supply chain and data/AI sovereignty options. SolutionCo can bundle sovereign-compliant workloads; InfraCo contracts should anticipate policy swings; PlatformCo's brokerage can diversify vendor exposure.

AI-native operations ('TelcOS'). By embedding AI across their operations, telecoms can leverage the technology to simultaneously plan, run, and assure networks—in terms of predictive maintenance, dynamic spectrum, closed-loop assurance—and compress cycle times in sales, care, and field operations. This model is central to ServeCo's cost-to-serve, SolutionCo's SLA delivery, and InfraCo's energy and utilisation economics. We take a closer look at TelcOS in the next section.

The combination of modest revenue growth outlook and ongoing commoditisation is intensifying the pressure on telecoms' differentiation, cash generation, and costs. Given that 35% of new passes in the US are now funded by private equity, incumbent carrier margins are under further pressure. And 55% of the telecom CEOs in PwC's 28th Global CEO Survey said they believed their company would no longer be economically viable a decade from now if it continued on its current path, compared with just 42% of all CEOs globally.

The solution to these challenges lies in building AI-native operations. Future-focused telecom executives aren't treating AI as the final step in a transformation road map. Instead, they're using AI agents today to simultaneously reduce costs, boost efficiency, improve customer and employee

experiences, and modernise legacy systems.

These strands of AI-enabled reinvention combine into a model for the AI-native telecom business that we've termed 'TelcOS.' It represents AI acting both as a demand driver—raising the bar for automation, assurance, and cost control—and as the means to manage and satisfy that demand.

Adopting TelcOS offers major upgrades across a telecom company's operations, including in areas such as network planning and design, network management and assurance, field and supply operations, customer operations, sales and product, and security and trust.

The data and platform foundations for TelcOS

The TelcOS operating model depends critically on putting the right data and platform underpinnings in place. A data-first approach using AI agents helps telecoms avoid two common missteps: (1) automating broken processes, and (2) waiting years for a clean slate on which to effect reinvention. Instead of relying on siloed applications and legacy databases, operators can now build a unified architecture that puts data and intelligence at the centre, over time replacing traditional tools like static billing platforms with AI agents that work across domains using shared context and standard models. This shift moves enterprise tech from simply recording what happened to detecting what's happening across the enterprise and triggering the next best action in real time.

Operators can lay the foundations for TelcOS reinvention by taking three steps:

Renew the data environment. A clean, modern digital core—anchored by an ERP backbone and unified data—lets both people and agents act safely, consistently, and at speed, thereby enabling end-to-end transformation. And most AI failures in telecom can be traced back to issues with data, such as silos, latency, lineage gaps, and quality debt. To avoid such problems, TelcOS needs the following:

- **Cloud-first data** (lakehouse) with low-latency ingestion from OSS/BSS (operations and business support systems) and IT/OT (information and operational technology), unified identity resolution (subscriber, device, service, location), and governance-by-design.
- **A semantic data fabric** over telemetry, orders, trouble tickets, inventory, topology, and finance—so agents can reason over meaning, not just columns.
- **Streaming/event backbones**—such as Kafka or Pub/Sub—for real-time signals into planning, assurance, and customer experience loops.

The industry is already moving in this direction: in PwC's cloud and AI business research, most tech/TMT companies reported GenAI adoption in "a few or many" operational areas—a precondition for scaling an AI data plane.

Move to microservices. Legacy stacks tend to fragment processes (assurance vs. care vs. billing). TelcOS favours domain microservices (catalogue, quote, order, inventory, policy, charging), exposing consistent APIs/events with common policy, identity, and 'golden' reference data. This removes handoffs, enabling closed-loop automation with human-in-the-loop governance.

Orchestrate vendor-agnostic agentic workflows as a 'human + agent' enterprise. Discrete chatbots won't move the P&L dial. Agentic operations require an 'OS for agents' that can enable cross-vendor agents to collaborate with one another and with human teams on complex, cross-functional workflows behind secure gateways. This calls for new roles, new governance, and a model in which people and agents operate as a system, with a clear process for determining who does what. A practical way to organise and orchestrate this process is to use the TM Forum's enhanced Telecom Operations Map (eTOM) model, which can help leaders decide where people should remain central, where agents can take the lead, and where seamless coordination between people and machines is required. TelcOS leaders are anchoring AI value to the P&L with 'autonomous value loops' linked to a clear outcome metric, targeting high-yield areas like network energy optimisation through cutting radio access network (RAN) power in low-load windows and zero-touch service assurance based on self-healing incidents with guard rails.

The bottom line? TelcOS is not a 'nice to have.' It is how carriers will protect margins, absorb AI-driven traffic growth, and create distinctive customer experiences in a market where ARPU growth lags inflation. The strategic question is no longer whether your telecoms will become AI-native; it's how fast you can progress AI from pilots to a new operating system for the business. This is the direction of travel needed to secure the future of your business through 2026 and beyond. The time to start is today.

Subscribe to the Global Telecom Outlook for access to detailed additional data and commentary for fixed, mobile, capex, and IOT segments across 53 countries and territories.

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Author



Global Telecommunications Leader, PwC United States

Telecom operators appear to be reinventing their business models. But are they really?

The telecommunications industry is facing digital disruption, regulatory evolution, intensifying competition, and increasing stakeholder pressure. How can companies reassess and transform their strategic, operational, and financial structures to create sustainable value?

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Jacqueline Kotkiewicz June 6, 2025



Fact Sheets

STRENGTHENING THE NATION'S CYBERSECURITY: Today, President Donald J. Trump signed an Executive Order to strengthen the nation's cybersecurity by focusing on critical protections against foreign cyber threats and enhancing secure technology practices.

- The Order amends problematic elements of Obama and Biden-era Executive Orders (14144 and 13694).
- The Order directs the Federal government to advance secure software development.
- It directs department and agency level action on border gateway security to defeat hijacking of network interconnections.
- The Order directs department and agency level actions on post-quantum cryptography to ensure protection against threats that may leverage next generation compute architectures.
- The Order directs adoption of the latest encryption protocols.
- It refocuses artificial intelligence (AI) cybersecurity efforts towards identifying and managing vulnerabilities, rather than censorship.

- The Order directs technical measures to promulgate cybersecurity policy, including machine readable policy standards and formal trust designations for “Internet of Things” as a way to ensure that Americans can know that their personal and home devices meet basic security engineering principles.
- It limits the application of cyber sanctions only to foreign malicious actors, preventing misuse against domestic political opponents and clarifying that sanctions do not apply to election-related activities.
- The Order strips away inappropriate measures outside of core cybersecurity focus, including removing a mandate for U.S. government issued digital IDs for illegal aliens that would have facilitated entitlement fraud and other abuse.

REPRIORITIZING CYBERSECURITY EFFORTS: President Trump is taking decisive action to address real technical challenges and enduring cyber security threats.

- Just days before President Trump took office, the Biden Administration attempted to sneak problematic and distracting issues into cybersecurity policy. This included:
    - Introducing digital identity mandates that risked widespread abuse by enabling illegal immigrants to improperly access public benefits.
    - Imposing unproven and burdensome software accounting processes that prioritized compliance checklists over genuine security investments.
    - Micromanaging technical cybersecurity decisions better handled at the department and agency level, where budget tradeoffs and innovative solutions can be more effectively evaluated and implemented.
- Cybersecurity is too important to be reduced to a mere political football.
- Adversaries routinely threaten our critical infrastructure, personal devices, and the fabrics of our digital lives.

ADVANCING NATIONAL CYBER SECURITY: President Trump is advancing cybersecurity for the safety of all Americans.

- President Trump has made it clear that this Administration will do what it takes to make America cyber secure—including focusing relentlessly on technical and organizational professionalism to improve the security and resilience of the nation’s information systems and networks.
- Since the first day he entered office, President Trump has been steadfast in his commitment to eliminate fraud and abuse across the Federal Government.
- President Trump has already taken action to remove barriers to AI innovation, ensuring that our technology sector remains competitive at the cutting edge of new developments and free from ideological bias.

ADJUSTING IMPORTS OF SEMICONDUCTORS, SEMICONDUCTOR MANUFACTURING EQUIPMENT, AND THEIR DERIVATIVE PRODUCTS INTO THE UNITED STATES

whitehouse.gov/presidential-actions/2026/01/adjusting-imports-of-semiconductors-semiconductor-manufacturing-equipment-and-their-derivative-products-into-the-united-states

Allison Schuster January 14, 2026



Presidential Actions

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

1.On December 22, 2025, the Secretary of Commerce (Secretary) transmitted to me a report on his investigation into the effects of imports of semiconductors (semiconductors or chips), semiconductor manufacturing equipment, and their derivative products on the national security of the United States under section 232 of the Trade Expansion Act of 1962, as amended, 19 U.S.C. 1862 (section 232). Based on the facts considered in that investigation, and taking into account the close relation of the economic welfare of the Nation to our national security and other relevant factors, *see* 19 U.S.C. 1862(d), the Secretary found and advised me of his opinion that semiconductors, semiconductor manufacturing equipment, and their derivative products are being imported into the United States in such quantities and under such circumstances as to threaten to impair the national security of the United States.

2. The Secretary found that the present quantities and circumstances of imports of semiconductors, semiconductor manufacturing equipment, and their derivative products pose a threat to the national security and economy. The United States' capacity to produce semiconductors, certain semiconductor manufacturing equipment such as advanced lithography and etching tools, and their derivative products is insufficient to meet domestic demand. This has led the United States to be dependent on foreign sources to meet domestic demand for semiconductors, semiconductor manufacturing equipment, and their derivative products.

3. The Secretary found that semiconductors are essential to the United States' economic, industrial, and military strength. Modern defense systems depend on high-performance semiconductors for radar and communication systems, electronic warfare and cybersecurity systems, and guidance and control systems for missiles and drones. Furthermore, defense systems often require specialized semiconductors that can withstand extreme environments. This reliance on semiconductors is expected only to increase.

4. The Secretary found that semiconductors are essential to each of the 16 critical infrastructure sectors identified by National Security Memorandum 22 of April 30, 2024 (Critical Infrastructure Security and Resilience). For example, the communications sector requires semiconductors for broadband networks, routing, switching, telecommunications infrastructure, smartphones, and satellite communications systems. The energy sector requires them for smart grid control and converter systems. Nuclear reactors use semiconductors for sensors and safety systems, control-rod-actuation systems, distributed control systems, and power-management systems. The medical sector uses semiconductors in its imaging systems, diagnostic-assay systems, robotic surgical systems, and in pacemakers and defibrillators.

5. The Secretary found that the United States' capacity to manufacture semiconductors is too low to meet projected national defense needs and to match the requirements of a growing commercial industry. The United States consumes roughly one quarter of the world's semiconductors. The United States currently fully manufactures only approximately 10 percent of the chips it requires, making it heavily reliant on foreign supply chains. This dependence on foreign supply chains is a significant economic and national security risk. Given the foundational role that semiconductors play in the modern economy and national defense, a disruption of import-reliant supply chains could strain the United States' industrial and military capabilities.

6. The Secretary found that semiconductors that enable artificial intelligence (AI) are an important element of many data centers currently in use, such that the importation in current quantities and circumstances poses a threat to the national security, when such importation does not contribute to the buildout of the United States technology supply chain.

7. In light of these findings, the Secretary recommended a two-phase plan of action to adjust imports of semiconductors so that such imports will not threaten to impair the national security of the United States. In the first phase, the United States would continue ongoing trade negotiations with foreign jurisdictions that have the potential to strengthen the United States semiconductor

industry. The Secretary also recommended, as part of this first phase, immediately imposing a 25 percent tariff on a very narrow category of semiconductors that are an important element of my Administration's AI and technology policies, and that such tariff would not apply when the chips are imported to support the buildout of the United States technology supply chain. In the second phase — after trade negotiations have concluded — the Secretary recommended broader tariffs on semiconductors, at a rate of duty that is significant. The Secretary also recommended that this broader tariff be accompanied by a tariff offset program to enable companies investing in United States semiconductor production and certain parts of the United States semiconductor supply chain to obtain preferential tariff treatment.

8. After considering the Secretary's report, the factors in section 232(d) (19 U.S.C. 1862(d)), and other relevant factors and information, among other things, I concur with the Secretary's finding that semiconductors, semiconductor manufacturing equipment, and their derivative products are being imported into the United States in such quantities and under such circumstances as to threaten to impair the national security of the United States. In my judgment, and in light of the Secretary's report, the factors in section 232(d) (19 U.S.C. 1862(d)), and other relevant factors and information, I have also determined that it is necessary and appropriate to adopt a plan of action, as described below, to adjust such imports of semiconductors, semiconductor manufacturing equipment, and their derivative products so that such imports will not threaten to impair the national security of the United States.

9. I have decided to include in the plan of action negotiations to address the threatened impairment of the national security with respect to imports of semiconductors, semiconductor manufacturing equipment, and their derivative products. I therefore direct the Secretary and the United States Trade Representative (Trade Representative) to jointly pursue negotiation of agreements or continue any current negotiations of agreements, such as agreements contemplated in section 232(c)(3)(A)(i) (19 U.S.C. 1862(c)(3)(A)(i)), to address the threatened impairment of the national security with respect to imported semiconductors, semiconductor manufacturing equipment, and their derivative products, with any foreign jurisdiction the Secretary and the Trade Representative deem appropriate, and to update me on the progress of such negotiations within 90 days of the date of this proclamation. Under current circumstances and in light of future requirements of the United States, this action is necessary and appropriate to address the threatened impairment of the national security.

10. I have also determined that it is necessary and appropriate to impose an immediate 25 percent duty rate on the import of certain advanced computing chips and certain derivative products described in the Annex to this proclamation (Covered Products), when such importation does not contribute to the buildout of the United States technology supply chain and the strengthening of domestic manufacturing capacity for derivatives of semiconductors. I have further determined that it is necessary and appropriate that this duty rate not apply to imports of these Covered Products for use in United States data centers, for repairs or replacements performed in the United States, for research and development in the United States involving these

chips, for startups in the United States, for non-data center consumer applications in the United States, for use in non-data center civil industrial applications in the United States, for use in United States public sector applications, or for other uses that the Secretary determines contribute to the strengthening of the United States technology supply chain or domestic manufacturing capacity for derivatives of semiconductors. In my judgment, the tariff regime imposed in clause (3) of this proclamation will address the threat to the national security found in this proclamation by, among other things, incentivizing the development of domestic manufacturing of certain semiconductors and their derivative products, reducing reliance on imports of certain advanced computing chips and certain derivative products, and promoting research and development in support of the United States' high-tech infrastructure and capabilities.

11. In my judgment, based on current circumstances as well as the future needs of the United States, the actions in this proclamation are necessary and appropriate to address the threat to impair the national security posed by imports of semiconductors, semiconductor manufacturing equipment, and their derivatives. In particular, the actions in this proclamation will, among other things, help increase domestic production of semiconductors and reduce our Nation's reliance on foreign sources and foreign supply chains. Along with other efforts by my Administration to promote the domestic semiconductor industry, the actions in this proclamation will ensure that domestic supply chains will be able to meet current and future domestic demand for semiconductors and their derivative products, which is essential for our defense systems and industry. These actions will also incentivize domestic industry to reduce reliance on imports of semiconductors, while leveraging imported semiconductors in circumstances that accelerate AI innovation in the United States and aid in building out the domestic technology supply chain.

12. Section 232 authorizes the President to take action to adjust the imports of an article and its derivatives that are being imported into the United States in such quantities or under such circumstances as to threaten to impair the national security. Section 232 includes the authority to adopt and carry out a plan of action, with adjustments over time, to address the national security threat. This plan of action may include negotiations of agreements with foreign trading partners along with other actions to adjust imports to address the national security threat, including tariffs. If action under section 232 includes the negotiation of an agreement, such as one contemplated in section 232(c)(3)(A)(i) (19 U.S.C. 1862(c)(3)(A)(i)), the President may also take other actions he deems necessary to adjust imports to eliminate the threat that the imported article poses to the national security, including if such an agreement is not entered into within 180 days of the date of this proclamation, is not being carried out, or is ineffective. *See* 19 U.S.C. 1862(c)(3)(A).

13. Section 604 of the Trade Act of 1974, as amended (19 U.S.C. 2483) (section 604), authorizes the President to embody in the Harmonized Tariff Schedule of the United States (HTSUS) the substance of statutes affecting import treatment, and actions thereunder, including the removal, modification, continuance, or imposition of any rate of duty or other import restriction.

NOW, THEREFORE, I, DONALD J. TRUMP, President of the United States of America, by the authority vested in me by the Constitution and the laws of the United States, including section 232, 19 U.S.C. 1862; section 604, 19 U.S.C. 2483; and section 301 of title 3, United States Code, do hereby proclaim as follows:

(1) The Secretary and the Trade Representative, and any senior official they deem appropriate, shall jointly pursue or continue pursuing negotiations of agreements contemplated in section 232(c)(3)(A)(i) (19 U.S.C. 1862(c)(3)(A)(i)) to address the threatened impairment of the national security with respect to imported semiconductors, semiconductor manufacturing equipment, and their derivative products. Depending on the status or resolution of such negotiations, I may consider imposing significant tariffs on imports of semiconductors, semiconductor manufacturing equipment, and their derivative products, as well as an accompanying tariff offset program to incentivize domestic manufacturing.

(2) Within 90 days of the date of this proclamation, the Secretary and the Trade Representative, in consultation with any senior official they deem appropriate, shall update me on the status or outcome of the negotiations directed under clause (1) of this proclamation.

(3) Except as otherwise provided in this proclamation, imports of Covered Products will be subject to a 25 percent duty rate. This tariff shall be effective with respect to goods entered for consumption, or withdrawn from warehouse for consumption, on or after 12:01 a.m. eastern standard time on January 15, 2026, and shall continue in effect, unless such action is expressly reduced, modified, or terminated. This tariff is in addition to any other duties, fees, exactions, and charges applicable to such imported semiconductors, unless stated otherwise below. The duty rate described in this clause shall not apply to imports of those Covered Products for use in United States data centers, for repairs or replacements performed in the United States, for research and development in the United States, for use by startups, for non-data center consumer applications in the United States, for use in non-data center civil industrial applications in the United States, for use in United States public sector applications, or for other uses that the Secretary determines contribute to the strengthening of the United States technology supply chain or domestic manufacturing capacity for derivatives of semiconductors. In making his determination, the Secretary shall consider factors he deems relevant, including the need to address the national security threat found in this proclamation and the purpose of this proclamation.

(4) The Secretary, in consultation with the Chair of the International Trade Commission and the Commissioner of U.S. Customs and Border Protection (CBP), shall determine whether any modifications to the HTSUS, end-use certifications, or other administrative measures are necessary to effectuate or implement this proclamation or any actions taken pursuant to this proclamation. Any changes shall be published in a notice in the *Federal Register*.

(5) If any Covered Product is subject to tariffs under both this proclamation and other section 232 proclamations, the Covered Product shall be subject to the terms and duties imposed under this proclamation and not those imposed pursuant to any other section 232 proclamation. Covered

Products subject to tariffs pursuant to clause (3) of this proclamation shall not be subject to any tariffs imposed by Executive Order 14257 of April 2, 2025 (Regulating Imports With a Reciprocal Tariff To Rectify Trade Practices That Contribute to Large and Persistent Annual United States Goods Trade Deficits), as amended; Executive Order 14193 of February 1, 2025 (Imposing Duties To Address the Flow of Illicit Drugs Across Our Northern Border), as amended; and Executive Order 14194 of February 1, 2025 (Imposing Duties To Address the Situation at Our Southern Border), as amended.

(6) No drawback shall be available with respect to the duties imposed pursuant to this proclamation.

(7) CBP may take any necessary or appropriate measure to administer the tariff imposed by this proclamation to the extent permitted by applicable law.

(8) Any product described in clause (3) of this proclamation, except those eligible for admission as “domestic status” as described in 19 CFR 146.43, that is subject to a duty imposed by this proclamation and that is admitted into a United States foreign trade zone on or after the effective date of this proclamation must be admitted as “privileged foreign status” as described in 19 CFR 146.41 and will be subject upon entry for consumption to any rates of duty related to the classification under the applicable HTSUS subheading.

(9) The Secretary shall continue to monitor imports of semiconductors, semiconductor manufacturing equipment, and their derivative products. The Secretary also shall, from time to time, in consultation with any senior executive branch officials the Secretary deems appropriate, review the status of such imports with respect to the national security. The Secretary shall inform me of any circumstances that, in the Secretary’s opinion, might indicate the need for further action by the President under section 232. By July 1, 2026, the Secretary shall provide me with an update on the market for semiconductors that are used in United States data centers, so that the President may determine whether it is appropriate to modify the tariff imposed in this proclamation. The Secretary shall also inform me of any circumstance that, in the Secretary’s opinion, might indicate that the tariff imposed in this proclamation is no longer necessary.

(10) To the extent consistent with applicable law and the purpose of this proclamation, the Secretary, the Trade Representative, and the Secretary of Homeland Security are directed and authorized to take all actions that are appropriate to implement and effectuate this proclamation and any actions contemplated by this proclamation, including, consistent with applicable law, the issuance of regulations, rules, guidance, and procedures and the temporary suspension or amendment of regulations, within their respective jurisdictions, and to employ all powers granted to the President under section 232, as may be appropriate to implement and effectuate this proclamation. The Secretary, the Trade Representative, and the Secretary of Homeland Security may, consistent with applicable law, including section 301 of title 3, United States Code,

redelegate any of these functions within their respective executive departments or agencies. All executive departments and agencies shall take all appropriate measures within their authority to implement this proclamation to the extent permitted by applicable law.

(11) Any provision of previous proclamations and Executive Orders that is inconsistent with the actions taken in this proclamation is superseded to the extent of such inconsistency. If any provision of this proclamation or the application of any provision to any individual or circumstance is held to be invalid, the remainder of this proclamation and the application of its provisions to any other individuals or circumstances shall not be affected.

IN WITNESS WHEREOF, I have hereunto set my hand this

fourteenth day of January, in the year of our Lord two thousand twenty-six, and of the Independence of the United States of America the two hundred and fiftieth.

DONALD J. TRUMP

Annex

Fact Sheet: President Donald J. Trump Takes Action to Win the 6G Race

whitehouse.gov/fact-sheets/2025/12/fact-sheet-president-donald-j-trump-takes-action-to-win-the-6g-race

Jacqueline Kotkiewicz December 20, 2025



Fact Sheets

SECURING THE SPECTRUM AMERICA NEEDS: Today, President Donald J. Trump signed a Presidential Memorandum to ensure America's leadership in 6G development.

- The Memorandum directs immediate planning to relocate Federal systems currently using the 7.125-7.4 GHz band of spectrum so it can be cleared for full-power commercial 6G use. Federal incumbents have 12 months to submit relocation plans that protect national security missions while freeing this prime spectrum for American industry.
- The Memorandum directs immediate study of two other critical spectrum bands—2.69-2.9 GHz and 4.4-4.94 GHz—as part of an effort to free up even more spectrum for full-power commercial 6G use.
- The Memorandum directs the Secretary of State and other members of the Administration to advance American leadership in 6G through diplomatic engagements.

WINNING THE 6G RACE: President Trump is taking decisive action to win the global race for 6G.

- 6G networks will provide the foundation to operate cutting-edge technologies of the next decade, including AI, robotics, implantable technologies and many other advancements. It will also deliver dramatically faster connection speeds, ultra-low latency, and higher data capacity.
- President Trump's Working Families Tax Cuts Act reflects the United States' commitment to win the race to 6G, and to be the global leader in developing technologies that rely on 6G, by auctioning necessary spectrum for next generation networks.
- The bold spectrum reallocation plan identified in this Memorandum will give American and allied companies the immediate certainty they need regarding which bands will be available to plan their 6G network developments.

DELIVERING AMERICAN LEADERSHIP IN TECHNOLOGICAL INNOVATION: President Trump is ensuring U.S. dominance in cutting-edge technologies, prioritizing innovation and global competitiveness

- President Trump has prioritized making America a leader in AI, most recently launching the Genesis Mission to supercharge scientific discovery.
- He signed an Executive Order to restore Gold Standard Science as the cornerstone of Federal scientific research to ensure unquestioned American scientific and technological global dominance.
- President Trump issued an Executive Order to strengthen the nation's cybersecurity by focusing on critical protections against foreign cyber threats and enhancing secure technology practices.
- He signed an Executive Order to promote supersonic aviation in the United States, removing regulatory barriers so that U.S. companies can dominate supersonic flight once again.

Presidential Message on Critical Infrastructure Security and Resilience Month

whitehouse.gov/briefings-statements/2025/11/presidential-message-on-critical-infrastructure-security-and-resilience-month

Mary Wales November 4, 2025



Briefings & Statements

Our Nation’s critical infrastructure is foundational to every American’s way of life—protecting our national security, facilitating our economic stability, and ensuring our public safety. During Critical Infrastructure Security and Resilience Month, we recommit to making America’s systems and networks powerful, modern, and more resilient than ever before.

Immediately after retaking office, I signed an Executive Order to unleash American energy to restore our Nation’s capacity to produce the critical resources that power our economy. By reasserting our energy dominance, we are rebuilding our supply chains, strengthening our industrial base, and fortifying the critical infrastructure that keeps our country safe, all while lowering costs and creating good-paying jobs for Americans.

As we modernize the foundations of American strength, we are also building the digital infrastructure that will define the future. The United States is in a race to achieve global dominance in the technological development of our time: artificial intelligence (AI). Winning this battle will usher in a new era of human flourishing, economic competitiveness, and national security for the American people.

My Administration is taking a whole-of-government approach to win the AI race by accelerating innovation, building AI infrastructure, and leading in international diplomacy and security. Since my return to office, American AI companies have announced infrastructure totaling more than $400 billion—more investment than the Apollo Program and Manhattan Project combined. We are also rapidly developing next-generation AI data centers and modernizing our electrical grids and communications networks to power and connect this unprecedented buildout. With the support of the First Lady, who champions efforts to prepare students and workers for this new technological era, we are ushering in a new era of American ingenuity and leadership.

Across every sector vital to our prosperity—energy, transportation, communications, defense, and beyond—America's critical infrastructure is being strengthened and renewed. These assets, systems, and networks are the backbone of our country's success, and my Administration is improving each one of them—empowering States and municipalities to make smart infrastructure choices that both increase resilience and benefit taxpayers. Through commonsense, risk-informed approaches we are building new infrastructure, modernizing existing systems, and driving innovations that protect our people, power our economy, and keep our Nation the most advanced, dependable, and resilient country in the world.

Ericsson Mobility Report

November 2025



ERICSSON

Letter from the publisher

Next wave of mobile

This year, the industry has taken big steps in deploying the 5G standalone (SA) architecture needed to support differentiated connectivity services. The number of communications service providers deploying 5G SA has increased globally, and we've seen many go from proofs-of-concept to commercial offers based on 5G network slicing.

In this edition of the Ericsson Mobility Report, we dig deeper into how the industry is evolving, not just in terms of technology, but in the way it creates value for service providers, users and the ecosystem.

By the end of this year, 5G subscriptions are expected to reach 2.9 billion – about one-third of all mobile subscriptions globally. During 2025, an additional 400 million people worldwide will have 5G coverage. The share of traffic carried over 5G continues to rise, and in 2031, over 1.2 billion people globally will be served by 5G Fixed Wireless Access-based broadband. 5G services are affecting people's lives around the world.

We also examine some interesting markets and recent events showcasing new offerings and go-to-market approaches.

Together with Singtel, we discuss how experience can become a new currency, as the service provider aims to change the conversation from data quantity to data differentiation. Connectivity is enabling tailored experiences that deliver business outcomes when and where they matter most.

With SoftBank, we explore new ways for enterprises to build secure and flexible connectivity for remote and hybrid workforces. 5G connectivity can simplify enterprise IT architecture while supporting zero-trust and AI-enabled workflows that enhance both security and productivity.

5G-powered solutions are also addressing completely new segments in new environments. SailGP, a global racing competition held across various locations worldwide, is using a hybrid 5G public and private network to provide high-quality connectivity, improving both fan experiences and race operations on land and at sea.

As we enter this next wave of mobile, I'm convinced that collaboration across the ecosystem will be the key to unlocking its full potential. The interdependence across the technology stack, especially as AI, cloud and mobile become ever more intertwined, means that fostering a collaborative and open ecosystem, particularly among leading industry players, is more important than ever.

I hope you find this report both engaging and useful. Let's continue to shape the future together.

Erik Ekudden
Senior Vice President and
Chief Technology Officer

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Executive Editor: Peter Jonsson
Project Sponsor: Patrik Cerwall
Project Manager: Anette Lundvall
Forecasts: David von Koch
Writer Editor: Steven Davis

Co-writers:
Hai Thoo Cheong, Terence Lai (Singtel)
Koji Araki, Keisuke Asakura,
Takashi Nakamura (SoftBank)
Kes McHugh (SailGP)

Contributors:
Boris Babić, Greger Blennerud, Marko Čejvan,
Lisa Englund, Michiyo Kato,
Doroteja Kobescak, Zsolt Kormanyos,
Per Lindberg, Nina Lövehagen,
Jens Malmodin, Valerio Manca,
Daniel Paska, Ove Persson,
Kosuke Takizawa, Katsuyoshi Ueno,
John Yazlle, Martin Zander

Forecasts

The proportion of mobile subscriptions that are 5G increased from one-quarter at the end of 2024 to one-third in 2025. 5G mid-band is ideal for providing both capacity and coverage, and therefore enhancing user experience, with population coverage expected to reach 45 percent globally outside mainland China during 2025. Mobile network data traffic grew 20 percent between Q3 2024 and Q3 2025, slightly more than expected. Looking to the next generation, the 6G standardization process has already begun. We expect the first commercial launches to be driven by leading service providers in front-runner markets. AI-native 6G networks, together with new capabilities such as integrated sensing and communication (ISAC), will enable entirely new use cases and classes of devices. These advances will unlock new business opportunities for service providers.

6G

By 2031, most networks in leading countries will have been upgraded to 6G.

1.4 bn

In 2031, around 1.4 billion people globally will be served by Fixed Wireless Access broadband.

20%

Mobile network data traffic grew 20 percent between Q3 2024 and Q3 2025, slightly above expectations.

400m

During 2025, an additional 400 million people worldwide will have 5G coverage.

5G to account for one-third of mobile subscriptions in 2025

During the third quarter of 2025, 162 million 5G subscriptions were added, bringing the total to almost 2.8 billion.

5G subscription uptake continues apace and the total is expected to reach 2.9 billion at the end of 2025, accounting for one-third of all mobile subscriptions. The highest 5G subscription penetration is expected to be in North America with 79 percent, followed by North East Asia at 61 percent and Western Europe and the Gulf Cooperation Council (GCC) countries, both at 55 percent. Globally, 5G is anticipated to overtake 4G as the dominant mobile access technology by subscription by the end of 2027, nine years after launch.

Around 360 service providers have now launched commercial 5G services, and more than 90 of those have launched or soft-launched 5G standalone (SA).[1]

As subscribers migrate to 5G, the number of 4G subscriptions continues to decline. During the third quarter, 4G subscriptions declined by 65 million, bringing the total below 4.8 billion. 3G subscriptions declined by 22 million during the same period, while 2G subscriptions dropped by 29 million.

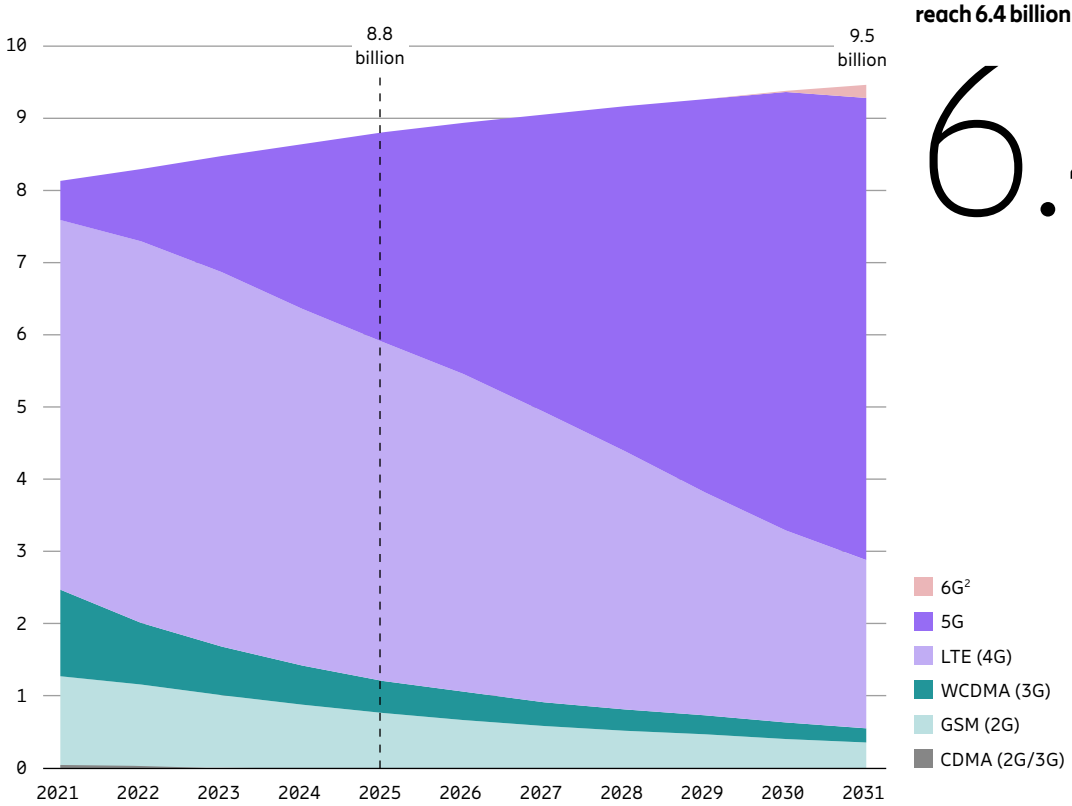
2G and 3G network sunsetting continues around the world. The phasing out of 3G networks is anticipated to happen more quickly than that of 2G in the coming years, but the timeline for this transition varies based on country and service provider.

Two-thirds of all mobile subscriptions expected to be 5G at the end of 2031

Global 5G subscriptions are forecast to reach 6.4 billion in 2031 and will make up two-thirds of all mobile subscriptions. Deployment of 5G SA by leading service providers will continue, and 5G SA subscriptions are projected to account for more than 4.1 billion in 2031, making up around 65 percent of all 5G subscriptions at that time.

In 2031, it is projected that Western Europe, North America and the GCC countries will have 5G subscription penetration of above 90 percent.

Figure 1: Mobile subscriptions by technology (billion)



5G subscriptions are forecast to reach 6.4 billion by the end of 2031.

6.4bn

[1] GSA and Ericsson (November 2025).
[2] This does not include early uptake of AI-enabled IoT devices such as autonomous vehicles, smart glasses and drones.

6G, AI and cloud will redefine service possibilities

Standardization discussions for 6G (3GPP Release 21, based on ITU IMT-2030) have begun. 6G is expected to have only a standalone architecture with a core network built on the architectural principles of 5G SA, extended with new capabilities such as AI and integrated sensing and communication (ISAC). A new Radio Access Network (RAN) architecture will be defined, including a new radio interface. For traditional use cases like enhanced mobile broadband (eMBB), Fixed Wireless Access (FWA) and the Internet of Things (IoT), 6G will advance the performance, service differentiation and guarantees. As these network technologies open up new service possibilities, use cases like massive digital twinning, autonomous mobility and wide-area mixed reality are likely to gain broader commercial adoption.

Global 6G subscriptions[3] are forecast to reach 180 million by the end of 2031, not including early uptake of AI-enabled IoT devices such as autonomous vehicles, smart glasses and drones. If 6G subscription uptake happens earlier, the current forecast could be surpassed significantly. The timing of commercial launch will vary between regions and countries:

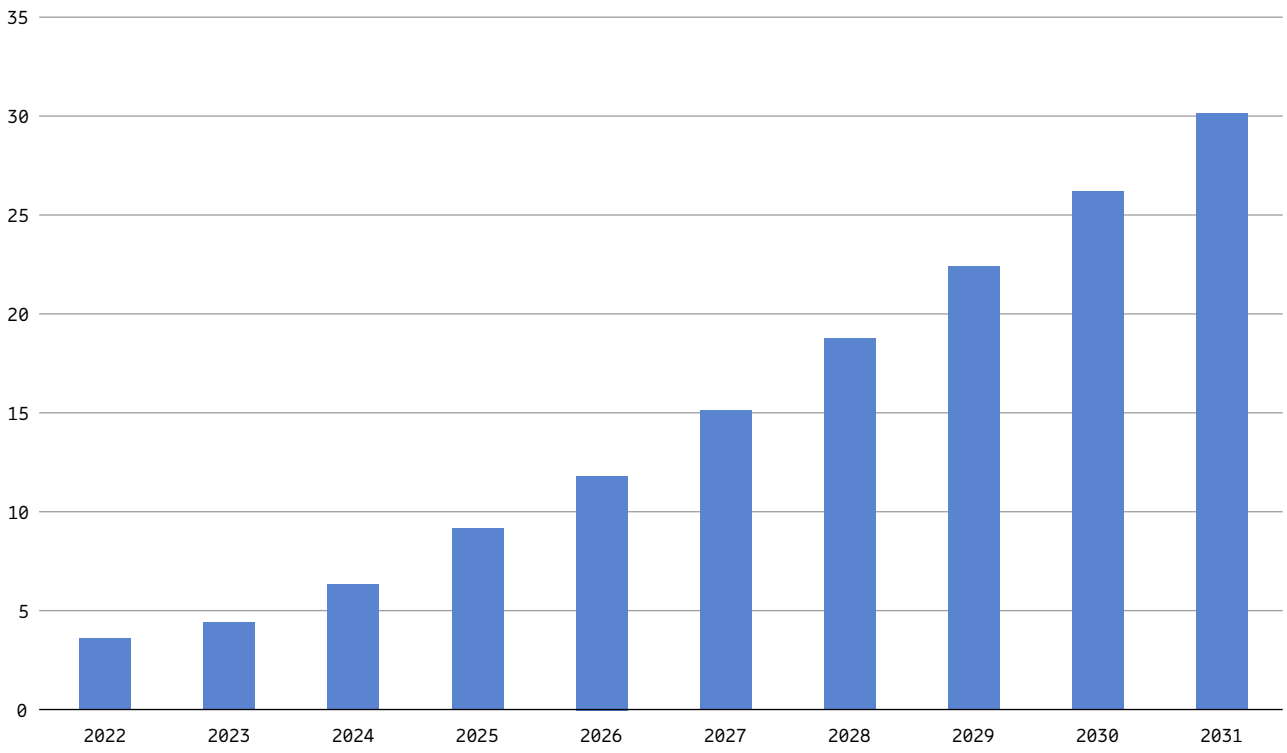
- In the US, China, Japan, the GCC countries and South Korea, the launch of commercial 5G services took place relatively early compared to many other countries, and it is expected that these countries will be among the first to roll out 6G commercial services.
- India has been vocal in its ambition to lead in 6G technology, and it is expected that the timing of the commercial 6G launch compared to other countries will happen earlier than it did for 5G.
- In Europe, the launch of commercial 6G services is anticipated to be about one year later, relative to other countries, than was the case for 5G, due to the later roll out of 5G SA.

Satellite broadband subscriptions

In recent years, there has been a growth in satellite networks, in particular large constellations of low-Earth orbit (LEO) satellites. These networks can provide multiple services such as direct-to-device connectivity and fixed broadband internet (that is, fixed satellite services). To meet the fixed broadband connectivity needs as we approach 2031, the mix of fiber, 5G FWA and satellite technologies will all be crucial to support an increasingly digital world. Globally, satellite broadband subscriptions are forecast to increase from around 9 million by the end of 2025 to around 30 million by the end of 2031. For comparison, there will be a projected 350 million FWA subscriptions on mobile networks by 2031. The total number of fixed broadband connections will be around 2 billion by 2031.

Satellite broadband subscriptions: Number of subscriptions using a satellite broadband service operating in the fixed-satellite service (FSS) spectrum.

Figure 2: Satellite broadband subscriptions (million)



[3] Currently, 6G subscriptions are not published on a regional level.

Adoption of speed-based FWA offerings continues

Service providers are capitalizing on consumer preferences for fast, reliable services; the proportion of Fixed Wireless Access (FWA) service providers offering speed-based tariff plans has increased from 43 percent to 54 percent in one year.

FWA is continuing to grow solidly in terms of the:

- **Adoption:** Proportion of service providers offering it over 5G
- **Monetization:** Share of service providers with speed-based tariff plans
- **Scale:** Number of connections and the traffic volume per connection

Continued global FWA momentum

An updated Ericsson study[1] of retail packages offered by service providers reveals that 81 percent have an FWA offering. There are 159 service providers offering FWA services over 5G, representing 65 percent of all FWA service providers.

Figure 3: Global FWA service provider adoption 2022–2025

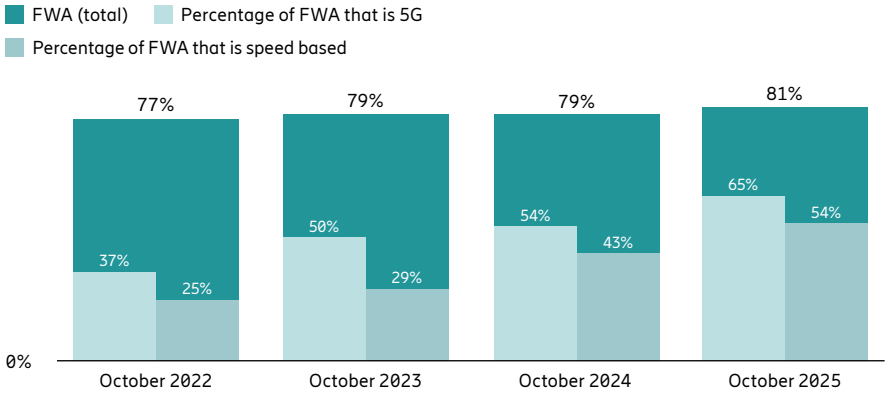
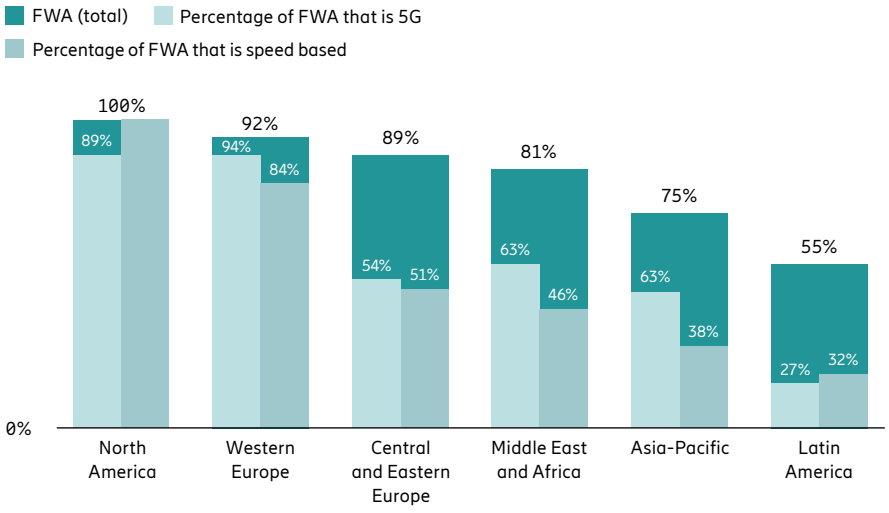


Figure 4: Regional FWA service provider adoption 2025



[1] 304 service providers, representing around 90 percent of global mobile revenues.

Over half of FWA service providers now offer speed-based tariff plans

Speed-based tariff plans are commonly offered for fixed broadband services, such as those delivered over fiber or cable. Consumers understand this type of plan well, enabling service providers to monetize FWA as a broadband alternative. Speed-based tariff plans are now offered by 54 percent of FWA service providers, up from 43 percent a year ago. The remaining 46 percent offer only volume-based tariff plans (buckets of GB per month).

Taking into account only the service providers that offer 5G FWA services, 70 percent offer speed-based tariff plans.

Regional variations

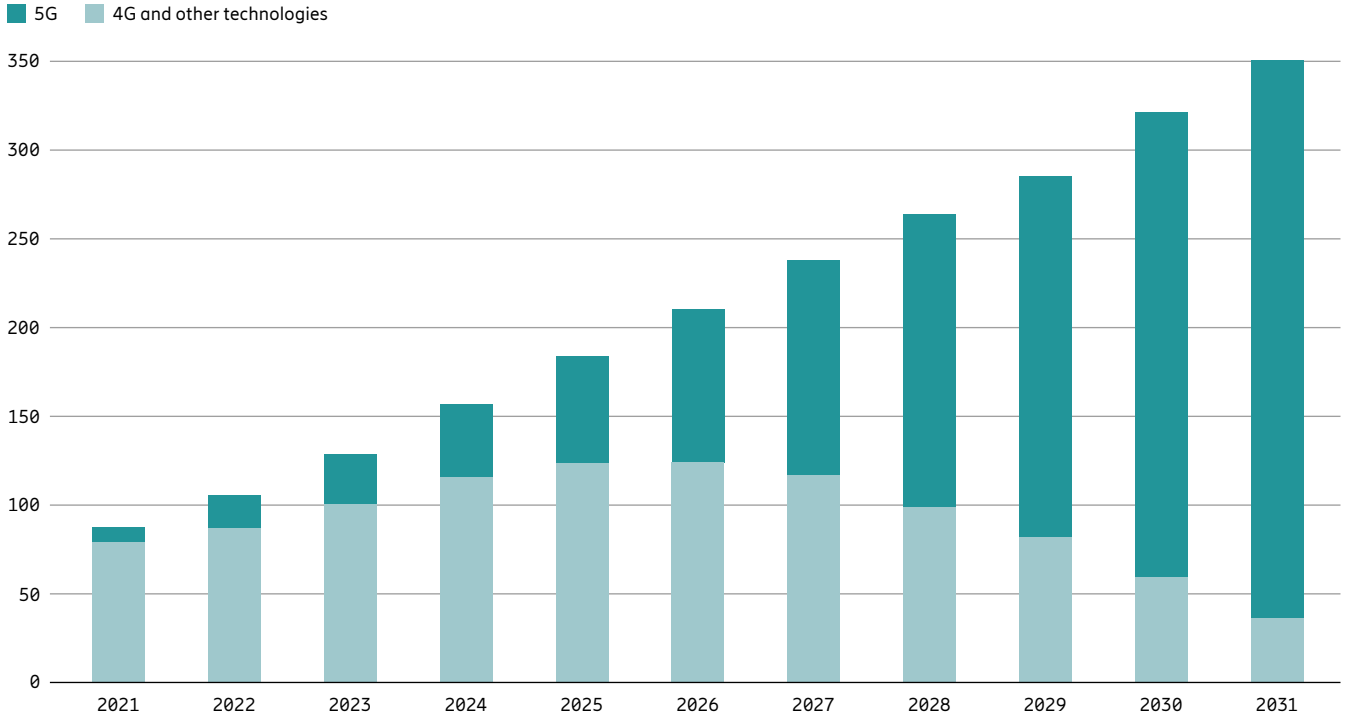
There are large regional variations in the proportion of service providers adopting FWA:

- FWA adoption is widespread globally. In five out of six regions, 75 percent or more service providers are offering FWA.
- In the past year, there has been continuous growth in the number of service providers offering speed-based plans, driven primarily by Western Europe.
- Latin America has the most potential to increase the number of service providers that offer FWA over 5G and speed-based tariff plans.

FWA connection advancements

- During Q2 2025, Jio grew to become the largest global FWA provider in terms of the number of connections, with 9.5 million connections as of Q3 2025.
- There is robust demand for FWA in India, with the combined number of connections from Jio and Airtel reaching 12 million as of September 2025.
- In the US, the three largest service providers achieved all-time-high quarterly FWA net adds of 1.04 million connections in Q3 2025. As a result, their combined FWA user base stands at 14.6 million connections.

Figure 5: FWA connections (millions)



- High-growth markets are leveraging FWA to drive revenue expansion. For example, Smart Philippines reported a 12 percent year-on-year increase in 5G FWA connections, with FWA revenues emerging as the fastest-growing segment of mobile revenues with an increase of 22 percent year-on-year.
- A recent FWA customer premises equipment (CPE) survey, which encompasses insights from 17 leading vendors, projects shipments of 35 million CPE units in 2025, representing a 26 percent year-on-year growth.[2] Notably, 57 percent of these shipments are expected to be 5G-capable.

FWA monetization advancements

- Cosmote, Greece, has introduced differentiated 5G FWA connectivity, reaching 19,000 connections at the end of Q2 2025. This enabled the total fixed broadband segment to achieve growth and reverse the negative trajectory seen from previous quarters.
- In the US, FWA is a major factor in 5G standalone (SA) traffic growth, primarily driven by leading service providers.
- Telstra has launched "Dynamic 5G," an advanced FWA solution tailored for enterprise customers. This offering is based on differentiated connectivity with guaranteed performance levels.

350 million FWA connections by 2031

While 5G FWA adoption is strong in many markets, uptake in certain regions – particularly Latin America, Africa and parts of South East Asia – remains comparatively limited. Nonetheless, many of these regions have substantial underlying demand and long-term growth potential as consumers want high-speed, reliable broadband services. Markets with strong 5G FWA growth excel in two areas:

- **5G deployment maturity:** Characterized by broad 5G population coverage, in particular 5G mid-band coverage (see the network coverage forecast on page 15), as well as adoption of 5G SA and 5G Advanced.
- **FWA monetization maturity:** Refers to a variety of 5G FWA offerings, in particular speed-based FWA such as tiered speed plans. More advanced service providers are offering a premium experience FWA based on differentiated connectivity.

Markets that have experienced strong FWA growth, including the US and India, excel in both of these areas. Conversely, regions with slower growth in FWA connections typically have limited 5G deployment and monetization maturity. Consequently, the aggregated FWA connection forecast has been adjusted one year forward, and is expected to grow from 185 million at the end of 2025 to 350 million by the end of 2031, with 90 percent of the connections being on 5G.

Considering a global average household size of about four people, this equates to approximately 1.4 billion individuals being served by FWA broadband by the end of 2031.

Half of global FWA connections to be in Asia-Pacific by 2031

Higher volumes of 5G FWA in populous, high-growth countries can drive economies of scale for the overall 5G FWA ecosystem, resulting in even more affordable CPE. Asia-Pacific's share of global FWA connections is expected to increase from just over 40 percent in 2025 to 50 percent by 2031.

FWA impact on global mobile network data traffic

At the end of 2025, FWA data traffic is set to represent 27 percent of global mobile data traffic and is projected to grow by a factor of over 3 to reach around 174 EB per month by the end of 2031. This will represent 36 percent of total mobile network data traffic.

In 2031, around 1.4 billion people globally will be served by FWA broadband, with 90 percent on 5G.

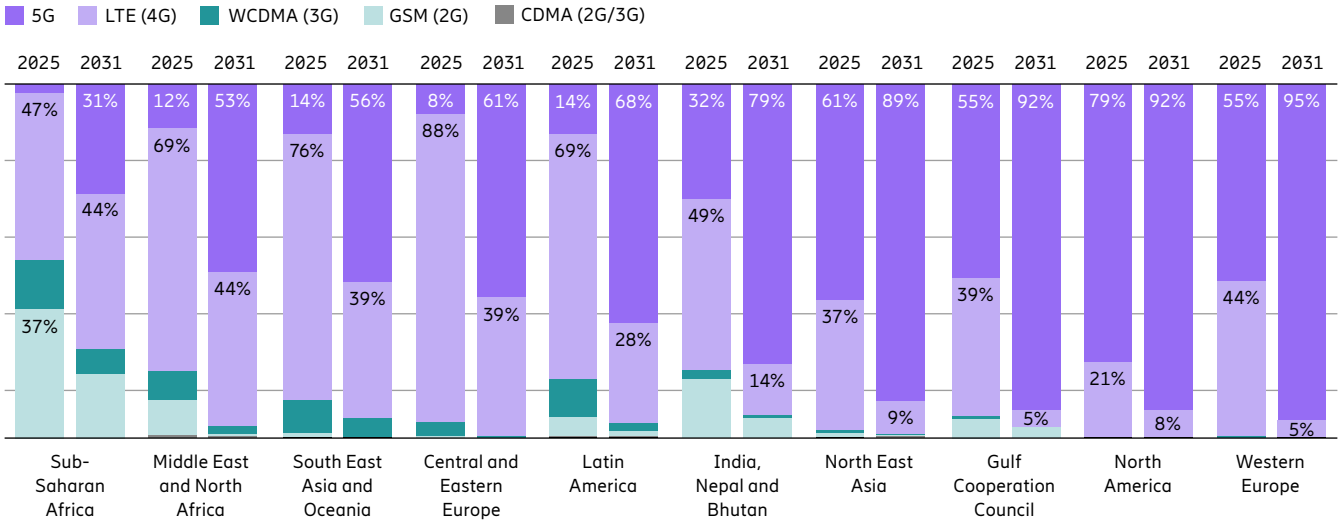
1.4 bn

[2] GSA survey (September 2025).

Global growth in 5G subscriptions

In Central and Eastern Europe and Latin America, 5G subscription penetration is expected to grow by over 50 percentage points up to 2031.

Figure 6: Mobile subscriptions by region and technology (percent)



Note: All Middle East and North Africa figures include GCC countries. Currently, 6G subscriptions are not published on a regional level, but included in 5G figures in regions where 6G is expected to launch early.

Sub-Saharan Africa

The telecoms sector continues to drive growth in the region, fueled by a young population, wider access to affordable smartphones, and a rising demand for mobile data and digital services.

The ongoing rollout of 4G and the early stages of 5G deployment are expected to gradually phase out legacy technologies. Sunsetting of 3G networks is anticipated to happen sooner than for 2G networks, with 3G subscriptions expected to decline by 8 percent annually over the forecast period, to a total of 89 million in 2031. 2G subscriptions are projected to fall by 7 percent annually to a total of 243 million. In 2031, 4G is set to account for 44 percent of all mobile subscriptions, while 5G is expected to grow significantly to around 400 million subscriptions.

Smartphone subscriptions are projected to rise to 960 million in 2031. Notably, around 42 percent of these are expected to be 5G subscriptions, reflecting the growing consumer demand and evolving mobile ecosystem.

Service providers are increasingly diversifying their offerings, with a strong focus on fintech – particularly mobile money services – and Fixed Wireless Access (FWA), aimed at boosting connectivity for both consumers and enterprises. The sector's resilience and long-term momentum will hinge on ongoing infrastructure developments and supportive regulatory environments.

Middle East and North Africa

The telecom sector across the region continues to show resilience in the face of ongoing global economic uncertainty and geopolitical complexities.

Regional efforts to diversify economies and drive digital transformation are helping to stabilize the sector and sustain investment momentum. Mobile subscriptions are projected to grow at an annual rate of 1 percent up to 2031, reaching a total of 780 million. Notably, 5G subscriptions are forecast to rise with a CAGR of around 30 percent over the same period, signaling a shift in how users engage with digital services.

In 2031, 4G is anticipated to make up 44 percent of mobile subscriptions, while 5G is set to dominate with 53 percent of the total subscriptions. 5G FWA is also gaining traction as a key enabler of next-generation connectivity, complementing traditional broadband offerings. Service providers are continuously working to enhance network capacity while minimizing energy consumption and their carbon footprint – modernization is key to achieving business goals and reducing energy costs to meet net-zero ambitions.

South East Asia and Oceania
5G subscriptions in the region are forecast to reach around 680 million in 2031. 5G is evolving beyond coverage to prioritize performance, differentiated connectivity and high-value use cases. Service providers across the region have launched experience-led differentiated connectivity offerings, such as boost packs and network slices, for consumers and enterprises.

Singapore offers tiered 5G experiences for consumers and enterprises, delivering differentiated connectivity based on user needs for speed, priority and security. Meanwhile, Australia is rolling out service level agreement-backed 5G for mission-critical enterprise workloads. In Malaysia, network slicing capabilities are now available for 5G consumers. 5G has become a significant driver of data consumption and increased ARPU in Thailand, with service providers reporting 10–15 percent ARPU uplift among 5G users. Vietnam's government is driving accelerated 5G deployment of 90 percent population coverage in 2025, through a mix of targeted subsidies for service providers and spectrum reforms.

Central and Eastern Europe
Technology adoption and subscription uptake has historically been slower here than in Western Europe. 5G deployment varies by country, partly due to slower spectrum allocation processes. However, the region has seen several accelerated 5G deployments, driven by growing demand. For example, Croatia leverages 5G for tourism and smart cities, while 5G in Hungary is going beyond smartphones to the automotive sector and other use cases. Regionally, 5G subscriptions are expected to reach 45 million during 2025.

4G is currently the dominant technology and is expected to account for 88 percent of all subscriptions at the end of 2025. It is estimated that this share will decline after a peak in 2025, as subscribers migrate to 5G.

Latin America
5G is gaining momentum in Latin America after a slow start. Although the region currently has a small base with 106 million 5G subscriptions, the large overall subscriber base is projected to enable Latin American 5G subscriptions to reach 553 million by the end of 2031. Throughout this period of growth in number of 5G subscriptions, the mobile infrastructure is anticipated to mature significantly with the adoption of 5G standalone (SA) architecture, 5G Advanced technologies, network slicing and open programmable architectures. This will fuel digital transformation in the region.

India, Nepal and Bhutan
5G adoption in India is growing rapidly. The expansion of 5G networks, availability of affordable 5G FWA customer premises equipment (CPE) and high data consumption from FWA users is fueling the data traffic growth in India. 5G FWA allows for rapid deployment of broadband services to homes and businesses, especially in rural and semi-urban areas where fiber optic cable installation is slow and expensive, and is helping to bridge the digital divide.

Regionally, 5G subscriptions are expected to reach 394 million at the end of 2025, accounting for 32 percent of total mobile subscriptions. More than 1 billion 5G subscriptions are expected by the end of 2031, reaching 79 percent subscription penetration. 4G is currently the dominant subscription type, making up 49 percent of total mobile subscriptions. 4G subscriptions are forecast to decline from around 600 million in 2025 to around 190 million in 2031, as subscribers migrate to 5G.

North East Asia
The region has the second-highest 5G subscription penetration globally, and is expected to reach 61 percent at the end of 2025. Adoption of differentiated connectivity is expanding across the region, enhancing user experience and creating opportunities for service providers to monetize personalized services.

In mainland China, 5G subscriptions are expected to reach 1.2 billion at the end of 2025, and over 90 percent of smartphone shipments are anticipated to be 5G-capable.[1] 5G Advanced is becoming more widely available, including functionalities such as support for reduced capability (RedCap) and high-order carrier aggregation.

In Japan, progress in 5G SA is improving consumer experiences, and service offerings that leverage differentiated connectivity are emerging. Service providers are also increasing investments in areas such as AI, to support future monetization strategies.

South Korea continues to offer high average 5G throughput while expanding coverage, including in rural areas, through network sharing. Service providers remain focused on improving user experience and preparing networks for increased importance in the AI era, alongside efforts to monetize 5G services.

In Hong Kong, service providers report a substantially increased ARPU from 5G compared to 4G, contributing positively to financial performance.

In Taiwan, service providers have begun testing differentiated connectivity offerings in specific segments, such as live entertainment, with commercial 5G SA services expected to launch within the next one to two years.

Gulf Cooperation Council (GCC)
The region, while small in terms of subscribers, is notable for its high penetration, high levels of urbanization and robust consumer spending power.

Service providers are transitioning from traditional telcos to digital service providers. This is enabled by extensive 5G deployment and the adoption of technologies such as AI, cloud computing and edge solutions. Network slicing, supported by programmable networks and open APIs, is expected to be a cornerstone in delivering customized and performance-sensitive services.

In 2031, mobile subscriptions are expected to reach 97 million. Subscriptions for legacy network generations will decline sharply as users migrate to next-generation connectivity. By the end of 2031, 5G subscriptions are expected to comprise 92 percent of all mobile subscriptions, totaling 89 million.

FWA adoption is driven by demand for high-speed alternatives to fixed broadband and national initiatives aimed at reaching underserved areas and supporting smart-city ambitions.

North America
5G subscriptions are expected to reach 359 million at the end of 2025, accounting for 79 percent of all mobile subscriptions at that time, and to further reach around 450 million in 2031. Leading service providers anticipate continued growth for FWA and are introducing differentiated connectivity to offer tailored experiences. Extensive mid-band 5G network coverage is the foundation for new consumers, enterprises and government innovations across the broader tech ecosystem. The innovations are created at the intersection of AI, cloud and mobile.

Western Europe
5G subscription growth is strong in the region, and is expected to rise from 227 million at the end of 2024 to 307 million in 2025, equaling a penetration of 55 percent. 5G subscription penetration varies between countries, where markets that launched 5G early, such as the UK and Finland, have already achieved high penetration relative to other markets. Going forward, 4G is expected to decline in favor of 5G. 5G subscriptions are anticipated to reach around 540 million at the end of 2031, representing 95 percent penetration at that time, which is in line with other leading 5G markets. 5G mid-band and SA are gaining traction in the region, with leading service providers launching new offerings based on differentiated connectivity in areas such as payment terminals, live broadcasting and photojournalism.

[1] China Academy of Information and Communications Technology (CAICT).

5G standalone: From smartphones to smartwatches and beyond

5G standalone (SA) is playing a central role in improving wearable devices. Smartwatches are leading this development with integrated connectivity, with smart glasses expected to follow in the future.

RedCap wearables supported by 5G SA
The first widely used smartwatch supporting 5G SA reduced capability (RedCap) is now supported by over 20 service providers, underscoring a growing focus on 5G SA-enabled devices. Although wearables cannot compare in sales volume to smartphones, they may have an important role in the future device ecosystem. Device manufacturers selecting 5G SA with RedCap for devices requiring long battery life confirms that the 5G SA era is here, with the rest of the ecosystem expected to follow.

Smart glasses in the 5G era
Lightweight smart glasses typically connect to the cellular network through a companion device, such as a smartphone, but integrated connectivity is expected in the next two to three years. RedCap can play an important role here, providing the size and power efficiency required for this form factor. Companion devices will continue to be important for offloading compute from the glasses, but edge computing is expected to be the way forward. Early adopters of AI/AR glasses report benefits such as the simplicity of hands-free phone calls and use of the simple screen for incoming messages.

The question of whether smart glasses will ultimately replace smartphones remains: Currently, sales volumes are less than 1 percent of smartphones.

Growth of 5G SA-only devices
In China, there is a growing trend toward 5G SA-only devices to reduce cost and increase simplicity. This trend is expected to drive demand for SA roaming, as most service providers today rely on non-standalone (NSA) when subscribers roam. Without SA roaming, these devices will need to fall back to LTE when abroad.

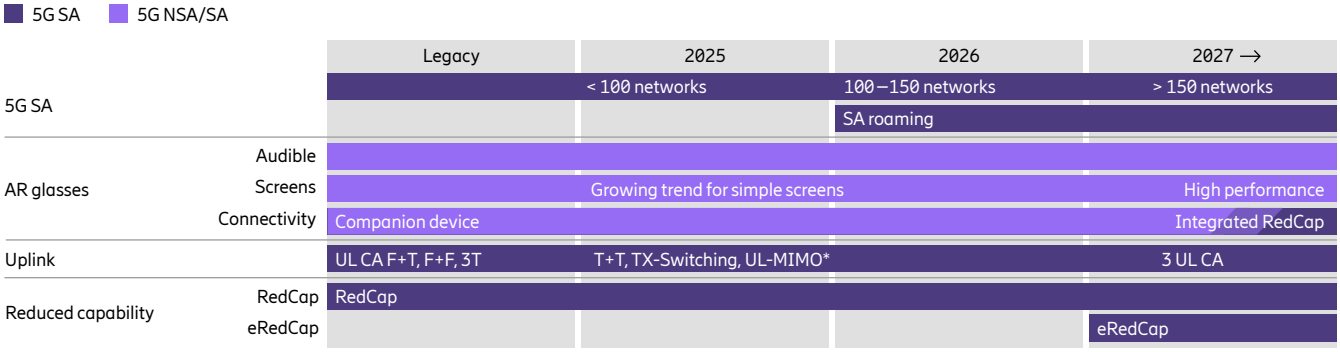
Boosting uplink performance
The smartphone industry is increasingly focusing on uplink performance. Some commercial smartphones now include support for uplink carrier aggregation (CA), combining frequency division duplex (FDD) and time division duplex (TDD) frequency bands to boost capacity and performance. Certain models also support uplink Multiple-Input Multiple-Output (MIMO), enabling the simultaneous transmission of data over several antennas, increasing uplink speed and reliability. A few devices implement Release 16 uplink transmit (TX) switching, a feature that lets the smartphone intelligently switch between uplink antennas depending on signal conditions, providing improved connection stability and energy efficiency.

However, adding more uplink capabilities to the smartphone can introduce size, complexity, cost and battery performance challenges. For Fixed Wireless Access (FWA), there is a concurrent trend to increase output power to strengthen the uplink signal. Overall, the intensified focus on uplink aligns with today's demanding user behavior, where people upload content more than ever before.

EVs and drones driving 5G innovation
Smartphone vendors and established chipset vendors are now investing in the electric vehicle (EV) sector. As cars offload more computational tasks, their data consumption increases. Self-driving taxis, for example, rely on reliable connectivity that can be further enhanced using network slicing.

The low-altitude digital airspace ecosystem, particularly the drone segment, is becoming an important market for 5G connectivity, with 5G SA enabling digital services that enhance cost-efficiency and support weight requirements of drones.

Figure 7: 5G technology area readiness on device



Note: Readiness means more than one infrastructure and device vendor is ready. Key terms: carrier aggregation (CA), F+T (FDD and TDD), F+F (FDD and FDD), T+T (TDD and TDD), TX-switching (antenna switching), UL-MIMO (2TX antennas in uplink), 3 UL CA (3 uplink carrier aggregation).
*Limited market use ahead of timeline.

Decrease in ICT's carbon footprint slows down

While electricity consumption continues to grow – largely due to AI – the adoption of renewables has slowed, leading to only a slight decrease in greenhouse gas (GHG) emissions compared to last year.

Electricity consumption increasing
Global ICT sector electricity consumption in the use stage was estimated to be nearly 1,100 TWh in 2024, up from about 940 TWh in 2020. About 40 percent of the total usage relates to user devices and IoT. The main growth is in the data center segment, where electricity consumption has grown about 9 percent yearly since 2020. This corresponds to about 90 TWh, compared to the rise of 25 TWh 2010–2020. The increase is largely related to AI. For the network segment, the increased electricity usage is about 2 percent per year since 2020, corresponding to about 23 TWh, and mainly relates to an increase reported by the three major Chinese service providers. Between 2010 and 2020 the network electricity usage increased by 88 TWh.

The ICT sector's electricity consumption remains about 4 percent of the global total, increasing in line with global consumption.

The total estimated GHG emissions for the entire lifecycle in 2024 were still about 750 million metric tons (Mt) of carbon dioxide equivalents (CO_2e), reduced by about 1 percent since 2023. In 2020, it was about 780 Mt. The decrease in reported emissions in 2024 compared to 2020 relates to increased investments in renewables by ICT companies and less fossil fuels generally in electricity production. During 2024 however, investments in renewables grew more slowly compared to previous years.

Looking forward to 2030
Up to 2030, it is forecast that electricity consumption will continue to rise gradually in all areas of ICT. The increase in electricity consumption has been greater in the last two years than in previous years, mainly due to the development and adoption of AI. In our current forecast, this increased growth rate is expected to continue during 2025, but thereafter fall back to the previous growth rate. However, this will depend on the future development of AI.

The carbon footprint of the sector is forecast to continue to decrease by 2030, due to an increased share of renewable energy used by networks and data centers, as well as generally in the global electricity grid. This will also reduce GHG emissions from device usage and production.

With the current AI impact, geopolitical situation and slower shift to renewable energy, both electricity usage and GHG emissions are expected to be higher compared to 2024's forecast.[1]

Figure 8: ICT sector development up to 2024 and forecast to 2030

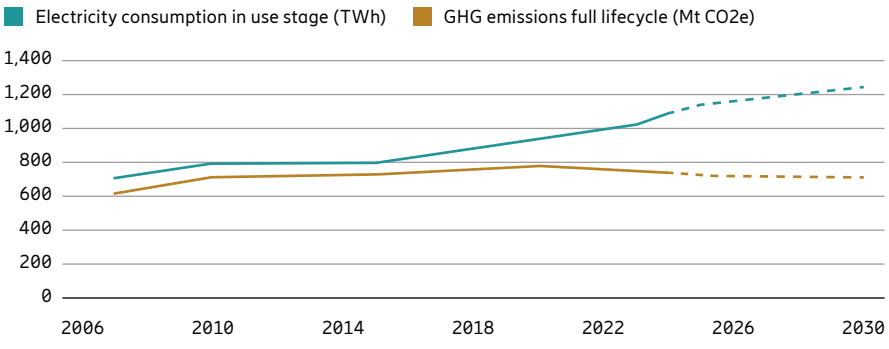
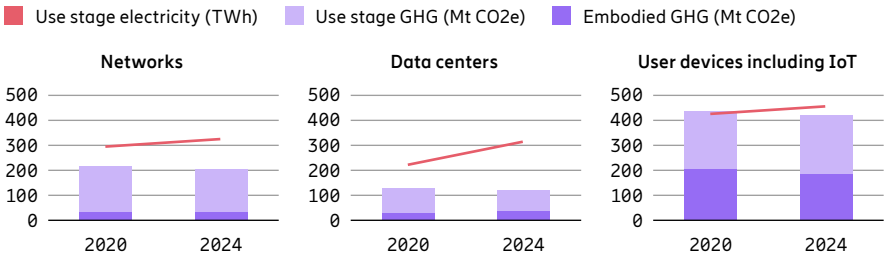


Figure 9: ICT sector 2024 versus 2020



ICT sector
The ICT sector is defined as: **data centers**, meaning all deployments of servers, from small racks to large hyperscale data centers including all infrastructure; **networks**, comprising mobile and fixed networks, including enterprise networks and communication satellites; **user devices** such as PCs, monitors, phones, tablets or customer premises equipment (CPE) such as routers and modems; and **Internet of Things (IoT)**, including payment terminals, surveillance cameras, smart meters, smart home devices and other IoT and machine-to machine (M2M) communication modules.

All segments consume electricity in the use stage, which leads to GHG emissions. The full carbon footprint includes the use stage and the embodied GHG emissions, which covers materials, production, transport and end-of-life treatment.

[1] Ericsson Mobility Report, "ICT's carbon footprint continuing to decrease" (November 2024).

During 2025, mobile network data traffic growth has been stable

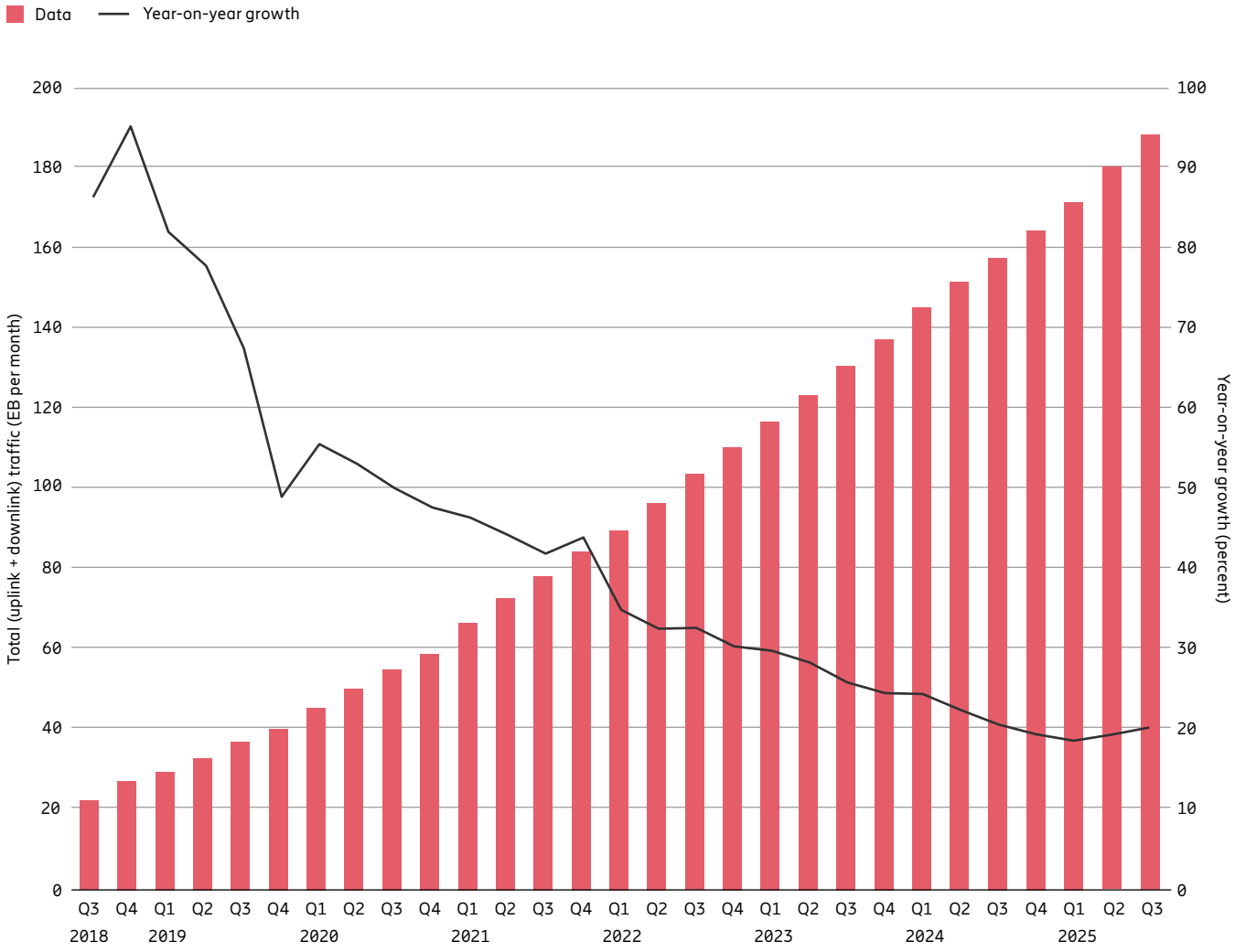
Mobile network data traffic grew slightly above expectations at 20 percent between Q3 2024 and Q3 2025.

