



ICAO

International Civil Aviation Organization  
North American, Central American and Caribbean Office

WORKING PAPER

NACC/WG/4 — WP/33  
05/03/14

**Fourth North American, Central American and Caribbean Working Group Meeting  
(NACC/WG/4)**

Ottawa, Canada, 24 to 28 March 2014

**Agenda Item 3 Follow-up on the NAM/CAR Regional Performance-Based Air Navigation  
Implementation Plan (NAM/CAR RPBANIP) Progress  
3.3 ANI/WG and other regional group progress reports**

**ANI/WG ADS-B TASK FORCE PROGRESS REPORT**

(Presented by ANI/WG ADS-B Task Force Rapporteur)

**EXECUTIVE SUMMARY**

This working paper presents the progress achieved by the ADS-B Task Force since its creation in the ANI/WG/1 Meeting. Following the work programme of the Task Force and its deliverables, the note includes the results for these deliverables and recommendations for improving the Task Force function and coordination.

<b>Action:</b>	Suggested action in paragraph 3
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• NAM/CAR Regional Performance Based Air Navigation Implementation Plan (NAM/CAR RPBANIP),</li><li>• First NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/1), Mexico City, Mexico, 29 July to 1 August 2013</li><li>• 1<sup>st</sup> ADS-B TF Teleconference (30 October 2013)</li><li>• 2<sup>nd</sup> ADS-B TF Teleconference (24 January 2014)</li></ul>

**1. Introduction**

1.1 During the ANI/WG/1 Meeting and based on the ANI/WG Terms of Reference (ToRs) and Work Programme, the Meeting considered the existence of the various existing Ad hoc Groups that were working in support of the implementation working groups, such as the ADS-B Ad hoc Group, the AMHS Implementation Group, etc., and considered necessary to group them under the ANI/WG structure, including any other specific implementation task group, with the aim of providing continuity. In this regard, seven topics that shall be developed through Task Forces under the ANI/WG were identified.

1.2 An initial ToRs, preliminary membership and Rapporteurs for each Task Force were agreed in the ANI/WG/1 Meeting. In this regard Decision ANI/WG/1/3 - *Terms of Reference, Work Programme and Membership of the ANI/WG Task Forces* was formulated.

**2. ADS-B TF Progress and results**

***Review of ToRs and final work programme***

2.1 The Task Group is responsible for:

- a) Work Programme Management
- b) Provide advice and guidance to States wishing to start operational testing ADS- B
- c) Guide states that have conducted trials to project its operational implementation
- d) Recommend goals for implementing ADS- B based on the needs of navigation service providers (ANSPs ) and users
- e) periodically request information from States on statistics as a result of his essays

2.2 The Task Group Working Methods:

- a) Submit containing its work program activities in terms of objectives, responsibilities, deliverables and time
- b) Avoid duplication of work within the ANI / WG and maintain close coordination among existing agencies to optimize the use of resources and expertise available
- c) Designate if deemed ad hoc groups to work on issues and organize specific activities and clearly defined tasks and activities;
- d) Coordinate the tasks to maximize efficiency and reduce costs through electronic means including email , phone and conference calls , and meetings convened when necessary
- e) Notify and coordinate the progress of the tasks assigned to ANI/WG.

2.3 Work programme:

<b>TASK NAME</b>	<b>DELIVERABLE</b>	<b>DATE START</b>	<b>DATE END</b>	<b>PERCENTAGE COMPLETED</b>	<b>RESPONSIBLE</b>
Activities/Tasks ADS- B		1/8/13	31/12/18		
1. Formation of ADS-B TF	Participant List	1/8/13	1/8/13	100 %	Group Members
2. Terms of reference	Present Working Group Terms of Reference	1/8/13	1/8/13	100 %	Cuba (Rapporteur )
3. Develop Work Programme		2/8/13	14/8/13	100%	Cuba (Rapporteur )
3.1 Provide to OACI the Work Programme	Work Programme	14/8/13	14/8/13	100%	Cuba (Rapporteur )

