

International Civil Aviation Organization



**AUTOMATIC DEPENDENT
SURVEILLANCE – BROADCAST SEMINAR
AND FOURTEENTH MEETING OF
AUTOMATIC DEPENDENT
SURVEILLANCE – BROADCAST (ADS-B)
STUDY AND IMPLEMENTATION TASK
FORCE (ADS-B SITF/14)**

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Christchurch, New Zealand, 14 – 17 April 2015

Agenda Item 7: Review the Subject/Tasks List and Action items

**REVIEW TERMS OF REFERENCE OF ADS-B STUDY
AND IMPLEMENTATION TASK FORCE**

(Presented by Secretariat)

SUMMARY

This paper presents the Terms of Reference (TOR) adopted by APANPIRG/23 for review by the meeting.

1. INTRODUCTION

1.1 The APANPIRG/23 meeting in 2012 reviewed the revised TOR of ADS-B SITF as recommended by the Task Force and endorsed by the CNS/MET SG. Considering that ADS-B IN is part of ASBU modules to be considered for adoption by AN Conf/12, the meeting agreed that ADS-B IN implementation should be added included in the work programme of the Task Force. The meeting noted the updated Subject/Tasks List for ADS-B SITF and adopted following Decision:

Decision 23/30 - Revised Terms of Reference and Subject/Tasks List of ADS-B Study and Implementation Task Force

That, the revised Terms of Reference and updated Subject/Tasks List of ADS-B Study and Implementation Task Force provided in Appendices F and Appendix G to the Report on agenda item 3.4 be adopted.

2. DISCUSSION

2.1 ASBU Modules adopted by AN Conf/12 have been included in the Appendix 2 to the Global Air Navigation Plan (GANP). The ASBU modules related to ADS-B OUT and ADS-B IN includes but not limit to B0-SURF, B0-ASUR, B0-OPFL, B0-ASEP and B0-SNET.

2.2 The ADS-B SITF/13 meeting in 2014 reviewed the Terms of Reference of the ADS-B SITF and did not identify the need to revise the TOR which was considered still appropriate for the time being. However, the meeting identified the need to reflect correct name of APANPIRG Sub-groups in the note of Term of Reference (TOR). The latest TOR of the ADS-B Study and Implementation Task Force is provided in the **Attachment A** to this paper for review.

2.3 The Thirteenth meeting of the ADS-B Study and Implementation Task Force held in April 2014 discussed the issue of the Task Force life time. The Task Force had met 14 times in the past 12 years. A set of regional guidance materials have been developed and then adopted by APANPIRG to assist States in the planning and implementation of ADS-B based surveillance service and surveillance data sharing, in particular the consolidated useful implementation material i.e. the ADS-B Implementation Guidance Document (AIGD). The Task Force was expected to further discuss outstanding issues/tasks at this meeting and, depending on the scale of work involved, any uncompleted tasks may be addressed by other contributory bodies of APANPIRG after this meeting. This issue is expected to be discussed under this agenda item and develop a recommendation for consideration by APANPIRG.

2.4 In this connection, the meeting in invited to note that APANPIRG at its 25th meeting in September 2014, had established a contributory bodies structure review Task Force to align its working arrangements with revised Global ANP. APANPIRG noted that in light of the performance based approach to air navigation planning and implementation there is a need to align the work programme of States, regions and ICAO. The APANPIRG also noted that in this regard, within the ASBU framework, due consideration should be given to planning, implementation, and performance measurement, monitoring and reporting aspects and that a project based approach for ASBU's should be applied to APANPIRG Contributory Bodies (Sub Groups, Working Groups, Task Forces) as necessary. The meeting adopted Decision 25/50 regarding establishment of a structure review task force:

- a) The APANPIRG Contributory Bodies Structure Review Task Force (ABSRTF) with members consisting of Chairpersons/Vice Chairpersons of APANPIRG Contributory Bodies (Sub-groups, Working Groups and Task Forces) and voluntary members nominated by States be established with the Terms of Reference presented in Appendix B (**Attachment B** to this WP) to this section of the report; and
- b) In coordination with the ICAO Regional Office, the Task Force undertakes a review of the Terms of Reference and activities of the APANPIRG Contributory Bodies and proposes rationalization of the APANPIRG structure to meet the changing environment to APANPIRG/26.