The quarter-on-quarter mobile network data traffic growth between Q2 2025 and Q3 2025 was around 5 percent. Total monthly global mobile network data traffic reached 188 EB. The slightly stronger than expected yearly growth in Q3 2025 was mainly driven by India and mainland China.

Mobile data traffic growth is being driven by both rising smartphone subscriptions and increasing average data volume per subscription, fueled primarily by increased viewing of video content. At the end of 2025, video traffic is expected to account for 76 percent of all mobile data traffic.

Figure 10 shows the total global monthly network data traffic from Q3 2018 to Q3 2025, along with year-on-year percentage growth for mobile network data traffic.

Figure 10: Global mobile network data traffic and year-on-year growth



Note: Mobile network data traffic also includes traffic generated by Fixed Wireless Access services.

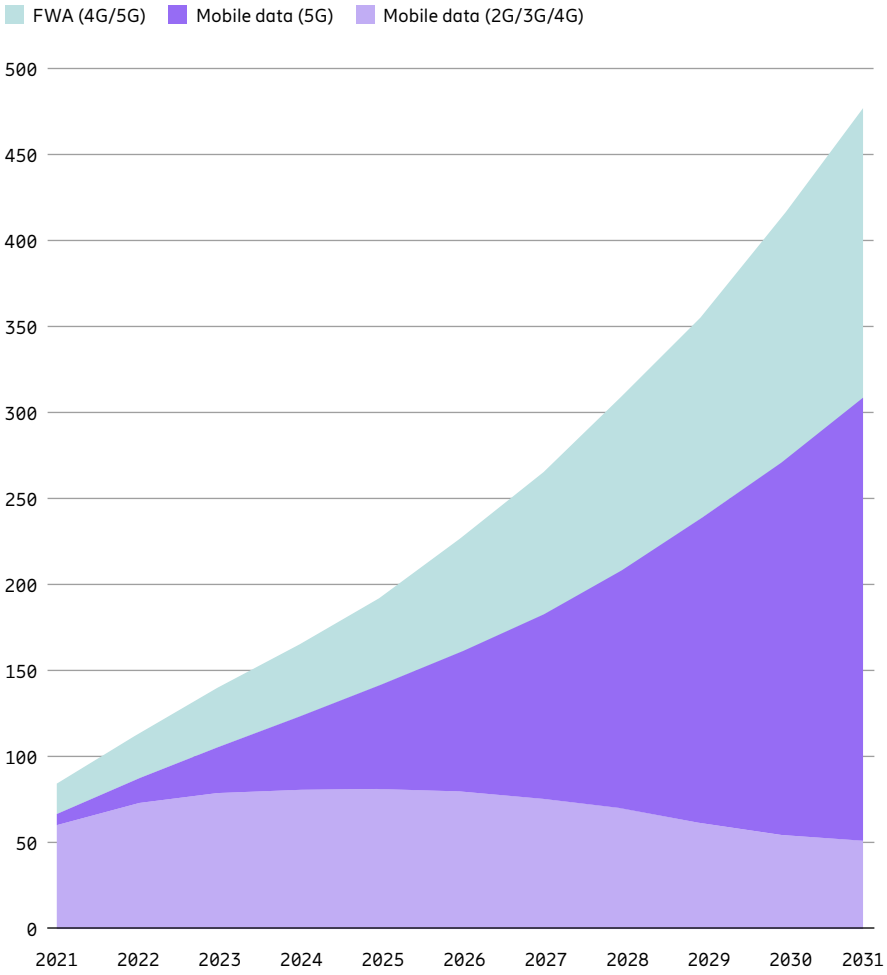
Traffic growth in mobile networks driven by 5G

Mobile network data traffic continues to grow, with the highest yearly net addition so far projected for 2025.

Global mobile data traffic, excluding Fixed Wireless Access (FWA), is projected to increase by a factor of around 2.2 to reach 310 EB per month in 2031. Including FWA, total mobile network data traffic is expected to grow by a factor of around 2.4, reaching 482 EB per month by the end of the forecast period. Despite some regional differences, the overall projections are consistent with the estimate from six months ago.

The share of mobile data carried over 5G is forecast to rise from 34 percent at the end of 2024 to 43 percent by the end of 2025, reaching 83 percent in 2031. In 2031, a 14 percent year-on-year growth rate is expected, with a CAGR of 16 percent over the full forecast period. Total global mobile data traffic generated by 6G subscriptions is expected to be limited in 2031, due to the relatively low number of such subscriptions compared to 5G at that time.

Figure 11: Global mobile network data traffic (EB per month)



Factors that can impact traffic growth

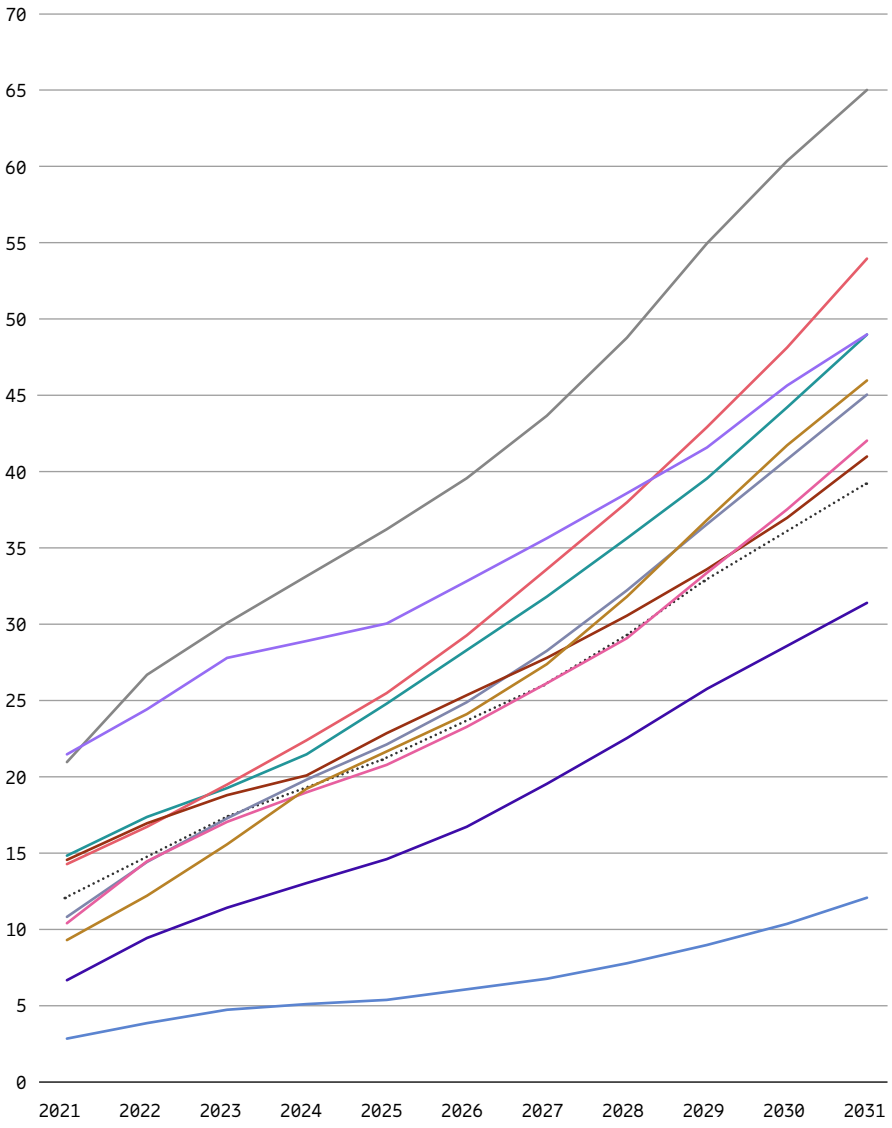
Mobile data traffic growth can be highly volatile and vary significantly between years, regions, markets and service providers, depending on local market dynamics. Factors that could impact traffic growth include:

- The uptake rate of new devices, such as those built for AR, and scalable, multimodal generative AI (GenAI) applications. The current predicted traffic growth up to 2031 includes an assumption that an initial uptake of extended reality (XR) services, including AR, VR and mixed reality (MR), will happen in the latter part of the forecast period. However, if adoption is accelerated, data traffic could significantly surpass our current traffic outlook at the end of the forecast period.
- Tariff plans and available services.
- Continued improvements in the performance of deployed networks.
- The pace of subscriber migration to later mobile technology generations in populous markets like India, Latin America, South East Asia and Africa.
- Changes to the split between FWA and mobile data traffic when FWA connections grow. With continued strong FWA uptake in parts of the world where fixed broadband connections have been limited, it is likely that household-based traffic will move from smartphones to FWA – especially for streaming services.
- Smartphone shipment volumes in different regions.

5G is set to account for 43 percent of mobile data traffic at the end of 2025.

43%

Figure 12: Mobile data traffic per active smartphone[1] (GB per month)



Regions	2025	2031	CAGR 2025–2031
India, Nepal and Bhutan	36	65	10%
Western Europe	25	54	13%
North America	25	49	12%
Gulf Cooperation Council	30	49	8%
Middle East and North Africa[2]	21	46	14%
Central and Eastern Europe	22	45	13%
South East Asia and Oceania	21	42	12%
North East Asia	23	41	10%
Global average	21	39	11%
Latin America	14	31	14%
Sub-Saharan Africa	5	12	15%

The growth in mobile data traffic per smartphone can be attributed to several drivers: improved device capabilities, affordable service plans, increased time spent consuming services, an increase in data-intensive content, and growth in data consumption due to continued improvements in deployed network performance.

During 2025, these factors affected mobile data traffic differently across several countries:

- In Brazil, mobile data prices rose by around 20 percent, driving data traffic growth rate down.
- In China, intensified competition among service providers supported growth in mobile data traffic.
- In South Korea, mobile data traffic reached double-digit year-on-year growth after a prolonged period of single-digit expansion, driven by a larger share of data-intensive content.
- In India, traffic growth increased year-on-year, supported by improved device capabilities.

There are significant variations in monthly data consumption within all regions, with some individual countries and service providers having considerably higher or lower consumption than the regional averages.

As traffic demand varies across regions and over time, it is important to keep in mind that average monthly data traffic growth in a region cannot be used to estimate daily peak traffic growth in a local area, or to support network evolution strategies there. Traffic growth is not universal across locations within a service provider's network. For example, in dense urban locations, traffic demands can be up to 1,000 times larger relative to rural areas.[3]

Average mobile data traffic per active smartphone is 21 GB globally in 2025.

21 GB

[1] Traffic per active smartphone refers to all traffic generated by that device, regardless of number of subscriptions attached.
[2] All Middle East and North Africa figures include the Gulf Cooperation Council countries.
[3] Ericsson Mobility Report, "Exploring how traffic patterns drive network evolution" (June 2023).

5G covers half of the world's population outside mainland China

Total 5G coverage outside mainland China is expected to increase from 45 percent to 50 percent during 2025, while mid-band coverage is projected to grow from 40 percent to 45 percent over the same period.

There are currently 841 4G networks deployed worldwide, with 347 upgraded to LTE-Advanced and 448 LTE devices supporting Cat-16.[1] By the end of 2025, 4G population coverage outside mainland China is set to reach 90 percent globally and is projected to exceed 95 percent in 2031.

The build-out of 5G continues, with around 360 networks launched worldwide. Global 5G population coverage is expected to reach 60 percent by the end of 2025, providing 5G coverage to an additional 400 million people during the year. Outside mainland China, it is projected to increase from 50 percent in 2025 to about 85 percent in 2031.

5G mid-band, either delivered through time division duplex (TDD) or frequency division duplex (FDD), combines high capacity with good coverage. It is available in most markets, making it an ideal choice for delivering the full 5G experience. Combined with a low-band FDD 5G carrier, mid-band can provide full coverage and mobility. Good mid-band coverage is also essential for enabling differentiated connectivity and unlocking new revenue opportunities across consumer and enterprise use cases.

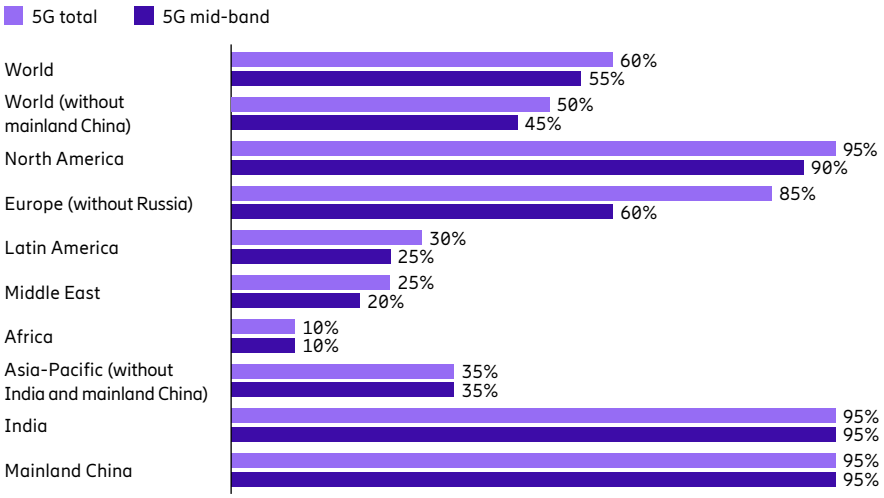
Large regional variations in 5G coverage

By the end of 2025, 5G mid-band population coverage outside mainland China is projected to reach about 45 percent, but coverage levels vary significantly by region. Africa is expected to have the lowest total and mid-band 5G coverage, reaching about 10 percent by the end of 2025. The Middle East shows somewhat higher levels, with a total coverage of around 25 percent and mid-band coverage of about 20 percent expected.

Latin America, with 30 percent total and 25 percent mid-band 5G coverage, and Asia-Pacific (outside India and mainland China), with around 35 percent total and mid-band coverage, both remain below the global average for 5G population coverage. Extensive total and mid-band 5G coverage has been established across North America, mainland China and India, now covering 90–95 percent of the population in these regions.

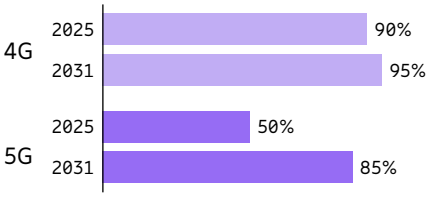
Despite these coverage advancements, only around 35 percent of sites globally outside of mainland China have been upgraded to 5G mid-band.

Figure 13: World population and mid-band coverage[2] split by region (end of 2025)



Note: The figures in these graphs are rounded and refer to the coverage of each technology. The ability to utilize the technology is subject to factors such as access to devices and subscriptions.

Figure 14: World population coverage outside mainland China, by technology



Global 5G population coverage, outside of mainland China, will reach 50 percent by the end of 2025.

50%

[1] Ericsson and GSA (Oct 2025).

[2] Population coverage is estimated using a database of regional population and territory distribution, based on population density. This is then combined with proprietary data on the installed base of radio base stations (RBS), together with estimated coverage per RBS for each of six population density categories (from metro to wilderness).

Articles

5G has the power to provide tailored experiences for consumers, create business opportunities for service providers and enhance operations for enterprises. Our articles include: a study into how prevalent differentiated connectivity and network slicing are becoming around the world; an exploration of how 5G standalone (SA) is helping Singtel unlock opportunities by providing tailored experiences; a discussion in collaboration with SoftBank Corp. about how 5G can modernize enterprise IT; a case study of how 5G is enhancing operations and viewer experiences at global SailGP events; analysis of different types of video traffic affect traffic patterns; and discussion of how the adoption of some technologies is expected to drive significant uplink growth.



An updated study found that globally there are now 65 commercial offerings from service providers based on 5G SA network slicing.

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Singtel's strategic focus on 5G SA and differentiated connectivity is delivering commercial offerings to foster loyalty and create new business opportunities.

Page 19



With SoftBank Corp., we explore how technologies such as 5G SA are helping to modernize enterprise IT, offering improved agility and security.

Page 22



A hybrid public/private 5G network is the perfect solution for deployment at the SailGP races, improving fan experiences and handling the data-heavy race operations.

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Analysis of four sample networks reveals differences in uplink and downlink usage per application category, as well as insights into how users consume video on smartphones.

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The convergence of AI, cloud and mobile is expected to shift traffic patterns in the near future, which could lead to a sharp increase in uplink demands on networks.

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Global momentum in commercial differentiated connectivity services

New offerings that leverage 5G standalone (SA) capabilities, such as network slicing, have progressed from limited pilots and niche experiments to fully launched commercial services.

Key insights

- Commercial differentiated connectivity services are accelerating worldwide, with strong growth in both scale and diversity of offerings.
- Europe stands out with the highest number of commercial cases, reflecting increased market maturity and adoption.
- Marketing innovations – such as in-the-moment offers – can significantly outperform traditional channels.

The ability for service providers to differentiate connectivity services – for example, by providing latency guarantees, priority services, security enhancements, immersive experiences, or connectivity targeting specific situations and locations or app categories – is changing with the introduction of 5G SA.

A broad review of the global service provider landscape reveals a striking shift in the pace and scale of commercial service offering launches that are based on differentiated connectivity. In the latest study, covering over 300 service providers across 134 markets, a significantly higher number of launches was found compared to previous studies.

The findings point to a market transitioning from proof-of-concept trials to commercial services that serve real customers in diverse contexts. This shift has been driven by advances in network capabilities and greater confidence among service providers, with an increasing willingness to explore new monetization models beyond traditional data and speed tiers. The extent of engagement is notable, with many service providers now active in several categories simultaneously. This demonstrates scalability, market validation and confidence in the commercial viability of service offerings based on differentiated connectivity. Out of 118 such offerings, 55 percent are commercially available.

Traditional data plans continue to evolve

In the context of traditional data plan offerings, about 99 percent of surveyed service providers offer some form of data bucket plan. Meanwhile, around 58 percent provide one or more unlimited data packages to their users. Regional differences are notable, with unlimited offerings most prevalent in Western Europe, where about 86 percent of service providers include unlimited options in their plans.

There has been a constant growth in the number of service providers in recent years offering device-based plans, mainly driven by smartwatches.

More service providers are deploying 5G networks that can support reduced capability (RedCap), and new categories of RedCap devices are expected to enter the market (beyond today's available broadband devices such as dongles and routers, surveillance cameras and smartwatches). Meanwhile, a range of new consumer and enterprise service offerings are expected to emerge. Commercial broadband services using RedCap devices have been launched by one service provider in the US and by two service providers in the Asia-Pacific region.

Commercialization of differentiated connectivity

Out of 79 service providers with commercially deployed 5G SA, there are 118 documented cases, from 56 service providers, of network slicing being used for some type of differentiated connectivity offering. Of these, 65 are commercially available either as a subscription service, an add-on package, or in the B2B and B2B2C space as a packaged, deployment-ready service. In the B2C sphere, application or situation-focused services such as video conferencing, gaming, event-specific packages and premium fixed wireless broadband subscriptions make up around 55 percent of all offerings. In the B2B area, vertical markets like public safety, transport and logistics, defense and general enterprise use cases dominate.

In the parts of Europe where service providers have deployed 5G SA, they are increasingly active. The region accounts for 45 percent of all network slicing-related activities globally, including trials, proofs-of-concept and commercial offerings. Proportionally, there are more tests and trials in Europe than in other regions such as Asia-Pacific and North America. Out of all commercial offerings globally, 37 and 36 percent are in Europe and Asia-Pacific, respectively. North America constitutes 18 percent of the offerings, with just one service provider accounting for three-quarters of all deployments in the region.

Learning to communicate benefits

One recurring challenge identified by service providers, particularly in the consumer market, is how to explain new offers in terms that resonate with their customers. Selling "more gigabytes" or "faster speeds" is familiar territory – but telling the story of latency guarantees for gamers, uninterrupted HD streaming at live events, or priority service for emergency communications requires a more benefits-led approach. Customers respond more strongly when the offer is tied clearly to their personal experience, a specific app or situational need.

Speed, bandwidth, general performance or stability improvements are still being highlighted as user benefits in 86 of the cases based on network slicing. There are some new areas being highlighted, however, like latency (48 percent) or improved experiences when using a specific service or app (38 percent). In many cases, multiple benefits are communicated and combined to enhance the value proposition.

The word "guarantee" has seldom been used in marketing by service providers, but 22 cases express some form of performance guarantee. These could be guarantees for a maximum latency for gamers, minimum bandwidth on Fixed Wireless Access (FWA) or when using video conferencing, or for businesses buying a "productivity slice" with the mobile private network (MPN/VPN) solution. As described in a previous article, delivering a proposition at just the right moment can be very important.[1] A striking example involves a service provider that utilized a direct in-app promotional strategy (displaying a pop-up within a partner app) that generated 95 percent of its sales for a specific package, making it 20 times more efficient than any other channel. Many offers blended benefits, combining speed, priority and security messages to enhance perceived value.

Scaling success stories

The number of service providers deploying 5G SA and starting to use network slicing to create differentiated connectivity offerings is increasing at pace. Meanwhile, service providers that were first to introduce differentiated connectivity, some as early as 2022, have now scaled up their deployments and started to broaden their reach. Across the 65 commercial offerings based on network slicing, half of them are offered by only six service providers. Two of the service providers have 17 of the commercial offers combined, including both B2C and B2B segments. This scale-up indicates that the initial launch phase has been successful enough to justify expansion. The variety of current business models – from guaranteed service tiers for broadcasters to secure connectivity for defense applications – shows both the adaptability of the approach with differentiated connectivity offerings and the market's appetite for specialized solutions.

Momentum is real and global

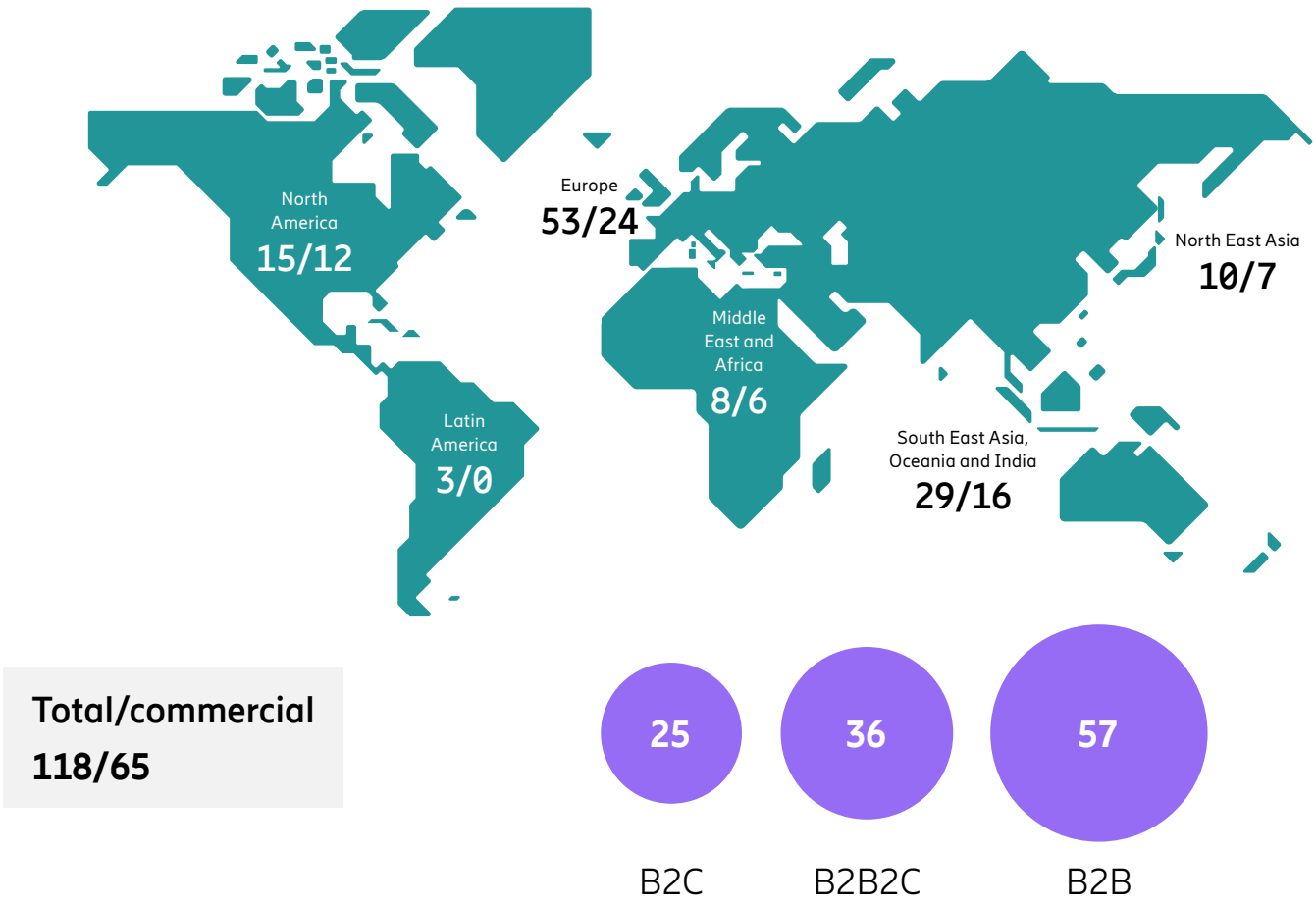
The data from the study paints a positive picture: Differentiated connectivity is no longer a speculative field, it is a growing commercial reality across regions and sectors. The fact that Europe is catching up fast, the scale of multi-segment engagement among service providers, and the proven impact of innovative marketing all point toward a market entering a new phase.

The challenge may no longer be whether these services can be launched, but how best to communicate their unique benefits to users, transforming technical capabilities into experiences and outcomes that customers truly value and are willing to purchase.

Of the network slicing use cases found, 65 are commercial offerings.

65

Figure 15: Global instances of network slicing



[1] Ericsson Mobility Report, "A new era for connected creativity and entertainment" (June 2025).

Growing loyalty and creating business opportunities with tailored customer experiences

For Singtel, unlocking opportunities to offer tailored experiences and add more value to consumers while improving business outcomes is a key priority.

Key insights

- Singtel aims to move the conversation from data quantity toward high-quality performance, shifting the focus to user experience in a digital world.
- Commercialization of differentiated connectivity has been achieved through a cross-organizational focus on developing offerings built upon 5G standalone (SA).
- Increasing application centricity is important for the future evolution of tailored experiences and business outcomes.

Singapore is an island country, similar in size to New York City, with a population of around 6 million people. In 2022, with Singtel's network buildout, it became the first country in the world to be fully covered (95 percent) by 5G SA. In 2025, the network was further enhanced with 5G low-band (700 MHz) added to the existing coverage. This delivers reliable nationwide coverage, especially improving deep indoor penetration. Singtel's early-mover advantage has enabled it to explore and develop products and services to capitalize on the opportunities presented by 5G SA.

A business and technology journey

Singtel's early move into 5G SA clearly signals its strategic priorities. Service providers predominantly compete to offer data packages at the lowest price, meaning increasing the size of data buckets is no longer a differentiator in the hyper-competitive landscape. Therefore, the top priority was to shift the conversation from data quantity to data differentiation, and to make enhanced experiences the new currency, where experience become the main measure of value. This was both a technical and marketing challenge, requiring a company-wide approach. Singtel's strong belief that 5G SA is a strategic asset to achieve this goal has been a driving force behind its successful business transformation, embedding new ways of working to both maximize and commercialize the capabilities of 5G.

From a technology perspective, a robust and flexible network is required to support varying performance levels across consumer, enterprise and industry verticals. Key enablers such as network slicing, advanced traffic management and end-to-end quality assurance mechanisms mean Singtel can deliver consistent, predictable performance. Through the various capabilities unlocked in the network, they have been able to integrate with device and application ecosystems to ensure a seamless user experience.

From a business perspective, differentiated connectivity is most impactful when closely aligned with user needs and use cases. Enterprises, for example, value guarantees on latency, reliability and security for business-critical operations, whereas consumers are increasingly aware of enhanced experiences in gaming, streaming and immersive applications, and seek high-performance connectivity capabilities to support these needs. Differentiated connectivity is not just a network feature – it is a customer value proposition that requires strong collaboration from technology, business and ecosystem partners to unlock its full potential.

Singtel

This article was written in collaboration with Singtel, a leading communications technology group in Asia, providing a portfolio of services from next-generation communication, 5G and technology services, to infotainment for both consumers and businesses.

Co-creation with partners, clear consumer monetization models and business outcome-driven offerings for enterprises are essential for success.

Singtel was able to bring the technical and business aspects together through building a common language across the organization as a foundation, removing barriers between the technological and commercial sides of the organization. From here, a unifying goal of launching offerings that provided tailored experiences was built, based on the combined technical capabilities and value proposition of differentiated connectivity.

In 2022, Singtel had already achieved 95 percent nationwide 5G SA coverage.

95%

Figure 16: Singtel 5G+ commercial offerings structure

	5G+	5G+ Enhanced	5G+ Priority
Connectivity	**Network PLUS** – 700 MHz **Coverage PLUS** – deep inside	**Network PLUS** – 700 MHz **Coverage PLUS** – deep inside **Enhanced network** – 2x faster speed **Enhanced roaming** – trusted partners	**Network PLUS** – 700 MHz **Coverage PLUS** – deep inside **Priority lane** – 4x faster speed **Priority roaming** – first choice partners
Services		**Enhanced security** – security protection software **Enhanced care** – 24/7 hotline	**Priority security** – Mobile Protect **Priority care** – dedicated in-store service and 24/7 hotline
Extras		**Enhanced deals** – latest phones	**Priority deals** – 15 percent off accessories

From data quantity to performance differentiation at scale

The industry is exploring differentiated connectivity services, with growth in both scale and diversity of offerings. In 2025, Singtel's first nationwide commercial offering, 5G+, was introduced. It is a three-tier structure that allows consumers to select experience levels aligned to their needs. These tiers are enabled by network slicing capabilities and are elevated by product value propositions, enhanced cyber security, and exclusive user experience and perks. 5G+, the entry-level package that all existing 5G consumers have been migrated to, provides reliable nationwide coverage with the ability for consumers to further enhance their plans according to their desired connectivity performance and consumer experience needs.

5G+ Enhanced is where slicing is used to provide enhanced connectivity in congested situations with up to two-times faster speeds. Additionally, it features improved roaming and stronger security. This package also includes the flexibility to upgrade during moments of greater connectivity need via a priority boost pass. To build the full value proposition, enhanced security, roaming and customer care are bundled into the offering alongside promotional subscriptions to premium streaming applications.

5G+ Priority is the top-tier offering that is also based on slicing but includes up to four-times faster speeds and network priority in congested situations, exclusive benefits and dedicated customer care. To kick-start adoption of this plan, existing top-tier plan consumers were upgraded for free. With greater bandwidth, ultra-low latency and faster speeds, users enjoy better digital experiences such as smoother streaming, ultra-responsive gaming and uninterrupted video calls. Users benefit from seamless connectivity even in high-traffic areas and during peak hours. This plan also includes priority security in the form of Mobile Protect, a security-as-a-slice service, which provides advanced real-time monitoring for protection both locally and while roaming.

Experience, the new currency

Network developments in preparation for this launch were focused on experience differentiation for all users. For example, when Singtel achieved nationwide 5G low-band (700 MHz) coverage, it resulted in up to a 40 percent increase in signal strength in high-rise indoor and underground spaces, as well as in remote areas. This has been used to redefine the base-level experience for all Singtel 5G customers. This addresses a critical factor for network satisfaction: A recent study found indoor coverage was the second most important factor impacting overall network satisfaction in Singapore amongst 5G users aged 15–69.[1] All of Singtel's 5G+ subscribers can access enhanced connectivity with a priority boost offering, be it for concerts, gaming marathons, or video streaming binge sessions. To achieve this, Singtel has built alignment across networks, business support systems and IT systems, to ensure the time to commission such services is reduced, allowing users to buy in the moment.

Consumer research from 2025 shows that one in three users in Singapore were willing to pay for assured network performance.[2] The recent study found that 8 percent are interested in hourly connectivity boosts that could be activated at critical moments, while 25 percent are interested in monthly subscriptions that offer enhanced connectivity performance.

The new performance-based plans are in their early days. However, initial findings show high levels of satisfaction from consumers who had subscribed to the 5G+ Priority plan, who were delighted to be upgraded and received the promised four-times faster speed based on congested situations. For example, at a recent Lady Gaga concert, 5G+ Priority users noticed faster speeds and reported being able to send messages and upload videos to social media without any problem. A notable 32 percent of frequent concert attendees reported a superior network experience compared to past concerts. This positive sentiment is a vital step in defining experience as the new currency, moving the conversation from data quantity to data differentiation and tailored experiences.

Nationwide 5G low-band coverage resulted in a 40 percent increase in signal strength in indoor locations.

40%

[1, 2] Ericsson ConsumerLab research (2025).

Developing the market

The 5G+ Enhanced and Priority plans are seeing encouraging uplifts in subscribers after just a few months following the launch, as consumers with more demanding connectivity needs opt for these packages. A key to success here has been market education that simplifies complex technical concepts, such as network slicing, for consumers in a way that is simple and relatable. This means highlighting how users get consistently better performance in real-life situations – from crowded concerts to high-traffic areas. The message is moving the conversation away from "how much data you have" to "how reliable your network is when it matters most."

Moving beyond a one-size-fits-all approach and focusing on tailored experiences, Singtel aims to both strengthen consumer loyalty and unlock new revenue streams. To realize this, it is important to deliver differentiated services tailored to the diverse needs of consumer segments. This means developing offerings that address specific use cases. For example, offering real-time monitoring and security solutions for consumers, whether at home or abroad, or guaranteeing access to subscribers in congested areas, or providing reliable, secure and customizable services for enterprises.

Increasing application centricity

To deliver tailored experiences that meet the diverse needs of users, becoming more application-centric will be important for optimizing the user experience. For example, Singtel has already tested the slicing capability with User equipment Route Selection Policy (URSP), working with content partners to monetize this capability with content, video or gaming apps. Figure 17 shows how 5G Advanced Latency Priority Scheduling is being used to identify and prioritize time-critical game data, such as player commands and in-game animations, reducing delays in real-time gameplay.

This will become even more important with AI and extended reality (XR), two of the most transformative forces expected to shape the future of digital experiences. On one hand, AI is becoming the engine of personalization, automation and intelligence, enabling networks to self-optimize, services to be tailored in real time and enterprises to run more efficiently. On the other hand, XR devices and applications are pushing the boundaries of how people interact with the digital world, whether through immersive entertainment, training, remote collaboration, or industrial use cases.

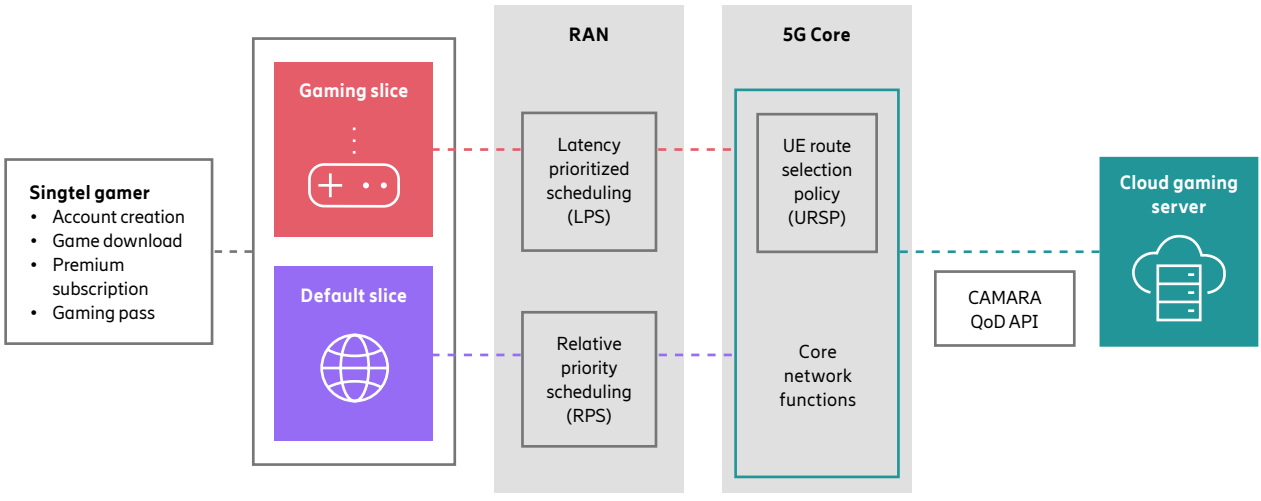
For Singtel, the excitement is around the convergence of the two: AI will be critical to make XR experiences seamless, adaptive and accessible, while 5G connectivity provides the low-latency, high-bandwidth foundation to deliver them reliably anytime, anywhere. In the near future, Singtel expects to see AI-driven XR services move from pilots into mainstream adoption, creating opportunities for both consumers and enterprises, and reinforcing the value of differentiated connectivity. Success here will be driven by volume offerings for the mass market experiences that are application-centric for efficient individual experiences. Alongside the new devices and user interfaces that smart glasses will provide, this will unlock new revenue streams.

Network APIs for QoD

The future for enhancing application-centric offerings is the ability to use differentiated connectivity via a quality-on-demand (QoD) API. This would provide an interface for enterprises and applications to dynamically request specific network parameters, such as latency or throughput, to improve network performance during high traffic load conditions, tailoring connectivity to the needs of specific services. Singtel is actively piloting its API Gateway, extending to the QoD API and network exposure, to become a key enabler of next-generation digital services, providing real-time boosts for gaming, streaming and immersive XR experiences. While Singtel believes the QoD API could potentially provide monetization opportunities, there are several factors that need to be addressed as an industry to make it scalable and profitable. These factors include network complexity, a fragmented ecosystem and a standardization gap for interworking and operational implementation. But as with 5G SA and differentiated connectivity, having the foresight to start early is important for Singtel so they can build the knowledge base required to move fast and scale with confidence, when the time is right.

Figure 17: Singtel gaming slice

"5G Advanced Latency Priority Scheduling – this technology identifies and prioritizes time-critical game data, such as player commands and in-game animations, reducing delays in real-time gameplay."



Source: Singtel press release, "Singtel and Tencent Games to launch Honor of Kings" (4 September, 2025).

Modernizing enterprise IT with 5G

As digital transformation accelerates in the enterprise sector, service providers are well positioned to modernize enterprise IT, shifting from traditional site-bound perimeter models to secure, zero-trust endpoint-centric models that improve user experience while enabling agile, resilient operations.

Key insights

- SoftBank Corp. aims to enhance its 5G network and develop enterprise solutions that leverage 5G standalone (SA) capabilities.
- An endpoint-centric model, built on zero-trust, 5G and cloud technologies, is set to redefine enterprise IT architecture.
- More agile, flexible business practices will be enabled by making 5G programmable networks available to enterprise IT.

SoftBank is advancing its Beyond Carrier strategy – an initiative that guides its efforts to combine mobile network expertise with cloud, security and AI capabilities to support enterprise digital transformation. Within this approach, SoftBank continues to enhance its 5G network and develop enterprise solutions that leverage 5G SA capabilities such as ultra-low latency and massive device connectivity, which are essential for modern enterprise IT environments.

Facing new challenges in enterprise IT management

For decades, enterprise IT has largely revolved around centralized, site-based infrastructure. Data centers, on-premises servers and wired networks formed the backbone of corporate computing and communications. However, the rise of remote work, high-performing mobile networks and 5G laptops, and cloud services is disrupting this model. Enterprises now require greater agility, scalability and mobility to support distributed operations and real-time data processing.

The enterprise IT market encompasses a wide range of technologies and solutions designed to support complex business processes, enhance productivity, ensure security and enable digital transformation at scale. These technologies are typically implemented, managed and maintained by the enterprise's IT department. The trends of cloudification, hybrid working and AI are raising significant challenges for enterprises to cost-effectively and securely manage, maintain and develop existing IT infrastructure to meet future demands:

- **Cloudification:** The current software trends strongly lean toward cloud services driven by their flexibility, scalability, cost-effectiveness and ease of maintenance. As enterprise applications migrate to the cloud, IT infrastructure becomes lighter but also more distributed – requiring consistent management and security across locations and devices.
- **Hybrid working:** Catalyzed by the COVID-19 pandemic, hybrid working has become the new normal for many organizations. Enterprises are now managing users and devices across office, home and mobile environments, requiring seamless and secure connectivity. This shift increases reliance on mobile networks and makes location-based security models less effective.
- **AI:** Enterprises are increasingly integrating AI tools into a wide range of business functions, and even moving beyond pilot initiatives to embed AI in their core operations, such as automating tasks and enabling real-time decision making. These applications depend on continuous, secure connectivity to access data and computing resources distributed between the cloud and edge. In this context, 5G's low-latency and always-on characteristics provide the foundation for secure and responsive AI-driven workflows, while also reinforcing the need for zero-trust security principles.

SoftBank

This article was written in collaboration with SoftBank Corp. (SoftBank), a leading communications and technology company operating one of Japan's most advanced 5G networks. SoftBank aims to drive enterprise digital transformation by combining mobile connectivity with cloud, AI and security innovations.

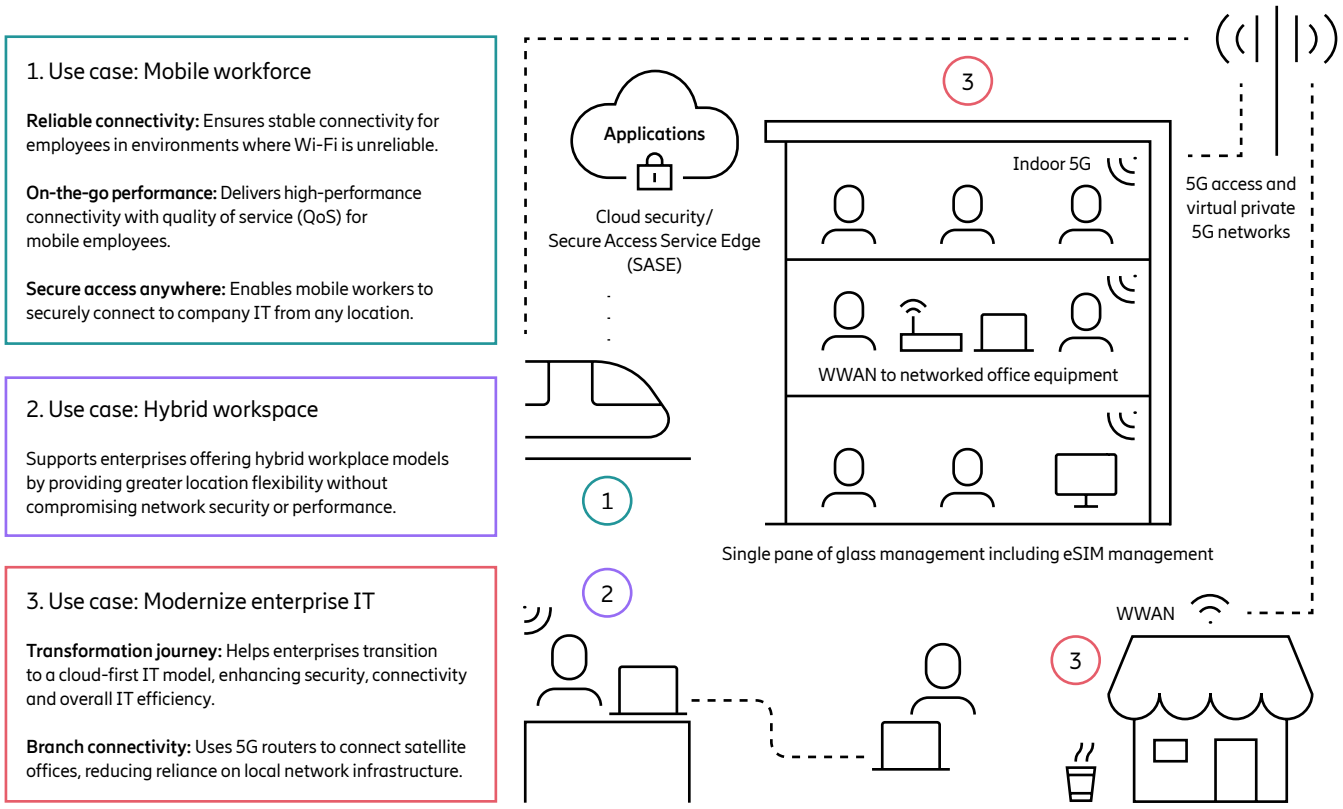
Enterprises face significant IT management challenges in: device selection, procurement and lifecycle management; network design and operations for both on-site and remote locations; and IT asset governance. The shift to hybrid work broadens the scope of these tasks. In environments that mix on-premises and cloud systems, secure operations based on zero-trust principles are increasingly essential. From a management perspective, the ongoing costs of maintaining legacy systems are a persistent concern.

5G laptops: Anywhere is a secure office

Cellular-enabled laptop adoption is expected to grow faster than the overall laptop market. By 2030, the global installed base of 5G laptops is, by some external analysts, projected to approach 100 million, corresponding to a CAGR of approximately 45 percent between 2024 and 2030.[1] The growth of 5G laptops, combined with the migration of enterprise applications to cloud platforms, serves as a catalyst for enterprise IT transformation.

[1] External analyst forecast (H2 2025).

Figure 18: IT infrastructure-light enterprise



This shift indicates that traditional perimeter-based, location-dependent enterprise IT network architectures will become increasingly obsolete, making way for more flexible, cloud-centric and zero-trust networking approaches enabled by seamless 5G connectivity both inside and outside the office.

Traditional, perimeter-based architectures rely on securing fixed physical sites and treating remote access as an exception – typically employing device certificates and virtual private networks (VPNs) to mimic a trusted internal environment. This approach is becoming less cost effective as modern workforces demand secure, seamless connectivity from anywhere, and as new operational models emerge that leverage 5G networks to meet evolving user demands and offer enhanced experiences.

Transitioning to a mobility-first, zero-trust network

A mobility-first, zero-trust network protects enterprise information assets by continuously validating both the user and the device, rather than basing security on physical location. Access rights are determined by identity and the device's security posture. By leveraging persistent device authentication based on non-removable eSIM and SIM credentials managed through the mobile network, and integrating these with enterprise-managed identity systems and device management platforms, organizations achieve a unified, high-assurance security framework that works seamlessly across office, home and mobile environments. With the traditional notion of a "secure location" disappearing, there is no longer a need to centralize assets at specific sites. This new model allows enterprises to provision, manage and secure devices anywhere – creating the foundation for more flexible operational practices. Service providers play a key role in enabling this transformation, as mobile networks provide the trusted, always-on connectivity required to verify users and devices continuously.

In a zero-trust environment built on persistent device identity, even traditionally IT-controlled tasks such as device provisioning can now be performed securely by end users. User-driven onboarding – supported by cloud-based Unified Endpoint Management (UEM) tools and integrated mobile authentication – enables employees to set up corporate devices directly, wherever they are, without compromising security. This approach reduces operational overhead and enhances flexibility in enterprise IT operations.

Enhancing security and policy enforcement across working environments

Cellular laptops maintain continuous connectivity via the mobile network. This ensures remote management functions and security actions can be immediately executed at any time and at any location, such as remote wiping or the removal of connection profiles if a device is lost or stolen. Always-on, network-native connectivity also gives IT administrators increased confidence in managing and responding to incidents by enabling consistent policy enforcement across all working environments within a zero-trust framework. While this consistent policy enforcement is a core benefit, another important advantage of cellular-first connectivity is the reduced dependence on extensive Wi-Fi infrastructure, enhancing both security and operational simplicity.

Transforming enterprise IT with 5G and partners

In collaboration with partners, SoftBank has been exploring new ways for enterprises to build secure and flexible connectivity for remote and hybrid workforces. High-performing 5G networks enable employees to securely access cloud-based services using 5G-connected laptops – whether in the office, at home or on the move. These initiatives illustrate how 5G connectivity can simplify enterprise IT architecture while supporting zero-trust and AI-enabled workflows that enhance both security and productivity.

Improved efficiencies with mobile-first connected laptops

In Japan, enterprises are increasingly looking for ways to improve both security and productivity through mobile-first IT environments. SoftBank conducted an internal study involving employees from the enterprise sales division to evaluate the benefits of equipping employees with cellular-enabled PCs, focusing on the direct impact on users. For example, participating sales employees often need to access company resources while visiting customers. Previously, they had to spend several minutes preparing their devices and completing authentication procedures before each presentation. With cellular PCs providing continuous, secure connectivity within a zero-trust framework, this step was eliminated. Based on internal trials, this improvement translated into measurable productivity gains across the sales organization – the cumulative reduction is estimated to be up to one full working day per month, per employee. This demonstrates how cellular-enabled PCs can enhance both security and employee experience by enabling truly seamless, always-on access to enterprise resources.

Quantifying potential IT cost efficiencies

As enterprises transition their office environments to support hybrid work and accelerate cloud migration, traditional LAN and WAN infrastructures often become underutilized yet still costly to maintain. According to Ericsson internal analysis, replacing parts of these conventional network environments with 5G-based architectures leveraging network virtualization could reduce overall IT infrastructure costs by up to 50 percent, depending on deployment conditions and enterprise size.

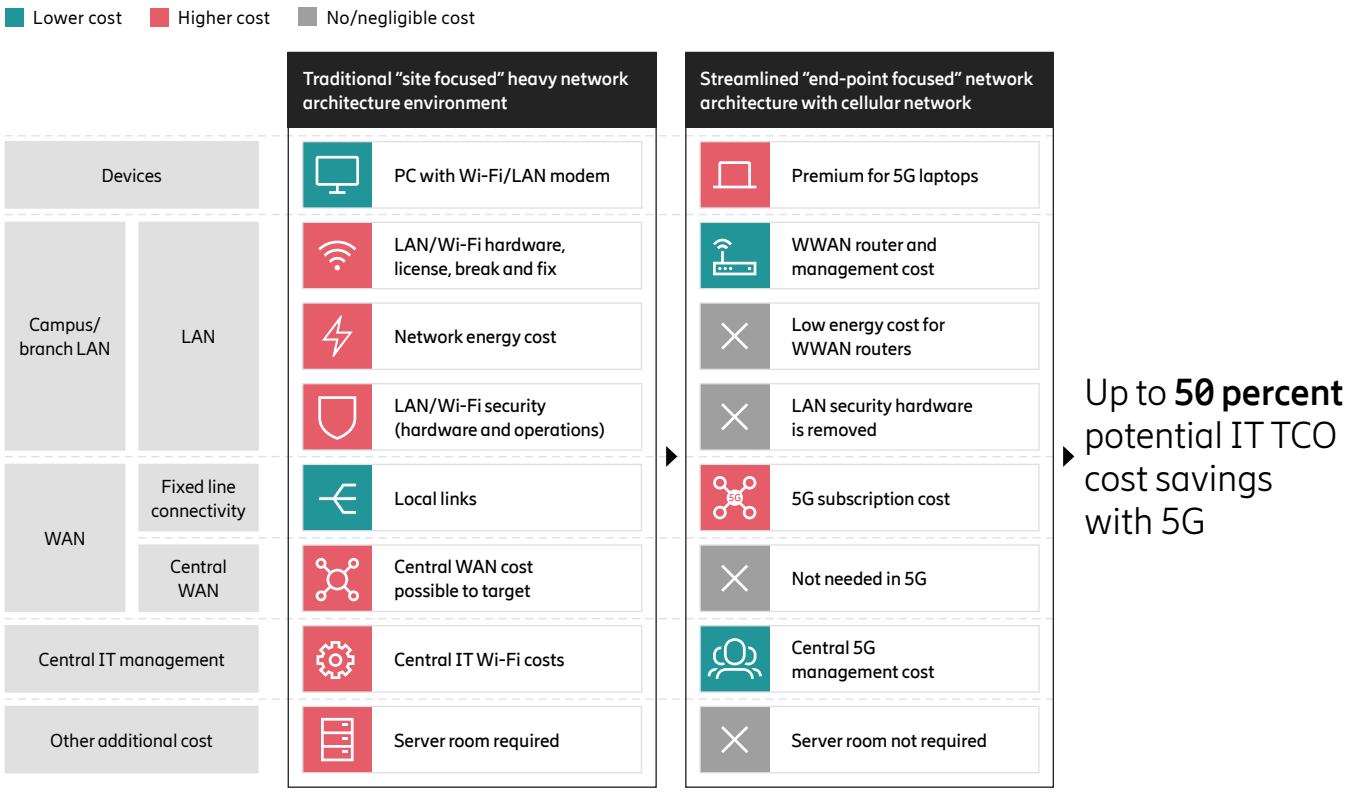
Ericsson Japan has also been implementing this approach within its own offices, gradually replacing local Wi-Fi environments with private 5G networks. Early internal results show reduced operational complexity and improved network reliability, providing a practical demonstration of how 5G can streamline enterprise IT and connectivity management. While the actual savings will vary, such 5G-enabled architectures offer opportunities to simplify network operations, improve agility and future-proof enterprise connectivity.

Evolving to an infrastructure-light enterprise

As enterprises accelerate cloud adoption and hybrid work, a fundamental shift from perimeter-based security to zero-trust models is becoming essential. A mobility-first, zero-trust architecture – powered by cellular-connected secure endpoints – enables service providers to deliver this transformation with capabilities unique to 5G mobile networks. This evolution not only strengthens enterprise security across all workspaces during hybrid working, but also streamlines operations and paves the way for more agile, flexible business practices by making 5G programmable networks available for enterprise IT.

Service providers are uniquely positioned to lead this transformation, integrating secure connectivity, identity management and managed lifecycle services into a cohesive solution offering for enterprise customers. In doing so, they enable enterprises to boost operational efficiency, strengthen security and reduce total cost of ownership (TCO) – while enhancing user experience and laying the groundwork for AI-driven innovation. The endpoint-centric model, powered by zero-trust, 5G and cloud technologies, is positioned to redefine enterprise IT architecture. Service providers who embrace this shift stand to gain not only new revenue streams but also deeper strategic partnerships with enterprises undergoing digital transformations.

Figure 19: TCO comparison: Traditional enterprise IT infrastructure versus 5G



Note: Central IT management includes connectivity procurement, central management of network equipment patches and software updates, and network operation centers for troubleshooting.

5G is supercharging sports technology, events and entertainment

A hybrid 5G public and private network provides high-quality 5G connectivity, improving fan experience and race operations, all with distinct requirements.

Key insights

- Real-time data is critical for the SailGP competition, with teams reliant on instant data to make tactical decisions. Fans also benefit from enhanced insights into sailing strategies.
- Deploying 5G networks in harsh marine environments, with limited setup time and varying licensed spectrum across global locations, requires advanced planning and compact, manageable hardware.
- The optimum event solution is to expand 5G deployment across all use cases, combining private networks and public network slicing to fully leverage 5G's capabilities.

Each year, 12 international teams race in SailGP, a global racing competition that spans multiple grands prix held across various locations worldwide. The event creates an even playing field for competitors, with each team racing on an identical high-performance F50 catamaran and having access to the same race data. This means it's the skill and split-second responses made by the athletes that make the difference between victory and defeat. To support those decisions, each team requires access to real-time data and statistical feedback instantaneously, despite their F50s reaching speeds of up to 100 km per hour over open waters. Beyond the racing itself, operations must also run seamlessly on the land: security, retail outlets and the fan engagement and experience from live broadcast to Wi-Fi must all be managed.

Data drives the SailGP experience

Secure and resilient network connectivity with predictable performance is required to enhance both the racing and the fan experience. When racing, each team is looking to gain a competitive advantage, so optimizing their vessel in real time is critical. This is supported by real-time transport of extensive data between off- and on-shore teammates about boat speed, wind conditions, race position, course layout and other factors. To ensure fairness and transparency, the data is sent immediately, directly and securely into the cloud, and shared with all teams. This allows for real-time analysis to maximize speed and efficiency, for example by adjusting sail settings and boat trim, and to enhance tactical decision-making, such as choosing optimal sailing angles, deciding when to turn left or right, and strategizing for rounding marks. To improve spectator engagement, harnessing connectivity is key, allowing viewers to benefit from shared data which provides insights into the intricacies of sailing tactics and strategy, making races more engaging and understandable.

Connectivity in challenging environments

There are several main challenges facing the SailGP championship network operations team building the 5G private network and operating the hybrid 5G private public network. These include the harsh marine environment and the very limited timeframe for build and delivery, with just one day to test the systems on the water prior to racing. Another notable challenge is gaining licensed spectrum – as SailGP takes place in many global locations, different channels are required in different regions. This means the setup cannot simply be replicated between locations.

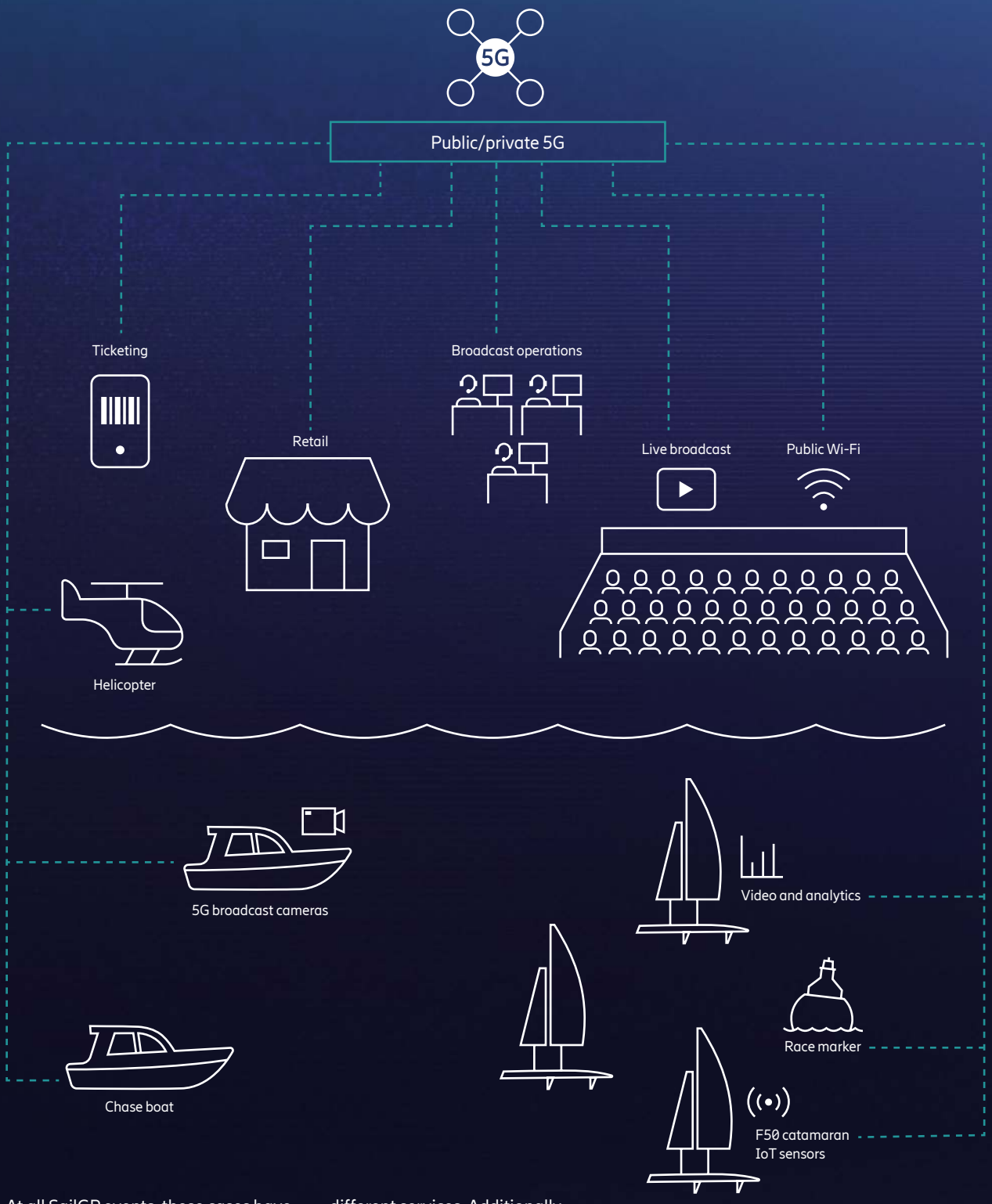
SAILGP

This article was written in collaboration with SailGP, a global racing championship.

5G is the ideal solution, offering coverage and allowing IP-based technology to be easily deployed. Once the private 5G is deployed and functioning, the 5G system cleanly resolves a lot of on-site challenges, such as: enlargement of the internal networks without extensive cabling; on-water usage for both the internal services like telemetry, communications and video but also internet access for teams using their own services; and services for the guests, including VIPs on chaser boats or other guests on viewing platforms.

To ensure a smooth build within the limited time on-site pre-event, it is critical to have radio frequency designs in place three months before the event, based on the in-country licensed spectrum availability for that specific event. Once on-site, it is essential all equipment is available on-site for day one of setup, to ensure the network can be built in a timely manner. This is supported by having hardware that is both compact and easy to handle, with a managed design. The design is supported by two or three template configuration formats that can be applied with minimum deployment time, as well as system functionality checks carried out on site to measure and analyze performance.

Figure 20: Public/private 5G at SailGP events



At all SailGP events, these cases have been tested. The critical points of a ship-to-shore system are robustness, consistency and maintaining high quality of service at a minimum bounded latency. This is achieved by usage of multiple modems, working in a bonded environment. The ability to switch between private and public when needed is critical, alongside the ability to fine tune between different services. Additionally, voice communications must be clearly audible with no buffering or clipping, telemetry must have low latency and minimum packet loss and video must be smooth with no buffering. On the shore, ticketing, retail and other services require low-latency quality of service (QoS) and robustness, but the service level is not required to be as high as the on-water connectivity.



SailGP: 53 billion data requests on event day

Flexibility between private and public 5G networks

Local service providers have had varying roles in the deployment across the different venues. In some markets, they have helped with spectrum applications and advice on which bands to use. In other markets, leading service providers have played a bigger role in the event connectivity through network slicing and prioritizing their network SIMs as part of commercial agreements.

Resilient connectivity is essential for these events, therefore the solution is built so that the private and public networks are both used consistently. All critical assets have a minimum of two, but often three, modems onboard. If there are three modems, then one will always be connected to the public network and configured with failover for increased resilience.

The ability to offer SailGP a network slice is becoming more frequent, as the local service providers look to develop this service as a commercial offering. Having slicing alongside private 5G is the optimum and desired setup for SailGP events, as this enables the use of private 5G for landing data locally, and then a dedicated slice for cloud-based traffic and shared data-exchange functionality.

Scaling and trialing multiple cases

Each SailGP event, like any other major event, has many areas that are dependent on reliable and stable connectivity for retail, ticketing and live broadcasts. Beyond a typical event setup there are specific requirements for the in-water aspects of these events. There are IoT sensors, video and analytics from the F50 catamarans that generate billions of data points. The racecourse itself is laid out with connected markers that can be adjusted based on wind direction.

There are additional vessels on the water for broadcast cameras, support boats and guest VIP chase boats. Finally, there are helicopters in the skies above the race capturing footage and monitoring events.

Meeting distinct requirements

Across most deployments, the focus has been on ensuring both network reliability and high uplink capacity, with average data throughput around 150 Mbps. Given the short time available for setup and testing, results have naturally varied across locations and use cases. Shore-to-ship connectivity has delivered consistently strong performance, while ship-to-shore links have proven more challenging due to the fast-moving platforms, diverse installation methods and highly reflective over-water environment. Achieving stable sub-40 ms latency requires further fine-tuning and optimization – something limited by the brief on-water testing window. The experience gained this season, however, will guide more refined, site-specific deployment strategies for future events.

While specific private 5G outcomes for each case are still being meticulously tracked, it is crucial to understand the sheer scale of data involved: a single SailGP event day generates 53 billion data requests. This immense volume underscores the absolute necessity of leveraging advanced technology to effectively harness this data, thereby empowering the teams, the league and the fans, with unparalleled insights and experiences.

Connecting helicopters has brought unique challenges, as the setup needs to take place outside of the private 5G network coverage area. During the Emirates Great Britain Sail Grand Prix in Portsmouth, UK, SailGP were able to work with BT to provide a 30 km transit route with connectivity on the public network, allowing the helicopter to switch seamlessly between the public and private network. This same route also provided connectivity between remote control centers and the event location.

The role of collaboration across the ecosystem was also demonstrated during the Portsmouth event where SailGP worked with BT and Sony to use a 5G network slice on the public network as the connectivity layer to support broadcast-quality video, delivering the low latency and high bandwidth required for delay-sensitive video encoders.

5G has been deployed at SailGP events in Dubai and Abu Dhabi, UAE; Auckland, New Zealand; Sydney, Australia; Los Angeles, San Francisco and New York, US; Portsmouth, UK; Sassnitz, Germany; Saint-Tropez, France; Geneva, Switzerland; and Cádiz, Spain.

The season ahead

SailGP's first year being supported by 5G at events has been an evolutionary period of testing and learning, offering invaluable insights into 5G's potential to revolutionize the races' operations. This journey has not only illuminated how this technology can empower the league, but has also highlighted key developments within the ecosystem that are enabling boundaries to be pushed and the full potential of 5G to be realized in this harsh environment. Following the trials and looking ahead, the aim is to gradually implement 5G across all identified use cases in future seasons, and combine the benefits of private 5G and network slicing on the public network.

Short-form dominates video traffic

Social platform video accounts for the vast majority of smartphone video viewing, while video-on-demand services deliver higher bitrates and superior quality of experience (QoE) scores.

Key insights

- Social media-generated videos constitute 70–80 percent of all mobile video traffic viewed on smartphones, while streaming of video-on-demand services represents less than 10 percent, underscoring users' preference for short, engaging clips from social platforms.
- For short-form social-media videos, 5G provides faster startup and smoother playback compared to 4G, minimizing interruptions as users rapidly scroll.
- Professionally produced and optimized streaming services deliver higher bitrates and superior QoE scores on smartphones compared with social media video platforms.

Comparing downlink and uplink traffic across four European mobile networks shows that video still dominates downlink usage, while cloud storage and communication services generate relatively more uplink traffic.

Video dominates downlink, but not uplink traffic

Video represents the largest portion of mobile data traffic across all four networks, accounting for around 50 percent of mobile traffic. Downlink traffic consistently shows a high share for video, reaching up to 60 percent. The share of video in uplink traffic, however, varies between networks. This variation reflects differences in user behavior, such as content creation and live streaming activity.

Communication services (including messaging, VoIP and video calls) are more bi-directional than video streaming, and therefore they generate a higher proportion of uplink traffic compared to downlink across the four sampled networks – 73 percent downlink and 27 percent uplink. The share of uplink traffic for communication services across the sampled networks ranges from 13 percent to 23 percent, while the share of downlink traffic remains around 5 percent or lower. This disparity underscores the interactive and user-driven nature of these services, where frequent user-originated activities such as voice and video calls, conferencing and content uploads significantly contribute to uplink traffic.

Across the sampled networks, social networking downlink traffic varies considerably, ranging from about 2 percent to 13 percent. For uplink, social networking usually ranks as the third-largest traffic category share – after video and either communications services or cloud storage – contributing roughly 7 percent to 14 percent of uplink traffic.

Cloud storage services represent a substantially larger share of uplink traffic compared to downlink, highlighting active usage of cloud-based functions such as backups and file synchronization. Conversely, gaming, audio and software downloads consistently contribute less than 2 percent of both downlink and uplink traffic across all networks.

Smartphone users prefer short, dynamic videos

Across the four sampled European networks, a more detailed analysis of video traffic was performed, where video consumption of content from the most popular global service providers was grouped into two main categories:

- social media–generated video (YouTube, TikTok, Instagram, Facebook)
- global[1] video on-demand streaming (Netflix, Disney+, Amazon Prime, Apple TV)

Methodology

The application mix and share of traffic in the sampled networks might not represent the absolute shares of the total traffic, as some traffic could not be classified. For example, the absolute share of video traffic is presumably higher across all networks as part of it is included in the categories "Other" and "Social networking" (such as Instagram feeds, Reels and Stories). The analysis is based on one week of data collection.

The analysis shows that across the four European service providers, video traffic on smartphones is dominated by social media, far exceeding that of streaming video-on-demand services. For three of the service providers, social media video accounts for approximately 80 percent of all video traffic, while the fourth records nearly 70 percent. These results highlight smartphone users' clear preference for short, dynamic videos on social platforms.

YouTube – the dominant platform in terms of reach

Across the four European mobile service providers, YouTube consistently emerges as a leading video service by user share, with the share of mobile video users ranging from about 73 percent to nearly 99 percent. Almost every mobile video user consumes YouTube content, making it the dominant platform in terms of reach. In terms of traffic volume, it takes the clear lead in two networks with a 34 and 21 percent share, while in one network it shares the top position with Instagram, and in the fourth network it remains a major contributor despite a slightly lower user share.

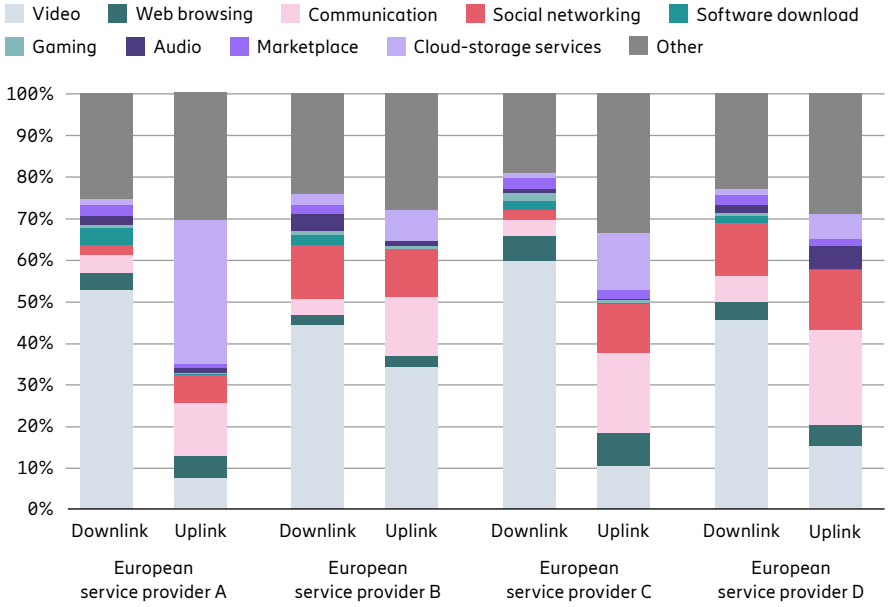
[1] To maintain analytical consistency, local TV streaming platforms and smaller content providers have been grouped under the "Other video" category due to regional and service provider-specific variations.

TikTok is the third most popular service by reach, with user share ranging from 52–59 percent and generating about 20–40 percent of the video traffic across the four service providers.

Instagram's user base varies across the four networks: It engages around 50 percent of users in two networks, while its adoption remains limited in the other two. In terms of traffic share, Instagram is most dominant in one network, accounting for about 20 percent of the total traffic.

Facebook is especially popular in two networks, engaging more than 75 percent of video users and accounting for over 20 percent of total video traffic in both networks. Across the other networks, Facebook still attracts a large share of users, but it generates a smaller proportion of traffic there. This pattern suggests that consumption is driven by autoplay content and short-form formats like Reels, which increase user counts but have shorter viewing times.

Figure 21: Share of traffic volume in downlink and uplink per application category



Note: "Other" includes unclassified traffic and traffic from services that have too small a share to be significant compared to the categorized segments, for example location services, email, speed tests, weather and web security. A large share of "Other" is presumably video traffic.

Mobile video-on-demand's role limited on smartphones

Streaming of global video-on-demand services accounts for less than 10 percent of total mobile video traffic consumed on smartphones across all sampled networks. Netflix consistently dominates this category, contributing between 3 and 6 percent of total video traffic on these networks. Other services like Disney+, Amazon Prime and Apple TV+ have a relatively small share, typically less than 1 percent. This limited usage on smartphones likely reflects users' preference to stream high-resolution content over Wi-Fi or fixed broadband connections and on larger devices such as tablets and PCs.

While traffic volumes and user behavior reveal a clear preference for short-form video content on social media platforms, the quality of the viewing experience is shaped by a range of technical factors. These include the capabilities of the smartphone itself, the encoding strategies of content providers and the performance of the underlying mobile network.

Smartphone video experience differs across models

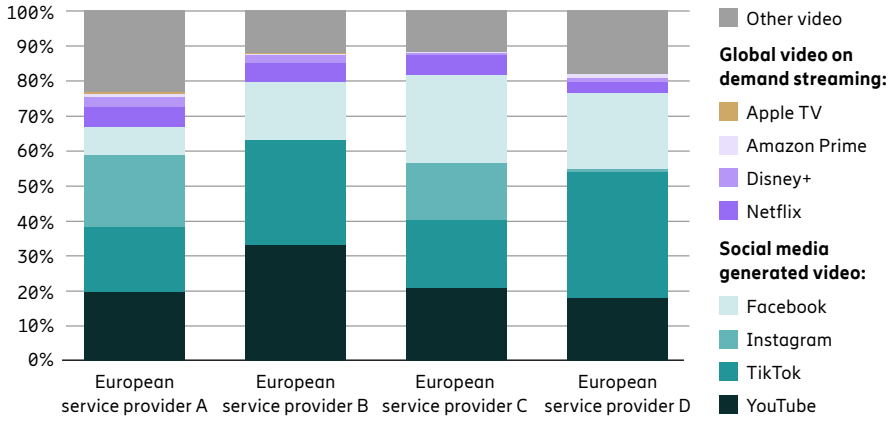
Mobile video experience on smartphones depends on several measurable factors, including intrinsic encoding quality (influenced by resolution, frame rate and codec) and dynamic quality effects such as time-to-content, rebuffering events and resolution adaptations to available channel capacity. It also depends on a specific smartphone model's capability. Calculated performance metrics across the sampled networks show that high-end flagship smartphones delivered the best streaming experience, with higher bitrates and QoE scores[2] of above 4.2, while entry-level models showed lower bitrates and QoE scores of 3.6–4.0. Overall, flagship smartphones deliver a superior video streaming experience due to better bitrate performance and optimization.

As expected, professionally produced and optimized streaming services like Netflix and Amazon Prime deliver higher bitrates and superior QoE scores compared with social media video platforms. Notably, Instagram achieves unusually high QoE scores despite lower bitrates, suggesting particularly effective adaptation and encoding strategies that preserve perceived quality under constrained network conditions.