4. Approve ADS-B TF Work Programme		24/01/14	24/01/14	100%	Group Members
5. Begin Work Programme implementation		31/10/13	31/12/18		Group Members
5.1 Develop ADS-B survey		23/01/14	14/02/14	100%	COCESNA
5.1.1 Send ICAO survey for distribution to the States of the region	Survey on the ADS –B status	28/02/14	28/02/14	100%	COCESNA
5.1.2 Collect survey results	Current situation of ADS- B in the States	28/02/14	30/4/14		ICAO NACC
5.2 Surveying information on the implementation of ADS -B aircraft	survey on the status of ADS -B aircrafts	23/01/14	30/4/14		IATA
5.2.1 Information on implementation of ADS -B aircraft	ICAO Current Status of ADS- B aircraft (Recommendation of target dates for the ADS -B )	30/04/14	30/04/14		IATA
6. Conduct of Tests with ADS-B		8/2/13	5/20/15		States/Territories of the Region
6.1 Continue ADS-B that are being conducted		8/2/13	5/20/15		Canada , Cuba, Mexico, United States, and COCESNA
6.2 Send to TF members the guidance for testing	Guidance for testing	2/13/14	2/13/14	100%	Cuba (Rapporteur )
6.3 Start of ADS-B trials for those States that have not yet done so/ list of States with dates	Support for those who wish to trials	30/10/14	29/5/15		Costa Rica, Jamaica, Nicaragua Trinidad and Tobago
6.4 Sending quarterly to ICAO any deficiencies of the trials	Test results	30/10/13	29/5/15		Group Members
7. Develop relevant operational requirements for the ADS-B implementation		15/11/13	30/04/14		United States
7.1 Provide relevant operational requirements for the ADS-B implementation	Guide with relevant operational requirements for the ADS-B implementation	30/04/14	30/04/14		United States

8. Collect information on national ADS- B implementation plans	States with implementation plans	23/1/14	30/04/14		ICAO NACC
9. Follow-up meeting to the development of ADS- B	Final Report	19/05/14	23/05/14		ANI/WG ADS-B TF
10. Assist the ADS- B operational implementation process	LoA's between regional states Metrics	29/5/15	31/12/18		States/Territories of the Region
11. ADS- B operational implementation process Follow-up	ANRF's	31/12/14	31/12/14		ANI/WG ADS-B TF

### *Activities carried out*

- COCESNA continues its ADS - B in the Central American Flight Information Region (FIR) initiated since 2008 to collect ADS- B data. COCESNA is collecting data with ADS - B receiver INDRA , but version 0.23 software needs to be updated
- United States continues its progress in implementing its ADS- B services
- Cuba has been providing information on the results of the analysis of ADS- B data collected in their trials and is planning a trial MLAT for the first half of this year
- Mexico notified it plans to carry out the installation of 10 ADS-B stations and improvements to the Air Traffic Control (ATC) system for the processing of ADS- B data, together with radar data
- Jamaica is using its ADS - B receiver, but the data is not stored. Jamaica is currently in the planning process to improve its automation system, and plans to resume data collection and archiving at the end of the year
- Trinidad and Tobago reported having an ADS- B receiver, which is being used with the new ATC system .A survey in order to obtain the status of the States/Territories in the region for the ADS-B implementation, taking into account the difference between them was developed
- United States in coordination with the Regional Office of ICAO NACC organized a new ICAO/FAA Workshop on ADS-B and Multilateral Implementation (ADS-B/IMP) from 19 to 22 May of this year, in which different aspects of implementation will be analyzed, both technical and operational with the participation of the industry (system Providers ADS-B and MLAT) and States
- There have been two teleconferences

***Deliverables and results***

2.4 The ADS-B Task Force has noticed the following observations on the ADS-B implementation:

- a) although few advances reported by ADS-B participants to coordinate activities in the NAM/CAR Region and have homogeneous criteria in the analysis and ADS-B data exchange; it is required to review the national plans for implementation of ADS-B, with a view to suit the conclusions arising from the implementation of block upgrades Aviation (ASBUs); and
- b) a number of States have implemented or are working with ADS-B and MLAT receptors and their processing capacity of this type of surveillance data in their automated Air Traffic Services (ATS) systems; so it is necessary to coordinate a target date for implementing ADS-B surveillance in airspace where required; based on an operational concept and the ADS-B Regional Strategy. In this regard, a regional implementation date for ADS-B (out) can be in 2018 with a phased implementation.

**DRAFT  
CONCLUSION  
NACC/WG/4/XX**

**ADS-B OUT IMPLEMENTATION IN THE NAM/CAR REGIONS**

That all States/Territories in the NAM/CAR Region adopt/include in their implementation plans the ADS-B implementation date by **31 December 2018**, to finalize the operational implementation of ADS-B out.

**3. Suggested Actions**

3.1 The Meeting is invited to [sample suggested actions]:

- a) ensure the participation of the representatives of the group members to participate on the ADS-B Task Force Follow-up Meeting to be held on May 23 2014 at a continuation of the ICAO/FAA Workshop on ADS-B and Multilateral Implementation (ADS-B/IMP);
- b) review and approve the ADS-B TF ToRs and work programme;
- c) evaluate the progress of the ADS-B TF;
- d) approve the draft conclusion and improvements suggested by the TF; and
- e) propose any other action or task as deemed necessary

