## Research Report



# STUDY FOR A MONITORING STATION FOR EGNOS TO SUPPORT SERVICES IN EASTERN EUROPE

#### Goal of the project

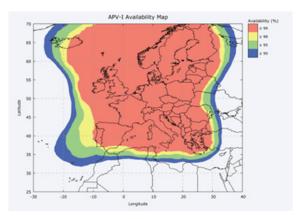
The objective of the study is the automatic reporting of EGNOS performance over Romania as well as the assessment of corrections transmitted by other SBAS.

#### Short description of the project

Due to its geographical location, Romania is an ideal candidate for system performance monitoring at the border of EGNOS service area. Receivers placed in most parts of Romania will be able to track, in addition to EGNOS, also the Russian Federation's System for Differential Corrections and Monitoring (SDCM) and India's GPS Aided GEO Augmented Navigation system (GAGAN).

The Contractor will implement within ESA regulatory framework and based on ECSS standards, all activities related to: an automatic reporting of EGNOS performance over Romania and Assessment of other SBAS visible from Romania.

The Contractor is requested to deploy a monitoring site network for the EGNOS service and all GNSS systems within Romania and Archive data for remote access by the Agency.



EGNOS Service Area according to ESSP Service Definition Document v3.0

## Implementation period

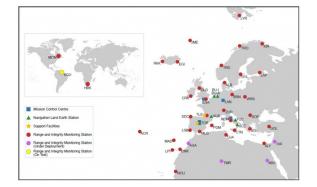
Sep 19 2016 - Sep 19 2017

#### Project implemented by

- Politehnica University of Timisoara (UPT) Contractor
- Alenia Toulouse France Subcontractor
- Pildo Labs Spain Subcontractor

#### Main activities

- Management
- Site Ranking
- Site Selection
- Deployment
- Automatic Reporting & Performance Comparison
- Communication



EGNOS RIMS Sites

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#### Results

#### Deliverables

- Site Selection Justification Document
- Volume Simulation Plan
- Service Volume Simulation Report
- Hardware Deployment Plan
- Hardware Deployment Report
- Project Management Plan
- Executive Summary Report
- Financial Report
- Final Report
- Contract Closure Summary

#### Dissemination:

- Scientific paper in a scientific journal
- Technical Note on synthesis of the study

## Applicability and transferability of the results

The subject is evaluated today at technology maturity level 1 (Scientific Research), and it is aimed to conclude the project at technology readiness level (TRL) 6 Model demonstrating the critical functions of the element in a relevant environment.

## Financed through/by

- European Space Agency (ESA), contract number No. 4000 117 527
- / 16/NL/CBi UPT: 115000 EURO
- Thales Alenia: 15000 EURO
- Pildo Labs: 20000 EURO

#### Research centre

Research Centre for Intelligent Signal Processing (ISPRC)

#### Research team

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