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WORKING PAPER

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**Third NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/3)**  
Mexico City, Mexico, 4 to 6 April 2016

- Agenda Item 4: Follow-up, Performance Evaluation and Monitoring of the NAM/CAR Regional Performance Based Air Navigation Implementation Plan (NAM/CAR RPBANIP) Targets**
- 4.1 Progress Reports of the Task Forces and the ANI/WG**

**UNITED STATES UPDATE ON THE NORTH AMERICAN COMMON INTERFACE CONTROL DOCUMENT (NAM ICD) VERSION 'E'**

(Presented by United States)

**EXECUTIVE SUMMARY**

This paper and brief present information on Air Traffic Service Inter-facility Data Communications (AIDC) of the North American Common Interface Control Document update to Version "E" which serves as the primary guide for the automated data exchange for automated Air Traffic Service (ATS) systems of the North American and Caribbean (NAM/CAR) Regions. This Paper updates the referenced document within the NAM/CAR Regions where the United States and other member States provide the existing and future AIDC Flight Information Region (FIR) to FIR data interfaces.

<b>Action:</b>	Suggested action in Section 3.
<b>Strategic Objectives:</b>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<b>References:</b>	<ul style="list-style-type: none"><li>• ICAO Global Plan Initiatives (GPI)</li><li>• GPI-9 – <i>Situational Awareness</i></li><li>• Regional Performance Objective (RPO) 4: <i>Improve Situational Awareness</i></li></ul>

## 1. Introduction

1.1 The increasing traffic, demands between Flight Information Regions (FIRs), prompt efficiency and accuracy improvement for the Air Traffic Control (ATC) providers. Developing a harmonized process and defining protocols for exchanging data between multiple States/Territories/International Organizations within and across regions, thus it is critical to achieving this objective. As ATS providers develop their automation systems, consideration should be given to meeting the capabilities identified within an Interface Control Document (ICD) which serves to meet the Region requirements. The Air Traffic Services Inter-facility Data Communications (AIDC) in the NAM/CAR Regions was modelled from an AIDC ICDs, the ICAO Doc 4444 — *Air Traffic Management* currently supports twenty three (23) operational member interfaces; the NAM ICD documents the protocol of these interfaces.

## 2. Discussion

2.1 The NAM ICD Version “E” document change addresses messages exchanged between Air Navigation Service Providers (ANSP) and Area Control Centres (ACCs) for Instrument Flight Rules (IFR) aircraft. Within the NAM ICD, ATC operations units forward necessary flight plan data and control information from unit to unit, as the flight progresses. The NAM ICD usage supports the notification, coordination, and transfer of control phases outlined within the ICAO Doc 4444, Pan Regional Interface Control Document (PAN ICD) for AIDC ICAO Doc 9694-AN/955 *Manual of Air Traffic Services Data Link Applications*.

2.2 The NAM ICD Version ‘E’ (NAM ICD-E) update does not change the automated data exchange for any existing operational interface. Existing NAM ICD member states do not have to implement any changes in support of the NAM ICD-E.

2.3 Changes, corrections and activations which will make-up the NAM ICD-E activities include:

- Radar Handoff messaging and Interface Management Support
  - o United States – Canada to Initiate Radar Handoff/Point Out messaging development to support existing domestic interfaces
  - o United States – Canada Boundary Agreement will reflect Handoff implementation specifics
  - o Implementing interface management messages, Airspace System Management (ASM) message added
  - o Identification/support of direct communication requirement for Handoff/Point Out
- Radar Point Out messages added as Class 3 capability
  - o Point Out – Basic added/Identified for implementation
  - o Point Out – Enhanced added for future implementation
- New York, Oakland and Anchorage ATS facilities being added as emerging United States NAM ICD facilities interfacing with Canada Air Traffic Services (CAATS)

- Advance boundary information (ABI) Supplemental Messages, Top of Climb/ aeronautical operational control (TOC/AOC) messages defined
- Error Codes Expanded (see **Appendix**)
- Corrections identified and corrected
- COCESNA Boundary agreements with Havana and Merida Area Control Centres (ACCs) added

2.4 The North American automated flight data message set found in the NAM ICD is used operationally between United States and Canada, United States and Mexico, United States and Cuba, Cuba and Mexico and COCESNA and Mexico and COCESNA and Cuba. One of the strengths of the NAM message set is the scalability of the functionality.

2.5 The automated flight data message set allows an automated interface to be constructed with a minimum of two messages, known as Class 1. Class 1 consists of the current flight plan (CPL) message; the CPL and the acknowledgement message; the Logical Acknowledgement Message (LAM). More capabilities are available in Class 2, building on the Class 1 foundation, by adding pre-departure and post-departure amendment capability, near border departures and specific error information on message failures.

### **3. Suggested Actions**

3.1 The Meeting is invited to:

- a) Note the information in this Working paper and briefing;
- b) support measures and build on lessons learned by Member States to reach the goal of a seamless, globalized Air Traffic Management (ATM) system using the NAM ICD; and
- c) look at the recent automated data exchange successes using the NAM ICD and the Class 1, 2 and 3 capabilities it defines.

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