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**Agenda Item 4: NACC/WG Work Programme Update to 2024**  
4.2 Development of the Electronic Air Navigation Plan e-ANP Volume III

**REPORT ON THE PROGRESS IN THE FORMULATION AND MANAGEMENT OF VOLUME III OF THE AIR NAVIGATION PLAN OF THE CAR/SAM REGIONS / REPLACEMENT OF THE RPBANIP**

(Presented by the Secretariat)

<b>EXECUTIVE SUMMARY</b>	
This Working Paper presents the status of the project for the formulation and management for Volume III of the CAR/SAM Air Navigation Plan and proposes actions to integrate the normal activities of the NACC/WG working groups with the tasks aimed at implementing a framework for managing the performance of air navigation services.	
<b>Action:</b>	Suggested actions are presented in Section 5.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• Doc 9883, Manual on Global Performance of the Air Navigation System</li><li>• CAR/SAM Air Navigation Plan</li><li>• Regional Performance Based Air Navigation Implementation Plan (RPBANIP)</li><li>• Minute of the Fourth GREPECAS Programmes and Projects Review Committee (PPRC) Virtual Meeting (ePPRC/04) 21 – 22 April 2022</li><li>• Instructions for Use of the Template for Volume III of the Regional Air Navigation Plan – CAR/SAM ANP</li></ul>

**1. Introduction**

1.1 The Regional Air Navigation Plans (ANP) provide for the planning and implementation of air navigation systems within a specific Region (or Regions), in accordance with the agreed global and regional planning framework.

1.2 The ANPs are developed to reinforce applicable ICAO Standards and Recommended Practices (SARPs), as well as to meet requirements for specific areas not covered in global provisions. The ANPs must support the performance-based planning approach adopted by ICAO to measure the efforts made by the States in the implementation of the agreed requirements.

1.3 The development and maintenance of the ANPs is carried out by the ICAO planning and implementation regional group (PIRGs) with the assistance of the ICAO Secretariat.

## **2. Background**

### *2.1 Performance-based air navigation system*

2.1.1 The notion of a performance-based air navigation system grew out of well-founded industry practices outside the aviation industry.

2.1.2 The performance-based approach (PBA) applied in this context is based on the following principles:

- strong focus on desired or required results through the adoption of performance objectives and targets;
- informed decision making, motivated by desired or required results; and
- decision making based on facts and data.

2.1.3 The performance-based approach is a way of organizing the management process. ICAO focuses on applying this process based on a six-step process:

- STEP 1: Scope, Context & General Ambitions and expectations
- STEP 2: SWOT Analysis/ set objectives
- STEP 3: Set of targets/ Calculation of needs
- STEP 4: Optimum solution identification
- STEP 5: Optimum solution deployment
- STEP 6: Results assessment

### *2.2 Approval of the new Regional Air Navigation Plan (ANP) template and Procedures for Amendments*

2.2.1 In 2014, the ICAO Council approved changes to the ANP template and introduced concepts to support the performance-based planning approach adopted by ICAO to measure States' efforts to implement agreed requirements. The Council decided that Volume III should contain dynamic/flexible plan elements providing implementation planning guidance for air navigation systems and their modernization taking into consideration emerging programmes such as the ASBUs and associated technology roadmaps described in the GANP.

2.2.2 Part I of Volume III would include a table to define a minimum set of indicators for each of the 18 ASBU Block 0 modules and to include other information as deemed necessary, for use in all regions. The details related to the monitoring of the ASBU modules, including the design of supporting enablers (tables/databases) would be left to the regions/PIRGs.

### 2.3 *Regional Performance-Based Air Navigation Implementation Plan*

2.3.1 In order to harmonize the implementation of air navigation systems/services in the NAM/CAR Regions, the NACC civil aviation directors approved the NAM/CAR RPBANIP at the NACC/DCA/3 Meeting and agreed that it would be the reference for all air navigation implementation, whose activities would be reflected in the National Plan of each State/Territory.

2.3.2 Since 2008, the RPBANIP has been the reference for all action plans and implementation tasks of the NAM/CAR implementation working groups. All working groups reported annually on progress and operational achievements.

2.3.3 Subsequent updates to the RPBANIP resulted in the implementation of a performance-based air navigation planning system, as adopted by the ICAO Council, with requirements similar to those of Volume III of the ANP. GREPECAS/18 in 2018, concluded (Conclusion 18/7) on the postponement of the development of the CAR/SAM eANP Volume III, pending important changes in 2019 of new versions of GANP and ASBU.