5G enhances the streaming and scrolling experience

Across all four networks, 5G consistently delivers an improved video streaming experience compared with 4G.
The enhancement is noticeable for long-form, high-quality content on video-on-demand platforms, where higher bitrates, shorter stall times and better QoE make streaming smoother.
For short-form, social-media videos, 5G provides faster startup and smoother playback, minimizing interruptions as users rapidly scroll. In both cases, the upgrade to 5G results in a more responsive and reliable viewing experience.

Figure 22: Share of video traffic per video service provider



Note: To maintain analytical consistency, local TV streaming platforms and smaller content providers have been grouped under the "Other video" category due to regional and service provider-specific variations.

[2] Reported QoE values are estimates, calculated from video models using bitrate, resolution, stalls and video length, and may be less precise for encrypted traffic.

AI, cloud and mobile set to drive significant growth in uplink traffic

The accelerated development and convergence of AI, cloud and mobile will fundamentally shift future traffic patterns, driving significant growth in uplink demands on mobile networks in the coming decade.

Key insights

- As AI, cloud and mobile converge, devices constantly send data to the cloud for real-time learning and personalization; this continuous feedback loop sharply increases uplink traffic.
- AR/AI glasses use large AI models in the cloud, while autonomous vehicles (AVs)/droids transmit large datasets for training and remote functions, making them major uplink traffic drivers.
- To begin preparing for the increase in uplink, relevant 5G standalone (SA) networking features are becoming available.

As intelligent devices increasingly rely on cloud-based processing, data is flowing in the uplink more than ever before. Yet, this shift is more complex than a simple surge in uplink demand. While AI-driven systems like AVs and AR glasses continuously send data to the cloud, advances in on-device intelligence, compression and smart data transport are reshaping how and when that data moves. The result is a more dynamic balance, where networks must support both the growing appetite for real-time cloud and the efficiencies that keep bandwidth use sustainable. Understanding this interplay is key to preparing for the next wave of connected intelligence.

Convergence of AI, cloud and mobile

The convergence of AI, cloud computing and mobile technologies represents one of the most transformative shifts in the digital era. Together, they create a powerful ecosystem where intelligence, scalability and accessibility reinforce each other: cloud platforms provide the computational infrastructure and storage capacity needed to deploy and train advanced AI models; mobile devices serve as both a data feed and the end-user interface to deliver these AI-powered cloud services, enabling personalized and context-aware experiences in real time; and networks provide ubiquitous and dependable connectivity between cloud and devices.

AI models hosted on the cloud can process massive datasets and deliver insights instantly to mobile users, whether they are powering smart assistants, enabling real-time language translation, or optimizing logistics and healthcare operations. Mobile devices therefore act not only as endpoints, but as data generators, feeding continuous streams of contextual information (such as location, behavior and sensor data) back to the cloud which, in turn, improves AI models through feedback loops.

The future drivers of uplink traffic

As the convergence mentioned earlier happens, data rates increase further as a result. This will be particularly notable in the uplink.

In the enterprise and industry sectors, for instance, 5G-native laptops, AI-enabled Internet of Things (IoT) devices, AVs, humanoid droids and drones will require significant uplink capacity. AVs and droids will transmit a lot of data to the cloud, as they collect a lot of training data, require data to be stored for legal reasons and sometimes require remote interventions.

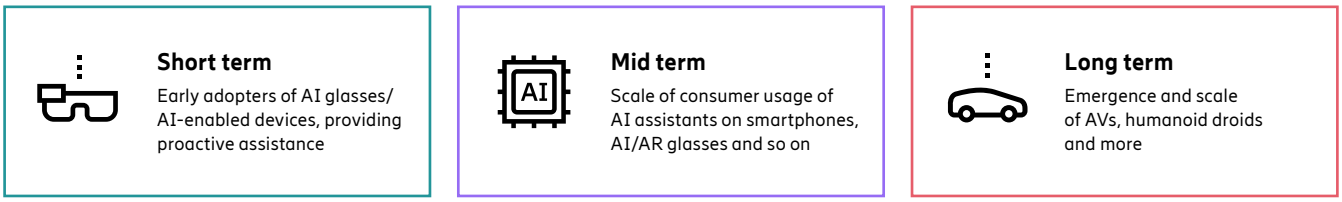
In the consumer space, personalized agents will be used on smartphones and emerging devices like AI and AR glasses, or similar companion devices. Some will be activated on demand, while other agents will be on all the time.

As a result, the uplink traffic will increase significantly over the coming years and, indeed, is becoming telecom's new "currency." Short term, this will be driven by the early adoption of AI glasses; mid term, by the adoption of AI assistants over AI/AR glasses at scale; and long term, by the large-scale deployment of AVs and possibly humanoid droids.

To effectively handle such an increase in uplink traffic, advancements such as carrier aggregation (CA) and Massive Multiple-Input Multiple-Output (M-MIMO) – available in 5G SA – enable more flexible and efficient use of spectrum across both frequency division duplex (FDD) and time division duplex (TDD) bands.

For example, uplink traffic can be anchored on a low-band FDD carrier to maximize coverage and enhanced with FDD M-MIMO to boost capacity. Meanwhile, downlink capacity can be boosted through aggregation between FDD and a mid-band TDD carrier, leveraging TDD M-MIMO for higher throughput and improved overall performance.

Figure 23: Future drivers of uplink traffic



Uplink requirements of current AI glasses

To date, approximately 2 million smart glasses from leading manufacturers have been sold in the US – amounting to approximately 1 percent market penetration – with ambitions to sell millions per year going forward. The success driving these sales is in connecting the user to an AI agent that delivers sentient engagements based on video and audio input from the glasses.

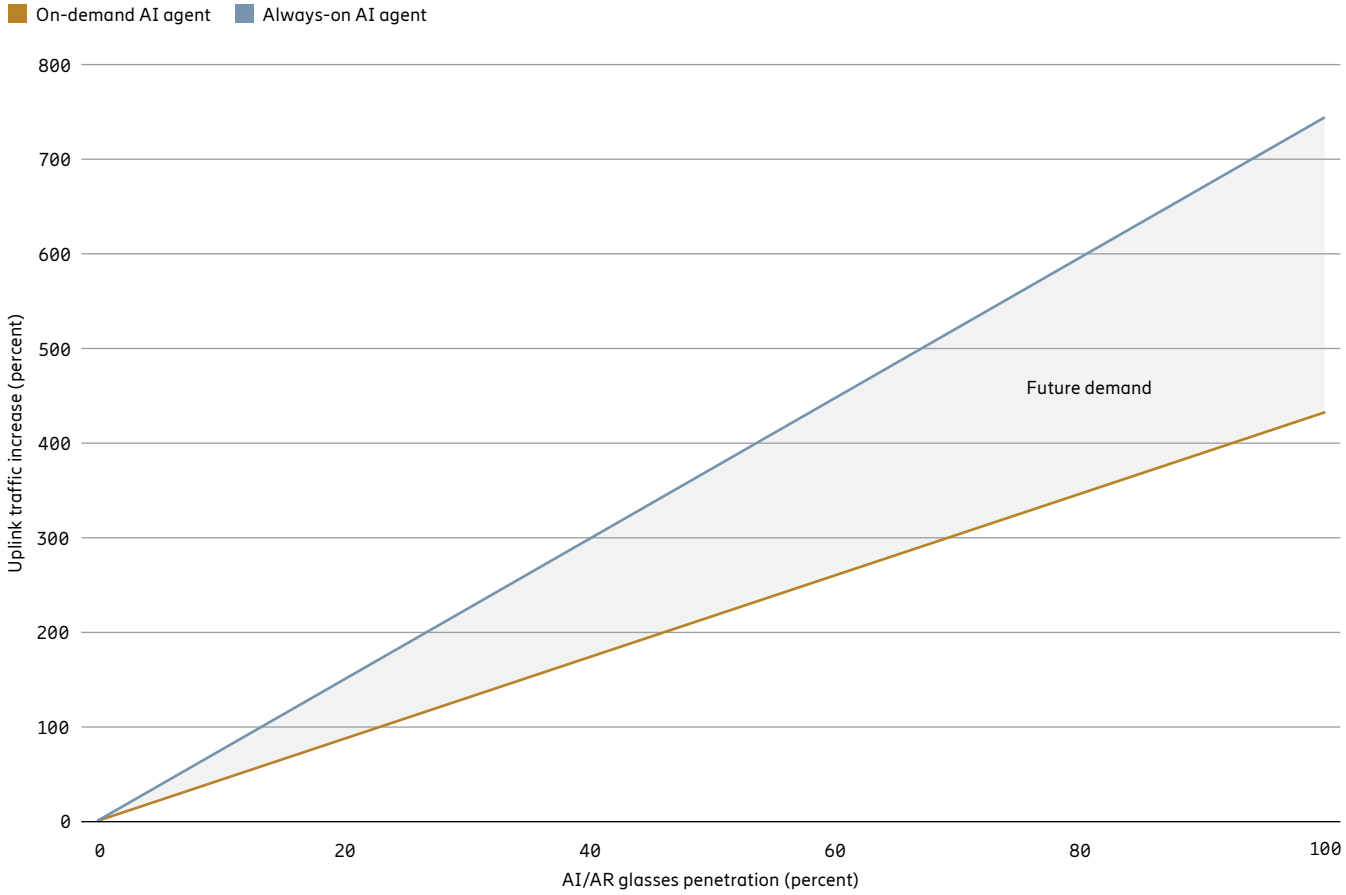
Going forward, some models will use AI capabilities right on the glasses and/or tethered devices; however, advanced AI capabilities will need to run in the cloud and – when inference time of the models is low – the uplink network characteristics become critical.

A recently announced smart glasses model has an advertised video capture resolution of 1,440 x 1,920 pixels. Multimodal AI on-demand engagements typically require framerates in the order of 5–10 frames per second (FPS) while being used. Always-on agents, on the other hand, are likely to use lower and perhaps dynamic framerates, such as 1 frame every 5–10 seconds. The on-demand agent can make use of video codecs with a compression ratio of about 0.1 bits per pixel (bpp). At the given resolution and a frame rate of 5 FPS, this yields about 1.4 Mbps in the uplink. It is further assumed that for users of these AI agents, about 20 percent are "power users" at 100 min/day, with the remaining 80 percent being "ordinary users" at 10 min/day. This yields an average of 28 min/day.

The always-on agent will need to use image compression, at about 0.5 bpp; at the given resolution and a frame rate of about 0.1 FPS, this yields about 0.14 Mbps. It is then assumed that the agent is on for about 8h/day.

The resulting increase in the uplink percentage with regards to today's global average baseline of about 2 GB per month is shown in Figure 24. Per user, the always-on agent consumes a slightly higher uplink than the on-demand agent under these assumptions. For a given device penetration, given the value on the x-axis in Figure 24, some users may adopt an always-on agent whilst others prefer on-demand. The future demand will therefore be between these two curves. This potential growth of uplink traffic underlines the importance of network capacity planning, spectrum allocation and RAN feature developments.

Figure 24: Uplink traffic increase with regards to today's uplink baseline versus AI/AR glasses penetration



Methodology

Forecast methodology
Ericsson makes forecasts on a regular basis to support internal decisions and planning, as well as market communications. The forecast time in the Ericsson Mobility Report is six years and this moves forward one year in the November report each year. All estimates in Ericsson Mobility Report are for the month of December each year. The subscription and traffic forecast baseline is established using historical data from various sources, validated with Ericsson internal data, including measurements in customer networks. Future developments are estimated based on macroeconomic trends, user trends, market maturity and technological advances. Other sources include industry analyst reports, together with internal assumptions and analyses.

Historical data may be revised if the underlying data changes – for example, if service providers report updated subscription figures.

Mobile subscriptions
Mobile subscriptions include all mobile technologies. Subscriptions are defined by the most advanced technology that the mobile phone and network are capable of. Our mobile subscriptions by technology findings divide subscriptions according to the highest-enabled technology they can be used for. LTE (4G) subscriptions, in most cases, also include the possibility for the subscription to access 3G (WCDMA/HSPA) and 2G (GSM or CDMA in some markets) networks. A 5G subscription is counted as such when associated with a device that supports New Radio as specified in 3GPP Release 15, and connected to a 5G-enabled network. Mobile broadband includes radio access technologies HSPA (3G), LTE (4G), 5G, CDMA2000 EV-DO, TD-SCDMA and Mobile WiMAX. WCDMA without HSPA and GPRS/EDGE are not included. FWA is defined as a connection that provides broadband access through mobile network enabled customer premises equipment (CPE). This includes both indoor (desktop and window-mounted) and outdoor (rooftop and wall-mounted) CPE. It does not include portable battery-based Wi-Fi routers or dongles.

Rounding of figures
As figures are rounded, summing up data may result in slight differences from the actual totals. In tables with key figures, subscriptions have been rounded to the nearest 10th of a million. However, when used in highlights in the articles, subscriptions are usually expressed in full billions or to one decimal place. Compound annual growth rate (CAGR) is calculated on the underlying, unrounded numbers and is then rounded to the nearest full percentage figure. Traffic volumes are expressed to two significant figures.

Subscribers
There is a large difference between the numbers of subscriptions and subscribers. This is because many subscribers have several subscriptions. Reasons for this could include users lowering traffic costs by using optimized subscriptions for different types of calls, maximizing coverage and having different subscriptions for mobile PCs/tablets and mobile phones. In addition, it takes time before inactive subscriptions are removed from service provider databases. Consequently, subscription penetration can be above 100 percent, which is the case in many countries today. However, in some developing regions, it is common for several people to share one subscription, for example via a family- or community-shared phone.

Mobile network traffic
Ericsson regularly performs traffic measurements in around 100 live networks covering all major regions of the world. These measurements form a representative base for calculating worldwide total mobile network traffic. Mobile network data traffic also includes traffic generated by FWA services. More detailed measurements are made in a select number of commercial networks with the purpose of understanding how mobile data traffic evolves. No subscriber data is included in these measurements. Please note that the Ericsson Mobility Report data traffic forecast, both global and regional, represents the estimated traffic volume in all networks over the duration of one month in December. Traffic (in terms of throughput) in high-traffic areas will be much higher than the average traffic.

Population coverage
Population coverage is estimated using a database of regional population and territory distribution, based on population density. This is then combined with proprietary data on the installed base of radio base stations (RBS), together with estimated coverage per RBS for each of six population density categories (from metro to wilderness). Based on this, the portion of each area that is covered by a certain technology can be estimated, as well as the percentage of the population it represents. By aggregating these areas, world population coverage per technology can be calculated.

Disclaimer
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Ericsson Mobility Visualizer
Explore actual and forecast data from the Ericsson Mobility Report in our interactive web application. It contains a range of data types, including mobile subscriptions, mobile broadband subscriptions, mobile data traffic, traffic per application type, VoLTE statistics, monthly data usage per device and an IoT connected device forecast. Data can be exported and charts generated for publication subject to the inclusion of an Ericsson source attribution.

Find out more
Scan the QR code, or visit
ericsson.com/mobility-visualizer

Glossary

2G: 2nd generation mobile networks (GSM, CDMA 1x)

3G: 3rd generation mobile networks (WCDMA/HSPA, TD-SCDMA, CDMA EV-DO, Mobile WiMAX)

3GPP: 3rd Generation Partnership Project

4G: 4th generation mobile networks (LTE, LTE-A)

4K: In video, a horizontal display resolution of approximately 4,000 pixels. A resolution of 3840 × 2160 (4K UHD) is used in television and consumer media. In the movie projection industry, 4096 × 2160 (DCI 4K) is dominant

5G: 5th generation mobile networks (IMT-2020)

AI: Artificial intelligence

AR: Augmented reality. An interactive experience of a real-world environment whereby the objects that reside in the real world are "augmented" by computer-generated information

ARPU: Average revenue per user

CAGR: Compound annual growth rate

CAMARA: An open-source project to develop APIs.

Cat-M1: A 3GPP standardized low-power wide-area (LPWA) cellular technology for IoT connectivity

CDMA: Code-division multiple access

EB: Exabyte, 10^{18} bytes

FDD: Frequency division duplex

FWA: Fixed wireless access

Gaussian splatting: A 3D rendering technique that uses millions of tiny, translucent ellipsoids (or "splats") to represent a scene

GB: Gigabyte, 10^{9} bytes

Gbps: Gigabits per second

GHz: Gigahertz, 10^{9} hertz (unit of frequency)

GSA: Global mobile Suppliers Association

GSM: Global System for Mobile Communications

GSMA: GSM Association

HSPA: High speed packet access

IoT: Internet of Things

Kbps: Kilobits per second

LTE: Long-Term Evolution

MB: Megabyte, 10^{6} bytes

Mbps: Megabits per second

MHz: Megahertz, 10^{6} hertz (unit of frequency)

MIMO: Multiple Input Multiple Output is the use of multiple transmitters and receivers (multiple antennas) on wireless devices for improved performance

mmWave: Millimeter waves are radio frequency waves in the extremely high frequency range (30–300GHz) with wavelengths between 10mm and 1mm. In a 5G context, millimeter waves refer to frequencies between 24 and 71GHz (the two frequency ranges 26GHz and 28GHz are included in millimeter range by convention)

Mobile broadband: Mobile data service using radio access technologies including 5G, LTE, HSPA, CDMA2000 EV-DO, Mobile WiMAX and TD-SCDMA

Mobile PC: Defined as laptop or desktop PC devices with built-in cellular modem or external USB dongle

Mobile router: A device with a cellular network connection to the internet and Wi-Fi or Ethernet connection to one or several clients (such as PCs or tablets)

MR: Mixed reality. Immersive technology in which elements from both the real world and a virtual environment are fully interactive with each other

NB-IoT: A 3GPP standardized low-power wide-area (LPWA) cellular technology for IoT connectivity

Net Zero: Defined in ITU standards as a future state where all emissions that can be reduced are reduced, with like-for-like or permanent removals applied by carbon-removal technologies to balance the remaining emissions

Neural radiance fields: A deep learning method for creating 3D representations of scenes from 2D images

NR: New Radio as defined by 3GPP Release 15

NR-DC: NR-NR Dual connectivity

NSA 5G: Non-standalone 5G is a 5G Radio Access Network (RAN) that operates on a legacy 4G/LTE core

PB: Petabyte, 10^{15} bytes

RedCap: Reduced capability

SA: Standalone

Short-range IoT: Segment that largely consists of devices connected by unlicensed radio technologies, with a typical range of up to 100 meters, such as Wi-Fi, Bluetooth and Zigbee

Sunsetting: The process of closing down older mobile technologies

TD-SCDMA: Time division-synchronous code-division multiple access

TDD: Time division duplex

VoIP: Voice over IP (Internet Protocol)

VoLTE: Voice over LTE as defined by GSMA IR.92 specification

VR: Virtual reality

WCDMA: Wideband code-division multiple access

Wide-area IoT: Segment made up of devices using cellular connections or unlicensed low-power technologies like Sigfox and LoRa

XR: Extended reality. An umbrella category for virtual or combined real/virtual environments, which includes AR, VR and MR

Key figures

Global key figures

Mobile subscriptions	2024	2025	Forecast 2031	CAGR* 2025–2031	Unit
Worldwide mobile subscriptions	8,660	8,830	9,500	1%	million
• Smartphone subscriptions	7,130	7,410	8,480	2%	million
• Mobile PC, tablet and mobile router subscriptions	290	320	530	8%	million
• Mobile broadband subscriptions	7,710	8,010	9,220	2%	million
• Mobile subscriptions, GSM/EDGE-only	870	760	350	-12%	million
• Mobile subscriptions, WCDMA/HSPA	550	460	200	-13%	million
• Mobile subscriptions, LTE	4,940	4,690	2,320	-11%	million
• Mobile subscriptions, 5G	2,290	2,900	6,410	14%	million
Mobile subscriptions, 5G standalone	1,270	1,690	4,140	16%	million
• Mobile subscriptions, 6G	0	0	180	N/A	million
Fixed broadband connections	**1,620**	**1,690**	**2,030**	**3%**	**million**
Fixed Wireless Access connections	160	185	350	11%	million
Satellite broadband subscriptions	6	9	30	22%	million

Mobile data traffic					
• Data traffic per smartphone	19	21	39	11%	GB/month
• Data traffic per mobile PC	26	28	40	6%	GB/month
• Data traffic per tablet	15	18	29	9%	GB/month

Total data traffic**					
Mobile data traffic	123	143	310	14%	EB/month
• Smartphones	121	140	304	14%	EB/month
• Mobile PCs and routers	1.2	1.5	2.7	11%	EB/month
• Tablets	1	1.2	2.5	13%	EB/month
Fixed Wireless Access	41	54	174	22%	EB/month
Total mobile network traffic	164	197	482	16%	EB/month
Total fixed data traffic	330	380	710	11%	EB/month

Regional key figures

Mobile subscriptions	2024	2025	Forecast 2031	CAGR* 2025–2031	Unit
North America	450	460	490	1%	million
Latin America	730	750	820	1%	million
Western Europe	550	550	570	0%	million
Central and Eastern Europe	560	560	560	0%	million
North East Asia	2,260	2,310	2,410	1%	million
China[1]	1,790	1,830	1,880	0%	million
South East Asia and Oceania	1,180	1,170	1,230	1%	million
India, Nepal and Bhutan	1,190	1,230	1,350	2%	million
Middle East and North Africa	740	750	780	1%	million
Gulf Cooperation Council (GCC)[2]	81	84	97	2%	million
Sub-Saharan Africa	1,000	1,050	1,310	4%	million

Regional key figures

LTE subscriptions	2024	2025	Forecast 2031	CAGR* 2025–2031	Unit
North America	130	100	40	-14%	million
Latin America	530	520	230	-13%	million
Western Europe	310	240	30	-30%	million
Central and Eastern Europe	480	490	220	-13%	million
North East Asia	1,020	850	220	-20%	million
China[1]	720	570	70	-29%	million
South East Asia and Oceania	930	890	480	-10%	million
India, Nepal and Bhutan	620	600	190	-17%	million
Middle East and North Africa	500	510	340	-7%	million
GCC[2]	39	33	5	-27%	million
Sub-Saharan Africa	411	490	570	3%	million

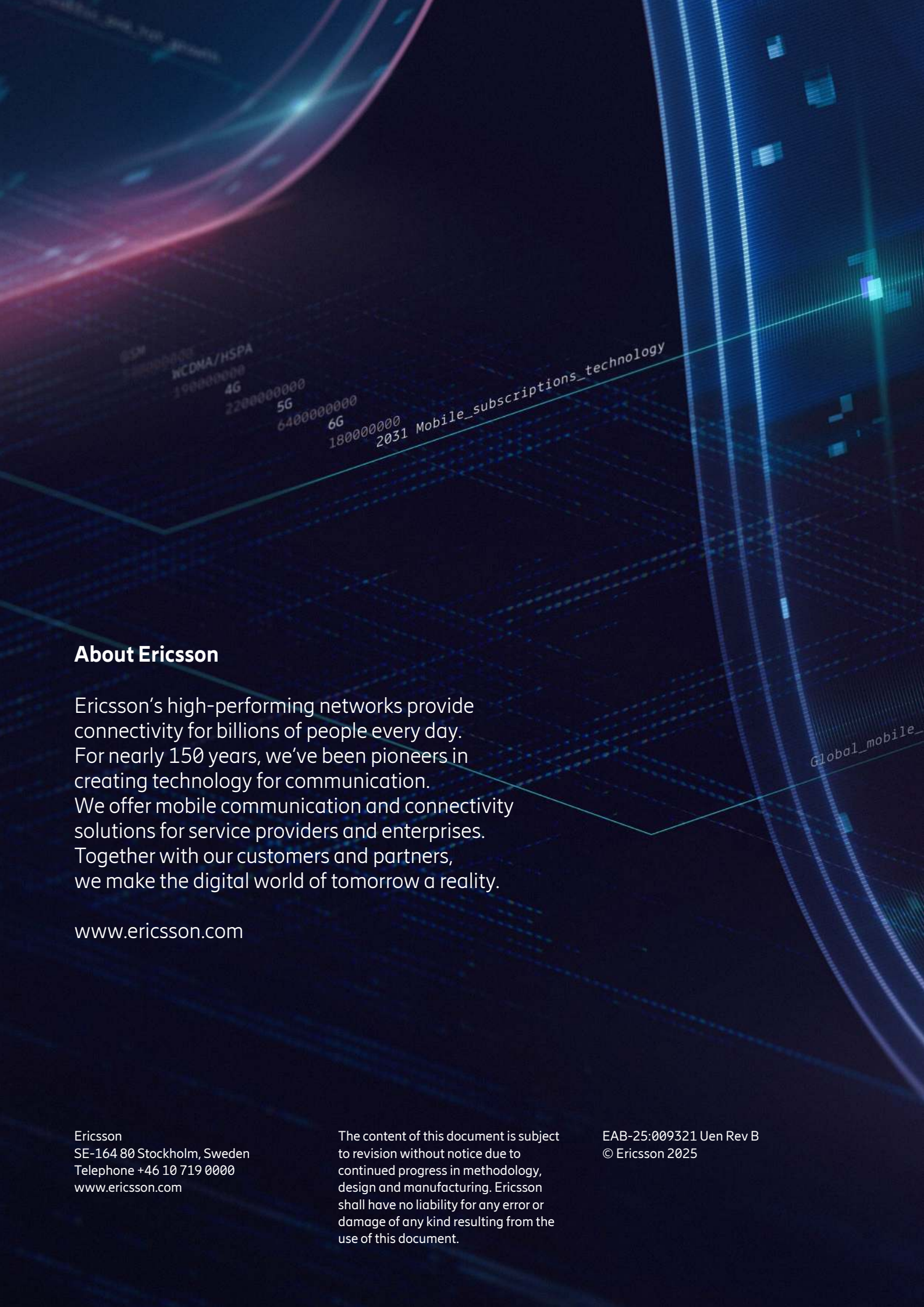
5G subscriptions[3]	2024	2025	Forecast 2031	CAGR* 2025–2031	Unit
North America	316	359	450	3%	million
Latin America	63	106	550	32%	million
Western Europe	227	307	540	10%	million
Central and Eastern Europe	30	45	340	40%	million
North East Asia	1,178	1,411	2,150	6%	million
China[1]	1,014	1,213	1,790	5%	million
South East Asia and Oceania	111	160	680	27%	million
India, Nepal and Bhutan	290	395	1,070	18%	million
Middle East and North Africa	57	91	410	28%	million
GCC[2]	37	46	89	11%	million
Sub-Saharan Africa	11	27	400	57%	million

Data traffic per smartphone	2024	2025	Forecast 2031	CAGR* 2025–2031	Unit
North America	21	25	49	12%	GB/month
Latin America	13	15	31	14%	GB/month
Western Europe	22	25	54	13%	GB/month
Central and Eastern Europe	20	22	45	13%	GB/month
North East Asia	20	23	41	10%	GB/month
China[1]	21	23	42	10%	GB/month
South East Asia and Oceania	19	21	42	12%	GB/month
India, Nepal and Bhutan	33	36	65	10%	GB/month
Middle East and North Africa	19	21	46	14%	GB/month
GCC[2]	29	30	49	8%	GB/month
Sub-Saharan Africa	5	5.3	12	15%	GB/month

Total mobile data traffic	2024	2025	Forecast 2031	CAGR* 2025–2031	Unit
North America	8.7	10	21	13%	EB/month
Latin America	6.9	7.9	20	17%	EB/month
Western Europe	10	12	24	13%	EB/month
Central and Eastern Europe	7.3	8.7	18	13%	EB/month
North East Asia	37	43	81	11%	EB/month
China[1]	32	37	70	11%	EB/month
South East Asia and Oceania	17	19	42	14%	EB/month
India, Nepal and Bhutan	24	29	63	14%	EB/month
Middle East and North Africa	9.3	11	30	18%	EB/month
GCC[2]	1.6	1.8	3.4	11%	EB/month
Sub-Saharan Africa	2.3	2.8	10	24%	EB/month

[1] These figures are also included in the figures for North East Asia.
[2] These figures are also included in the figures for Middle East and North Africa.
[3] Currently, 6G subscriptions are not published on a regional level, but included in 5G figures in regions where 6G is expected to launch early.

* CAGR is calculated on unrounded figures.
** Figures are rounded (see methodology) and therefore summing up of rounded data may result in slight differences from the actual total.



About Ericsson

Ericsson's high-performing networks provide connectivity for billions of people every day. For nearly 150 years, we've been pioneers in creating technology for communication. We offer mobile communication and connectivity solutions for service providers and enterprises. Together with our customers and partners, we make the digital world of tomorrow a reality.

www.ericsson.com

Ericsson
SE-164 80 Stockholm, Sweden
Telephone +46 10 719 0000
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The content of this document is subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.

EAB-25:009321 Uen Rev B
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Exhibit C.II - Second Prong - Well Positioned to Advance the Proposed Endeavor

Please refer to all the documents in Exhibit B

HUAWEI

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南美南地区部培训中心，华为技术有限公司。

Certificate

培 训 证 书

This is to certify

Mr./Ms.

Gustavo Dartagnan Xavier

完成此培训项目:

completed the training program for

MRFC System Fundamental and Data Configuration Training

自 from *March 26th*

至 to *March 27th 2012*

TRAINING CENTER SOUTHERN SOUTH AMERICA

签 发 人:
Director
许绛垣
培 训 中 心:
Training Center

签发日期:
Date of Issue
March 27th 2012
Brazil

编 号:
Serial No.

Training Contents:

MRFC System Fundamental and Data Configuration Training

- *MRFC Product Orientation*
- *MRFC Interfaces*
- *MRFC Functions and Features*
- *MRFC System Structure*
- *MRFC Data Configuration*
- *MRFC Specifications*

Duration: 12 hours

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南美南地区部培训中心，华为技术有限公司。

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Mr./Ms.

Gustavo Dartagnan Xavier

完成此培训项目:

completed the training program for

IMS Overview Training

自 from *January 30th* 至 to *February 01st 2012*

TRAINING CENTER SOUTHERN SOUTH AMERICA

签 发 人
Director
培训中心
Training Center
许绛垣

签发日期:
Date of Issue
February 01st 2012
Campinas, Brazil

编 号:
Serial No.

Training Contents:

IMS Overview Training

- *Arquitetura da rede IMS*
- *Procedimento de Sinalização Básico IMS*
- *Sistema IMS Overview de Protocolo SIP*

Duration: 12 hours

Save

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This is to certify

Mr./Ms.

Gustavo Dartagnan Xavier

完成此培训项目:

completed the training program for

CSC3300 Data Configuration Training

自 from *February 29th* 至 to *March 02st 2012*

TRAINING CENTER SOUTHERN SOUTH AMERICA

签 发 人:
Director
许络垣
培训中心
Training Center

签发日期:
Date of Issue
March 02st 2012
Brazil

编 号:
Serial No.

Training Contents:

CSC3300 Data Configuration Training

- *CSC3300 Data Configuration Overview*
- *CSC3300 HW Data Configuration*
- *CSC3300 NE and Module Configuration*
- *CSC3300 Domain Data Configuration*
- *CSC3300 Interconnection Data Configuration*
- *CSC3300 Features Data Configuration*

Duration: 18 hours

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完成此培训项目:

completed the training program for

IMS Overview Training

自 from *January 30th* 至 to *February 01st 2012*

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培训中心
Training Center
许绛垣

签发日期:
Date of Issue
February 01st 2012
Campinas, Brazil

编 号:
Serial No.

Training Contents:

IMS Overview Training

- *Arquitetura da rede IMS*
- *Procedimento de Sinalização Básico IMS*
- *Sistema IMS Overview de Protocolo SIP*

Duration: 12 hours

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完成此培训项目:

completed the training program for

MRP6600 Data Configuration Training

自 from *March 28th* 至 to *March 29th 2012*

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Director
许绛垣
培 训 中 心:
Training Center

签发日期:
Date of Issue
March 29th 2012
Brazil

编 号:
Serial No.

Training Contents:

MRP6600 Data Configuration Training

- *MRP6600 Data Configuration Overview*
- *MRP6600 Hardware Data Configuration*
- *MRP6600 NE/Module Data Configuration*
- *MRP6600 Local Data Configuration*
- *MRP6600 Resources Data Configuration*
- *MRP6600 Interconnection Data Configuration*
- *MRP6600 Special Features Data Configuration*
- *MRP6600 System State Maintenance*

Duration: 12 hours

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完成此培训项目:

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ATS9900 Fundamental Training

自 from *March 30th* 至 to *April 02nd 2012*

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Director

许绛垣

培训中心

Training Center

签发日期: Date of Issue *April 02nd 2012*

Brazil

编 号: Serial No.

Training Contents:

ATS9900 Fundamental Training

- *ATS9900 Product Location*
- *ATS9900 Interfaces*
- *ATS9900 Functions and Features*
- *ATS9900 System Structure*
- *ATS9900 Technical Specifications*

Duration: 12 hours

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完成此培训项目:

completed the training program for

IMS Operation and Maintenance Training

自 from *February 10th* 至 to *February 14th 2012*

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签 发 人: Director 许绛垣

培 训 中 心: Training Center

签发日期: Date of Issue *February 14th 2012*

Campinas, Brazil

编 号: Serial No.

Training Contents:
IMS Operation and Maintenance Training

Operação LMT
O&M Hardware OSTA
O&M Software
O&M Elementos de Rede

Duration: 16 hours

Salo

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完成此培训项目:

completed the training program for

HSS9820 Data Configuration Training

自 from *March 07th* 至 to *March 08th 2012*

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签 发 人:
Director

培 训 中 心:
Training Center

许绛垣

签发日期:
Date of Issue

March 08th 2012
Brazil

编 号:
Serial No.

Training Contents:

HSS9820 Data Configuration Training

- *HSS9820 Hardware Data Verification*
- *HSS9820 Local Data Configuration*
- *HSS9820 Interconnection Data Configuration*

Duration: 12 hours

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Gustavo Dartagnan Xavier

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completed the training program for

ATS9900 Provisioning Training

自 from *April 09th* 至 to *April 10th 2012*

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签 发 人 Director

许绛垣

Training Center

签发日期: Date of Issue *April 10th 2012*

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Training Contents:

ATS9900 Provisioning Training

- *Basic Concepts of Service Provisioning*
- *Service Provisioning Examples*

Duration: 12 hours

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ATS9900 Data Configuration Training

自 from *April 03rd* 至 to *April 04th 2012*

TRAINING CENTER SOUTHERN SOUTH AMERICA

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培训中心
Training Center

许经垣

签发日期:
Date of Issue

April 04th 2012
Brazil

编 号:
Serial No.

Training Contents:

ATS9900 Data Configuration Training

- *ATS9900 Basic Data Configuration Overview*
- *ATS9900 Hardware Data Configuration*
- *ATS9900 NE/Module Data Configuration*
- *ATS9900 Local Data Configuration*
- *ATS9900 Number Analysis Configuration*
- *ATS9900 Interworking Data Configuration*
- *ATS9900 Services Data Configuration*

Duration: 12 hours

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Gustavo Dartagnan Xavier

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completed the training program for

IMS ATCA Platform (Hardware/OMS2600) Training

自 from *February 06th*

至 to *February 07th 2012*

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许绛垣
培 训 中 心:
Training Center

签发日期:
Date of Issue
February 07th 2012
Campinas, Brazil

编 号:
Serial No.

Training Contents:

IMS ATCA Platform (Hardware/OMS2600) Training

- *Sistema Hardware IMS Huawei*
- *OMS2600 Introdução ao Produto*

Duration: 12 hours

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completed the training program for

HSS9820 Fundamental Training

自 from *March 05th* 至 to *March 06th 2012*

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签发日期:
Date of Issue
March 06th 2012
Brazil

编 号:
Serial No.

Training Contents:

HSS9820 Fundamental Training

- *HSS9820 Product Orientation*
- *HSS9820 Interfaces*
- *HSS9820 Functions and Features*
- *HSS9820 System Structure*
- *HSS9820 Technical Specifications*
- *HSS9820 Diameter Messages*

Duration: 12 hours

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completed the training program for

OSTA2.0 Hardware Platform Training

自 from *February 02nd* 至 to *February 03rd 2012*

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签 发 人: Director

许绛垣

培训中心 Training Center

签发日期: Date of Issue *February 03rd 2012*

Campinas, Brazil

编 号: Serial No.

Training Contents:

OSTA2.0 Hardware Platform Training

- *OSTA Introduction*
- *Boards Introduction*
- *Signahing Cables*
- *Softaware Architecture*
- *Alarm Flow*

Duration: 12 hours

Solo

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CSC3300 Fundamental Training

自 from *February 27th* 至 to *February 28th 2012*

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培 训 中 心:
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Date of Issue
February 28th 2012
Brazil

编 号:
Serial No.

Training Contents:

CSC3300 Fundamental Training

- *CSC3300 Product Orientation*
- *CSC330 Interfaces*
- *CSC3300 Applications and Features*
- *CSC3300 System Structure*

Duration: 12 hours

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完成此培训项目:
completed the training program for
IMS Operation and Maintenance Training SPG 2800

自 from *February 08th* 至 to *February 09th 2012*

TRAINING CENTER SOUTHERN SOUTH AMERICA

签 发 人: Director 许绛垣
培 训 中 心: Training Center

签发日期: Date of Issue *February 09th 2012*
Campinas, Brazil

编 号: Serial No.

Training Contents:

IMS Operation and Maintenance Training SPG 2800

- *SPG2800 Product Overview*
- *SPG2800 Functions And Features*
- *SPG2800 O&M Systew*
- *SPG2800 Technical Specifications*

Duration: 12 hours

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This is to certify

Mr./Ms.

Gustavo Dartagnan Xavier

完成此培训项目:

completed the training program for

iCG9815 Operation and Maintenance Training

自 from *May 18th* 至 to *May 21st 2012*

TRAINING CENTER SOUTHERN SOUTH AMERICA

签 发 人: Director 许绛垣

培 训 中 心: Training Center

签发日期: Date of Issue *May 21st 2012*

Brazil

编 号: Serial No.

Training Contents:

iCG9815 Operation and Maintenance Training

- *iCG9815 CDR Console Introduction*
- *iCG9815 Debug Console Introduction*

Duration: 12 hours

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This is to certify

Mr./Ms.

Gustavo Dartagnan Xavier

兹证明此培训项目：

completed the training program for

CSC3300/HSS9820 Operation and Maintenance Training and Provisioning Suscribers

自 from *March 09th*

至 to *March 13rd 2012*

TRAINING CENTER SOUTHERN SOUTH AMERICA

签 发 人 Director 许绛垣

培 训 中 心： Training Center

签发日期: Date of Issue *March 13rd 2012*

Brazil

编 号: Serial No.

Training Contents:

CSC3300/HSS9820 Operation and Maintenance Training and Provisioning Suscribers

- *CSC3300/HSS9820 O&M Tasks*
- *CSC3300/HSS9820 User Management*
- *Subscription Basic Concepts*
- *SPG Introduction*
- *PGW Web LMT*
- *Subscription Provisioning*
- *Template Management*
- *Subscriber Management*

Duration: 18 hours

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This is to certify

Mr./Ms.

Gustavo Dartagnan Xavier

完成此培训项目:

completed the training program for

MRP6600 Fundamental Training

自 from *March 26th* 至 to *March 27th 2012*

TRAINING CENTER SOUTHERN SOUTH AMERICA

签 发 人:
Director
许绛垣
培 训 中 心:
Training Center

签发日期:
Date of Issue
March 27th 2012
Brazil

编 号:
Serial No.

Training Contents:

MRP6600 Fundamental Training

- *MRP6600 Product Orientation*
- *MRP6600 Interfaces*
- *MRP6600 Functions and Features*
- *MRP6600 System Structure*

Duration: 12 hours

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This is to certify

Mr./Ms.

Gustavo Dartgnan Xavier

完成此培训项目:

completed the training program for

UMG8900 Fundamental Training

自 from *April25 rd* 至 to *April 26th 2012*

TRAINING CENTER SOUTHERN SOUTH AMERICA

签 发 人:
Director

培 训 中 心:
Training Center

许终垣

签发日期:
Date of Issue

April 26th 2012
Brazil

编 号:
Serial No.

Training Contents:

UMG8900 Fundamental Training

- *UMG8900 Overview*
- *UMG8900 Product Features*
- *UMG8900 System Architecture*
- *UMG8900 Board Function*
- *UMG8900 Signaling Flow*

Duration: 12 hours

Alura Online Education

Rua Vergueiro, 3185, 8th floor, São Paulo/SP.

Company Name: AOVS Sistemas de Informática S.A

CNPJ: 05.555.382/0001-33

(11) 4118-2432

www.alura.com.br

We certify that Gustavo Dartagnan Xavier Do Rego successfully completed the online course “Python: understanding Object-Oriented Programming” with an estimated workload of 12 hours, completing 64 out of 64 activities, from 04/13/2022 to 04/13/2022.

This course covered the following topics:

1. The problem with the procedural paradigm
2. Classes and Objects
3. Implementing Methods
4. Encapsulation
5. Using Properties
6. Private and static methods





Guilherme Silveira — Coordinator

Carlos Felício — Director

https://cursos.alura.com.br/certificate/3a1ca8a3-7b8f-456e-b135-9adc902e01d2

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 13, 2026.

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Razão Social: AOVS Sistemas de Informática S.A
CNPJ: 05.555.382/0001-33
(11) 4118-2432
www.alura.com.br

Certificamos que Gustavo Dartagnan Xavier Do Rego concluiu com aproveitamento o curso online "Python: entendendo a Orientação a Objetos" de carga horária estimada em 12 horas, realizando 64 de 64 atividades, no período de 13/04/2022 a 13/04/2022.

Este curso abordou os seguintes tópicos:

1. O problema do paradigma procedural
2. Classes e Objetos
3. Implementando Métodos
4. Encapsulamento
5. Usando Propriedades
6. Métodos privados e estáticos



Guilherme Silveira — Coordenador

Carlos Felício — Diretor

https://cursos.alura.com.br/certificate/3a1ca8a3-7b8f-456e-b135-9adc902e01d2

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Company Name: AOVS Sistemas de Informática S.A
CNPJ: 05.555.382/0001-33
(11) 4118-2432
www.alura.com.br

We certify that Gustavo Dartagnan Xavier Do Rego successfully completed the online course “Python Collections part 1: lists and tuples” with an estimated workload of 8 hours, completing 49 out of 49 activities, from 04/19/2022 to 04/19/2022.

This course covered the following topics:

1. Lists and operations
2. Tuples
3. Polymorphism and arrays
4. Equality
5. Other built-ins
6. Natural order
7. Custom sorting
8. Total ordering





Guilherme Silveira — Coordinator

Carlos Felício — Director

https://cursos.alura.com.br/certificate/d1303901-3e3c-4d1f-84c6-2e5005de9650

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



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CNPJ: 05.555.382/0001-33
(11) 4118-2432
www.alura.com.br

Certificamos que Gustavo Dartagnan Xavier Do Rego concluiu com aproveitamento o curso online "Python Collections parte 1: listas e tuplas" de carga horária estimada em 8 horas, realizando 49 de 49 atividades, no período de 19/04/2022 a 19/04/2022.

Este curso abordou os seguintes tópicos:

1. Listas e operações
2. Tuplas
3. Polimorfismo e arrays
4. Igualdade
5. Outros builtins
6. Ordem natural
7. Ordenação customizada
8. Ordenação total



Guilherme Silveira — Coordenador

Carlos Felício — Diretor

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Company Name: AOVS Sistemas de Informática S.A

CNPJ: 05.555.382/0001-33

(11) 4118-2432

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We certify that Gustavo Dartagnan Xavier Do Rego successfully completed the online course “Python Brazil: data validation in the national standard,” with an estimated workload of 7 hours, completing 37 out of 37 activities, from 04/20/2022 to 04/20/2022.

This course covered the following topics:

1. Validating CPF and accessing PyPI
2. Validating CNPJ and building a Factory
3. Validating phone numbers with regular expressions
4. Manipulating and formatting dates
5. Working with ZIP codes (CEP) and accessing an API



Guilherme Silveira — Coordinator

Carlos Felício — Director

https://cursos.alura.com.br/certificate/06fb3afb-d717-4e69-a9bf-daffcc452a34

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



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Alura Ensino Online

Rua Vergueiro, 3185, 8o andar, São Paulo/SP.
Razão Social: AOVS Sistemas de Informática S.A
CNPJ: 05.555.382/0001-33
(11) 4118-2432
www.alura.com.br

Certificamos que Gustavo Dartagnan Xavier Do Rego concluiu com aproveitamento o curso online "Python Brasil: validação de dados no padrão nacional" de carga horária estimada em 7 horas, realizando 37 de 37 atividades, no período de 20/04/2022 a 20/04/2022.

Este curso abordou os seguintes tópicos:

1. Validando CPF e acessando o PYPI
2. Validando CNPJ e construindo uma Factory
3. Validando telefones com expressões regulares
4. Manipulando e formatando datas
5. Trabalhando com CEP e acessando uma API



Guilherme Silveira — Coordenador

Carlos Felício — Diretor

https://cursos.alura.com.br/certificate/06fb3afb-d717-4e69-a9bf-daffcc452a34

FIAP – UNIVERSITY CENTER hereby certifies that

Gustavo Dartagnan Xavier do Rego

has completed the Nano Course

DevOps & Agile Culture

with a total workload of 60 hours

.

São Paulo, December 4, 2020.

Wagner Sanchez
Academic Director

Leandro Rubim
Director of Digital Learning

To verify this certificate, please access: https://on.fiap.com.br/local/nanocourses/validar-certificado and enter the following code: d46e899041e3fc527a5bf93bfc218349

CERTIFICATE

WE HEREBY CERTIFY THAT

GUSTAVO DARTAGNAN XAVIER DO REGO

has completed the course "**Signaling in NGN Networks**,"

conducted at GVT in Curitiba and taught by

Eng. Sebastião Cardim, from December 7 to December 11, 2009,

with a total duration of 40 hours.

Campinas, April 8, 2010.

Sebastião Cardim
Technology Director

José Maria Souza
Commercial Director

IWF
CONSULTING AND TRAINING

NORTEL

nortel.com

Training Certificate

May 14, 2010

Gustavo Xavier Dartagnan

Successfully completed the course:

1775A CS 2000 - Compact/CS 2100 - Operations and Maintenance

Instructor

Executive Officer, Nortel

ID:02D8CF-083922

CERTIFICATE.02.01

Alcatel·Lucent

UNIVERSITY

Hereby awards this certificate to

Gustavo Dartagnan Xavier do Rego

Company: GVT

for his participation in the course

Starter Pack Enterprise

Period: 09/28/2009 to 10/09/2009

Total Workload: 80.0 hours

Eng. Jonny Alex Rodrigues dos Santos
Instructor

Eng. Henri Marcos Esgalha Castelli
Coordinator

14.788

Alcatel·Lucent

UNIVERSITY

Hereby awards this certificate to

Gustavo Dartagnan Xavier do Rego

Company: GVT

for his participation in the course

VoIP Advanced

Period: 10/19/2009 to 10/23/2009

Total Workload: 40.0 hours

Eng. Jonny Alex Rodrigues dos Santos
Instructor

Eng. Henri Marcos Esgalha Castelli
Coordinator

15.000

Alcatel·Lucent

UNIVERSITY

Hereby awards this certificate to

Gustavo Dartagnan Xavier do Rego

Company: GVT

for his participation in the course

CPU Loading & Redundancy

Period: 10/13/2009 to 10/16/2009

Total Workload: 32.0 hours

Eng. Jonny Alex Rodrigues dos Santos
Instructor

Eng. Henri Marcos Esgalha Castelli
Coordinator

14.999

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 13 2026

FIAP NANO COURSES

O FIAP - CENTRO UNIVERSITÁRIO certifica que

Gustavo Dartagnan Xavier do Rego

participou do Nano Course

DevOps & Agile Culture

com carga horária de 60 horas.

São Paulo, 04 de dezembro de 2020.



Wagner Sanchez
Diretor Acadêmico



Leandro Rubim
Direção Digital Learning

Para validar acesse: https://on.fiap.com.br/local/nanocourses/validar-certificado e informe a chave: d46e899041e3fc527a5bf93bfc218349

CERTIFICADO

CERTIFICAMOS QUE

GUSTAVO DARTAGNAN XAVIER DO REGO

concluiu o curso **"Sinalização em Redes NGN"** ,

realizado na GVT, em Curitiba, e ministrado pelo

Eng. Sebastião Cardim no período de 07 a 11 de Dezembro de 2009,

com duração total de 40 horas.

Campinas, 08 de abril de 2010.

Sebastião Cardim
Diretor de Tecnologia

José Maria Souza
Diretor Comercial

IWF
CONSULTORIA E TREINAMENTO

NORTEL

nortel.com

Certificado de Treinamento

14 maio 2010

Gustavo Xavier Dartagnan

Concluiu satisfatoriamente o curso:

1775A CS 2000 - Compact/CS 2100 - Operations and Maintenace

Instrutor

Executive Officer, Nortel

ID:02D8CF-083922

CERTIFICATE.02.01

Alcatel·Lucent

UNIVERSITY

Confere o certificado a

Gustavo Dartagnan Xavier do Rego

Empresa: GVT

Por sua participação no Curso:

Starter Pack Enterprise

Período: 28/9/2009 a 9/10/2009

Carga horária: 80,0 horas

Eng. Jonny Alex Rodrigues dos Santos
Instrutor

Eng. Henri Marcos Esgalha Castelli
Coordenador

14.788

Alcatel·Lucent

UNIVERSITY

Confere o certificado a

Gustavo Dartagnan Xavier do Rego

Empresa: GVT

Por sua participação no Curso:

VoIP Advanced

Período: 19/10/2009 a 23/10/2009

Carga horária: 40,0 horas

Eng. Jonny Alex Rodrigues dos Santos
Instrutor

Eng. Henri Marcos Esgalha Castelli
Coordenador

15.000

Alcatel·Lucent

UNIVERSITY

Confere o certificado a

Gustavo Dartagnan Xavier do Rego

Empresa: GVT

Por sua participação no Curso:

CPU Loading & Redundancy

Período: 13/10/2009 a 16/10/2009

Carga horária: 32,0 horas

Eng. Jonny Alex Rodrigues dos Santos
Instrutor

Eng. Henri Marcos Esgalha Castelli
Coordenador

14.999

GENBAND®

Knowledge Services

Certificate of Completion

is hereby granted to

Gustavo Dartagnan Xavier Do Rego

for successfully completing all required coursework and training for the

S330 / S340 Basic Operations, Administration, Maintenance & Provisioning Course

Anna M. Marano

Instructor
Knowledge Services

Issued:

June 17, 2011

Pablo Gargiulo
President of Global Operations

GENBAND®

Knowledge Services

Certificate of Completion

is hereby granted to

GUSTAVO DARTAGNAN XAVIER DO REGO

for successfully completing all required coursework and training for the

ATCA15 – C20-ATCA Operations and Maintenance

Instructor
Knowledge Services

Issued:
September 22, 2011

Pablo Gargiulo
President of Global Operations

GENBAND®

Knowledge Services

Certificate of Completion

is hereby granted to

GUSTAVO DARTAGNAN XAVIER DO REGO

for successfully completing all required coursework and training for the

C2010 – C20 Solution Overview

Instructor
Knowledge Services

Issued:
September 16, 2011

Pablo Gargiulo
President of Global Operations

GENBAND®

Knowledge Services

Certificate of Completion

is hereby granted to

Gustavo Dartagnan Xavier

for successfully completing all required coursework and training for the

C2015 C20 Solution fault Management

Instructor
Knowledge Services

Issued:

October 21, 2011

Pablo Gargiulo
President of Global Operations

GENBAND®

Knowledge Services

Certificate of Completion

is hereby granted to

GUSTAVO DARTAGNAN XAVIER DO REGO

for successfully completing all required coursework and training for the

SP2K15 – Signaling Point 2000 Signaling Gateway Operations, Administration and Maintenance

Issued:

September 28, 2011

Instructor
Knowledge Services

Pablo Gargiulo
President of Global Operations

GENBAND®

Knowledge Services

Certificate of Completion

is hereby granted to

GUSTAVO DARTAGNAN XAVIER DO REGO

for successfully completing all required coursework and training for the

A218 – C20-Adaptative Application Engine (A2) Administration

Instructor
Knowledge Services

Issued:
September 14, 2011

Pablo Gargiulo
President of Global Operations

Certificate of Completion

BROADCOM®

This is to certify that

Gustavo Dartagnan Xavier

is hereby recognized for having successfully completed a course of instruction in

VMware vSAN: Troubleshooting [V7]

Completion Date: 5/6/2022

ca technologies A Broadcom Company

BROCADE A Broadcom Company

vmware by Broadcom

Symantec. A Division of Broadcom

Certificate of Completion

BROADCOM®

This is to certify that

Gustavo Dartagnan Xavier

is hereby recognized for having successfully completed a course of instruction in

VMware vSphere: Troubleshooting [V7]

Completion Date: 4/8/2022

ca technologies A Broadcom Company

BROCADE A Broadcom Company

vmware by Broadcom

Symantec. A Division of Broadcom

Certificate of Completion

BROADCOM®

This is to certify that

Gustavo Dartagnan Xavier

is hereby recognized for having successfully completed a course of instruction in

VMware vSAN: Management and Operations [V7]

Completion Date: 5/4/2022

ca technologies A Broadcom Company

BROCADE A Broadcom Company

vmware by Broadcom

Symantec. A Division of Broadcom

acme packet

Certificate of Completion

has been presented to

Gustavo Dartagnan Xavier

for the completion of

Net-Net Session Director Advanced Configuration

November 19 — 23 , 2012
Date

Marcos Cerqueira *Instructor*

Centro di Cultura Italiana
PARANÁ · SANTA CATARINA

CERTIFICATE

We hereby certify **GUSTAVO DARTAGNAN XAVIER DO REGO** the present Certificate of Attendance and Achievement of the "***Intensive Italian Language Course - B1 Level***" taught ***100% Online*** through CCI-PR/SC - Centro di Cultura Italiana Paraná e Santa Catarina, with the registered office in Curitiba, State of Paraná, from March 20, 2025 to December 4, 2025, with a workload of 150.

REFERENCE LEVEL
B1 Level of the Common European Framework of Reference for Languages (CEFR) Is able to understand the main points when clear and standard language is used and the topics are familiar (subjects addressed at work, school, and leisure time, etc.). Is able to deal with situations encountered in the region where the target language is spoken. Is able to produce simple and coherent speech on topics that are familiar or of personal interest. Can describe experiences and events, dreams, hopes, and ambitions, as well as briefly explain reasons and justifications for an opinion or project.
Attendance: 96%
Performance: 84/100
The registration of this Certificate is recorded in book No. ---06--- under No. 24063

Curitiba, December 19, 2025.

Domingos José Budel

Interim President CCI PR/SC

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 13, 2026.

Centro di Cultura Italiana
PARANÁ · SANTA CATARINA

CERTIFICADO

Conferimos a **GUSTAVO DARTAGNAN XAVIER DO REGO** o presente Certificado de Frequência e Aproveitamento do "***Curso Intensivo de Língua Italiana – Nível B1***" ministrado ***100% Online*** através do CCI-PR/SC - Centro di Cultura Italiana Paraná e Santa Catarina, com sede em Curitiba, Estado do Paraná, no período de 20 de março de 2025 a 04 de dezembro de 2025, totalizando 150 horas de atividades realizadas.

NÍVEL DE REFERÊNCIA
Nível B1 do Quadro Europeu Comum de Referência para Línguas (CEFR) É capaz de compreender as questões principais, quando é usada uma linguagem clara e estandardizada e os assuntos lhe são familiares (temas abordados no trabalho, na escola e nos momentos de lazer, etc.) É capaz de lidar com as situações encontradas na região onde se fala a língua-alvo. É capaz de produzir um discurso simples e coerente sobre assuntos que lhe são familiares ou de interesse pessoal. Pode descrever experiências e eventos, sonhos, esperanças e ambições, bem como expor brevemente razões e justificações para uma opinião ou um projeto.
Frequência: 96%
Aproveitamento: 84/100
O registro do presente Certificado se encontra no livro nº --- 06--- sob nº 24063

Curitiba, 19 de dezembro de 2025.

Domingos José Budel

Presidente Interino CCI PR/SC

CERTIFICATE

We hereby certify, for all due purposes, that **Gustavo Dartagnan Xavier do Rego** participated in the Continuing Education Courses listed below, at Celin - Center for Languages and Interculturality of the Federal University of Paraná**.**

	Term	Grade	Attendance	Class hours
Basic English IV	2nd semester of 2006	8.7	90%	60 hours
Pre-Intermediate English I	1st semester of 2007	8.5	83%	60 hours
Pre-Intermediate English II	2nd semester of 2007	8.4	80%	60 hours
Intermediate English I	1st semester of 2008	8.8	80%	60 hours
Intermediate English II	2nd semester of 2008	7.7	70%	60 hours
Intermediate English III	1st semester of 2009	8.9	83%	60 hours
Intermediate English IV	2nd semester of 2009	8.3	63%	60 hours

Total class hours: 420 hours

Note: Students are considered approved at this institution if they obtain a grade of at least 7.0 (seven) and a minimum attendance of 80%.

Curitiba, December 1, 2025

gov.br
Digitally signed document
ALISON ROBERTO GONCALVES
Date: 12/01/2025 2:40:49 PM - 0300
Verify at https://validar.iti.gov.br

Prof. Dr. Alison Roberto Gonçalves
Director of the Center for Languages and Interculturality of UFPR

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 22, 2026.

DECLARAÇÃO

Declaramos para os devidos fins que **Gustavo Dartagnan Xavier do Rego** participou dos Cursos de Extensão Universitária, abaixo relacionados, no Celin - Centro de Línguas e Interculturalidade da Universidade Federal do Paraná.

	Período	Média	Frequência	Horas/aula
Inglês Básico IV	2º semestre de 2006	8,7	90%	60hs
Inglês Pré-intermediário I	1º semestre de 2007	8,5	83%	60hs
Inglês Pré-intermediário II	2º semestre de 2007	8,4	80%	60hs
Inglês Intermediário I	1º semestre de 2008	8,8	80%	60hs
Inglês Intermediário II	2º semestre de 2008	7,7	70%	60hs
Inglês Intermediário III	1º semestre de 2009	8,9	83%	60hs
Inglês Intermediário IV	2º semestre de 2009	8,3	63%	60hs

Total geral de horas: 420hs

Observação: São considerados aprovados nesta instituição de ensino alunos que obtiverem média de pelo menos 7,0 (sete) e frequência de no mínimo 80%.

Curitiba, 01 de dezembro de 2025

gov.br Documento assinado digitalmente
ALISON ROBERTO GONCALVES
Data: 01/12/2025 14:40:49-0300
Verifique em https://validar.iti.gov.br

Prof. Dr. Alison Roberto Gonçalves
Diretor do Centro de Línguas e Interculturalidade da UFPR

2801 Network Boulevard
Suite 300
Frisco, Texas 75034

August 2, 2011

Gustavo Dartagnan Xavier do Rego
GVT
Rua Lourenço Pinto, 299/3° andar
Centro – Curitiba – PR – Brasil

Re: Visit of Gustavo Dartagnan Xavier do Rego to Genband US LLC

GENBAND US LLC would like to invite Mr. Gustavo Dartagnan Xavier do Rego, of GVT to Raleigh, North Carolina, for customer training in C2015 C20 – Solution Fault Management, the week of October 18th – October 21st, 2011.

GENBAND is a private company founded in 1999 by some of the world's leading venture capital firms. GENBAND has evolved since its inception to become a market leader in gateways. Today, GENBAND is a leading supplier of secure, IP infrastructure products and solutions for mobile and fixed line service providers worldwide. Headquartered in Frisco, Texas, GENBAND has training facilities in Texas, Raleigh, Ottawa, and China.

Itinerary/Agenda Items	Location	Dates
Training in C2015 C20 – Solution Fault Management	4001 East Chapel Hill-Nelson Highway, Research Triangle Park, North Carolina 27709	10/18/2011 – 10/21/2011

During his visit, Mr. do Rego will not have access to technology or data that is controlled for export to Brazil under the Export Administration Regulations (EAR) or the International Trafficking in Arms Regulations (ITAR). Please contact me at +972.265.3970 with any questions regarding this business-related visit.

Sincerely,

Lynn Woodard

Lynn Woodard
Director, Talent Management
Human Resources
GENBAND

Search Create

Spaces / Mobile, Fixed Voice,... /
Add parent / MFWE-148

KAFKA integration

3

Closed Agents

Done Improve Task

Description

Please document here KAFKA integration efforts and progress.

Subtasks

Add subtask

Linked work items

Add linked work item

Qase: runs

Link a run

Name	Project	Date	Status

Activity

All Comments History Work log Trans

Comments summary — Only visible to you

Details

Assignee
GX Gustavo XavierdoRego

Reporter
DR Darian Rodriguez

Labels
MFWEMobile
MFWEObservability
MFWEProjects
MFWEQoEimprovements

Due date
None

Area of Impact
Add options

Stakeholders Priority
Add option

Product Priority
Add option

Issue Delivered On
None

Numeric Priority
None

Four
Add options

Quickstart

GX

Add a comment...

Suggest a reply... Status update...

Pro tip: press M to comment

GX **Gustavo XavierdoRego**
May 14, 2026 at 5:21 PM

SNMP conversion to OTLP Json completed. Integrating missing equipment's in other Jira task.

GX **Gustavo XavierdoRego**
November 18, 2025 at 4:25 PM

CSV conversion to OTLP Json completed. All PGW integrated to Middleware and graphs were build in Grafana

GX **Gustavo XavierdoRego**
September 11, 2025 at 1:06 PM

Nokia IMS XML convertion to OTLP (Open telemetry) is completed; Created scripts to convert CSV and SNMP, but depending on firewall opening to put in production.

DR **Darian Rodriguez**
April 9, 2025 at 12:07 PM

Things to track now:

1-Voice elements dashboard creation after Sevone info is available in Kafka.

2-check MVNO info they will be getting from SevOne and evaluate if we can deploy something.

Story Points

0

Time tracking

20w logged

Priority

= Medium

> Development

> More fields Original estimate, Co...

> Automation Rule executions

> Qase Linked Test cases

Created April 9, 2025 at 10:58 AM
Updated May 15, 2026 at 10:56 AM
Resolved May 14, 2026 at 5:23 PM

3-investigate if bulkstats can be converted to telemetry format.

4-integrate all remaining MVNO elements. Either via middleware or direct.

5-see how we can integrate our other SNMP elements to sevone (DNS/STP/Etc)
6-evaluate syslogs capabilities to create dashboards and correlations.

Gustavo XavierdoRego
May 14, 2026 at 5:20 PM

@Darian Rodriguez

1 - done

2 - done

3 - done (converted bulkstats)

4 - In progress in other Jira task (SNMP, SFTP, etc..)

5 - SNMP Poller in Middleware developed and deployed

6 - Need help do identify our equipment's in the logs from grafana

Search Create

Spaces / Mobile, Fixed Voice,... /
MFWE-1260 / MFWE-1318

1

ZTR MVP Development

Closed Agents

Done Improve Task

Description

The basic development of the integration between Grafana and ZTR, was the Grafana Notification Template and an raw webhook for posting in Kafka ZTR topic.

Grafana Notification Template:

```
{{ define "kafka.silver.v2" }}
  {{- $first := index .Alerts 0 -

  {{- /* 1. Variable Extraction &
  {{- /* environment: default to
  {{- $environment := index $firs

  {{- /* instance: default to "gl
  {{- $instance := index $first.L

  {{- /* technical_severity: defa
  {{- $severity := index $first.L

  {{- /* utt_workLogDetails: buil
  {{- $utt_workLogDetails := "" -

  {{- range .Alerts -}}
    {{- $summary := index .Annota
    {{- $utt_workLogDetails = pri
  {{- end -}}

  {{- if eq $utt_workLogDetails "
    {{- $utt_workLogDetails = (tm
  {{- end -}}

```

Details

Assignee
GX Gustavo XavierdoRego

Reporter
DR Darian Rodriguez

Labels
None

Due date
None

Area of Impact
Add options

Stakeholders Priority
Add option

Product Priority
Add option

Issue Delivered On
None

Numeric Priority
None

Found In
Add options

Story
0

Quickstart

```
26
27    {{- /* business_severity: defau
28    {{- $business_severity := index
29
30    {{- /* service_name: default to
31    {{- $service_name := index $fir
32
33
34
35
36    {{- /* Metric Value Extraction
37    {{- $metricValue := 0.0 -}}
38    {{- if $first.Values.M }}{{ $me
39
40    {{- /* utt_issueSummary: defaul
41    {{- $utt_issueSummary := index
42
43    {{- /* utt_symptomCode: default
44    {{- $utt_symptomCode := index $
45
46    {{- /* utt_issueCode: default t
47    {{- $utt_issueCode := index $fi
48
49    {{- /* actionability_isActionab
50    {{- $actionability_isActionable
51
52    {{- /* service_area: default to
53    {{- $service_area := index $fir
54
55    {{- /* service_customerImpactin
56    {{- $service_customerImpacting
57
58    {{- /* service_businessImpactin
59    {{- $service_businessImpacting
60
61    {{- /* category_probableCause:
62    {{- $category_probableCause :=
63
64    {{- /* category_detectionMethod
65    {{- $category_detectionMethod :
66
67    {{- /* hiplink_groups: default
68    {{- $hiplink_groups := index $f
```

Time tracking

1w logged

Priority

TBD

Parent

MFWE-1260 ZTR MVP

Development

More fields Original estimate, Co...

Automation Rule executions

Qase Linked Test cases

Created May 7, 2026 at 6:03 PM

Updated May 15, 2026 at 10:56 AM

Resolved May 8, 2026 at 5:03 PM

```
69
70    {{- /* assinged_to_group: defau
71    {{- $assigned_to_group := index
72
73
74    {{- /* 2. Construct the Diction
75    {{- coll.Dict
76      "schema_version" "2.0"
77      "event_id" $first.Fingerprint
78      "event_type" (tmpl.Inline "{{
79      "correlation_key" (printf "Gr
80      "dedupe_hint" (printf "%s|%s"
81      "detected_at" $first.StartsAt
82      "last_changed_at" $first.Star
83      "source_system" "Grafana-Aler
84      "environment" $environment
85      "business_severity" $business
86      "technical_severity" $severit
87      "utt_issueSummary" $utt_issue
88      "utt_workLogDetails" $utt_wor
89      "utt_issueCode" $utt_issueCod
90      "utt_symptomCode" $utt_sympto
91      "actionability_isActionable"
92      "actionability_reason" "Metri
93      "service_name" $service_name
94      "service_area" $service_area
95      "service_customerImpacting" $
96      "service_businessImpacting" $
97      "category_problemCode" (index
98      "category_probableCause" $cat
99      "category_detectionMethod" $c
100     "assigned_to_group" $assigned
101     "runbook" (coll.Dict "url" $f
102     "routing" (coll.Dict "hiplink
103     "impacts" (coll.Dict "busines
104     "entity" (coll.Dict "type" "s
105     "metrics" (coll.Slice (coll.D
106     | data.ToJSON }}
107 {{ end }}
```

Subtasks

Add subtask

Linked work items

Add linked work item

Activity

All | Comments | History | Work log | Transiti

GX

Add a comment...

Status update... | Thanks... | Agr

Pro tip: press **M** to comment

ZTR MVP Testing

Closed Agents

Done Improve Task

Description

We created many alerts for testing the integration:

UTT Ticket Reference (Monday May 4th]	UTT Ticket Referenc (Friday May 1st]
UTT000005507259	UTT000005499440
UTT000005507310	UTT000005499413
UTT000005507324	UTT000005499487
UTT000005507287	UTT000005499405
UTT000005507415	UTT000005499676
UTT000005507422	UTT000005499697
UTT000005507421	UTT000005499983
UTT000005507424	UTT000005500012
UTT000005507426	UTT000005500005
UTT000005507522	UTT000005500158
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186

Details

Assignee
GX Gustavo XavierdoRego

Reporter
DR Darian Rodriguez

Labels
None

Due date
None

Area of Impact
Add options

Stakeholders Priority
Add option

Product Priority
Add option

Issue Delivered On
None

Numeric Priority
None

Found In
Add options

Story
0

Quickstart

UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005507516	UTT000005500186
UTT000005506279	-
UTT000005507515	UTT000005500237
UTT000005507517	UTT000005500248
UTT000005507518	UTT000005500249
UTT000005507556	UTT000005500253
UTT000005507557	UTT000005500265
UTT000005507560	UTT000005500268
UTT000005507561	UTT000005500293
UTT000005507569	UTT000005500285
UTT000005507579	UTT000005500270
UTT000005506281	UTT000005499528
UTT000005507589	UTT000005500297
UTT000005507587	UTT000005500295

Time tracking

1w logged

Priority

TBD

Parent

MFWE-1260 ZTR MVP

Development

More fields Original estimate, Co...

Automation Rule executions

Qase Linked Test cases

Created May 7, 2026 at 6:03 PM

Updated May 15, 2026 at 10:56 AM

Resolved May 8, 2026 at 5:05 PM

UTT000005506282	UTT000005501084
UTT000005506285	UTT000005501624
UTT000005506280	UTT000005501083
UTT000005506284	UTT000005500880
UTT000005506288	UTT000005500861
UTT000005506300	UTT000005501082

Subtasks

Add subtask

Linked work items

Add linked work item

Activity

All | Comments | History | Work log | Tr siti

GX

Add a comment...

Status update... | Thanks... | Agr

Pro tip: press M to comment

Search Create

Spaces / OPTIMUM CTIO WAR ROO... / OWR-3156

Mobile Platform - Health Status Dashboards (Kafka/Grafana)

3

Completed Agents

Improve Deliverable

Key details

Description

IBEAUCHA - Update the description field

Benefit Hypothesis and Key Results

None

Subtasks

Add subtask

Linked work items

is child task of

OWR-166 **IN PROGRESS** DR

Qase: runs

+ Link a run

Name	Project	Date	Status

Activity

All Comments History Work log Trans

Details

Assignee

GX Gustavo XavierdoRego

Reporter

JA JIRA Admin

Labels

DEFCON2-MVW

Due date

None

Start Date (migrated)

None

War Room

Mobile & Voice

War Room Lead

Ian Beauchamp

War Room Deliverables

Health Dashboards (Kafka/Graf...

Percentage Completed

Add option

Defense Condition

DEFCON-2

Quickstart

GX

Add a comment...

Suggest a reply... Status update...

Pro tip: press M to comment

GX **Gustavo XavierdoRego**
May 13, 2026 at 9:55 AM

Many Dashboards Created:
https://grafana.alticeusa.net/dashboards/f/eeil2vs0dyio0a/?orgId=1

IB **Ian Beauchamp**
June 10, 2025 at 5:39 PM

CC: @Darian Rodriguez

Priority
= Medium

> Development

> More fields Original estimate, Tim...

> Automation Rule executions

> Qase Linked Test cases

Created June 10, 2025 at 11:26 AM
Updated May 13, 2026 at 9:55 AM

Exhibit C.II - Second Prong - Certification

Federative Republic of Brazil
Federal Council of Engineering, Architecture, and Agronomy
Professional Identity Card

CONFEA CREA

National Registry
170108389-2

Name
GUSTAVO DARTAGNAN XAVIER DO REGO

Parents
ELIAS XAVIER DO REGO NETO
BERNADETE CHIUZA XAVIER

C.P.F.	Identity Document	Blood Type
025.907.999-50	6.129.994-7 SSP-PR	

Birth Date	Place of Birth	State	Nationality
09/23/1978	CAMPO MOURAO	PR	BRAZILIAN

CREA Registration	Issuance Date	Expiration Date
CREA-PR	01/19/2007	01/18/2012

President's Signature

Registration with CREA
PR-88187/D





Valid throughout the National Territory

Professional License
Electrical Engineer

Professional Signature
Gustavo Dartagnan Xavier

It's valid as an ID and has public faith (Article 56, item 82, of Law No. 5,194, of 12/24/1966, and Law No. 6,206, of 05/07/1975).

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 10 2026

República Federativa do Brasil

Conselho Federal de Engenharia, Arquitetura e Agronomia

Carteira de Identidade Profissional

CONFEA CREA

Registro Nacional
170108389-2

Nome
GUSTAVO DARTAGNAN XAVIER DO REGO

Filiação
ELIAS XAVIER DO REGO NETO
BERNADETE CHIUZA XAVIER

C.P.F.	Documento de Identidade	Tipo Sang.
025.907.999-50	6.129.994-7 SSP-PR	

Nascimento	Naturalidade	UF	Nacionalidade
23/09/1978	CAMPO MOURAO	PR	BRASILEIRA

Crea de Registro	Emissão	Validade
CREA-PR	19/01/2007	18/01/2012

Ass. Presidente

Registro no Crea
PR-88187/D





Título Profissional
Engenheiro Eletricista

Ass. do Profissional
Gustavo Dartagnan Xavier

Válida em todo o Território Nacional

Vale como Documento de Identidade e tem Fé Pública (§2º do art. 56 da Lei nº 5194 de 24/12/66 e Lei nº 6206 de 07/05/75)

REGIONAL COUNCIL OF ENGINEERING AND
AGRONOMY OF PARANÁ

CERTIFICATE OF NO ETHICAL VIOLATIONS

The Regional Council of Engineering and Agronomy of Paraná – CREA-PR hereby certifies that the professional identified below has not been subject to ethical penalties in the past five years.

Certificate No.: 130263/2025 Expiration date: 02/18/2026

Name: GUSTAVO DARTAGNAN XAVIER DO REGO

Professional License - CREA-PR Nº: PR-88187/D

National Registration No.: 1701083892

Registered since: 11/24/2006

Parents: ELIAS XAVIER DO REGO NETO
BERNADETE CHIUZA XAVIER

Date of Birth: 09/23/1978

Identity Card: 6.129.994-7 CPF: 02590799950

Place of Birth: CAMPO MOURÃO/PR

Degree(s):

ELECTRICAL ENGINEER

FEDERAL UNIVERSITY OF PARANÁ

Date of Graduation Ceremony Degree Conferral: 05/10/2006

Status: Interrupted

Professional attributions:

CONFEA Resolution No. 218/1973 – Article 8, dated 06/29/1973

CONFEA Resolution No. 218/1973 – Article 9, dated 06/29/1973

The authenticity of this certificate may be verified on the CREA-PR website (http://www.crea-pr.org.br) using protocol No. 318303/2025.

Issued via the Internet on 11/20/2025 at 4:38:24 PM

This document does not require a signature, pursuant to Service Instruction No. 002/2014.
Forgery of this document constitutes a crime under the Brazilian Penal Code, subjecting the offender to the applicable criminal prosecution.

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 10 2026

CONSELHO REGIONAL DE ENGENHARIA
E AGRONOMIA DO PARANÁ

CERTIDÃO NEGATIVA DE INFRAÇÕES ÉTICAS

O Conselho Regional de Engenharia e Agronomia do Paraná - CREA-PR, certifica que o profissional abaixo não sofreu penalidades éticas nos últimos cinco anos.

