



*International Civil Aviation Organization
Eastern and Southern African Office*

**Joint Meeting of the APIRG Performance Based Navigation and
Global Navigation Satellite System Implementation Task Forces (Joint
PBN & GNSS/I TFs)**

First Meeting
(Nairobi, 8 - 10 September 2009)

Agenda Item 8: AFI GNSS Strategy

EGNOS STATUS

Submitted by the European Space Agency

SUMMARY

This Information Paper gives an overview of the status of EGNOS implementation in ECAC and the latest information on SBAS certification, also the latest news on the availability of SBAS avionics and the progress in onboard installations.

1. OVERVIEW

1.1. EGNOS has been operational since late 2006. Since 2008 the EGNOS Signal in Space (SIS) has been available 100% of the time.

1.2. In addition to the 34 RIMS (Reference and Integrity Monitoring Stations) already in place, new RIMS will be brought online in Athens, Tel-Aviv, Alexandria, Tamanrasset, Agadir, La Palma, Nouackchott and Abu Simbel by first quarter of 2010.

2. CERTIFICATION

2.1. FMS from the major avionics producers have achieved TSOA (Technical Standards Orders Authorisation) certification or are in the process of achieving it. Garmin has already sold over 34,000 WAAS LPV receivers.

2.2. A number of aircraft manufacturers have completed aircraft STC (Supplemental Type Certificates) and many more are awaiting final certification to carry SBAS systems onboard.

- 2.3. The baseline certification requirements for the EGNOS System will be the Single European Sky Regulatory Package.
- 2.4. It is expected that EGNOS will be certified for Safety of Life use by mid 2010 and that European ANSPs will commence publishing of procedures from that time onwards.
- 2.5. Projects have been launched in the UK, France and Poland for the designing of national SBAS APV procedures, implementation of the Safety Case, and airworthiness certification & operational approval at a number of airports and for a number aircraft types.

3. HIGHLIGHTS

- 2.1. Upon planned MSG (Message) 27 modification, EGNOS NPA coverage will extend over Africa to 20 degrees South (for use in RNP ARCHs)
- 2.2. STC have been completed for Boeing B-737-200 and in progress for the Airbus A350 and A400.
- 2.3. Airbus plans to implement their Satellite Landing System on the A350 XWB by 2013. Initially this SLS will use SBAS (EGNOS and WAAS) for LPV 200 procedures and in the longer term it will utilise future GNSS capability to reach 200' minima worldwide without the necessity for ground stations.

2. ACTIONS FOR THE TASK FORCE

- 3.1. The task force is invited to:
 - a) View the accompanying presentation for further detail on the information presented in this IP. See

[EGNOS Status IP for Joint TF.pdf](#)
 - b) Take note of the accelerated approach of SBAS uptake in Europe and USA.