References:

1st ADS-B TaskForce Teleconference (30 October 2013, 1600 UTC)

- ADS-B TaskForce Terms of References (ANI/WG/01 Report)
- 2. ICAO NACC ADS-B Webpage information
- 3. Previous ADS-B Implementation Activities
- 4. Regional ADS-B Implementation Plan
- 5. Actions agreed from ANI/WG/01 Meeting

Purpose and agenda: to review ADS-B Task Force Terms of References and definition of actions for developing the TF workprogramme and future coordination activities. The adopted agenda was:

- a) Review of Terms of Reference (ToR) of the TF
- b) Ideas for Work Programme development
- c) Other matters

Participants:

Costa Rica: Fernando Naranjo

Cuba: Carlos Jimenes (Rapporteur)

United States: Bill Blakes

IATA: Marco Vidal

• ICAO: Julio C. Siu

Discussions:

- 1. An overview of the trials made and the work achievement currently in the Region was commented, resulting in the teleconferences carried out in defining the existing ADS-B Regional Implementation Plan (Attachment A and B of this minutes). It was highlighted that ADS-B is operational in parts of Canada and United States and shortly in the Golf of Mexico.
- 2. ICAO recalled the participants on the ANI/WG Decision 1/3 for reviewing the TF Terms of Reference and submitting any change and the workprogramme to ICAO by 15 November 2013.
- 3. Carlos carried out a review of the TF ToR (attachment C of this minutes), with no changes and a better understanding of the responsibilities was achieved particularly on the responsibilities regarding providing advice and support to States wishing to initiate operational ADS-B trials, guiding States that have conducted trials to project operational implementation, recommending targets for ADS-B implementation based on air navigation service providers (ANSPs) and user needs and periodically requesting statistics from States resulting from their trials.
- 4. IATA commented on the need to ensure the harmonized use of ADS-B data considering a recommended avionic (DO260 A at least) and ANSP data processing. Everyone was in agreements of carrying out surveys among the ANSPs and airlines (users) to identify the current operational and infrastructure situation.
- For the TF membership, most of the members did not join the teleconference. <u>ACT 01:</u> ICAO will contact Mexico DGAC and SENEAM for the designation of the ADS-B TF Member by 8 November 2013. <u>ACT 02:</u> ADS-B TF Members to review and provide any comments, if any, to the Rapporteur by 12 November.
- 6. A quick review on the available valid ADS related documentation was presented, which is available at the ICAO NACC Regional website: http://www.icao.int/NACC/Pages/edocs-cns.aspx under ADS Activities.
- 7. ICAO recalled the participants that together with the ADS-B Workshop to be held from May 12-15 2014, a tentative ADS-B Task Force Meeting has been scheduled for May 16 2014. Similarly ICAO commented on the Regional CAR RLA Project's initiative for the acquisition of an ADS-B receiver for common use of the Project Members, and the request for the ADS-B TF to support on recommending the most appropriated equipment by February 28, 2014.
- 8. The participants commented on the different deliverables to be included in the workprogramme such as:
 - a) Recommendation on minimum operational and ADS-B capabilities
 - b) Review of ADS-B Plan

- c) Guidance for operational trials
- d) Surveys,
- Recommendation on ADS-B equipment to be acquired Coordination, implementation, and trials for ADS-B e)
- 9. In this regard the Meeting agreed <u>ACT 03:</u> TF Rapporteur will draft a tentative workprogramme by 4 November and members are expected to comment this draft submitting their inputs by 12 November 2013.