Certidão nº: 130263/2025 Validade: 18/02/2026

Nome: GUSTAVO DARTAGNAN XAVIER DO REGO

Carteira - CREA-PR Nº: PR-88187/D

Registro Nacional:1701083892

Registrado(a) desde: 24/11/2006

Filiação: ELIAS XAVIER DO REGO NETO
BERNADETE CHIUZA XAVIER

Data de Nascimento: 23/09/1978

Carteira de Identidade: 6.129.994-7 CPF: 02590799950

Naturalidade: CAMPO MOURAO/PR

Título(s):

ENGENHEIRO ELETRICISTA

UNIVERSIDADE FEDERAL DO PARANÁ

Data da Colação de Grau: Diplomação: 10/05/2006

Situação: Interrompido

Atribuições profissionais:

Resolução do Confea N.º 218/1973 - Art. 8º de 29/06/1973 do CONFEA

Resolução do Confea N.º 218/1973 - Art. 9º de 29/06/1973 do CONFEA

A autenticidade desta certidão poderá ser confirmada na página do CREA-PR (http://www.crea-pr.org.br), através do protocolo n.º 318303/2025.

Emitida via Internet em 20/11/2025 16:38:24

Dispensa-se a assinatura neste documento, conforme Instrução de Serviço Nº 002/2014.
A falsificação deste documento constitui-se em crime previsto no Código Penal Brasileiro, sujeitando o autor à respectiva ação penal.

L5194

planalto.gov.br/ccivil_03/leis/l5194.htm

Presidency of the Republic,

Civil House

, Sub-Chief of Legal Affairs

LAW No. 5,194, OF DECEMBER 24, 1966.

Parts maintained by the National Congress
Veto message

See Decree Law No. 241, of 1967
See Decree No. 79,137, of 1977
See Law No. 8,195, of 1991 See Law No. 12,378, of 2010

Regulates the practice of the professions of Engineer, Architect and Agricultural Engineer, and provides other measures.

The President of the Republic hereby announces that the **National Congress** decrees and I sanction the following Law:

The National Congress decrees:

TITLE I

Regarding the Professional Practice of Engineering, Architecture, and Agronomy

Chapter I

Professional Activities

Section I

Characterization and Practice of Professions

Article 1. The professions of engineer, architect, and agricultural engineer are characterized by achievements of social and human interest that involve the realization of the following projects:

a) exploitation and utilization of natural resources;

b) means of transportation and communication;

c) urban, rural and regional buildings, services and equipment, in their technical and artistic aspects;

d) facilities and means of access to coasts, waterways and bodies of water and land extensions;

e) Industrial and agricultural development.

Article 2. The practice of the profession of engineer, architect, or agricultural engineer in the country is guaranteed, provided that the conditions of competence and other legal requirements are met:

a) to those who possess a duly registered diploma from an official or recognized college or higher education institution in engineering, architecture, or agronomy existing in the country;

b) those who possess, duly validated and registered in the country, a diploma from a foreign college or school of higher education in engineering, architecture or agronomy, as well as those whose practice is supported by international exchange agreements;

c) to foreign contractors who, at the discretion of the Federal and Regional Councils of Engineering, Architecture and Agronomy, considering the scarcity of professionals in a given specialty and the national interest, have their qualifications temporarily registered.

Sole paragraph. The practice of the activities of engineer, architect and agricultural engineer is guaranteed, respecting the limits of their respective licenses and excluding those issued, on a provisional basis, until the publication of this Law, to those who, on this date, are registered with the Regional Councils.

Section II

Regarding the use of the Professional Title

Article 3. The titles of engineer, architect, or agricultural engineer, which must include the characteristics of their basic training, are reserved exclusively for the professionals referred to in this Law.

Sole paragraph. The qualifications referred to in this article may be accompanied by other designations relating to specialization, advanced training, and postgraduate courses.

Article 4. The qualifications of engineer, architect, or agricultural engineer may only be added to the name of a legal entity composed exclusively of professionals who hold such titles.

Article 5. Only commercial or industrial firms whose board of directors is composed, in its majority, of professionals registered with the Regional Councils may include the words engineering, architecture, or agronomy in their name.

Section III

Regarding the illegal practice of a profession.

Article 6. Illegally practicing the profession of engineer, architect, or agricultural engineer:

a) any individual or legal entity that performs acts or provides public or private services reserved for the professionals covered by this law and that does not have registration with the Regional Councils;

b) the professional who undertakes activities outside the scope of duties specified in their registration;

c) the professional who lends their name to individuals, firms, organizations, or companies executing works and services without their actual participation in said works;

d) a professional who, while suspended from practice, continues to work;

(e) the firm, organization or company that, as a legal entity, performs duties reserved for professionals in engineering, architecture and agronomy, in violation of the provisions of the sole paragraph of article 8 of this law.

Section IV

Professional responsibilities and coordination of their activities.

Article 7. The professional activities and responsibilities of engineers, architects, and agricultural engineers consist of:

a) Performance of duties, functions and commissions in state, semi-state, autonomous, mixed-economy and private entities;

b) planning or design, in general, of regions, zones, cities, works, structures, transport, exploitation of natural resources and development of industrial and agricultural production;

c) studies, projects, analyses, evaluations, inspections, expert reports, opinions and technical dissemination;

d) teaching, research, experimentation and testing;

e) inspection of works and technical services;

f) management of works and technical services;

g) execution of works and technical services;

h) specialized technical, industrial or agricultural production.

Sole paragraph. Engineers, architects, and agricultural engineers may engage in any other activity that, by its nature, falls within the scope of their professions.

Article 8. The activities and duties listed in subparagraphs a, b, c, d, e, and f of the preceding article are the responsibility of individuals legally qualified to do so.

Sole paragraph. Legal entities and state organizations may only carry out the activities listed in Article 7, with the exception of those contained in subparagraph "a", with the effective participation and declared authorship of a legally qualified professional registered with the Regional Council, ensuring the rights conferred upon them by this law.

Article 9. The activities listed in subparagraphs geh of Article 7, observing the provisions of this law, may be carried out, indiscriminately, by professionals or by legal entities.

Article 10. It is the responsibility of the Congregations of engineering, architecture, and agronomy schools and faculties to indicate to the Federal Council, based on the qualifications assessed through professional training, in general terms, the characteristics of the professionals they graduate.

Article 11. The Federal Council shall organize and maintain an up-to-date list of degrees awarded by schools and colleges, as well as their courses and curricula, indicating their characteristics.

Article 12. In the Union, the States and the Municipalities, in autonomous, semi-autonomous and mixed-economy entities, the positions and functions that require knowledge of engineering, architecture and agronomy, as listed in item "g" of Article 27, may only be exercised by professionals qualified in accordance with this law.

Article 13. Studies, plans, projects, reports, and any other engineering, architectural, and agronomic work, whether public or private, may only be submitted to the judgment of the competent authorities and will only have legal value when their authors are qualified professionals in accordance with this law.

Article 14. In graphic works, specifications, budgets, opinions, reports, and judicial or administrative acts, in addition to the signature, preceded by the name of the company,

society, institution, or firm to which they pertain, it is mandatory to explicitly mention the title of the professional who signs them and the number of the professional card referred to in Article 56.

Article 15. Contracts relating to any branch of engineering, architecture, or agronomy, including the preparation of projects, direction, or execution of works, are null and void when entered into by a public or private entity with a natural or legal person not legally authorized to practice the activity under the terms of this law.

Article 16. For the duration of the execution of works, installations and services of any nature, it is mandatory to place and maintain visible and legible signs for the public, containing the name of the author and co-authors of the project, in all its technical and artistic aspects, as well as those responsible for the execution of the works.

Chapter II

Regarding responsibility and authorship

Article 17. The copyright of an engineering, architectural, or agronomic plan or project, respecting the express contractual relationships between the author and other interested parties, belongs to the professional who prepares it.

Sole paragraph. The professional who created them is entitled to the awards or honorary distinctions granted to projects, plans, works, or technical services.

Article 18. Changes to the original project or plan may only be made by the professional who prepared it.

Sole paragraph. If the author of the original project or plan is unable or refuses to provide their professional collaboration, and the request is duly proven, the alterations or modifications thereof may be made by another qualified professional, who will be responsible for the modified project or plan.

Article 19. When the general concept that characterizes a plan or project is developed jointly by legally qualified professionals, all will be considered co-authors of the project, with the corresponding rights and duties.

Article 20. Professionals or organizations of specialized technicians who collaborate on a part of the project must be explicitly mentioned as authors of the part entrusted to them, and all documents, such as plans, drawings, calculations, opinions, reports, analyses, standards, specifications, and other documents relating to the project, must be signed by them.

Sole paragraph. The technical responsibility for the expansion, continuation, or completion of any engineering, architecture, or agronomy project shall fall to the registered professional or entity that accepts this responsibility, who shall also be held responsible for the works, and the Federal Council shall adopt a resolution regarding the responsibilities for the parts already executed or completed by other professionals.

Article 21. Whenever the author of the project calls upon professionals from the organization of professionals, specialized and legally qualified, to perform their duties, these professionals shall be considered jointly responsible for the part that concerns them.

Article 22. The author of the project or their representatives are guaranteed the right to monitor the execution of the work, in order to ensure its completion in accordance with the conditions, specifications and other technical details established therein.

Sole paragraph. The specialized professionals who participate, as co-responsible parties, in the elaboration of the project will have the right guaranteed in this article to the author of the project, in the part that concerns them.

Article 23. The Regional Councils shall create registers of authorship of plans and projects, to safeguard the copyright of professionals who so desire.

TITLE II

Regarding the oversight of the practice of professions.

Chapter I

From the supervisory bodies

~~Article 24. The application of the provisions of this law, the verification and supervision of the exercise and activities of the professions regulated herein shall be carried out by a Federal Council of Engineering, Architecture and Agronomy (CONFEA) and Regional Councils of Engineering, Architecture and Agronomy (CREA), organized in such a way as to ensure unity of action.~~

~~Article 24. The application of the provisions of this law and the supervision of the practice of the professions referred to herein shall be regulated by the Federal Council of Engineering, Architecture and Agronomy (CONFEA) for the necessary harmony and unity of action. (Wording given by Decree Law No. 620, of 1969)~~

Article 24. The application of the provisions of this law, the verification and supervision of the exercise and activities of the professions regulated herein shall be carried out by a Federal

Council of Engineering, Architecture and Agronomy (CONFEA) and Regional Councils of Engineering, Architecture and Agronomy (CREA), organized in such a way as to ensure unity of action. (Reinstated by Decree-Law No. 711 of 1969).

Article 25. While maintaining those already existing, the Federal Council of Engineering, Architecture and Agronomy will promote the establishment, in the States, Federal District and Federal Territories, of the Regional Councils necessary for the execution of this law, and the action of any of them may extend to more than one State.

§ 1 The proposal to create new Regional Councils will be made by the majority of professional associations and schools or colleges based in the new Region, with the Councils affected by the initiative being responsible for providing their opinion and forwarding the proposal to the Federal Council for approval.

§ 2. Each unit of the Federation may only be under the jurisdiction of one Regional Council.

§ 3 The headquarters of the Regional Councils will be in the Federal District, in the capital of a State or Federal Territory.

Chapter II

From the Federal Council of Engineering, Architecture and Agronomy

Section I

Regarding the establishment of the Council and its responsibilities.

Article 26. The Federal Council of Engineering, Architecture and Agronomy (CONFEA) is the highest authority for overseeing the professional practice of engineering, architecture, and agronomy.

Article 27. The Federal Council's responsibilities include:

a) to organize its internal regulations and establish general rules for the regulations of the Regional Councils;

b) to approve the internal regulations organized by the Regional Councils;

c) to examine and decide in the last instance on matters relating to the practice of the professions of engineering, architecture and agronomy, and may annul any act that is not in accordance with this law;

d) to take cognizance of and resolve any doubts raised in the Regional Councils;

(e) to rule, as a final instance, on appeals regarding registrations, decisions, and penalties imposed by the Regional Councils;

f) to issue and publish the resolutions foreseen for the regulation and execution of this law, and, after consulting the Regional Councils, to resolve any omissions;

(g) to list the positions and functions of state, semi-state, autonomous and mixed-economy services for which the title of engineer, architect or agricultural engineer is required;

h) incorporate into its own income and expenditure statements those of the Regional Councils;

i) send to the Regional Councils a copy of the document forwarded to the Court of Auditors, within 30 (thirty) days of dispatch;

j) to publish annually a list of degrees, courses and higher education institutions, as well as, periodically, a list of qualified professionals;

k) to establish, after consulting the respective Regional Council, the conditions under which the professional associations of the region may have the right to representation therein;

l) to promote, at least once a year, the meetings of representatives of the Federal and Regional Councils foreseen in article 53 of this law;

m) to examine and approve the proportion of representation of professional groups in the Regional Councils;

n) to judge, on appeal, violations of the Professional Code of Ethics for engineers, architects, and agricultural engineers, drawn up by the professional associations;

o) to approve or reject proposals for the creation of new Regional Councils;

(p) to set and amend the annual fees, emoluments and charges payable by the professionals and legal entities referred to in article 63.

~~q) To promote audits and other investigations, inquiries or verifications regarding the functioning of the Regional Councils and to adopt measures for their efficiency and regularity. (Included by Decree Law No. 620, of 1969)~~

~~q) To promote audits and other investigations, inquiries or verifications regarding the functioning of the Regional Councils and to adopt measures for their efficiency and regularity. (Reinstated by Decree-Law No. 711 of 1969).~~

q) to authorize the president to acquire, encumber, or, through bidding, dispose of real estate. (Wording given by Law No. 6,619 of 1978)

Sole paragraph. In matters relating to professional duties, the decision of the Federal Council shall only be taken with a minimum of 12 (twelve) favorable votes.

~~Article 28. The following constitute the income of the Federal Council:~~

~~a) one tenth of the gross income of the Regional Councils;~~

~~a) the portion referred to in Article 36, of the gross revenue collected by the Regional Councils;~~ (Wording given by Decree Law No. 620, of 1969)

~~a) one tenth of the gross income of the Regional Councils;~~ (Reinstated by Decree-Law No. 711 of 1969).

~~b) donations, legacies, interest and property income;~~

~~c) subsidies.~~

Article 28 - The following constitute the income of the Federal Council: (Wording given by Law No. 6,619 of 1978)

I - fifteen percent of the proceeds from the collection foreseen in items I to V of article 35; (Included by Law No. 6,619, of 1978)

II - donations, legacies, interest and patrimonial income; (Included by Law No. 6,619 of 1978)

III - subsidies; (Included by Law No. 6,619 of 1978)

IV - other occasional income. (Included by Law No. 6,619 of 1978)

Section II

Regarding composition and organization

Article 29. The Federal Council shall be composed of 18 (eighteen) members, Brazilian citizens, holding degrees in Engineering, Architecture or Agronomy, qualified in accordance with this law, observing the following composition:

a) 15 (fifteen) representatives of professional groups, being 9 (nine) engineers representing engineering modalities established in generic terms by the Federal Council, with a minimum

of 3 (three) modalities, in order to correspond to the technical trainings contained in the records existing therein; 3 (three) architects and 3 (three) agricultural engineers;

b) 1 (one) representative from engineering schools, 1 (one) representative from architecture schools and 1 (one) representative from agronomy schools.

§ 1 Each member of the Federal Council shall have 1 (one) alternate.

§ 2 The president of the Federal Council shall be elected by an absolute majority from among its members.

§ 3 The vacancy left by the representative appointed as president of the Council will be filled by his alternate.

Article 30. The representatives of the professional groups referred to in subparagraph "a" of Article 29 and their alternates shall be elected by their respective registered professional associations in the regions, in assemblies specifically convened for this purpose by the Regional Councils, with each region being responsible for indicating, on a rotating basis, one member of the Federal Council.

Sole paragraph. The representatives of the professional associations in the assemblies referred to in this article shall be elected by them, in accordance with their respective statutes.

Article 31. The representatives of the schools or colleges and their alternates shall be elected by an absolute majority of votes in an assembly of delegates from each professional group, designated by their respective Congregations.

Art. 32. The terms of office for members of the Federal Council and the President shall be 3 (three) years.

Sole paragraph. The Federal Council shall be renewed annually by one-third of its members.

Chapter III

From the Regional Councils of Engineering, Architecture and Agronomy

Section I

Regarding the establishment of Regional Councils and their responsibilities.

Article 33. The Regional Councils of Engineering, Architecture and Agronomy (CREA) are bodies responsible for overseeing the practice of the engineering, architecture and agronomy professions in their respective regions.

Article 34. The Regional Councils have the following responsibilities:

a) to draft and amend its internal regulations, submitting them to the Federal Council for approval.

b) to create Specialized Chambers that meet the conditions for greater efficiency in oversight established in this law;

c) to examine complaints and representations regarding records;

d) to judge and decide, on appeal, the proceedings for violations of this law and the Code of Ethics, sent by the Specialized Chambers;

e) to judge, on appeal, the proceedings for the imposition of penalties and fines;

f) to organize the system for monitoring the practice of professions regulated by this law;

(g) publish reports of their work and lists of registered professionals and firms;

h) to examine registration requests and processes in general, issuing professional cards or registration documents;

i) to suggest to the Federal Council measures necessary for the regularity of services and the supervision of the practice of professions regulated in this law;

j) to act, in collaboration with professional associations and engineering, architecture and agronomy schools or faculties, in matters relating to this law;

k) to comply with and enforce this law, the resolutions issued by the Federal Council, as well as to issue any acts they deem necessary for this purpose;

l) to create inspectorates and appoint special inspectors for greater efficiency in oversight;

m) to deliberate on matters of general and administrative interest and on cases common to two or more professional specializations;

n) to judge, decide or resolve issues of attribution or competence of the Specialized Chambers referred to in article 45, when the Regional Council does not have a sufficient number of professionals from the same group to constitute the respective Chamber, as established in article 48;

(o) to organize, regulate and maintain an up-to-date register of professionals and legal entities that, under the terms of this law, register to carry out engineering, architecture or agronomy activities in the Region;

(p) to organize and maintain an up-to-date register of the professional associations referred to in Article 62 and of the schools and colleges that, according to this law, must participate in the election of representatives to compose the Regional Council and the Federal Council;

q) to organize, regulate and maintain the register of projects and plans referred to in article 23;

r) to record the basic tables of professional fees prepared by the professional bodies.

s) to authorize the president to acquire, encumber, or, through bidding, dispose of real estate. (Included by Law No. 6,619 of 1978)

~~Article 35. The following constitute the income of the Regional Councils:~~

~~a) the fees for issuing professional licenses and registrations; (See Decree 711 of 1966)~~

~~b) fines imposed in accordance with this law; (See Decree-Law 711 of 1966)~~

~~c) donations, legacies, interest and property income;~~

~~d) subsidies.~~

Article 35 - The following constitute the income of the Regional Councils: (Wording given by Law No. 6,619 of 1978)

I - annual fees charged to professionals and legal entities; (Included by Law No. 6,619 of 1978)

II - fees for issuing professional licenses and various documents; (Included by Law No. 6,619 of 1978)

III - fees for registrations, visas and other procedures; (Included by Law No. 6,619 of 1978)

IV - four-fifths of the revenue from the fee established by Law No. 6,496, of December 7, 1977 ; (Included by Law No. 6,619, of 1978)

V - fines applied in accordance with this Law and with Law No. 6,496, of December 7, 1977 ; (Included by Law No. 6,619, of 1978)

VI - donations, legacies, interest and patrimonial income; (Included by Law No. 6,619, of 1978)

VII - subsidies; (Included by Law No. 6,619 of 1978)

VIII - other occasional income. (Included by Law No. 6,619 of 1978)

~~Art. 36. From the gross income derived from the collection of fees and fines referred to in subparagraphs "a" and "b" of the preceding article, the Regional Council shall transfer one-tenth to the Federal Council, in accordance with article 28.~~

~~Sole paragraph. The Regional Councils shall annually allocate the net income from the collection of fines to measures aimed at the technical and cultural improvement of engineers, architects, and agricultural engineers.~~

~~Article 36. Each Regional Council shall remit to the Federal Council 15% (fifteen percent) of the gross income derived from the collection of fees and fines referred to in subparagraphs " *a* " and " *b* " of the preceding article. (Wording given by Decree Law No. 620, of 1969)~~

~~Article 36. From the gross income derived from the collection of fees and fines referred to in subparagraphs "a" and "b" of the preceding article, the Regional Council shall remit one-tenth to the Federal Council, in accordance with Article 28. (Reinstated by Decree Law No. 711 of 1969).~~

Article 36 - The Regional Councils shall remit to the Federal Council, by the thirtieth day of the month following the month of collection, the participation quota established in item I of article 28. (Wording given by Law No. 6,619, of 1978)

Sole paragraph - The Regional Councils may allocate part of their net income, derived from the collection of fines, to measures aimed at the technical and cultural improvement of engineers, architects, and agricultural engineers. (Included by Law No. 6,619, of 1978)

Section II

Regarding composition and organization

Article 37. The Regional Councils shall be composed of Brazilian citizens holding a higher education degree, legally qualified in accordance with this law, observing the following composition:

a) a president, elected by an absolute majority of the members of the Council, with a term of 3 (three) years;

b) one representative from each engineering, architecture, and agronomy school or faculty based in the Region;

c) direct representatives of the professional associations of engineers, architects, and agricultural engineers, registered in the Region in accordance with article 62.

Sole paragraph. Each member of the Council will have an alternate.

Article 38. The representatives of the schools and colleges and their respective alternates will be appointed by their respective congregations.

Article 39. The representatives of the professional associations and their respective alternates shall be elected by those associations in accordance with their bylaws.

Article 40. The number of councilors representing professional associations will be determined by the respective Regional Councils, ensuring a minimum of one representative per professional association and proportionality among the representatives of the different professional categories.

Article 41. The proportionality of representatives from each professional category will be established based on the total number of registrations with the Regional Council, of engineers in the generic modalities foreseen in item "a" of article 29, of architects and of agricultural engineers, that exist in each region, with each class entity registered with the Regional Council having a number of representatives proportional to the number of its members, ensuring a minimum of one representative per entity.

Sole paragraph. The proportionality referred to in this article will be subject to prior approval by the Federal Council.

Art. 42. The Regional Councils will function in full and, for specific matters, organized into Specialized Chambers corresponding to the following professional categories: engineering in the modalities corresponding to the technical training referred to in subparagraph a of art. 29, architecture and agronomy.

Art. 43. The term of office for regional councilors shall be 3 (three) years and shall be renewed annually by one-third of its members.

Article 44. Each Regional Council shall have inspectorates, for the purpose of inspection, in the cities or zones where they are deemed necessary.

Chapter IV

From the Specialized Chambers

Section I

Regarding the establishment of the Chambers and their responsibilities.

Article 45. The Specialized Chambers are the bodies of the Regional Councils responsible for judging and deciding on matters of oversight pertaining to their respective professional specializations and violations of the Code of Ethics.

Article 46. The responsibilities of the Specialized Chambers are:

a) to judge cases of violation of this law, within the scope of their specific professional competence;

b) to judge violations of the Code of Ethics;

c) apply the penalties and fines stipulated;

d) to review and judge applications for registration of professionals, firms, public entities, professional associations, and schools or colleges in the Region;

e) to develop the rules for the supervision of the respective professional specializations;

f) to give opinions on matters of common interest to two or more professional specializations, forwarding them to the Regional Council.

Section II

Composition and organization

Article 47. The Specialized Chambers will be composed of the regional councilors.

Sole paragraph. In each Specialized Chamber there will be one member, elected by the Regional Council, representing the other professional categories.

Art. 48. A Specialized Chamber shall be constituted provided that among the regional councilors there are at least 3 (three) from the same professional group.

Chapter V

Generalities

Article 49. The Presidents of the Federal and Regional Councils are responsible, in addition to directing their respective Councils, for representing them in court.

Article 50. A federal or regional council member who, during a period of 1 (one) year, is absent without prior leave from 6 (six) sessions, consecutive or not, will automatically lose their

mandate, which will then be exercised, on an effective basis, by the respective alternate.

Article 51. The term of office for Presidents and Councilors shall be honorary.

Article 52. Serving as a member of the Councils for a period of not less than two-thirds of the respective term of office shall be considered relevant service rendered to the Nation.

§ 1 The Federal Council shall grant to those who meet the conditions of this article the certificate of relevant service, regardless of a request from the interested party, within 12 (twelve) months from the date of communication from the Councils.

~~§ 2º VETOED~~

§ 2. The time of service as President or Councilor shall be considered as effective public service for the purposes of retirement and availability, however, it shall not be counted concurrently with time served in a public office. (maintained by the National Congress)

Article 53. The representatives of the Federal and Regional Councils shall meet at least once a year to jointly study and establish measures to ensure or improve the application of this law, and the Federal Council shall send the respective agenda to the Regional Councils in due time.

~~Article 54. The Regional Councils are responsible for resolving any doubt or omission regarding the application of this law, with an ex officio appeal, with suspensive effect, to the Federal Council, which is responsible for deciding, in the last instance, in a general manner. (Repealed by Decree-Law No. 620 of 1969)~~

Article 54. The Regional Councils are responsible for resolving any doubt or omission regarding the application of this law, with an "ex officio" appeal, with suspensive effect, to the Federal Council, which is responsible for deciding, in the last instance, in a general manner. (Reinstated by Decree-Law No. 711 of 1969).

TITLE III

Professional registration and oversight

Chapter I

From the registration of professionals

Article 55. Professionals qualified in accordance with the provisions of this law may only practice their profession after registering with the Regional Council under whose jurisdiction their place of activity is located.

Article 56. Professionals registered in accordance with this law shall be provided with a professional card, according to the model adopted by the Federal Council, containing the registration number, the nature of the title, specializations and all elements necessary for their identification.

§ 1 The issuance of the card referred to in this article is subject to the fee determined by the Federal Council.

§ 2 The professional card, for the purposes of this law, will replace the diploma, will be valid as an identity document and will have public faith.

§ 3 For the issuance of the professional card, the Regional Councils shall require the applicant to provide proof of professional qualification and identity, as well as other elements deemed appropriate, in accordance with instructions issued by the Federal Council.

Article 57. Graduates from official or recognized schools or faculties of engineering, architecture, or agronomy, whose diplomas have not yet been registered but are being processed by the competent federal agency, may practice their respective professions by means of provisional registration with the Regional Council.

Article 58. If a professional, firm, or organization registered with any Regional Council carries out activities in another Region, they will be required to have their registration endorsed in that Region.

Chapter II

Regarding the registration of firms and entities.

Article 59. Firms, societies, associations, companies, cooperatives, and businesses in general, which are organized to carry out works or services related in the manner established in this law, may only begin their activities after obtaining the appropriate registration with the Regional Councils, as well as the registration of the professionals on their technical staff.

§ 1 The registration of firms, partnerships, associations, companies, cooperatives and businesses in general will only be granted if their name is truly consistent with their purpose and the qualifications of their members.

§ 2. State, semi-state, autonomous, and mixed-economy entities that are active in engineering, architecture, or agronomy, or that utilize the services of professionals in these categories, are obligated, without any charges, to provide the Regional Councils with all the elements necessary for the verification and oversight of this law.

§ 3 The Federal Council shall establish, by resolution, the requirements that firms or other organizations referred to in this article must meet for their registration.

Article 60. Any and all firms or organizations that, although not covered by the previous article, have any section related to the professional practice of engineering, architecture, and agronomy, as established in this law, are required to request their registration and the registration of the legally qualified professionals in charge thereof.

Article 61. When services are performed in locations distant from the entity's headquarters, the entity must maintain, for each service, a duly qualified professional in that jurisdiction.

Article 62. Members of the Regional Councils may only be elected by professional associations that are previously registered with the Council in whose jurisdiction they are headquartered.

§ 1. In order to obtain registration, the entities referred to in this article must be legally established, have a defined permanent purpose, have at least thirty associated engineers, architects or agricultural engineers, and meet the requirements established by the Regional Council.

§ 2 When the entity brings together associated engineers, architects and agricultural engineers, the minimum limit referred to in the previous paragraph shall be sixty.

Chapter III

Regarding annual fees, charges and fees.

Article 63. Professionals and legal entities registered in accordance with the provisions of this law are required to pay an annual fee to the Regional Council to whose jurisdiction they belong.

~~§ 1 The annual fee referred to in this article shall be paid by March 31 of each year.~~

~~§ 2. Payment of the annual fee after this deadline will incur an additional 10% (ten percent) charge for late payment.~~

~~§ 3 The initial annual fee will be paid upon registration.~~

§ 1 - The annual fee referred to in this article shall be due from January 1st of each year. (Wording given by Law No. 6,619, of 1978)

§ 2 - Payment of the annual fee after March 31st will incur a twenty percent surcharge as a late payment fee when made within the same fiscal year. (Wording given by Law No.

6,619 of 1978)

§ 3 - The annual fee paid after the respective fiscal year will have its value updated to the value in effect at the time of payment, plus twenty percent as a late payment fee. (Wording given by Law No. 6,619, of 1978)

Article 64. The registration of any professional or legal entity that fails to pay the annual fee to which it is subject for 2 (two) consecutive years will be automatically cancelled, without prejudice to the obligation to pay the debt.

Sole paragraph. Any professional or legal entity whose registration is cancelled under the terms of this article, if they engage in any activity regulated by this law, will be illegally practicing the profession, and may be reinstated through a new registration, provided that, in addition to the outstanding annual fees, any fines imposed on them and other regulatory fees and charges are paid.

Article 65. Whenever a certified professional presents their professional card to a Regional Council for the necessary "approval" and registration, they must provide proof of having paid their annual fee in their region of origin or in the region where they will reside.

Article 66. Payment of the annual fee due by a professional or legal entity will only be accepted after verification that there are no outstanding debts concerning fines, fees, charges, or annual fees from previous years.

Article 67. Although legally registered, a professional or legal entity will only be considered to be legitimately practicing the profession and activities covered by this law if they are up-to-date with the payment of their respective annual fees.

Article 68. Administrative and judicial authorities, state, semi-state, autonomous or mixed-economy departments shall not accept studies, projects, reports, expert opinions, arbitrations and any other work unless the authors, professionals or legal entities prove that they are up to date with the payment of the respective annual fee.

Article 69. Only professionals and legal entities that present proof of payment of any outstanding debts or a visa from the Regional Council of the jurisdiction where the work, technical service, or project is to be executed may be admitted to public tenders for works or technical services and to project competitions.

Article 70. The Federal Council shall issue resolutions establishing the Rules of Costs and, periodically, when it deems appropriate, shall promote its revision.

TITLE IV

Regarding penalties

Article 71. The penalties applicable for violation of this law are as follows, according to the seriousness of the offense:

a) confidential warning;

b) public censure;

c) fine;

d) temporary suspension from professional practice;

e) definitive cancellation of the registration.

Sole paragraph. The penalties for each professional group will be imposed by the respective Specialized Chambers or, in their absence, by the Regional Councils.

Article 72. The penalties of private warning and public censure are applicable to professionals who fail to comply with the provisions of the Code of Ethics, taking into account the seriousness of the offense and cases of recidivism, at the discretion of the respective Specialized Chambers.

~~Article 73. Fines are established based on the highest minimum wage in the country and will have the following values, disregarding fractions of one thousand cruzeiros:~~

~~a) fines of one to three tenths of the minimum wage, for those who violate articles 17 and 58 and the provisions for which there is no express indication of penalty;~~

~~b) fines of three to six tenths of the minimum wage for individuals, for violation of item "b" of article 6, articles 13, 14 and 55 or the sole paragraph of article 64;~~

~~c) fines of half to one minimum wage for legal entities, for violation of articles 13, 14, 59/60 and the sole paragraph of article 64;~~

~~d) a fine of half to one minimum wage for individuals for violating items "a", "c", and "d" of article 6;~~

~~(e) Fines of half to three minimum wages for legal entities, for violation of article 6.~~

Article 73 - Fines are stipulated based on the highest reference value set by the Executive Branch and will have the following values, disregarding fractions of a cruzeiro: (Wording given by Law No. 6,619, of 1978)

a) from one to three tenths of the reference value, for those who violate articles 17 and 58 and the provisions for which there is no express indication of penalty; (Wording given by Law No. 6,619, of 1978) (See Law No. 6,496, of 1977)

b) from three to six tenths of the reference value, to individuals, for violation of item *b* of article 6, articles 13, 14 and 55 or the sole paragraph of article 64; (Wording given by Law No. 6,619, of 1978)

c) from half to a reference value, to legal entities, for violation of articles 13, 14, 59 and 60, and the sole paragraph of article 64; (Wording given by Law No. 6,619, of 1978)

d) from half to a reference value, to individuals, for violation of items *a* , *c* and *d* of article 6; (Wording given by Law No. 6,619, of 1978)

(e) from half to three reference values, for legal entities, for violation of article 6. (Wording given by Law No. 6,619, of 1978)

Sole paragraph. The fines referred to in this article will be doubled in cases of repeat offenses.

Art. 74. In cases of repeated offenses as provided for in the preceding article, subparagraphs "c", "d" and "e", a temporary suspension of professional practice will be imposed, at the discretion of the Specialized Chambers, for periods ranging from 6 (six) months to 2 (two) years and, by the Regional Councils in plenary session, from 2 (two) to 5 (five) years.

Article 75. The cancellation of registration will be carried out due to public misconduct and scandals committed by the professional or their final conviction for a crime considered infamous.

Article 76. Unqualified individuals who practice professions regulated by this law, regardless of the established fine, are subject to the penalties provided for in the Law on Criminal Offenses.

Article 77. The officials designated for this purpose by the Regional Councils of Engineering, Architecture and Agronomy in their respective Regions are competent to draw up infraction reports for the provisions referred to in this law.

Art. 78. Regarding penalties imposed by the specialized Chambers, the interested party may, within a period of 60 (sixty) days from the date of notification, file an appeal which will have suspensive effect, to the Regional Council and, within the same period, from there to the Federal Council.

§ 1. If the fines are not paid amicably, they will be collected through executive proceedings.

§ 2. The infraction notices, after being definitively judged against the offender, constitute titles of liquid and certain debt.

Article 79. Professionals penalized for failure to register may not obtain a professional license without first paying the fines they have incurred.

TITLE V

General provisions

~~Article 80. The Federal and Regional Councils of Engineering, Architecture and Agronomy, autonomous entities endowed with legal personality under public law, constitute a federal public service, and their assets, income and services enjoy total tax immunity (Article 31, item V, subparagraph a of the Federal Constitution) and postal and telegraphic franchise.~~

~~Article 80. The Federal Council of Engineering, Architecture and Agronomy constitutes a decentralized federal public service in the form of an autonomous entity, and its assets, income and services, as well as those of the CREAs (Regional Councils of Engineering and Agronomy) subordinate to it, enjoy tax immunity (Article 20, item III, subparagraph " *a* " and its § 1, of the Constitution of Brazil). (Wording given by Decree Law No. 620, of 1969)~~

Article 80. The Federal and Regional Councils of Engineering, Architecture and Agronomy, autonomous entities endowed with legal personality under public law, constitute a federal public service, and their assets, income and services enjoy total tax immunity (Article 31, item V, subparagraph a of the Federal Constitution) and postal and telegraphic franchise. (Reinstated by Decree-Law No. 711 of 1969).

Article 81. No professional may hold elected positions on Councils for more than two consecutive terms.

~~Article 82. VETOED~~

Article 82. The initial remuneration of engineers, architects, and agricultural engineers, regardless of the paying source, may not be less than six (6) times the minimum wage of the respective region. (maintained by the National Congress)

~~Article 83. Professional work related to projects may not be subject to price competition; when applicable, it must be subject to a tender.~~ (Repealed by Law No. 8,666, of June 21, 1993)

~~Article 84. Graduates from official or recognized agricultural or industrial secondary education institutions, whose diplomas or certificates are registered with the competent authorities, may only perform their duties or activities after registration with the Regional Councils.~~
(Repealed by Law No. 13,639 of 2018)

~~Sole paragraph. The duties of the graduate referred to in this article will be regulated by the Federal Council, taking into account their curricula and levels of education.~~
(Repealed by Law No. 13,639 of 2018)

Art. 85. Entities that hire professionals under the terms of subparagraph "c" of article 2 are required to maintain, alongside them, a Brazilian assistant in the respective professional field.

TITLE VI

Transitional provisions

Article 86. Current engineering, architecture, and agronomy professionals, as well as those enrolled in their respective schools on the date of publication of this law, are guaranteed the rights they have previously enjoyed and which may in any way be affected by its provisions.

Sole paragraph. A period of 12 (twelve) months is established, counting from the publication of this law, for interested parties to make the necessary registration in the records of the Regional Councils.

Article 87. The current members of the Federal and Regional Councils will complete the terms for which they were elected.

Sole paragraph. The current presidents of the Federal and Regional Councils will complete their terms, with the president of the former Council retaining the status of a member of the latter.

Article 88. The Federal Council shall issue resolutions, within 60 (sixty) days from the date of this law, intended to complete the composition of the Federal and Regional Councils.

Article 89. In the constitution of the first Federal Council after the publication of this law, the Regions and the professional groups that will represent them will be chosen by lottery.

Article 90. The Federal and Regional Councils, completed in accordance with this law, shall have a period of 180 (one hundred and eighty) days, after taking office, to prepare their internal regulations, with the regulations and resolutions in force remaining in effect until the expiration of this period, insofar as they do not conflict with the provisions of this law.

Article 91. This Law shall enter into force on the date of its publication.

Article 92. All provisions to the contrary are hereby repealed.

Brasilia, December 24, 1966; 145th year of Independence and 78th year of the Republic.

H. CASTELLO BRANCO
LG do Nascimento e Silva

This text does not replace the one published in the Official Gazette of the Union (DOU) on December 27, 1966, and corrected on January 4, 1967.

Presidency of the Republic,

Civil House

, Sub-Chief of Legal Affairs

LAW No. 5,194, OF DECEMBER 24, 1966.

Parts maintained by the National Congress, after presidential veto, of the bill that became Law No. 5,194, of December 24, 1966, which regulates the practice of the professions of Engineer, Architect and Agricultural Engineer and provides other measures.

THE PRESIDENT OF THE REPUBLIC:

I hereby announce that the NATIONAL CONGRESS has upheld and I promulgate, in accordance with the final part of § 3 of article 62 of the Federal Constitution, the following provisions of Law 5.194, of December 24, 1966:

> "Art 52 ....
>
> ....
>
> § 2. The time of service as President or Councilor shall be considered as effective public service for the purposes of retirement and availability, however, it shall not be counted cumulatively with time served in a public office.
>
> Article 82. The initial remuneration of engineers, architects, and agricultural engineers, regardless of the paying source, may not be less than six (6) times the minimum wage of the respective region.

Brasilia, April 20, 1967; 146th year of Independence and 79th year of the Republic.

A. COSTA E SILVA

This text does not replace the one published in the Official Gazette of the Union (DOU) on April 24, 1967.

*

Exhibit C.II - Second Prong - Membership

2026 Certificate of Membership

IEEE Communications Society

This certificate recognizes

Gustavo Dartagnan Xavier do Rego

as a Member in good standing, denoting

a personal and professional commitment to the advancement of technology

IEEE ComSoc
IEEE Communications Society

Nelson Fonseca
2026 IEEE Communications Society President

IEEE
Advancing Technology for Humanity

IEEE CONSTITUTION and BYLAWS

THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

3 Park Avenue, 17th Floor
New York, N.Y. 10016-5997, U.S.A.



Adopted by the IEEE Board of Directors 8 January 1963 and incorporating subsequent revisions through 16 February 2026.

The IEEE Board of Directors approves changes to the *IEEE Bylaws* from time to time. This document is updated on a regular basis and the most current version is available at
http://www.ieee.org/bylaws

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I-102. Categories

1. Categories. The following categories of IEEE membership are:

   Electronic Membership
   Life Members
   Minimum Income
   Permanently Disabled
   Retired
   Unemployed

   Requirements to qualify for these categories of membership shall be specified in the IEEE Policies, except for Life Members which shall be defined in these Bylaws.

2. Life Members. The designation "Life Member" is applicable only to a member who has attained the age of 65 years and who has been a member of IEEE for such a period that the sum of his/her age and his/her years of membership equals or exceeds 100 years. The designation of “Life Member” shall be effective on 1 January of the year immediately succeeding the year in which the requirement for the Life Member category has been satisfied.

3. IEEE-Eta Kappa Nu (IEEE-HKN). The designation IEEE-HKN shall be applicable only to (i) any person who has been inducted into the membership of IEEE-HKN, or (ii) a Member or Eminent Member of Eta Kappa Nu in good standing prior to its merger into IEEE who continues to meet the requirements for membership in IEEE-HKN.

I-103. Affiliates

1. Definition. The designation "IEEE Society Affiliate" refers to individuals who are not IEEE members but who are entitled to participate in certain activities of the Society. The Technical Activities Board shall establish the qualifications for Society Affiliates and the associated rights and privileges within the Society. Dues shall be established by the Board of Directors. Affiliates do not qualify for any special membership categories as defined in IEEE Bylaw I-102.1.

I-104. Qualifications

1. Honorary Member. The title of Honorary Member may be conferred by the IEEE Board of Directors on those individuals, not members of IEEE, who have rendered meritorious service to humanity in IEEE's designated fields of interest. An affirmative vote of two-thirds of the members of the IEEE Board of Directors present at the time of the vote, provided a quorum is present, shall be required for conferment at a regularly constituted meeting.

2. Fellow. The grade of Fellow recognizes unusual distinction in the profession and shall be conferred by the Board of Directors upon a person with an outstanding record of accomplishments in any of the IEEE fields of interest (Bylaw I-104.11). The accomplishments that are being honored shall have contributed importantly to the advancement or application of engineering, science and technology, bringing the realization of significant value to society at large. The nominee shall hold Senior Member grade at the time the nomination is submitted, shall have 15 years or more of professional experience, and shall have been a member in good standing in any grade for a period of five years or more preceding 1 January of the year of elevation.

Additional eligibility requirements for nominees and others involved in the submission and evaluation process, as well as other related procedures, shall be specified in the IEEE Fellow Committee Operations Manual. The year of elevation to the grade of Fellow is the year following approval by the Board of Directors conferring the grade of Fellow. Members elevated to the Fellow grade may use the title immediately following approval by the Board of Directors. All those elevated will receive a certificate and pin.

3. Senior Member. The grade of Senior Member is the highest for which application may be made and shall require experience reflecting professional maturity. For admission or transfer to the grade of Senior Member, a candidate shall be an engineer, scientist, educator, technical executive, or originator in IEEE-designated fields (Bylaw I-104.11).

   The candidate shall have been in professional practice for at least ten years and shall have shown significant performance over a period of at least five of those years, such performance including one or more of the following:

   a) Substantial responsibility or achievement in one or more of IEEE-designated fields; or

   b) Publication of papers, books, or inventions in one or more of IEEE-designated fields; or

   c) Technical direction or management of important work with evidence of accomplishment in one or more of IEEE-designated fields; or

   d) Recognized contributions to the welfare of the professions encompassed by one or more of the IEEE-designated fields; or

   e) Development or furtherance of important courses in one or more of the IEEE-designated fields at an accredited institution; or

   f) Contributions equivalent to those of (a) to (e) in areas related to IEEE-designated fields, provided these contributions serve to advance progress substantially in IEEE-designated fields.

4. Member. The grade of Member is limited to those who have satisfied IEEE-specified educational requirements and/or who have demonstrated professional competence in IEEE-designated fields of interest. For admission or transfer to the grade of Member, a candidate shall be either:

   An individual who shall have received a three-to-five year university-level or higher degree (i) from an accredited institution or program and (ii) in an IEEE-designated field, both of which are defined in IEEE Bylaw I-104.11; or

   b) An individual who shall have received a three-to-five year university-level or higher degree from an accredited institution or program and who has at least three years of professional work experience engaged in teaching, creating, developing, practicing or managing in IEEE-designated fields; or

   c) An individual who, through at least six years of professional work experience, has demonstrated competence in teaching, creating, developing, practicing or managing within IEEE-designated fields.

5. Associate Member. The grade of Associate Member is designed for technical and non-technical applicants who do not meet the qualifications for Member grade, but who would benefit through membership and participation in IEEE, and for those who are progressing, through continuing education and work experience, towards the qualifications for Member grade.

6. Graduate Student Member.

   a) A Graduate Student Member must qualify for Member grade and carry at least 50% of a normal full-time academic program as a registered graduate student in a regular course of study in IEEE-designated fields. The total cumulative period for a member to hold the Student Member grade and/or the Graduate Student Member grade shall be limited to 8 years.

   b) Graduate Student Members, upon graduation or upon reaching the total cumulative 8-year limit as a Student Member and/or Graduate Student Member (whichever occurs first), shall be transferred to Member grade.

7. Student Member.

   a) A Student Member must satisfy the following conditions (1) carry at least 50% of a normal full-time academic program as a registered undergraduate or graduate student in a regular course of study in IEEE-designated fields; and (2) not yet qualify for Member grade. The total cumulative period for a member to hold the Student Member grade and/or the Graduate Student Member grade shall be limited to 8 years.

   b) Student Members, upon graduation or upon reaching the 8-year limit (whichever occurs first), with at least a baccalaureate or higher degree (or its equivalent) from an accredited institution in an IEEE-designated field shall be transferred to Member grade.

   c) Student Members other than those qualifying under subparagraph (b), upon graduation or upon reaching the 8-year limit (whichever occurs first) shall be transferred to Associate Member grade.

8. Course Completion Equivalent. Graduation from a course of at least 18 months duration of study in a curriculum related to IEEE-designated fields may be accepted as equivalent to one year's professional experience.

9. Graduate Work Equivalent. Full-time graduate work, or part-time graduate work with teaching or research, in IEEE-designated fields, may be accepted as equivalent to professional experience.

10. Time Requirements. The time requirements for admission or transfer to any grade of membership may be satisfied by applying pro rata the experience of the candidate under the various alternative requirements for the grade.

Exhibit C.II - Second Prong - Evidence of High Salary

Update of the Employment Record Book

Company Information

Company	CNPJ	Unit
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Address	City
AV DOUTOR DARIO LOPES DOS SANTOS 2197 - REBOUCAS	CURITIBA - PR

Type of Establishment

Telecommunications service provider.

Employee Information

Registration	Name	Address
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

City	Work Location	Date of Hire	CPF	*CTPS No.	*PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	06/12/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

Salary Changes

Date	Current Amount	Reason
12/01/2014	7,052.00	COLLECTIVE BARGAINING AGREEMENT
01/01/2014	6,590.00	COLLECTIVE BARGAINING AGREEMENT
01/01/2013	6,154.00	COLLECTIVE BARGAINING AGREEMENT
08/01/2012	5,805.00	PROMOTION
10/01/2011	5,278.00	COLLECTIVE BARGAINING AGREEMENT
08/01/2011	4,914.00	MERIT
09/01/2010	4,273.00	COLLECTIVE BARGAINING AGREEMENT
08/01/2010	4,084.00	COLLECTIVE BARGAINING AGREEMENT
12/01/2009	3,999.00	SALARY CLASSIFICATION ADJUSTMENT
09/01/2009	3,258.00	PROMOTION
08/01/2009	2,715.00	COLLECTIVE BARGAINING AGREEMENT
07/01/2009	2,562.00	TRANSFER
12/01/2008	2,562.00	SALARY ADJUSTMENT (RECLASSIFICATION)
08/01/2008	2,130.00	COLLECTIVE BARGAINING AGREEMENT
05/01/2008	2,050.00	PROMOTION
08/01/2007	1,654.00	COLLECTIVE BARGAINING AGREEMENT

Salary Components

Item	Amount
11010 - MONTHLY SALARY	7,052.00
	TOTAL 7,052.00

Update of the Employment Record Book

Company Information

Company	CNPJ	Unit
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Address	City
AV DOUTOR DARIO LOPES DOS SANTOS 2197 - REBOUCAS	CURITIBA - PR

Type of Establishment

Telecommunications service provider.

Employee Information

Registration	Name	Address
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

City	Division	Date of Hire	CPF	*CTPS No.	*PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	06/12/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

Vacation Information

Accrual Period	Vacation Taken	Days Taken	Days Sold	Payment Date	½ 13th Salary	Installments
06/12/2013 to 06/11/2014	05/04/2015 to 05/23/2015	20	0	04/29/2015	N	2
06/12/2013 to 06/11/2014	01/26/2015 to 02/04/2015	10	0	01/22/2015	N	1
06/12/2012 to 06/11/2013	05/05/2014 to 05/24/2014	20	10	05/02/2014	N	0
06/12/2011 to 06/11/2012	05/02/2013 to 05/31/2013	30	0	04/25/2013	N	0
06/12/2010 to 06/11/2011	05/28/2012 to 06/06/2012	10	0	05/24/2012	N	2
06/12/2010 to 06/11/2011	11/28/2011 to 12/17/2011	20	0	11/24/2011	N	1
06/12/2009 to 06/11/2010	03/14/2011 to 04/02/2011	20	0	03/10/2011	Y	2
06/12/2009 to 06/11/2010	11/16/2010 to 11/25/2010	10	0	11/11/2010	N	1
06/12/2008 to 06/11/2009	05/24/2010 to 06/02/2010	10	0	05/20/2010	N	2
06/12/2008 to 06/11/2009	11/09/2009 to 11/28/2009	20	0	11/05/2009	N	1
06/12/2007 to 06/11/2008	06/01/2009 to 06/10/2009	10	0	05/30/2009	N	2
06/12/2007 to 06/11/2008	08/11/2008 to 08/30/2008	20	0	08/09/2008	N	1
12/06/2006 to 11/06/2007	24/03/2008 to 02/04/2008	10	0	03/20/2008	N	2
12/06/2006 to 11/06/2007	10/12/2007 to 29/12/2007	20	0	06/12/2007	N	1

Position Changes

Date	Previous Position	Current Position
05/01/2014	1153 - TECHNICAL CONSULTANT	0178 - TELECOM SPECIALIST

Reason	Type
SALARY CLASSIFICATION ADJUSTMENT	Permanent

Date	Previous Position	Current Position
08/01/2012	0769 - SENIOR TELECOM ANALYST	1153 - TECHNICAL CONSULTANT

Reason	Type
PROMOTION	Permanent

Date	Previous Position	Current Position
08/01/2011	0769 - SENIOR TELECOM ANALYST	0769 - SENIOR TELECOM ANALYST

Reason	Type
MERIT	Permanent

Update of the Employment Record Book

Company Information

Company	CNPJ	Unit
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Address	City
AV DOUTOR DARIO LOPES DOS SANTOS 2197 - REBOUCAS	CURITIBA - PR

Type of Establishment

Telecommunications service provider.

Employee Information

Registration	Name	Address
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

City	Division	Date of Hire	CPF	*CTPS No.	*PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	06/12/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

Position Changes

Date	Previous Position	Current Position
12/01/2009	0769 - SENIOR TELECOM ANALYST	0769 - SENIOR TELECOM ANALYST

Reason	Type
SALARY CLASSIFICATION ADJUSTMENT	Permanent

Date	Previous Position	Current Position
09/01/2009	0759 - SYSTEMS SUPPORT ANALYST	0769 - SENIOR TELECOM ANALYST

Reason	Type
PROMOTION	Permanent

Date	Previous Position	Current Position
07/01/2009	0759 - SYSTEMS SUPPORT ANALYST	0759 - SYSTEMS SUPPORT ANALYST

Reason	Type
TRANSFER	Permanent

Date	Previous Position	Current Position
05/01/2008	0611 - JUNIOR TECHNICAL SUPPORT ANALYST	0759 - SYSTEMS SUPPORT ANALYST

Reason	Type
PROMOTION	Permanent

Date	Previous Position	Current Position
07/01/2006	0941 - CORPORATE PROVISIONING TECHNICIAN	0611 - JUNIOR TECHNICAL SUPPORT ANALYST

Reason	Type
SALARY CLASSIFICATION ADJUSTMENT	Permanent

Transfers Between Locations

Date	Division - Origin	Division - Destination
03/01/2010	03.420.926/0002-05 - GLOBAL VILLAGE TELECOM SA - CURIT...	03.420.926/0002-05 - GLOBAL VILLAGE TELECOM SA - CURIT...

Reason	Notes
	00003600000000

Update of the Employment Record Book

Company Information

Company	CNPJ	Unit
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Address	City
AV DOUTOR DARIO LOPES DOS SANTOS 2197 - REBOUCAS	CURITIBA - PR

Type of Establishment

Telecommunications service provider.

Employee Information

Registration	Name	Address
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

City	Division	Date of Hire	CPF	*CTPS No.	*PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	06/12/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

Transfers Between Locations

Date	Division - Origin	Division - Destination
12/01/2010	03.420.926/0036-54 - GLOBAL VILLAGE TELECOM SA - REGI...	03.420.926/0036-54 - GLOBAL VILLAGE TELECOM SA - REGI...

Reason	Notes
	00010800000000

Date	Division - Origin	Division - Destination
04/01/2014	03.420.926/0108-63 - CURITIBA / TORONTO -HQ ADM	03.420.926/0205-83 - CURITIBA / JARDIM BOTANICO 0205 - H...

Reason	Notes
TRANSFER	

Union Contributions

Data	UNION	Amount
03/2014	001 - TELECOMMUNICATIONS EMPLOYEES' UNION – PARANÁ STATE	219.67
03/2013	001 - TELECOMMUNICATIONS EMPLOYEES' UNION – PARANÁ STATE	205.13
03/2012	001 - TELECOMMUNICATIONS EMPLOYEES' UNION – PARANÁ STATE	175.93
03/2011	001 - TELECOMMUNICATIONS EMPLOYEES' UNION – PARANÁ STATE	142.43
03/2010	001 - TELECOMMUNICATIONS EMPLOYEES' UNION – PARANÁ STATE	133.30
03/2009	001 - TELECOMMUNICATIONS EMPLOYEES' UNION – PARANÁ STATE	85.40
03/2008	001 - TELECOMMUNICATIONS EMPLOYEES' UNION – PARANÁ STATE	55.13
03/2007	001 - TELECOMMUNICATIONS EMPLOYEES' UNION – PARANÁ STATE	54.70

Update of the Employment Record Book

Company Information

Company	CNPJ	Unit
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Address	City
AV DOUTOR DARIO LOPES DOS SANTOS 2197 - REBOUCAS	CURITIBA - PR

Type of Establishment

Telecommunications service provider.

Employee Information

Registration	Name	Address
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

City	Division	Date of Hire	CPF	*CTPS No.	*PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	06/12/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

NOTE: This information reflects the employee's registration record and shall replace the entries in the Employment Record Book, as well as any and all declarations that may otherwise be requested from the company, in accordance with Ordinance No. 41 of the Ministry of Labor and Employment (MTE), dated 03/28/2007.

GLOBAL VILLAGE TELECOM S.A. provides the information regarding vacation records, union contributions, collective bargaining deductions, and changes in positions and salaries.

CURITIBA-PR, February 27, 2015



GLOBAL VILLAGE TELECOM S.A.

*CTPS - Employment Record Book
*PIS - Social Integration Program

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 16 2026

Atualização da Carteira de Trabalho

Informações da Empresa

Empresa	CNPJ	Unidade
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Endereço	Cidade
AV DOUTOR DARIO LOPES DOS SANTOS 2197-REBOUCAS	CURITIBA - PR

Espécie de Estabelecimento

Prestação de serviços de Telecomunicação.

Informações do Funcionário

Matrícula	Nome	Endereço
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

Cidade	Lotação	Dt. Adm.	CPF	Nº CTPS	PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	12/06/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

Alterações Salariais

Data	Valor Atual	Motivo
01/12/2014	7.052,00	ACORDO COLETIVO
01/01/2014	6.590,00	ACORDO COLETIVO
01/01/2013	6.154,00	ACORDO COLETIVO
01/08/2012	5.805,00	PROMOCAO
01/10/2011	5.278,00	ACORDO COLETIVO
01/08/2011	4.914,00	MÉRITO
01/09/2010	4.273,00	ACORDO COLETIVO
01/08/2010	4.084,00	ACORDO COLETIVO
01/12/2009	3.999,00	ENQUADRAMENTO
01/09/2009	3.258,00	PROMOCAO
01/08/2009	2.715,00	ACORDO COLETIVO
01/07/2009	2.562,00	TRANSFERENCIA
01/12/2008	2.562,00	ENQUADRAMENTO
01/08/2008	2.130,00	ACORDO COLETIVO
01/05/2008	2.050,00	PROMOCAO
01/08/2007	1.654,00	ACORDO COLETIVO

Componentes do Salário

Evento	Valor
11010 - SAL.MENSAL	7.052,00
TOTAL	7.052,00

Atualização da Carteira de Trabalho

Informações da Empresa

Empresa	CNPJ	Unidade
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Endereço	Cidade
AV DOUTOR DARIO LOPES DOS SANTOS 2197-REBOUCAS	CURITIBA - PR

Espécie de Estabelecimento

Prestação de serviços de Telecomunicação.

Informações do Funcionário

Matrícula	Nome	Endereço
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

Cidade	Lotação	Dt. Adm.	CPF	Nº CTPS	PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	12/06/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

Dados de Férias

Período Aquisitivo	Férias Gozadas	Dias de Gozo	Nº Dias Abono	Dt. Pagto.	½ 13º Salário	Parcelas
12/06/2013 a 11/06/2014	04/05/2015 a 23/05/2015	20	0	29/04/2015	N	2
12/06/2013 a 11/06/2014	26/01/2015 a 04/02/2015	10	0	22/01/2015	N	1
12/06/2012 a 11/06/2013	05/05/2014 a 24/05/2014	20	10	02/05/2014	N	0
12/06/2011 a 11/06/2012	02/05/2013 a 31/05/2013	30	0	25/04/2013	N	0
12/06/2010 a 11/06/2011	28/05/2012 a 06/06/2012	10	0	24/05/2012	N	2
12/06/2010 a 11/06/2011	28/11/2011 a 17/12/2011	20	0	24/11/2011	N	1
12/06/2009 a 11/06/2010	14/03/2011 a 02/04/2011	20	0	10/03/2011	S	2
12/06/2009 a 11/06/2010	16/11/2010 a 25/11/2010	10	0	11/11/2010	N	1
12/06/2008 a 11/06/2009	24/05/2010 a 02/06/2010	10	0	20/05/2010	N	2
12/06/2008 a 11/06/2009	09/11/2009 a 28/11/2009	20	0	05/11/2009	N	1
12/06/2007 a 11/06/2008	01/06/2009 a 10/06/2009	10	0	30/05/2009	N	2
12/06/2007 a 11/06/2008	11/08/2008 a 30/08/2008	20	0	09/08/2008	N	1
12/06/2006 a 11/06/2007	24/03/2008 a 02/04/2008	10	0	20/03/2008	N	2
12/06/2006 a 11/06/2007	10/12/2007 a 29/12/2007	20	0	06/12/2007	N	1

Alterações de Cargo

Data	Cargo - Anterior	Cargo - Atual
01/05/2014	1153 - CONSULTOR TECNICO	0178 - ESPECIALISTA TELECOM

Motivo	Tipo
READEQUACAO DE CARGO	Efetivo

Data	Cargo - Anterior	Cargo - Atual
01/08/2012	0769 - ANALISTA TELECOM SR	1153 - CONSULTOR TECNICO

Motivo	Tipo
PROMOCAO	Efetivo

Data	Cargo - Anterior	Cargo - Atual
01/08/2011	0769 - ANALISTA TELECOM SR	0769 - ANALISTA TELECOM SR

Motivo	Tipo
MÉRITO	Efetivo

Atualização da Carteira de Trabalho

Informações da Empresa

Empresa	CNPJ	Unidade
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Endereço	Cidade
AV DOUTOR DARIO LOPES DOS SANTOS 2197-REBOUCAS	CURITIBA - PR

Espécie de Estabelecimento

Prestação de serviços de Telecomunicação.

Informações do Funcionário

Matrícula	Nome	Endereço
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

Cidade	Lotação	Dt. Adm.	CPF	Nº CTPS	PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	12/06/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

Alterações de Cargo

Data	Cargo - Anterior	Cargo - Atual
01/12/2009	0769 - ANALISTA TELECOM SR	0769 - ANALISTA TELECOM SR
Motivo	**Tipo**	
ENQUADRAMENTO	Efetivo	
Data	**Cargo - Anterior**	**Cargo - Atual**
01/09/2009	0759 - ANALISTA SUPORTE SISTEMAS PL	0769 - ANALISTA TELECOM SR
Motivo	**Tipo**	
PROMOCAO	Efetivo	
Data	**Cargo - Anterior**	**Cargo - Atual**
01/07/2009	0759 - ANALISTA SUPORTE SISTEMAS PL	0759 - ANALISTA SUPORTE SISTEMAS PL
Motivo	**Tipo**	
TRANSFERENCIA	Efetivo	
Data	**Cargo - Anterior**	**Cargo - Atual**
01/05/2008	0611 - ANALISTA SUPORTE TECNICO JR	0759 - ANALISTA SUPORTE SISTEMAS PL
Motivo	**Tipo**	
PROMOCAO	Efetivo	
Data	**Cargo - Anterior**	**Cargo - Atual**
01/07/2006	0941 - TECNICO PROVISIONAMENTO CORPORATIVO PL	0611 - ANALISTA SUPORTE TECNICO JR
Motivo	**Tipo**	
ENQUADRAMENTO	Efetivo	

Transferências entre Lotações

Data	Lotação - Origem	Lotação - Destino
01/03/2010	03.420.926/0002-05 - GLOBAL VILLAGE TELECOM SA - CURIT...	03.420.926/0002-05 - GLOBAL VILLAGE TELECOM SA - CURIT...
Motivo		**Observações**
		00003600000000

Atualização da Carteira de Trabalho

Informações da Empresa

Empresa	CNPJ	Unidade
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Endereço	Cidade
AV DOUTOR DARIO LOPES DOS SANTOS 2197-REBOUCAS	CURITIBA - PR

Espécie de Estabelecimento

Prestação de serviços de Telecomunicação.

Informações do Funcionário

Matrícula	Nome	Endereço
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

Cidade	Lotação	Dt. Adm.	CPF	Nº CTPS	PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	12/06/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

Transferências entre Lotações

Data	Lotação - Origem	Lotação - Destino
01/12/2010	03.420.926/0036-54 - GLOBAL VILLAGE TELECOM SA - REGI...	03.420.926/0036-54 - GLOBAL VILLAGE TELECOM SA - REGI...

Motivo	Observações
	00010800000000

Data	Lotação - Origem	Lotação - Destino
01/04/2014	03.420.926/0108-63 - CURITIBA / TORONTO -HQ ADM	03.420.926/0205-83 - CURITIBA / JARDIM BOTANICO 0205 - H...

Motivo	Observações
TRANSFERENCIA	

Contribuições Sindicais

Data	Sindicato	Valor
03/2014	001 - SINDICATO TRAB EMP TELECOM OPER MESAS TELEF EST PR	219,67
03/2013	001 - SINDICATO TRAB EMP TELECOM OPER MESAS TELEF EST PR	205,13
03/2012	001 - SINDICATO TRAB EMP TELECOM OPER MESAS TELEF EST PR	175,93
03/2011	001 - SINDICATO TRAB EMP TELECOM OPER MESAS TELEF EST PR	142,43
03/2010	001 - SINDICATO TRAB EMP TELECOM OPER MESAS TELEF EST PR	133,30
03/2009	001 - SINDICATO TRAB EMP TELECOM OPER MESAS TELEF EST PR	85,40
03/2008	001 - SINDICATO TRAB EMP TELECOM OPER MESAS TELEF EST PR	55,13
03/2007	001 - SINDICATO TRAB EMP TELECOM OPER MESAS TELEF EST PR	54,70

Atualização da Carteira de Trabalho

Informações da Empresa

Empresa	CNPJ	Unidade
GLOBAL VILLAGE TELECOM S.A.	03.420.926/0205-83	CURITIBA / JARDIM BOTANICO 0205 - HQ ADM

Endereço	Cidade
AV DOUTOR DARIO LOPES DOS SANTOS 2197-REBOUCAS	CURITIBA - PR

Espécie de Estabelecimento

Prestação de serviços de Telecomunicação.

Informações do Funcionário

Matrícula	Nome	Endereço
000004958	GUSTAVO DARTAGNAN XAVIER DO REGO	Ata - Uberaba

Cidade	Lotação	Dt. Adm.	CPF	Nº CTPS	PIS
CURITIBA - PR	205.90000064 - CURITIBA / JARDIM BOTANICO 0205 - HQ ADM	12/06/2006	025.907.999-50	0033680 - 0053	126.90812.49.7

NOTA: Estes dados refletem a ficha de registro do empregado, devendo substituir em carteira de trabalho, bem como toda e qualquer declaração a ser eventualmente solicitada a empresa, conforme disposto na Portaria nº 41 do MTE de 28/03/2007.

A GLOBAL VILLAGE TELECOM S.A. disponibiliza as informações referentes a férias, contribuições sindicais, descontos de convenção coletiva e alterações de cargos e salários.

CURITIBA-PR, 27 de fevereiro de 2015

GLOBAL VILLAGE TELECOM S.A.

NAME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **INCOME TAX - INDIVIDUAL**
ANNUAL ADJUSTMENT DECLARATION **TAX YEAR 2024** **CALENDAR YEAR 2023**

TAXPAYER IDENTIFICATION

Name:	GUSTAVO DARTAGNAN XAVIER DO REGO	CPF:	025.907.999-50
Date of Birth:	09/23/1978	Voter ID:	0069700600655
Do you have a spouse or partner? Yes		CPF of the Spouse or partner:	055.115.229-02

Were you a resident abroad and became a resident in Brazil in 2023? No

Were there any changes to the registration details? No

Is one of the declarants a person with a serious illness or a physical or mental disability? No

Address:	AVENIDA AVENIDA SAO CASEMIRO, NO NUMBER 006001 006108	Number:	1815
Unit:		Neighborhood/District:	TAQUAROVA
City:	ARAUCARIA	State:	PR
ZIP Code:	83701-990	Area Code/Telephone:	
Email:	GUSTAVODARTAGNAN@GMAIL.COM	Area Code/Mobile:	(41) 98836-0365

Occupation Type: 12 - Owner of a company or sole proprietor or employer-owner

Main Occupation: 214 - Engineer, architect, and related professions

Type of Declaration: Original Annual Adjustment Declaration

Receipt Number of the last declaration filed in the 2023 tax year: 41.31.86.39.84-08

DEPENDENTS

No Information

ALIMONY

No Information

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY THE TAXPAYER

(Values in Reais)

NAME OF THE PAYING SOURCE	INCOME RECEIVED FROM LEGAL ENTITY	OFFICIAL SOCIAL SECURITY CONTRIBUTION	WITHHELD TAX	13th SALARY	INCOME TAX WITHHELD ON 13th SALARY
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D CNPJ/CPF: 47.751.467/0001-37	15.768,00	1.734,48	0,00	0,00	0,00
TOTAL	15.768,00	1.734,48	0,00	0,00	0,00

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY DEPENDENTS

No Information

TAXABLE INCOME RECEIVED FROM INDIVIDUALS AND ABROAD BY THE TAXPAYER

No Information

TAXABLE INCOME RECEIVED FROM INDIVIDUALS AND ABROAD BY DEPENDENTS

No Information

EXEMPT AND NON-TAXABLE INCOME

(Values in Reais)

12. Income from savings accounts, mortgage bonds, agribusiness, and real estate letters of credit (LCA and LCI), and certificates of agribusiness and real estate receivables (CRA and CRI) 8,75

Beneficiary	CPF	CNPJ of the Paying Source	Name of the Paying Source	Amount
Taxpayer	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	8,75

13. Income of a partner or owner of a microenterprise or small business opting for the Simples Nacional, except for pro labore, rents, and services rendered 187.503,39

Beneficiary	CPF	CNPJ of the Paying Source	Name of the Paying Source	Amount
Taxpayer	025.907.999-50	47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D	187.503,39

99. Others 301,04

Beneficiary	CPF	CPF/CNPJ da Fonte Pagadora	Name da Fonte Pagadora	Description	Amount
Taxpayer	025.907.999-50	76.416.890/0001-89	STATE DEPARTMENT OF FINANCE GOVERNMENT OF PARANA	NOTA PARANA (Credits Program)	301,04

TOTAL 187.813,18

INCOME SUBJECT TO EXCLUSIVE/DEFINITIVE TAXATION

(Values in Reais)

06. Income from financial investments 13,91

Beneficiary	CPF	CNPJ of the Paying Source	Name of the Paying Source	Amount
Taxpayer	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	6,86
Taxpayer	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	7,05

11. Participation in profits or results 9.741,74

Beneficiary	CPF	CNPJ of the Paying Source	Name of the Paying Source	Amount
Taxpayer	025.907.999-50	02.558.157/0001-62	TELEFONICA BRASIL S.A	9.741,74

TOTAL 9.755,65

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY THE TAXPAYER (TAX WITH SUSPENDED EXIGIBILITY)

No Information

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY THE DEPENDENTS (TAX WITH SUSPENDED EXIGIBILITY)

No Information

TAXABLE INCOME FROM LEGAL ENTITY RECEIVED CUMULATIVELY BY THE TAXPAYER

No Information

TAXABLE INCOME FROM LEGAL ENTITY RECEIVED CUMULATIVELY BY THE DEPENDENTS

No Information

TAX PAID / WITHHELD

No Information

PAYMENTS MADE

(Values in Reais)

CODE	BENEFICIARY NAME	BENEFICIARY CPF/CNPJ	AMOUNT PAID	NON-DEDUCTIBLE PORTION
Taxpayer				
26	SUL AMERICA SEGURO SAUDE S.A. - ANS 006246	01.685.053/0001-56	10.473,84	0,00
Description:				
26	SUL AMERICA SEGURO SAUDE S.A. - ANS 417815	11.973.134/0001-05	514,84	0,00
Description:				

DONATIONS MADE

No Information

STATEMENTS OF ASSETS AND RIGHTS

(Values in Reais)

GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2022	STATUS ON 12/31/2023
01	12	PROPERTY LOCATED AT RUA ATA 98, TWO-STORY HOUSE 02 - CURITIBA/PARANA. TOTAL PAID ON THE FINING IN 2013 R$16.807,06. IMPROVEMENTS R$2045,56. OUTSTANDING BALANCE AS OF 12/31/2014 R$ 46.398,43 TOTAL PAID IN 2014 (WITH FGTS AMORTIZATION OF R$14.589,99) R$30.054,23 + IMPROVEMENTS R$2.217,37. OUTSTANDING BALANCE AS OF 12/31/2015 39.288,53 TOTAL PAID IN 2015 11.945,57. FINANCING PAID OFF, FGTS 17.416,80, TOTAL PAID IN 2016 43.202,68. TOTAL PAID IN 2017 - IMPROVEMENTS 3300,00 – IMPROVEMENTS 2020 R$23.407,40	344.122,88	344.122,88

105 - Brazil

Municipal Registration (IPTU): 37.2.0009.0216.00-6

Address: RUA ATA
No.: 98
Unit: TWO-STORY HOUSE 02
Neighborhood: UBERABA
City: CURITIBA
State: PR ZIP Code: 81550-030
Total Area: 116,0 m²
Acquisition Date: 12/02/2010
Registered at the Registry Office: Yes
Name of the Registry Office: 4th REAL ESTATE REGISTRY OFFICE
Registration: 78.701

STATEMENTS OF ASSETS AND RIGHTS (Values in Reais)

GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2022	STATUS ON 12/31/2023
02	01	VW KOMBI GASOLINE LIGHT TRUCK 1993/1994	11.965,00	11.965,00

105 - Brazil

RENAVAM (National Registry of Motor Vehicles): 00613827627

02	01	PEUGEOT 308 BUSINESS THP 1.6 16V AT6C.4P166H - WHITE - CHASSIS: 8AD4C5GVUKG005614 - ENGINE:10FJCJ2483553 - LICENSE PLATE: OKD9J73 MAKE/MODEL 2018/2019 PURCHASED FROM BARIGUI VEICULOS LTDA CNPJ 79.763.884/0023-00 – DOWNPAYMENT OF R$ 32.950,00 + 24X1675,63 DATE 08/10/2022 FULLY PAUD IN 2024 BY THE AMOUNT OF R$33.512,6	39.652,52	73.165,12

105 - Brazil

RENAVAM: 01183865020

02	01	CITROEN C3 TENDANCE 1.5 8V 4P 89HP - CHASSIS: 935SLYFY1FB531492 - ENGINE: 10DBR10008718 – LICENSE PLATE: AZM4752 - RED MAKE/MODEL 2014/2015 PURCHASED FROM BARIGUI VEICULOS LTDA CNPJ 79.763.884/0023-00 SOLD FOR R$31 THOUSAND TO RENATO GURGEL DE CASTRO E SILVA CPF 804.277.909-72	41.900,00	0,00

105 - Brazil

RENAVAM: 01044468154

02	01	TROLLER/T4 DIESEL TDI 3.0 SILVER- CHASSIS: 94TT4TDE37H010115 -MAKE/MODEL: 2006/2007 LICENSE PLATE:AXN1J50 - ACQUIRED R$67.397,08 THROUGH FINANCING WITH BANCO SANTANDER 36 INSTALLMENTS OF R$2.699,60. PAID R$52.435,67 AS OF 12/31/2023	0,00	52.435,67

105 - Brazil

RENAVAM: 00903187990

04	01	SANTANDER SAVINGS ACCOUNT	434,34	0,00

105 - Brazil

Asset or right belonging to: Taxpayer CPF: 025.907.999-50
CNPJ: 90.400.888/0001-42

Bank: 033 Branch: 3731 Account: 00060040936-8

STATEMENTS OF ASSETS AND RIGHTS

(Values in Reais)

GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2022	STATUS ON 12/31/2023
04	02	SANTANDER CHECKING ACCOUNT/CDB (Certificate of Deposit) 105 - Brazil Asset or right belonging to: Taxpayer CPF: 025.907.999-50 CNPJ: 90.400.888/0001-42	3.599,49	3.541,39
TOTAL			441.674,23	485.230,06

ENCUMBRANCES AND REAL LIABILITIES

(Values in Reais)

CODE	DISCLOSURE	STATUS ON 12/31/2022	STATUS ON 12/31/2023	AMOUNT PAID IN 2023
14	LOAN CONTRACTED FROM BERNADETE CHIUZA XAVIER, CPF 31329675991. ID 1.197.656-5 FOR THE PAYMENT OF EXPENSES RELATED TO THE DIVORCE.	45.000,00	45.000,00	0,00
TOTAL		45.000,00	45.000,00	0,00

DONATIONS TO POLITICAL PARTIES AND CANDIDATES FOR ELECTIVE OFFICES

No Information

STATEMENT OF RURAL ACTIVITY - BRAZIL

IDENTIFICATION DATA OF THE EXPLORED PROPERTY - BRAZIL

No Information

INCOME AND EXPENSES - BRAZIL

No Information

CALCULATION OF THE RESULT - BRAZIL

No Information

LIVESTOCK ACTIVITY - BRAZIL

No Information

ASSETS OF RURAL ACTIVITY - BRAZIL

No Information

DEBTS RELATED TO RURAL ACTIVITY - BRAZIL

No Information

STATEMENT OF RURAL ACTIVITY - ABROAD

IDENTIFICATION DATA OF THE EXPLORED PROPERTY - ABROAD

No Information

INCOME AND EXPENSES - ABROAD

No Information

CALCULATION OF THE RESULT - ABROAD

No Information

LIVESTOCK ACTIVITY - ABROAD

No Information

ASSETS OF RURAL ACTIVITY - ABROAD

No Information

DEBTS RELATED TO RURAL ACTIVITY - ABROAD

No Information

STATEMENT OF CAPITAL GAINS CALCULATION

No Information

VARIABLE INCOME - COMMON OPERATIONS/DAY TRADE - TAXPAYER

NET GAINS OR LOSSES - JAN

No Information

NET GAINS OR LOSSES - FEB

No Information

NET GAINS OR LOSSES - MAR

No Information

NET GAINS OR LOSSES - APR

No Information

NET GAINS OR LOSSES - MAY

No Information

NET GAINS OR LOSSES - JUN

No Information

NET GAINS OR LOSSES - JUL

No Information

NET GAINS OR LOSSES - AUG

No Information

NET GAINS OR LOSSES - SEP

No Information

NET GAINS OR LOSSES - OCT

No Information

NET GAINS OR LOSSES - NOV

No Information

NET GAINS OR LOSSES - DEC

No Information

VARIABLE INCOME - COMMON OPERATIONS/DAY TRADE - DEPENDENTS

No Information

REAL ESTATE INVESTMENT FUNDS OR IN AGRO-INDUSTRIAL PRODUCTION CHAINS - TAXPAYER

No Information

REAL ESTATE INVESTMENT FUNDS OR IN AGRO-INDUSTRIAL PRODUCTION CHAINS - DEPENDENTS

No Information

NAME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **INCOME TAX - INDIVIDUAL**
ANNUAL ADJUSTMENT DECLARATION **TAX YEAR 2024** **CALENDAR YEAR 2023**

SUMMARY **TAXATION USING THE STANDARD DEDUCTION**

TAXABLE INCOME AND STANDARD DEDUCTION		
Received from Legal Entity by the Taxpayer		15.768,00
Received from Legal Entity by Dependents		0,00
Received from Individual/Abroad by the Taxpayer		0,00
Received from Individual/Abroad by Dependents		0,00
Received Cumulatively by the Taxpayer		0,00
Received Cumulatively by Dependents		0,00
Taxable Income from Rural Activity		0,00
TOTAL TAXABLE INCOME		15.768,00
Standard Deduction		3.153,60
Taxable Base		12.614,40
Tax Due		0,00
Tax Due RRA (on received accumulated income)		0,00
Effective Tax Rate (%)		0,00
Total Tax Due		0,00
TAX PAID		
Tax Withheld at Source by the Taxpayer		0,00
Tax Withheld at Source by Dependents		0,00
Taxpayer's Carnê-Leão		0,00
Dependents' Carnê-Leão		0,00
Complementary Tax		0,00
Tax Paid Abroad		0,00
Tax Withheld at Source (Law No.11.033/2004)		0,00
Tax Withheld RRA		0,00
Total Tax Paid		0,00
TAX TO BE REFUNDED		0,00
BALANCE OF TAX PAYABLE		0,00
INSTALLMENT PLAN		
Installment Amount	0,00	
Number of Installments	0	

BANKING INFORMATION

Automatic Debit: NO

Bank

Branch (without Checking Digit)

Account for credit

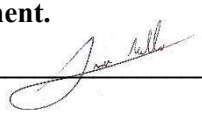
ASSET EVOLUTION

Assets and Rights on 12/31/2022	441.674,23
Assets and Rights on 12/31/2023	485.230,06
Encumbrances and Real Liabilities on 12/31/2022	45.000,00
Encumbrances and Real Liabilities on 12/31/2023	45.000,00

OTHER INFORMATION

Exempt and non-taxable income	187.813,18
Income subject to exclusive/definitive taxation	9.755,65
Taxable income - tax with suspended liability	0,00
Judicial Deposits of Tax	0,00
Tax Paid on Capital Gains	0,00
Tax Paid on Capital Gains Foreign Currency - Assets, Rights, and Financial Investments	0,00
Total tax withheld at source (Law No. 11.033/2004), as per the data provided by the taxpayer	0,00
Tax Paid on Variable Income	0,00
Donations to Political Parties and Candidates for Elective Office	
Tax Payable on Capital Gain - Foreign Currency in Cash	0,00
Deferred Tax on Capital Gains	0,00
Tax Due on Capital Gains	0,00
Tax Due on Net Income from Variable Income	0,00
Tax Due on Capital Gains in Foreign Currency - Assets, Rights, and Financial Investments	0,00

I, André Vinícius Inacio Penna Mello, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



Date: April 20, 2026.