### 2.4 *Project for the formulation and management of the CAR/SAM ANP Volume III*

2.4.1 The (ANConf/13), through Recommendation 4.3/1, item d) had encouraged the Planning and Implementation Regional Groups (PIRGs) to apply a Performance-Based Approach (PBA) for implementation and adopt the six-step performance management process described in the Manual on the Global Performance of the Air Navigation System (Doc 9883) mirroring the process in Vol. III of all Regional Air Navigation Plans (RNAPs).

2.4.2 PPRC/5, through Conclusion PPRC/05-10, instructed the Secretariat to process the approval of Vol. III of the CAR/SAM e-ANP no later than the third quarter of 2020. ICAO formed an Interregional Working Group for the preparation of a Standardized Template for Volume III of the ANPs with PBA. The GREPECAS Secretariat carried out activities to socialize, before and during the pandemic, the standardized Template proposed by ICAO, with the purpose of building Volume III of the CAR/SAM Regional Air Navigation Plan (e-ANP CAR/SAM) and observed the following:

- a) The basic building blocks were not all implemented in the States;
- b) Lack of uniform criteria;
- c) Different interpretations in the States of the application of the proposed template; and
- d) Need to review and update Vols. I and II.

2.4.3 The Secretariat, considering the previous points, decided to develop a Project to align the CAR/SAM ANP with the 6th Edition of the GANP, which includes the revision of Vols. I and II of the ANP and the processes related to the preparation and management of the CAR/SAM ANP Volume III. This approach will ensure a consistent and systemic updating of the CAR/SAM ANP.

2.4.4 The Project prepared by the Secretariat contains the following main results:

- a) Project Planning;
- b) Management of the master document of the CAR/SAM ANP;
- c) Analysis of the ANP with other documents (Global Aviation Safety Plan (GASP), Doc 7030 — Regional Supplementary Procedures, etc.);
- d) Revision of the CAR/SAM ANP Vol. I;
- e) Revision of the CAR/SAM ANP Vol. II; and
- f) Development of instructions — Assistance for the formulation and management of Vol. III of the CAR/SAM ANP.

2.4.5 The Secretariat carried out different activities to continue with the project deliverables. By following the six-step method (mentioned in 2.1.4) the Secretariat has been able to collect information to complete the first three.

### **3. Analysis**

3.1 The CAR Region, with the support of the ASBU Task Force and the Secretariat, has carried out important support work for the preparation of the National Air Navigation Plans, which has culminated in the national air navigation plans for 16 States and one International Organization that provides air navigation services in this Region. These plans contain valuable information that will support the population of the tables in Volume III.

3.2 The implementation of the performance-based approach (PBA) implies, in a simple way, the development of State and regional capabilities for data collection, the use of this data to identify problems/opportunities for improvement, selection of solutions and to be able to verify by measuring the performance the effectiveness (or not) of the implemented solutions.

3.3 The transition from the RPBANIP to Volume III of the CAR/SAM ANP should be a gradual process, which will imply a clear differentiation of the prescriptive elements based on monitoring implementation and those based on performance measurement. For the latter, support to States and air navigation service providers that have not yet developed performance measurement capabilities will be essential.

### **4. Recommendations**

4.1 States, Territories and International Organizations that provide air navigation services in the CAR Region must follow up on the formulation and management process of Volume III of the CAR/SAM ANP, providing information that allows feeding the tables of this Volume.

4.2 The management process of national air navigation plans, already prepared or pending preparation, should serve as a reference to Volume III of the CAR/SAM ANP.

4.3 The different working groups of the NACC/WG must support the implementation process of the performance-based approach (PBA), both at the Regional and National levels, explaining for each of their respective areas the most suitable mechanisms for an adequate performance measurement of air navigation services.

4.4 The Air Navigation Plan of the CAR/SAM Regions must be the main regional reference to guide the regional and national planning of air navigation services, as well as the different work programs of the NACC/WG.

## **5. Suggested actions**

5.1 The Meeting is invited to:

- a) evaluate the progress in the formulation and management of Volume III of the CAR/SAM ANP;
- b) support the recommendations included in Section 4 of this Paper; and
- c) instruct the working groups of the NACC/WG to evaluate the transition process of the RPBANIP and the impact on its different work programs.