



Agenda Item 4: Monitoring and reporting of the implementation of air navigation in the CAR/SAM Regions

PROGRESS ON THE IMPLEMENTATION AND FOLLOW-UP ON THE AIR NAVIGATION TARGETS ESTABLISHED ON THE PORT-OF-SPAIN AND BOGOTA DECLARATIONS AND THE REGIONAL PERFORMANCE-BASED AIR NAVIGATION IMPLEMENTATION PLANS

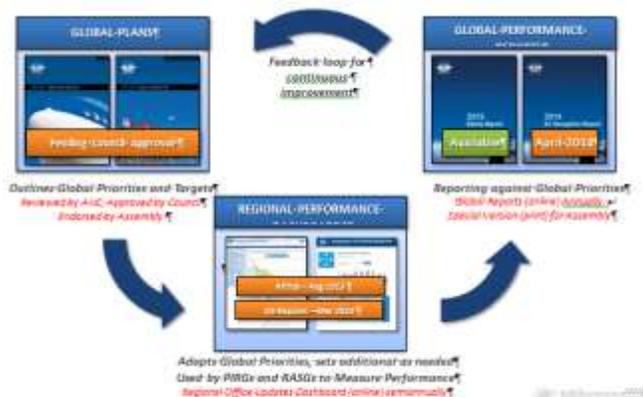
(Presented by Secretariat)

SUMMARY	
<p>This working paper presents the reporting and monitoring activities on the progress made in the Air Navigation targets by each ICAO regional office (NACC and SAM), according to the mechanism established by GREPECAS.</p>	
References:	
<ul style="list-style-type: none"> • Seventeenth CAR/SAM Regional Planning and Implementation Group Meeting (GREPECAS/17) Report, Cochabamba, Bolivia, 21 to 25 July 2014 • Fourteenth Workshop/Meeting of the SAM Implementation Group (SAM/IG/14) Report, Lima, Peru, 10 to 14 November 2014 • Fifteenth Workshop/Meeting of the SAM Implementation Group (SAM/IG/15) Report, Lima, Peru, 11 to May 2015 • Second NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/2) Report, Puntarenas, Costa Rica, 1 to 4 June 2015 	
<p><i>ICAO Strategic Objectives:</i></p>	<ul style="list-style-type: none"> • Safety • Air Navigation Capacity and Efficiency • Environmental Protection

1. Introduction

1.1 The Global Air Navigation Plan (GANP) drives the technical work programme of ICAO in the field of air navigation for each triennium as a strategic planning document for the implementation/planning of air navigation worldwide.

1.2 Following the 12th Air Navigation Conference (AN-Conf/12), a new GANP was developed and approved by the 38th Session of the



ICAO Assembly. Together with the new GANP, supporting electronic tools, including an annual Global Air Navigation Report and regional performance dashboards were envisioned to dynamically communicate progress and share implementation experiences. The A38-2 Resolution Appendix B entrusted the Council to publish the results of analyses on the regional performance dashboards and in an annual global air navigation report to include, as a minimum, the key implementation priorities and estimated accrued environmental benefits using the recognized methods by the ICAO Committee on Aviation Environmental Protection (CAEP).

1.3 The metrics or set of initial data that include global air navigation key priorities referred to in Resolution A38-2 Appendix B are:

- Performance Based Navigation (PBN)
- Continuous Decent Operation (CDO)
- Continuous Climb Operations (CCO)
- Aeronautical Information Management (AIM)
- Air Traffic Flow Management (ATFM)
- Estimated environmental benefits accrued from operational improvements based on ICAO Fuel Savings Estimation Tool (IFSET) or any other recognized tool by the CAEP

1.4 The indicators and performance targets for the CAR/SAM Regions were dealt with during 2013-2014 for safety and air navigation, establishing these targets and indicators in the corresponding Regional Air Navigation Performance-based Plans for NAM/CAR Region (RPBANIP) and for SAM Region (SAM PIB). In the Bogota and Port of Spain Declarations, the most relevant targets were established in accordance to Resolution A38-2.