NOME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **IMPOSTO SOBRE A RENDA - PESSOA FÍSICA**
DECLARAÇÃO DE AJUSTE ANUAL **EXERCÍCIO 2024** **ANO-CALENDÁRIO 2023**

IDENTIFICAÇÃO DO CONTRIBUINTE

Nome:	GUSTAVO DARTAGNAN XAVIER DO REGO	CPF:	025.907.999-50
Data de Nascimento:	23/09/1978	Título Eleitoral:	0069700600655
Possui cônjuge ou companheiro(a)?	Sim	CPF do cônjuge ou companheiro(a):	055.115.229-02

Era residente no exterior e passou a ser residente no Brasil em 2023? Não

Houve alteração de dados cadastrais? Não

Um dos declarantes é pessoa com doença grave ou portadora de deficiência física ou mental? Não

Endereço:	AVENIDA AVENIDA SAO CASEMIRO, S/N 006001 006108	Número:	1815
Complemento:		Bairro/Distrito:	TAQUAROVA
Município:	ARAUCARIA	UF:	PR
CEP:	83701-990	DDD/Telefone:	
E-mail:	GUSTAVODARTAGNAN@GMAIL.COM	DDD/Celular:	(41) 98836-0365

Natureza da Ocupação: 12 - Proprietário de empresa ou de firma individual ou empregador-titular

Ocupação Principal: 214 - Engenheiro, arquiteto e afins

Tipo de declaração: Declaração de Ajuste Anual Original

Nº do recibo da última declaração entregue do exercício de 2023: 41.31.86.39.84-08

PROTEGIDA POR SIGILO FISCAL

DEPENDENTES

Sem Informações

ALIMENTANDOS

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELO TITULAR

(Valores em Reais)

NOME DA FONTE PAGADORA	REND. RECEBIDOS DE PES. JURÍDICA	CONTR. PREVID. OFICIAL	IMPOSTO RETIDO NA FONTE	13º SALÁRIO	IRRF SOBRE 13º SALÁRIO
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D CNPJ/CPF: 47.751.467/0001-37	15.768,00	1.734,48	0,00	0,00	0,00
TOTAL	15.768,00	1.734,48	0,00	0,00	0,00

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELOS DEPENDENTES

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA FÍSICA E DO EXTERIOR PELO TITULAR

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA FÍSICA E DO EXTERIOR PELOS DEPENDENTES

Sem Informações

RENDIMENTOS ISENTOS E NÃO TRIBUTÁVEIS

(Valores em Reais)

12. Rendimentos de cadernetas de poupança, letras hipotecárias, letras de crédito do agronegócio e imobiliário (LCA e LCI) e certificados de recebíveis do agronegócio e imobiliários (CRA e CRI) 8,75

Beneficiário	CPF	CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Valor
Titular	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	8,75

13. Rendimento de sócio ou titular de microempresa ou empresa de pequeno porte optante pelo Simples Nacional, exceto pro labore, aluguéis e serviços prestados 187.503,39

Beneficiário	CPF	CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Valor
Titular	025.907.999-50	47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D	187.503,39

99. Outros 301,04

Beneficiário	CPF	CPF/CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Descrição	Valor
Titular	025.907.999-50	76.416.890/0001-89	GOVERNO DO PARANA SECRETARIA DE ESTADO DA FAZENDA	NOTA PARANA	301,04

TOTAL 187.813,18

RENDIMENTOS SUJEITOS À TRIBUTAÇÃO EXCLUSIVA / DEFINITIVA

(Valores em Reais)

06. Rendimentos de aplicações financeiras 13,91

Beneficiário	CPF	CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Valor
Titular	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	6,86
Titular	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	7,05

11. Participação nos lucros ou resultados 9.741,74

Beneficiário	CPF	CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Valor
Titular	025.907.999-50	02.558.157/0001-62	TELEFONICA BRASIL S.A	9.741,74

TOTAL 9.755,65

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELO TITULAR (IMPOSTO COM EXIGIBILIDADE SUSPENSA)

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELOS DEPENDENTES (IMPOSTO COM EXIGIBILIDADE SUSPENSA)

Sem Informações

RENDIMENTOS TRIBUTÁVEIS DE PESSOA JURÍDICA RECEBIDOS ACUMULADAMENTE PELO TITULAR

Sem Informações

PROTEGIDA POR SIGILO FISCAL

RENDIMENTOS TRIBUTÁVEIS DE PESSOA JURÍDICA RECEBIDOS ACUMULADAMENTE PELOS DEPENDENTES

Sem Informações

IMPOSTO PAGO / RETIDO

Sem Informações

PAGAMENTOS EFETUADOS

(Valores em Reais)

CÓD.	NOME DO BENEFICIÁRIO	CPF/CNPJ DO BENEFICIÁRIO	VALOR PAGO	PARC. NÃO DEDUTÍVEL
Titular				
26	SUL AMERICA SEGURO SAUDE S.A. - ANS 006246	01.685.053/0001-56	10.473,84	0,00
Descrição:				
26	SUL AMERICA SEGURO SAUDE S.A. - ANS 417815	11.973.134/0001-05	514,84	0,00
Descrição:				

DOAÇÕES EFETUADAS

Sem Informações

DECLARAÇÃO DE BENS E DIREITOS

(Valores em Reais)

GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2022	SITUAÇÃO EM 31/12/2023
01	12	IMOVEL SITUADO NA RUA ATA 98, SOBRADO 02 - CURITIBA/PARANA. TOTAL PAGO NO FINANCIAMENTO EM 2013 R$16.807,06. BENFEITORIAS R$2045,56. SALDO DEVEDOR EM 31/12/2014 R$ 46.398,43 TOTAL PAGO EM 2014 (COM AMORTIZACAO FGTS DE R$14.589,99) R$30.054,23 + BENFEITORIAS R$2.217,37. SALDO DEVEDOR EM 31/12/2015 39.288,53 TOTAL PAGO EM 2015 11.945,57. FINANCIAMENTO QUITADO, FGTS 17.416,80, TOTAL PAGO EM 2016 43.202,68. TOTAL PAGO EM 2017 - BENFEITORIAS 3300,00 - BENFEITORIAS 2020 R$23.407,40	344.122,88	344.122,88

105 - Brasil

Inscrição Municipal (IPTU): 37.2.0009.0216.00-6

Logradouro: RUA ATA
Nº: 98
Comp.: SOB 02
Bairro: UBERABA
Município: CURITIBA
UF: PR CEP: 81550-030
Área Total: 116,0 m²
Data de Aquisição: 02/12/2010
Registrado no Cartório: Sim
Nome Cartório: 4 REGISTRO DE IMOVEIS
Matrícula: 78.701

PROTEGIDO POR SIGILO FISCAL

DECLARAÇÃO DE BENS E DIREITOS (Valores em Reais)

GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2022	SITUAÇÃO EM 31/12/2023
02	01	VW KOMBI CAMINHONETA GASOLINA 1993/1994 105 - Brasil RENAVAM: 00613827627	11.965,00	11.965,00
02	01	PEUGEOT 308 BUSINESS THP 1.6 16V AT6C.4P166H - BRANCA - CHASSI: 8AD4C5GVUKG005614 - MOTOR:10FJCJ2483553 - PLACA: OKD9J73 FAB/MOD 2018/2019 ADQUIRIDO DE BARIGUI VEICULOS LTDA CNPJ 79.763.884/0023-00 - ENTRADA R$ 32.950,00 + 24X1675,63 DATA 10/08/2022 QUITADO EM 2024 POR R$33.512,6 105 - Brasil RENAVAM: 01183865020	39.652,52	73.165,12
02	01	CITROEN C3 TENDANCE 1.5 8V 4P 89HP - CHASSI: 935SLYFY1FB531492 - MOTOR: 10DBR10008718 - PLACA: AZM4752 - VERMELHA FAB/MOD 2014/2015 ADQUIRIDO DE BARIGUI VEICULOS LTDA CNPJ 79.763.884/0023-00 VENDIDO POR R$31MIL PARA RENATO GURGEL DE CASTRO E SILVA CPF 804.277.909-72 105 - Brasil RENAVAM: 01044468154	41.900,00	0,00
02	01	TROLLER/T4 DIESEL TDI 3.0 PRATA- CHASSI: 94TT4TDE37H010115 -ANO/MODELO: 2006/2007 PLACA:AXN1J50 - ADQUIRIDO R$67.397,08 POR MEIO DE FINANCIAMENTO BANCO SANTANDER 36X R$2.699,60. PAGO R$52.435,67 ATE 31/12/2023 105 - Brasil RENAVAM: 00903187990	0,00	52.435,67
04	01	SANTANDER POUPANCA 105 - Brasil	434,34	0,00

Bem ou direito pertencente ao: Titular CPF: 025.907.999-50
CNPJ: 90.400.888/0001-42

Banco: 033 Agência: 3731 Conta: 00060040936-8

PROTEGIDA POR SIGILO FISCAL

DECLARAÇÃO DE BENS E DIREITOS

(Valores em Reais)

GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2022	SITUAÇÃO EM 31/12/2023
04	02	SANTANDER CONTA CORRENTE/CDB 105 - Brasil Bem ou direito pertencente ao: Titular CPF: 025.907.999-50 CNPJ: 90.400.888/0001-42	3.599,49	3.541,39
TOTAL			441.674,23	485.230,06

DÍVIDAS E ÔNUS REAIS

(Valores em Reais)

CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2022	SITUAÇÃO EM 31/12/2023	VALOR PAGO EM 2023
14	EMPRESTIMO CONTRAIDO DE BERNADETE CHIUZA XAVIER, CPF 31329675991. RG 1.197.656-5 PARA PAGAMENTO DE DESPESAS RELACIONADAS COM O DIVORCIO.	45.000,00	45.000,00	0,00
TOTAL		45.000,00	45.000,00	0,00

DOAÇÕES A PARTIDOS POLÍTICOS E CANDIDATOS A CARGOS ELETIVOS

Sem Informações

PROTEGIDA POR SIGILO FISCAL

DEMONSTRATIVO DE ATIVIDADE RURAL - BRASIL

DADOS E IDENTIFICAÇÃO DO IMÓVEL EXPLORADO - BRASIL

Sem Informações

RECEITAS E DESPESAS - BRASIL

Sem Informações

APURAÇÃO DO RESULTADO - BRASIL

Sem Informações

MOVIMENTAÇÃO DO REBANHO - BRASIL

Sem Informações

BENS DA ATIVIDADE RURAL - BRASIL

Sem Informações

DÍVIDAS VINCULADAS À ATIVIDADE RURAL - BRASIL

Sem Informações

PROTEGIDA POR SIGILO FISCAL

DEMONSTRATIVO DE ATIVIDADE RURAL - EXTERIOR

DADOS E IDENTIFICAÇÃO DO IMÓVEL EXPLORADO - EXTERIOR

Sem Informações

RECEITAS E DESPESAS - EXTERIOR

Sem Informações

APURAÇÃO DO RESULTADO - EXTERIOR

Sem Informações

MOVIMENTAÇÃO DO REBANHO - EXTERIOR

Sem Informações

BENS DA ATIVIDADE RURAL - EXTERIOR

Sem Informações

DÍVIDAS VINCULADAS À ATIVIDADE RURAL - EXTERIOR

Sem Informações

DEMONSTRATIVO DA APURAÇÃO DOS GANHOS DE CAPITAL

Sem Informações

PROTEGIDA POR SIGILO FISCAL

RENDA VARIÁVEL - OPERAÇÕES COMUNS/DAYTRADE - TITULAR

GANHOS LÍQUIDOS OU PERDAS - JAN

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - FEV

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - MAR

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - ABR

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - MAI

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - JUN

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - JUL

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - AGO

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - SET

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - OUT

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - NOV

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - DEZ

Sem Informações

RENDA VARIÁVEL - OPERAÇÕES COMUNS/DAYTRADE - DEPENDENTES

Sem Informações

FUNDOS DE INVESTIMENTO IMOBILIÁRIO OU NAS CADEIAS PRODUTIVAS AGROINDUSTRIAIS - TITULAR

Sem Informações

FUNDOS DE INVESTIMENTO IMOBILIÁRIO OU NAS CADEIAS PRODUTIVAS AGROINDUSTRIAIS - DEPENDENTES

Sem Informações

PROTEGIDA POR SIGILO FISCAL

NOME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **IMPOSTO SOBRE A RENDA - PESSOA FÍSICA**
DECLARAÇÃO DE AJUSTE ANUAL **EXERCÍCIO 2024** **ANO-CALENDÁRIO 2023**

RESUMO **TRIBUTAÇÃO UTILIZANDO O DESCONTO SIMPLIFICADO**

RENDIMENTOS TRIBUTÁVEIS E DESCONTO SIMPLIFICADO	
Recebidos de Pessoa Jurídica pelo Titular	15.768,00
Recebidos de Pessoa Jurídica pelos Dependentes	0,00
Recebidos de Pessoa Física/Exterior pelo Titular	0,00
Recebidos de Pessoa Física/Exterior pelos Dependentes	0,00
Recebidos acumuladamente pelo titular	0,00
Recebidos acumuladamente pelos dependentes	0,00
Resultado tributável da Atividade Rural	0,00
TOTAL DE RENDIMENTOS TRIBUTÁVEIS	15.768,00
Desconto Simplificado	3.153,60
Base de cálculo do Imposto	12.614,40
Imposto devido	0,00
Imposto devido RRA	0,00
Aliquota efetiva (%)	0,00
Total do imposto devido	0,00
IMPOSTO PAGO	
Imposto retido na fonte do titular	0,00
Imp. retido na fonte dos dependentes	0,00
Carnê-Leao do titular	0,00
Carnê-Leao dos dependentes	0,00
Imposto Complementar	0,00
Imposto pago no exterior	0,00
Imposto retido na fonte (Lei nº 11.033/2004)	0,00
Imposto retido RRA	0,00
Total do imposto pago	0,00
IMPOSTO A RESTITUIR	0,00
SALDO IMPOSTO A PAGAR	0,00
PARCELAMENTO	
Valor da quota	0,00
Número de Quotas	0

INFORMAÇÕES BANCÁRIAS

Débito automático: NÃO

Banco
Agência (sem DV)
Conta para crédito

PROTEGIDA POR SIGILO FISCAL

EVOLUÇÃO PATRIMONIAL

Bens e direitos em 31/12/2022	441.674,23
Bens e direitos em 31/12/2023	485.230,06
Dívidas e ônus reais em 31/12/2022	45.000,00
Dívidas e ônus reais em 31/12/2023	45.000,00

OUTRAS INFORMAÇÕES

Rendimentos isentos e não tributáveis	187.813,18
Rendimentos sujeitos à tributação exclusiva/definitiva	9.755,65
Rendimentos tributáveis - imposto com exigibilidade suspensa	0,00
Depósitos judiciais do imposto	0,00
Imposto pago sobre Ganhos de Capital	0,00
Imposto pago Ganhos de Capital Moeda Estrangeira - Bens, direitos e Aplicações Financeiras	0,00
Total do imposto retido na fonte (Lei nº11.033/2004), conforme dados informados pelo contribuinte	0,00
Imposto pago sobre Renda Variável	0,00
Doações a Partidos Políticos e Candidatos a Cargos Eletivos	
Imposto a pagar sobre o Ganho de Capital - Moeda Estrangeira em Espécie	0,00
Imposto diferido dos Ganhos de Capital	0,00
Imposto devido sobre Ganhos de Capital	0,00
Imposto devido sobre ganhos líquidos em Renda Variável	0,00
Imposto devido sobre Ganhos de Capital Moeda Estrangeira - Bens, direitos e aplic. financeiras	0,00

PROTEGIDA POR SIGILO FISCAL

NAME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **INCOME TAX - INDIVIDUAL**
ANNUAL ADJUSTMENT DECLARATION **TAX YEAR 2025** **CALENDAR YEAR 2024**

TAXPAYER IDENTIFICATION

Name:	GUSTAVO DARTAGNAN XAVIER DO REGO	CPF:	025.907.999-50
Date of Birth:	09/23/1978		
Do you have a spouse or partner?	Yes	CPF of the Spouse or partner:	055.115.229-02

Were you a resident abroad and became a resident in Brazil in 2024? No

Were there any changes to the registration details? No

Is one of the declarants a person with a serious illness or a physical or mental disability? No

Address:	AVENIDA AVENIDA SAO CASEMIRO, S/N 006001 006108	Number:	1815
Unit:		Neighborhood/District:	TAQUAROVA
City:	ARAUCARIA	State:	PR
ZIP Code:	83701-990	Area Code/Telephone:	
Email:	GUSTAVODARTAGNAN@GMAIL.COM	Area Code/Mobile:	(41) 98836-0365

Occupation Type: 12 - Owner of a company or sole proprietor or employer-owner
Main Occupation: 214 - Engineer, architect, and related professions
Type of Declaration: Original Annual Adjustment Declaration
Receipt Number of the last declaration filed in the 2024 tax year: 01.30.21.25.88-59

DEPENDENTS

No Information

ALIMONY

No Information

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY THE TAXPAYER

(Values in Reais)

NAME OF THE PAYING SOURCE	INCOME RECEIVED FROM LEGAL ENTITY	OFFICIAL SOCIAL SECURITY CONTRIBUTION	WITHHELD TAX	13th SALARY	INCOME TAX WITHHELD ON 13th SALARY
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D CNPJ/CPF: 47.751.467/0001-37	16.944,00	1.863,84	0,00	0,00	0,00
TOTAL	16.944,00	1.863,84	0,00	0,00	0,00

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY DEPENDENTS

No Information

TAXABLE INCOME RECEIVED FROM INDIVIDUALS AND ABROAD BY THE TAXPAYER

No Information

TAXABLE INCOME RECEIVED FROM INDIVIDUALS AND ABROAD BY DEPENDENTS

No Information

EXEMPT AND NON-TAXABLE INCOME

(Values in Reais)

13. Income of a partner or owner of a microenterprise or small business opting for the Simples Nacional, except for pro labore, rents, and services rendered — 303.832,87

Beneficiary	CPF	CNPJ of the Paying Source	Name of the Paying Source	Amount
Taxpayer	025.907.999-50	47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D	303.832,87

99. Others — 109,18

Beneficiary	CPF	CPF/CNPJ of the Paying Source	Name of the Paying Source	Description	Amount
Taxpayer	025.907.999-50	76.416.890/0001-89	STATE DEPARTMENT OF FINANCE GOVERNMENT OF PARANA	NOTA PARANA (Credits Program)	109,18

TOTAL 303.942,05

INCOME SUBJECT TO EXCLUSIVE/DEFINITIVE TAXATION

(Values in Reais)

06. Income from financial investments — 18,94

Beneficiary	CPF	CNPJ of the Paying Source	Name of the Paying Source	Amount
Taxpayer	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	9,47
Taxpayer	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	9,47

TOTAL 18,94

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY THE TAXPAYER (TAX WITH SUSPENDED EXIGIBILITY)

No Information

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY THE DEPENDENTS (TAX WITH SUSPENDED EXIGIBILITY)

No Information

TAXABLE INCOME FROM LEGAL ENTITY RECEIVED CUMULATIVELY BY THE TAXPAYER

No Information

TAXABLE INCOME FROM LEGAL ENTITY RECEIVED CUMULATIVELY BY THE DEPENDENTS

No Information

TAX PAID / WITHHELD

No Information

PAYMENTS MADE

(Values in Reais)

CODE	BENEFICIARY NAME	BENEFICIARY CPF/CNPJ	AMOUNT PAID	NON-DEDUCTIBLE PORTION

PAYMENTS MADE

(Values in Reais)

CODE	BENEFICIARY NAME	BENEFICIARY CPF/CNPJ	AMOUNT PAID	NON-DEDUCTIBLE PORTION
Taxpayer				
26	SUL AMERICA SEGURO SAUDE S.A. - ANS 006246	01.685.053/0001-56	7.046,79	0,00
Description:				
26	SUL AMERICA SEGURO SAUDE S.A. - ANS 417815	11.973.134/0001-05	46,71	0,00
Description:				

DONATIONS MADE

No Information

STATEMENTS OF ASSETS AND RIGHTS

(Values in Reais)

Did you update the value of any real estate property and pay the capital gain tax by 12/16/2024 in accordance with Law No. 14.973/2024?	No

GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2023	STATUS ON 12/31/2024
01	12	PROPERTY LOCATED AT RUA ATA 98, TWO-STORY HOUSE 02 - CURITIBA/PARANA. TOTAL PAID ON THE FINING IN 2013 R$16.807,06. IMPROVEMENTS R$2045,56. OUTSTANDING BALANCE AS OF 12/31/2014 R$ 46.398,43 TOTAL PAID IN 2014 (WITH FGTS AMORTIZATION OF R$14.589,99) R$30.054,23 + IMPROVEMENTS R$2.217,37. OUTSTANDING BALANCE AS OF 12/31/2015 39.288,53 TOTAL PAID IN 2015 11.945,57. FINANCING PAID OFF, FGTS 17.416,80, TOTAL PAID IN 2016 43.202,68. TOTAL PAID IN 2017 - IMPROVEMENTS 3300,00 – IMPROVEMENTS 2020 R$23.407,40	344.122,88	344.122,88

105 - Brazil

Municipal Registration (IPTU): 37.2.0009.0216.00-6

Address RUA ATA
No.: 98
Unit: TWO-STORY HOUSE 02
Neighborhood: UBERABA
City: CURITIBA
State: PR ZIP Code: 81550-030
Total Area: 116,0 m²
Acquisition Date: 12/02/2010
Registered at the Registry Office: Yes
Name of the Registry Office: 4th REAL ESTATE REGISTRY OFFICE
Registration: 78.701

02	01	VW KOMBI GASOLINE LIGHT TRUCK 1993/1994	11.965,00	11.965,00

105 - Brazil

RENAVAM (National Registry of Motor Vehicles): 00613827627

STATEMENTS OF ASSETS AND RIGHTS

(Values in Reais)

Did you update the value of any real estate property and pay the capital gain tax by 12/16/2024 in accordance with Law No. 14.973/2024?	No

GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2023	STATUS ON 12/31/2024
02	01	PEUGEOT 308 BUSINESS THP 1.6 16V AT6C.4P166H - WHITE - CHASSIS: 8AD4C5GVUKG005614 - ENGINE:10FJCJ2483553 - LICENSE PLATE: OKD9J73 MAKE/MODEL 2018/2019 PURCHASED FROM BARIGUI VEICULOS LTDA CNPJ 79.763.884/0023-00 – DOWNPAYMENT OF R$ 32.950,00 + 24X1675,63 DATE 08/10/2022 FULLY PAUD IN 2024 BY THE AMOUNT OF R$33.512,6	73.165,12	73.165,12

105 - Brazil

RENAVAM: 01183865020

GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2023	STATUS ON 12/31/2024
02	01	TROLLER/T4 DIESEL TDI 3.0 SILVER- CHASSIS: 94TT4TDE37H010115 - MAKE/MODEL: 2006/2007 LICENSE PLATE:AXN1J50 - ACQUIRED R$67.397,08 THROUGH FINANCING WITH BANCO SANTANDER 36 INSTALLMENTS OF R$2.699,60. PAID R$52.435,67 AS OF 12/31/2023	52.435,67	78.864,18

105 - Brazil

RENAVAM: 00903187990

GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2023	STATUS ON 12/31/2024
04	02	SANTANDER CHECKING ACCOUNT/CDB (Certificate of Deposit) 3731-000010266324	3.541,39	20.990,52

105 - Brazil

Asset or right belonging to: Taxpayer CPF: 025.907.999-50

CNPJ: 90.400.888/0001-42

GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2023	STATUS ON 12/31/2024
06	99	NOMAD - BALANCE OF US$ 2,020.08 AT BROKERAGE DRIVEWEALTH, LLC, CONVERTED BY PTAX R$ 12,507.73 AS OF 12/31/2024	0,00	12.507,73

249 – United States

Asset or right belonging to: Taxpayer CPF: 025.907.999-50

Financial Investment

Profit or Loss: 0,00

Tax Paid Abroad: 0,00

TOTAL	485.230,06	541.615,43

ENCUMBRANCES AND REAL LIABILITIES

(Values in Reais)

CODE	DISCLOSURE	STATUS ON 12/31/2023	STATUS ON 12/31/2024	AMOUNT PAID IN 2024
14	LOAN CONTRACTED FROM BERNADETE CHIUZA XAVIER, CPF 31329675991. ID 1.197.656-5 FOR THE PAYMENT OF EXPENSES RELATED TO THE DIVORCE.	45.000,00	0,00	45.000,00
TOTAL		45.000,00	0,00	45.000,00

DONATIONS TO POLITICAL PARTIES AND CANDIDATES FOR ELECTIVE OFFICES

No Information

STATEMENT OF RURAL ACTIVITY - BRAZIL

IDENTIFICATION DATA OF THE EXPLORED PROPERTY - BRAZIL

No Information

INCOME AND EXPENSES - BRAZIL

No Information

CALCULATION OF THE RESULT - BRAZIL

No Information

LIVESTOCK ACTIVITY - BRAZIL

No Information

ASSETS OF RURAL ACTIVITY - BRAZIL

No Information

DEBTS RELATED TO RURAL ACTIVITY - BRAZIL

No Information

STATEMENT OF RURAL ACTIVITY - ABROAD

IDENTIFICATION DATA OF THE EXPLORED PROPERTY - ABROAD

No Information

INCOME AND EXPENSES - ABROAD

No Information

CALCULATION OF THE RESULT - ABROAD

No Information

LIVESTOCK ACTIVITY - ABROAD

No Information

ASSETS OF RURAL ACTIVITY - ABROAD

No Information

DEBTS RELATED TO RURAL ACTIVITY - ABROAD

No Information

STATEMENT OF CAPITAL GAINS CALCULATION

No Information

VARIABLE INCOME - COMMON OPERATIONS/DAY TRADE - TAXPAYER

NET GAINS OR LOSSES - JAN

No Information

NET GAINS OR LOSSES - FEB

No Information

NET GAINS OR LOSSES - MAR

No Information

NET GAINS OR LOSSES - APR

No Information

NET GAINS OR LOSSES - MAY

No Information

NET GAINS OR LOSSES - JUN

No Information

NET GAINS OR LOSSES - JUL

No Information

NET GAINS OR LOSSES - AUG

No Information

NET GAINS OR LOSSES - SEP

No Information

NET GAINS OR LOSSES - OCT

No Information

NET GAINS OR LOSSES - NOV

No Information

NET GAINS OR LOSSES - DEC

No Information

VARIABLE INCOME - COMMON OPERATIONS/DAY TRADE - DEPENDENTS

No Information

REAL ESTATE INVESTMENT FUNDS OR IN AGRO-INDUSTRIAL PRODUCTION CHAINS - TAXPAYER

No Information

REAL ESTATE INVESTMENT FUNDS OR IN AGRO-INDUSTRIAL PRODUCTION CHAINS - DEPENDENTS

No Information

DONATIONS DIRECTLY IN THE DECLARATION – ECA (STATUTE OF THE CHILD AND ADOLESCENT)

No Information

DONATIONS DIRECTLY IN THE DECLARATION - ELDERLY

No Information

NAME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **INCOME TAX - INDIVIDUAL**
ANNUAL ADJUSTMENT DECLARATION **TAX YEAR 2025** **CALENDAR YEAR 2024**

SUMMARY — TAXATION USING THE LEGAL DEDUCTION

TAXABLE INCOME

Received from Legal Entity by the taxpayer	16.944,00
Received from Legal Entity by dependents	0,00
Received from Individual/Abroad by the taxpayer	0,00
Received from Individual/Abroad by Dependents	0,00
Received Cumulatively by the taxpayer	0,00
Received Cumulatively by dependents	0,00
Taxable Income from Rural Activity	0,00
TOTAL	16.944,00

DEDUCTIONS

Contributions to the official and closed complementary pension systems referred to in § 15 of Article 40 of the CF (Federal Constitution)/1988 (up to the sponsor limit)	1.863,84
Contribution to the official pension system (Income received cumulatively)	0,00
Contribution to the complementary pension system, including the amount for the closed systems referred to in Article 40, § 15, of the CF (Federal Constitution)/1988, which exceeds the sponsor's limit	0,00
Dependents	0,00
Education Expenses	0,00
Medical Expenses	7.093,50
Judicial Alimony	0,00
Alimony by Public Deed	0,00
Judicial Alimony (Income received cumulatively)	0,00
Cash Book	0,00
TOTAL	8.957,34

TAX DUE

Tax Base	7.986,66
Tax Due	0,00
Incentive Deduction	0,00
Tax Due I	0,00
Tax Due RRA (on received accumulated income)	0,00
Effective Tax Rate (%)	0,00
Total Tax Due	0,00

TAX TO BE REFUNDED	0,00
BALANCE OF TAX PAYABLE	0,00

INSTALLMENT PLAN

Installment Amount	0,00
Number of Installments	0

BANKING INFORMATION

Automatic Debit: NO

Bank
Branch (without verification digit)
Account for debit

TAX PAID

Tax Withheld at Source by the Taxpayer	0,00
Tax Withheld at Source by Dependents	0,00
Taxpayer's Carnê-Leão	0,00
Dependents' Carnê-Leão	0,00
Complementary Tax	0,00
Tax Paid Abroad	0,00
Tax Withheld at Source (Law No. 11.033/2004)	0,00
Tax Withheld RRA	0,00
Total Tax Paid	0,00

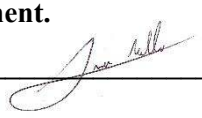
ASSET EVOLUTION

Assets and Rights on 12/31/2023	485.230,06
Assets and Rights on 12/31/2024	541.615,43
Encumbrances and Real Liabilities on 12/31/2023	45.000,00
Encumbrances and Real Liabilities on 12/31/2024	0,00

OTHER INFORMATION

Exempt and non-taxable income	303.942,05
Income subject to exclusive/definitive taxation	18,94
Taxable income - tax with suspended liability	0,00
Judicial Deposits of Tax	0,00
Tax Paid on Capital Gains	0,00
Tax Paid on Capital Gains Foreign Currency - Assets, Rights, and Financial Investments	0,00
Total tax withheld at source (Law No. 11.033/2004), as per the data provided by the taxpayer	0,00
Tax Paid on Variable Income	0,00
Donations to Political Parties and Candidates for Elective Office	0,00
Tax Payable on Capital Gain - Foreign Currency in Cash	0,00
Deferred Tax on Capital Gains	0,00
Tax Due on Capital Gains	0,00
Tax Due on Net Income from Variable Income	0,00
Tax Due on Capital Gains in Foreign Currency - Assets, Rights, and Financial Investments	0,00

I, André Vinícius Inacio Penna Mello, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



Date: April 20, 2026.

NOME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **IMPOSTO SOBRE A RENDA - PESSOA FÍSICA**
DECLARAÇÃO DE AJUSTE ANUAL **EXERCÍCIO 2025** **ANO-CALENDÁRIO 2024**

IDENTIFICAÇÃO DO CONTRIBUINTE

Nome:	GUSTAVO DARTAGNAN XAVIER DO REGO	CPF:	025.907.999-50
Data de Nascimento:	23/09/1978		
Possui cônjuge ou companheiro(a)?	Sim	CPF do cônjuge ou companheiro(a):	055.115.229-02

Era residente no exterior e passou a ser residente no Brasil em 2024? Não

Houve alteração de dados cadastrais? Não

Um dos declarantes é pessoa com doença grave ou portadora de deficiência física ou mental? Não

Endereço:	AVENIDA AVENIDA SAO CASEMIRO, S/N 006001 006108	Número:	1815
Complemento:		Bairro/Distrito:	TAQUAROVA
Município:	ARAUCARIA	UF:	PR
CEP:	83701-990	DDD/Telefone:	
E-mail:	GUSTAVODARTAGNAN@GMAIL.COM	DDD/Celular:	(41) 98836-0365

Natureza da Ocupação: 12 - Proprietário de empresa ou de firma individual ou empregador-titular

Ocupação Principal: 214 - Engenheiro, arquiteto e afins

Tipo de declaração: Declaração de Ajuste Anual Original

Nº do recibo da última declaração entregue do exercício de 2024: 01.30.21.25.88-59

PROTEGIDA POR SIGILO FISCAL

DEPENDENTES

Sem Informações

ALIMENTANDOS

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELO TITULAR

(Valores em Reais)

NOME DA FONTE PAGADORA	REND. RECEBIDOS DE PES. JURÍDICA	CONTR. PREVID. OFICIAL	IMPOSTO RETIDO NA FONTE	13º SALÁRIO	IRRF SOBRE 13º SALÁRIO
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D CNPJ/CPF: 47.751.467/0001-37	16.944,00	1.863,84	0,00	0,00	0,00
TOTAL	16.944,00	1.863,84	0,00	0,00	0,00

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELOS DEPENDENTES

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA FÍSICA E DO EXTERIOR PELO TITULAR

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA FÍSICA E DO EXTERIOR PELOS DEPENDENTES

Sem Informações

RENDIMENTOS ISENTOS E NÃO TRIBUTÁVEIS

(Valores em Reais)

13. Rendimento de sócio ou titular de microempresa ou empresa de pequeno porte optante pelo Simples Nacional, exceto pro labore, aluguéis e serviços prestados 303.832,87

Beneficiário	CPF	CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Valor
Titular	025.907.999-50	47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D	303.832,87

99. Outros 109,18

Beneficiário	CPF	CPF/CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Descrição	Valor
Titular	025.907.999-50	76.416.890/0001-89	GOVERNO DO PARANA SECRETARIA DA FAZENDA	NOTA PARANA	109,18

TOTAL 303.942,05

RENDIMENTOS SUJEITOS À TRIBUTAÇÃO EXCLUSIVA / DEFINITIVA

(Valores em Reais)

06. Rendimentos de aplicações financeiras 18,94

Beneficiário	CPF	CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Valor
Titular	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	9,47
Titular	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) SA	9,47

TOTAL 18,94

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELO TITULAR (IMPOSTO COM EXIGIBILIDADE SUSPENSA)

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELOS DEPENDENTES (IMPOSTO COM EXIGIBILIDADE SUSPENSA)

Sem Informações

RENDIMENTOS TRIBUTÁVEIS DE PESSOA JURÍDICA RECEBIDOS ACUMULADAMENTE PELO TITULAR

Sem Informações

RENDIMENTOS TRIBUTÁVEIS DE PESSOA JURÍDICA RECEBIDOS ACUMULADAMENTE PELOS DEPENDENTES

Sem Informações

IMPOSTO PAGO / RETIDO

Sem Informações

PAGAMENTOS EFETUADOS

(Valores em Reais)

CÓD.	NOME DO BENEFICIÁRIO	CPF/CNPJ DO BENEFICIÁRIO	VALOR PAGO	PARC. NÃO DEDUTÍVEL

PROTEGIDA POR SIGILO FISCAL

PAGAMENTOS EFETUADOS

(Valores em Reais)

CÓD.	NOME DO BENEFICIÁRIO	CPF/CNPJ DO BENEFICIÁRIO	VALOR PAGO	PARC. NÃO DEDUTÍVEL
Titular				
26	SUL AMERICA SEGURO SAUDE S.A. - ANS 006246	01.685.053/0001-56	7.046,79	0,00
Descrição:				
26	SUL AMERICA SEGURO SAUDE S.A. - ANS 417815	11.973.134/0001-05	46,71	0,00
Descrição:				

DOAÇÕES EFETUADAS

Sem Informações

DECLARAÇÃO DE BENS E DIREITOS

(Valores em Reais)

Atualizou o valor de algum bem imóvel e pagou o ganho de capital até 16/12/2024 de acordo com a Lei nº 14.973/2024?	Não

GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2023	SITUAÇÃO EM 31/12/2024
01	12	IMOVEL SITUADO NA RUA ATA 98, SOBRADO 02 - CURITIBA/PARANA. TOTAL PAGO NO FINANCIAMENTO EM 2013 R$16.807,06. BENFEITORIAS R$2045,56. SALDO DEVEDOR EM 31/12/2014 R$ 46.398,43 TOTAL PAGO EM 2014 (COM AMORTIZACAO FGTS DE R$14.589,99) R$30.054,23 + BENFEITORIAS R$2.217,37. SALDO DEVEDOR EM 31/12/2015 39.288,53 TOTAL PAGO EM 2015 11.945,57. FINANCIAMENTO QUITADO, FGTS 17.416,80, TOTAL PAGO EM 2016 43.202,68. TOTAL PAGO EM 2017 - BENFEITORIAS 3300,00 - BENFEITORIAS 2020 R$23.407,40	344.122,88	344.122,88

105 - Brasil

Inscrição Municipal (IPTU): 37.2.0009.0216.00-6

Logradouro: RUA ATA
Nº: 98
Comp.: SOB 02
Bairro: UBERABA
Município: CURITIBA
UF: PR CEP: 81550-030
Área Total: 116,0 m²
Data de Aquisição: 02/12/2010
Registrado no Cartório: Sim
Nome Cartório: 4 REGISTRO DE IMOVEIS
Matrícula: 78.701

02	01	VW KOMBI CAMINHONETA GASOLINA 1993/1994	11.965,00	11.965,00

105 - Brasil

RENAVAM: 00613827627

PROTEGIDO POR SIGILO FISCAL

DECLARAÇÃO DE BENS E DIREITOS

(Valores em Reais)

Atualizou o valor de algum bem imóvel e pagou o ganho de capital até 16/12/2024 de acordo com a Lei nº 14.973/2024?	Não

GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2023	SITUAÇÃO EM 31/12/2024
02	01	PEUGEOT 308 BUSINESS THP 1.6 16V AT6C.4P166H - BRANCA - CHASSI: 8AD4C5GVUKG005614 - MOTOR:10FJCJ2483553 - PLACA: OKD9J73 FAB/MOD 2018/2019 ADQUIRIDO DE BARIGUI VEICULOS LTDA CNPJ 79.763.884/0023-00 - ENTRADA R$ 32.950,00 + 24X1675,63 DATA 10/08/2022 QUITADO EM 2024 POR R$33.512,6 105 - Brasil RENAVAM: 01183865020	73.165,12	73.165,12
02	01	TROLLER/T4 DIESEL TDI 3.0 PRATA- CHASSI: 94TT4TDE37H010115 -ANO/MODELO: 2006/2007 PLACA:AXN1J50 - ADQUIRIDO R$67.397,08 POR MEIO DE FINANCIAMENTO BANCO SANTANDER 36X R$2.699,60. PAGO R$52.435,67 ATE 31/12/2023 105 - Brasil RENAVAM: 00903187990	52.435,67	78.864,18
04	02	SANTANDER CONTA CORRENTE/CDB 3731-000010266324 105 - Brasil Bem ou direito pertencente ao: Titular CPF: 025.907.999-50 CNPJ: 90.400.888/0001-42	3.541,39	20.990,52
06	99	NOMAD - SALDO DE US$ 2020,08 NA CORRETORA DRIVEWEALTH, LLC, CONVERTIDO PELA PTAX R$ 12.507,73 DE 31/12/2024 249 - Estados Unidos Bem ou direito pertencente ao: Titular CPF: 025.907.999-50 **Aplicação Financeira** Lucro ou Prejuízo: 0,00 Imposto Pago no Exterior: 0,00	0,00	12.507,73
TOTAL			485.230,06	541.615,43

DÍVIDAS E ÔNUS REAIS

(Valores em Reais)

CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2023	SITUAÇÃO EM 31/12/2024	VALOR PAGO EM 2024
14	EMPRESTIMO CONTRAIDO DE BERNADETE CHIUZA XAVIER, CPF 31329675991. RG 1.197.656-5 PARA PAGAMENTO DE DESPESAS RELACIONADAS COM O DIVORCIO.	45.000,00	0,00	45.000,00
TOTAL		45.000,00	0,00	45.000,00

DOAÇÕES A PARTIDOS POLÍTICOS E CANDIDATOS A CARGOS ELETIVOS

Sem Informações

PROTEGIDA POR SIGILO FISCAL

DEMONSTRATIVO DE ATIVIDADE RURAL - BRASIL

DADOS E IDENTIFICAÇÃO DO IMÓVEL EXPLORADO - BRASIL

Sem Informações

RECEITAS E DESPESAS - BRASIL

Sem Informações

APURAÇÃO DO RESULTADO - BRASIL

Sem Informações

MOVIMENTAÇÃO DO REBANHO - BRASIL

Sem Informações

BENS DA ATIVIDADE RURAL - BRASIL

Sem Informações

DÍVIDAS VINCULADAS À ATIVIDADE RURAL - BRASIL

Sem Informações

PROTEGIDA POR SIGILO FISCAL

DEMONSTRATIVO DE ATIVIDADE RURAL - EXTERIOR

DADOS E IDENTIFICAÇÃO DO IMÓVEL EXPLORADO - EXTERIOR

Sem Informações

RECEITAS E DESPESAS - EXTERIOR

Sem Informações

APURAÇÃO DO RESULTADO - EXTERIOR

Sem Informações

MOVIMENTAÇÃO DO REBANHO - EXTERIOR

Sem Informações

BENS DA ATIVIDADE RURAL - EXTERIOR

Sem Informações

DÍVIDAS VINCULADAS À ATIVIDADE RURAL - EXTERIOR

Sem Informações

DEMONSTRATIVO DA APURAÇÃO DOS GANHOS DE CAPITAL

Sem Informações

PROTEGIDA POR SIGILO FISCAL

RENDA VARIÁVEL - OPERAÇÕES COMUNS/DAYTRADE - TITULAR

GANHOS LÍQUIDOS OU PERDAS - JAN

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - FEV

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - MAR

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - ABR

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - MAI

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - JUN

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - JUL

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - AGO

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - SET

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - OUT

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - NOV

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - DEZ

Sem Informações

RENDA VARIÁVEL - OPERAÇÕES COMUNS/DAYTRADE - DEPENDENTES

Sem Informações

FUNDOS DE INVESTIMENTO IMOBILIÁRIO OU NAS CADEIAS PRODUTIVAS AGROINDUSTRIAIS - TITULAR

Sem Informações

FUNDOS DE INVESTIMENTO IMOBILIÁRIO OU NAS CADEIAS PRODUTIVAS AGROINDUSTRIAIS - DEPENDENTES

Sem Informações

DOAÇÕES DIRETAMENTE NA DECLARAÇÃO - ECA

Sem Informações

DOAÇÕES DIRETAMENTE NA DECLARAÇÃO - IDOSO

Sem Informações

PROTEGIDA POR SIGILO FISCAL

NOME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **IMPOSTO SOBRE A RENDA - PESSOA FÍSICA**
DECLARAÇÃO DE AJUSTE ANUAL **EXERCÍCIO 2025** **ANO-CALENDÁRIO 2024**

RESUMO — TRIBUTAÇÃO UTILIZANDO AS DEDUÇÕES LEGAIS

RENDIMENTOS TRIBUTÁVEIS

Recebidos de Pessoa Jurídica pelo titular	16.944,00
Recebidos de Pessoa Jurídica pelos dependentes	0,00
Recebidos de Pessoa Física/Exterior pelo titular	0,00
Recebidos de Pessoa Física/Exterior pelos dependentes	0,00
Recebidos acumuladamente pelo titular	0,00
Recebidos acumuladamente pelos dependentes	0,00
Resultado tributável da Atividade Rural	0,00
TOTAL	16.944,00

DEDUÇÕES

Contribuições às previdências oficial e complementar fechada de que trata o § 15 do art. 40 da CF/1988 (até o limite do patrocinador)	1.863,84
Contribuição à previdência oficial (Rendimentos recebidos acumuladamente)	0,00
Contribuição à prev. complementar, inclusive o valor para as fechadas de que trata o § 15 do art. 40 da CF/1988 que exceder o limite do patrocinador	0,00
Dependentes	0,00
Despesas com instrução	0,00
Despesas médicas	7.093,50
Pensão alimentícia judicial	0,00
Pensão alimentícia por escritura pública	0,00
Pensão alimentícia judicial (Rendimentos recebidos acumuladamente)	0,00
Livro caixa	0,00
TOTAL	8.957,34

IMPOSTO DEVIDO

Base de cálculo do imposto	7.986,66
Imposto devido	0,00
Dedução de incentivo	0,00
Imposto devido I	0,00
Imposto devido RRA	0,00
Aliquota efetiva (%)	0,00
Total do imposto devido	0,00

IMPOSTO PAGO

Imposto retido na fonte do titular	0,00
Imp. retido na fonte dos dependentes	0,00
Carnê-Leão do titular	0,00
Carnê-Leão dos dependentes	0,00
Imposto complementar	0,00
Imposto pago no exterior	0,00
Imposto retido na fonte (Lei nº 11.033/2004)	0,00
Imposto retido RRA	0,00
Total do imposto pago	0,00

IMPOSTO A RESTITUIR	0,00
SALDO DE IMPOSTO A PAGAR	0,00

PARCELAMENTO

Valor da quota	0,00
Número de Quotas	0

INFORMAÇÕES BANCÁRIAS

Débito automático: NÃO

Banco
Agência (sem DV)
Conta para crédito

PROTEGIDA POR SIGILO FISCAL

EVOLUÇÃO PATRIMONIAL

Bens e direitos em 31/12/2023	485.230,06
Bens e direitos em 31/12/2024	541.615,43
Dívidas e ônus reais em 31/12/2023	45.000,00
Dívidas e ônus reais em 31/12/2024	0,00

OUTRAS INFORMAÇÕES

Rendimentos isentos e não tributáveis	303.942,05
Rendimentos sujeitos à tributação exclusiva/definitiva	18,94
Rendimentos tributáveis - imposto com exigibilidade suspensa	0,00
Depósitos judiciais do imposto	0,00
Imposto pago sobre Ganhos de Capital	0,00
Imposto pago Ganhos de Capital Moeda Estrangeira - Bens, direitos e Aplicações Financeiras	0,00
Total do imposto retido na fonte (Lei nº11.033/2004), conforme dados informados pelo contribuinte	0,00
Imposto pago sobre Renda Variável	0,00
Doações a Partidos Políticos e Candidatos a Cargos Eletivos	0,00
Imposto a pagar sobre o Ganho de Capital - Moeda Estrangeira em Espécie	0,00
Imposto diferido dos Ganhos de Capital	0,00
Imposto devido sobre Ganhos de Capital	0,00
Imposto devido sobre ganhos líquidos em Renda Variável	0,00
Imposto devido sobre Ganhos de Capital Moeda Estrangeira - Bens, direitos e aplic. financeiras	0,00

PROTEGIDA POR SIGILO FISCAL

NAME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **INCOME TAX - INDIVIDUAL**
ANNUAL ADJUSTMENT DECLARATION **TAX YEAR 2026** **CALENDAR YEAR 2025**

TAXPAYER IDENTIFICATION

Name:	GUSTAVO DARTAGNAN XAVIER DO REGO	CPF:	025.907.999-50
Date of Birth:	09/23/1978		
Race/Skin:	White		
Do you have a spouse or partner?	Yes	CPF of the Spouse or partner:	055.115.229-02

Were you a resident abroad and became a resident in Brazil in 2025? No

Were there any changes to the registration details? No

Is one of the declarants a person with a serious illness or a physical or mental disability? No

Address:	AVENIDA AVENIDA SAO CASEMIRO, S/N	Number:	1815
Unit:		Neighborhood/District:	TAQUAROVA
City:	ARAUCARIA	State:	PR
ZIP Code:	83701-990	Area Code/Telephone:	
E-mail:	GUSTAVODARTAGNAN@GMAIL.COM	Area Code/Mobile:	(41) 98836-0365

Occupation Type: 12 - OWNER OF A COMPANY OR SOLE PROPRIETOR OR EMPLOYER-OWNER

Main Occupation: 214 - ENGINEER, ARCHITECT, AND RELATED PROFESSIONS

Type of Declaration: Original Annual Adjustment Declaration

Receipt Number of the last declaration filed in the 2025 tax year: 10.36.81.46.28-60

DEPENDENTS

No Information

ALIMONY

No Information

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY THE TAXPAYER

(Values in Reais)

NAME OF THE PAYING SOURCE	INCOME RECEIVED FROM LEGAL ENTITY	OFFICIAL SOCIAL SECURITY CONTRIBUTION	WITHHELD TAX	13th SALARY	INCOME TAX WITHHELD ON 13th SALARY
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D CNPJ/CPF: 47.751.467/0001-37	18.216,00	2.003,76	0,00	0,00	0,00
TOTAL	18.216,00	2.003,76	0,00	0,00	0,00

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY DEPENDENTS

No Information

TAXABLE INCOME RECEIVED FROM INDIVIDUALS AND ABROAD BY THE TAXPAYER

No Information

TAXABLE INCOME RECEIVED FROM INDIVIDUALS AND ABROAD BY DEPENDENTS

No Information

EXEMPT AND NON-TAXABLE INCOME

(Values in Reais)

09. Profits and received dividends 257.923,45

Beneficiary	CPF	CNPJ of the Paying Source	Name of the Paying Source	Amount
Taxpayer	025.907.999-50	47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D	257.923,45

TOTAL 257.923,45

INCOME SUBJECT TO EXCLUSIVE/DEFINITIVE TAXATION

(Values in Reais)

06. Income from financial investments 4,02

Beneficiary	CPF	CNPJ of the Paying Source	Name of the Paying Source	Amount
Taxpayer	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) S.A.	4,02

12. Financial Investments and Profits and Dividends Abroad (Law 14.754/2023) 280,76

TOTAL 284,78

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY THE TAXPAYER (TAX WITH SUSPENDED EXIGIBILITY)

No Information

TAXABLE INCOME RECEIVED FROM LEGAL ENTITY BY THE DEPENDENTS (TAX WITH SUSPENDED EXIGIBILITY)

No Information

TAXABLE INCOME FROM LEGAL ENTITY RECEIVED CUMULATIVELY BY THE TAXPAYER

No Information

TAXABLE INCOME FROM LEGAL ENTITY RECEIVED CUMULATIVELY BY THE DEPENDENTS

No Information

TAX PAID / WITHHELD

No Information

PAYMENTS MADE

(Values in Reais)

CODE	BENEFICIARY NAME	BENEFICIARY CPF/CNPJ	AMOUNT PAID	NON-DEDUCTIBLE PORTION
Taxpayer				
26	SUL AMERICA COMPANHIA DE SEGURO SAUDE	01.685.053/0001-56	8.154,35	0,00
Description:				
26	SUL AMERICA ODONTOLOGICO S.A	11.973.134/0001-05	110,64	0,00
Description:				
TOTAL			8.264,99	0,00

DONATIONS MADE

No Information

STATEMENTS OF ASSETS AND RIGHTS

(Values in Reais)

Are there losses to offset in accordance with Law No. 14,754 of 2023 (art. 9)? No

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
6	01	12	PROPERTY LOCATED AT RUA ATA 98, TWO-STORY HOUSE 02 - CURITIBA/PARANA. TOTAL PAID ON THE FINING IN 2013 R$16.807,06. IMPROVEMENTS R$2045,56. OUTSTANDING BALANCE AS OF 12/31/2014 R$ 46.398,43 TOTAL PAID IN 2014 (WITH FGTS AMORTIZATION OF R$14.589,99) R$30.054,23 + IMPROVEMENTS R$2.217,37. OUTSTANDING BALANCE AS OF 12/31/2015 39.288,53 TOTAL PAID IN 2015 11.945,57. FINANCING PAID OFF, FGTS 17.416,80, TOTAL PAID IN 2016 43.202,68. TOTAL PAID IN 2017 - IMPROVEMENTS 3300,00 – IMPROVEMENTS 2020 R$23.407,40 IMPROVEMENTS 2025 R$ 5.372,92	344.122,88	349.495,80

105 - BRAZIL — Asset with usufruct: No

Municipal Registration (IPTU): 37.2.0009.0216.00-6

Address: RUA ATA — No.: 98

Unit: TWO-STORY HOUSE 02 — Neighborhood: UBERABA

City: CURITIBA — State: PR ZIP Code: 81550-030

Total Area: 116,0 m² — Acquisition Date: 12/02/2010

Registered at the Registry Office: Yes — Name of the Registry Office: 4th REAL ESTATE REGISTRY OFFICE

Registration: 78.701

2	02	01	VW KOMBI GASOLINE LIGHT TRUCK 1993/1994	11.965,00	11.965,00

105 - BRAZIL — Asset with usufruct: No

RENAVAM (National Registry of Motor Vehicles): 00613827627

3	02	01	PEUGEOT 308 BUSINESS THP 1.6 16V AT6C.4P166H - BRANCA - CHASSI: 8AD4C5GVUKG005614 - MOTOR:10FJCJ2483553 - PLACA: OKD9J73 FAB/MOD 2018/2019 ADQUIRIDO DE BARIGUI VEICULOS LTDA CNPJ 79.763.884/0023-00 - ENTRADA R$ 32.950,00 + 24X1675,63 DATA 10/08/2022 QUITADO EM 2024 POR R$33.512,6	73.165,12	73.165,12

105 - BRAZIL — Asset with usufruct: No

RENAVAM: 01183865020

STATEMENTS OF ASSETS AND RIGHTS

(Values in Reais)

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
4	02	01	TROLLER/T4 DIESEL TDI 3.0 SILVER- CHASSIS: 94TT4TDE37H010115 - MAKE/MODEL: 2006/2007 LICENSE PLATE:AXN1J50 - ACQUIRED R$67.397,08 THROUGH FINANCING WITH BANCO SANTANDER 36 INSTALLMENTS OF R$2.699,60. PAID R$52.435,67 AS OF 12/31/2023	78.864,18	78.864,18

105 - BRAZIL — Asset with usufruct: No

RENAVAM: 00903187990

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
10	03	01	4.53812 SHARE(S) OF AMAZON COM INC COM (AMZN) HELD AT BROKERAGE APEX CLEARING CORPORATION. TOTAL ACQUISITION COST OF US$ 1,000.00 WITH AN AVERAGE DOLLAR RATE OF 5.34189000.	0,00	5.341,89

249 - UNITED STATES OF AMERICA — Asset with usufruct: No

Asset or right belonging to: Taxpayer CPF: 025.907.999-50

Traded on the Stock Exchange: Yes Trading Code: AMZN

Financial Investment (R$)		**Profits and Dividends (R$)**	
Profit or Loss:	0,00	Amount Received:	0,00
Tax Paid Abroad:	0,00	Tax Paid Abroad/Income Tax Brazil:	0,00

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
11	03	01	2.97734 SHARE(S) OF BROADCOM INC COM (AVGO) HELD AT BROKERAGE APEX CLEARING CORPORATION. TOTAL ACQUISITION COST OF US$ 1.000,00 WITH AN AVERAGE DOLLAR RATE OF 5,34190000.	0,00	5.341,90

249 - UNITED STATES OF AMERICA — Asset with usufruct: No

Asset or right belonging to: Taxpayer CPF: 025.907.999-50

Traded on the Stock Exchange: Yes Trading Code: AVGO

Financial Investment (R$)		**Profits and Dividends (R$)**	
Profit or Loss:	0,00	Amount Received:	10,67
Tax Paid Abroad:	0,00	Tax Paid Abroad/Income Tax Brazil:	3,19

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
12	03	01	4.15383 SHARE(S) OF JPMORGAN CHASE & CO COM (JPM) HELD AT BROKERAGE APEX CLEARING CORPORATION. TOTAL ACQUISITION COST OF US$ 1.305,71 WITH AN AVERAGE DOLLAR RATE OF 5,34189062.	0,00	6.974,96

249 - UNITED STATES OF AMERICA — Asset with usufruct: No

Asset or right belonging to: Taxpayer CPF: 025.907.999-50

Traded on the Stock Exchange: Yes Trading Code: JPM

Financial Investment (R$)		**Profits and Dividends (R$)**	
Profit or Loss:	0,00	Amount Received:	33,54
Tax Paid Abroad:	0,00	Tax Paid Abroad/Income Tax Brazil:	10,07

STATEMENTS OF ASSETS AND RIGHTS

(Values in Reais)

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
5	04	02	SANTANDER CHECKING ACCOUNT/CDB (Certificate of Deposit) 3731- 000010266324	20.990,52	49.731,58

105 - BRAZIL — Asset with usufruct: No

Asset or right belonging to: Taxpayer — CPF: 025.907.999-50

CNPJ: 90.400.888/0001-42

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
14	04	99	1 SHARE(S) OF THE UNITED STATES TREASURY 0.0%, 0,00 01/22/2026 (US912797PD35) HELD AT BROKERAGE APEX CLEARING CORPORATION. TOTAL ACQUISITION COST OF US$ 987,93 WITH AN AVERAGE DOLLAR RATE OF 5,34189669.	0,00	5.277,42

249 - UNITED STATES OF AMERICA — Asset with usufruct: No

Asset or right belonging to: Taxpayer — CPF: 025.907.999-50

Financial Investment (R$)

Profit or Loss: 0,00

Tax Paid Abroad: 0,00

Profits and Dividends (R$)

Amount Received: 0,00

Tax Paid Abroad/Income Tax Brazil: 0,00

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
7	06	99	NOMAD - BALANCE OF US$ 1.009,75 AVAILABLE AT AT COMMUNITY FEDERAL SAVINGS BANK, CONVERTED BY PTAX R$ 5,5018 AS OF 12/31/25.	12.507,73	5.555,44

249 - UNITED STATES OF AMERICA — Asset with usufruct: No

Asset or right belonging to: Taxpayer — CPF: 025.907.999-50

Financial Investment (R$)

Profit or Loss: 0,00

Tax Paid Abroad: 0,00

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
8	06	99	BALANCE OF US$ 22,56 AT BROKERAGE APEX CLEARING CORPORATION, ACCOUNT 8PY14667, CONVERTED 0,00 BY PTAX R$ 5,5018 AS OF 12/31/2025.	0,00	124,12

249 - UNITED STATES OF AMERICA — Asset with usufruct: No

Asset or right belonging to: Taxpayer — CPF: 025.907.999-50

Financial Investment (R$)

Profit or Loss: 0,00

Tax Paid Abroad: 0,00

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
9	06	99	BALANCE OF US$ 52,20 AT BROKERAGE APEX CLEARING CORPORATION, ACCOUNT TEW49MG, CONVERTED BY PTAX R$ 5,5018 AS OF 12/31/2025.	0,00	287,19

249 - UNITED STATES OF AMERICA — Asset with usufruct: No

Asset or right belonging to: Taxpayer — CPF: 025.907.999-50

Financial Investment (R$)

Profit or Loss: 0,00

Tax Paid Abroad: 0,00

STATEMENTS OF ASSETS AND RIGHTS

(Values in Reais)

ASSET	GROUP	CODE	DISCLOSURE	STATUS ON 12/31/2024	STATUS ON 12/31/2025
13	07	99	100.65507 SHARE(S) OF ISHARES TR TRS FLT RT 0,00 BD (TFLO) HELD AT BROKERAGE APEX CLEARING CORPORATION. TOTAL ACQUISITION COST OF US$ 5.089,00 WITH AN AVERAGE DOLLAR RATE OF 5,34190018.	0,00	27.184,93

249 - UNITED STATES OF AMERICA — Asset with usufruct: No

Asset or right belonging to: Taxpayer — CPF: 025.907.999-50

Traded on the Stock Exchange: Yes — Trading Code: TFLO

Financial Investment (R$)		**Profits and Dividends (R$)**	
Profit or Loss:	0,00	Amount Received:	356,85
Tax Paid Abroad:	0,00	Tax Paid Abroad/Income Tax Brazil:	107,04

1	08	99	QUANTITY OF 3.9035646500 MUSD - MELI DOLLAR (MERCADO LIVRE) - AS OF 12/31/2025 - REPORTED BY CNPJ 23.351.302/0001-00	0,00	21,54

105 - BRAZIL — Asset with usufruct: No

Asset or right belonging to: Taxpayer — CPF: 025.907.999-50

TOTAL	541.615,43	619.331,07

ENCUMBRANCES AND REAL LIABILITIES

No Information

DONATIONS TO POLITICAL PARTIES AND CANDIDATES FOR ELECTIVE OFFICES

No Information

STATEMENT OF RURAL ACTIVITY - BRAZIL

IDENTIFICATION DATA OF THE EXPLORED PROPERTY - BRAZIL

No Information

INCOME AND EXPENSES - BRAZIL

No Information

CALCULATION OF THE RESULT - BRAZIL

No Information

LIVESTOCK ACTIVITY - BRAZIL

No Information

ASSETS OF RURAL ACTIVITY - BRAZIL

No Information

DEBTS RELATED TO RURAL ACTIVITY - BRAZIL

No Information

STATEMENT OF RURAL ACTIVITY - ABROAD

IDENTIFICATION DATA OF THE EXPLORED PROPERTY - ABROAD

No Information

INCOME AND EXPENSES - ABROAD

No Information

CALCULATION OF THE RESULT - ABROAD

No Information

LIVESTOCK ACTIVITY - ABROAD

No Information

ASSETS OF RURAL ACTIVITY - ABROAD

No Information

DEBTS RELATED TO RURAL ACTIVITY - ABROAD

No Information

STATEMENT OF CAPITAL GAINS CALCULATION

No Information

VARIABLE INCOME - COMMON OPERATIONS/DAY TRADE - TAXPAYER

NET GAINS OR LOSSES - JAN

No Information

NET GAINS OR LOSSES - FEB

No Information

NET GAINS OR LOSSES - MAR

No Information

NET GAINS OR LOSSES – APR

No Information

NET GAINS OR LOSSES - MAY

No Information

NET GAINS OR LOSSES - JUN

No Information

NET GAINS OR LOSSES - JUL

No Information

NET GAINS OR LOSSES - AUG

No Information

NET GAINS OR LOSSES - SEP

No Information

NET GAINS OR LOSSES - OCT

No Information

NET GAINS OR LOSSES - NOV

No Information

NET GAINS OR LOSSES - DEC

No Information

VARIABLE INCOME - COMMON OPERATIONS/DAY TRADE - DEPENDENTS

No Information

REAL ESTATE INVESTMENT FUNDS OR IN AGRO-INDUSTRIAL PRODUCTION CHAINS - TAXPAYER

No Information

REAL ESTATE INVESTMENT FUNDS OR IN AGRO-INDUSTRIAL PRODUCTION CHAINS - DEPENDENTS

No Information

DONATIONS DIRECTLY IN THE DECLARATION – ECA (STATUTE OF THE CHILD AND ADOLESCENT)

No Information

DONATIONS DIRECTLY IN THE DECLARATION - ELDERLY

No Information

STATEMENT OF CALCULATION – LAW 14.754/2023

Statement of Calculation of Income Tax Levied on Income from Financial Investments Abroad and on Profits and Dividends of a Controlled Foreign Entity, and on the Offset of Losses from Financial Investments Abroad

Asset	Type	Gain/Loss	Tax Due	Tax Paid in Brazil/Abroad	Tax Base	Balance
					Prior-year loss:	0,00
13	LD	356,85	53,52	107,04	0,00	-
12	LD	33,54	5,03	10,07	0,00	-
11	LD	10,67	1,60	3,19	0,00	-
					Tax Base:	0,00
					Tax Due:	0,00

Type Key
AF - Financial Investment
LD - Profits and Dividends

Asset
The identification of the asset can be verified in the printout of the Assets and Rights form.

NAME: GUSTAVO DARTAGNAN XAVIER DO REGO

CPF: 025.907.999-50 **INCOME TAX - INDIVIDUAL**

ANNUAL ADJUSTMENT DECLARATION **TAX YEAR 2026** **CALENDAR YEAR 2025**

SUMMARY — TAXATION USING THE LEGAL DEDUCTION

TAXABLE INCOME

Received from Legal Entity by the taxpayer	18.216,00
Received from Legal Entity by dependents	0,00
Received from Individual/Abroad by the taxpayer	0,00
Received from Individual/Abroad by Dependents	0,00
Received Cumulatively by the taxpayer	0,00
Received Cumulatively by dependents	0,00
Taxable Income from Rural Activity	0,00
TOTAL	18.216,00

DEDUCTIONS

Contributions to the official and closed complementary pension systems referred to in § 15 of Article 40 of the CF (Federal Constitution)/1988 (up to the sponsor limit)	2.003,76
Contribution to the official pension system (Income received cumulatively)	0,00
Contribution to the complementary pension system, including the amount for the closed systems referred to in Article 40, § 15, of the CF (Federal Constitution)/1988, which exceeds the sponsor's limit	0,00
Dependents	0,00
Education Expenses	0,00
Medical Expenses	8.264,99
Judicial Alimony	0,00
Alimony by Public Deed	0,00
Judicial Alimony (Income received cumulatively)	0,00
Cash book	0,00
TOTAL	10.268,75

TAX DUE

Tax Base	7.947,25
Tax Due	0,00
Incentive Deduction	0,00
Tax Due I	0,00
Tax Due RRA (on received accumulated income)	0,00
Tax Rate (%)	0,00
Total Tax Due	0,00

TAX TO BE REFUNDED 0,00

BALANCE OF TAX PAYABLE 0,00

INSTALLMENT PLAN

Installment Amount	0,00
Number of Installments	0

BANKING INFORMATION

Automatic Debit: NO

Bank

Branch (without verification digit)

Account for debit

TAX PAID

Tax Withheld at Source by the Taxpayer	0,00
Tax Withheld at Source by Dependents	0,00
Taxpayer's Carnê-Leão	0,00
Dependents' Carnê-Leão	0,00
Complementary Tax	0,00
Tax Paid Abroad	0,00
Tax Withheld at Source (Law No. 11.033/2004)	0,00
Tax Withheld RRA	0,00
Total Tax Paid	0,00

NAME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **INCOME TAX - INDIVIDUAL**
ANNUAL ADJUSTMENT DECLARATION **TAX YEAR 2026** **CALENDAR YEAR 2025**

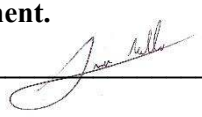
ASSET EVOLUTION

Assets and Rights on 12/31/2024	541.615,43
Assets and Rights on 12/31/2025	619.331,07
Encumbrances and Real Liabilities on 12/31/2024	0,00
Encumbrances and Real Liabilities on 12/31/2025	0,00

OTHER INFORMATION

Exempt and non-taxable income	257.923,45
Income subject to exclusive/definitive taxation	284,78
Taxable income - tax with suspended liability	0,00
Judicial Deposits of Tax	0,00
Tax Paid on Capital Gains	0,00
Tax Paid on Capital Gains Foreign Currency - Assets, Rights, and Financial Investments	0,00
Total tax withheld at source (Law No. 11.033/2004), as per the data provided by the taxpayer	0,00
Tax Paid on Variable Income	0,00
Donations to Political Parties and Candidates for Elective Office	0,00
Tax Payable on Capital Gain - Foreign Currency in Cash	0,00
Deferred Tax on Capital Gains	0,00
Tax Due on Capital Gains	0,00
Tax Due on Net Income from Variable Income	0,00
Tax Due on Capital Gains in Foreign Currency - Assets, Rights, and Financial Investments	0,00

I, André Vinícius Inacio Penna Mello, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



Date: April 23, 2026.

