

International Civil Aviation Organization



**AUTOMATIC DEPENDENT SURVEILLANCE –
BROADCAST SEMINAR AND ELEVENTH MEETING
OF AUTOMATIC DEPENDENT SURVEILLANCE –
BROADCAST (ADS-B) STUDY AND
IMPLEMENTATION TASK FORCE (ADS-B SITF/11)**



Jeju, Republic of Korea, 24-27 April 2012

Agenda Item 4: Review the Terms of Reference and Subject/Tasks List

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

(Presented by Secretariat)

SUMMARY

This paper presents the decision made by APANPIRG/22 adopting the updated subject and tasks list of ADS-B SITF and the Terms of Reference (TOR) adopted by APANPIRG/18 for review by the meeting.

1. INTRODUCTION

1.1 The ADS-B Study and Implementation Task Force of APANPIRG (ADS-B SITF) review its Terms of Reference (TOR) and Subject/Tasks List at each meeting.

2. DISCUSSION

2.1 In light of the progress achieved by the ADS-B Study and Implementation Task Force, the APANPIRG/18 meeting adopted a revised Terms of Reference. It was emphasized that the exchange of information on lessons learnt and experiences gained during the trial and implementation of ADS-B should be further encouraged.

2.2 The ADS-B SITF/10, CNS/MEG SG/15 and APANPIRG/22 meetings did not propose any change to the TOR of the ADS-B Study and Implementation Task Force. The TOR was considered appropriate.

2.3 The ADS-B SITF/10 in 2011 updated the List of Subject /Tasks for the Task Force and The APANPIRG/22 held in September 2011 adopted the updated Subject/Tasks List for the ADS-B Study and Implementation Task Force under Decision 22/30 as recommended by the CNS/MET SG/15.

2.4 The consolidated Tasks List and Action items for review and further updating by this meeting is provided in the **Attachment 2** to this paper.

3. ACTION BY THE MEETING

3.1 The meeting is invited to review the TOR of ADS-B Study and Implementation Task Force adopted by APANPIRG/18 as provided in the **Attachment 1** and the consolidated List of Subject/Tasks as provided in the **Attachment 2** to this paper.

3.2 The meeting is also invited to update the Subject/Tasks List as necessary.

APANPIRG/19
Appendix G to the Report on Agenda Item 3.3

**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 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.

UPDATED ADS-B SUBJECT/TASKS LIST

Serial No.	His No.	Subject/Tasks List	Associated with Strategic Objective	Associated GPI	Deliverables	Target Date	Status and Action to be taken and led by
1	3	Each member State report on the number of airframes fitted and transmitting with good NUC/NIC.	D. Efficiency	GPI01/05/06/09/14/16/17/21/22	Report on statistics conducted	4/2011	Closed
2	14	Guidance material on how to build safety case for delivery of separation services.	A.Safety	GPI01/05/06/09/14/16/17/21/22	Guidance material for implementation	Apr-11	Completed
3	17	Guidance on legal liability issues for ADS-B data sharing.	A.Safety	GPI01/05/06/09/14/16/17/21/22	Guidance material for implementation	Aug-12	U.S.A.
4	18	Develop and implement regional collaboration project for ADS-B Out operational use including data sharing in SEA and report on implementation progress.	D. Efficiency	GPI01/05/06/09/14/16/17/21/22	Sub-regional ADS-B collaboration project has been developed.	Jul-08/ Apr-11	SEA WG - On going
5	19	Develop and implement regional collaboration project for ADS-B out operational use including data sharing in South Pacific and report on implementation progress.	D. Efficiency	GPI01/05/06/09/14/16/17/21/22	Develop and implement sub-regional ADS-B collaboration project.	Apr-09/ Dec-11	South Pacific States On-going
6	21	Study application of ADS-B and multilat for precision runway monitoring.	D. Efficiency	GPI01/05/06/09/14/16/17/21/22	Guidance material for implementation	Apr-11	All Members On-going
7	22	Perform data collection and data analysis of ADS-B messages to examine GPS performance in different geographic areas.	D. Efficiency	GPI01/05/06/09/14/16/17/21/22	Report of data collected and analyzed - continuous	Apr-11	All Members On-going
8	23	Develop and implement regional collaboration project for ADS-B out operational use including data sharing in Bay of Bengal area and report on implementation progress.	D. Efficiency	GPI01/05/06/09/14/16/17/21/22	Develop and implement sub-regional ADS-B collaboration project.	Apr-09/ Dec-11	Bay of Bengal States

Serial No.	His No.	Subject/Tasks List	Associated with Strategic Objective	Associated GPI	Deliverables	Target Date	Status and Action to be taken and led by
9	25	Provide feedback to the proposed amendment and template for data sharing based on experience gained by Indonesia and Singapore.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Comments	April-2011	Completed
10	26	Prepare a paper on the experience of using the ADS-B data sharing template and make any recommendations for change of the data sharing template.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Comments	April-2011	Completed Singapore & Indonesia
11	27	Clarify relation between DO260B and 3NM separation in TMA.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Prepare a WP	April-2011	Completed
12	28	Renaming SEA ADS/B WG and relation between WG and TF.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Comments	April-2011	All Members Completed
13	29	Review the forward fit requirement for SA Aware compliance by June 2012.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	To develop a strategy to resolve this issue	April-2011	IATA & Australia
14	30	To exam existing air-ground communication and surveillance capability in the boarder area between China and Myanmar and identify the need and possibility for sharing ADS-B data from potential ADS-B ground station at Lashio.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Report status and position	April-2011	China & Myanmar On-going
15	31	To exam possibility of sharing ADS-B data from potential ADS-B ground station from Coo Co and Pathein.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Report status and possibility	April-2011	Myanmar & India
16	32	ATS operational letter of agreements between neighboring FIRs among South China Sea States for radar-like surveillance service	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Report progress	April-12	China, Hong Kong China, Viet Nam and Singapore
17	33	Review of FPL Amendment to update AIGD and its effective date.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Update the AIGD	April-2012	Australia and Secretariat

Serial No.	His No.	Subject/Tasks List	Associated with Strategic Objective	Associated GPI	Deliverables	Target Date	Status and Action to be taken and led by
18	34	Identify new data sharing projects in the eastern part of South China Sea.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Prepare a working paper	April-2011	Singapore
19	35	Identify new data sharing projects in Bay of Bengal.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22	Prepare a working paper	April-2011	Australia On-going
20	36	States to advise when their ground stations can be upgraded to receive ADS-B DO260B compliant ADS-B data.	D. Efficiency	GPI01/05/06/09/ 14/16/17/21/22		April/May12	All Members
21	37	Guidance material addressig military concerns regarding sharing ADS-B data	A. Safety	GPI01/05/06/09/ 14/16/17/21/22	Prepare a working paper	April-12	Australia
22	38	Bring attention of States concerned to the risk that ADS-B data without integrity (such as NUC=0) should not be used to support procedural control	A. Safety	GPI01/05/06/09/ 14/16/17/21/22	Letter to States	October-11	Regional Office
23	39	Comparing the changes brought by DO260B and identifying any potential impacts on ATC systems.	A. Safety	GPI01/05/06/09/ 14/16/17/21/22	Prepare a working paper	April-12	Hong Kong China & Singapore