



ICAO

International Civil Aviation Organization

**Twenty Sixth Meeting of the Communications/  
Navigation and Surveillance Sub-group (CNS SG/26)  
of APANPIRG**

Video Tele-Conference, 5 – 9 September 2022

**Review of Report  
Fourth Meeting of GBAS/SBAS  
Implementation Task Force  
(GBAS/SBAS ITF/4)**

*(Presented by Co-Chair)*



ICAO

# Introduction

## Fourth Meeting of the ICAO GBAS/SBAS Implementation Task Force (GBAS/SBAS TF/4)

- a) Held on 11 – 12 May 2022 via Video  
Teleconference (VTC)
- b) 113 participants from States/Administrations,  
ICAO, and International Organisations
- c) Total of twelve (12) Working Papers (WPs) and  
six (6) Information Papers (IPs)



WP  
(GBAS-SBAS-ITF-4)



ICAO

# Discussion

**Agenda Item 2:** Updates from States about GBAS/SBAS Implementation

**Agenda Item 3:** Progress on the work of Expert Groups

- *GBAS and SBAS safety assessment guidance document related to anomalous ionospheric conditions*
- *Guidance Document on Implementation Process for GBAS/SBAS*

**Agenda Item 4:** Review of Action Item List



ICAO

# Updates from States about GBAS/SBAS Implementation

Three (3) working papers and six (6) Information papers presented by States, covering:

- a) Implementation of LPV (GAGAN) Approaches in India
- b) GBAS Implementation in USA
- c) SBAS Implementation in Republic of Korea
- d) GBAS & SBAS Implementation and MSAS LPV Trials in Japan
- e) GBAS Proof-of-Concept Project in Thailand



ICAO

## Progress on the work of Expert Groups

### *GBAS and SBAS Safety Assessment Guidance Document Related to Anomalous Ionospheric Conditions*

#### Outcomes of Expert Group

- a) Identified potential areas for revision
- b) Planned to circulate draft revision for Task Force members' review by December 2022
- c) Scheduled online Expert Group meetings in monthly basis



ICAO

# Progress on the work of Expert Groups

## Guidance Document on Implementation Process for GBAS/SBAS

### Outcomes of Expert Group

- a) Finalised the structure of guidance document on implementation process for GBAS/SBAS (Appendix 1)
- b) Set up timeline for drafting this guidance document for the Region as well as the regular expert group review meetings (Appendix 2)
- c) Concluded to incorporate specific consideration(s), such as ionospheric impacts in low altitude region, only particularly applicable to the Asia/Pacific Region and States' experience
- d) Suggested for getting one or two expert from regulators to join Expert Group in order to enrich the regulatory perspective
- e) Planned for the 1<sup>st</sup> draft ready by December 2022



Appendix 1&2 -  
GBAS-SBAS ITF-4



ICAO

## Tasks in Action List

Three (3) working papers and two (2) Information papers presented by States to accomplish tasks in Action List:

- a) ATC Perspective in GBAS Implementation (Australia)
- b) VDB Frequency Assignment and Coordination (Japan)
- c) IATA's Aircraft Equipage and Capability Survey for Asia-Pacific and North Asia (IATA)
- d) SBAS Training for ATSEP (Japan)
- e) SBAS Safety Assessment (India)



ICAO

# Review of Action List

23 out of 31 items (~75%) in the Action List have been completed and closed. Remaining items are highlighted as follows:

- a) Development Awareness and Information Sharing
  - i. Workshop/Meeting with APAC Airspace Users and Regulators*
- b) Experience Sharing
  - i. Visit to States/Airports with deployed GBAS/SBAS (Wait until COVID-19 situation to allow international travel)*
- c) Technical Issues
  - i. GBAS and SBAS Safety Assessment Guidance Document Related to Anomalous Ionospheric Conditions (in progress, under Expert Group)*
  - ii. ATC Interface and NOTAM Matters*
  - iii. GBAS/SBAS Safety Assessment*
  - iv. GBAS/SBAS Performance Demonstration*
- d) Quick Guides and Reference
  - i. Guidance Document on Implementation Process for GBAS/SBAS (in progress, under Expert Group)*
  - ii. Technical Support for System Certification and Operation Certification (To be decided after workshop/meeting with regulators)*
- e) Training
  - i. Training workshop/material for ATCOs*



Appendix 3 - WP  
(GBAS-SBAS-ITF-4)



ICAO

# Action Required

**The meeting is invited to:**

- a) Review the Summary Report on the outcome of the GBAS/SBAS ITF/4 Meeting;*
- b) Urge States/Administrations to share relevant materials with Expert Group for preparing the draft guidance document on Implementation Process for GBAS/SBAS and note the timeline given in Appendix 2 for it;*
- c) Urge States/Administrations to nominate experts from regulators to join Expert Group for preparing the draft guidance document on Implementation Process for GBAS/SBAS; and*
- d) Discuss any relevant matters as appropriate.*



ICAO

