



GNSS Vulnerability Workshop

Summary of Discussion

7-8 November 2017
Rabat, Morocco



ATTENDANCE



- (43) Participants
- Jointly organized by ACAC and ICAO and supported by European Commission
- (9) States: Algeria, Egypt, Lebanon, Libya, Morocco, Tunisia, France, India and Yemen
- (6) International Organizations: ACAC, ICAO, GCC, IATA, IFALPA, JPO
- (5) Industries (Telespazio, Thales Alenia Space, DLC Consultant, ESSP), Resys Consultant, Abus Salam International Centre for Theoretical Physics (ICTP) and Universities



OBJECTIVES

- ▶ To provide a forum for sharing the current and future developments related to GNSS with a focus on SBAS, GBAS and GNSS vulnerability.





CONCLUSIONS/RECOMMENDATIONS



REC N°	TITLE	STATUS OF IMPLEMENTATION	STATUS
5	Interested States to use EGNOS Safety of Life (SoL) service need to initiate negotiation with the EC for the signature of an EGNOS International Agreement in parallel with the RIMS installation, and provision of technical assistance.	Morocco is in negotiation with the EC for the signature of an EGNOS International Agreement Waiting for Egypt	In progress



CONCLUSIONS/RECOMMENDATIONS



REC N°	TITLE	STATUS OF IMPLEMENTATION	STATUS
6&7	<p>The workshop was apprised of the results of the study case carried out by Thales related to the implementation of an Autonomous SBAS system for the GCC States, Iraq and Yemen. The workshop noted the outcomes of the CBA and the methodology used, as well as the recommendations from CBA related to ANSPs and States.</p> <p>The Workshop noted the availability on the EU side of a pool of industries, which can provide a complete range of support needed for the development of and operation of a turn-key SBAS system up-to service provision.</p>	<p><u>A Proposed roadmap for EU SBAS solutions in ACAC Member States was provided and it will be discussed during the 38th ACAC ANC meeting to be held (dated on 21 Dec 2017)</u></p>	<p>In progress</p>



CONCLUSIONS/RECOMMENDATIONS



REC N°	TITLE	STATUS OF IMPLEMENTATION	STATUS
6&7	<ul style="list-style-type: none">The Workshop was apprised of the Programme management Office (JPO) activities related to GNSS, including the benefits analysis for SBAS implementation in East Africa. The Cost Benefit Analysis is foreseen as the next step to support the choice of the technical scenario.The workshop noted the challenges faced by JPO related to the data collection from some States for the development of the CBA.	<ul style="list-style-type: none"><i>ACAC participate at the SC of JP (the 3th SC meeting was held at Addis Ababa 5th Dec 2017)</i><i>ACAC provided data regarding Sudan, Somalia and Djibouti for CBA study</i>	In progress



CONCLUSIONS/RECOMMENDATIONS



REC N°	TITLE	STATUS OF IMPLEMENTATION	STATUS
9	<ul style="list-style-type: none">The Workshop was apprised of the GAGAN developments and the possibility to extend services to the MID States. Interested states need to approach CAA INDIA for further coordination	<ul style="list-style-type: none"><i>ACAC requested from CAA INDIA a CBA study for the Extension of GAGAN System</i>	In progress



CONCLUSIONS/RECOMMENDATIONS



REC N°	TITLE	STATUS OF IMPLEMENTATION	STATUS
15	The workshop was apprised of the effects of solar radio bursts on GNSS operations by Prof. Sandro RADICELLA, Abdus Salam International Center for Theoretical Physics.	Cooperation with Abdus Salam International Center for Theoretical Physics is in progress in order to establish a MOC for further fellowship or / and scholarship	In progress



CONCLUSIONS/RECOMMENDATIONS



REC N°	TITLE	STATUS OF IMPLEMENTATION	STATUS
16	As part of the GNSS vulnerability issues, Dr. Adlen LOUKIL, from Tunisia University made a presentation on Cybersecurity, safety and resilience, and the need of developing national Security policy against cyber threats including awareness and training programmes.	Training related to the cyber threats including awareness and training programmes will be planned in coordination with Resysconsultant	In progress



CONCLUSIONS/RECOMMENDATIONS



REC N°	TITLE	STATUS OF IMPLEMENTATION	STATUS
17 & 18	<p>-States are encouraged to implement best practices related to GNSS Vulnerabilities mitigation measures, as per ICAO guidance material, including the coordination between CAA and Military Authorities related to GNSS interferences</p> <p>-The workshop was apprised of and supported the MIDANPIRG outcome related to the reporting of GNSS Vulnerability incidents/occurrences, including the development RASG-MID safety advisory related to GNSS vulnerabilities and mitigations measures</p>	<p>IATA template regarding the GNSS Vulnerabilities was adopted and communicated to ACAC States for reporting to ICAO and ACAC, ACAC will be involved with the concerned subgroup in the development of a RASG-MID Safety Advisory (RSA) related to GNSS vulnerabilities</p>	<p>In progress</p>