



ICAO

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North American, Central American and Caribbean Office

WORKING PAPER

NACC/WG/7 — WP/11
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Seventh North American, Central American and Caribbean Working Group Meeting (NACC/WG/7)
ICAO NACC Regional Office, Mexico City, 29 August - 1 September 2022

Agenda Item 3: Follow-up of the Activities of the NACC/WG Task Forces

3.1 Progress of the NACC/WG on Aeronautical Information Management (AIM), Air Traffic Management (ATM) and Communications, Navigation and Surveillance (CNS)

GUIDE FOR STATES ON PARAMETERS TO MONITOR THE PERFORMANCE OF ADS-B SYSTEMS

(Presented by the Surveillance Task Force Rapporteur)

| EXECUTIVE SUMMARY | |
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| This working paper presents the Parameters to Monitor the Performance of Automatic Dependent Surveillance – Broadcast (ADS-B) systems guide developed in collaboration with members of the Surveillance Task Force during a working group meeting held in Mexico City, Mexico in July 2022. | |
| Action: | Suggested actions are presented in Section 3. |
| <i>Strategic Objectives:</i> | <ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Environmental Protection |
| <i>References:</i> | <ul style="list-style-type: none">• Surveillance Task Force Meeting held in Mexico City, Mexico from 13-15 July 2022 |

1. Introduction

1.1 At the Surveillance Task Force Meeting held in Mexico City, Mexico from 13-15 July 2022, an Ad-Hoc group met to finalize a guide for ICAO Member States to utilize when developing an Automatic Dependent Surveillance-Broadcast (ADS-B) analytical tool to monitor ADS-B performance and quality metrics. The Ad-Hoc group consisted of representatives from Cuba, Mexico, the United States, and COCESNA.

1.2 During that meeting, the Ad-Hoc group developed a document in both English and Spanish in order to be presented to this group for consideration for approval and publication on the ICAO NACC Regional Office website for the NAM/CAR Regions.

1.3 Completion of this task brings to closure one of the key projects identified under the ICAO Surveillance Task Force working group activities.

2. Discussion

2.1. During the Air Navigation Services (ANS) Surveillance Task Force (TF) meeting held from 13 to 15 July 2022, the document “Parameters To Monitor The Performance of ADS-B Systems” was finalized by the Ad-Hoc group.

2.2. The purpose of this document is to assist States in the NACC region with a guide for items to consider when developing a tool to monitor ADS-B system performance in their respective airspace.

2.3. The document identifies the general parameters that should be included in order to properly evaluate the performance of Automatic Dependent Surveillance-Broadcast (ADS- B) OUT, and perform statistical analysis of the ADS-B information received by a monitoring system.

2.4. As a result of the July 2022 meeting, a decision was made by the Ad-Hoc group to present the finalized document to the NACC working group for final approval.

2.5. Once approved, this document will not only assist States in the development of their ADS- B monitoring tool, but also identify a minimum set of parameters to be captured and analyzed improving harmonization on data reporting across the region.

2.6. A copy of the document can be found in the **Appendix** to this working paper.

3. Suggested actions

3.1 The Surveillance Task Force Ad-Hoc group is inviting the meeting to:

- a) review and accept the “Parameters To Monitor The Performance of ADS-B Systems” document as a reference guide for the development and implementation of an ADS- B performance monitoring tool;
- b) with this, standardize as much as possible, the regional ADS-B monitoring tools implementations; and
- c) discuss any other issues it may deem appropriate.