2.5 The first meeting of ABSRTF with the APANPIRG Sub Groups Chairs through a teleconference was scheduled for 8th April 2015. A very initial proposal being made for consideration is to establish a Surveillance Implementation Coordination Group or a Surveillance Task Force under CNS Sub-group of APANPIRG. The remaining tasks/actions for the ADS-B Study and Implementations Task Force would be transferred to the new surveillance group if an agreement achieved by this Task Force and endorsed by the ABSRTF. A face-to-face meeting of the ABSRTF with all the TF members is planned for June 2015.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information provided in this paper including the TOR of ABSRTF provided in the **Attachment B** to this paper; and

3.2 Review the TOR of ADS-B Study and Implementation Task Force provided in the **Attachment A** to this working paper.

3.3 Further discuss the future of the ADS-B SITF and make an appropriate recommendation for consideration by APANPIRG through ABSRTF.

**THE REVISED TERMS OF REFERENCE OF
ADS-B STUDY AND IMPLEMENTATION TASK FORCE**

- Compare currently available technologies with respect to concept of operations, relative costing, technical and operational performance and maturity of alternative technology/solutions (primary, secondary radar including Mode-S, ADS-B, multilateration, ADS-C);
- Develop an implementation plan for near term ADS-B applications in the Asia Pacific Region including implementation target dates taking into account:
 - available equipment standards
 - readiness of airspace users and ATS providers
 - identifying sub-regional areas (FIRs) where there is a positive cost/benefit for near-term implementation of ADS-B OUT
 - developing a standardised and systematic task-list approach to ADS-B OUT implementation; and
 - holding educational seminars and provide guidance material to educate States and airspace users on what is required to implement ADS-B IN & OUT.
- Study and identify applicable multilateration applications in the Asia and Pacific Region considering:
 - Concept of use/operation
 - Required site and network architecture
 - Expected surveillance coverage
 - Cost of system
 - Recommended separation minimums; and
 - If multilateration can be successfully integrated into an ADS-B OUT-system for air traffic control.
- Coordinate ADS-B implementation plan and concept of operations with other ICAO regions where ADS-B implementation is going on and with relevant external bodies such as EUROCONTROL, EUROCAE, RTCA and Industry.

Note: The Task Force, while undertaking the tasks, should take into account of the work being undertaken by SAS, AS Panels with a view to avoid any duplication.

The Task Force should report to the APANPIRG, through the CNS/MET Sub-group and provide briefing to the ATM/AIS/SAR Sub-group.

TERMS OF REFERENCE

APANPIRG Contributory Bodies Structure Review Task Force (ABSRTF)

Deliverable(s)

Recommendation on New APANPIRG structure and revised Terms of Reference for its contributory bodies

Scope of work

The following are the broad principles describing the scope of work:

- a) Review of the existing APANPIRG structure which has become effective since 2013 and suggest new structure to APANPIRG/26 to meet the changing environment; and
- b) Review and propose Terms of Reference (TOR) of the APANPIRG contributory bodies under the new structure. The proposed new structure and TOR shall reflect the need for supporting:
 - i) planning and implementation of air navigation systems/services accorded as priority elements for the Asia Pacific Region (established regional priorities and associated targets according to AN-Conf/12 Recommendation 6/1); and
 - ii) monitoring and reporting of the seamless ATM elements for the Asia Pacific Regions.

Composition

The Task Force would be composed of members consisting of Chairpersons/Vice Chairpersons of APANPIRG Contributory Bodies (Sub-Groups, Working Groups and Task Forces) and voluntary members nominated by States;

Conduct of the work and schedule

The Task Force shall complete its work and submit the new structure to APANPIRG/26 for endorsement by September 2015. The work would be carried out by means of electronic correspondence as far as practicable. Minimum amount of face to face meetings would be planned.