NOME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **IMPOSTO SOBRE A RENDA - PESSOA FÍSICA**
DECLARAÇÃO DE AJUSTE ANUAL **EXERCÍCIO 2026** **ANO-CALENDÁRIO 2025**

IDENTIFICAÇÃO DO CONTRIBUINTE

Nome:	GUSTAVO DARTAGNAN XAVIER DO REGO	CPF:	025.907.999-50
Data de Nascimento:	23/09/1978		
Raça/Cor:	Branca		
Possui cônjuge ou companheiro(a)?	Sim	CPF do cônjuge ou companheiro(a):	055.115.229-02

Era residente no exterior e passou a ser residente no Brasil em 2025? Não

Houve alteração de dados cadastrais? Não

Há declarante ou dependente com doença grave ou deficiência física ou mental? Não

Endereço:	AVENIDA AVENIDA SAO CASEMIRO, S/N	Número:	1815
Complemento:		Bairro/Distrito:	TAQUAROVA
Município:	ARAUCARIA	UF:	PR
CEP:	83701-990	DDD/Telefone:	
E-mail:	GUSTAVODARTAGNAN@GMAIL.COM	DDD/Celular:	(41) 98836-0365

Natureza da Ocupação: 12 - PROPRIETÁRIO DE EMPRESA OU DE FIRMA INDIVIDUAL OU EMPREGADOR-TITULAR

Ocupação Principal: 214 - ENGENHEIRO, ARQUITETO E AFINS

Tipo de declaração: Declaração de Ajuste Anual Original

Nº do recibo da última declaração entregue do exercício de 2025: 10.36.81.46.28-60

PROTEGIDA POR SIGILO FISCAL

DEPENDENTES

Sem Informações

ALIMENTANDOS

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELO TITULAR

(Valores em Reais)

NOME DA FONTE PAGADORA	REND. RECEBIDOS DE PES. JURÍDICA	CONTR. PREVID. OFICIAL	IMPOSTO RETIDO NA FONTE	13º SALÁRIO	IRRF SOBRE 13º SALÁRIO
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D CNPJ/CPF: 47.751.467/0001-37	18.216,00	2.003,76	0,00	0,00	0,00
TOTAL	18.216,00	2.003,76	0,00	0,00	0,00

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELOS DEPENDENTES

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA FÍSICA E DO EXTERIOR PELO TITULAR

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA FÍSICA E DO EXTERIOR PELOS DEPENDENTES

Sem Informações

RENDIMENTOS ISENTOS E NÃO TRIBUTÁVEIS

(Valores em Reais)

09. Lucros e dividendos recebidos 257.923,45

Beneficiário	CPF	CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Valor
Titular	025.907.999-50	47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA D	257.923,45

TOTAL 257.923,45

RENDIMENTOS SUJEITOS À TRIBUTAÇÃO EXCLUSIVA / DEFINITIVA

(Valores em Reais)

06. Rendimentos de aplicações financeiras 4,02

Beneficiário	CPF	CNPJ da Fonte Pagadora	Nome da Fonte Pagadora	Valor
Titular	025.907.999-50	90.400.888/0001-42	BANCO SANTANDER (BRASIL) S.A.	4,02

12. Aplicações Financeiras e Lucros e Dividendos no Exterior (Lei 14.754/2023) 280,76

TOTAL 284,78

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELO TITULAR (IMPOSTO COM EXIGIBILIDADE SUSPENSA)

Sem Informações

RENDIMENTOS TRIBUTÁVEIS RECEBIDOS DE PESSOA JURÍDICA PELOS DEPENDENTES (IMPOSTO COM EXIGIBILIDADE SUSPENSA)

Sem Informações

RENDIMENTOS TRIBUTÁVEIS DE PESSOA JURÍDICA RECEBIDOS ACUMULADAMENTE PELO TITULAR

Sem Informações

RENDIMENTOS TRIBUTÁVEIS DE PESSOA JURÍDICA RECEBIDOS ACUMULADAMENTE PELOS DEPENDENTES

Sem Informações

IMPOSTO PAGO / RETIDO

Sem Informações

PAGAMENTOS EFETUADOS

(Valores em Reais)

CÓD.	NOME DO BENEFICIÁRIO	CPF/CNPJ DO BENEFICIÁRIO	VALOR PAGO	PARC. NÃO DEDUTÍVEL
Titular				
26	SUL AMERICA COMPANHIA DE SEGURO SAUDE	01.685.053/0001-56	8.154,35	0,00
Descrição:				
26	SUL AMERICA ODONTOLOGICO S.A	11.973.134/0001-05	110,64	0,00
Descrição:				
TOTAL			8.264,99	0,00

PROTEGIDA POR SIGILO FISCAL

DOAÇÕES EFETUADAS

Sem Informações

DECLARAÇÃO DE BENS E DIREITOS

(Valores em Reais)

Possui perdas a compensar de acordo com a Lei nº 14.754, de 2023 (art. 9º)? Não

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
6	01	12	IMOVEL SITUADO NA RUA ATA 98, SOBRADO 02 - CURITIBA/PARANA. TOTAL PAGO NO FINANCIAMENTO EM 2013 R$16.807,06. BENFEITORIAS R$2045,56. SALDO DEVEDOR EM 31/12/2014 R$ 46.398,43 TOTAL PAGO EM 2014 (COM AMORTIZACAO FGTS DE R$14.589,99) R$30.054,23 + BENFEITORIAS R$2.217,37. SALDO DEVEDOR EM 31/12/2015 39.288,53 TOTAL PAGO EM 2015 11.945,57. FINANCIAMENTO QUITADO, FGTS 17.416,80, TOTAL PAGO EM 2016 43.202,68. TOTAL PAGO EM 2017 - BENFEITORIAS 3300,00 - BENFEITORIAS 2020 R$23.407,40 BENFEITORIAS 2025 R$ 5.372,92	344.122,88	349.495,80

105 - BRASIL — Bem com usufruto: Não

Inscrição Municipal (IPTU): 37.2.0009.0216.00-6

Logradouro: RUA ATA — Nº: 98
Comp.: SOB 02 — Bairro: UBERABA
Município: CURITIBA — UF: PR CEP: 81550-030
Área Total: 116,0 m² — Data de Aquisição: 02/12/2010
Registrado no Cartório: Sim — Nome Cartório: 4 REGISTRO DE IMOVEIS
Matrícula: 78.701

2	02	01	VW KOMBI CAMINHONETA GASOLINA 1993/1994	11.965,00	11.965,00

105 - BRASIL — Bem com usufruto: Não

RENAVAM: 00613827627

3	02	01	PEUGEOT 308 BUSINESS THP 1.6 16V AT6C.4P166H - BRANCA - CHASSI: 8AD4C5GVUKG005614 - MOTOR:10FJCJ2483553 - PLACA: OKD9J73 FAB/MOD 2018/2019 ADQUIRIDO DE BARIGUI VEICULOS LTDA CNPJ 79.763.884/0023-00 - ENTRADA R$ 32.950,00 + 24X1675,63 DATA 10/08/2022 QUITADO EM 2024 POR R$33.512,6	73.165,12	73.165,12

105 - BRASIL — Bem com usufruto: Não

RENAVAM: 01183865020

PROTEGIDA POR SIGILO FISCAL

DECLARAÇÃO DE BENS E DIREITOS

(Valores em Reais)

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
4	02	01	TROLLER/T4 DIESEL TDI 3.0 PRATA- CHASSI: 94TT4TDE37H010115 -ANO/MODELO: 2006/2007 PLACA:AXN1J50 - ADQUIRIDO R$67.397,08 POR MEIO DE FINANCIAMENTO BANCO SANTANDER 36X R$2.699,60. PAGO R$52.435,67 ATE 31/12/2023	78.864,18	78.864,18

105 - BRASIL — Bem com usufruto: Não

RENAVAM: 00903187990

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
10	03	01	4.53812 COTA(S) DE AMAZON COM INC COM (AMZN) CUSTODIADAS NA CORRETORA APEX CLEARING CORPORATION. CUSTO TOTAL DE AQUISIÇÃO DE US$ 1.000,00 COM DÓLAR MÉDIO DE 5,34189000.	0,00	5.341,89

249 - ESTADOS UNIDOS DA AMÉRICA — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular CPF: 025.907.999-50

Negociados em Bolsa: Sim Código de Negociação: AMZN

Aplicação Financeira (R$)		**Lucros e Dividendos (R$)**	
Rendimento ou Perda:	0,00	Valor Recebido:	0,00
Imposto Pago no Exterior:	0,00	Imposto Pago Exterior/IRRF Brasil:	0,00

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
11	03	01	2.97734 COTA(S) DE BROADCOM INC COM (AVGO) CUSTODIADAS NA CORRETORA APEX CLEARING CORPORATION. CUSTO TOTAL DE AQUISIÇÃO DE US$ 1.000,00 COM DÓLAR MÉDIO DE 5,34190000.	0,00	5.341,90

249 - ESTADOS UNIDOS DA AMÉRICA — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular CPF: 025.907.999-50

Negociados em Bolsa: Sim Código de Negociação: AVGO

Aplicação Financeira (R$)		**Lucros e Dividendos (R$)**	
Rendimento ou Perda:	0,00	Valor Recebido:	10,67
Imposto Pago no Exterior:	0,00	Imposto Pago Exterior/IRRF Brasil:	3,19

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
12	03	01	4.15383 COTA(S) DE JPMORGAN CHASE & CO COM (JPM) CUSTODIADAS NA CORRETORA APEX CLEARING CORPORATION. CUSTO TOTAL DE AQUISIÇÃO DE US$ 1.305,71 COM DÓLAR MÉDIO DE 5,34189062.	0,00	6.974,96

249 - ESTADOS UNIDOS DA AMÉRICA — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular CPF: 025.907.999-50

Negociados em Bolsa: Sim Código de Negociação: JPM

Aplicação Financeira (R$)		**Lucros e Dividendos (R$)**	
Rendimento ou Perda:	0,00	Valor Recebido:	33,54
Imposto Pago no Exterior:	0,00	Imposto Pago Exterior/IRRF Brasil:	10,07

PROTEGIDA POR SIGILO FISCAL

DECLARAÇÃO DE BENS E DIREITOS

(Valores em Reais)

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
5	04	02	SANTANDER CONTA CORRENTE/CDB 3731-000010266324	20.990,52	49.731,58

105 - BRASIL — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular — CPF: 025.907.999-50

CNPJ: 90.400.888/0001-42

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
14	04	99	1 UNIDADE(S) DE UNITED STATES TREASURY 0.0%, 0,00 01/22/2026 (US912797PD35) CUSTODIADAS NA CORRETORA APEX CLEARING CORPORATION. CUSTO TOTAL DE AQUISIÇÃO DE US$ 987,93 COM DÓLAR MÉDIO DE 5,34189669.	0,00	5.277,42

249 - ESTADOS UNIDOS DA AMÉRICA — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular — CPF: 025.907.999-50

Aplicação Financeira (R$)

Rendimento ou Perda: 0,00

Imposto Pago no Exterior: 0,00

Lucros e Dividendos (R$)

Valor Recebido: 0,00

Imposto Pago Exterior/IRRF Brasil: 0,00

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
7	06	99	NOMAD - SALDO DE US$ 1.009,75 DISPONÍVEL NO BANCO COMMUNITY FEDERAL SAVINGS BANK, CONVERTIDO PELA PTAX R$ 5,5018 DE 31/12/25.	12.507,73	5.555,44

249 - ESTADOS UNIDOS DA AMÉRICA — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular — CPF: 025.907.999-50

Aplicação Financeira (R$)

Rendimento ou Perda: 0,00

Imposto Pago no Exterior: 0,00

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
8	06	99	SALDO DE US$ 22,56 NA CORRETORA APEX CLEARING CORPORATION, CONTA 8PY14667, CONVERTIDO 0,00 PELA PTAX R$ 5,5018 DE 31/12/2025.	0,00	124,12

249 - ESTADOS UNIDOS DA AMÉRICA — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular — CPF: 025.907.999-50

Aplicação Financeira (R$)

Rendimento ou Perda: 0,00

Imposto Pago no Exterior: 0,00

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
9	06	99	SALDO DE US$ 52,20 NA CORRETORA APEX CLEARING CORPORATION, CONTA TEW49MG, CONVERTIDO PELA PTAX R$ 5,5018 DE 31/12/2025.	0,00	287,19

249 - ESTADOS UNIDOS DA AMÉRICA — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular — CPF: 025.907.999-50

Aplicação Financeira (R$)

Rendimento ou Perda: 0,00

Imposto Pago no Exterior: 0,00

PROTEGIDA POR SIGILO FISCAL

DECLARAÇÃO DE BENS E DIREITOS

(Valores em Reais)

BEM	GRUPO	CÓDIGO	DISCRIMINAÇÃO	SITUAÇÃO EM 31/12/2024	SITUAÇÃO EM 31/12/2025
13	07	99	100.65507 COTA(S) DE ISHARES TR TRS FLT RT BD (TFLO) CUSTODIADAS NA CORRETORA APEX CLEARING CORPORATION. CUSTO TOTAL DE AQUISIÇÃO DE US$ 5.089,00 COM DÓLAR MÉDIO DE 5,34190018.	0,00	27.184,93

249 - ESTADOS UNIDOS DA AMÉRICA — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular — CPF: 025.907.999-50

Negociados em Bolsa: Sim — Código de Negociação: TFLO

Aplicação Financeira (R$)		**Lucros e Dividendos (R$)**	
Rendimento ou Perda:	0,00	Valor Recebido:	356,85
Imposto Pago no Exterior:	0,00	Imposto Pago Exterior/IRRF Brasil:	107,04

1	08	99	QUANTIDADE DE 3.9035646500 MUSD - MELI DOLAR (MERCADO LIVRE) - EM 31/12/2025 - INFORMADO POR CNPJ 23.351.302/0001-00	0,00	21,54

105 - BRASIL — Bem com usufruto: Não

Bem ou direito pertencente ao: Titular — CPF: 025.907.999-50

TOTAL	541.615,43	619.331,07

DÍVIDAS E ÔNUS REAIS

Sem Informações

DOAÇÕES A PARTIDOS POLÍTICOS E CANDIDATOS A CARGOS ELETIVOS

Sem Informações

PROTEGIDA POR SIGILO FISCAL

DEMONSTRATIVO DE ATIVIDADE RURAL - BRASIL

DADOS E IDENTIFICAÇÃO DO IMÓVEL EXPLORADO - BRASIL

Sem Informações

RECEITAS E DESPESAS - BRASIL

Sem Informações

APURAÇÃO DO RESULTADO - BRASIL

Sem Informações

MOVIMENTAÇÃO DO REBANHO - BRASIL

Sem Informações

BENS DA ATIVIDADE RURAL - BRASIL

Sem Informações

DÍVIDAS VINCULADAS À ATIVIDADE RURAL - BRASIL

Sem Informações

PROTEGIDA POR SIGILO FISCAL

DEMONSTRATIVO DE ATIVIDADE RURAL - EXTERIOR

DADOS E IDENTIFICAÇÃO DO IMÓVEL EXPLORADO - EXTERIOR

Sem Informações

RECEITAS E DESPESAS - EXTERIOR

Sem Informações

APURAÇÃO DO RESULTADO - EXTERIOR

Sem Informações

MOVIMENTAÇÃO DO REBANHO - EXTERIOR

Sem Informações

BENS DA ATIVIDADE RURAL - EXTERIOR

Sem Informações

DÍVIDAS VINCULADAS À ATIVIDADE RURAL - EXTERIOR

Sem Informações

DEMONSTRATIVO DA APURAÇÃO DOS GANHOS DE CAPITAL

Sem Informações

PROTEGIDA POR SIGILO FISCAL

RENDA VARIÁVEL - OPERAÇÕES COMUNS/DAYTRADE - TITULAR

GANHOS LÍQUIDOS OU PERDAS - JAN

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - FEV

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - MAR

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - ABR

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - MAI

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - JUN

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - JUL

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - AGO

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - SET

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - OUT

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - NOV

Sem Informações

GANHOS LÍQUIDOS OU PERDAS - DEZ

Sem Informações

RENDA VARIÁVEL - OPERAÇÕES COMUNS/DAYTRADE - DEPENDENTES

Sem Informações

FUNDOS DE INVESTIMENTO IMOBILIÁRIO OU NAS CADEIAS PRODUTIVAS AGROINDUSTRIAIS - TITULAR

Sem Informações

FUNDOS DE INVESTIMENTO IMOBILIÁRIO OU NAS CADEIAS PRODUTIVAS AGROINDUSTRIAIS - DEPENDENTES

Sem Informações

DOAÇÕES DIRETAMENTE NA DECLARAÇÃO - ECA

Sem Informações

DOAÇÕES DIRETAMENTE NA DECLARAÇÃO - PESSOA IDOSA

Sem Informações

PROTEGIDA POR SIGILO FISCAL

DEMONSTRATIVO DE APURAÇÃO - LEI 14.754/2023

Demonstrativo de Apuração do Imposto de Renda Incidente sobre Rendimentos de Aplicações Financeiras no Exterior e sobre Lucros e Dividendos de Entidade Controlada no Exterior e de Compensação de Perdas em Aplicações Financeiras no Exterior

Bem	Tipo	Ganho/Prejuízo	Imposto Devido	Imposto Pago no Brasil / Exterior	Base de Cálculo	Saldo
					Prejuízo do ano anterior:	0,00
13	LD	356,85	53,52	107,04	0,00	-
12	LD	33,54	5,03	10,07	0,00	-
11	LD	10,67	1,60	3,19	0,00	-
					Base de Cálculo:	0,00
					Imposto Devido:	0,00

Legenda Tipo	**Bem**
AF - Aplicação Financeira LD - Lucros e Dividendos	A identificação do bem pode ser verificada na impressão da ficha de Bens e Direitos.

PROTEGIDA POR SIGILO FISCAL

NOME: GUSTAVO DARTAGNAN XAVIER DO REGO
CPF: 025.907.999-50 **IMPOSTO SOBRE A RENDA - PESSOA FÍSICA**
DECLARAÇÃO DE AJUSTE ANUAL **EXERCÍCIO 2026** **ANO-CALENDÁRIO 2025**

RESUMO — TRIBUTAÇÃO UTILIZANDO AS DEDUÇÕES LEGAIS

RENDIMENTOS TRIBUTÁVEIS

Recebidos de Pessoa Jurídica pelo titular	18.216,00
Recebidos de Pessoa Jurídica pelos dependentes	0,00
Recebidos de Pessoa Física/Exterior pelo titular	0,00
Recebidos de Pessoa Física/Exterior pelos dependentes	0,00
Recebidos acumuladamente pelo titular	0,00
Recebidos acumuladamente pelos dependentes	0,00
Resultado tributável da Atividade Rural	0,00
TOTAL	18.216,00

DEDUÇÕES

Contribuições às previdências oficial e complementar aberta ou fechada de que trata o § 15 do art. 40 da CF/1988 (até o limite do patrocinador)	2.003,76
Contribuição à previdência oficial (Rendimentos recebidos acumuladamente)	0,00
Contribuição à prev. complementar, inclusive o valor para as fechadas de que trata o § 15 do art. 40 da CF/1988 que exceder o limite do patrocinador	0,00
Dependentes	0,00
Despesas com instrução	0,00
Despesas médicas	8.264,99
Pensão alimentícia judicial	0,00
Pensão alimentícia por escritura pública	0,00
Pensão alimentícia judicial (Rendimentos recebidos acumuladamente)	0,00
Livro caixa	0,00
TOTAL	10.268,75

IMPOSTO DEVIDO

Base de cálculo do imposto	7.947,25
Imposto devido	0,00
Dedução de incentivo	0,00
Imposto devido I	0,00
Imposto devido RRA	0,00
Aliquota efetiva (%)	0,00
Total do imposto devido	0,00

IMPOSTO PAGO

Imposto retido na fonte do titular	0,00
Imp. retido na fonte dos dependentes	0,00
Carnê-Leão do titular	0,00
Carnê-Leão dos dependentes	0,00
Imposto complementar	0,00
Imposto pago no exterior	0,00
Imposto retido na fonte (Lei nº 11.033/2004)	0,00
Imposto retido RRA	0,00
Total do imposto pago	0,00

IMPOSTO A RESTITUIR	0,00
SALDO DE IMPOSTO A PAGAR	0,00

PARCELAMENTO

Valor da quota	0,00
Número de Quotas	0

INFORMAÇÕES BANCÁRIAS

Débito automático: NÃO

Banco
Agência (sem DV)
Conta para crédito

PROTEGIDA POR SIGILO FISCAL

EVOLUÇÃO PATRIMONIAL

Bens e direitos em 31/12/2024	541.615,43
Bens e direitos em 31/12/2025	619.331,07
Dívidas e ônus reais em 31/12/2024	0,00
Dívidas e ônus reais em 31/12/2025	0,00

OUTRAS INFORMAÇÕES

Rendimentos isentos e não tributáveis	257.923,45
Rendimentos sujeitos à tributação exclusiva/definitiva	284,78
Rendimentos tributáveis - imposto com exigibilidade suspensa	0,00
Depósitos judiciais do imposto	0,00
Imposto pago sobre Ganhos de Capital	0,00
Imposto pago Ganhos de Capital Moeda Estrangeira - Bens, direitos e Aplicações Financeiras	0,00
Total do imposto retido na fonte (Lei nº11.033/2004), conforme dados informados pelo contribuinte	0,00
Imposto pago sobre Renda Variável	0,00
Doações a Partidos Políticos e Candidatos a Cargos Eletivos	0,00
Imposto a pagar sobre o Ganho de Capital - Moeda Estrangeira em Espécie	0,00
Imposto diferido dos Ganhos de Capital	0,00
Imposto devido sobre Ganhos de Capital	0,00
Imposto devido sobre ganhos líquidos em Renda Variável	0,00
Imposto devido sobre Ganhos de Capital Moeda Estrangeira - Bens, direitos e aplic. financeiras	0,00

PROTEGIDA POR SIGILO FISCAL

Ministry of Economy Special Secretariat of the Federal Revenue of Brazil Individual Income Tax *Fiscal Year 2024*	Income Statement Paid and Withholding of Income Tax at Source *Calendar Year: 2023*

Please verify the requirements and deadline for filing the Individual Income Tax Return for this calendar year on the website of the Special Secretariat of the Federal Revenue of Brazil at www.receita.fazenda.gov.br

1. Paying Source – Legal Entity

CNPJ/CPF	Corporate Name
47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

2. Individual Beneficiary of the Income

CPF	Full Name
025.907.999-50	GUSTAVO DARTAGNAN XAVIER DO REGO
Type of Income Employment income (salary)	

3. Taxable Income, Deductions, and Income Tax Withheld at Source

Amounts in reais

1. Total income (including vacation pay)	15,768.00
2. Official social security contributions	1,734.48
3. Private pension entities and individual retirement funds contributions (FAPI) (also complete Section 7)	0.00
4. Alimony (also complete Section 7)	0.00
5. Income tax withheld at source	0.00

4. Exempt and Non-Taxable Income

Amounts in real

1. Exempt portion of retirement, reserve pay, disability retirement, and pension (age 65 or older), excluding the exempt portion of the 13th salary	0.00
2. Exempt portion of the 13th salary related to retirement, reserve pay, retirement and pension (age 65 or older).	0.00
3. Per diem and allowances	0.00
4. Retirement or pension income due to serious illness; retirement due to work-related accident	0.00
5. Profits and dividends, determined as of 1996, paid by a legal entity (actual, presumed, or arbitrated	187,503.39

profit).	
6. Amount paid to owner/partner of micro-enterprise or small business, except owner's draw, rent, or services	0.00
7. Compensation for termination of employment contract, including voluntary dismissal programs, and for work-related accidents.	0.00
8. Interest received for late payment of remuneration for employment, position, and function.	0.00
9. Other (specify).	0.00

5. Income Subject to exclusive taxation (net income)

Amounts in reais

1. Thirteenth salary	0.00
2. Income tax withheld at source on the 13th salary	0.00
3. Others	0.00

6. Income Received Cumulatively - Art. 12-A of Law No. 7,713, of 1988 (subject to exclusive taxation)

6.1 Process Number:	Number of months	0.00
Type of income:		

Amounts in reais

1. Total taxable income (including vacation pay and 13th-month salary)	0.00
2. Exclusion: Legal expenses	0.00
3. Deduction: Official social security contribution	0.00
4. Deduction: Alimony (also complete section 7)	0.00
5. Income tax withheld at source	0.00
6. Tax-exempt income from pension, retirement benefits or disability pension due to serious illness or retirement pension due to work-related accident	0.00

7. Additional Information

Dental Plan Information
11.973.134/0001-05 - SUL AMERICA SEGURO SAUDE S.A. - ANS 417815
Policyholder Information:
GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Amounts paid during the year: R$ 514.84

Health Plan Information
01.685.053/0001-56 - SUL AMERICA SEGURO SAUDE S.A. - ANS 006246
Policyholder Information:
GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Amounts paid during the year: R$ 10,473.84

8. Responsible for the information

Name	Date	Signature
CHARLES DAVYD GULARTE	02/28/2024	

Approved by Normative Instruction RFB No. 2060, of December 13, 2021.

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 22 2026

Ministério da Economia Secretaria Especial da Receita Federal do Brasil Imposto sobre a Renda da Pessoa Física Exercício de 2024	Comprovante de Rendimentos Pagos e de Imposto sobre a Renda Retido na Fonte Ano-calendário de 2023

Verifique as condições e o prazo para a apresentação da Declaração do Imposto sobre a Renda da Pessoa Física para este ano-calendário no sítio da Secretaria Especial da Receita Federal do Brasil na Internet, no endereço www.receita.fazenda.gov.br

1. Fonte Pagadora Pessoa Jurídica

CNPJ/CPF	Nome empresarial
47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

2. Pessoa Física Beneficiária dos Rendimentos

CPF	Nome completo
025.907.999-50	GUSTAVO DARTAGNAN XAVIER DO REGO
Natureza do rendimento Rendimentos do trabalho assalariado	

3. Rendimentos Tributáveis, Deduções e Imposto sobre a Renda Retido na Fonte

	Valores em reais
1. Total dos rendimentos (inclusive férias)	15.768,00
2. Contribuição previdenciária oficial	1.734,48
3. Contribuições a entidades de previdência complementar e a fundos de aposentadoria prog. individual (Fapi) (preencher também o quadro 7)	0,00
4. Pensão alimentícia (preencher também o quadro 7)	0,00
5. Imposto sobre a renda retido na fonte	0,00

4. Rendimentos Isentos e Não Tributáveis

	Valores em reais
1. Parcela isenta dos proventos de aposentadoria, reserva remunerada, reforma e pensão (65 anos ou mais), exceto a parcela isenta do 13º (décimo terceiro) salário.	0,00
2. Parcela isenta do 13º salário de aposentadoria , reserva remunerada, reforma e pensão (65 anos ou mais).	0,00
3. Diárias e ajudas de custo	0,00
4. Pensão e proventos de aposentadoria ou reforma por moléstia grave; proventos de aposentadoria ou reforma por acidente em serviço	0,00
5. Lucros e dividendos, apurados a partir de 1996, pagos por pessoa jurídica (lucro real, presumido ou	187.503,39

arbitrado)	
6. Valores pagos ao titular ou sócio da microempresa ou empresa de pequeno porte, exceto pro labore, aluguéis ou serviços prestados	0,00
7. Indenizações por rescisão de contrato de trabalho, inclusive a título de PDV, e por acidente de trabalho	0,00
8. Juros de mora recebidos, devidos pelo atraso no pagamento de remuneração por exercício de emprego, cargo e função.	0,00
9. Outros (especificar).	0,00

5. Rendimentos sujeitos à Tributação Exclusiva(rendimento líquido)

Valores em reais

1. Décimo terceiro salário	0,00
2. Imposto sobre a renda retido na fonte sobre 13º salário	0,00
3. Outros	0,00

6. Rendimentos Recebidos Acumuladamente - Art. 12-A da Lei nº 7.713, de 1988 (sujeito à tributação exclusiva)

6.1 Número do processo:	Quantidade de meses	0,0
Natureza do rendimento:		

Valores em reais

1. Total dos rendimentos tributáveis (inclusive férias e décimo terceiro salário)	0,00
2. Exclusão: Despesas com a ação judicial	0,00
3. Dedução: Contribuição previdenciária oficial	0,00
4. Dedução: Pensão alimentícia (preencher também o quadro 7)	0,00
5. Imposto sobre a renda retido na fonte	0,00
6. Rendimentos isentos de pensão, proventos de aposentadoria ou reforma por moléstia grave ou aposentadoria ou reforma por acidente em serviço	0,00

7. Informações Complementares

Informações do Plano Odontológico
11.973.134/0001-05 - SUL AMERICA SEGURO SAUDE S.A. - ANS 417815
Dados do Titular do plano:
GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Valores pagos durante o ano: R$ 514,84

Informações do Plano de Saúde
01.685.053/0001-56 - SUL AMERICA SEGURO SAUDE S.A. - ANS 006246
Dados do Titular do plano:
GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Valores pagos durante o ano: R$ 10.473,84

8. Responsável pelas informações

Nome	Data	Assinatura
CHARLES DAVYD GULARTE	28/02/2024	

Aprovado pela Instrução Normativa RFB nº2060, de 13 de dezembro de 2021.

Ministry of Economy Special Secretariat of the Federal Revenue of Brazil Individual Income Tax *Fiscal Year 2025*	Income Statement Paid and Withholding of Income Tax at Source *Calendar Year: 2024*

Please verify the requirements and deadline for filing the Individual Income Tax Return for this calendar year on the website of the Special Secretariat of the Federal Revenue of Brazil at www.receita.fazenda.gov.br

1. Paying Source – Legal Entity

CNPJ/CPF	Corporate Name
47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

2. Individual Beneficiary of the Income

CPF	Full Name
025.907.999-50	GUSTAVO DARTAGNAN XAVIER DO REGO
Type of Income Employment income (salary)	

3. Taxable Income, Deductions, and Income Tax Withheld at Source

Amounts in reais

1. Total income (including vacation pay)	16,944.00
2. Official social security contributions	1,863.84
3. Private pension entities and individual retirement funds contributions (FAPI) (also complete Section 7)	0.00
4. Alimony (also complete Section 7)	0.00
5. Income tax withheld at source	0.00

4. Exempt and Non-Taxable Income

Amounts in real

1. Exempt portion of retirement, reserve pay, disability retirement, and pension (age 65 or older), excluding the exempt portion of the 13th salary	0.00
2. Exempt portion of the 13th salary related to retirement, reserve pay, retirement and pension (age 65 or older).	0.00
3. Per diem and allowances	0.00
4. Retirement or pension income due to serious illness; retirement due to work-related accident	0.00
5. Profits and dividends, determined as of 1996, paid by a legal entity (actual, presumed, or arbitrated	303,832.87

profit).	
6. Amount paid to owner/partner of micro-enterprise or small business, except owner's draw, rent, or services	0.00
7. Compensation for termination of employment contract, including voluntary dismissal programs, and for work-related accidents.	0.00
8. Interest received for late payment of remuneration for employment, position, and function.	0.00
9. Other (specify).	0.00

5. Income Subject to exclusive taxation (net income)

Amounts in reais

1. Thirteenth salary	0.00
2. Income tax withheld at source on the 13th salary	0.00
3. Others	0.00

6. Income Received Cumulatively - Art. 12-A of Law No. 7,713, of 1988 (subject to exclusive taxation)

6.1 Process Number:	Number of months	0.00
Type of income:		

Amounts in reais

1. Total taxable income (including vacation pay and 13th-month salary)	0.00
2. Exclusion: Legal expenses	0.00
3. Deduction: Official social security contribution	0.00
4. Deduction: Alimony (also complete section 7)	0.00
5. Income tax withheld at source	0.00
6. Tax-exempt income from pension, retirement benefits or disability pension due to serious illness or retirement pension due to work-related accident	0.00

7. Additional Information

Health Plan Information

01.685.053/0001-56 - SUL AMERICA SEGURO SAUDE S.A. - ANS 006246

Policyholder Information:

GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Amounts paid during the year: R$ 7,046.79

Dental Plan Information

01.685.053/0001-56 - SUL AMERICA COMPANHIA DE SEGUR - ANS 006246

Policyholder Information:

GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Amounts paid during the year: R$ 409.89

Dental Plan Information

11.973.134/0001-05 - SUL AMÉRICA ODONTOLÓGICO S/A - ANS 417815

Policyholder Information:

GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Amounts paid during the year: R$ 46.71

8. Responsible for the information

Name	Date	Signature
CHARLES DAVYD GULARTE	02/28/2025	

Approved by Normative Instruction RFB No. 2060, of December 13, 2021.

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 22 2026

Ministério da Economia

Secretaria Especial da Receita Federal do Brasil

Imposto sobre a Renda da Pessoa Física

Exercício de 2025

Comprovante de Rendimentos Pagos e de Imposto sobre a Renda Retido na Fonte

Ano-calendário de 2024

Verifique as condições e o prazo para a apresentação da Declaração do Imposto sobre a Renda da Pessoa Física para este ano-calendário no sítio da Secretaria Especial da Receita Federal do Brasil na Internet, no endereço www.receita.fazenda.gov.br

1. Fonte Pagadora Pessoa Jurídica

CNPJ/CPF	Nome empresarial
47.751.467/0001-37	GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

2. Pessoa Física Beneficiária dos Rendimentos

CPF	Nome completo
025.907.999-50	GUSTAVO DARTAGNAN XAVIER DO REGO

Natureza do rendimento
Rendimentos do trabalho assalariado

3. Rendimentos Tributáveis, Deduções e Imposto sobre a Renda Retido na Fonte

	Valores em reais
1. Total dos rendimentos (inclusive férias)	16.944,00
2. Contribuição previdenciária oficial	1.863,84
3. Contribuições a entidades de previdência complementar e a fundos de aposentadoria prog. individual (Fapi) (preencher também o quadro 7)	0,00
4. Pensão alimentícia (preencher também o quadro 7)	0,00
5. Imposto sobre a renda retido na fonte	0,00

4. Rendimentos Isentos e Não Tributáveis

	Valores em reais
1. Parcela isenta dos proventos de aposentadoria, reserva remunerada, reforma e pensão (65 anos ou mais), exceto a parcela isenta do 13º (décimo terceiro) salário.	0,00
2. Parcela isenta do 13º salário de aposentadoria , reserva remunerada, reforma e pensão (65 anos ou mais).	0,00
3. Diárias e ajudas de custo	0,00
4. Pensão e proventos de aposentadoria ou reforma por moléstia grave; proventos de aposentadoria ou reforma por acidente em serviço	0,00
5. Lucros e dividendos, apurados a partir de 1996, pagos por pessoa jurídica (lucro real, presumido ou	303.832,87

arbitrado)	
6. Valores pagos ao titular ou sócio da microempresa ou empresa de pequeno porte, exceto pro labore, aluguéis ou serviços prestados	0,00
7. Indenizações por rescisão de contrato de trabalho, inclusive a título de PDV, e por acidente de trabalho	0,00
8. Juros de mora recebidos, devidos pelo atraso no pagamento de remuneração por exercício de emprego, cargo e função.	0,00
9. Outros (especificar).	0,00

5. Rendimentos sujeitos à Tributação Exclusiva(rendimento líquido)

Valores em reais

1. Décimo terceiro salário	0,00
2. Imposto sobre a renda retido na fonte sobre 13º salário	0,00
3. Outros	0,00

6. Rendimentos Recebidos Acumuladamente - Art. 12-A da Lei nº 7.713, de 1988 (sujeito à tributação exclusiva)

6.1 Número do processo:	Quantidade de meses	0,0
Natureza do rendimento:		

Valores em reais

1. Total dos rendimentos tributáveis (inclusive férias e décimo terceiro salário)	0,00
2. Exclusão: Despesas com a ação judicial	0,00
3. Dedução: Contribuição previdenciária oficial	0,00
4. Dedução: Pensão alimentícia (preencher também o quadro 7)	0,00
5. Imposto sobre a renda retido na fonte	0,00
6. Rendimentos isentos de pensão, proventos de aposentadoria ou reforma por moléstia grave ou aposentadoria ou reforma por acidente em serviço	0,00

7. Informações Complementares

Informações do Plano de Saúde
01.685.053/0001-56 - SUL AMERICA SEGURO SAUDE S.A. - ANS 006246
Dados do Titular do plano:
GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Valores pagos durante o ano: R$ 7.046,79

Informações do Plano Odontológico
01.685.053/0001-56 - SUL AMERICA COMPANHIA DE SEGUR - ANS 006246
Dados do Titular do plano:
GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Valores pagos durante o ano: R$ 409,89

Informações do Plano Odontológico
11.973.134/0001-05 - SUL AMÉRICA ODONTOLÓGICO S/A - ANS 417815
Dados do Titular do plano:
GUSTAVO DARTAGNAN XAVIER DO REGO - CPF: 025.907.999-50 - Valores pagos durante o ano: R$ 46,71

8. Responsável pelas informações

Nome	Data	Assinatura
CHARLES DAVYD GULARTE	28/02/2025	

Aprovado pela Instrução Normativa RFB nº2060, de 13 de dezembro de 2021.

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Telecommunications Engineer Salaries

Salaries Interviews

Telecommunications Engineer Salaries (Brazil)

Experience

All the years of experience

Base salary

R$ 6,000 - R$ 11,000 / month

Average base salary **of R$ 8,000** / month

Variable compensation

Average of **R$1,000** / month

R$ 833 - R$ 2,000 / month Range

About our data

Very high confidence · Last updated: June 4, 2024 · 132 salaries submitted

How do we calculate compensation?

How do you estimate the **average base salary range** of **R$6,000-R$11,000/month?**

Low

It needs

High

Exhibit C.II - Second Prong - Letters of Support and Resume

Canonical

February 4, 2026, to USCIS:

My name is Andre Luiz Garcia Ruiz, and I am employed by Canonical Brasil Serviços de Software Ltda, working remotely in support of the company's U.S. branch. My professional background in the technology and telecommunications industry enables me to provide an informed perspective on Mr. Gustavo Dartagnan Xavier do Rego's technical capabilities and professional trajectory. I have had the opportunity to observe his work closely across different stages of his career, which has given me a clear understanding of his ability to manage complex systems and drive innovation in large-scale telecommunications environments.

Our professional relationship began in 2006 at GVT in Curitiba. When I joined the team, Mr. Xavier was already involved in the Vox3G project, an initiative focused on deploying and managing software-based private branch exchange systems. This project relied on Asterisk, an open-source private branch exchange (PBX) software widely adopted in telecommunications environments, which at the time was still an emerging technology in the Brazilian market. Working in the same office allowed me to witness his daily contributions to what was then an unexplored territory in the Brazilian market. We operated in an environment where best practices were still being established, and his role was fundamental to defining the team's technical standards.

Mr. Xavier developed a series of configuration templates and automation tools hosted on a central server accessible to employees across multiple cities. This initiative directly addressed the need for consistent, reliable equipment configuration, reducing human error and improving service stability across multiple locations. By creating these tools and accompanying procedures, he significantly reduced the margin for error and the deployment time. His work extended beyond execution to the creation of a technical framework that improved the department's overall quality and output. He quickly became a technical leader in voice-over-IP solutions, owing to his mastery of signaling protocols and telephony infrastructure.

In 2020, I interacted with Mr. Xavier again during a request for proposal for a telecommunications cloud solution at Vivo, a major Brazilian telecommunications operator serving millions of customers nationwide, in which my company participated as a technology provider. He led the process of evaluating advanced technologies, including virtualized network functions. This experience demonstrated that his technical expertise had evolved to meet the demands of modern network architectures, including those that support 5G services used by nationwide telecommunications operators. His ability to manage projects involving high-value infrastructure and innovative cloud solutions demonstrates his versatility and commitment to maintaining high performance in a rapidly changing industry.

Based on my years of observing his professional conduct, I can state that Mr. Xavier is highly adaptable and intelligent, consistently delivering results with precision. His experience with IMS core networks and Telco Cloud environments based on virtualized network functions reflects a

Canonical

level of maturity and technical depth that is rare in the field. Through automation and cloud-based solutions, he has consistently contributed to improving the reliability and scalability of carrier-grade communications systems. I am confident that his experience and his proactive approach to solving technical challenges will allow him to continue making significant contributions to the industry.

I fully support his professional plans and believe that his presence will be an asset to the development of advanced communication networks.

Sincerely,



Andre Luiz Garcia Ruiz
Canonical Brasil Serviços de Software Ltda, São Paulo - Brazil
andre.ruiz@gmail.com / andre.ruiz@canonical.com
+55 (41) 984073847
Linkedin: https://www.linkedin.com/in/andre-ruiz

These are my own words and do not express or imply any opinion of my employer.
This is not an official letter from the company.

Contact

www.linkedin.com/in/andre-ruiz-237856 (LinkedIn)
www.atendemos.com.br (Other)

Top Skills

MAAs
Kubernetes
OpenStack

Languages

English (Full Professional)

Andre Ruiz

Principal Field Engineer at Canonical Ltd.
Greater Curitiba

Summary

Working with Linux since 1994, worked at Conectiva S.A. for more than 4 years. RedHat Certified Engineer. Very experienced in server and network administration, as well as enterprise solutions using free and open source software. Also a software developer, mainly at operating system level and job automation. Skills include hardware and electronics, comercial unix (mainly AIX) and server consolidation with VMware products. At Canonical, designing and delivering private clouds with Openstack and Kubernetes. Fluent english, learn fast, good expression, like tough challenges.

Specialties: Networks, servers, linux, network administration, VoIP and telephony, free and open source software, general development with linux, security, openstack and kubernetes.

Experience

Canonical Ltd.
Principal Field Engineer
December 2018 - Present (7 years 7 months)
United Kingdom (work from home)

Asset Information Technology
Technology Manager
November 2013 - November 2018 (5 years 1 month)
Curitiba Area, Brazil

Atendemos Tecnologia Ltda
Owner
March 2012 - January 2017 (4 years 11 months)
Curitiba Area, Brazil

Atendemos é uma empresa inovadora especializada em terceirizar o serviço de telefonia e telefonistas de pequenas empresas. Atendemos o seu número telefônico, com o seu nome, da maneira que você quiser, transferimos

ligações a anotamos recados, que podem ser transferidos em tempo real por SMS e email. Serviços avançados como URAs também estão disponíveis.

Service IT Solutions
Sr. Engineer
August 2011 - October 2013 (2 years 3 months)
Curitiba - PR

IT Consulting, including VMware, AIX, Linux, Storages.

GVT - Global Village Telecom
Senior Analyst
September 2005 - August 2011 (6 years)

In GVT I´m working on the deployment of a large scale VoIP platform, with business and retail versions.

Webbertek OpenSource Knowledge
Systems Analyst
2008 - 2009 (1 year)

IT Consulting

Service IT Solutions
Tech Analyst
September 2004 - August 2005 (1 year)

Service IT Solutions is a IBM Premier Business Partner and a VMware Partner. Being a Tech Analist there means to deal with very big customers every day. The main jobs are servers consolidation with VMware products and deploying almost all solutions from IBM porfolio, from Power Servers to Storages and Backup Libraries (robots).

Conectiva S.A.
Tech Analist
2000 - 2004 (4 years)

Linux Specialist

Education

Federal University of Technology - Parana
Specialization, Networks and Telecomunications · (2006 - 2007)

Facet - Faculdade de Ciência e Tecnologia do Parana

Bachelor of Science - BS, Computer Science · (January 2001 - December 2004)

Universidade Estadual de Maringá

BS, Computer Science · (1993 - 1999)

Colégio Marista - Maringá PR

High School · (1990 - 1991)

Dear Sir or Madam from USCIS,

February 5th, 2026

My name is Fernando Tauscheck, an electrical engineer with more than two decades of professional experience in the telecommunications sector. I am currently employed by *Randstad Brasil Recursos Humanos Ltda* and assigned to *Huawei Gestão e Serviços de Telecomunicações do Brasil Ltda*, based in São Paulo, Brazil. I earned my degree in Electrical Engineering from the Federal University of Paraná and have spent my career designing, operating, and optimizing large-scale mobile networks, including GSM, WCDMA, LTE, and NR. Throughout this trajectory, I have worked with major global vendors such as Siemens, Alcatel-Lucent, and Huawei, and collaborated with leading Brazilian mobile operators, including Claro, TIM, Vivo, and Oi, in roles that required both technical depth and operational responsibility.

I became acquainted with Gustavo Dartagnan Xavier do Rego during our undergraduate studies in Electrical Engineering at the Federal University of Paraná (Universidade Federal do Paraná). After graduation, we began a professional relationship as our careers evolved within the same telecommunications industry, allowing me to track his professional output over time. Although we did not consistently work on the same internal teams, I had direct visibility into the results of his work through projects carried out at GVT and, subsequently, at Vivo, where his contributions were reflected in the performance and evolution of core network services.

My assessment of Mr. Rego's work is based on my experience with mobile network performance and optimization. Modern LTE (Long Term Evolution) and NR (New Radio) mobile networks, which support 4G and 5G services, depend heavily on underlying core technologies that ensure signaling, service continuity, and interoperability. These include Session Initiation Protocol, which governs call and session signaling; Linux-based operating environments used to sustain network services; IP Multimedia Subsystem architectures that integrate voice and data; and Next Generation Network models that consolidate legacy and IP infrastructures. These domains are central to Mr. Rego's professional specialization, and I have observed how his expertise in these areas supports the stability and scalability of mobile networks.

Early in his career, Mr. Rego was involved in the development, deployment, and operation of the Vono service at GVT. This voice-over-IP offering maintained consistent service quality nationwide and supported corporate and mass-market users across multiple regions. In later years, he played an essential role in the evolution of the GVT and Vivo core networks, contributing to the implementation and operation of Next Generation Network architectures and, subsequently, Session Initiation Protocol-based core platforms. From a professional standpoint, these activities require a high level of technical rigor and

operational reliability, as they directly affect the continuity of services used by millions of subscribers every day.

One aspect that consistently distinguishes Mr. Rego from many professionals I have encountered at companies such as Huawei and Alcatel Lucent is his hybrid engineering profile. It is uncommon to find individuals who combine a solid command of telecommunications network architecture with advanced proficiency in automation using Python and Linux. This combination is particularly relevant in environments where information technology and telecommunications software converge, such as telco cloud deployments and virtualized network functions. I have also observed his ability to address interoperability issues in multi-vendor environments, which is critical in large-scale networks, as well as his strategic approach to capacity planning to avoid inefficient capital investments.

With a long-standing professional experience and direct knowledge of Mr. Rego's trajectory, I consider his qualifications well aligned with contexts that demand robust, interoperable, and secure communications infrastructures, particularly those integrating mobile access networks with complex core systems. His ability to adapt to technological change, combined with experience across multiple vendors and operational environments, supports my professional judgment that he is ready to apply his expertise in advanced, demanding scenarios. It is on this basis, and on the concrete professional results I have observed, that I express my support.

Cordially,

Fernando Tauscheck
Electrical Engineer
Randstad Brazil Human Resources Ltd.
Allocated to Huawei Telecommunications Management and Services of Brazil Ltd.
1350 Francisco Matarazzo Avenue, 20th floor, Tower I, CGD Condominium Building
São Paulo, SP, Brazil
Contact: fernando@tauscheck.com / +55 41 98423 6286

Contact

www.linkedin.com/in/fernando-tauscheck (LinkedIn)
www.tauscheck.com (Blog)
github.com/ftauscheck/ (Portfolio)

Key Competencies

New product rollout

Wireless communication systems

Key performance indicators

Languages

English

Certifications

Data Science Professional Certificate (V2)

Fernando Tauscheck

RF Engineer

Curitiba, Paraná, Brazil

Summary

Electrical engineer with 20 years of experience in mobile network design, operation, and optimization, as well as in the development of systems for the operation and maintenance (O&M) of these networks. Quick to learn and adapt to new products and technologies. Flexibility to handle challenging circumstances, adjusting to the conditions and demands imposed by the situation. Solid technical knowledge in wireless telecommunications technologies.
Interest in studying and understanding the use of statistics in processes.
Experience in defining, collecting, analyzing, and classifying network indicators (KPIs) and conducting statistical studies for the development of monitoring metrics.
Skilled in developing tools for automatic data collection, processing, and presentation, including the consolidation of large data volumes.

CORE SKILLS:
- Proficiency in defining, collecting, analyzing, and classifying network indicators (KPIs) and conducting statistical studies for the development of monitoring metrics.
- Experience in developing automation tools for data collection, processing, and presentation, including automatic reports and consolidation of large datasets, using Python, PHP, SQL (MySQL, SQLite, PostgreSQL), VBA, PowerQuery, and supporting languages/systems (JS, AWK, bash script, etc.).

- Familiarity with the Office suite and support tools such as Huawei2020, CME, Ericsson OSS/amos, Unix systems, and MS Windows.

Professional Experience

Randstad
RF Optimization Engineer
January 2025 - Present (1 year 6 months)
Curitiba, Paraná, Brazil

Work on the mobile network optimization team for the "Vivo Sul" project (Huawei NPM project).
- Participation in various project phases, covering initial tuning, troubleshooting, monitoring, and improvement of 3G, 4G, and 5G network indicators.
- Coverage of major events, including pre-event assessment, real-time monitoring and optimization, and subsequent preparation of a detailed report outlining the scenario and presenting possible solutions to the observed issues.
- Direct collaboration with transmission, CORE, drive test, and field teams.

Tech Mahindra
RF Engineer
December 2022 - January 2025 (2 years 2 months)
Curitiba, Paraná, Brazil

Work on the mobile network optimization team for the "Vivo Sul" project (access network in Rio Grande do Sul).
- Participation in various project phases, covering network expansion, initial tuning (post-integration), troubleshooting, monitoring, maintenance, and improvement of 3G, 4G, and 5G network indicators.
- Real-time monitoring of major events, ensuring the best service at all stages.
- Direct collaboration with transmission, CORE, and field teams, facilitating integrated operations.

Oi/Telemar
Optimization Specialist - Consultant
June 2014 - December 2022 (8 years 7 months)
Curitiba Area, Brazil

Quality and O&M specialist, working on a multi-vendor access network (Huawei and Ericsson).
- Development of automated tools and reports to support project implementation, operation, and optimization.
- Support to the headquarters performance department, contributing to the maintenance and improvement of network monitoring reports.
- Development of tools for collecting, processing, and analyzing KPIs and equipment logs, aimed at improving network indicators, fault handling, and feature validation.

Huawei
RF Engineer
April 2009 - June 2014 (5 years 3 months)
Curitiba Area, Brazil

- Involvement in various phases of the Oi project: support, swap, coverage and capacity expansion (2G/3G);
- RF team coordinator on the TIM Sul project - Deployment and Swap (2G, 3G, and 4G) between 2013 and 2014;
- Generation and execution of scripts for project activities.
- Generation of pre- and post-activity reports, as well as presentation and discussion with the client;
- Fault troubleshooting;
- On the job training at GTAC (Shenzen - China) - 2 weeks (2010);

Alcatel Lucent Brasil
RF Consultant
December 2008 - March 2009 (4 months)
Curitiba, Paraná, Brazil

RF Consultant on the BRT O&M project for Santa Catarina with Alcatel equipment.

Claro
RF Engineer - Paraná & Santa Catarina Optimization
June 2005 - November 2008 (3 years 6 months)
Curitiba Area, Brazil

Optimization team Engineer in the states of Paraná and Santa Catarina with Siemens, Ericsson, and Huawei equipment (3G).
- Development of tools to support the Operations and Optimization departments;
- Responsible for the RF project in the deployment of the 3G network (Phase 1);

Siemens
RF Analyst
March 2004 - June 2005 (1 year 4 months)
Curitiba Area, Brazil

Participation in the Claro GSM project (PR/SC) - Phase II and III (Siemens equipment):
- Development of management controls;
- Control and delivery of RF documentation;
- Field inspections (TSS), drive test analysis, and optimization (KPI analysis and suggestions for logical and physical changes).

Academic Background

Federal University of Paraná
Electrical Engineer · (1999 - 2005)

I, André Vinícius Inacio Penna Mello, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



Date: June 10, 2026.

Contato

www.linkedin.com/in/fernando-tauscheck (LinkedIn)
www.tauscheck.com (Blog)
github.com/ftauscheck/ (Portfolio)

Principais competências

Rollout de novos produtos
Sistemas de comunicação sem fio
Indicadores-chave de desempenho

Languages

Inglês

Certifications

Data Science Professional Certificate (V2)

Fernando Tauscheck

Engenheiro de RF
Curitiba, Paraná, Brasil

Resumo

Engenheiro eletricista com 20 anos de experiência em design, operação e otimização de redes
móveis, bem como no desenvolvimento de sistemas para operação e manutenção (O&M) dessas
redes. Facilidade de aprendizado e adaptação a novos produtos e tecnologias. Flexibilidade
para lidar com circunstâncias desafiadoras, ajustando-se às condições e necessidades impostas
pela situação. Sólido conhecimento técnico em tecnologias de telecomunicações sem fio.
Interesse pelo estudo e compreensão do uso de estatísticas em processos.
Experiência na definição, coleta, análise e classificação de indicadores de rede (KPIs) e
realização de estudos estatísticos para desenvolvimento de métricas de monitoramento.
Habilidade no desenvolvimento de ferramentas para coleta automática de dados,
processamento e apresentação, incluindo consolidação de grandes volumes de dados.

PRINCIPAIS HABILIDADES:
- Proficiência na definição, coleta, análise e classificação de indicadores de rede (KPIs) e
realização de estudos estatísticos para desenvolvimento de métricas de monitoramento.
- Experiência no desenvolvimento de ferramentas de automação para coleta, processamento e
apresentação de dados, incluindo relatórios automáticos e consolidação de grandes
conjuntos de dados, utilizando Python, PHP, SQL (MySQL, SQLite, PostgreSQL), VBA,
PowerQuery e linguagens/sistemas de suporte (JS, AWK, bash script, etc.).

- Familiaridade com o pacote Office e ferramentas de suporte como Huawei2020, CME,
Ericsson OSS/amos, sistemas Unix e MS Windows.

Experiência

Randstad
Engenheiro de otimização de RF
janeiro de 2025 - Present (1 ano 6 meses)
Curitiba, Paraná, Brasil

Atuação na equipe de otimização de redes móveis do projeto "Vivo Sul" (projeto NPM Huawei).
- Participação em várias fases do projeto, abrangendo initial tuning, troubleshooting, monitoramento e melhoria de indicadores das redes 3G, 4G e 5G.
- Acompanhamento de grandes eventos, incluindo avaliação pré-evento, monitoramento e otimização em tempo real e, posteriormente, elaboração de relatório detalhando o cenário e apresentando possíveis soluções para os problemas observado.
- Colaboração direta com as equipes de transmissão, CORE, drive test e campo.

Tech Mahindra
Engenheiro de RF
dezembro de 2022 - janeiro de 2025 (2 anos 2 meses)
Curitiba, Paraná, Brasil

Atuação na equipe de otimização de redes móveis do projeto "Vivo Sul" (rede de acesso no Rio Grande do Sul).
- Participação em várias fases do projeto, abrangendo expansão de rede, initial tuning (pós-integração), troubleshooting, monitoramento, manutenção e melhoria de indicadores das redes 3G, 4G e 5G.
- Monitoramento em tempo real de grandes eventos, assegurando o melhor serviço em todas as etapas.
- Colaboração direta com as equipes de transmissão, CORE e campo, facilitando operações integradas.

Oi/Telemar
Especialista Otimização - Consultor
junho de 2014 - dezembro de 2022 (8 anos 7 meses)
Curitiba e Região, Brasil

Especialista em qualidade e O&M, trabalhando em rede de acesso multi-fornecedor (Huawei e Ericsson).
- Desenvolvimento de ferramentas e relatórios automatizados para suporte à implementação de projetos, operação e otimização.
- Apoio ao departamento de desempenho da matriz, contribuindo para a manutenção e melhoria de relatórios de monitoramento de rede.
- Desenvolvimento de ferramentas para coleta, processamento e análise de KPIs e registros de equipamentos, visando melhorias nos indicadores de rede, tratamento de falhas e validação de recursos.

Huawei
Engenheiro de RF
abril de 2009 - junho de 2014 (5 anos 3 meses)
Curitiba e Região, Brasil

- Atuação em várias fases do projeto Oi: suporte, swap, expansão de cobertura e capacidade (2G/3G);
- Coordenador da equipe de RF no projeto TIM Sul - Implantação e Swap (2G, 3G e 4G) entre 2013 e 2014;
- Geração e execução de scripts para as atividades do projeto.
- Geração de relatórios pré e pós atividade, bem como apresentação e discussão com o cliente;
- Troubleshooting de falhas;
- On the job training no GTAC (Shenzen - China) - 2 semanas (2010);

Alcatel Lucent Brasil
Consultor RF
dezembro de 2008 - março de 2009 (4 meses)
Curitiba, Paraná, Brasil

Consultor de RF no projeto Brt O&M para Santa Catarina com equipamento Alcatel.

Claro
Engenheiro RF - Otimização PR&SC
junho de 2005 - novembro de 2008 (3 anos 6 meses)
Curitiba e Região, Brasil

Engenheiro da equipe de Otimização nos estados do PR e SC com equipamentos Siemens, Ericsson e Huawei (3G).
- Desenvolvimento de ferramentas para suporte das áreas de Operação e Otimização;
- Responsável pelo projeto de RF na implantação da rede 3G (Fase 1);

Siemens

Analista de RF

março de 2004 - junho de 2005 (1 ano 4 meses)

Curitiba e Região, Brasil

Participação no projeto Claro GSM (PR/SC) - Fase II e III (Equipamento Siemens):

- Desenvolvimento de controles gerenciais;
- Controle e entrega da documentação de RF;
- Vistorias em campo (TSS), análise de drive test e otimização (análise de KPI e sugestões de mudanças lógicas e físicas).

Formação acadêmica

Universidade Federal do Paraná

Engenheiro, Elétrica · (1999 - 2005)

02/23/2026

To the Department of Homeland Security Office,

My name is Juliano Boarão, and I am currently a Sector Manager at Petróleo Brasileiro S.A. (Petrobras), Brazil's state-controlled oil and gas company and one of the largest energy corporations in Latin America. I have worked in telecommunications for more than 13 years. Throughout my career, I have held technical and managerial roles in large telecommunications and industrial organizations in Brazil and abroad, including Claro Brasil, Ericsson in Angola, and Siemens, with a professional focus on mission-critical communication systems and large-scale network operations. I also hold a Bachelor's degree in Electrical and Electronic Engineering from the Federal University of Paraná, completed between 1999 and 2006, and an Executive MBA in Business Management from Fundação Getulio Vargas, completed in 2021. I also completed the Harvard ManageMentor Program in Management at Harvard Business School from 2020 to 2021.

I have known Gustavo Dartagnan Xavier do Rego's professional trajectory since our undergraduate studies in Electrical Engineering with an emphasis on Telecommunications at the Federal University of Paraná. Although our careers followed different paths within the telecommunications sector, we maintained professional contact over the years, which allowed me to closely follow his professional development for nearly two decades. This long-standing professional relationship provides a consistent basis for evaluating his technical development, decision-making capacity, and contributions to the field.

Beyond that, my own experience includes work with mobile telephony networks, submarine optical systems, radiocommunication in maritime units, and regulatory infrastructure for offshore environments. For almost ten years, I have led the team responsible for planning and executing telecommunications and information technology maintenance across Petrobras' entire offshore network, which includes more than four hundred vessels. This role required a deep technical understanding of high availability systems, operational continuity, and the integration of complex platforms. Given this background, I am well-positioned to assess the level of specialization required for Mr. Rego's work.

What has consistently stood out in Mr. Rego's professional performance is his ability to deliver reliable results in highly complex, mission-critical environments. I have observed his ability to design, integrate, and maintain high-performance voice and data infrastructures, and his effective use of Python and Linux-based automation to streamline complex processes, reduce operational errors, and accelerate critical activities. He has demonstrated experience in large-scale network migrations with exceptionally low incident rates and a strong command of technologies, including Voice over Internet Protocol, IP Multimedia Subsystem, Session Border Controllers, Session Initiation Protocol, and cloud-based virtual network functions. His participation in strategic projects, including initiatives recognized for innovation in communications in Brazil and internationally, reflects a professional approach grounded in technical rigor and systemic vision.

I believe Mr. Rego can contribute to the United States through his expertise in regulatory projects, network modernization, and the development of observability solutions that process millions of records daily. His background in critical network operations, large-scale data environments, and regulatory compliance aligns with the demands of advanced

telecommunications infrastructure and demonstrates professional maturity directly applicable to complex operational contexts.

Based on my direct knowledge of his career, technical qualifications, and professional reliability, I consider Mr. Rego a highly capable telecommunications engineer whose experience and judgment enable him to undertake work of substantial responsibility and relevance. I offer this statement in support of his professional trajectory, grounded solely in my long-term observation of his work and conduct.

Cordially,



Juliano Boarão

Macaé – RJ, Brazil
Email: juliano.boarao@gmail.com / juliano.boarao@petrobras.com.br

Contact

www.linkedin.com/in/juliano-boarao-a61bb4196 (LinkedIn)

Certifications

Lean Management and Industry 4.0

Introduction to Computer Science with Python Part 1

Juliano Boarao

Sectoral Manager at Petrobras

Macaé, Rio de Janeiro, Brazil

Professional Experience

Petrobras

14 years 3 months

Sectoral Manager

August 2016 - Present (9 years 11 months)

Telecommunications Engineer

April 2012 - August 2016 (4 years 5 months)

Macaé Area, Brazil

Claro Brasil

Telecommunications Engineer

April 2011 - April 2012 (1 year 1 month)

Rio de Janeiro Area, Brazil

Ericsson

Telecommunications Engineer

April 2010 - April 2011 (1 year 1 month)

Angola

Claro Brasil

Telecommunications Engineer

April 2006 - April 2010 (4 years 1 month)

Curitiba

Siemens

Telecommunications Technician

March 2004 - March 2006 (2 years 1 month)

Curitiba Area, Brazil

Academic Background

Getulio Vargas Foundation

Executive MBA, Business Management · (2020 - 2021)

Harvard Business School

Harvard Manage Mentor Program, Management · (2020 - 2021)

Federal University of Paraná

Bachelor's Degree, Electrical and Electronic Engineering · (1999 - 2006)

I, André Vinícius Inacio Penna Mello, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



Date: June 10, 2026.

Contato

www.linkedin.com/in/juliano-boarao-a61bb4196 (LinkedIn)

Certifications

Gestão Enxuta/Lean e a Indústria 4.0

Introdução à Ciência da Computação com Python Parte 1

Juliano Boarao

Gerente Setorial na Petrobras

Macaé, Rio de Janeiro, Brasil

Experiência

Petrobras

14 anos 3 meses

Gerente Setorial

agosto de 2016 - Present (9 anos 11 meses)

Engenheiro de telecomunicações

abril de 2012 - agosto de 2016 (4 anos 5 meses)

Macaé e Região, Brasil

Claro Brasil

Engenheiro de telecomunicações

abril de 2011 - abril de 2012 (1 ano 1 mês)

Rio de Janeiro e Região, Brasil

Ericsson

Engenheiro de telecomunicações

abril de 2010 - abril de 2011 (1 ano 1 mês)

Angola

Claro Brasil

Engenheiro de telecomunicações

abril de 2006 - abril de 2010 (4 anos 1 mês)

Curitiba

Siemens

Técnico de telecomunicações

março de 2004 - março de 2006 (2 anos 1 mês)

Curitiba e Região, Brasil

Formação acadêmica

Fundação Getulio Vargas

Executive MBA, Gestão Empresarial · (2020 - 2021)

Harvard Business School

Harvard ManageMentor Program, Gestão · (2020 - 2021)

Universidade Federal do Paraná

graduação, Engenharia Elétrica e Eletrônica · (1999 - 2006)

vivo

To USCIS,

My name is Juliano Parreira dos Santos, and I serve as a Telecommunications Consultant at Telefônica Brasil Vivo in Curitiba. My professional background is rooted in a degree in Telecommunications Systems from the Federal University of Technology of Paraná and an MBA in Project Management from UNINTER Centro Universitário Internacional. Throughout my career, I have specialized in Voice over IP, signaling protocols such as SIP and SS7, and the management of complex core network infrastructures. My daily responsibilities involve developing network adaptation projects, managing core network resources, and implementing new services through Session Border Controllers and signaling transfer points. This technical trajectory allows me to provide an informed perspective on the professional capacity and technical contributions of the individuals I have supervised or collaborated with over the years.

I first established a professional connection with Gustavo Dartagnan Xavier do Rego in 2008. At that time, I was a Senior Telecom Technician in the Network Management Center, while Mr. Rego was a Junior Technical Support Analyst. Our initial collaboration focused on a technical solution he managed that enabled my team to host an application to standardize network scheduling and support massive events. Our professional relationship evolved as he moved into more senior roles, specifically when he became a Senior Telecom Analyst in 2009. In that capacity, he provided Level 3 support for the voice network and served as a critical escalation point for the technical issues my team encountered. By 2010, our departments were integrated, leading to a period of intense collaboration in analyzing voice network failures and participating in specialized technical training.

Between 2014 and 2018, we operated as colleagues within the Core Engineering department. During this phase, I personally observed Mr. Rego's technical leadership in several high-impact initiatives. He was instrumental in integrating Huawei IMS into the network and deploying multiple SBCs nationwide. One of his most notable technical achievements was developing automation scripts to configure Signaling Transfer Points. This intervention enabled the company to internalize previously outsourced tasks, resulting in verified operational savings of more than two million reais. Furthermore, his technical oversight was vital during the installation and commissioning of SBCs (Brazilian Society of Soil Science), which enabled a significant expansion of the residential customer base, growing from 500,000 to over 3 million users.

Mr. Rego has consistently been a trusted reference for the team on SIP protocol signaling and IMS Core configurations. His proactive nature enabled him to master complex technical topics independently, ensuring network processes operated with maximum precision. I also noted his participation in global projects alongside the Global CTO team, focusing on Continuous Deployment, Continuous Testing, and Observability. His ability to develop rapid solutions was further evidenced when he created a CDR analysis system to meet urgent regulatory requirements from Anatel that the standard IT infrastructure could not address within the mandated timeframe.

The command that Mr. Rego has demonstrated throughout our decade of collaboration confirms his status as an expert in telecommunications infrastructure. His history of delivering measurable results and his capacity for innovation in network engineering provide a strong foundation for his continued professional growth. Based on the technical excellence and commitment I have witnessed, I fully support his professional path and the contributions he will continue to make to telecommunications.

Sincerely,

Juliano Parreira dos Santos

Juliano Parreira dos Santos
+55 41 98823 9347
Telefônica Brasil - Vivo

Contact

www.linkedin.com/in/juliano-parreira-dos-santos-86379a13 (LinkedIn)
www.vivo.com.br (Company)

Top Skills

Solução de problemas técnicos
Huawei M2000
Experiência do cliente

Languages

Inglês (Limited Working)

Certifications

Produtividade e Gestão do Tempo
RAMP15 - Ribbon Application Manager Platform Support
Formação Python
Entrega Contínua: Confiabilidade e qualidade na implantação de software

Juliano Parreira dos Santos

Telecommunications Consultant at Telefônica Brasil
Curitiba, Paraná, Brazil

Summary

Experienced telecommunications consultant with a proven track record of working in the telecommunications industry. Voice over IP (VoIP), Session Initiation Protocol (SIP), Session Description (SDP), SIGTRAN (M3UA, M2UA, IUA), TDM (MFCR2, ISDN PRI) and Signaling System 7 (SS7).

Personal characteristics: Team work, easy learning, ease of communication, dedicated and committed to delivering.

Knowhow in:
Python: Basic Scripts and O.O
Mysql: Basic (Create DB, Select, Insert, Update, Drop, Truncate, etc.)
PHP: scripts backend
Network TDM, NGN - Genband and Huawei
IMS: Huawei
Session Border Controller (SBC): Genband, Oracle and Ribbon
STP: Trópico
MGW: Genband and Huawei

Experience

Telefônica Brasil
Consultor de telecomunicações
March 2016 - Present (9 years 11 months)
Curitiba

Development of projects for the provision of new services including SBCs, STPs and Centrals.

Development of network adaptation projects.

Generation of scripts for IMS core integration with new application servers.

Management and Control of Core Network.

Development python scripts for get equipment resources.

GVT

9 years 11 months

Telecom Specialist

May 2015 - March 2016 (11 months)

Curitiba (PR)

Development of new voice solutions on the Huawei IMS solution (ATS, ENUM, HSS, CSCF, MGCF, AGCF).

Monitoring and control of the installation and commissioning of the AGCF element in the IMS Huawei solution for customer service MFCR2, ISDN PRI and V5.2.

IMS Solution Software Upgrade project management for new release.

Analysis, template creation and integration testing for the ENUM Cross Domain project.

Review of IMS solution MGCF database configuration method to optimize table resources.

Analyze and track the quantity of licenses for each element of the IMS solution.

Generation of scripts for updating database (routing) involving the Nono Digito Project for Genband switches and IMS solution.

Creation of scripts and management of the migration project of the STP network element from São Paulo to Recife.

Project management of migration of signaling links between STP.

Control of the licensing capacity of STP signaling links.

Senior Telecom Analyst

September 2014 - May 2015 (9 months)

Curitiba (PR)

Hardware Expansion Projects in the Tropics STPs.

Generation of scripts for updating database (routing) involving the Nono Digito Project for Genband switches and IMS solution.

Development and management of the Genband Media Gateway installation project.

Review of IMS solution MGCF database configuration method to optimize table resources.

Development of the use of M2UA signaling in Media Gateway equipment (IMS solution).

Pleno Telecom Analyst

February 2012 - September 2014 (2 years 8 months)

Curitiba Area, Brazil

Analysis and treatment of failures involving MFCR2 signaling, ISDN PRI, T.38, ISUP, H.248 and SIP for corporate clients.

Handling of database failures (routing) involving corporate clients at IMS Huawei, TDM and NGN.
Support Level 2 for the area for handling corporate customer calls.

Junior Telecom Analyst
September 2010 - January 2012 (1 year 5 months)
Curitiba (PR)

Control of faults in peripherals of Genband, Huawei and Tropico plants.
Analysis and treatment of indicators involving call completion based on CDRs and troubleshooting in the scenarios of internal completion failures and involving interconnection.
Analysis and treatment of CDRs in Error, which generate loss of revenue in billing and Detraf for the operator. Correction of parameters in the Genband and Huawei plants (C&C08).
Development of web interface in PHP / MySql / Python for the generation of reports of peripherals of the exchanges.

Senior Telecom Technician
March 2008 - September 2010 (2 years 7 months)
Curitiba (PR)

Troubleshooting in residential customers involving:
- CDRs analysis of Genband (DMS / DMS-XCORE) and Huawei (C&C08);
- SIP signaling in VSI Tropics and Session Server Trunks (Genband);
- SS7 signaling in STP;
- Analysis and correction of call forwarding at Genband switches (DMS / DMS-XCORE) and Huawei Switchboards (C&C08).

Failure treatment involving interconnection operators (call signaling and routing)
Level 2 support for area responsible for handling complaints from residential customers.

Junior Telecom Technician
March 2007 - March 2008 (1 year 1 month)
Curitiba (PR)

Management of scheduled activities.
Control of complaints indicators.

Internship Trainee
May 2006 - March 2007 (11 months)

Generating Reports of Complaints Indicators in Excel
Developeded of managerial reports involving indicators.

Education

Federal University of Technology - Parana

Technology, Telecommunications Systems · (2005 - 2009)

UNINTER Centro Universitário Internacional

Master of Business Administration - MBA, Project management · (2016 - 2018)

Universidade Tecnológica Federal do Paraná

Specialization, Network and servers · (2010 - 2011)

vivo

February 4, 2026
luis.beu@telefonica.com
+55 41 99127-3101

From: Luis Carlos Beu
To: USCIS Immigration Officer

The telecommunications industry in Brazil requires a high level of technical precision, as operational failures can directly translate into significant financial losses and the interruption of essential services. As an engineer at Telefonica Brasil (VIVO) with a background from the Federal University of Engineering of Itajubá (Universidade Federal de Engenharia de Itajubá, UNIFEI MG) and certifications as a Cisco Certified Network Associate and Professional, I have spent my career managing these complexities. From this professional vantage point, I provide this evaluation of Gustavo Dartagnan Xavier do Rego, with whom I have collaborated extensively since 2006.

Our professional relationship began when Mr. Rego joined the Corporate Support area at GVT, while I served as a Telecommunications Engineer focused on product development for large-scale corporate clients. We were immediately tasked with resolving persistent quality issues in Voice over Internet Protocol (VoIP) services, specifically affecting voice clarity and data transmission for fax machines and credit card terminals. I observed Mr. Xavier's technical discipline during the migration of a major client in Rio de Janeiro to an Alcatel Lucent OmniPCX solution, a carrier-grade enterprise voice platform widely used in corporate telecommunications environments. He was instrumental in developing technical procedures and managing the activation phase, ensuring a seamless transition to what would become the VoxNG product for the end user.

The depth of Mr. Xavier's expertise became even more evident during his tenure in specialized level 3 support. In 2010, he took responsibility for the VoxNG product during a period of critical instability. He did not merely react to failures; he systematically mapped every problematic scenario and engaged global vendors such as Alcatel-Lucent and AudioCodes to secure permanent solutions. His involvement in maintenance windows was rigorous, prioritizing the continuity of corporate operations above all else. This effort was a precursor to the Blue Eyes project, which introduced advanced self-service capabilities for clients. The success of these technical interventions was validated internationally when the VoxNG solution won the Best Cloud Telephony Solution award in Chicago in 2012.

Beyond troubleshooting, Mr. Rego demonstrated a capacity for high-level engineering and network growth. When he moved to the Core Engineering department in 2012, we worked on implementing a Huawei IMS (IP Multimedia Subsystem) switching center. He managed the technical solutions for SIP (Session Initiation Protocol) lines, interconnection, and the Freedom project. The latter was a significant innovation that enabled fixed-line numbers to function via mobile applications. This project, for which Mr. Xavier served as the technical lead, achieved nationwide adoption, reaching over 50,000 downloads across 156 cities, and was subsequently recognized with the Tele. Síntese Innovation Award in 2013, an industry award granted to projects with significant impact on the Brazilian telecommunications sector. His ability to lead the Request for Proposal (RFP) process for the softphone technology and to provide training to other departments demonstrated professional expertise that extended beyond pure engineering.

During the 2015 merger of GVT and Vivo, Mr. Xavier's role was vital to ensuring interoperability between the two distinct telephony networks. This required a sophisticated understanding of how different architectures communicate, a task he handled while

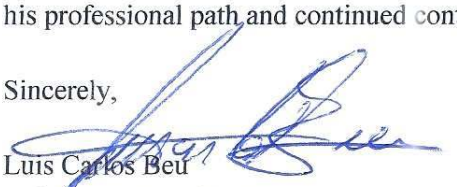
February 4, 2026
luis.beu@telefonica.com
+55 41 99127-3101

simultaneously adapting the VoIP product portfolio. Later, in 2018, his work in Virtualization Engineering involved defining technical standards for the Telco Cloud environment, including orchestration and observability. Observability is the technical practice of using telemetry data to understand the internal state of a network, a critical function for maintaining uptime in modern, virtualized infrastructures.

Mr. Xavier possesses a rare integration of deep technical knowledge in IMS and Cloud systems with a strategic vision for business stability. His track record of transforming complex technologies into industry-recognized telecommunications solutions, while managing relationships with global suppliers such as Ericsson and Huawei, demonstrates a high level of technical authority and professional credibility.

Given the reliability and technical leadership he has consistently demonstrated, I fully support his professional path and continued contributions to telecommunications engineering.

Sincerely,



Luis Carlos Beu
Telefonica Brasil (VIVO)

Contact

www.linkedin.com/in/luis-carlos-beu-6454a5 (LinkedIn)
www.gvt.com.br (Company)

Top Skills

Telecommunications
IP
VoIP

Luis Carlos Beu

Telecom Specialist at Telefônica Brasil
Curitiba, Paraná, Brazil

Summary

New Technologies Analisys, Network Evolution & Service Strategies, Proof of Concepts (Technical Skill).
Main focus (actual): Mobile, 5G, Core, Slicing, Edge Computing, etc.

Specialties: Telecom, IP Networks, Metro-Ethernet, Data & VoIP solutions (Cisco CCNP), SIP, NGN, IMS, Mobile, 5G SA.

Experience

Telefônica Brasil
Telecom Specialist
September 2015 - Present (10 years 10 months)
Curitiba Area, Brazil

Member of Planning Team

Technologies & Network

New Technologies Analisys, Network Evolution & Service Strategies, Proof of Concepts (Technical Skill). Main focus: Mobile, 5G, Core, Slicing, Edge Computing, etc.

