International Civil Aviation Organization

MIDANPIRG ATM Sub-Group

Second Meeting (ATM SG/2)
(Cairo, Egypt, 30 November – 03 December 2015)

Agenda Item 3: Global and Regional Developments related to ATM and SAR

ELECTRONIC AIR NAVIGATION PLAN (eANP) VOLUME III

(Presented by the United States of America)

SUMMARY

This paper presents recommended changes to the Regional eANP Volume III. The same recommendations were presented to the North Atlantic (NAT) eANP Project Team then translated into the NAT eANP Volume III and were presented for endorsement by the NAT Implementation Management Group (IMG) and adoption by the North Atlantic Systems Planning Group (NAT SPG).

Action by the meeting is at paragraph 4.

1. INTRODUCTION

1.1 The Twelfth Air Navigation Conference (AN-Conf/12) agreed to Recommendation 6/1- *Regional performance framework – planning methodologies and tools regarding the alignment of regional ANPs with the fourth edition of the Global Air Navigation Plan (GANP) (Doc 9750).*

1.2 Following this recommendation, ICAO established a working group (eANP WG), composed of representatives from ICAO Regional Offices and Headquarters, to make proposals for changes to the regional ANPs which included the development of a new structure, format and content of the ANP.

1.3 During the ICAO Caribbean-South American Regional Planning and Implementation Group (GREPECAS/17) meeting, the eANP WG results and eANP approved format by ICAO Council were presented to the meeting. The eANP is composed of three volumes: (1) Volume I contains stable plan; (2) Volume II contains more dynamic plan elements; and (3) Volume III contains dynamic/flexible plan elements that provide planning and implementation guidance for ANSPs as they move toward modernization of their airspace that incorporates ASBU initiative and associated technology roadmaps described in the GANP.

2. ISSUES IDENTIFIED

2.1 The FAA began the internal coordination to provide status on where we were in the implementation of ASBU Block 0 Modules. As we progressed, we have identified some proposed changes to assist States in the implementation of the ASBU initiatives. The FAA identified and discussed items for clarification including:

- Distinction between Modules and Elements
- Description of Elements
- Define process to relate Elements to the State/Regional Needs
- Concept and description of Implementation Indicators
- Tailor each Element identified in the Air Navigation Reporting Form (ANRF) section 8, Performance Monitoring

2.2 In addition to the proposed changes to the ASBU initiative, the FAA also identified areas to clarify in the eANP Volume III format, to include:

- Identify and include Block 1 Modules
- Mention Block 2 and Block 3
- Provide stronger interrelation between the eANP Volume II and/or regional specific requirements

3. DISCUSSION/APPROACHES TAKEN

3.1 The NAM Region, which consists of the United States and Canada, does not have a formal regional ANP. Because of the recent activity to transition the regional ANPs to the new eANP format, the ICAO North American, Central American and Caribbean (NACC) Office in Mexico City asked the FAA and NAV CANADA to look at the feasibility of developing a regional ANP for North America. The FAA and NAV CANADA are working collaboratively on feasibility of a North American (NAM) eANP.

3.2 During the second NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/2) in Puntarenas, Costa Rica, 1-4 June 2015, the NAM eANP team introduced the following components for the eANP:

- NAM ASBU Handbook – Supporting analysis and implementation reporting of the ICAO ASBU Modules
- ASBU Element Analysis and Implementation Work Flow
- Implementation Status Table
- Revised Implementation Indicator concept
- Revised ANRF

3.3 The *NAM ASBU Handbook – Supporting analysis and implementation reporting of the ICAO ASBU Modules*, identifies the Block 0 and Block 1 Elements that are implementable. It is very important to note that Elements are implementable capabilities while Modules are high level concepts.

3.4 The *ASBU Element Analysis and Implementation Work Flow*, is a simple, yet easy to understand process that is integral to systematically monitoring the ASBU and any other capability implementation progress. Figure 1 shows the *ASBU Element Analysis and Implementation Work Flow* diagram.

