Introductory remarks

Euromed GNSS II project/MEDUSA

Technical workshop on LPV implementation in ESSP
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Objective of workshop

Presentation of the agenda

Conclusions of the 6th Euromed GNSS WG meeting

Expectations from today’s meeting

Contributions from countries & timing

GEMCO
Objective of workshop
MEDUSA framework

MEDUSA’s implements a programme of actions designed to promote/exploit the use of EGNOS addressing local needs/maturity (also in terms of EGNOS service availability perspective):

• Support and cooperation actions at regional, sub-regional and national levels

• A series of specific technical assistance actions through a variety of forms, including national meetings/workshops, dedicated technical meetings/workshops, concrete demonstrations aimed at proving EGNOS services in different applications/domains
Objective of workshop

Genesis

• National workshops in Tunisia, Morocco and Algeria

• Vis-a-vis discussions with countries’ ANSPs

• Countries heritage (e.g. RIMS, METIS, SIRAJ, national initiatives)

• MEDUSA EGNOS SoL service demonstration in civil aviation

• Sub-regional common motivations and needs in relation to:
  – EGNOS service coverage (North Africa)
  – Maturity and interest/commitment in relation to the operational adoption
  – Information about the necessary steps for the operational introduction, on the basis of EU’s experiences
Objective of workshop

Rationale

• Answering to their need to have assistance in the decision-making process

• Identifying the most suitable pipeline and necessary elements

• EU-Euromed co-shaping on the basis of:
  – Present cases
  – EU experiences
  – Countries specific issues
Presentation of the agenda

AGENDA

9.00 Welcome address (ESSP)

9.10 Introductory remarks, objective of workshop and presentation of the agenda (MEDUSA/TPZ)

9.20 EC

9.30 Roll call of participants (All)


10.30 – 12.00 Presentations from the three Euromed countries: existing air navigation non GNSS and GNSS infrastructures, ATC infrastructures, traffic statistics and trends, status of procedures and plans, PBN implementation plan, international framework (international/regional/sub-regional/bilateral agreements), civil aviation regulatory framework (organizations/actors/key decision makers, roles and responsibilities, liability schemes, process for procedure publications).

10.30-11.00 Algeria (Algeria representative + Q&A)

11.00-11.30 Morocco (Morocco representative + Q&A)

11.30-12.00 Tunisia (Tunisia representative + Q&A)

12.00 – 12.30 Coffee break

12.30 EGNOS SoL Service implementation scheme (ESSP + Q&A)

13.00 ICAO framework for LPV (ENAV + Q&A)

13.30 – 14.30 Lunch

14.30 Discussion of specific needs/interests for each country (All)

16.00 Closure of the meeting
Conclusions of the 6th Euromed GNSS WG meeting (EN)

6th Euromed GNSS WG
25 September 2013, Brussels

Conclusions (English text)

The Working Group:

1. took note of the updates from European Commission on the status and plans of EGNOS and Galileo.
2. requested to European Commission to confirm that use of EGNOS services are and will remain free of charge to all users.
3. requested to European Commission to provide the up-to-date information related to the infrastructure components needed to achieve the full EGNOS SoL coverage across the Partner Countries.
4. requested to European Commission the financial support needed for such infrastructure and an adequate planning for its relevant deployment.
5. requested the Partner Countries to commit to provide their support in order to deploy – in the shortest possible time – such infrastructures.
6. asked European Commission to explore the possibility that AUGUR web tool for GNSS-RAIM prediction is extended in a way to cover Moroccan and Tunisian airspace.
7. requested the Partner Countries to provide their feedback on the GEMCO work plan, its current and future structure and actively contributing to its establishment/activity.
8. appreciated the number of ideas submitted in the call for ideas of GEMCO and invited the Partner Countries to provide inputs regarding any future need, which will then be – as much as possible – accommodate within MEDUSA project.
Expectations from today’s meeting

Euromed countries - opportunity to:
• Establish direct contacts with key stakeholders (ESSP and EC)
• Gathering information from EU ANSP
• Having a deeper understanding

MEDUSA’s targets:
• Getting contributions from Euromed countries about the suitable process (including issues linked to NOTAM, liability, performance monitoring)
• Establishing a working group among ANSPs at sub-regional level concerning SBAS/EGNOS
• Triggering the practical involvement of Euromed countries (e.g. EGNOS newsletter, use of EDAS)

Technical workshop material integrated in the GEMCO eLibrary
Contributions from countries

• To identify which are the priority airports in each country for EGNOS coverage (excel to collect inputs from countries about the aerodromes with favourable conditions for the implementation of SBAS based APCH procedures in each country, thus representing a priority for the country) → to be transmitted to EC to identify the priorities for EGNOS SoL coverage/necessary RIMS’s deployment

• To provide information about the decision-makers and process for PBN procedure approval/publication in each country (ppt to collect inputs about the present situation) → to be elaborated for EC

• To provide ideas/information helping to identify the suitable process/roadmap, e.g.: customized per country?, cross-relations with other agreements/frameworks (e.g. MASC)?
EGNOS Safety of Life service
demonstration for Civil Aviation (1)

Monastir airport

- Flight validation of RNAV APCH
  - RNAV APCH procedures design for RWY 07 (currently ILS) and RWY 25 (currently NPA)
  - FAS data blocks codification
  - Airborne data bases generation
  - 2 validation flight trials for RWY 07 & 2 validation flight trials for RWY 25
  - Business Case development
  - Safety Assessment

- List of “to-dos” for the relevant operational introduction/publication

- Technical assistance to start the process for the procedures operational introduction/publication
EGNOS Safety of Life service demonstration for Civil Aviation (2)

Key dates

- **October 2013:**
  - RNAV APCH procedures
  - Business case
  - Safety assessment
  - Training
  - Technical workshop on LPV operational implementation

- **January 2014:** Flight trials execution

- **From February 2014-onwards:** Exploitation towards operational use/starting process for procedures publication

- **May 2014:** Final workshop open to the civil aviation community of all Euromed countries
A long term cooperation and operation structure named GEMCO (Galileo EuroMed Cooperation Office), with an associated Work Plan ensuring the proper regional participation of the beneficiary countries

In Tunisia (Tunis) hosted by Elgazala Technopark
Completely operational during the project
Offices and staff

Work Plan (MEDUSA time frame)
Long-term perspective
eLibrary

GEMCO can host meetings, support activities, etc.
GEMCO (2)

Inauguration: 23 October 2013

- 2 offices
- 1 meeting room
- Supported with conference room and related facilities by Elgazala Technopark
**RWY 25 LPV “single procedure chart” final design**

**RWY 07 LPV “single procedure chart” final design**

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Currently 460 ft

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RNAV APCHs to RWY 07 & 25 in a “3 minima lines combined chart” final design

LPV, LNAV/VNAV (Baro-VNAV) & LNAV minima lines