GVT Global Village Telecom
Telecom Engineer (Data/VoIP Specialist)
February 2001 - September 2015 (14 years 8 months)

Member of Engineering Team - GVT

New Technologies & Products

Brasil Telecom (Telepar)
Telecom Engineer
October 1992 - February 2001 (8 years 5 months)

Operation (NMC): Data Communication - Coordinator

Operation (Maintenance & Activation): Data Communication - Coordinator

Operation (Quality and Process): Telecom Engineer

CPqD / Telebrás
Estagiário Engenharia Telecom

July 1991 - December 1991 (6 months)

Área: Tecnologia de Redes Externas

(CPqD - TELEBRÁS)

Companhia Brasileira de Aluminio - Votorantim

Estagiário Engenharia Eletrônica

June 1991 - July 1991 (2 months)

Sorocaba Area, Brazil

Área: Sistemas de Controle Industrial

(CBA - Cia. Brasileira de Alumínio - Votorantim)

Education

Universidade Federal de Engenharia de Itajubá (UNIFEI-MG)

Engenharia Elétrica / Eletrônica · (1987 - 1991)

Cisco

CCNP, Cisco Certified Network Professional (Routing & Switching) · (2002 - 2017)

CEFET-PR

Pós Graduação: Especialização em Redes (Telemática) · (1996 - 1996)

Sorocaba

bradesco

To Whom It May Concern,

I am Leandro Braniak Alves, currently working at Bradesco within the Xaxim Administrative Center (Centro Administrativo Xaxim - CAX) in Curitiba, Brazil. My academic credentials include a Bachelor's degree in Systems Analysis and Development from the International University Center (Centro Universitário Internacional - UNINTER) and a specialization in Computer Networks from the Federal University of Parana (Universidade Federal do Paraná - UFPR). My career has been built in operational and provisioning roles within large-scale telecommunications environments, where service stability, traffic volume, and financial risk must be managed daily.

My professional history with Mr. Gustavo Dartagnan Xavier do Rego dates back to June 2006 at GVT. At the time, I was a Corporate Provisioning Technician, and Mr. Rego joined the team as a Junior Technical Support Analyst. We worked together in the Corporate Support department, focusing on the Vox3G product, which used Asterisk, an open-source IP PBX. As our operations expanded to encompass the entire Corporate VoIP portfolio, including VoxNG and Omni, Mr. Rego was appointed technical leader of the client activation team. He was the primary point of contact for troubleshooting intricate cases and was responsible for drafting technical procedures for configuration and maintenance.

I personally witnessed Mr. Rego improve our operational efficiency by developing automated templates for equipment configuration. This intervention was vital as it not only accelerated our delivery timelines but also removed the risk of manual configuration errors. Subsequently, he joined the Vono product team as a Systems Analyst, where he managed an Asterisk cluster integrated with Oracle databases, an enterprise-grade database system. In this role, he executed the migration of Vono to the Next Generation Network (NGN) using Session Server Trunks (SSTK), replacing the older E1 EV2000 Gateways. His work in server virtualization was particularly impactful, as he achieved a 25% increase in installed call-handling capacity of the Vono platform by optimizing the virtualization software without requiring additional hardware.

Mr. Rego also demonstrated a high level of responsibility regarding network security and service expansion. He identified and corrected critical fraud scenarios that would have allowed calls to be completed without proper charging, preventing significant financial losses. Additionally, he developed and implemented new features such as Click2Call and Fax2Email, and managed the integration of high-volume clients, including Skype, a global communications platform, whose integration generated more than two million minutes of voice traffic in just fifteen days, requiring continuous monitoring and rapid operational response. His ability to handle such high-stakes environments with technical precision and a focus on quality is what sets him apart.

Given my direct experience working with him in high-volume, high-risk operational scenarios, I strongly support his petition and am confident in his continued contributions to complex telecommunications systems, where reliability, precision, and risk control are essential.

Sincerely,

Leandro Braniak Alves
leandro.braniak@bradesco.com.br |braniak@gmail.com
https://www.linkedin.com/in/leandro-braniak-a0172714/
+55 41 99994-5740

02/04/2026

Contact

www.linkedin.com/in/leandro-braniak-a0172714 (LinkedIn)

Top Skills

VMware vCenter
Bash
Virtual Private Network (VPN)

Languages

English (Full Professional)
Portuguese (Native or Bilingual)

Certifications

Microsoft Certified: Azure Fundamentals

Leandro Braniak

Telecommunications Network Analyst at Bradesco
Curitiba, Paraná, Brazil

Summary

Experienced Telecommunications Network Analyst with a demonstrated history of working in the banking industry. Skilled in Cisco IOS, virtualization, Session Initiation Protocol (SIP), Network and Linux System Administration. Strong information technology professional with postgraduate degree in Computer Networking from Universidade Tecnológica Federal do Paraná.

Experience

Bradesco
Telecommunications Network Analyst
October 2016 - Present (9 years 9 months)
Curitiba Area, Brazil

HSBC
Sr Production Support Analyst
November 2013 - September 2016 (2 years 11 months)

GVT
5 years 9 months

Server Support Analyst
July 2009 - November 2013 (4 years 5 months)

Corporate Technical Provisioning
March 2008 - June 2009 (1 year 4 months)

Education

Federal University of Technology - Parana
Postgraduate Degree, Computer Networking · (September 2020 - December 2021)

Centro Universitário Internacional UNINTER

Bachelor's degree, System Analysis and Development · (2015 - 2019)

Pontifícia Universidade Católica do Paraná

Computer Systems Networking and Telecommunications · (2005 - 2007)

Paraná, Brazil
January 29, 2026

To USCIS,

My name is Rafael Avila Leite, and I currently work at Ligga Telecom, a telecommunications company based in Curitiba, Brazil. I have built my professional career in telecommunications operations and advanced network support, with formal training in information technology and computer networks, complemented by an MBA in Strategic Business Management from the Getulio Vargas Foundation (Fundação Getulio Vargas). Over my career, I have held senior technical roles focused on voice networks, large-scale infrastructure, and advanced troubleshooting in carrier-grade environments.

I first met Gustavo Dartagnan Xavier do Rego in 2006, when we both worked at GVT (Global Village Telecom), a major Brazilian telecommunications provider. At that time, I served as a Support Coordinator in the Specialized Support area, which was responsible for network expansion and advanced support of the voice infrastructure. Mr. Rego worked as a Junior Technical Support Analyst in the Corporate Technical Support team. Our professional interaction was frequent because my team functioned as the escalation level for complex issues related to corporate Voice over Internet Protocol products, including VoxNG, Omni, and Vox3G, which are carrier-grade platforms used to deliver corporate voice services over IP-based telecommunications networks. During the deployment of the Next Generation Network (NGN), I observed him directly participating in planned maintenance windows and advanced troubleshooting activities designed to preserve service continuity and prevent disruption to corporate and essential services.

In May 2008, Mr. Rego became a Systems Analyst at Vono, serving as the technical leader for the product. We worked closely throughout the Vono migration to the GVT Next Generation Network infrastructure, replacing legacy gateway solutions with Session Server Trunks. Given the high volume of this product traffic, operational incidents were closely monitored at the executive level, which intensified our collaboration. His technical decisions and coordination during this period were critical to maintaining service continuity in a high-traffic environment, where network instability could directly impact large corporate clients and essential communications.

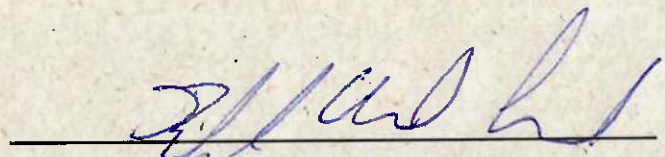
In September 2009, Mr. Rego joined my Specialized Support team as a Senior Telecommunications Analyst, reporting directly to me. In this role, he stood out for his ability to absorb advanced training from international vendors and to translate that knowledge into practical operational improvements. He was the only professional selected by the company to attend the Genband international training course, C20 Solution Fault Management, in Raleigh, North Carolina, underscoring his role as the primary technical reference for the Next Generation Network.

Furthermore, in 2011, due to his exceptional technical command, Mr. Rego was a key member of the Specialized Technical On Call (Sobreaviso) Rotation. This role was reserved only for the highest-level engineers, classified as Tier 3, who were responsible for 24/7 mission-critical incident response. In this capacity, he was the primary authority to resolve large-scale network outages and complex signaling failures that threatened the continuity of national telecommunications services. This responsibility solidified his position as our final resource for the most challenging infrastructure issues.

One of his most impactful contributions was developing an automated audit script for Next Generation Network Links configurations. This initiative transformed a manual, error-prone process into a standardized, auditable routine, significantly reducing configuration failures and the time required for root cause analysis. During a period of severe instability affecting the VoxNG product between 2010 and 2011, Mr. Rego mapped failure scenarios, coordinated corrective actions with multiple international vendors, and personally participated in maintenance activities to prevent customer impact. As a result, the backlog of unresolved technical incidents for corporate voice over IP products was effectively eliminated, and network stability was restored. For these reasons, he received a letter of recognition from our manager, Sergio Wolski, for his performance and commitment, which, in addition to serving as an example for the team, significantly contributed to achieving the area's objectives.

Based on my direct experience working with Mr. Rego, I believe his expertise in stabilizing and optimizing large-scale telecommunications networks is directly applicable to initiatives focused on reliable and resilient communications infrastructure. The qualities he demonstrated in complex operational environments provide a solid foundation for the professional activities he seeks to pursue in the United States, and I offer my support based on the competence, responsibility, and leadership he consistently displayed throughout our collaboration.

Cordially,



Rafael Avila Leite

linkedin.com/in/raleite
+55 (41) 99878-4161
Email: ra.leite@gmail.com

Contact

www.linkedin.com/in/raleite
(LinkedIn)

Top Skills

Teamwork
Problem solving
C (programming language)

Rafael Avila Leite

Operations Manager - CGR
Curitiba, Paraná, Brazil

Summary

Professional with over 30 years of experience in the areas of operation, deployment, and planning of telecommunications networks.

- Leadership skills.
- Adaptability to new roles and environments.
- Results-driven profile.
- Proactive mindset with problem-solving skills;
- Experience working in cross-functional teams;

Focus on process and structure optimization, always seeking to improve the customer experience.

In-depth knowledge of network architectures and planning in data, voice, and FTTH access networks.

Experience

Ligga Telecom
Specialized Support and NOC Manager
August 2021 - Present (4 years 11 months)
Curitiba, Paraná, Brazil

Manager of a high-performance, mission-critical multidisciplinary team in the areas of IP/Data Network, Transmission, Voice, Access, Datacenter, and Infrastructure.

Responsible for the implementation of Network Proactivities and Improvements and OPEX management.

Focus on solving customer needs and demands, and on the development and optimization of operational processes.

Horizons Telecom

Telecommunications and Technology Specialist.
September 2011 - August 2021 (10 years)
Curitiba Area, Brazil

Telecommunications and technology specialist with extensive knowledge in GPON/FTTx network architecture, Data, NGN/VoIP, and telecommunications infrastructure.

Planning of GPON/FTTx access networks, Home Gateway/ONT/ONU, Customer Devices, and Metro Ethernet, defining and implementing network architectures and topologies.

Planning and deployment of NGN/VoIP SCM and STFC networks, media gateways, SIP, SBC, PTS, and SS7 signaling, number portability, IP Centrex, Virtual PABX, and lawful interception.

Responsible for the homologation process of new technologies for Voice, GPON/FTTx, and Metro Ethernet networks

Deployment of GPON/FTTx access and STFC/SCM voice networks in several cities across the states of Paraná and São Paulo.

Development of processes and procedures in the Engineering area. Preparation of Action Plans for continuous improvement of service quality.

GVT
11 years 4 months

Specialized Support Coordinator
September 2007 - September 2011 (4 years 1 month)
Curitiba Area, Brazil

Manager and Leader of the multidisciplinary level-3 support team in the areas of Data Network, Switching Network, Infrastructure, and Network Performance, composed of more than 30 Specialists, Engineers, and Analysts.

- Data Network: IP, routers, switches, ATM, DNS, etc.

- Switching Network: NGN networks, media gateways, SIP, TDM, SBC, PTS, VoIP, number portability, intelligent network, interconnections, etc.

- Infrastructure: Air conditioning systems, generator sets, batteries, UPS, FCC power supplies, etc.

- Network Performance: ANATEL indicators, completion rates, proactive identification of potential failures, etc.

Senior Telecom Analyst
July 2006 - August 2007 (1 year 2 months)

* Operation and Maintenance of Nortel DMS-100 and Huawei C&C08 switches.
* Development and deployment of routing databases.
* Capacity Planning and Network Optimization.
* Development of the SS7 signaling plan.
* Implementation of SW and HW upgrades.
* Development and implementation of new TDM and NGN voice products.
* Deployment of GVT's NGN Network.
* Fault analysis with SIP, H248, ISUP, Digital R2, ISDN PRI, V5.2, and H248 signaling protocols.

Specialist Telecom Technician
June 2004 - June 2006 (2 years 1 month)

Telecom Technician
June 2000 - May 2004 (4 years)

Retebrás – Redes e Telecommunicações.
Technical Supervisor
October 1999 - June 2000 (9 months)
Porto Alegre, Rio Grande do Sul, Brazil

* Deployment of metallic and optical telephone networks.
* Survey and execution of telephone network projects.

Ikro S/A – Telecom Division
Telecom Technician
September 1995 - September 1999 (4 years 1 month)
Porto Alegre, Rio Grande do Sul, Brazil

Supervision of telecommunications network deployment works for CRT/Brasil Telecom/OI operators.

Jalfim Telecommunicações
Electronics Technician.
November 1994 - September 1995 (11 months)
Porto Alegre, Rio Grande do Sul, Brazil

Deployment of optical links, performing optical splicing and terminations as well as acceptance and delivery tests.

Metax Telemática S/A
Electronics Technician
August 1992 - November 1994 (2 years 4 months)
Porto Alegre, Rio Grande do Sul, Brazil

Deployment of switching systems and STFC telephone exchanges.

Companhia Riograndense de Telecomunicações
Technical Intern
October 1991 - August 1992 (11 months)
Porto Alegre

Education

Getúlio Vargas Foundation
MBA, Strategic Business Management · (2010 - 2013)

Tuiuti University of Paraná
Graduate Studies, Computer Networks and Security · (2007 - 2008)

Tuiuti University of Paraná
Information Technology Degree · (2004 - 2006)

Parobé Technical School
Electronics Technician · (March 1987 - December 1993)

I, André Vinícius Inacio Penna Mello, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Date: June 10, 2026.

Contact

www.linkedin.com/in/raleite (LinkedIn)

Top Skills

Trabalho em equipe
Resolução de problemas
C (linguagem de programação)

Rafael Avila Leite

Gerente de Operações - CGR
Curitiba, Paraná, Brazil

Summary

Profissional com mais de 30 anos de experiência nas áreas de operação, implantação e planejamento de redes de telecomunicações.

- Capacidade de liderança.
- Adaptabilidade a novas funções e ambientes.
- Perfil focado em entrega de resultado.
- Mentalidade proativa com capacidade de resolução de problemas;
- Experiência de trabalho em equipes multifuncionais;

Foco na otimização de processos e estruturas, sempre buscando melhoria na experiência do cliente.

Profundo conhecimento em arquiteturas de rede e planejamento em redes de dados, voz e acesso FTTH.

Experience

Ligga Telecom
Gerente de Suporte Especializado e NOC
August 2021 - Present (4 years 11 months)
Curitiba, Paraná, Brasil

Gestor de equipe multidisciplinar de alto desempenho e missão crítica nas áreas de Rede IP/Dados, Transmissão, Voz, Acesso, Datacenter e Infraestrutura.

Responsável pela implantação de Próatividades e Melhorias de rede e gestão de OPEX.

Foco na solução de necessidades e demandas de clientes, elaboração e otimização dos processos operacionais.

Horizons Telecom

Especialista em Telecomunicações e Tecnologia.
September 2011 - August 2021 (10 years)
Curitiba Area, Brazil

Especialista em telecomunicações e tecnologia com elevado conhecimento em arquitetura de redes GPON/FTTx, Dados, NGN/VoIP e Infraestrutura em telecomunicações.

Planejamento de redes de acesso GPON/FTTx, Home Gateway/ONT/ONU, Devices de Clientes e Metroethernet definindo e implementando arquitetura e topologias de redes.

Planejamento e Implantação de redes NGN/VoIP SCM e STFC, Media gateways, SIP, SBC, PTS e sinalização SS7, portabilidade numérica, IP Centrex, PABX Virtual, interceptação legal.

Responsável pelo processo de homologação de novas tecnologias das redes de Voz, GPON/FTTx e Metroethernet

Implantação de redes Acesso GPON/FTTx e Voz STFC/SCM em diversas cidades nos estados do Paraná e São Paulo,

Desenvolvimento de processos e procedimentos na área de Engenharia. Elaboração de Planos de Ação para melhoria continua da Qualidade dos serviços.

GVT
11 years 4 months

Coordenador de Suporte Especializado
September 2007 - September 2011 (4 years 1 month)
Curitiba e Região, Brasil

Gestor e Líder da equipe multidisciplinar de suporte nível 3 nas áreas de Rede de Dados, Rede de Comutação, Infraestrutura e Desempenho de rede, composta por mais de 30 Especialistas, Engenheiros e Analistas.

- Rede de Dados: IP, routers, switches, ATM, DNS, etc.

- Rede de Comutação: Redes NGN, media gateways, SIP, TDM, SBC, PTS, VoIP, portabilidade, rede inteligente, interconexões, etc.

- Infraestrutura: Sistemas de climatização, GMG, baterias, no-break, Fontes FCC, etc.

- Desempenho de Rede: Indicadores ANATEL, Índices de completamento, pro atividade a possíveis falhas, etc.

Analista Telecom SR
July 2006 - August 2007 (1 year 2 months)

* Operação e Manutenção de centrais Nortel DMS-100 e Huawei C&C08.
* Desenvolvimento e Implantação de base de dados de encaminhamentos.
* Planejamento de Capacidade e Otimização de Rede.
* Desenvolvimento do plano de sinalização SS7.
* Implementação de upgrades de SW w HW.
* Desenvolvimento e implementação de novos produtos de voz TDM e NGN.
* Implantação da Rede NGN da GVT.
* Analise de falhas com os protocolos de sinalização SIP, H248, ISUP, R2 Digital ISDN PRI, V5.2 e H248.

Técnico Telecom Especialista
June 2004 - June 2006 (2 years 1 month)

Técnico Telecom
June 2000 - May 2004 (4 years)

Retebrás – Redes e Telecommunicações.
Supervisor Técnico
October 1999 - June 2000 (9 months)
Porto Alegre, Rio Grande do Sul, Brasil

* Implantação de redes telefônicas metálicas e ópticas.
* Levantamento e execução de projetos de redes telefônicas.

Ikro S/A – Divisão Telecom
Técnico Telecom
September 1995 - September 1999 (4 years 1 month)
Porto Alegre, Rio Grande do Sul, Brasil

Supervisão de obras de implantação de rede de telecomunicações para operadoras CRT/Brasil Telecom/OI

Jalfim Telecommunicações
Técnico em Eletrônica.
November 1994 - September 1995 (11 months)
Porto Alegre, Rio Grande do Sul, Brasil

Implantação de enlace ópticos, realizando as fusões terminações ópticas bem como os testes de aceitação e entrega.

Metax Telemática S/A
Técnico em Eletrônica
August 1992 - November 1994 (2 years 4 months)
Porto Alegre, Rio Grande do Sul, Brasil

Implantação de sistemas de comutação e centrais telefônicas STFC

Companhia Riograndense de Telecomunicações
Estagiário Técnico
October 1991 - August 1992 (11 months)
Porto Alegre

Education

Fundação Getúlio Vargas
MBA, Gestão Estratégica de Empresas · (2010 - 2013)

Universidade Tuiuti do Paraná
Pós Graduação, Redes de Computadores e Segurança · (2007 - 2008)

Universidade Tuiuti do Paraná
Tecnologia em Informática · (2004 - 2006)

Escola Técnica Parobé
Técnico em Eletrônica · (March 1987 - December 1993)

alctel

sergio@alctel.com.br
+55 31 99214 2525

February 5, 2026
Belo Horizonte, Brazil

To the USCIS Immigration Officer,

I am Sergio Luiz de Lima, currently Chief Executive Officer of Alctel, a telecommunications company headquartered in Belo Horizonte, Brazil. My professional background includes an Executive MBA in Strategic Leadership from Dom Cabral Foundation and formal training in Systems Management and LAN and WAN Networks from Centro Universitario UNA. Over the course of my career, I have been directly involved in deploying and supporting complex corporate telecommunications infrastructure, frequently in collaboration with large network operators and international technology vendors.

My professional interaction with Gustavo Dartagnan Xavier do Rego began in early 2007, shortly after Alctel executed its first contract with GVT to implement Alcatel IP PBX solutions in a customized project for a corporate client using the Vox3G product. At that time, I served as a Director at Alctel and was personally involved in the technical oversight and validation of the installation and configuration of the equipment. Following the migration of this initial client, my contact with Mr. Rego became frequent due to operational issues reported by GVT corporate customers, which were escalated to our team for advanced troubleshooting.

In March 2007, our collaboration expanded when a controlled test environment was established in the GVT laboratory to validate the Alcatel IP PBX as the core of the VoxNG product. Mr. Rego actively participated in this process alongside other technical specialists, contributing to the product's approval and subsequent commercial launch later that year. VoxNG introduced an architecture in which a centralized IP PBX was hosted within the operator's network, while customer sites were connected through data links and modular media gateways, enabling cost reduction, centralized management, and internal calls between geographically distributed branches without additional tariffs.

During VoxNG's operational lifecycle, Mr. Rego was responsible for defining procedures and developing an automated configuration system for Mediatrix Integrated Access Devices which are network gateways used to connect remote customer sites to centralized voice platforms and operate as remote extensions. used as remote extensions. He also conducted internal technical training and participated directly in maintenance windows for server upgrades. After assuming responsibility for Level 3 technical support in 2009, he led the transfer of the product's operational control to GVT, establishing internal service workflows and integrating user management and alarm monitoring with the company's core systems.

A particularly critical phase occurred in 2010, when VoxNG experienced operational instability. Mr. Rego served as the technical liaison between GVT and Alcatel-Lucent in France, coordinating diagnostic audits and overseeing corrective maintenance activities. As

alctel

a result, configuration standards were revised, multiple upgrades were implemented, and the customer self-service portal, known internally as the Blue Eyes projectwas significantly enhanced. These improvements enabled customers to manage a broader range of configurations independently and contributed to VoxNG receiving international recognition in 2012 at the Alcatel-Lucent Dynamics Entrerprise Awards in Chicago, where it was evaluated by independent telecommunications analysts from firms including Frost & Sullivan, IDC, Gartner, and Yankee Group.

From 2012 onward, as a Technical Consultant in Engineering, Mr. Rego led initiatives in capacity planning, budget control, technical proposal analysis, network expansion, interoperability with Huawei's IP Multimedia Subsystem, and geographic redundancy through data center reconfiguration. He later played a central role in maintaining VoxNG within the product portfolio following the merger between GVT and Vivo. In 2016, he coordinated a large-scale software upgrade, including portal adaptation and maintenance execution, achieving substantial capacity gains through virtualization without disrupting customer service.

Based on my direct and long-term professional observations, Mr. Rego demonstrates a rare level of competence in managing the full technical lifecycle of mission-critical telecommunications products. His ability to align operational stability, scalability, and business requirements has consistently delivered resilient, sustainable solutions. These characteristics, developed through years of responsibility for complex systems, provide a solid foundation for initiatives that demand technical depth, structured decision-making, and operational reliability.

Sincerely,

Sergio Luiz de Lima
Chief Executive Officer, Alctel

Contact

www.linkedin.com/in/sergio-lima-0150357b (LinkedIn)

Key Competencies

Telecommunications
Wireless
VoIP

Sergio Lima

CEO at ALCTEL
Belo Horizonte, Minas Gerais, Brazil

Summary

Over the past 30 years, I founded and managed Alctel and 5 other companies, always striving to do my best for my clients and employees... We won major projects with large companies in Brazil (Itaú, Bradesco, Mercado Livre, FastShop, Localiza, Movida, Unimed-BH, Materdei, Felício Rocho, among others...);
we supplied the 3 largest telephone operators in Brazil (Telefônica/VIVO, Embratel/Claro, and OI/Telemar); we won national and international awards (VOXNG Host PBX - GVT, Itaú - Video Attendance, Outstanding Service Delivery - UNIMED-BH, among others...) And always with the certainty of having done my best, with ethics and respect for the laws, institutions, and people...

Professional Experience

ALCTEL
29 years 11 months

CEO
February 2017 - Present (9 years 5 months)
Belo Horizonte, Minas Gerais, Brazil

Director
August 1996 - February 2017 (20 years 7 months)

Alcatel-Lucent Enterprise
Telecommunications Technician
December 1992 - July 1996 (3 years 8 months)

Academic Background

Dom Cabral Foundation
Executive MBA, Strategic Leadership · (2019 - 2021)

UNA University Center

Systems, Network, and LAN/WAN Management · (2002 - 2004)

Cotemig School

Electronics Technician · (1990 - 1992)

MIT Professional Education

Agentic Artificial Intelligence for Business Transformation, Information Technology · (September 2025 - December 2025)

I, André Vinícius Inacio Penna Mello, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



Date: June 10, 2026.

Contato

www.linkedin.com/in/sergio-lima-0150357b (LinkedIn)

Principais competências

Telecommunications
Wireless
VoIP

Sergio Lima

CEO na ALCTEL
Belo Horizonte, Minas Gerais, Brasil

Resumo

Nos últimos 30 anos, constitui e dirigi a Alctel e mais outras 5 empresas, sempre tentando fazer o melhor por meus clientes e colaboradores... Ganhamos grandes projetos, em grandes empresas do Brasil (Itaú, Bradesco, Mercado Livre, FastShop, Localiza, Movida, Unimed-BH, Materdei, Felício Rocho, entre outros...); Fornecemos para as 3 maiores operadoras de Telefonia do Brasil (Telefônica/VIVO, Embratel/Claro e OI/Telemar); Ganhamos prêmios nacionais e internacionais (VOXNG Host PBX - GVT, Itaú - Vídeo Atendimento, Destaque na Prestação de Serviços - UNIMED-BH, entre outros...) E sempre a certeza de ter feito o meu melhor, com ética e respeito as leis, as instituições e as pessoas...

Experiência

ALCTEL
29 anos 11 meses

CEO
fevereiro de 2017 - Present (9 anos 5 meses)
Belo Horizonte, Minas Gerais, Brasil

Diretor
agosto de 1996 - fevereiro de 2017 (20 anos 7 meses)

Alcatel-Lucent Enterprise
Técnico de telecomunicações
dezembro de 1992 - julho de 1996 (3 anos 8 meses)

Formação acadêmica

Fundação Dom Cabral
Executive MBA, Liderança Estratégica · (2019 - 2021)

Centro Universitário UNA

Gerenciamento de Sistemas, Redes e LAN/WAN · (2002 - 2004)

Colégio Cotemig

Técnico em Eletrônica · (1990 - 1992)

MIT Professional Education

Inteligência Artificial Agêntica para a Transformação Empresarial, Tecnologia da Informação · (setembro de 2025 - dezembro de 2025)

Pedro Javier Chia Luna
February 5, 2026
Paraná, Brazil
Email: pedro.luna@telefonica.com / pedrojchia@gmail.com
Phone: +55 41 98806 2068

Dear Immigration Officer,

With over more than 28 years of professional experience in the telecommunications sector, I have led the implementation of advanced network technologies across diverse markets in Latin America and Asia. My academic background includes a degree in Electronic Engineering from Universidad Distrital Francisco José de Caldas, a Master of Science in Industrial Engineering from Universidad de Los Andes, and a Master of Business Administration in New Business from Fundação Getulio Vargas. Currently, I exercise my professional duties at Telefônica Vivo, based in Av. Dr. Dário Lopes dos Santos, 2197, in Curitiba, where I have focused on core network architecture and large-scale engineering projects. My name is Pedro Javier Chia Luna, and, from my long-term industry experience, I provide this assessment of Gustavo Dartagnan Xavier do Rego.

I met Mr. Gustavo in 2007 at GVT, where I was a Senior Network Engineer, and he was a Technical Support Analyst. We worked together on technical challenges involving fax transmissions in Next Generation Network environments and on assessing corporate client impacts during network migrations. I closely monitored his career progression through roles such as Systems Analyst and Senior Telecom Analyst until 2012, when I personally invited him to join the Core Engineering team as a Technical Consultant. In this capacity, he assumed responsibility for network expansion, the integration of new functionality, and the technical validation of equipment procurement.

Mr. Gustavo's professional contributions are characterized by the sophisticated integration of telecommunications engineering and automated software solutions. A notable example was his leadership in integrating Huawei's IP Multimedia Subsystem, for which he was responsible for the technical documentation defining call scenarios for high-value corporate services. Furthermore, he transformed our procurement approach for Session Border Controllers by implementing a network-wide licensing strategy. This innovation allowed for the optimization of simultaneous traffic across the entire infrastructure, ensuring maximum capacity while significantly reducing licensing costs and administrative complexity.

The operational impact of his work is further evidenced by his development of a capacity planning system that provided the company with precise historical data on resource utilization, which prevented unnecessary capital expenditures. Mr. Gustavo also streamlined the deployment of over forty SBCs in a single year by creating standardized configuration templates that simplified the work of installation and operations teams. More recently, he played a key role in the transition to telco

cloud and virtualization, performing the first local certification of Virtual Network Functions in Brazil. In 2022, he also addressed an urgent regulatory mandate from the National Telecommunications Agency (Agência Nacional de Telecomunicações – ANATEL) by developing a call record analysis system to mitigate robocalls within a thirty-day window.

When Mr. Gustavo assumed the role of Technical Consultant within the Core Engineering team, his responsibilities expanded to include network growth planning, the adoption of new technologies, and technical leadership in equipment procurement. A notable example was his leadership in integrating Huawei's IP Multimedia Subsystem (IMS) into the network, where he was responsible for approving Technical Requirement Documents that defined complex call scenarios for high-value corporate services, including the adaptation of legacy products such as VoxIP and VoxNG.

In parallel, he led the homologation process for Session Border Controller suppliers and conducted the Request for Proposal that introduced a network-wide licensing model. This approach fundamentally changed how capacity was managed across the SBC infrastructure, allowing the network to operate at maximum efficiency while significantly reducing licensing costs and eliminating vendor lock-in.

Mr. Gustavo has been instrumental in the sustainable growth and modernization of telecommunications infrastructure across the organizations where he worked, particularly through initiatives that expanded network capacity, improved cost efficiency, and ensured regulatory compliance. The solutions he designed and implemented delivered internal gains and contributed to advancing technical practices across the sector. Based on the results I have observed throughout our extensive collaboration, I fully support his professional goals and am confident that his expertise will continue to generate meaningful contributions to the telecommunications field.

In Earnest,



Pedro Javier Chia Luna
Telefônica Vivo

Contact

www.linkedin.com/in/pedro-j-chia-luna (LinkedIn)

Top Skills

Voice over IP (VoIP)
Agile Methodologies
Scrum

Languages

English (Full Professional)
Portuguese (Native or Bilingual)
Spanish (Native or Bilingual)

Pedro L.

Delivery Manager | Vivo (Telefônica Brasil)
Curitiba, Paraná, Brazil

Summary

High skilled Technology engineer. Working over 20 years on different roles like project management, design, planning, engineering, implementation and support on several innovation projects around world and multiple assignments using agile methodologies by focusing on iterative development, clear communication, and adaptive planning, I ensure that team members are empowered to take ownership of their tasks while maintaining alignment with project goals. I excel at managing stakeholder expectations, resolving conflicts, and ensuring that projects meet the evolving needs of the business while achieving measurable outcomes.

Planning, managing, implementation and controlling technonolgy projects, with aggressive time to market schedules and monitoring them about US$30 million.

Focused on results, deep analysis over the different phases in the deployment of projects with pro-eficienciency and decision making for targeting the main goals.

Experience

Vivo (Telefônica Brasil)

Optimization & Architecture Network Manager
February 2021 - Present (5 years 5 months)
Brasil

Team leader of 22 Engineers focused on design, planning, implementation of Telecommunication with expertise in Agile methodology, skilled in leading cross-functional teams to successfully deliver high-quality projects on time and within budget. I have experience implementing Agile practices such as Scrum, Kanban, and Lean to streamline workflows, foster collaboration, and drive continuous improvement adapted to Telecommunications Technology projects.

Budget execution in projects over US$22 million.

Main Responsibilities:

Digital Transformation

Planning and design Telecommunication converged Mobile & fixed network.

Expansion of network voice network and deployment for new voice services and technologies.

Leadership of a team with high performance skills and innovation with good quality providing solutions focusing on low cost Opex.

Telefónica
Fixed Core Network Manager
September 2015 - February 2021 (5 years 6 months)
São Paulo

Team leader of 20 Engineers focused on planning, implementation and design of Telecommunication voice solutions for a network with more than 12 million customers.

Budget execution in projects over US$40 million.

Reporting to Voice Core Network Senior Management of Telefonica Group.

Main Responsibilities:

Expansion of network voice network and deployment for new voice services and technologies.

Network transformation leader, start migration of legacy subscribers over IMS (VoIP SIP) customers.

Leadership of a team with high performance skills and innovation with good quality providing solutions focusing on low cost Opex.

GVT Vivendi Group
8 years

Network Core Manager
April 2012 - July 2015 (3 years 4 months)

Responsible for planning, design and capacity of voice network with over 3.5 million of Voice over IP customers.

Network Core Manager
Budget USD$30 millions

Expansion of network voice network and deployment for new voice services and technologies.

Network transformation leader, start migration of legacy subscribers over IMS (VoIP SIP) customers.

Leadership of a team with high performance skills and innovation with good quality providong solutions focusing onto final customers.

Business new market analyst, risk potential and regulation analisys for African Markets.

Deployment of voice app for mobility of voice wireline into smartphones.

Senior network engineer
August 2007 - April 2012 (4 years 9 months)

Planning network engineer
Responsible for large NGN deployment for Voice network with over 120 cities.

Network technology prospection for introducing IMS solution pioneer in CALA region.

Responsible for homologation process for new voice technologies.

RFP responsible for specification, evaluation and acquisition of voice core and voice services plattform

Nortel Networks
7 years

Senior System Engineer
2006 - 2007 (1 year)
Kuala Lumpur Malaysia

Responsible for network transformation of TDM voice network with large switching offices into one NGN core Network.

Engineering planning leader for technology implantation for collapsing class 4 and class 5 networks.

Network Engineer
2000 - 2006 (6 years)

Network designer for TDM / NGN network for GVT startUp

Operation professional Services for customer operation and training process for knowledge transfer technology.

Planing network engineer for expansion of Voice Network

Avantel
Core Network Engineer
1999 - 2000 (1 year)
Bogota Col

Responsible for engineering and operation of a mobile network of iden / GSM technology

Claro Colombia - Comcel
SWITCHING ENG
1996 - 1998 (2 years)
Bogota

Network operation engineer for startup of TDM network

Education

FGV

Master of Business Administration (M.B.A.), New business · (2003 - 2004)

Universidad de Los Andes

Master of Science (MSc), Industrial Engineering · (1999 - 2000)

Universidad Distrital Francisco José de Caldas

Electronic Engineer, Electrical and Electronics Engineering · (1990 - 1996)

05/02/2026

To USCIS,

My name is Darian Jose Rodriguez Del Carmen, and I currently oversee the Engineering activities for MVNO Mobile at Optimum in Bethpage, New York. Over the years, I have built my career in the telecommunications sector through technical and leadership roles, supported by an MBA from Barna Management School, specialized project management training at Instituto Tecnológico de Santo Domingo, and advanced studies in telecommunications networks at Universidad Rey Juan Carlos. My background has required constant evaluation of engineering performance, technical rigor, and professionals' capacity to deliver reliable solutions in large-scale operations.

D.R

I first became acquainted with Gustavo Dartagnan Xavier do Rego when he joined my organization on October 3rd of 2022 as a Senior Telecom Engineer working in an outsourced capacity under my direct supervision. At that time, we were navigating regulatory and operational challenges associated with the Robot Call Mitigation Project, and I assigned him responsibilities related to compliance with Federal Communications Commission DA 24 73 and the implementation of STIR SHAKEN. From the outset, Mr. Rego established himself as someone who approached complex requirements with discipline and clarity, which were essential to the responsibilities placed on him.

As our collaboration progressed, I had the opportunity to observe his work during the transition of our corporate clients from the Genband legacy switch to the Metaswitch platform. The project was initially slowed by excessive manual intervention and an unacceptably low success rate. When I asked Mr. Rego to evaluate the situation, he carefully reviewed the workflow and identified opportunities for automation, leveraging his Python and Linux expertise. His contribution changed the course of the project. The automation he implemented increased the success rate from 60% to 100% and reduced a projected three-year effort to one. This modernization process affected more than 600 active clients across more than 20 cities in 5 states, including organizations in healthcare, public safety, education, finance, and energy. The continuity of service in these sectors depended on a smooth migration, and his work ensured the transition had minimal operational impact.

I also relied on him when we found gaps in our Nokia IMS backups. At my request, he investigated and returned with an automated process capable of managing backup routines for more than 100 devices, along with a webpage displaying the most recent backup status for each device stored on the servers. This gave the engineering team immediate visibility and strengthened the company's ability to maintain business continuity in the event of failures, cyberattacks, or human error.

Another significant contribution was our adoption of an OpenTelemetry-based observability platform. We were working with a legacy telemetry system that did not meet our operational needs. I asked Mr. Rego to determine how to integrate our Mobile IMS performance indicators, which follow the 3GPP TS 32.435 XML standard, into the new environment. He took responsibility for the entire

Darian.Rodriguez@optimum.com
+1 516 242 9176

05/02/2026

workflow, from preparing the infrastructure and connectivity to developing the software routines to parse, normalize, and format the data. The resulting system began processing more than eight thousand performance indicators and approximately seventy-five million records each day. This improvement enhanced our capacity to detect and resolve issues, reducing critical downtime by 45% and providing the team with consistent access to accurate operational insights.

Throughout our time working together, what became most evident about Mr. Rego was his ability to combine multidisciplinary telecommunications expertise with advanced Linux administration and software development skills. He also produced thorough documentation and standard operating procedures, which supported the team's adoption of new tools and technologies. His ability to learn quickly was repeatedly demonstrated, particularly when mastering Adtran management practices and the data formats required for IMS and OpenTelemetry integrations. Above all, he worked with a degree of independence that allowed me to delegate complex engineering tasks with full confidence in his judgment and delivery.

For these reasons, I highly regard his technical expertise and problem-solving approach. The consistency and depth he demonstrated during our collaboration give me complete confidence that he can contribute meaningfully in environments where the stability and modernization of large-scale telecommunications systems are essential to broader organizational objectives.

Sincerely,
Darian José Rodríguez Del Carmen
Director of Engineering, MVNO Mobile
West Babylon, NY, USA

Darian.Rodriguez@optimum.com
+1 516 242 9176

Contact

www.linkedin.com/in/darianrodriguez1987 (LinkedIn)
www.darianrodriguez.es (Personal)

Top Skills

E-911
Elaboración de presupuestos
Virtual Machines

Languages

Ingles (Native or Bilingual)
Español (Native or Bilingual)
Francés (Elementary)

Publications

Estudio y planificación de implementación de red WIFI que ofrece conectividad a extensión de la Universidad de Panamá y misión agustino recoleta en la selva Kankintú.

Darian Rodriguez

Mobile, Wireless and Voice Core Director | MBA, MEng
New York City Metropolitan Area

Summary

With over 14 years of experience in the telecommunications industry, I am a Director of Engineering at Altice USA, overseeing mobile, WiFi, and fixed voice core engineering and operations. I lead a team of subject matter experts in WiFi core Voice core and mobile core technologies, to support our organization goals and customer needs. I also support, evaluate, and consult with all levels of leadership regarding technical operations, strategic planning, network transformation, and new product development and deployment.

My expertise includes the architecture design and implementation of a full MNVO EPC and IMS network, service implementation for data, voice, SMS, MMS, Xcap, RTT over LTE and WiFi network, national and international roaming implementation over 2G/3G and LTE networks, IR21 administration, IREG and TADIG tests for roaming implementations, and technical assessment for RFPs. I also work with OEMs to ensure ongoing support and development of device management capabilities and adapt to the needs of our business units.

I am a leader who is not afraid to take risks and challenge the status quo, a team player and a consensus builder, and a passionate engineer who strives to deliver innovative and high-quality solutions.

Experience

Optimum
Mobile, Wireless & Voice Core Director
April 2022 - Present (3 years 10 months)
Bethpage, Nueva York, Estados Unidos

Altice USA
4 years 2 months

Mobile and Wireless Core Manager
March 2021 - July 2022 (1 year 5 months)
Nueva York, Estados Unidos

As Mobile and Wireless Core Manager I have performed the following tasks:

Lead a team of subject matter experts in WiFi Core and 3GPP Mobile Core technologies, to support our organization goals and customer needs.

Support, evaluate and consult with all levels of leadership regarding technical operations, strategic planning of rebuilds, network operations, and new product development and deployment for Altice's Mobile and WiFi Networks.

Evaluate and determine appropriate growth points and present design options to support growth needs.

Analyze root cause determination of issues including recommendations for improvements.

Interface with cross-functional engineering and marketing teams for new feature and functionality requests. Train and mentor a team of engineers in the implementation and configuration of mobile core products and services.

Plan and execute budget aligned with the organization goals.

Act as technical point of contact between with the main vendors.

Mobile Core Lead Engineer
June 2018 - March 2021 (2 years 10 months)
Nueva York y alrededores, Estados Unidos

As Mobile Core Lead Engineer I been leading the following tasks:

Architecture Design and implementation of full MNVO EPC and IMS network.
Service implementation for: Data, Voice, SMS, MMS, Xcap, RTT all over LTE & WiFi Network.
National and international roaming implementation over 2G/3G and LTE networks, IR21 administration.
IREG and TADIG tests for roaming implementations.
Work with OEM to ensure ongoing support and development of device management capabilities but also adapt to the needs of our business units.
Technical assessment for RFPs.
Implementation of business logic in network elements.

All this in multi vendor/multi cultural environment, coordinating and following up with internal and external parties, to make things happen.

Main Nodes:
PGW
PCRF
OCS
DRA
DNS
UT Proxy
P-CSCF
S-CSCF
i-CSCF
STP
SMSC
MMSC
HSS

Support, evaluate and consult with all levels of leadership regarding technical operations, strategic planning of rebuilds, network operations, dispatch, and new product development and deployment. Evaluate and determine appropriate growth points and present design options to support growth needs. Analyze root cause determination of issues including recommendations for improvements. Interface with cross-functional engineering and marketing teams for new feature and functionality requests. Train and mentor a team of engineers in the implementation and configuration of mobile core products and services.

Altice Group
2 years 4 months

Core Network Specialist
September 2017 - June 2018 (10 months)
República Dominicana

My main role in this position is packet Core design, Implementation, dimensioning, Optimization and administration of the nodes.

My main daily tasks are:
-Project planing and/or followup
-Capacity planning of license, Memory and CPU utilization with forecasting.
-Rehoming Plannification.
-SW upgrades plannification according to vendor roadmaps and company needs..
-Licences upgrades/implementations.
-Nodes configurations. (new interfaces, new associations, traffic migrations)
-Forensic troubleshooting during/after incidents.
-Parameter optimization
-Inbound and outbound roaming, design and service assurance.

Main administered nodes Network Nodes:
-Serving GPRS Support Node (SGSN)
-GPRS Support Node (GGSN)
-Mobility Management Entity (MME)
-Serving Gateway (SGW)
-PDN Gateway (PGW)
-Policy Charging rules Function (PCRF)
-Policy & Charging Enforcement Function (PCEF)
-Domain Name Server (DNS)
-Authentication Authorization Accounting server (AAA)
-Diameter Routing Agent (DRA)

1st level troubleshooting & Operations and maintenance of:

-Mobile Switching Core (MSC)
-Media Gateway (MGW)
-Home Location register (HLR)
-Home Subscriber Server (HSS)
ver menos

Core Network Senior Engineer
March 2016 - June 2018 (2 years 4 months)
Dominican Republic

My main role in this position is packet Core design, Implementation, dimensioning, Optimization and administration of the nodes.

My main daily tasks are:
-Project planing and/or followup
-Capacity planning of license, Memory and CPU utilization with forecasting.
-Rehoming Plannification.
-SW upgrades plannification according to vendor roadmaps and company needs..
-Licences upgrades/implementations.
-Nodes configurations. (new interfaces, new associations, traffic migrations)
-Forensic troubleshooting during/after incidents.
-Parameter optimization

Main administered nodes Network Nodes:
-Serving GPRS Support Node (SGSN)
-GPRS Support Node (GGSN)
-Mobility Management Entity (MME)
-Serving Gateway (SGW)
-PDN Gateway (PGW)
-Policy Charging rules Function (PCRF)
-Policy & Charging Enforcement Function (PCEF)
-Domain Name Server (DNS)
-Authentication Authorization Accounting server (AAA)
-Diameter Routing Agent (DRA)

1st level troubleshooting & Operations and maintenance of:

-Mobile Switching Core (MSC)
-Media Gateway (MGW)
-Home Location register (HLR)
-Home Subscriber Server (HSS)

Orange Dominicana
Core Network Engineer
August 2012 - September 2017 (5 years 2 months)
Santo Domingo, Republica Dominicana

My main role in this position is packet Core design, Implementation, dimensioning, Optimization and administration of the nodes.

Been in charge of new EPC platform integration and implementation:
-Design and architecture approval.

-Traversal telco & multi platform teams coordination.
-Planning, scheduling & hands on implementation and put in production of new nodes without traffic disturbance or incidents.
-Configuration of important Counters and KPI's for statistical followup.

My main daily tasks are:

-Babysitting PS nodes.
-Capacity planning of license, Memory and CPU utilization with forecasting.
-Perform rehomings.
-SW upgrades.
-Licences upgrades/implementations.
-Nodes configurations. (new interfaces, new associations, traffic migrations)
-Forensic trouble shooting during/after incidents.
-Parameter optimization

Main administered nodes Network Nodes:
-Serving GPRS Support Node (SGSN)
-GPRS Support Node (GGSN)
-Mobility Management Entity (MME)
-Serving Gateway (SGW)
-PDN Gateway (PGW)
-Policy Charging rules Function (PCRF)
-Policy & Charging Enforcement Function (PCEF)
-Domain Name Server (DNS)
-Authentication Authorization Accounting server (AAA)

1st level troubleshooting & Operations and maintenance of:

-Mobile Switching Core (MSC)
-Media Gateway (MGW)
-Home Location register (HLR)
-Home Subscriber Server (HSS)

Orange Dominicana
Optimization technician
June 2010 - September 2011 (1 year 4 months)
Orange Dominicana

Drivetest coordination with the outsourcings teams.
Desing of methodology for end user experience tests in real conditions.
Team leader of nationals benchmarking for the main gsm companies in the country.
Dashboads and automatic reports configuration and verification for 3G Huawei network (M2000) and 2G Ericsson network(Bussiness objects).
Follow up acceptance process of MSS's, BSC's, sites, expansions changes and integrations through statistics and automatic reports.
Evaluation and analysis of TEMS logs 2G/3G.
Drivetests analysis for troubleshooting and to advise new coverage areas.
Gsm sites parameters assignment.
3G sites dimensioning and expansion analysis and recommendations.
Lac dimensioning analysis, GSM and UMTS.

Education

Barna Management School

Master of Business Administration (M.B.A.), Habilidades sociales y para los negocios · (2016 - 2018)

Instituto Tecnológico de Santo Domingo

Project management diplomate, Project management · (2015 - 2015)

Universidad Rey Juan Carlos

Master en Redes de Telecomunicacion Para Paises en Desarrollo, Redes de Telecomunicacion · (2011 - 2012)

Instituto Tecnológico de Santo Domingo

Ingeniero en Electronica y de Comunicaciones · (November 2005 - October 2009)

Instituto Tecnológico de Santo Domingo

Electronical and telecommunications engineer, Telecommunications Engineering · (2005 - 2009)

GUSTAVO DARTAGNAN XAVIER DO REGO,

You are being recognized for your outstanding contributions to network improvement initiatives, which resulted in the stability of the VOX-NG and VOX-IP Services. Your performance and commitment, in addition to serving as an example to the team, have significantly contributed to achieving the department's objectives.

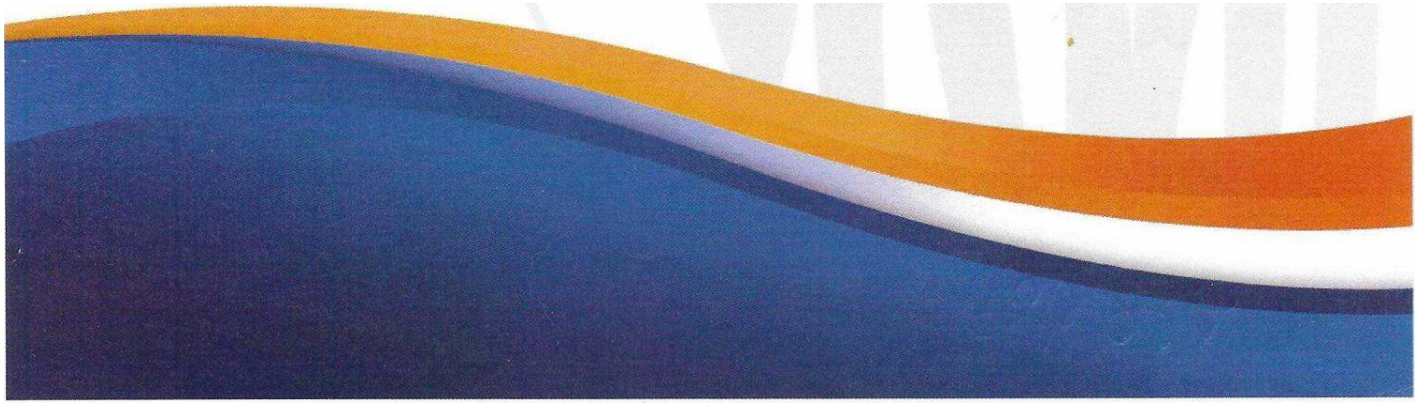
We appreciate your effort and dedication.

Congratulations!

Sérgio Wolski
Technical Support Manager

SERGIO WOLSKI
SPECIALIZED SUPPORT MANAGER

Curitiba, February 2011.



I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 14, 2026.

GUSTAVO DARTAGNAN XAVIER DO REGO,

Você está sendo reconhecido pelo destaque nas ações de melhoria de rede, as quais resultaram na estabilidade do Serviço VOX-NG e do Serviço VOX-IP. Sua atuação e comprometimento, além de exemplo para equipe contribuíram significativamente para o alcance dos objetivos da área.

Agradecemos o empenho e a dedicação.

Parabéns!

Sérgio Wolski
Gerente Suporte Técnico

SERGIO WOLSKI
GERENTE DE SUPORTE ESPECIALIZADO

Curitiba, fevereiro 2011.

Exhibit C.II - Second Prong - Evidence of Financial Feasibility

Contabilizei.

ACCOUNTING STATMENT

CONTABILIZEI CONTABILIDADE LTDA., registered under CNPJ number 34.346.830/0001-97, located at Rua Doutor Pedrosa, 151, 16th floor, Centro - Curitiba/Paraná, hereby declares, jointly with GUSTAVO DARTAGNAN XAVIER DO REGO, legal representative of **GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA**, registered under the CNPJ number 47.751.467/0001-37, located at RUA ESTADOS UNIDOS, 2196, Curitiba, that it recorded revenue between 01/2023 and 12/2023, as detailed below:

GROSS REVENUE	
MONTH	**REVENUE (R$)**
January/2023	R$ 26,203.41
February/2023	R$ 24,180.87
March/2023	R$ 27,387.53
April/2023	R$ 21,561.83
May/2023	R$ 21,718.77
June/2023	R$ 21,943.18
July/2023	R$ 23,150.18
August/2023	R$ 25,180.22
September/2023	R$ 21,848.42
October/2023	R$ 23,136.71
November/2023	R$ 25,534.28
December/2023	R$ 20,546.97
Total	**R$ 280,392.37**

Curitiba, March 24, 2026.

Contabilizei Contabilidade Ltda
CNPJ 34.346.830/0001-97
Vinicius Bortolotto dos Santos
CPF 419.455.888-02
CRC SP-333109/O-8

GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA
GUSTAVO DARTAGNAN XAVIER DO REGO
CPF 025.907.999-50

Contabilizei.

ACCOUNTING STATMENT

CONTABILIZEI CONTABILIDADE LTDA., registered under the CNPJ number 34.346.830/0001-97, located at Rua Doutor Pedrosa, 151, 16th floor, Centro - Curitiba/Paraná, hereby declares, jointly with GUSTAVO DARTAGNAN XAVIER DO REGO, legal representative of **GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA**, registered under the CNPJ number 47.751.467/0001-37, located at RUA ESTADOS UNIDOS, 2196, Curitiba, that it recorded revenue between 01/2024 and 12/2024, as detailed below:

GROSS REVENUE	
MONTH	**REVENUE (R$)**
January/2024	R$ 24,587.25
February/2024	R$ 24,020.73
March/2024	R$ 23,346.44
April/2024	R$ 26,458.14
May/2024	R$ 26,240.66
June/2024	R$ 24,087.45
July/2024	R$ 24,013.84
August/2024	R$ 27,425.80
September/2024	R$ 28,117.69
October/2024	R$ 31,517.68
November/2024	R$ 28,440.41
December/2024	R$ 24,535.17
Total	**R$ 312,791.26**

Curitiba, March 24, 2026.

Contabilizei Contabilidade Ltda
CNPJ 34.346.830/0001-97
Vinicius Bortolotto dos Santos
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GROSS REVENUE	
MONTH	**REVENUE (R$)**
January/2025	R$ 31,528.65
February/2025	R$ 27,825.61
March/2025	R$ 28,989.92
April/2025	R$ 28,826.63
May/2025	R$ 29,100.06
June/2025	R$ 25,906.31
July/2025	R$ 24,737.55
August/2025	R$ 26,203.93
September/2025	R$ 28,529.22
October/2025	R$ 30,584.52
November/2025	R$ 26,479.89
December/2025	R$ 26,459.60
Total	**R$ 335,171.89**

Curitiba, March 24, 2026.

Contabilizei Contabilidade Ltda
CNPJ 34.346.830/0001-97
Vinicius Bortolotto dos Santos
CPF 419.455.888-02
CRC SP-333109/O-8

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GUSTAVO DARTAGNAN XAVIER DO REGO
CPF 025.907.999-50

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 14, 2026.

Contabilizei.

DECLARAÇÃO DE FATURAMENTO

A CONTABILIZEI CONTABILIDADE LTDA., inscrita no CNPJ sob número 34.346.830/0001-97, situada à Rua Doutor Pedrosa, 151, 16 andar, Centro - Curitiba/PR, declara juntamente com o GUSTAVO DARTAGNAN XAVIER DO REGO, responsável legal da entidade **GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA**, inscrita no CNPJ sob número 47.751.467/0001-37, situada à RUA ESTADOS UNIDOS 2196 , Curitiba, obteve faturamento entre 01/2023 e 12/2023, conforme abaixo relacionado:

FATURAMENTO	
MÊS	**RECEITA (R$)**
janeiro/2023	R$ 26.203,41
fevereiro/2023	R$ 24.180,87
março/2023	R$ 27.387,53
abril/2023	R$ 21.561,83
maio/2023	R$ 21.718,77
junho/2023	R$ 21.943,18
julho/2023	R$ 23.150,18
agosto/2023	R$ 25.180,22
setembro/2023	R$ 21.848,42
outubro/2023	R$ 23.136,71
novembro/2023	R$ 25.534,28
dezembro/2023	R$ 20.546,97
Total	**R$ 280.392,37**

Curitiba, 24 de março de 2026.

Contabilizei Contabilidade Ltda
CNPJ 34.346.830/0001-97
Vinicius Bortolotto dos Santos
CPF 419.455.888-02
CRC SP-333109/O-8

Gustavo Dartagnan Xavier do Rego

GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA
GUSTAVO DARTAGNAN XAVIER DO REGO
CPF 025.907.999-50

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Total	**R$ 312.791,26**

Curitiba, 24 de março de 2026.

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FATURAMENTO	
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outubro/2025	R$ 30.584,52
novembro/2025	R$ 26.479,89
dezembro/2025	R$ 26.459,60
Total	**R$ 335.171,89**

Curitiba, 24 de março de 2026.

Contabilizei Contabilidade Ltda
CNPJ 34.346.830/0001-97
Vinicius Bortolotto dos Santos
CPF 419.455.888-02
CRC SP-333109/O-8

Gustavo Dartagnan Xavier do Rego

GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA
GUSTAVO DARTAGNAN XAVIER DO REGO
CPF 025.907.999-50

FEDERATIVE REPUBLIC OF BRAZIL

NATIONAL REGISTER OF LEGAL ENTITIES

REGISTRATION NUMBER	CERTIFICATE OF ENROLLMENT AND REGISTRATION STATUS	DATE OF INCORPORATION
47.751.467/0001-37 **HEAD OFFICE**		**08/29/2022**

COMPANY NAME
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

TRADE NAME	SIZE
DARTAGNAN CONSULTORIA EM TECNOLOGIA	**ME (Microenterprise)**

CODE AND DESCRIPTION OF MAIN ECONOMIC ACTIVITY
62.04-0-00 - Information Technology Consulting

CODE AND DESCRIPTION OF SECONDARY ECONOMIC ACTIVITIES
62.01-5-01 – Custom Computer Software Development
62.01-5-02 – Web Design
62.02-3-00 – Development and Licensing of Customizable Computer Software
62.09-1-00 – Technical Support, Maintenance, and Other Information Technology Services
63.11-9-00 – Data Processing, Application Service Providers, and Internet Hosting Services
63.19-4-00 – Web Portals, Content Providers, and Other Internet Information Services

CODE AND DESCRIPTION OF LEGAL NATURE
206-2 - Limited Liability Company

ADDRESS	NUMBER	UNIT
R ESTADOS UNIDOS	**2196**	******

ZIP CODE	NEIGHBORHOOD/DISTRICT	CITY	STATE
82.540-030	**BOA VISTA**	**CURITIBA**	**PR**

EMAIL ADDRESS	PHONE NUMBER
MEUCNPJ@CONTABILIZEI.COM.BR	**(41) 9686-9828/ (0000) 0000-0000**

RESPONSIBLE FEDERAL ENTITY (RFE)
******

REGISTRATION STATUS	REGISTRATION STATUS DATE
ACTIVE	**08/29/2022**

REASON FOR REGISTRATION STATUS

SPECIAL STATUS	SPECIAL STATUS DATE
*******	*******

It was approved by Normative Instruction RFB No. 2.119, dated December 6, 2022.

It was issued on **03/16/2026** at **3:44:56 AM** (Brasília date and time).

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 13 2026

REPÚBLICA FEDERATIVA DO BRASIL

CADASTRO NACIONAL DA PESSOA JURÍDICA

NÚMERO DE INSCRIÇÃO	COMPROVANTE DE INSCRIÇÃO E DE SITUAÇÃO CADASTRAL	DATA DE ABERTURA
47.751.467/0001-37 **MATRIZ**		**29/08/2022**

NOME EMPRESARIAL
GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

TÍTULO DO ESTABELECIMENTO (NOME DE FANTASIA)	PORTE
DARTAGNAN CONSULTORIA EM TECNOLOGIA	**ME**

CÓDIGO E DESCRIÇÃO DA ATIVIDADE ECONÔMICA PRINCIPAL
62.04-0-00 - Consultoria em tecnologia da informação

CÓDIGO E DESCRIÇÃO DAS ATIVIDADES ECONÔMICAS SECUNDÁRIAS
62.01-5-01 - Desenvolvimento de programas de computador sob encomenda
62.01-5-02 - Web design
62.02-3-00 - Desenvolvimento e licenciamento de programas de computador customizáveis
62.09-1-00 - Suporte técnico, manutenção e outros serviços em tecnologia da informação
63.11-9-00 - Tratamento de dados, provedores de serviços de aplicação e serviços de hospedagem na internet
63.19-4-00 - Portais, provedores de conteúdo e outros serviços de informação na internet

CÓDIGO E DESCRIÇÃO DA NATUREZA JURÍDICA
206-2 - Sociedade Empresária Limitada

LOGRADOURO	NÚMERO	COMPLEMENTO
R ESTADOS UNIDOS	**2196**	********

CEP	BAIRRO/DISTRITO	MUNICÍPIO	UF
82.540-030	**BOA VISTA**	**CURITIBA**	**PR**

ENDEREÇO ELETRÔNICO	TELEFONE
MEUCNPJ@CONTABILIZEI.COM.BR	**(41) 9686-9828/ (0000) 0000-0000**

ENTE FEDERATIVO RESPONSÁVEL (EFR)
*****

SITUAÇÃO CADASTRAL	DATA DA SITUAÇÃO CADASTRAL
ATIVA	**29/08/2022**

MOTIVO DE SITUAÇÃO CADASTRAL

SITUAÇÃO ESPECIAL	DATA DA SITUAÇÃO ESPECIAL
********	********

Aprovado pela Instrução Normativa RFB nº 2.119, de 06 de dezembro de 2022.

Emitido no dia **16/03/2026** às **15:44:56** (data e hora de Brasília).

MINISTRY OF FINANCE
Special Secretariat of the Federal Revenue of Brazil
WITHHOLDING INCOME TAX RETURN – DIRF 2025
SUBMISSION RECEIPT

Tax Year: 2025
Calendar Year: 2024
Type: Amended

Taxpayer Identification

CNPJ: 47.751.467/0001-37
Corporate Name: GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

Tax Return Information

Individual Beneficiaries (PF)	1
Legal Entity Beneficiaries (PJ)	0

Amounts		
Taxable income	R$	16,944.00
Official social security	R$	1,863.84
Private pension	R$	0.00
Individual programmed retirement fund – FAPI	R$	0.00
Dependents	R$	0.00
Alimony	R$	0.00
Monthly simplified deduction	R$	0.00
Income tax withheld	R$	0.00
Exempt and non-taxable income	R$	303,832.87
Tax Offset by Court Order		
Calendar year	R$	0.00
Previous years	R$	0.00
Taxation with Suspended Enforceability		
Taxable income	R$	0.00
Official social security	R$	0.00
Private pension	R$	0.00
Individual programmed retirement fund – FAPI	R$	0.00
Dependents	R$	0.00
Alimony	R$	0.00
Monthly simplified deduction	R$	0.00
Withholding income tax	R$	0.00
Judicial deposit	R$	0.00
Accumulated Income Received		
Taxable income	R$	0.00
Official social security	R$	0.00
Alimony	R$	0.00
Legal expenses	R$	0.00
Income tax withheld	R$	0.00
Exempt and non-taxable income	R$	0.00

Private Health Care Plan – Employer-Sponsored

Policyholders	0
Dependents	0

Amounts		
Amounts paid by policyholders	R$	0.00
Reimbursements to policyholders	R$	0.00
Amounts paid by dependents	R$	0.00
Reimbursements to dependents	R$	0.00

Information of the Person Responsible for Completing the Tax Return

Name: CHARLES DAVYD GULARTE
CPF: 003.918.339-44 Area Code (DDD): (41) Telephone: 3022-6004 Extension: Fax:
Email: OBRIGACOES@CONTABILIZEI.COM.BR

Tax return received via internet
received by the processing agent SERPRO
on 03/05/2025 at 4:55:17 PM
3471996215

MINISTRY OF FINANCE
Special Secretariat of the Federal Revenue of Brazil
WITHHOLDING INCOME TAX RETURN – DIRF 2025
SUBMISSION RECEIPT

Tax Year: 2025
Calendar Year: 2024
Type: Original

Taxpayer Identification

CNPJ: 47.751.467/0001-37
Corporate Name: GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

The RECEIPT NUMBER of this tax return filed on 03/05/2025 at 4:55:17 PM is:

04.05.57.61.94-59

This return was signed with a digital certificate under NI No. 34346830000197.

This number is for personal use and must NOT be disclosed to third parties. It is required to:

- amend this tax return;
- access services available on the website of the Special Secretariat of the Federal Revenue of Brazil, such as:
  - DIRF – Processing report;
  - processing status information;
  - reconciliation between DIRF and DARF;
  - reconciliation between the Individual Income Tax Return (DIRPF) and DIRF.

Important Notice:

This return will be processed at a later time and is subject to rejection.
As of 03/12/2025, you may check the processing results by accessing the website of the Special Secretariat of the Federal Revenue of Brazil (www.gov.br/receitafederal/pt-br)

PENDING ISSUES:

The following pending issues exist for CNPJ 47.751.467/0001-37:
- Declaration rejected for the calendar year: 2024;

To resolve the above-mentioned pending issues, consult the processing statement on the RFB website.

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 22 2026

MINISTÉRIO DA FAZENDA
SECRETARIA ESPECIAL DA RECEITA FEDERAL DO BRASIL
DECLARAÇÃO DO IMPOSTO SOBRE A RENDA RETIDO NA FONTE – Dirf 2025
RECIBO DE ENTREGA

Exercício: 2025
Ano-calendário: 2024
Tipo: Retificadora

Identificação do declarante

CNPJ: 47.751.467/0001-37
Nome empresarial: GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

Extrato da declaração

Beneficiários PF	1
Beneficiários PJ	0

Valores		
Rendimentos tributáveis	R$	16.944,00
Previdência oficial	R$	1.863,84
Previdência privada	R$	0,00
Fundo de aposentadoria programada individual – FAPI	R$	0,00
Dependentes	R$	0,00
Pensão alimentícia	R$	0,00
Desconto simplificado mensal	R$	0,00
Imposto retido	R$	0,00
Rendimentos isentos e não tributáveis	R$	303.832,87
Compensação do imposto por decisão judicial		
Ano-calendário	R$	0,00
Anos anteriores	R$	0,00
Tributação com exigibilidade suspensa		
Rendimentos tributáveis	R$	0,00
Previdência oficial	R$	0,00
Previdência privada	R$	0,00
Fundo de aposentadoria programada individual – FAPI	R$	0,00
Dependentes	R$	0,00
Pensão alimentícia	R$	0,00
Desconto simplificado mensal	R$	0,00
IRRF	R$	0,00
Depósito judicial	R$	0,00
Rendimento recebido acumuladamente		
Rendimentos tributáveis	R$	0,00
Previdência oficial	R$	0,00
Pensão alimentícia	R$	0,00
Despesas com ação judicial	R$	0,00
Imposto retido	R$	0,00
Rendimentos isentos e não tributáveis	R$	0,00

Plano privado de assistência à saúde - coletivo empresarial

Titulares	0
Dependentes	0

Valores		
Valores pagos por titulares	R$	0,00
Valores relativos a rembolso dos titulares	R$	0,00
Valores pagos por dependentes	R$	0,00
Valores relativos a reembolso dos dependentes	R$	0,00

Dados da pessoa responsável pelo preenchimento da declaração

Nome: CHARLES DAVYD GULARTE
CPF: 003.918.339-44 DDD: (41) Telefone: 3022-6004 Ramal: Fax:
Correio eletrônico: OBRIGACOES@CONTABILIZEI.COM.BR

Declaração recebida via internet
pelo agente receptor SERPRO
em 05/03/2025 às 16:55:17
3471996215

MINISTÉRIO DA FAZENDA
SECRETARIA ESPECIAL DA RECEITA FEDERAL DO BRASIL
DECLARAÇÃO DO IMPOSTO SOBRE A RENDA RETIDO NA FONTE – Dirf 2025
RECIBO DE ENTREGA

Exercício: 2025
Ano-calendário: 2024
Tipo: Retificadora

Identificação do declarante

CNPJ: 47.751.467/0001-37
Nome empresarial: GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

O NÚMERO DO RECIBO desta declaração apresentada em 05/03/2025 às 16:55:17 é:

04.05.57.61.94-59

Essa declaração foi assinada com certificado digital do NI 34346830000197

Este número é de uso pessoal e NÃO deve ser fornecido a terceiros. Ele é necessário para:
- retificar esta declaração;
- realizar serviços disponíveis na página da Secretaria Especial da Receita Federal do Brasil na internet, tais como:
  - Dirf – Extrato do processamento;
    - informação da situação do processamento;
    - incidência no batimento Dirf x Darf;
    - incidência no batimento DIRPF x Dirf.

Atenção:

Esta declaração será processada posteriormente, estando sujeita à rejeição.
A partir de 12/03/2025, consulte o resultado do processamento, acessando a página da Secretaria Especial da Receita Federal do Brasil (www.gov.br/receitafederal/pt-br).

PENDÊNCIAS:

As seguintes pendências constam para o CNPJ 47.751.467/0001-37:
- declaração rejeitada para o ano-calendário: 2024;

Para regularizar as pendências acima indicadas consulte o extrato do processamento na página da RFB na internet.

MINISTRY OF FINANCE
Special Secretariat of the Federal Revenue of Brazil
WITHHOLDING INCOME TAX RETURN – DIRF 2024
SUBMISSION RECEIPT

Tax Year: 2024
Calendar Year: 2023
Type: Original

Taxpayer Identification

CNPJ: 47.751.467/0001-37
Corporate Name: GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

Tax Return Information

Individual Beneficiaries (PF)	1
Legal Entity Beneficiaries (PJ)	0

Amounts		
Taxable income	R$	15,768.00
Official social security	R$	1,734.48
Private pension	R$	0.00
Individual programmed retirement fund – FAPI	R$	0.00
Dependents	R$	0.00
Alimony	R$	0.00
Monthly simplified deduction	R$	0.00
Income tax withheld	R$	0.00
Exempt and non-taxable income	R$	187,503.39
Tax Offset by Court Order		
Calendar year	R$	0.00
Previous years	R$	0.00
Taxation with Suspended Enforceability		
Taxable income	R$	0.00
Official social security	R$	0.00
Private pension	R$	0.00
Individual programmed retirement fund – FAPI	R$	0.00
Dependents	R$	0.00
Alimony	R$	0.00
Monthly simplified deduction	R$	0.00
Withholding income tax	R$	0.00
Judicial deposit	R$	0.00
Accumulated Income Received		
Taxable income	R$	0.00
Official social security	R$	0.00
Alimony	R$	0.00
Legal expenses	R$	0.00
Income tax withheld	R$	0.00
Exempt and non-taxable income	R$	0.00

Private Health Care Plan – Employer-Sponsored

Policyholders	0
Dependents	0

Amounts		
Amounts paid by policyholders	R$	0.00
Reimbursements to policyholders	R$	0.00
Amounts paid by dependents	R$	0.00
Reimbursements to dependents	R$	0.00

Information of the Person Responsible for Completing the Tax Return

Name: CHARLES DAVYD GULARTE
CPF: 003.918.339-44 Area Code (DDD): (41) Telephone: 3022-6004 Extension: Fax:
Email: OBRIGACOES@CONTABILIZEI.COM.BR

Tax return received via internet
received by the processing agent SERPRO
on 02/23/2024 at 5:21:08 PM
1021038572

MINISTRY OF FINANCE
Special Secretariat of the Federal Revenue of Brazil
WITHHOLDING INCOME TAX RETURN – DIRF 2024
SUBMISSION RECEIPT

Tax Year: 2024
Calendar Year: 2023
Type: Original

Taxpayer Identification

CNPJ: 47.751.467/0001-37
Corporate Name: GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

The RECEIPT NUMBER of this tax return filed on 02/23/2024 at 5:21:08 PM is:

18.79.40.78.11-45

This return was signed with a digital certificate under NI No. 34346830000197.

This number is for personal use and must NOT be disclosed to third parties. It is required to:

- amend this tax return;
- access services available on the website of the Special Secretariat of the Federal Revenue of Brazil, such as:
  - DIRF – Processing report;
  - processing status information;
  - reconciliation between DIRF and DARF;
  - reconciliation between the Individual Income Tax Return (DIRPF) and DIRF.

Important Notice:

This return will be processed at a later time and is subject to rejection.
As of 03/01/2024, you may check the processing results by accessing the website of the Special Secretariat of the Federal Revenue of Brazil (www.gov.br/receitafederal/pt-br)

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 22 2026

MINISTÉRIO DA FAZENDA
SECRETARIA ESPECIAL DA RECEITA FEDERAL DO BRASIL
DECLARAÇÃO DO IMPOSTO SOBRE A RENDA RETIDO NA FONTE – Dirf 2024
RECIBO DE ENTREGA

Exercício: 2024
Ano-calendário: 2023
Tipo: Original

Identificação do declarante

CNPJ: 47.751.467/0001-37
Nome empresarial: GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

Extrato da declaração

Beneficiários PF	1
Beneficiários PJ	0

Valores		
Rendimentos tributáveis	R$	15.768,00
Previdência oficial	R$	1.734,48
Previdência privada	R$	0,00
Fundo de aposentadoria programada individual – FAPI	R$	0,00
Dependentes	R$	0,00
Pensão alimentícia	R$	0,00
Desconto simplificado mensal	R$	0,00
Imposto retido	R$	0,00
Rendimentos isentos e não tributáveis	R$	187.503,39
Compensação do imposto por decisão judicial		
Ano-calendário	R$	0,00
Anos anteriores	R$	0,00
Tributação com exigibilidade suspensa		
Rendimentos tributáveis	R$	0,00
Previdência oficial	R$	0,00
Previdência privada	R$	0,00
Fundo de aposentadoria programada individual – FAPI	R$	0,00
Dependentes	R$	0,00
Pensão alimentícia	R$	0,00
Desconto simplificado mensal	R$	0,00
IRRF	R$	0,00
Depósito judicial	R$	0,00
Rendimento recebido acumuladamente		
Rendimentos tributáveis	R$	0,00
Previdência oficial	R$	0,00
Pensão alimentícia	R$	0,00
Despesas com ação judicial	R$	0,00
Imposto retido	R$	0,00
Rendimentos isentos e não tributáveis	R$	0,00

Plano privado de assistência à saúde - coletivo empresarial

Titulares	0
Dependentes	0

Valores		
Valores pagos por titulares	R$	0,00
Valores relativos a rembolso dos titulares	R$	0,00
Valores pagos por dependentes	R$	0,00
Valores relativos a reembolso dos dependentes	R$	0,00

Dados da pessoa responsável pelo preenchimento da declaração

Nome: CHARLES DAVYD GULARTE
CPF: 003.918.339-44 DDD: (41) Telefone: 3022-6004 Ramal: Fax:
Correio eletrônico: OBRIGACOES@CONTABILIZEI.COM.BR

Declaração recebida via internet
pelo agente receptor SERPRO
em 23/02/2024 às 17:21:08
1021038572

MINISTÉRIO DA FAZENDA
SECRETARIA ESPECIAL DA RECEITA FEDERAL DO BRASIL
DECLARAÇÃO DO IMPOSTO SOBRE A RENDA RETIDO NA FONTE – Dirf 2024
RECIBO DE ENTREGA

Exercício: 2024
Ano-calendário: 2023
Tipo: Original

Identificação do declarante

CNPJ: 47.751.467/0001-37
Nome empresarial: GUSTAVO DARTAGNAN XAVIER DO REGO CONSULTORIA EM TECNOLOGIA DA INFORMACAO LTDA

O NÚMERO DO RECIBO desta declaração apresentada em 23/02/2024 às 17:21:08 é:

18.79.40.78.11-45

Essa declaração foi assinada com certificado digital do NI 34346830000197

Este número é de uso pessoal e NÃO deve ser fornecido a terceiros. Ele é necessário para:
- retificar esta declaração;
- realizar serviços disponíveis na página da Secretaria Especial da Receita Federal do Brasil na internet, tais como:
  - Dirf – Extrato do processamento;
    - informação da situação do processamento;
    - incidência no batimento Dirf x Darf;
    - incidência no batimento DIRPF x Dirf.

