

Livius Buzdugan

Personal data

- Birth date: 26 Oct 1969
- Birthplace: Bucharest, Romania
- Citizenship: Romanian
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Work experience

1997-present: Romanian Air Traffic Services Administration
Headquarters, Bucharest

MET Expert

Area of responsibility: Surface Observation Data

- Operations: Development and implementation of operating procedures for aerodrome meteorological stations
- Operations: Development of procedures to assure the metrological traceability of aeronautical meteorological measurements and continuous quality monitoring of meteorological instruments
- Risk management: Conducting aviation safety assessments (impact of meteorological elements)
- Training: Developing and teaching meteorology class modules for observers, forecasters, and air traffic controllers
- Quality Management: Aeronautical Weather Forecast Quality Survey-development and implementation of a TAF (terminal aerodrome forecast) verification programme
- **Expert teams:**
 - Participation in the ROMATSA eGAFOR project Team, under the Connecting EUROPE Facility (CEF) -Transport Sector, with the goal to provide general aviation pilots with easily understandable meteorological information on the condition of a particular route, based on the co-operation of aviation meteorological service providers in Central and Southeastern Europe (started 2017, ongoing)
 - Participation in the ROMATSA Team for the project „PILOT PLATFORM for access services to OPMET (worldwide/ECAC) data (METAR, TAF, SIGMET) in WXXM format”, under the Connecting EUROPE Facility (CEF) – Transport Sector, Action “DP Implementation”- coordinated by SESAR Deployment Manager (2014-2017)
 - Requirements (MET data integration) for integrated information and data display systems for Air Traffic Controllers; participation in Site Acceptance Tests, Manuals writing and ATC training
 - Participation in Eurocontrol “MET Support for ATM” workshops (2008-2011)

1995–1997 Romanian Air Traffic Services Administration, Bucharest
Otopeni airport MET office

Airfield Forecaster

1994-1995 National Institute of Meteorology and Hydrology

Research Assistant –Long Range Weather Forecasting Dept.

**Educational
Background**

2015-present University of Bucharest Bucharest, Romania

- Doctoral School of Physics – Ph.D Thesis theme: “Research on the Wind Shear Detection in Operational Aeronautical Meteorology”

1989-1995 University of Bucharest Bucharest, Romania

- Degree in Physics, 1994
- M.Sc. in Atmospheric Sciences, 1995
- Fluent in English and French; basic knowledge of German
- Forecaster Development Course, UKMO College, Reading, UK, July 1996
- Mesoscale Meteorology Course, UKMO College, Reading, UK, Oct-Nov 1996
- Numerical Weather Prediction Appreciation Course, UKMO College, Reading, UK, Oct-Nov 1996
- Remote Sensing Techniques Course, UKMO College, Reading, UK, Oct-Nov 1996
- Class Instruction Techniques and Class Examination Techniques, Eurocontrol, Bucharest – June 1997
- Advanced Forecasting Course, UKMO College, Reading, UK, Sep-Oct 1997
- Radar Meteorology Training, Kavouras Inc, Minneapolis, USA., June 1998
- Basics of Aeronautical Information Services for Meteorologists, SERCO College, Bath, September 1999
- Quality Auditor Course, QUASARO, Bucharest, December 2003
- Radar meteorology course, National Meteorological School – Romania, 2004
- MSG Satellite meteorology course, National Meteorological School – Romania, 2005
- Risk management course – Functional Hazard Analysis, Eurocontrol – INSTILUX, Luxemburg, May 2006
- Winter mesoscale course, UKMO College, Exeter, September 2006
- Severe convection forecasting course, National Meteorological School – Romania, 2006
- Aviation Forecaster Refresher Course, UKMO College, Exeter, April 2007
- Risk management course – Preliminary System Safety Analysis

- Eurocontrol – INSTILUX, Luxemburg, September 2010
- Meteorological Refresher Course, UKMO College, Exeter, March 2012
 - Atmospheric Remote Sensing Summer School, RADO, INOE, Magurele, August 2012
 - Project Management Seminar, EMAGUS CONSULT, Bucharest, November 2012
 - Risk management course – Practical Safety Assessment, Eurocontrol – INSTILUX, Luxemburg, June 2013
 - Risk management course – ATM Software Safety Assessment, Eurocontrol – INSTILUX, Luxemburg, January 2015
 - "Using satellite data in weather forecasting" course, BULATSA, Sofia, March 2016
- ESSL Summer School on Severe Convection, September 2017
- Training course of Doppler Sodar PCS.2000-64, METEK, 2017
 - Theoretical Training Instructors course, Eurocontrol – INSTILUX, Luxemburg, 2019
- Projects managed**
- Implementation of a Low-Level Wind Shear detection and warning system based on Doppler Lidar and Sodar at Bucharest Henri Coanda international airport
 - Implementation of automated weather observing systems at all civil airports within Romania, with the approval of Romanian Civil Aviation Authority, according to the appropriate EU EATMN Interoperability Regulation
- Participation in international conferences, publications**
- **28-th International Laser Radar Conference (ILRC 28)**, Bucharest, Romania, June 25-30, 2017 – presentation: Remote Sensing Of Low Visibility Over Otopeni Airport, Buzdugan L (1,2), Urlea D.(1,2), Bugeac P.(1,2), Ștefan S.(1), EPJ Web of Conferences 176, 11001, 2018, (1) University of Bucharest, Faculty of Physics (2) ROMATSA
 - **19-th International Symposium for the Advancement of Boundary-Layer Remote Sensing (ISARS 2018)**, Cologne, Germany, May 22-25, 2018 – poster presentation: Assessment of Sodar wind measurements over Otopeni Airport, Buzdugan L(1,2), Ștefan S (1)
 - **European Lidar Conference (ELC) 2018**, Thessaloniki, Greece, July 3rd 2018 – poster presentation: Assessment of Doppler Lidar and Sodar wind measurements at Otopeni Airport, Buzdugan L(1,2), Cazacu M.M.(3), Ștefan S (1) 3. Department of Physics, "Gheorghe Asachi" Technical University, Iasi
 - **38th "Caius Iacob" Conference on Fluid Mechanics and its Technical Applications**, Bucharest, Romania, Nov. 8, 2019: Role of vertical wind shear and deformation in Clear Air Turbulence within the Romanian Airspace, Buzdugan L(1), Necula C(1), Radu A.A. (4), Ștefan S (1) 4. Institute of Space Science
 - **A comparative study of lidar, sodar wind measurements and high-resolution wind observations from aircraft tracked by air traffic control radar at Otopeni airport.** Buzdugan L., Ștefan S., ROMANIAN JOURNAL OF PHYSICS 65: 810, 2020
 - **Study of Clear Air Turbulence Related to Tropopause Folding over Romanian Airspace**, Ștefan, S., Antonescu, B., Urlea, A.D., Buzdugan,

L. Andrei, M.D., Necula, C. and Voinea, S., Atmosphere: 11 (10), 1099.
<https://doi.org/10.3390/atmos11101099>, 2020

- **A comparison of low-level wind profiles from Mode-S EHS data with ground-based remote sensing data**, Livius Buzdugan, Octavian Paul Bugeac, Sabina Ștefan (2021).. Meteorology and Atmospheric Physics (2021). <https://doi.org/10.1007/s00703-021-00820-2>
- **Study of clear air turbulence occurrence probability in Romanian airspace**, Bugeac, O.P., Buzdugan, L., Ștefan, S., Belegante (5), L., Urlea, D, 2021: manuscris acceptat spre publicare în Romanian Reports in Physics 5. INOE

