CURRICULUM VITAE

PERSONAL INFORMATION

Name UNGUREANU Cristian

Telephone +40-732-005-706 Fax +40-372 84 5724

E-mail cristian.ungureanu@ancom.ro

Nationality Romanian

Date of birth 6 September 1977



INTERNATIONAL ACTIVITIES

A highly experienced and qualified radiocommunications expert with a working career in the Romanian communications regulator (ANCOM) for more than 20 years, Cristian UNGUREANU has also been actively involved in relevant international activities, both at a regional, and at a global level.

At European level, he has represented Romania within various working structures of the Electronic Communications Committee –ECC/WG SE (SE07, SE40), ECC/WG FM (FM44), CPG/PTB, CPG/PTA. Since May 2022 he has been Chair of CEPT/WGSE/SE7. Currently, he is the CEPT coordinator on WRC-23 A.I. 1.18.

At ITU level, he has taken part in the work of ITU-R SG4 (WP 4A, WP 4C), and is involved in the preparatory works for WRC-23. Since August 2020, he has been a Vice-chair of ITU Expert Group on Decision 482 from the European Region.

WORK EXPERIENCE

Date (from – to) November 2019 – present

Name and address of employer

National Authority for Management and Regulation in Communications of Romania (Headquaters), 2 Delea Noua Street, Bucharest 3, Romania

Nomania (Neadquaters), 2 Boloa Noda Circos, Businaissa S, Nomania

Type of business or sector Telecommunication Regulatory Authority RF engineering

Occupation or position held

Main activities and responsibilities

Expert in the Aeronautical, Maritime, Satellite and Amateur Unit

Approximation in the activities of coordinating the orbital position

 Participation in the activities of coordinating the orbital positions assigned to Romania, as well as of elaborating and sending the assignment requests for orbital positions to BR ITU;

- Participation in inter-ministerial groups regarding the development of projects with an impact on satellite radiocommunication services managed within the office;

- Participation in authorization and regulation activities, internal and international coordination, including CEPT and ITU working groups, as well as monitoring and control, related to radiocommunication services managed within the office;

 Administration Manager for e-Submission of Satellite Network and Satellite Interference Reporting and Resolution System.

• Dates (from – to) November 2010 – November 2019

Name and address of employer
 National Authority for Management and Regulation in Communications of Romania

(Headquaters)2 Delea Noua Street, Bucharest 3, Romania

RF engineering

Middle management

· Occupation or position held

· Main activities and responsibilities

Expert at Monitoring Coordination Service

- Managing a team of telecom engineers;
- Elaborating strategies for monitoring campaigns;
- Training new recruits on monitoring problems and standards;
- Budgeting the team;
- Elaborating technical procedures for different kinds of monitoring campaigns;
- Making quality measurements on GSM, CDMA, UMTS, LTE and CDMA based networks;
- Spectrum monitoring (GSM, CDMA, UMTS, LTE, FM and TV broadcasting, PMR/PAMR);
- Interference solving (GSM, CDMA, UMTS, LTE, FM and TV broadcasting, PMR/PAMR);
- Discovering unlicensed radio emissions;
- Finding solutions to eliminate EM interferences appeared in licensed telecommunication systems:
- Supervising the installation and integration of transportable and fix monitoring stations.

• Dates (from - to)

June 2009 to November 2010

· Name and address of employer

National Authority for Management and Regulation in Communications of Romania, laşi Regional Branch, 34A Moara de Vânt Street, laşi, Romania

Type of business or sector

Telecommunication Regulatory Authority

RF engineering

Middle management

Occupation or position held
 Main activities and responsibilities

Head of Unit Regional Control Service

- Managing a team of telecom engineers;
- Elaborating strategies for market surveillance, radio equipment inspection, enforcement campaigns:
- Training new recruits on enforcement problems and standards;
- Budgeting the team;
- Elaborating technical procedures for different kinds of enforcement campaigns.

Dates (from – to)

October 2005 to June 2009

· Name and address of employer

National Regulatory Authority for Communications and Information Technology, Iași Regional Branch, 34A Moara de Vânt Street, Iasi, Romania

. Type of business or sector

Telecommunication Regulatory Authority

RF engineering

Occupation or position held

RF engineer at Authorization and Radiocommunications Bureau

- Main activities and responsibilities
 Frequency allocation for PMR and PAMR systems;
 - Licensing FM/TV stations;
 - Controlling PMR/PAMR networks;
 - Controlling cable TV networks;
 - Database operation and maintenance.