Next meeting: tentatively December at 15 UTC



2th ADS-B ACTIVITIES FOLLOW-UP TELECONFERENCE

(14 September 2012, 1600 UTC)

References: 1. Action Plan on ADS-B activities

2. 1st teleconf Minute activities

The reference documents are available at:

http://www.mexico.icao.int/CNS.html#Surveillance

Agenda:

- 1. Follow up to first teleconf Minute activities / FAA explanation on Data fields
- 2. ADS- Course and follow-up Meeting
- 3. Other issues

Participants:

- Cuba: Carlos Jimenez, Juan Ayon
- Jamaica: Derrick Grant, Fabian Taylor
- Mexico: Hector Garcia, Jose Gil Jimenez, Román Ramírez Montalvo, Jose de Jesus Jimenez (email)
- Trinidad and Tobago: Veronica Ramdath
- United States: Michael Polchert, Michael Lam
- COCESNA: Wilmer Flores, Cesar Nuñez
- ICAO: Julio C. Siu

Discussion:

Follow to the first teleconf Minute activities - FAA explanation on Data fields

- ICAO commented that little progress have been informed by the ADS-B Participants to coordinate
 activities in the NAM/CAR Regions to have homogeneous criteria in the analysis and data exchange of
 ADS-B Data, nevertheless ADS-B is one of the main enabler for the ICAO Aviation System Block
 Upgrades (ASBUs) that are to be discussed and agreement in the 12th Air Navigation in November
 2012.
- 2. A follow-up to the previous actions was carried out: Actions 08, 01/01 and 01/02 remain valid.

ACT 04: final ADS-B agreement to be shared with other States after it is signed.

The agreement was signed in May 2012 between FAA-SENEAM, and the technical part for ADS-B need to be developed. <u>ACT 02/01</u>: Mexico/SENEAM to design their new Points of Contact to work out the agreement with FAA, particularly to develop the technical ADS-B parts of this agreement (12 Oct 2012).

ACT 08: Aeromexico to investigate with their aircraft provider on the readiness for ADS-B capability and inform relevant information on the considerations for airline users. To inform no later than March 12, 2012: **VALID**

ACT 01/01: the ADS-B Adhoc Group (Cuba, Mexico, Jamaica, Trinidad, United States and COCESNA) will exchange, by the 31 July 2012, what are the current data fields being collected by their ADS-B equipment to progress on the analysis of this information and propose a common criterion of data fields for the analysis: **VALID**

Progress: United States provided a sample of the data collected and its description of each field. Cuba is not collecting data currently but plans to resume this task after November 2012. Jamaica and COCESNA are collecting data.

ACT 01/02: Mexico will inform the participants on the results and progress made in their meeting with the users as part of the work of the Mexico ADS-B Work Group, by the next ADS-B Teleconference: **VALID:** *Mexico to report*

ACT 01/03: All participants shall review the Points of Contact information and send any changes to ICAO by 18 July 2012: *Completed*

ACT 01/04: All participants shall review the ICAO NACC ADS-B Webpage section and send any improvement comments to ICAO by 20 July 2012: Completed

ACT 01/05: ICAO will send an update to the ADS-B Activities Action Plan to all participants by 18 July 2012. Update to Action Plan posted on Webpage: *Completed*

3. The Participants recalled the available technical support on ADS-B activities from United States or a visit to their facilities as required. This could be achieved by a communication from the State/Territory to the following FAA Point of contact:

Dawn Veatch
Director, Western Hemisphere, Office of International Affairs
FAA National Headquarters
600 Independence Ave., SW
Washington, DC 20591
dawn.veatch@faa.gov

