



ICAO

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

WORKING PAPER

MEVA/TMG/29 — WP/17  
19/11/14

**Twenty-ninth MEVA Technical Management Group Meeting (MEVA/TMG/29)**  
Mexico City, Mexico, 9 to 12 December 2014

**Agenda Item 7: Other Matters**  
**7.1 Aviation System Block Upgrade (ASBU) Implementation and Support review**

**AVIATION SYSTEM BLOCK UPGRADE (ASBU) IMPLEMENTATION FOR INCLUSION IN MEVA/TMG ACTIVITIES**

(Presented by the Secretariat)

<b>EXECUTIVE SUMMARY</b>	
This working paper presents an overview of the Aviation System Block Upgrade (ASBU) methodology adopted under the NAM/CAR Regional Performance based Air navigation Implementation Plan for the Group consideration and update of existing work programme and Terms of Reference.	
<b>Action:</b>	The suggested actions are detailed in Section 3
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li><li>• Environmental Protection</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (NAM/CAR RPBANIP) ver 3.1</li><li>• ICAO Doc 9750 - Global Air Navigation Plan (GANP)</li><li>• Twenty-sixth MEVA Technical Management Group Meeting (MEVA /TMG/26), ICAO NACC Regional Office, Mexico City, Mexico, 4 to 7 June 2013</li><li>• Second NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/02), Costa Rica, 1 to 4 June</li></ul>

**1. Introduction**

1.1 The ICAO Assembly (States) endorsed the Fourth Edition of the *Global Air Navigation Plan (GANP)*, Doc 9750, which provides strategic direction for the ICAO global air navigation system technical work programme and serves as global guidance for the PIRGs, States, service providers, airspace users, and other stakeholders. The GANP offers these entities long-term vision with developing and implementing air navigation infrastructure and avionics advances leading to full global harmonization of the ATM system.

1.2 The GANP includes a valuable set of implementation tools under the ASBUs methodology. The ASBUs are complemented by Communication, Navigation and Surveillance (CNS) avionics and information management roadmaps. The ASBUs and the roadmaps related to technology were an integral part of the GANP and constitute.

1.3 ASBUs are organized in five-year increment working programmes starting in 2013 and continuing through 2028 and beyond. The ASBU methodology serves as a comprehensive framework encompassing a set of modules, which are organized in flexible and scalable blocks and can be implemented in a State or region depending on the operational needs and preparation level in regard to:

- Aerodrome operations
- Interoperability and data through the globally interoperable System-Wide Information Management (SWIM) system
- Optimization of capacity and efficiency through global collaborative air transport management
- Efficient flight paths through trajectory-based operations and future actions for air navigation

1.4 Once operational implementation of ASBU modules has been completed, a strategic monitoring programme for identifying air navigation performance achievements will be established.

1.5 During the MEVA TMG/26, the Secretariat presented a summary of the recommendations of the AN-Conf/12 approved by the ICAO Council; the implementation of the ASBUs methodology; and the creation of the New NAM/CAR Air Navigation Implementation Working Group (ANI/WG) and recalled the coordination and inputs from the TMG to the existing working groups in the Regions, particularly the C/CAR/WG; as identified in conclusion *MEVA TMG 21/4 - Contributions to the Development of C/CAR/WG Work Programme*, where the importance of the MEVA II Network on the provision of services in the Central Caribbean sub-region was highlighted and recognized that the MEVA TMG conducting a network performance analysis of all the services and the planning of future new services in the Network.

1.6 The TMG/26 also recognized that the recommendations of the AN-Conf/12 and the implementation of the ASBU methodology will be followed-up by the States through the different working groups and the contributory bodies to the working groups. The C/CAR/WG is no longer an active group. It was merged into a single implementation group, NAM/CAR ANI/WG where telecommunication activities are covered under CNS matters. The MEVA TMG, as the active management group for the telecommunication infrastructure in the C/CAR sub-region, is a key contributory body that is expected to support ANI/WG development and NAM/CAR Regional Performance Based Air Navigation Implementation Plan (RPBANIP) implementation. In this regard, the conclusion 26/20 - *MEVA TMG Support for ANI/WG Activities* was agreed

## **2. Discussion**

2.1 To this extend, the ANI/WG reviewed and supported the NAM/CAR RPBANIP and aligned the Regional Performance Objectives (RPOs) with the ICAO ASBU modules. The ANI/WG recognized that by adopting the ASBUs, all air navigation regional plans and implementation activities would be updated during 2014 with the RPBANIP version 3.1.

2.2 The NAM/CAR ANI/WG/1 and the E/CAR/CATG/1 Meetings noted these tasks.

2.3 The RPBANIP is available at the following link: <http://www.icao.int/NACC/Pages/namcar-RPBANIP.aspx>, including the 18 ASBU Block 0 modules adopted by the NAM/CAR regions and the corresponding Air Navigation Reporting forms (ANRFs).

2.4 During the TMG/28 Meeting, ICAO presented the air navigation regional priorities and targets related to the MEVA Network infrastructure that were developed by the NAM/CAR ANI/WG and approved by the NAM/CAR Directors of Civil Aviation. The Meeting also recognized that these regional priorities/RPOs related to the MEVA Network infrastructure shall require follow-up and accomplishment by the MEVA Network. The air navigation targets that are related to the MEVA Network infrastructure under ASBU module 0 are as follows:

ASBU B0 Module	Element	Targets
B0-30/DAIM: Service Improvement through Digital Aeronautical Information Management	Aeronautical Information Exchange Model (AIXM) 5.1 Implementation	40 % of States with AIXM 5.1 implemented by December 2018
B0-25/FICE: Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration	AMHS Implementation	4 States to have Air Traffic Services Message Handling Services (AMHS) interconnected with other AMHS by December 2014
	ATS Interfacility Data Communications (AIDC) Implementation	50% of FIRs within which all applicable ACCs have implemented at least one interface to use Air Traffic Services Inter-facility Data Communication (AIDC)/On-line Data Interchange (OLDI) with a neighbouring ACC by December 2016.
	Aeronautical Telecommunication Network (ATN) Router Structure Implementation	70% of ATN router structure implemented by June 2016 100% MEVA III IP Network implementation by August 2015
B0-102/SNET: Increased Effectiveness of Ground-Based Safety Nets	Short Term Conflict Alert Implementation (STCA)	80% of selected ATS units with ground based safety nets (STCA) implemented by Dec. 2015
	Area Proximity Warning (APW)/Minimum Safe Altitude Warning (MSAW)	70% of selected ATS units with ground based safety nets (APW) implemented/70% of selected ATS units with ground based safety nets (MSAW) implemented by Dec. 2015
	Medium Term Conflict Alert (MTCA)	80% of selected ATS units with ground based safety nets (MTCA) implemented by Dec. 2016

2.5 Considering that the communication network will be a key component of the ASBU implementation, the existing work programme and terms of reference shall be reviewed and updated accordingly for its approval by the States.

2.6 Eventually for 2015, the RPBANIP content will be migrated to the Volume III of the electronic Regional Air Navigation Plan (eANP).

2.7 The ANI/WG/02 Meeting will be held in Costa Rica in June 2015.

**3. Suggested Action**

3.1 The Meeting is invited to:

- a) take note of ASBU and the RPBANIP considerations;
- b) adopt actions to support the ANI/WG/02 Meeting;
- c) review and update the MEVA/TMG work programme and terms of reference aligning them to the RPBANIP and ASBU methodology; and
- e) take any other action as deemed necessary.

— END —