Dates (from – to)

October 2003 to October 2005

· Name and address of employer

General Inspectorate for Communications and Information Technology (Headquater) 22 Italiana Street, Bucharest, Romania

• Type of business or sector

Telecommunication Regulatory Authority

RF engineering

Occupation or position held

RF engineer at Spectrum Management Service

Main activities and responsibilities

- Making quality measurements on GSM, UMTS and CDMA based networks;
- Spectrum monitoring (GSM, CDMA, UMTS, FM and TV broadcasting, PMR/PAMR);
- Perturbation solving (GSM, CDMA, UMTS, FM and TV broadcasting, PMR/PAMR);
- Discovering unlicensed radio emissions;
- Finding solutions to eliminate EM interferences appeared in licensed telecommunication systems;
 - Supervising the installation and integration of transportable monitoring stations.

Dates (from – to)

July 2002 to October 2003

· Name and address of employer

General Inspectorate for Communications and Information Technology, Iași Regional

Branch, 34A Moara de Vânt Street, Iași, Romania

· Type of business or sector

Telecommunication Regulatory Authority

RF engineering

 Occupation or position held · Main activities and responsibilities RF engineer at Authorization and Radiocommunications Bureau

- Frequency allocation for PMR and PAMR systems;

- Licensing FM/TV stations;

- Controlling PMR/PAMR networks;

- Controlling cable TV networks;

- Database operation and maintenance.

EDUCATION AND TRAINING

· Dates (from - to)

30 November to 4 December 2020 and 24 to 28 October 2022

 Name and type of organisation providing education and training ITU

 Principal subjects/occupational skills covered BR Space Software and Databases, BRSIS, Submission of API and Notification for satellite networks not subject to coordination, Submission of non-geostationary satellite systems and networks subject to coordination, Examination of non-geostationary satellite systems and networks including EPFD, Space Monitoring, Harmful Interference and SIRRS, e-Submission of satellite network filings, e-Communications, Submission and receivability of coordination requests of GSO networks, Regulatory and technical examination: general overview, GIBC/PFD for GSO and NGSO networks, Coordination between geostationary satellite networks: Appendix 8, Introduction to Coordination Identification of Nos 9.11A and 9.21 through GIBC-FOS, Notification and recording of frequency assignments for satellite networks subject to coordination, Broadcastingsatellite service and associated feeder-link Plan/List, Implementation of Resolution 559 (WRC-19), AP30/30A submissions and publications, Commenting on Special Sections, Coordination and notification of Earth stations, Bringing into use of GSO and NGSO satellite networks, Cost recovery for satellite network filings

· Title of qualification awarded

Certificate of participation

· Dates (from - to)

30 January - 01 February 2017

· Name and type of organisation providing education and training

Anite Finlad Ltd

· Principal subjects/occupational skills covered Mobile networks introduction; Nemo Outdoor: Principles and Measurements Methos;

Nemo Walker hardware introduction; Nemo Outdoor with Nemo Walker; Nemo Outdoor indoor option for Walker; Nemo servers introduction; Nemo Analyze introduction; Nemo Handy introduction

· Title of qualification awarded

Certificate of Advanced Training

Dates (from – to)

17-20 October and 1-4 November 2016

· Name and type of organisation providing education and training

Anite Finland Ltd

 Principal subjects/occupational skills covered Mobile networks introduction; Nemo Outdoor: Principles and Measurements Methos; Nemo Walker hardware introduction; Nemo Outdoor with Nemo Walker; Nemo Outdoor indoor option for Walker; Nemo servers introduction; Nemo Analyze introduction; Nemo