- 4. Jamaica indicated their interest for this assistance and will contact FAA as indicated. Jamaica continues the use of their ADS-B receiver but data is not stored. Presently Jamaica is in the planning process of upgrading their Automation System, and has plans to resume data collection and archiving by the end of the year. The ADS-B receiver manufacturer is ERA configured for a data format: ASTERIX Category 21, Version 0.26.
- Cuba informed that currently they are not collecting ADS-B data since they are upgrading their ATC systems, so this data collection will continue after FPL2012 activities, in other words, by December 2012. The ADS-B receiver manufacturer is VNIIRA.
- 6. Mexico informed that the ADS-B Project was already started and currently the sites visits are being conducted to install 10 ADS-B stations and upgrading their ATC System for the processing of the ADS-B Data together with the radar data. Mexico/SENEAM recognized the need to work more closely with Mexico/DGAC and ICAO for the regulatory aspects for aircraft equipment and procedure formulation and agreement for measuring the data. <u>ACT 02/02:</u> Mexico/SENEAM to inform by 14 December 2012 their Plan of activities on ADS-B to ICAO and ADS-B Ah-hoc Members.
- 7. Trinidad and Tobago commented that they have an ADS-B, not in use currently, and from the trials Trinidad and Tobago had requested their equipment Manufacturer to solve the conflict when ADS-B data is integrated with the radar surveillance information. Also Trinidad and Tobago had requested the equipment manufacturer about what capabilities and configuration the equipment has. ACT 02/03: Trinidad and Tobago to inform by 14 December what equipment (model and type), technical characteristics, projected operational use, use with radar data, etc the current ADS-B equipment has.
- 8. COCESNA is collecting ADS-B data with their INDRA receiver, but the software version 0.23 is to be upgraded. Data evaluation continues.
- 9. United States/FAA briefed on the data sample sent to the participants and that these data fields are in accordance to ASTERIX Category 33, which is a non-standard format only use by United States. The current standard ASTERIX format for ADS-B data is Category 21. <u>ACT 02/04:</u> United States will inform by 14 December 2012 to the ADS-B Group of their planning to expand their ADS-B coverage to Puerto Rico or other areas in the Caribbean, as well as if their current ADS-B format can be translated to CAT 21. <u>ACT 02/05:</u> ICAO to include relevant references for ADS-B for ASTERIX documentation in ICAO NACC ADS-B Webpage by 28 September.

ADS- Course and follow-up Meeting

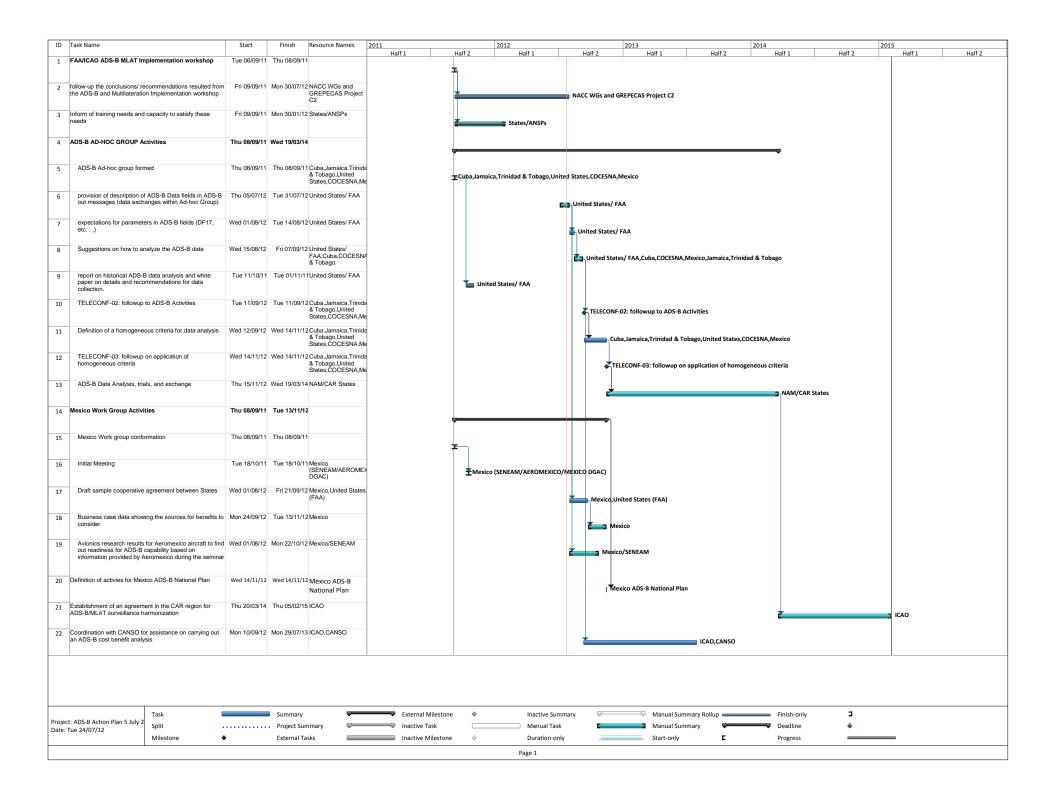
- 10. ICAO commented that COCESNA is organizing an ADS-B course by the end of the year in El Salvador. This event is being coordinated with ICAO and United States. The course is projected to be in Spanish, with material in English, and interpretation service available. Also a follow-up meeting on ADS-B activities is projected.
- 11. In this regard, ICAO, United States and COCESNA are finalizing the agreements to have this event as an ICAO/FAA/COCESNA ADS-B Course and follow-up Meeting, with duration of 1 week tentatively for 26 to 30 November 2012. Cuba commented that this event is not scheduled on 2012 annual event calendar and budget to participate may be a problem. United States and COCESNA confirmed their support to this event. Jamaica is interested to participate with at least 3 participants.
- 12. Under the ICAO Regional Technical Cooperation Project for the Caribbean Region "Implementation of the Performance Based Air Navigation Systems" (RLA/09/801) an ADS-B Meeting was scheduled for 2013. The Meeting considered that the event may also be more beneficial if it could be rescheduled for

