



الهيئة العربية للطيران المدني

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**Summary Report
of ACAC GNSS Workshop
Riyadh – Saudi Arabia, 1 – 2 December 2008**

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ACAC GNSS Workshop
Riyadh, Saudi Arabia, 1 – 2 December 2008

1- Place and duration

An ACAC GNSS workshop is one of the secluded seminars and workshops in the ACAC programme in year 2005. The workshop was held in Riyadh – Saudi Arabia on 1 – 2 December 2008.

2- Opening

The workshop was inaugurated by opening welcome statements from Mr. Mohamed Alsalmi – Deputy Chairman of General Aviation Civil Authority for Air Navigation who welcomed all the participants to Saudi Arabia and to the ACAC GNSS workshop

Mr. Mohamed Elkady – the Air Navigation expert of ACAC welcomed all the participants who attended the workshop and thanked the Civil Aviation of Saudi Arabia for their hosting the meeting and their hospitality. Also, he conveyed the greetings of the ACAC DG – Mr. Mohamed Elalj expressing the workshop with a very successful deliberations. Mr. Mohamed Elkady highlighted the major role that GNSS plays and the importance of such workshop for introduction of EGNOS extension in a whole the ACAC area and in more particular in the ARG-3 area.

3- Attendance

The workshop was attended by 23 delegates from 7 ACAC states and two organizations. Delegates breakdown was approximately 55 % engineers, 25% ATCs and 20% remaining management which included the speakers and ACAC expert. The list of participants is at attachment (A). The workshop was moderated by Mr. Mohamed Elkady – Air Navigation expert of ACAC.

The purpose of the workshop was to increase awareness between ACAC states, especially the ARG-3 area on the practical issues of GNSS and in more practical in the EGNOS extension in the ARG-3 area

4- Agenda

Final Agenda item was adopted and it is at attachment (B)

5- Discussions

The aim of the workshop was to provide information on the latest developments in GNSS in general and in more particular on the European initiatives EGNOS and Galileo, including the technical performance for EGNOS extension over ACAC area.

A number of ESA and Eurocontrol presentations covering existing and planned products/services (GNSS and technical issues of EGNOS extension to the ACAC states).

Eurocontrol arranged for an excellent speaker - Mr. Francisco Salabert - Head of GNSS Policy Office in Eurocontrol to deliver 3 presentations as follows:

1- First Presentation, on GIANT project which supporting EGNOS introduction in aviation, its achievements, its demonstrations, ..etc

2- Second Presentation, on SBAS Operation introduction in aviation, which contained a very important topics on EGNOS operational implementation, information on Eurocontrol RNAV Approach task Force (focusing on APV/Baro and APV/SBAS), operational areas like NOTAM, EGNOS performance assessment and procedures.

In addition to safety areas, cost benefits area, legal area for EGNOS, communication areas and EGNOS certification process. Focusing the use of EGNOS in the MEDA region.

3- Third presentation, on GNSS policy and benefits of EGNOS for aviation, which contained Eurocontrol role on GNSS, Use of GNSS in aviation applications, transition to GNSS in European aviation, ICAO concept on PBN, impact of GNSS on ATM, in addition of Galileo services

Also, European Space Agency (ESA) arranged for another excellent speaker Mr. Juan Pedro Lam – EGNOS Project Office to deliver 3 presentations, as follows:

1- First presentation on EGNOS status, which contained EGNOS Architecture, deployed infrastructure, overview of EGNOS performance, and EGNOS coverage and service.

2- Second presentation on EGNOS Performance in the ACAC region, which contained the decomposition of ACAC in sub-regions, deployment status of RIMS stations, current and estimated APV availability in ACAC area, in addition of NPA and APV services in all ACAC area

3- Third Presentation on EGNOS Extension to ARG-3 area, including a feasibility, assessment, a trade-off of the heterogeneous extension architectures, the operational aspects of EGNOS extension and the next steps.

6- Recommendations

There was also a very interesting round-table discussion between the delegates of ACAC states and the representatives of ESA and Eurocontrol in the EGNOS extension in ACAC area.

The following recommendations can be extracted as conclusions from the workshop:

- 1) ACAC-ANC in coordination with ICAO, To plan usage of NPA (RNP 0.1) service based on EGNOS in all ACAC region in the short term as an introductory step**
- 2) ESA, To improve EGNOS APV 1 service coverage in the MEDA region**
 - a. financing and installing a RIMS station in Libya to improve the EGNOS service in MEDA countries and Libya.**
 - b. financing and installing more MEDA RIMS stations in order to achieve full APV1 coverage**
- 3) To extend the EGNOS APV 1 coverage to the ARG-3 Region.**
 - a. ESA, To provide cost estimates for the EGNOS extension in the ARG-3, in the frame of ARG SC**
 - b. ESA, To assess the technical feasibility of including Sudan and Somalia in the ARG-3 area**
 - c. ARG-SG, To improve the representation of the ARG-SC by enlarging the composition to other countries in the ARG-3 Region, respecting SC membership criteria.**
- 4) To request to EC/GSA to disclose the results of the Task2 of ACAC study, dealing with the institutional aspects for EGNOS extension in the Region.**

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