Handy introduction

· Title of qualification awarded

Certificate of Training

• Dates (from - to) 5-9 January 2015 Name and type of organisation Keysight Technologies providing education and training · Principal subjects/occupational Radio Spectrum Management with Keysight RF Sensor and Surveyor 4D, Geolocation, Vector Signal Analyzer, Audio Player Software skills covered Title of qualification awarded Certificate of Training Completion • Dates (from - to) 25-27 November 2014 · Name and type of organisation Rohde&Schwarz providing education and training · Principal subjects/occupational Portable Receiver PR100 Training for Users skills covered · Title of qualification awarded Certificate of Attendance · Dates (from - to) 2-6 June 2014 · Name and type of organisation Felix Telecom - Alcatel-Lucent Academy Timisoara providing education and training · Principal subjects/occupational LTE - standards and protocols skills covered · Title of qualification awarded Certificate of Achievements 4-8 November 2013 • Dates (from - to) · Name and type of organisation Agilent Technologies providing education and training · Principal subjects/occupational Agilent Technologies Geo-location and Signal Survey training skills covered · Title of qualification awarded Certificate of Achievement • Dates (from - to) 30 September - 04 October 2013 · Name and type of organisation **ICPE-CA Bucharest** providing education and training · Principal subjects/occupational Electromagnetic compatibility skills covered · Title of qualification awarded Certificate of Attendance 2-6 June 2013 Dates (from – to) · Name and type of organisation Rohde&Schwarz providing education and training · Principal subjects/occupational Argus - Training for Experienced Users skills covered · Title of qualification awarded Certificate of Attendance • Dates (from - to) 2-6 June 2013 · Name and type of organisation Rohde&Schwarz providing education and training · Principal subjects/occupational Argus Refresh training skills covered · Title of qualification awarded Certificate of Attendance • Dates (from - to) 12-16 November 2012 · Name and type of organisation CODECS Romania providing education and training · Principal subjects/occupational Internet Protocol TeleVision

skills covered

 Title of qualification awarded 	Certificate of Achievement
 Dates (from – to) 	25-27 June 2012
 Name and type of organisation providing education and training 	Rohde&Schwarz
 Principal subjects/occupational skills covered 	Romes&NPA training
Title of qualification awarded	Certificate of Attendance
• Dates (from - to)	6-8 June 2012
 Name and type of organisation providing education and training 	Rohde&Schwarz
 Principal subjects/occupational skills covered 	LTE&WiMax technologies training
 Title of qualification awarded 	Certificate of Attendance
 Dates (from – to) 	24-27 April 2012
 Name and type of organisation providing education and training 	Rohde&Schwarz
 Principal subjects/occupational skills covered 	Spectrum Monitoring Training
Title of qualification awarded	Certificate of Attendance
• Dates (from - to)	17-20 January 2012
 Name and type of organisation providing education and training 	Rohde&Schwarz
Principal subjects/occupational skills covered	Monitoring Receivers – Advanced Level
 Title of qualification awarded 	Certificate of Attendance
	16 January 2012
 Dates (from – to) 	10 bandary 2012
Dates (from – to) Name and type of organisation providing education and training	Rohde&Schwarz
Name and type of organisation	<u>.</u>
 Name and type of organisation providing education and training Principal subjects/occupational 	Rohde&Schwarz
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to)	Rohde&Schwarz Direction Finding Training – Advanced Level
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded	Rohde&Schwarz Direction Finding Training – Advanced Level Certificate of Attendance 21-25 November 2011 Rohde&Schwarz
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation	Rohde&Schwarz Direction Finding Training – Advanced Level Certificate of Attendance 21-25 November 2011
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational	Rohde&Schwarz Direction Finding Training – Advanced Level Certificate of Attendance 21-25 November 2011 Rohde&Schwarz
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational skills covered	Rohde&Schwarz Direction Finding Training – Advanced Level Certificate of Attendance 21-25 November 2011 Rohde&Schwarz Radiomonitoring and Direction Finding training
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded	Rohde&Schwarz Direction Finding Training – Advanced Level Certificate of Attendance 21-25 November 2011 Rohde&Schwarz Radiomonitoring and Direction Finding training Certificate of Attendance
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation	Rohde&Schwarz Direction Finding Training – Advanced Level Certificate of Attendance 21-25 November 2011 Rohde&Schwarz Radiomonitoring and Direction Finding training Certificate of Attendance 28 November – 02 December 2011
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational	Rohde&Schwarz Direction Finding Training – Advanced Level Certificate of Attendance 21-25 November 2011 Rohde&Schwarz Radiomonitoring and Direction Finding training Certificate of Attendance 28 November – 02 December 2011 Rohde&Schwarz
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational skills covered	Ponde&Schwarz Direction Finding Training – Advanced Level Certificate of Attendance 21-25 November 2011 Rohde&Schwarz Radiomonitoring and Direction Finding training Certificate of Attendance 28 November – 02 December 2011 Rohde&Schwarz Argus training
Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded Dates (from – to) Name and type of organisation providing education and training Principal subjects/occupational skills covered Title of qualification awarded	Point Robbins Schwarz Direction Finding Training – Advanced Level Certificate of Attendance 21-25 November 2011 Robbins Schwarz Radiomonitoring and Direction Finding training Certificate of Attendance 28 November – 02 December 2011 Robbins Schwarz Argus training Certificate of Attendance