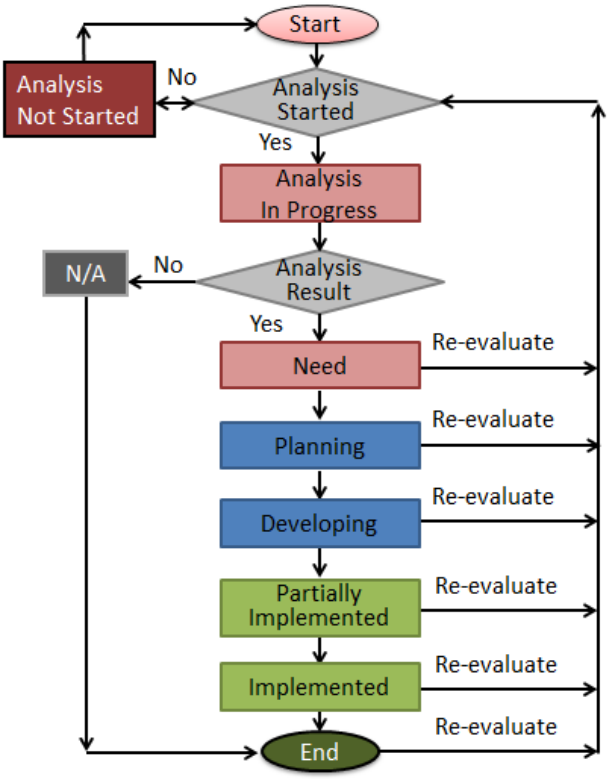

Figure 1: *ASBU Element Analysis and Implementation Work Flow*

3.5 The Implementation Status Table is based on the *ASBU Element Analysis and Implementation Work Flow*. Sample table is shown below as Table 1.

Block 0 Modules	Module Elements	Need Analysis of Module Elements				Implementation Status (if Element is needed)			
		Not Started	In Progress	Need	N/A	Planning	Developing	Partially Implemented	Implemented
Performance Improvement Area 4: Efficient Flight Paths									
CCO	1. (Defined: Element 1) Procedure changes to facilitate CCO	X							
	2. (Defined: Element 1) Route changes to facilitate CCO	X							
	3. (Defined: Element 2) PBN SIDs	X							
CDO	1. (Derived from Element 1) Procedure changes to facilitate CDO	X							
	2. (Derived from Element 1) Route changes to facilitate CDO	X							
	3. (Derived from Element 2) PBN STARs	X							
TBO	1. (Defined: Element 1) ADS-C over oceanic and remote areas								X
	2. (Defined: Element 2) Continental CPDLC								X

Table 1: Sample Implementation Status Table

3.6 This Implementation Status Table is also applicable to the State ANP. This table supports the ICAO's "No Country Left Behind" (NCLB) campaign that assists States in implementing ICAO Standards and Recommended Practices (SARPs). This table helps the States in determining whether it is being "Left Behind", a critical step in defining the success of the implementation process.

3.7 The implementation indicators in the current template did not clearly and systematically associate with the Elements. Rather, the existing implementation indicators are associated with Modules in an ambiguous manner.

3.8 The NAM eANP team's recommendation for the implementation indicators was to associate the Region/State needs to the Element first. Then implementation status of each Element is evaluated against the implementation status.

3.9 The ANRF is an excellent tool to plan, monitor, and report implementation status. By preparing ANRF to report the Block 0 Element implementation status, the FAA identified suggested improvements to the form. The amendments were presented at the ANI/WG/2 and accepted.

3.10 The NAM eANP team was invited to support the North Atlantic (NAT) eANP Project Team in 4 -7 August 2015 in Paris, France by the ICAO NAT Office. The second NAT eANP Project Team meeting was again hosted by the ICAO NAT Office in 31 August – 2 September 2015. The work during the second meeting was concentrated in the development of the NAT eANP Volume III.

3.11 The NAT eANP, including Volume III has been endorsed are by the NAT IMG/47 (2 – 5 November 2015) and NAT SPG. Refer to NAT IMG/47-WP/04 and WP05.

3.12 The ICAO NAT Office also introduced the progress of the NAT eANP at the fourth Inter-Regional Coordination Meetings between APAC, EUR/NAT and MID (IRCM/4) in Bangkok, Thailand, 14 -16 September 2015.

3.13 The proposed new structure of Volume III is as follows:

- Part 0 – Introduction
- Part I – General Planning Aspects
- Part II – Air Navigation Systems/ASBU Implementation
- Part III – Air Navigation System/Regional Specific Improvements Implementation

4. ACTION BY THE MEETING

4.1 The meeting is invited to:

a) note the information provided; and

b) provide any suggested improvements to the eANP Volume III.

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