Atenção:

Esta declaração será processada posteriormente, estando sujeita à rejeição.
A partir de 01/03/2024, consulte o resultado do processamento, acessando a página da Secretaria Especial da Receita Federal do Brasil (www.gov.br/receitafederal/pt-br).

Validate the certificate here

Federal Republic of Brazil
4th Real Estate Registry Office
District of Curitiba – Paraná

Registrar: Marcio de Vasconcelos Martins
Rua Marechal Deodoro, No. 869, 1st Floor, Suites 101 and 102, Centro, Center Tower Building
ZIP Code: 80060-010 | Phone: +55 41 3387-1898

CERTIFICATE

4th REAL ESTATE REGISTRY OFFICE
Registration: ENEIDE CUNICO SCHWAB
CPF: 322.539.829-20
Rua Visconde do Rio Branco, No. 1341 – 1st Floor
District of Curitiba – State of Paraná

GENERAL REGISTRY | SHEET **1** | PROPERTY REG. No.: 78,701 | INITIALS

PROPERTY IDENTIFICATION: **House No. 02 (two)**, with a private built area of 55.18 m² on the ground floor and a private built area on the second floor of 59.71m², a private built area of 114.89 m², plus a common built area of 2.01 m², resulting in a total built area of 116.90 m², a land area occupied by the construction of 56.13 m², a private uncovered land area designated for garden, backyard, and access of 100.61 m², an undivided interest of 156.74 m², plus a common unbuilt area of 14.67 m², totaling a land area and proportional share of 171.41 m², with an undivided interest of land of 0.3718, located at the rear of the lot and on the left side, as viewed from the street, with access via the left side, and bears city number 98/2 of Rua Ata.
Municipal Registration No.: 88.332.003.001-2. It is part of the **"RESIDENCIAL TULIPAS"**, located at Rua Ata No. 98, built on Lot No. 28 of the Jardim Cristina subdivision, in Uberaba, as described in the previous registration.
OWNERS: ROSANA VANINI IBRAHIM, Brazilian, businesswoman, holder of ID No. 3.035.828-7/PR and CPF No. 405.144.399-04, and her husband **JAMIL IBRAHIM**, Brazilian, businessman, holder of ID No. 1.926.885/PR and CPF No. 301.382.059-49, married under the Partial Community Property regime on 09/03/1983, residing and domiciled at Rua Adolfo Werneck No. 309, House U, Uberaba, Curitiba/PR.
PREVIOUS REGISTRATION: Property Registration No. 1,479 of RG2 of this Office. The above is true, and I hereby certify. Curitiba, December 9, 2010.
REGISTRAR: **-----//signature//-----**

NOTE: The identifying elements of the property described in this registration were provided by the parties in accordance with the Rules of the Judicial Administrative Department of this State.

R.1-78,701 – **PURCHASE AND SALE**: Filed under No. 232,967 on 12/02/2010. Pursuant to the Private Instrument of Fully Paid Residential Property Purchase and Sale, Loan Agreement, and Fiduciary Transfer of Ownership as Security*, Credit Letter with Brazilian Savings and Loan System (SBPE) Resources within the scope of the Housing Finance System (SFH), with the use of funds from the FGTS linked accounts of the Buyers and Debtors/Fiduciary Grantors dated 11/25/2010, a copy of which is filed, ROSANA VANINI IBRAHIM and her husband JAMIL IBRAHIM, already qualified above, sold the property described in this registration to: **ELAINE LOPES PEREIRA NUNES**, Brazilian, biologist, holder of ID No. 7.266.125-7/PR and CPF No. 009.396.159-67, and her husband **GUSTAVO DARTAGNAN XAVIER DO REGO**, Brazilian, electrical engineer, holder of ID No. 6.129.994-7/PR and CPF No. 025.907.999-50, married under the Partial Community Property regime on 11/15/2008, residing and domiciled at Rua Rockefeller No. 858, Apt. 204, Rebouças, Curitiba/PR. Purchase and Sale Price: R$ 235,000.00 (two hundred thirty-five thousand Reais), composed as follows: Own funds: R$ 107,000.00; FGTS-linked account funds: R$ 13,706.33; Financing granted by Caixa Econômica Federal (CEF): R$ 114,293.67; ITBI No.: 53,736/2010 (paid on the amount of R$ 235,000.00). Exempt from payment of FUNREJUS, pursuant to Article 3, VIII, b-15, of State Law No. 12,604, dated 07/02/1999, as evidenced by the document filed herein. DOI issued. Fees: 4,312 (VRC) – R$ 452.76. The above is true, and I hereby certify. Curitiba, December 9, 2010.
REGISTRAR: **-----//signature//-----**

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PROPERTY REG. 78,701

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CONTINUATION

R.2-78,701 – **FIDUCIARY TRANSFER OF OWNERSHIP AS SECURITY**: Pursuant to the instrument that gave rise to Registration No. 1, the acquiring debtors mentioned therein assigned the property described in this registration, it is held in the fiduciary transfer, to **CAIXA ECONÔMICA FEDERAL – CEF**, a financial institution headquartered at Setor Bancário Sul, Quadra 4, Lots 3/4, Brasília/DF, CNPJ No. 00.360.305/0001-04. Debt amount: R$ 114,293.67; Grace period: 120 months; Annual interest rate: Nominal: 8.0930%; Effective: 8.4000%; Fiduciary Transfer amount: R$ 235,000.00. Other terms and conditions are set forth in the contract. Fees: 2,156 (VRC) – R$ 226.38. The above is true, and I hereby certify. Curitiba, December 9, 2010. REGISTRAR: **-----//signature//-----**

Av.3-78,701 – **DIVORCE**: Filed under No. 253,129 on 09/10/2012. Pursuant to the request and the copy of the marriage certificate with annotation of divorce, issued on 06/29/2012, from record No. 10,765, page 146 of Book 42, of the Bacacheri District Registry Office of this district, filed herein, the marital status of GUSTAVO DARTAGNAN XAVIER DO REGO and ELAINE LOPES PEREIRA NUNES is hereby changed to **divorced**. Fees: 060 (VRC) – R$ 8.46. The above is true, and I hereby certify. Curitiba, September 26, 2012. REGISTRAR: **-----//signature//-----**

R.4-78,701 – **ASSIGNMENT OF RIGHTS**: Filed under No. 253,130 on 09/10/2012. Pursuant to the Private Agreement for Assignment of Rights and Obligations, with Assumption of Real Estate Debt and Ratification of Clauses – SBPE Resources – Housing Finance System (SFH), dated 09/04/2012, a copy of which is filed with this Office, ELAINE LOPES PEREIRA NUNES, already qualified, assigned a 50% undivided interest of the property rights under a fiduciary regime of the property described in this registration to **GUSTAVO DARTAGNAN XAVIER DO REGO**, already qualified. The value of the assignment of rights is R$ 96,940.43, fully composed of financing granted by CAIXA ECONÔMICA FEDERAL – CEF in the same amount. ITBI No.: 41,105/2012 (paid on the amount of R$ 126,700.00). FUNREJUS paid for R$ 193.88, as per receipt No. 12064000500074272, filed herein. DOI issued. Fees: 4,312 (VRC) – R$ 607.99 The above is true, and I hereby certify. Curitiba, September 26, 2012. REGISTRAR: **-----//signature//-----**

Av. 5-78,701 – **ASSUMPTION OF REAL ESTATE DEBT**: Pursuant to the instrument mentioned in R-4 above, the real estate debt resulting from the fiduciary transfer of registration no. 02, the assignee/debtor/fiduciary grantor GUSTAVO DARTAGNAN XAVIER DO REGO, already qualified, in view of the debt assumption already effected, he assumes full responsibility for payment to **CAIXA ECONÔMICA FEDERAL – CEF**, already qualified, of the outstanding balance of the financing agreement recorded under R-2 of this registration. All other terms and conditions remain under the agreement recorded under No. 2 of this registration. Fees: 315 (VRC) – R$ 44.41. The above is true, and I hereby certify. Curitiba, September 26, 2012. REGISTRAR: **-----//signature//-----**

Av. 6-78,701 – **INEFFECTIVENESS:** Filed under No. 289,070 on 10/26/2015. Pursuant to Official Letter No. 1033/2015vs, dated 10/08/2015, issued by the Court of Law of the Ninth Civil Court of this District, extracted from the records of the Enforcement of Extrajudicial Title proceeding No. 383/1999,

CONTINUES

***Translator's Note:** The term "alienação fiduciária" has been translated as "fiduciary transfer of ownership as security." This is a legal mechanism under Brazilian law whereby ownership of the property is conditionally transferred to the creditor as collateral for a debt and is automatically restored to the debtor upon full payment. This concept does not have a direct equivalent in U.S. law, although it serves a similar function to a mortgage or deed of trust. For the sake of readability, the term may appear in abbreviated form as "fiduciary transfer" or simply "fiduciary" in the remainder of this translation.

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Continued on page 3

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4th Real Estate Registry Office
District of Curitiba – Paraná

Registrar: Marcio de Vasconcelos Martins
Rua Marechal Deodoro, No. 869, 1st Floor, Suites 101 and 102, Centro, Center Tower Building
ZIP Code: 80060-010 | Phone: +55 41 3387-1898

CERTIFICATE

CONTINUATION

filed herein, in which DISTRIBUIDORA DE MEDICAMENTOS SANTA CRUZ LTDA proceeds against ELIZIA DE FATIMA BORA – ME, it is hereby recorded that the purchase and sale registered under No. 07 of Property Registration No. 1,479 (previous registration) has been declared ineffective. FUNREJUS duly paid in accordance with State Law No. 18,415, dated 12/29/2014. Fees: 315 (VRC) – R$ 52.60. The above is true, and I hereby certify. Curitiba, November 19, 2015.
REGISTRAR: **-----//signature//-----**

R.7-78,701 – **LIEN:** Filed under No. 289,070 on 10/26/2015. Pursuant to Official Letter No. 1033/2015vs, dated 10/08/2015, issued by the Court of Law of the Ninth Civil Court of this District, extracted from the records of the Enforcement of Extrajudicial Title proceeding No. 383/1999, filed herein, in which DISTRIBUIDORA DE MEDICAMENTOS SANTA CRUZ LTDA proceeds against ELIZIA DE FÁTIMA BORA – ME, I hereby record the lien of the property described in this registration, in view of the ineffectiveness of Registration No. 07 of Property Registration No. 1,479 (previous registration). Claim Amount: R$ 58,625.23 as of 10/02/2009 (including other properties). FUNREJUS paid for R$ 17.89 (updated amount R$ 85,942.56), as per receipt No. 24000000001040607-0, filed herein (including other properties). Fees: 1,294 (VRC) – R$ 216.03 The above is true, and I hereby certify. Curitiba, November 19, 2015. REGISTRAR: **-----//signature//-----**

Av. 08/78,701 – **CANCELLATION OF FIDUCIARY TRANSFER:** Filed under No. 302,964 on 03/23/2017. This annotation is made pursuant to the Private Instrument Authorizing the Cancellation of Fiduciary Transfer Ownership – Real Estate Financing, issued in Curitiba/PR on 12/13/2016, with the duly notarized signature of the legal representative of the creditor **CAIXA ECONÔMICA FEDERAL – CEF**, in order to record, for all legal purposes, upon full payment of the debt, the cancellation of the fiduciary transfer registered under R-02 and annotated under Av-05 of this registration. Exempt from payment of FUNREJUS, pursuant to Article 3, VII, b-4, of State Law No. 12,216, dated 07/15/1998, as amended by Article 1 of State Law No. 12,604, dated 07/02/1999. Fees: 630 (VRC) – R$ 114.66 Curitiba/PR, March 31, 2017. Registrar: _____ (Marcio de Vasconcelos Martins). ***.
-----//signature//-----

Av. 09/78,701 – **CHANGE IN MARITAL STATUS:** Filed under No. 374,473 on 03/23/2023. This annotation is made pursuant to the application signed by the interested party in Curitiba/PR on 03/23/2023, supported by the Marriage Certificate registered under No. 084681 01 55 2018 2 00077 042 0018309 14, issued on 03/22/2023 by the Civil Registry of Natural Persons of Araucária/PR, in order to record that **GUSTAVO DARTAGNAN XAVIER DO REGO**, already qualified, **entered into marriage** on 09/03/2018 under the Partial Community Property regime, with **MILENA CRISTINA PERCIAK**, Brazilian, holder of ID No. 90477358/SESP/PR and CPF No. 055.115.229-02. FUNREJUS duly paid in accordance with State Law No. 18,415, dated 12/29/2014. Fees: R$ 14.76 – 060 (VRC); FUNREJUS (25%): R$ 3.69; FUNDEP: R$ 0.74; ISS: R$ 0.59; Seal: R$ 1.00, Funarpen Seal: SFRIL.tEkc7.dajfd-dQreG.F389q. Curitiba/PR, April 3, 2023. _____ Rodrigo Varela da Silva - Deputy Registrar Registrar: Marcio de Vasconcelos Martins. ***.

CONTINUES

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www.registradores.onr.org.br

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Av. 10/78,701 – **CANCELLATION OF INEFFECTIVENESS:** Filed under No. 375,093 on 04/05/2023. This annotation is made pursuant to Official Letter No. 01665/2022, issued on 08/29/2022, by order of the Honorable Deputy Judge of the 9th Civil Court of the District of Curitiba/PR, Dr. Pedro Roderjan Rezende, extracted from the records of Compliance with Judgment proceeding No. 0036581-68.2015.8.16.0001, in order to record, for all legal purposes, the cancellation of the ineffectiveness recorded under **Av-06** of this registration. Exempt from payment of FUNREJUS with respect to this cancellation, pursuant to Article 3, VII, item "b," No. 04, of Law No. 12,216, dated 05/15/1998, as amended by Article 1 of Law No. 12,604, dated 07/02/1999. Fees: R$ 77.49 – 315 (VRC); FUNDEP: R$ 3.87; ISS: R$ 3.10; Seal: R$ 8.00; Funarpen Seal: SFRI2.P5QQv.sK3Wu-F7UIj.F389q. Curitiba/PR, April 24, 2023.
Registrar: _____ (Marcio de Vasconcelos Martins). ***.

Av. 11/78,701 – **CANCELLATION OF LIEN:** Filed under No. 375,093 on 04/05/2023. This annotation is made pursuant to Official Letter No. 01665/2022, issued on 08/29/2022, by order of the Honorable Deputy Judge of the 9th Civil Court of the District of Curitiba/PR, Dr. Pedro Roderjan Rezende, extracted from the records of Compliance with Judgment proceeding No. 0036581-68.2015.8.16.0001, in order to record, for all legal purposes, the cancellation of the attachment recorded under **R-07** of this registration. Exempt from payment of FUNREJUS with respect to this cancellation, pursuant to Article 3, VII, item "b," No. 04, of Law No. 12,216, dated 05/15/1998, as amended by Article 1 of Law No. 12,604, dated 07/02/1999. Fees: R$ 159.11 – 647 (VRC); FUNDEP: R$ 7.96; ISS: R$ 6.37; Seal: R$ 8.00; Funarpen Seal: SFRI2.P56Qv.sK3Wu-67GIj.F389q. Curitiba/PR, April 24, 2023. Registrar: _____ (Marcio de Vasconcelos Martins). ***.

DIGITAL CERTIFICATE

I HEREBY CERTIFY that this photocopy is a true and complete reproduction of Property Registration **No. 78,701** of Book 2 of this Registry Office and has the legal value of a certificate (Art. 19, §1, Law No. 6,015/73). **I certify.** Protocol No.: 185,954. Fees: R$ 0.00. FUNREJUS: R$ 0.00. Seal: R$ 0.00. ISS: R$ 0.00. FUNDEP: R$ 0.00. TOTAL: R$ 0.00

Curitiba/PR, April 26, 2023.

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I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 15 2026

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CERTIDÃO

4° REGISTRO DE IMÓVEIS
Reg.:ENEIDE CUNICO SCHWAB
C. P. F. 322.539.829-20

Rua Visconde do Rio Branco,1341 - 1° andar
Comarca de Curitiba - Estado do Paraná

REGISTRO GERAL | FICHA 1 | RUBRICA

MATRÍCULA Nº 78.701

IDENTIFICAÇÃO DO IMÓVEL: **Casa nº "02" (dois)**, com a área construída privativa no pavimento térreo com 55,18m², área construída privativa no segundo pavimento com 59,71m², área construída privativa de 114,89m², mais área comum construída de 2,01m², área construída total de 116,90m², área de terreno ocupada pela construção com 56,13m², área de terreno privativo descoberto destinado a jardim, quintal e acesso com 100,61m², fração ideal de 156,74m², mais a área comum não construida de 14,67m², área total de terreno e quota com 171,41m², fração ideal de solo de 0,3718, localizada nos fundos do terreno e na lateral esquerda para quem da rua olha o condomínio, com acesso pela lateral esquerda, tem a numeração predial 98/2 da Rua Ata. Indicação Fiscal nº 88.332.003.001-2 do Cadastro Municipal. Integrante do **"RESIDENCIAL TULIPAS"**, situado na Rua Ata nº 98, o qual foi edificado sobre o Lote nº 28, da Planta Jardim Cristina, no Uberaba, conforme descrição do registro anterior. **PROPRIETÁRIOS**: **ROSANA VANINI IBRAHIM**, brasileira, empresária, CI/RG 3.035.828-7/PR e CPF/MF 405.144.399-04, e seu esposo **JAMIL IBRAHIM**, brasileiro, empresário, CI/RG 1.926.885/PR e CPF/MF 301.382.059-49, casados sob o regime de Comunhão Parcial de Bens, em 03/09/1983, residentes e domiciliados na Rua Adolfo Werneck nº 309, casa U, Uberaba, Curitiba-PR. **REGISTRO ANTERIOR**: Matrícula nº 1.479 do RG2 deste Ofício. O referido é verdade e dou fé. (Jb/vi). Curitiba, 09 de dezembro de 2010. REGISTRADORA:

OBSERVAÇÃO: Os elementos caracterizadores do imóvel desta matrícula foram fornecidos pelas partes nos termos do Código de Normas da Corregedoria Geral de Justiça deste Estado.

R.1-78.701-**COMPRA E VENDA**: Protocolado sob nº 232.967, em 02/12/2010. Nos termos do Contrato Por Instrumento Particular de Compra e Venda de Imóvel Residencial Quitado, Mútuo e Alienação Fiduciária em Garantia, Carta de Crédito com Recursos do SBPE no Âmbito do Sistema Financeiro da Habitação - SFH - com Utilização dos Recursos da Conta Vinculada do FGTS dos Compradores e Devedores/Fiduciantes, datado de 25/11/2010, do qual uma via fica arquivada, ROSANA VANINI IBRAHIM e seu esposo JAMIL IBRAHIM já qualificados, venderam o imóvel descrito nesta matrícula a **ELAINE LOPES PEREIRA NUNES**, brasileira, bióloga, CI/RG 7.266.125-7/PR e CPF/MF 009.396.159-67, e seu esposo **GUSTAVO DARTAGNAN XAVIER DO REGO**, brasileiro, engenheiro eletricista, CI/RG 6.129.994-7/PR e CPF/MF 025.907.999-50, casados sob o regime da Comunhão Parcial de Bens, em 15/11/2008, residentes e domiciliados na Rua Rockefeller nº 858 - apto 204, Rebouças, Curitiba-PR. Valor da compra e venda: R$235.000,00 (duzentos e trinta e cinco mil reais), sendo composto mediante a integralização das parcelas a seguir: Recursos próprios: R$107.000,00; Recursos da Conta Vinculada de FGTS: R$13.706,33; Financiamento concedido pela CEF: R$114.293,67. ITBI nº 53736/2010 (recolhido sobre a quantia de R$235.000,00). Isento do recolhimento do FUNREJUS, conforme previsto no art.3º, VII, b-15, da Lei Estadual nº 12.604 de 02/07/1999, comprovante aqui arquivado. Emitida a DOI. Custas: 4312(vrc)-R$452,76. O referido é verdade e dou fé. (jb/vi). Curitiba, 09 de dezembro de 2010. REGISTRADORA:

SEGUE NO VERSO

MATRÍCULA 78.701

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Continua na página 02

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CONTINUAÇÃO

R.2-78.701-**ALIENAÇÃO FIDUCIÁRIA**: Nos termos do título que deu origem ao registro nº 1, os adquirentes devedores fiduciantes, lá mencionados, alienaram em caráter fiduciário o imóvel descrito nesta matrícula, em favor da **CAIXA ECONÔMICA FEDERAL - CEF**, instituição financeira, com sede no Setor Bancário Sul, Quadra 4, Lotes 3/4, em Brasília/DF, CNPJ/MF nº 00.360.305/0001-04. Valor da dívida: R$114.293,67. Prazo em meses de amortização: 120. Taxa anual de juros: Nominal de 8,0930% e Efetiva de 8,4000%. Valor da garantia fiduciária: R$235.000,00. Demais condições constantes do contrato. Custas: 2156(vrc)-R$226,38. O referido é verdade e dou fé. (jb/vi). Curitiba, 09 de dezembro de 2010. REG:

Av.3-78.701-**DIVÓRCIO**: Protocolado sob nº 253.129, em 10/09/2012. Nos termos do requerimento e da cópia da certidão de casamento com averbação de divórcio, extraída em 29/06/2012, do termo nº 10765, fls 146 do livro 42, do Serviço Distrital do Bacacheri, desta comarca, aqui arquivados, fica alterado o estado civil de GUSTAVO DARTAGNAN XAVIER DO REGO e ELAINE LOPES PEREIRA NUNES para **divorciados**. Custas: 060(vrc)-R$8,46. O referido é verdade e dou fé. (Jb/Lv). Curitiba, 26 de setembro de 2012. REG:

R.4-78.701-**CESSÃO DE DIREITOS**: Protocolado sob nº 253.130, em 10/09/2012. Nos termos do Contrato Particular de Cessão de Direitos e Obrigações, com Assunção de Dívida Imobiliária e Ratificação de Cláusulas - Recursos SBPE - SFH, datado de 04/09/2012, do qual uma via fica aqui arquivada, ELAINE LOPES PEREIRA NUNES, já qualificada, cedeu parte ideal de 50% sobre os direitos da propriedade em regime fiduciário do imóvel descrito nesta matrícula a **GUSTAVO DARTAGNAN XAVIER DO REGO**, já qualificado. O valor da cessão dos direitos é de R$96.940,43 sendo composto mediante financiamento concedido pela CAIXA de: R$96.940,43. ITBI nº 41105/2012 (recolhido sobre R$126.700,00). Recolhido o FUNREJUS no valor de R$193,88 conforme guia nº 12064000500074272, aqui arquivada. Emitida a DOI. Custas: 4312(vrc)-R$607,99. O referido é verdade e dou fé. (Jb/Lv). Curitiba, 26 de setembro de 2012. REGISTRADORA:

Av.5-78.701-**ASSUNÇÃO DE DÍVIDA IMOBILIÁRIA**: Nos termos do título mencionado no R-4 acima, a dívida imobiliária resultante da alienação fiduciária do registro nº02, o cessionário/devedor/fiduciante GUSTAVO DARTAGNAN XAVIER DO REGO, já qualificado, tendo em vista a assunção de divida, já efetivada, assume integralmente a responsabilidade pelo pagamento á **CAIXA ECONÔMICA FEDERAL- CEF**, já qualificada, do saldo devedor do financiamento assumido no contrato registrado no R-2. Demais condições constantes no contrato registrado sob nº2, desta matrícula. Custas: 315(vrc)-R$44,41. O referido é verdade e dou fé. (Jb/Lv). Curitiba, 26 de setembro de 2012. REGISTRADORA:

Av.6-78.701-**INEFICÁCIA**: Protocolado sob nº 289.070, em data de 26/10/2015. Nos termos do Ofício nº 1033/2015vs, datado de 08/10/2015, expedido pelo Juízo de Direito da Nona Vara Cível, desta Comarca, extraído dos Autos de Execução de Título Extrajudicial nº 383/1999,

SEGUE

Continua na página 03

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CERTIDÃO

RUBRICA | FOLHA -02- Matr.-78.701-

CONTINUAÇÃO

aqui arquivado, em que DISTRIBUIDORA DE MEDICAMENTOS SANTA CRUZ LTDA, move contra ELIZIA DE FATIMA BORA - ME, averba-se que foi declarada ineficaz a compra e venda registrada sob nº 07 matrícula 1479 (registro anterior). Recolhido o FUNREJUS conforme Lei Estadual nº 18415 de 29/12/2014. Custas: 315(vrc)-R$52,60. O referido é verdade e dou fé. (Ec/Jb/Lv). Curitiba, 19 de novembro de 2015. REGISTRADORA:

R.7-78.701-**PENHORA**: Protocolado sob nº 289.070, em 26/10/2015. Nos termos do Ofício nº 1033/2015vs, datado de 08/10/2015, expedido pelo Juízo de Direito da Nona Vara Cível, desta Comarca, extraído dos Autos de Execução de Título Extrajudicial nº 383/1999, aqui arquivado, em que DISTRIBUIDORA DE MEDICAMENTOS SANTA CRUZ LTDA, move contra ELIZIA DE FATIMA BORA - ME, procedo ao registro da penhora do imóvel descrito nesta matrícula, face a ineficácia do registro nº 07 da matrícula 1.479 (registro anterior). Valor da Causa: R$58.625,23 em 02/10/2009 (incluindo outros imóveis). Recolhido o FUNREJUS no valor de R$171,89 (valor atualizado monetariamente de R$85.942,56), conforme guia nº 24000000001040607-0, aqui arquivada (incluindo outros imóveis). Custas: 1294(vrc)-R$216,03. O referido é verdade e dou fé. (Ec/Jb/Lv). Curitiba, 19 de novembro de 2015. REGISTRADORA:

AV-08/78.701 - **CANCELAMENTO DE ALIENAÇÃO FIDUCIÁRIA**: Protocolado sob nº 302.964 de 23/03/2017. Procede-se à esta averbação conforme Instrumento Particular de Autorização Para Cancelamento da Propriedade Fiduciária - Financiamento de Crédito Imobiliário, expedido em Curitiba-PR, aos 13/12/2016, com firma devidamente reconhecida da representante legal da Credora **CAIXA ECONOMICA FEDERAL - CEF**, para fazer constar, para todos os fins de direito, face a respectiva quitação, o cancelamento da Alienação Fiduciária registrada sob o **R-02** e averbada sob **AV-05** da presente matrícula. Isento do recolhimento do FUNREJUS, conforme previsto no art. 3º, VII, b-4, da Lei Estadual nº 12.216 de 15/07/1998, alterado pelo art. 1º da Lei Estadual nº 12.604 de 02/07/1999. Custas: 630(vrc)-R$114,66. Curitiba/PR, 31 de março de 2017. Oficial Registrador (Marcio de Vasconcelos Martins).***.

AV-09/78.701 - **ALTERAÇÃO DE ESTADO CIVIL**: Protocolado sob nº 374.473, em 23/03/2023. Procede-se a esta averbação, conforme requerimento firmado pela parte interessada em Curitiba/PR, aos 23/03/2023, instruído com Certidão de Casamento matriculada sob nº 084681 01 55 2018 2 00077 042 0018309 14, expedida em 22/03/2023, pelo Registro Civil das Pessoas Naturais de Araucária/PR, para fazer constar que **GUSTAVO DARTAGNAN XAVIER DO REGO**, já qualificado, **contraiu núpcias** em 03/09/2018, sob o regime da Comunhão Parcial de Bens, com **MILENA CRISTINA PERCIAK**, brasileira, portadora do RG nº 90477358/SESP/PR, inscrita no CPF/MF sob nº 055.115.229-02. Recolhido o Funrejus, conforme Lei Estadual nº 18.415 de 29/12/2014. Emolumentos: R$14,76 - 060 (VRC); Funrejus 25%: R$3,69; Fundep: R$0,74; ISS: R$0,59; Selo: R$1,00. Selo Funarpen: SFRI1.tEkc7.dajfd-dQreG.F389q. Curitiba-PR, 03 de abril de 2023. Rodrigo Varela da Silva - Registrador Substituto. Oficial Registrador: Marcio de Vasconcelos Martins.***.

SEGUE

Continua na página 04

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CONTINUAÇÃO

AV-10/78.701 - **CANCELAMENTO DE INEFICÁCIA:** Protocolado sob nº 375.093, em 05/04/2023. Procede-se à presente averbação, conforme Ofício nº 01665/2022, expedido em 29/08/2022, por ordem do MM. Juiz de Direito Substituto da 9ª Vara Cível da Comarca de Curitiba/PR, Dr. Pedro Roderjan Rezende, extraído dos autos de Cumprimento de Sentença nº 0036581-68.2015.8.16.0001, para fazer constar, para todos os fins de direito, o Cancelamento de Ineficácia constante na **AV-06** da presente matrícula. Isento do recolhimento do Funrejus referente ao cancelamento, nos termos do art. 3º, inc. VII, alínea "b", nº 04, da Lei nº 12.216, de 15/05/1998, alterado pelo art. 1º, da Lei nº 12.604, de 02/07/1999. Emolumentos: R$77,49 - 315 (VRC); Fundep: R$3,87; ISS: R$3,10; Selo: R$8,00. Selo Funarpen: SFRI2.P5QQv.sK3Wu-F7UIj.F389q. Curitiba-PR, 24 de abril de 2023. Oficial Registrador _____ (Marcio de Vasconcelos Martins).***.

AV-11/78.701 - **CANCELAMENTO DE PENHORA:** Protocolado sob nº 375.093, em 05/04/2023. Procede-se à presente averbação, conforme Ofício nº 01665/2022, expedido em 29/08/2022, por ordem do MM. Juiz de Direito Substituto da 9ª Vara Cível da Comarca de Curitiba/PR, Dr. Pedro Roderjan Rezende, extraído dos autos de Cumprimento de Sentença nº 0036581-68.2015.8.16.0001, para fazer constar, para todos os fins de direito, o Cancelamento da Penhora registrada no **R-07** da presente matrícula. Isento do recolhimento do Funrejus referente ao cancelamento, nos termos do art. 3º, inc. VII, alínea "b", nº 04, da Lei nº 12.216, de 15/05/1998, alterado pelo art. 1º, da Lei nº 12.604, de 02/07/1999. Emolumentos: R$159,11 - 647 (VRC); Fundep: R$7,96; ISS: R$6,37; Selo: R$8,00. Selo Funarpen: SFRI2.P56Qv.sK3Wu-67GIj.F389q. Curitiba-PR, 24 de abril de 2023. Oficial Registrador _____ (Marcio de Vasconcelos Martins).***.

CERTIDÃO DIGITAL

CERTIFICO que esta fotocópia é reprodução fiel e integral da matrícula **nº 78.701** do Livro 2 deste Serviço Registral e tem valor de certidão (Art.19 § 1º da Lei 6.015/73). **Dou fé**. Protocolo nº 185.954. Emolumentos: R$0,00. Funrejus: R$0,00. Selo: R$0,00. ISS: R$0,00. FUNDEP: R$0,00. TOTAL: R$0,00.

Curitiba - PR, 26 de abril de 2023.

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PROPERTY APPRAISAL REPORT

1. IDENTIFICATION OF THE REQUESTING PARTY

Gustavo Dartagnan Xavier do Rego
CPF: 025.907.999-50

2. PURPOSE OF THE REPORT

This report aims to appraise a residential property, with the purpose of determining its market value for sale.

3. IDENTIFICATION AND DESCRIPTION OF THE PROPERTY

The property consists of a three-story townhouse (triplex), part of the Residencial Tulipas condominium, with an exclusive built area of 114.89 m² and a total area of 116.90 m².
The property includes an attic with an unregistered area, as well as a garage and a small backyard.
Address: Rua Ata, No. 98, Unit 2, Uberaba District, Curitiba/PR.
Property Registration No.: 78,701, 4th Real Estate Registry District.

4. METHODOLOGY AND CRITERIA ADOPTED

The following technical criteria were considered for this appraisal:

- **Location of the property;**
- **Infrastructure of the surrounding area;**
- **Condition of the property.**

5. DETERMINATION OF MARKET VALUE

R$ 580,000.00 (five hundred eighty thousand Reais)
Approximate unit value: R$ 5,000.00 per square meter.

6. FINAL CONSIDERATIONS AND LIMITATIONS

This report reflects the market value of the property as of the date of issuance, considering the observed conditions and the information provided by the requesting party.

Any discrepancies regarding the unregistered area, as well as future changes in the condition of the property or market conditions, may impact the value assigned herein.

Curitiba, January 17, 2026.



Heraldo José Brollo
Real Estate Broker
CRECI No. 12,601

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: April, 14 2026

LAUDO DE AVALIAÇÃO DE IMÓVEL

1. IDENTIFICAÇÃO DO SOLICITANTE

Gustavo Dartagnan Xavier do Rego
CPF: 025.907.999-50

2. OBJETO DO LAUDO

O presente laudo tem por objeto a avaliação de imóvel residencial, com a finalidade de determinação de seu valor de mercado para venda.

3. IDENTIFICAÇÃO E CARACTERIZAÇÃO DO IMÓVEL

Trata-se de um sobrado residencial triplex, integrante do condomínio Residencial Tulipas, com área construída exclusiva de 114,89 m² e área total de 116,90 m².
O imóvel possui ático com área não averbada, além de garagem e pequeno quintal.
Endereço: Rua Ata, nº 98, Sobrado 2, Bairro Uberaba, Curitiba/PR.
Matrícula Imobiliária nº 78.701, da 4ª Circunscrição Imobiliária.

4. METODOLOGIA E CRITÉRIOS ADOTADOS

Para a presente avaliação, foram considerados os seguintes critérios técnicos:
- Localização do imóvel;
- Infraestrutura da região;
- Estado de conservação do bem.

5. DETERMINAÇÃO DO VALOR DE MERCADO

R$ 580.000,00 (quinhentos e oitenta mil reais)
Valor unitário aproximado: R$ 5.000,00 por metro quadrado.

6. CONSIDERAÇÕES FINAIS E LIMITAÇÕES

O presente laudo reflete o valor de mercado do imóvel na data de sua emissão, considerando as condições observadas

e as informações fornecidas pelo solicitante.
Eventuais divergências quanto à área não averbada, bem como alterações futuras nas condições do imóvel ou do mercado, poderão impactar o valor ora atribuído.

Curitiba, 17 de janeiro de 2026.

Heraldo José Brollo
Corretor de Imóveis
CRECI nº 12.601

Exhibit D - Personal documents

FEDERATIVE REPUBLIC OF BRAZIL

CIVIL REGISTRY OF NATURAL PERSONS AND 3RD NOTARY OFFICE

Avenida Manoel Mendes de Camargo, 1553 - centro - Campo Mourão - Paraná, ZIP Code 87303-000

Wanderleia Tebinca Authorized Employee | *Lilian Rosana Goldoni* Authorized Employee | *Ana Maria Colledan* Registrar | *João José Pereira* Authorized Employee | *João Paulo Coledan* Authorized Employee

BOOK A-052
PAGE 008
ENTRY 008722

PHONE/FAX: (0XX44) 3523-3608

Ana Maria Colledan
Registrar

BIRTH CERTIFICATE

I CERTIFY that, from the book, page, and record referenced, of the BIRTH RECORDS from this Office, the birth record of -.- GUSTAVO DARTAGNAN XAVIER DO REGO -.- was issued on September 26, 1978. -.- male, born on September twenty-third, nineteen seventy-eight (09/23/1978), at eleven thirty p.m. (11:30 p.m.) at the Hospital and Maternity São José – in this city. -.-.-.-.-.-.-.-.-.- son of ELIAS XAVIER DO REGO NETO and BERNADETE CHIUZA XAVIER, he was born in this State, she was born in Rio Grande do Sul. -.- Paternal grandparents: ARISTOTELES XAVIER DO REGO. -.- and OLIVIA MENDES XAVIER. -.- Maternal grandparents: ERNESTO CHIUZA -.- and EVA DE OLIVEIRA CHIUZA. -.- The declarant was: the father. -.- with the witnesses listed in the record. -.- Notes: 2nd copy. Fees: R$ 18.37 (VRC 175.00). Searches: R$ 1.05. FUNARPEN: R$ 1.00. -.-

-.-.-.-

-.-.-.-

-.-.-.-

CIVIL REGISTRY OF NATURAL PERSONS
Ana Maria Colledan
Registrar
João José Pereira
Sworn Clerk
CAMPO MOURÃO - PARANÁ

The above is true and I certify.
Campo Mourão, April 7, 2008.

-----//Signature//----
Bachelor Lilian Rosana Goldoni
Authorized Employee

SIGNATURE AT THE 27th REGISTRY OFFICE
AV. SÃO LUÍS, 59 - SÃO PAULO, SP

3RD NOTARY OFFICE AND CIVIL REGISTRY
PHONE/FAX: (44) 523-3608
CAMPO MOURÃO - PARANÁ

Law 13,228 of 07/18/2001
FUNARPEN SEAL
REGISTRY SERVICES
Ana Maria Colledan
CIVIL REGISTRY
CAMPO MOURÃO - PR
CFD27228

ANOREG/PR

VALID THROUGHOUT THE NATIONAL TERRITORY, ANY ALTERATION OR ERASURE WILL INVALIDATE THIS DOCUMENT

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 22, 2026.

REPÚBLICA FEDERATIVA DO BRASIL

REGISTRO CIVIL DAS PESSOAS NATURAIS e 3º SERVIÇO NOTARIAL

Av. Manoel Mendes de Camargo, 1553 - centro - Campo Mourão – PR., CEP 87303-000

Wanderleia Tebinca	Lilian Rosana Goldoni	Ana Maria Colledan	João José Pereira	João Paulo Coledan
Func. Homologada	Func. Homologada	Oficiala	Func. Homologado	Func. Homologado

LIVRO A-052
FOLHAS 008
TERMO 008722

FONE/FAX (44) 523-3608

Ana Maria Colledan
Oficiala

CERTIDÃO DE NASCIMENTO

CERTIFICO que, do livro, folha e termo citados, de ASSENTO DE NASCIMENTOS deste Ofício, consta que, foi lavrado no dia 26 de setembro de 1978, o assento de nascimento de.-. **GUSTAVO DARTAGNAN XAVIER DO REGO** .- do sexo masculino, nascido no dia vinte e três de setembro de um mil, novecentos e setenta e oito (23/09/1978), às vinte e três horas e trinta minutos (23:30h), em Hospital e Maternidade São José - nesta cidade.-.-.-.-.-.- filho de **ELIAS XAVIER DO REGO NETO e de BERNADETE CHIUZA XAVIER**, ele nat. deste Estado, ela natural do RS.- São avós paternos: ARISTOTELES XAVIER DO REGO.- e OLIVIA MENDES XAVIER.- e avós maternos: ERNESTO CHIUZA.- e EVA DE OLIVEIRA CHIUZA.- Foi declarante: o pai.- Com as testemunhas constantes no termo.- **Observação:** 2ª via. Custas R$ 18,37 (VRC 175,00) Buscas R$ 1,05 Funarpen R$ 1,00.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-.-

FV584800

Assinatura do titular / Signature du titulaire
Bearer's signature / Firma del titular

Este passaporte deve ser assinado pelo titular, salvo em caso de incapacidade.

Ce passeport doit être signé par le titulaire, sauf en cas d'incapacité.

This passport must be signed, except where the bearer is unable to do so.

Este pasaporte debe ser firmado por el titular, salvo en caso de incapacidad.

REPÚBLICA FEDERATIVA DO BRASIL

PASSAPORTE
PASSPORT



SOBRENOME / SURNAME
XAVIER DO REGO

NOME / GIVEN NAMES
GUSTAVO DARTAGNAN

NACIONALIDADE / NATIONALITY
BRASILEIRO(A)

DATA DO NASCIMENTO / DATE OF BIRTH
23 SET/SEP 1978

IDENTIDADE Nº / PERSONAL No.

SEXO / SEX
M

NATURALIDADE / PLACE OF BIRTH
CAMPO MOURÃO/PR

FILIAÇÃO / FILIATION
ELIAS XAVIER DO REGO NETO

BERNADETE CHIUZA XAVIER

DATA DE EXPEDIÇÃO / DATE OF ISSUE
02 ABR/APR 2018

AUTORIDADE / AUTHORITY
SR/DPF/PR

VÁLIDO ATÉ / DATE OF EXPIRY
01 ABR/APR 2028

P<BRAXAVIER<DO<REGO<<GUSTAVO<DARTAGNAN<<<<<<
FV584800<9BRA7809235M2804017<<<<<<<<<<<<<<08

Gustavo DarTagnan Xavier

Assinatura do titular / Signature du titulaire
Bearer's signature / Firma del titular

Este passaporte deve ser assinado pelo titular,
salvo em caso de incapacidade.

Ce passeport doit être signé par le titulaire,
sauf en cas d'incapacité.

This passport must be signed,
except where the bearer is unable to do so.

Este pasaporte debe ser firmado por el titular,
salvo en caso de incapacidad.

REPÚBLICA FEDERATIVA DO BRASIL

PASSAPORTE
PASSPORT



P BRA
SOBRENOME / SURNAME
XAVIER DO REGO
NOME / GIVEN NAMES
GUSTAVO DARTAGNAN
NACIONALIDADE / NATIONALITY
BRASILEIRO
DATA DE NASCIMENTO / DATE OF BIRTH
23/Sep/1978
SEXO / SEX
M
NATURALIDADE / PLACE OF BIRTH
CAMPO MOURAO/PR
DATA DE EXPEDIÇÃO / DATE OF ISSUE
26/Jun/2008
VÁLIDO ATÉ / DATE OF EXPIRY
25/Jun/2013

PASSAPORTE Nº / PASSPORT No.
CW965172
IDENTIDADE Nº / PERSONAL No.
AUTORIDADE / AUTHORITY
SR/DPF/PR

P<BRAXAVIER<DO<REGO<<GUSTAVO<DARTAGNAN<<<<<<
CW965172<2BRA7809235M1306259<<<<<<<<<<<<<<06

NACIONALIDADE BRASILEIRA - *NATIONALITÉ BRÉSILIENNE - BRAZILIAN CITIZEN*

Nome
Nom
Name
GUSTAVO DARTAGNAN XAVIER DO REGO

Sexo
Sexe
MASCULINO

Lugar e data do nascimento
Lieu et date de naissance
Place and date of birth
CAMPO MOURÃO/PR
EM 23 DE SETEMBRO DE 1978

Filiação
Noms des parents
Father's and mother's name
ELIAS XAVIER DO REGO NETO
e
BERNADETE CHIUZA XAVIER

Repartição expedidora – *Délivré par – Issued by*
SR/DPF/PR SERVIÇO DE POLÍCIA MARÍTIMA AÉREA E DE FRONTEIRAS CURITIBA

Válido até – *Valable jusqu'au – Valid until*
27 ABR 2003

Data da expedição – *Délivré le – Issued on*
28 ABR 1993



Moisés Oliveira dos Santos
Agente de Polícia Federal
Matr. 2.416.682

Nome e cargo do funcionário que o concedeu
Nom et qualité de l'agent expéditeur
Name and function of the issuing authority

VISTOS VISAS

VISA

UNITED STATES OF AMERICA



Issuing Post Name
SAO PAULO

Control Number
20112567260003

Surname
XAVIER DO REGO

Given Name
GUSTAVO DARTAGNAN

Visa Type /Class
R B1/B2

Passport Number
CW965172

Sex
M

Birth Date
23SEP1978

Nationality
BRZL

Entries
M

Issue Date
14SEP2011

Expiration Date
12SEP2021

1011

Annotation

F0825002

* *

VNUSAXAVIER<DO<REGO<<GUSTAVO<DARTAGNAN<<<<<<

CW965172<2BRA7809235M2109125B3SPL1443J840092

VISTOS - VISAS

8

030 U.S. IMMIGRATION NYC ADMITTED SAO

AUG 07 2001

CLASS

UNTIL

UNITED STATES OF AMERICA

VISA



Issuing Post Name
SAO PAULO

Control Number
19992111460003

Surname
DO REGO

Given Name
GUSTAVO DARTAGNAN XAVIER

Visa Type/Class
R B2

Passport Number
CF151265

Sex
M

Birth Date
23SEP1978

Nationality
BRZL

Entries
M

Issue Date
30JUL1999

Expiry Date
29JUL2009

Annotation

CANCELLED WITHOUT PREJUDICE

33462156

VNBRADO<REGO<<GUSTAVO<DARTAGNAN<XAVIER<<<<<<

CF151265<7BRA7809235M9907308B230E4448A1B1C27

Document digitally signed in accordance with Provisional Measure No. 2200-2/2001 which established the Brazilian Public Key Infrastructure (ICP-BRASIL)

FEDERATIVE REPUBLIC OF BRAZIL
CIVIL REGISTRY OF NATURAL PERSONS

MARRIAGE CERTIFICATE

NAMES	CPF
GUSTAVO DARTAGNAN XAVIER DO REGO	**025.907.999-50**
MILENA CRISTINA PERCIAK	**055.115.229-02**

REGISTRATION

084681 01 55 2018 2 00077 042 0018309 14

FULL BIRTH NAMES, DATES OF BIRTH, PLACE OF BIRTH, NATIONALITY, AND FILIATION OF THE SPOUSES

GUSTAVO DARTAGNAN XAVIER DO REGO, BORN ON SEPTEMBER 23, 1978, IN CAMPO MOURÃO-PARANÁ, BRAZILIAN, SON OF ELIAS XAVIER DO REGO NETO AND BERNADETE CHIUZA XAVIER. MILENA CRISTINA PERCIAK, BORN ON AUGUST 5, 1986, IN ARAUCÁRIA-PARANÁ, BRAZILIAN, DAUGHTER OF JOSÉ PERCIAK AND MELANIA GAWLAK PERCIAK.

DATE OF MARRIAGE REGISTRATION (IN FULL)	DAY	MONTH	YEAR
SEPTEMBER THIRD, TWO THOUSAND EIGHTEEN	**03**	**09**	**2018**

MARITAL PROPERTY REGIME

PARTIAL COMMUNITY PROPERTY

NAME EACH SPOUSE BEGAN TO USE (IF CHANGED)

ANNOTATIONS / NOTES TO BE ADDED

FEES: R$43.05 (175.00 VRC), SEARCHES: R$2.46 (10.00 VRC), FUNDEP: R$2.29, ISSQN: R$2.29. TOTAL: R$50.09

REGISTRATION NOTES

SEE REVERSE

Certificate issued by Margarete Terumi Seima - Designated Registrar of the Civil Registry of Natural Persons of Araucária, who electronically signed it on March 22, 2023, pursuant to Provision No. 46/2015 of the National Council of Justice.

The content of this certificate is true. I certify.

Certificate issued on March 22, 2023.

This is an electronic public document, issued under Provisional Measure 2200-2 of 08/24/2001, and is only valid in digital format, reproduction is prohibited.

Civil Registry Office of Natural Persons
Araucária - Paraná
Hilda Lukalski Seima - Registrar
Rua Fernando Suckow, 438 - Centro - ZIP Code: 83702-200
Email: rcvaraucaria@hotmail.com
Phone: (41) 3642-1348

Validation of the digital signature attribute
www.registrocivil.org.br/validacao
Hash Code:
139C043D4E6E19E9AB987D454AE19D5B
Civil Registry Information Center - CRC - National

JUDICIARY - COURT OF JUSTICE OF THE STATE OF PARANÁ (TJPR) JUDICIAL ADMINISTRATIVE DEPARTMENT
Digital Seal: SFRC2.pch68.CIcc9 yHOf2.FN65q
Check the seal at http://funarpen.com.br

GUSTAVO DARTAGNAN XAVIER DO REGO

REGISTRATION NOTES

DOCUMENT TYPE	NUMBER	DATE OF ISSUE	ISSUING AUTHORITY	VALIDITY DATE
ID	6.129.994-7	03/06/1996	SSP/PR	

ZIP CODE	83702-090

* THE REGISTRATION NOTES ABOVE DO NOT EXEMPT THE INTERESTED PARTY FROM PRESENTING THE ORIGINAL DOCUMENT, WHEN REQUIRED BY THE REQUESTING AUTHORITY OR WHEN NECESSARY FOR IDENTIFICATION OF ITS HOLDER.

MILENA CRISTINA PERCIAK

REGISTRATION NOTES

DOCUMENT TYPE	NUMBER	DATE OF ISSUE	ISSUING AUTHORITY	VALIDITY DATE
ID	9.047.735-8	05/30/2000	SSP/PR	

ZIP CODE	83702-090

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Certificate issued by Margarete Terumi Seima - Designated Registrar of the Civil Registry of Natural Persons of Araucária, who electronically signed it on March 22, 2023, pursuant to Provision No. 46/2015 of the National Council of Justice

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Civil Registry Office of Natural Persons
Araucária - Paraná
Hilda Lukalski Seima - Registrar
Rua Fernando Suckow, 438 - Centro - ZIP Code: 83702-200
Email: rcvaraucaria@hotmail.com
Phone: (41) 36421348

Validation of the digital signature attribute
www.registrocivil.org.br/validacao
Hash Code:
139C043D4E6E19E9AB987D454AE19D5B
Civil Registry Information Center - CRC - National

DETAILED INFORMATION OF THE REGISTRATION

Registration	00188301551987 1 0003 050 0000533 31	cc (55)	Type Of Service Provided, Being: 55: Civil Registration Service of Natural Persons	fffff (0003) Book Number
Standard	aaaaaabbcc dddd e fffff ggg hhhhhhh ii		dddd (1987) Year of Registration	ggg (050) Page Number
DETAILING			e (1) Type Of Book, being: 1: Book A (Birth) 2: Book B (Marriage) 3: Book B Auxiliary (Religious Marriage Registration for Civil Purposes) 4: Book C (Death) 5: Auxiliary Book C (Stillbirth Registration) 6: Book D (Publication of Banns Registration) 7: Book E (Other Acts Related to Civil Registration)	hhhhhhh (0000533) Entry Number
aaaaaa (00188-3)	National Registry Office Code (unique identification of the notary office)			ii (31) Check Digit
bb (01)	Archive Code, being: 01 - Own Archive Other - Incorporated Archives			

For exclusive use in the issuance of civil registration certificates of natural persons

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I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 22, 2026.

Documento assinado digitalmente conforme MP nº 2200-2/2001 que instituiu a Infraestrutura de Chaves Públicas Brasileira (ICP-BRASIL)

REPÚBLICA FEDERATIVA DO BRASIL
REGISTRO CIVIL DAS PESSOAS NATURAIS

CERTIDÃO DE CASAMENTO

NOMES

GUSTAVO DARTAGNAN XAVIER DO REGO — CPF **025.907.999-50**

MILENA CRISTINA PERCIAK — CPF **055.115.229-02**

MATRÍCULA

084681 01 55 2018 2 00077 042 0018309 14

NOMES COMPLETOS DE SOLTEIRO, DATAS DE NASCIMENTO, NATURALIDADE, NACIONALIDADE E FILIAÇÃO DOS CÔNJUGES

GUSTAVO DARTAGNAN XAVIER DO REGO, NASCIDO AOS 23 DE SETEMBRO DE 1978, NATURAL DE CAMPO MOURÃO-PR, DE NACIONALIDADE BRASILEIRA, FILHO DE ELIAS XAVIER DO REGO NETO E DE BERNADETE CHIUZA XAVIER. MILENA CRISTINA PERCIAK, NASCIDA AOS 05 DE AGOSTO DE 1986, NATURAL DE ARAUCÁRIA-PR, DE NACIONALIDADE BRASILEIRA, FILHA DE JOSÉ PERCIAK E DE MELANIA GAWLAK PERCIAK.

DATA DO REGISTRO DO CASAMENTO (POR EXTENSO)

TRÊS DE SETEMBRO DE DOIS MIL E DEZOITO

DIA **03** | MÊS **09** | ANO **2018**

REGIME DE BENS DO CASAMENTO

COMUNHÃO PARCIAL DE BENS

NOME QUE CADA UM DOS CÔNJUGES PASSOU A UTILIZAR (QUANDO HOUVER ALTERAÇÃO)

AVERBAÇÕES / ANOTAÇÕES À ACRESCER

EMOLUMENTOS: R$43,05(VRC 175,00), BUSCAS: R$2,46(VRC 10,00) FUNDEP: R$2,29, ISSQN: R$2,29. TOTAL: R$50,09

ANOTAÇÕES DE CADASTRO

VIDE VERSO

Certidão lavrada por Margarete Terumi Seima - Oficial Designada do Registro Civil das Pessoas Naturais de Araucária, o(a) qual assinou eletronicamente aos 22 de Março de 2023, nos termos do Provimento nº 46/2015 do Conselho Nacional de Justiça

O conteúdo da certidão é verdadeiro. Dou fé

Certidão emitida em 22 de Março de 2023

Este é um documento público eletrônico, emitido nos termos da Medida Provisória 2200-2, de 24/08/2001, só tendo validade em formato digital, vedada a sua reprodução.

Oficial de Registro Civil das Pessoas Naturais
Araucária - PR
Hilda Lukalski Seima - Oficial
Rua Fernando Suckow, 438 - Centro - CEP: 83702-200
E-mail: rcvaraucaria@hotmail.com
Tel: (41) 36421348

Validação do atributo da assinatura digital
www.registrocivil.org.br/validacao
Cod. Hash:
139C043D4E6E19E9AB987D454AE19D5B
Central de Informações do Registro Civil - CRC-Nacional

PODER JUDICIÁRIO - TJPR CORREGEDORIA GERAL DE JUSTIÇA
Selo Digital: SFRC2.pch68.CIcc9 yHOf2.FN65q
Consulte selo em http://funarpen.com.br

GUSTAVO DARTAGNAN XAVIER DO REGO

ANOTAÇÕES DE CADASTRO

TIPO DOCUMENTO	NÚMERO	DATA EXPEDIÇÃO	ORGÃO EXPEDIDOR	DATA DE VALIDADE
RG	6.129.994-7	06/03/1996	SSP/PR	

CEP RESIDENCIAL	83702-090

* AS ANOTAÇÕES DE CADASTRO ACIMA NÃO DISPENSAM A PARTE INTERESSADA DA APRESENTAÇÃO DO DOCUMENTO ORIGINAL, QUANDO EXIGIDO PELO ORGÃO SOLICITANTE OU QUANDO NECESSÁRIO PARA IDENTIFICAÇÃO DE SEU PORTADOR.

MILENA CRISTINA PERCIAK

ANOTAÇÕES DE CADASTRO

TIPO DOCUMENTO	NÚMERO	DATA EXPEDIÇÃO	ORGÃO EXPEDIDOR	DATA DE VALIDADE
RG	9.047.735-8	30/05/2000	SSP/PR	

CEP RESIDENCIAL	83702-090

* AS ANOTAÇÕES DE CADASTRO ACIMA NÃO DISPENSAM A PARTE INTERESSADA DA APRESENTAÇÃO DO DOCUMENTO ORIGINAL, QUANDO EXIGIDO PELO ORGÃO SOLICITANTE OU QUANDO NECESSÁRIO PARA IDENTIFICAÇÃO DE SEU PORTADOR.

Certidão lavrada por Margarete Terumi Seima - Oficial Designada do Registro Civil das Pessoas Naturais de Araucária, o(a) qual assinou eletronicamente aos 22 de Março de 2023, nos termos do Provimento nº 46/2015 do Conselho Nacional de Justiça

O conteúdo da certidão é verdadeiro. Dou fé

Certidão emitida em 22 de Março de 2023

Este é um documento público eletrônico, emitido nos termos da Medida Provisória 2200-2, de 24/08/2001, só tendo validade em formato digital, vedada a sua reprodução.

Oficial de Registro Civil das Pessoas Naturais

Araucária - PR

Hilda Lukalski Seima - Oficial

Rua Fernando Suckow, 438 - Centro - CEP: 83702-200

E-mail: rcvaraucaria@hotmail.com

Tel: (41) 36421348

Validação do atributo da assinatura digital

www.registrocivil.org.br/validacao

Cod. Hash:
139C043D4E6E19E9AB987D454AE19D5B

Central de Informações do Registro Civil - CRC Nacional

DETALHAMENTO DA MATRÍCULA

Matrícula	001883015519871 0003 050 0000533 31	cc (55) Tipo de Serviço Prestado, sendo: 55: Serviço de Registro Civil das Pessoas Naturais	ffff (0003)	Número do livro
Padrão	aaaaaabbcc dddd e ffff ggg hhhhhhh ii	dddd (1987) Ano do Registro	ggg (050)	Número da folha
DETALHAMENTO		e (1) Tipo de livro, sendo: 1: Livro A (Nascimento) 2: Livro B (Casamento) 3: Livro B Auxiliar (Registro de casamento religioso para fins civis) 4: Livro C (Óbito) 5: Livro C Auxiliar (Registro de Natimortos) 6: Livro D (Registro de Proclamas) 7: Livro E (Demais atos relativos ao Registro Civil)	hhhhhhh (0000533)	Número do Termo
aaaaaa (00188-3)	Código Nacional da Serventia (identificação única do cartório)		ii (31)	Dígito Verificador
bb (01)	Código do Acervo, sendo: 01 - Acervo Próprio Outros - Acervos Incorporados			

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xQaKr. FYVHF
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FEDERATIVE REPUBLIC OF BRAZIL
CIVIL REGISTRY OF NATURAL PERSONS

BIRTH CERTIFICATE

Name

MILENA CRISTINA PERCIAK

CPF: No Record **

Registration

084681 01 55 1986 1 00055 242 0010763 48

Date of birth in full	Day	Month	Year
August fifth, nineteen eighty-six **	05	08	1986

Time of birth	City of birth
9:30 AM	Araucária-Paraná **

City of registration and state	Place, City of Birth and state	Sex
Araucária-Paraná **	São Vicente de Paulo Hospital, Araucária- Paraná **	Female

Filiation
JOSÉ PERCIAK and **MELANIA GAWLAK PERCIAK**, born in the state of Paraná, residents at Rua Lourenço Jasiocha, 763, Centro, in Araucária/Paraná **

Grandparents
FRANCISCO PERCIAK, ESTEFANIA PERCIAK, PEDRO GAWLAK AND APOLONIA GAWLAK **

Twin	Name and Registration number of twins
No	---------- **

Date of registration in full	Live birth registration number
August sixth, nineteen eighty-six **	No Record

NOTES/ANNOTATIONS TO BE ADDED
No Record. Fees: R$33.77 (VRC 174.97); Stamp: R$2.34; Total: R$36.11. **

REGISTRATION NOTES
No record **

Name of the Office
Civil Registry and Titles and Documents

Registrar
Hilda Lukalski Seima

City and Judicial District / State
Araucária - State of Paraná

Address
Rua Fernando Suckow, 438
ZIP Code: 83.702-200 - Phone: (41)3642-1348

The content of this certificate is true. I certify.

Araucária-Paraná, June 13, 2018.

----//signature//----
Elizangela Cristina Pinheiro de Souza Faé
Clerk

CIVIL REGISTRY OF NATURAL PERSONS OF ARAUCÁRIA-PARANÁ

HILDA LUKALSKI SEIMA
REGISTRAR

GILSON MARCOS DE FREITAS
DEPUTY - ORDINANCE 15/2008

ELISANGELA C. P. DE SOUZA FAÉ
AUTHORIZED CLERK - ORDINANCE 05/2011

Elizangela C. P. de Souza Faé
Authorized Clerk
Ordinance 05/2011

FUNARPEN AA 003511284 P

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 13, 2026.

FUNARPEN
SELO DIGITAL Nº
KDoaT.3tDzM.DvsJL
xQaKr.FYVHF
consulte esse selo em
http://funarpen.com.br

REPÚBLICA FEDERATIVA DO BRASIL
REGISTRO CIVIL DAS PESSOAS NATURAIS

CERTIDÃO DE NASCIMENTO

Nome

MILENA CRISTINA PERCIAK

CPF: Sem Informação ••

Matrícula

084681 01 55 1986 1 00055 242 0010763 48

Data do nascimento por extenso	Dia	Mês	Ano
Cinco de agosto de um mil e novecentos e oitenta e seis ••	05	08	1986

Hora	Naturalidade
09h 30min	Araucária-PR ••

Município de registro e unidade de federação	Local, Município de Nascimento e UF	Sexo
Araucária-PR ••	Hospital São Vicente de Paulo, Araucária-PR ••	Feminino

Filiação
JOSÉ PERCIAK e **MELANIA GAWLAK PERCIAK**, naturais do Estado do Paraná, residentes à Rua Lourenço Jasiocha, 763, Centro em Araucária/PR ••

Avós
FRANCISCO PERCIAK, ESTEFANIA PERCIAK, PEDRO GAWLAK E APOLONIA GAWLAK ••

Gêmeo	Nome e Matrícula do(s) gêmeo(s)
Não	---------- ••

Data do registro por extenso	Número da D.N.V
Seis de agosto de um mil e novecentos e oitenta e seis ••	Sem Informação

OBSERVAÇÃO/ANOTAÇÕES A ACRESCER
Nada Consta. Custas: R$33,77 (VRC 174,97); Selo; R$2,34; Total: R$36,11. ••

Anotações de cadastro
Nada consta. ••

Nome do Ofício
Registro Civil e Títulos e Documentos

Oficial Registrador
Hilda Lukalski Seima

Município e Comarca / UF
Araucária - Estado do Paraná

Endereço
R. Fernando Suckow, 438
CEP: 83.702-200 - Fone: (41)3642-1348

O conteúdo da certidão é verdadeiro. Dou fé.

Araucária-PR, 13 de junho de 2018.

Elisangela Cristina Pinheiro de Souza Faé
Escrevente

REGISTRO CIVIL DAS PESSOAS NATURAIS DE ARAUCÁRIA-PR
HILDA LUKALSKI SEIMA
OFICIAL
GILSON MARCOS DE FREITAS
SUBSTITUTO-PORT. 15/2008
ELISANGELA C. P. DE SOUZA FAÉ
ESCREVENTE AUTORIZADA - PORT. 05/2011

Elisangela C. P. de Souza Faé
Escrevente Autorizada
Portaria 05/2011

FUNARPEN AA 003511284 P

FUNARPEN

INSPECTION SEAL

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https://selo.funarpen.com.br

FEDERATIVE REPUBLIC OF BRAZIL
CIVIL REGISTRY OF NATURAL PERSONS

BIRTH CERTIFICATE

Name

MIGUEL PERCIAK XAVIER

CPF: **166.721.549-30 ****

Registration

084681 01 55 2023 1 00228 124 0074602 13

Date of birth in full	Day	Month	Year
May seventeenth, two thousand twenty-three **	17	05	2023

Time of birth	City of birth
3:41 AM	Araucária-Paraná **

City of registration and state	Place, City of Birth and state	Sex
Araucária-Paraná **	Santa Brígida Hospital and Maternity, Curitiba-Paraná	Male

Filiation

GUSTAVO DARTAGNAN XAVIER DO REGO and **MILENA CRISTINA PERCIAK**, he was born in Campo Mourão/Paraná, she was born in Araucária/Paraná, residents at Rua José Gondek, 133, block A, apartment 37, Costeira, in Araucária/Paraná **

Grandparents

ELIAS XAVIER DO REGO NETO, BERNADETE CHIUZA XAVIER, JOSE PERCIAKE AND MELANIA GAWLAK PERCIAK **

Twin	Name and Registration number of twins
No	---------- **

Date of registration in full	Live birth registration number
May twenty-third, two thousand twenty-three **	30-92021093-9

NOTES/ANNOTATIONS TO BE ADDED

No Record. Fees Exempt (Federal Law 9,534/97). **

Registration notes

No record **

Name of the Office

Civil Registry and Titles and Documents

Registrar

Hilda Lukalski Seima

City and Judicial District / State

Araucária - State of Paraná

Address

Rua Fernando Suckow, 438
ZIP Code: 83.702-200 - Phone: (41)3642-1348

EXTRAJUDICIAL NOTARY OFFICE
Civil Registry of Natural Persons;
Registry of Titles and Documents and Legal Entities
Rua Fernando Suckow, 438 - Centro
ZIP Code 83.702-200 Araucária - Paraná.

The content of this certificate is true. I certify.

Araucária-Paraná, May 23, 2023.

----//signature//----

Gilson Marcos de Freitas

Clerk

FUNARPEN BC 04218687 BRP

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 13, 2026.

FUNARPEN

SELO DE FISCALIZAÇÃO
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https://selo.funarpen.com.br

REPÚBLICA FEDERATIVA DO BRASIL
REGISTRO CIVIL DAS PESSOAS NATURAIS

CERTIDÃO DE NASCIMENTO

Nome
MIGUEL PERCIAK XAVIER

CPF: 166.721.549-30 ••

Matrícula
084681 01 55 2023 1 00228 124 0074602 13

Data do nascimento por extenso	Dia	Mês	Ano
Dezessete de maio de dois mil e vinte e três ••	17	05	2023

Hora	Naturalidade
03h 41min	Araucária-PR ••

Município de registro e unidade de federação	Local, Município de Nascimento e UF	Sexo
Araucária-PR ••	Hospital e Maternidade Santa Brigida, Curitiba-PR	Masculino

Filiação
GUSTAVO DARTAGNAN XAVIER DO REGO e **MILENA CRISTINA PERCIAK**, ele natural de Campo Mourão/PR, ela natural de Araucária/PR, residentes à Rua José Gondek, 133, bloco A apto 37, Costeira, em Araucária/PR ••

Avós
ELIAS XAVIER DO REGO NETO, BERNADETE CHIUZA XAVIER, JOSE PERCIAK E MELANIA GAWLAK PERCIAK ••

Gêmeo	Nome e Matrícula do(s) gêmeo(s)
Não	---------- ••

Data do registro por extenso	Número da D.N.V
Vinte e três de maio de dois mil e vinte e três ••	30-92021093-9

OBSERVAÇÃO/ANOTAÇÕES A ACRESCER
Nada Consta. Custas Isentas(Lei Federal 9.534/97). ••

Anotações de cadastro
Nada consta. ••

Nome do Ofício
Registro Civil e Títulos e Documentos

Oficial Registrador
Hilda Lukalski Seima

Município e Comarca / UF
Araucária - Estado do Paraná

Endereço
R. Fernando Suckow, 438
CEP: 83.702-200 - Fone: (41)3642-1348

SERVENTIA EXTRAJUDICIAL
Registro Civil das Pessoas Naturais;
Registro de Tit. e Doc. e Pessoa Jurídica
Rua Fernando Suckow, 438-Centro
CEP 83.702-200 Araucária-PR.

O conteúdo da certidão é verdadeiro. Dou fé.

Araucária-PR, 23 de maio de 2023.

Gilson Marcos de Freitas
Escrevente

Indústria Gráfica Brasileira Ltda

FUNARPEN BC 04218687 BRP

FUNARPEN

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https://selo.funarpen.com

FEDERATIVE REPUBLIC OF BRAZIL
CIVIL REGISTRY OF NATURAL PERSONS

BIRTH CERTIFICATE

Name

VERÔNICA PERCIAK XAVIER

CPF

057.525.909-49

Registration

084681 01 55 2025 1 00234 260 0077738 02

Date of birth	Day	Month	Year
April seventeenth, two thousand twenty-five	17	04	2025

Time of birth	City of birth	State
11:02 PM	Araucária	Paraná

Place of birth	City of Birth	State	Sex
Santa Brígida Hospital and Maternity	Curitiba	Paraná	Female

Parent's Name	City of birth	State
GUSTAVO DARTAGNAN XAVIER DO REGO	Campo Mourão	Paraná

Respective grandparents
ELIAS XAVIER DO REGO NETO; BERNADETE CHIUZA XAVIER

Parent's Name	City of birth	State
MILENA CRISTINA PERCIAK	Araucária	Paraná

Respective grandparents
JOSÉ PERCIAK; MELANIA GAWLAK PERCIAK

Date of registration	Live birth registration number
April twenty-third, two thousand twenty-five	30-95676971-5

Notes/Annotations
No record. Fees Exempt (Federal Law 9,534/97).

Registration notes
No record **

CNS No. 084681

Name of the Office
Civil Registry Service of Natural Persons

Registrar
Margarete Terumi Seima

City and Judicial District / State
Araucária/Paraná

Address
Rua Fernando Suckow, 438
ZIP Code: 83.702-200 - Phone: (41)3642-1348

The content of this certificate is true. I certify.

Araucária-Paraná, April 23, 2025.

----//signature//----
Lucas Borges da Luz
Clerk

LUCAS BORGES DA LUZ
Clerk - Ordinance 32/2023

BA 03230846 6 BRP

ANOREG
Association of Notaries and Registrars of Brazil

ARPENBRASIL
NATIONAL ASSOCIATION OF NATURAL PERSONS REGISTRARS

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.



_____ Date: April 13, 2026.

FUNARPEN

SELO DE FISCALIZAÇÃO
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https://selo.funarpen.com.br

REPÚBLICA FEDERATIVA DO BRASIL
REGISTRO CIVIL DAS PESSOAS NATURAIS

CERTIDÃO DE NASCIMENTO

Nome

VERÔNICA PERCIAK XAVIER

Número do CPF

057.525.909-49

Matrícula

084681 01 55 2025 1 00234 260 0077738 02

Data do nascimento	Dia	Mês	Ano
Dezessete de abril de dois mil e vinte e cinco	17	04	2025

Horario de nascimento	Município da naturalidade	UF
23h 02min	Araucária	PR

Local de nascimento	Município de Nascimento	UF	Sexo
Hospital e Maternidade Santa Brigida	Curitiba	PR	Feminino

Nome do(a) Genitor(a)	Município de nascimento	UF
GUSTAVO DARTAGNAN XAVIER DO REGO	Campo Mourão	PR

Avô(ó)(s) respectivo(s)
ELIAS XAVIER DO REGO NETO; BERNADETE CHIUZA XAVIER

Nome do(a) Genitor(a)	Município de nascimento	UF
MILENA CRISTINA PERCIAK	Araucária	PR

Avô(ó)(s) respectivo(s)
JOSÉ PERCIAK; MELANIA GAWLAK PERCIAK

Data de registro	D.N.V
Vinte e três de abril de dois mil e vinte e cinco	30-95676971-5

Anotações/Averbações
Nada Consta. Custas Isentas (Lei Federal 9.534/97).

Anotações voluntárias de cadastro
Nada consta. ••

CNS nº 084681

Nome do Ofício
Serviço de Registro Civil das Pessoas Naturais

Oficial Registrador
Margarete Terumi Seima

Município e Comarca / UF
Araucária/PR

Endereço
R. Fernando Suckow, 438
CEP: 83.702-200 - Fone: (41)3642-1348

O conteúdo da certidão é verdadeiro. Dou fé.

Araucária -PR, 23 de abril de 2025 .

Lucas Borges da Luz
Escrevente

LUCAS BORGES DA LUZ
Escrevente Port 32/2023

Indústria Gráfica Brasileira ltda

ARPENBRASIL BA 032308466 BRP

FV584801

Milena Cristina Perciak

Assinatura do titular / Signature du titulaire
Bearer's signature / Firma del titular

Este passaporte deve ser assinado pelo titular, salvo em caso de incapacidade.

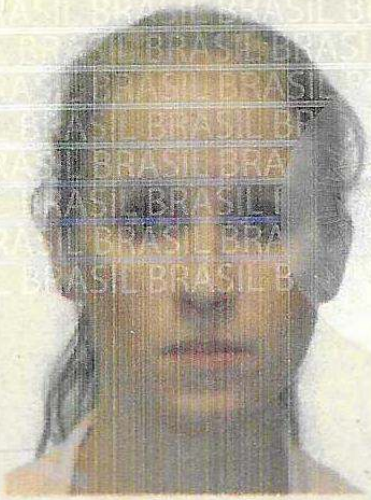
Ce passeport doit être signé par le titulaire, sauf en cas d'incapacité.

This passport must be signed, except where the bearer is unable to do so.

Este pasaporte debe ser firmado por el titular, salvo en caso de incapacidad.

REPÚBLICA FEDERATIVA DO BRASIL

PASSAPORTE
PASSPORT



BRA

TIPO / TYPE: P
PAÍS EMISSOR / ISSUING COUNTRY: BRA
PASSAPORTE Nº / PASSPORT No: FV584801

SOBRENOME / SURNAME
PERCIAK

NOME / GIVEN NAMES
MILENA CRISTINA

NACIONALIDADE / NATIONALITY
BRASILEIRO(A)

DATA DO NASCIMENTO / DATE OF BIRTH
05 AGO/AUG 1986

IDENTIDADE Nº / PERSONAL No

SEXO / SEX
F

NATURALIDADE / PLACE OF BIRTH
ARAUCÁRIA/PR

FILIAÇÃO / FILIATION
MELANIA GAWLAK PERCIAK

JOSE PERCIAK

DATA DE EXPEDIÇÃO / DATE OF ISSUE
02 ABR/APR 2018

AUTORIDADE / AUTHORITY
SR/DPF/PR

VÁLIDO ATÉ / DATE OF EXPIRY
01 ABR/APR 2028

P<BRAPERCIAK<<MILENA<CRISTINA<<<<<<<<<<<<<<<
FV584801<2BRA8608055F2804017<<<<<<<<<<<<<<02

VISTOS VISAS

VISA

UNITED STATES OF AMERICA



Issuing Post Name
SAO PAULO

Control Number
20190529930003

Surname
PERCIAK

Given Name
MILENA CRISTINA

Visa Type /Class
R B1/B2

Passport Number	Sex	Birth Date	Nationality
FV584801	F	05AUG1986	BRZL

Entries	Issue Date	Expiration Date	
M	25FEB2019	20FEB2029	1001

Annotation

N8642176

**

VNUSAPERCIAK<<MILENA<CRISTINA<<<<<<<<<<<<<<<

FV584801<2BRA8608055F2902201B3SPL30GQ0942291