skills covered	
Title of qualification awarded	Certificate of Achievement
• Dates (from - to)	13-16 December 2010
Name and type of organisation providing education and training	Radiocom Romania
Principal subjects/occupational skills covered	Digital Television
Title of qualification awarded	Participation diploma
• Dates (from – to)	22-27 November 2010
Name and type of organisation providing education and training	Rohde & Schwarz
Principal subjects/occupational skills covered	Argus Monitoring Software
Title of qualification awarded	Participation diploma
• Dates (from – to)	1-5 November 2010
Name and type of organisation	Rohde & Schwarz
providing education and training	Deutsche Telekom Hungary
Principal subjects/occupational	Digital modulation Techniques
skills covered	Radio Network Planning and Optimization
 Title of qualification awarded 	Participation diploma
• Dates (from – to)	May to November 2010
Name and type of organisation providing education and training	CODECS Romania
Principal subjects/occupational	Project management
skills covered	
Title of qualification awarded	Participation diploma
• Dates (from – to)	October 2009
 Name and type of organisation providing education and training 	AVANTERA Romania
Principal subjects/occupational skills covered	development of student leadership skills in his triple capacity as: process manager, mentor for colleagues and team leader
Title of qualification awarded	Certificate of Attendance
• Dates (from – to)	20-24 October 2008
Name and type of organisation providing education and training	Radiocom Romania
Principal subjects/occupational	TV and radio broadcasting measuring equipment
skills covered • Title of qualification awarded	Participation diploma
• Dates (from – to)	3-5 July 2007
Name and type of organisation providing education and training	International Telecomunication Union, Kyiv, Ukraine
Principal subjects/occupational skills covered	Economic aspects of national radio frequency spectrum management
Title of qualification awarded	Cartificate of Attendance

Certificate of Attendance

• Title of qualification awarded

• Dates (from - to) 19-21 July 2006

· Name and type of organisation providing education and training International Telecomunication Union, Kyiv, Ukraine

Principal subjects/occupational

Trends in development of national spectrum monitoring systems

skills covered

· Title of qualification awarded Certificate of Attendance

Dates (from – to)

04 December 2006 - 30 June 2007

 Name and type of organisation providing education and training Faculty of Electronics and Telecommunications, Technical University "Gheorghe Asachi"

lasi, Romania

 Principal subjects/occupational **Digital Radiocommunications**

PC Networks skills covered

Title of qualification awarded

Participation diploma

• Dates (from - to)

October 1996 - June 2001

 Name and type of organisation providing education and training

Faculty of Electronics and Telecommunications, Technical University "Gheorghe Asachi"

laşi, Romania

 Principal subjects/occupational skills covered

Basic knowledge of radio/telecommunications systems

PC Networks Programming

Operating Systems

· Title of qualification awarded

Engineer

· Dates (from - to)

September 1992 - June 1996

· Name and type of organisation providing education and training IT High School "Grigore Moisil", Iași, Romania

 Principal subjects/occupational **Mathematics**

> **Physics** skills covered

Informatics

· Title of qualification awarded

Baccalaureate Diploma

PERSONAL SKILLS AND COMPETENCES

Romanian MOTHER TONGUE

OTHER LANGUAGES

English

· Reading skills Proficient user B2 Writing skills Proficient user B2 Verbal skills Proficient user B2

French

· Reading skills Basic user A1 · Writing skills Basic user A1 Verbal skills Basic user A1

SOCIAL SKILLS AND COMPETENCES Very good interpersonal and communication skills, all of those obtained as a participant at:

- national and international meetings (member of ECC WG/SE (SE07 and SE40) Group, ECC/WG FM (FM44), CPG/PTB, CPG/PTA, ITU SG4);
- various national spectrum monitoring and enforcement campaigns (together with colleagues from different Regional Divisions or network operators).