the first quarter 2013. <u>ACT 02/06:</u> ICAO will inform the Group no later than **28 September** the final definition of this event and its support by the CAR RLA Project.

Other issues

13. ICAO informed that under the approved work programme of the ICAO Regional Technical Cooperation Project for the Caribbean Region – "Implementation of the Performance Based Air Navigation Systems" (RLA/09/801), the acquisition of ADS-B equipment for common sharing/use by the Project members is considered. In other to develop the technical specification of this event and considering the experience by the Group members, ICAO is requesting these members to share the technical specification of their system and approximately cost and recommend if possible the best equipment for this acquisition. ACT 02/07: ADS-B Group members to share the technical specifications of their ADS-B equipment and suggest as possible, the best ADS-B equipment to be acquired under the ICAO RLA Project by 31 October 2012.

Next Meeting/ Teleconference: Tentatively 13 December 2012 15 UTC



APPENDIX E AUTOMATIC DEPENDENT SURVEILLANCE – BROADCAST (ADS-B) IMPLEMENTATION TASK FORCE

1. Background

During the first ANI/WG meeting, an ADS-B Implementation Task Force was formed in order to streamline related air navigation implementation activities. This Task Force shall support ADS-B trials and implementation activities as well as update and report progress to the ANI/WG based on the action plan for these tasks.

2. Responsibilities

The Task Force is responsible for:

- a) Work Programme Management
- b) Providing advice and support to States wishing to initiate operational ADS-B trials
- c) Guiding States that have conducted trials to project operational implementation
- d) Recommending targets for ADS-B implementation based on air navigation service providers (ANSPs) and user needs
- e) Periodically requesting statistics from States resulting from their trials

3. Working Methods

The Task Force will:

- a) Present its work programme containing activities in terms of objectives, responsibilities, deliverables and timelines
- b) Avoid duplicating work within the ANI/WG and maintain close coordination among the existing entities to optimize use of available resources and experience
- c) Designate, as necessary, Ad hoc Groups to work on specific topics and activities and organize clearly defined tasks and activities
- d) Coordinate tasks to maximize efficiency and reduce costs via electronic means including emails, telephone and teleconference calls, and convene meetings as necessary
- e) Report on and coordinate the progress of assigned tasks to the ANI/WG

4. Work Programme – to be included

5. Membership

Task Force Member- Name:	State/T/IO	email
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