ORGANISATIONAL SKILLS AND COMPETENCES

Very good and efficient leader:

as Head of Unit Regional Control Service I've had to recruit, "grow" and coordinate a team
of radio engineers for solving various problems regarding the radio spectrum enforcement
aspects and also various administrative tasks like contracts, maintenance contracts,
budgeting, etc.

TECHNICAL SKILLS AND COMPETENCES

Excellent command of:

- Keysight ESA, VSA and PSA series spectrum analyzers,
- Keysight N9912A, N9340B spectrum analyzers,
- Rohde & Schwarz ESI 40 spectrum analyzer,
- Rohde & Schwarz FSL6 spectrum analyzer,
- Rohde & Schwarz ESMD spectrum monitoring receiver,
- Rohde & Schwarz PR100 spectrum monitoring receiver,
- Rohde & Schwarz SMR 40 signal generator,
- Rohde & Schwarz SMA 100 signal generator,
- Anritsu MT8220T and MS2724B spectrum analyzers,
- Narda SRM-3006 spectrum analyzers,
- Kathrein MSK 200/M4 75 spectrum analyzers,
- Tadiran spectrum monitoring system,
- Rohde&Schwarz spectrum monitoring system,
- Anite Nemo (Keysight) benchmark system,
- Rohde & Schwarz monitoring system for quality measurements on mobile communications networks (TSMU, TSMW, Qualcomm Test Phones, etc.),
- various kinds of antennas, attenuators, and filters,
- various software for spectrum monitoring (Argus, Romes, Spectrum, Anite Nemo),
- radio planning and spectrum management software ATDI ICS Telecom.

All of these competences were acquired in a real radiocom environment.

Very familiar with different kinds of standards, regulations, recommendations, and reports issued by ITU, ECC, ETSI, ERO, CEPT, regarding various radio technologies, propagation, planning and spectrum monitoring.

Level of knowledge for:

- -Windows advanced
- Microsoft Office advanced
- ICS Telecom (radio planning tool) advanced
- Mapinfo advanced
- ROMES, ARGUS (Rohde & Schwarz software) advanced
- PSPICE intermediate
- VHDL, Matlab, C/C++ intermediate

All these computer skills were acquired through on-site, daily work.

ARTISTIC SKILLS AND COMPETENCES

I like listening to rock and classical music. I have a large collection of albums of these musical genres.

OTHER SKILLS AND COMPETENCES

Very well organized and well-mannered.

Can work independently as well in teams, under stress.

Problem-solving oriented.

DRIVING LICENCE(S)

B category since 1998

ADDITIONAL INFORMATION

Available for extensive global travel.

Contact persons for references:

Name: Liviu Goraș

Position: Professor at Technical University "Gheorghe Asachi" lasi, Faculty of

Electronics and Telecommunications

Address: Technical University "Gheorghe Asachi" lasi, Faculty of Electronics and

Telecommunications, B-dul Carol I, no. 11, lasi, Romania

Phone: +40-0232 213737, int. 207 e-mail: lgoras@etti.tuiasi.ro

Name: Nicolae Cojan

Position: Professor at Technical University "Gheorghe Asachi" lasi, Faculty of

Electronics and Telecommunications

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Telecommunications, B-dul Carol I, no. 11, lasi, Romania

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Name: Marian Luiz Mircea Angheluta

Position: former Head of Unit Monitoring Coordination Service at: National Regulatory

Authority for Communications and Information Technology

Address: National Regulatory Authority for Communications and Information

Technology, 2 Delea Noua Street, Bucharest 3, Romania

Phone: +1 819-328-6904

e-mail: marian.angheluta@yahoo.com

Name: Octavian Nicolae Lupu

Position: Head of Unit Aeronautical, Maritime, Satellite and Amateur Unit at: National

Regulatory Authority for Communications and Information Technology Address: National Regulatory Authority for Communications and Information

Technology, 2 Delea Noua Street, Bucharest 3, Romania

Phone: +40-372 84 5345 e-mail: octavian.lupu@ancom.ro