2. Discussion

2.1 The Seventeenth CAR/SAM Regional Planning and Implementation Group Meeting (GREPECAS/17) considered that the Programmes and Projects Review Committee (PPRC) would be responsible of the collection, monitoring and reporting progress on operational improvement implementation in the CAR/SAM Regions through the Regional Offices. In this sense, the Meeting agreed Conclusion 17/7 – *Approval of the Forms to Follow-Up on the Progress on Indicators and Targets for the CAR/SAM Regions*, where it was established that GREPECAS will collect, monitor, and report progress on operational improvement implementation in the CAR/SAM Regions based on the indicators and targets established in the Bogota and Port-of-Spain Declarations, and will commission ICAO NACC and SAM Regional Offices to implement this forms for the progress reporting in the regional performance dashboards. This progress in the established format is detailed in WP/06.

2.2 During GREPECAS/17 Meeting, the future inclusion of RPBANIP and SAM PBIP planning and implementation elements (including the adopted Aviation System Block Upgrade (ASBU) modules) in the electronic Regional Air Navigation Plan (e-ANP), Volume III was also informed. This was agreed in Conclusion 17/8 - *Inclusion of Regional Performance-Based Implementation Plans in the New Air Navigation Plan (eANP)*, according to the detail provided in WP/05.

2.3 In order to support this monitoring and reporting process by the PPRC, NACC and SAM Regional Offices have developed the following activities:

CAR Region

2.4 NACC Regional Office collects information on the air navigation progress through regional implementation groups, such as the NAM/CAR Air Navigation Implementation Working Group (ANI/WG) through the use of the Air Navigation Report Forms (ANRFs).

2.5 During the Second NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/2), the meeting identified that only few States have developed their air navigation performance-based plans applying ASBU methodology. In this sense, a review and improvement of the ANRF was made in order to promote its implementation by the States, including an air navigation metrics analysis and a better understanding of the concepts to facilitate the measuring process for their national targets and the operational benefits. The detail of this discussion by the ANI/WG/2 Meeting is presented in the **Appendix** to this working paper.

SAM Region

2.6 The progress in the SAM Region air navigation systems and services implementation specified in the SAM PBIP are collected through the SAM Implementation Groups (SAM/IG) held twice a year, its priorities address the follow-up on the implementation of the Performance-Based Navigation (PBN), Air Traffic Flow Management (ATFM), Communications, Navigation and Surveillance (CNS) improvements, automation and transition from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM). Additionally AGA and MET areas progress are collected in other regional forums (COM/MET Meetings and AGA implementation).

2.7 Regarding the development of the national plans aligned with the GANP (4th edition) and the SAM PBIP, in the SAM/IG meetings Argentina, Brazil and Colombia have reported its completeness and other States are in process.

2.8 In this sense, the CAR/SAM Region States that have not yet done so are invited to amend and develop as soon as possible their national plans aligned with the GANP (4th edition) and the RPBANIP and SAM PBIP, in order to harmonize the implementation and facilitate the inter and intraregional navigations systems and services interoperability.

3. Suggested Action

3.1 The Meeting is invited to:

- a) take note of the information presented in this note;
- b) analyse the activities undertaken by each region CAR and SAM in order to promote the measuring, monitoring and reporting of the targets established in the regional plans of the Bogota and Port-of-Spain Declarations, and the development of the national plans aligned with the GANP (4th edition) and the RPBANIP and SAM PBIP regional plans; and
- c) analyse other considerations respectively, as deemed appropriate by the Meeting.

APPENDIX

REPORTING AND MONITORING ACTIVITIES IN NAM AND CAR REGIONS

The ANI/WG/02 Meeting discussed the difficulty for Regions and States to correlate their plans with the ICAO ASBU planning framework. In particular, the information about the ASBU Modules provided in the GANP was not sufficiently detailed to permit easy mapping to existing regional and national plans. The group agreed that the Module descriptions were of high level and were not suitable to guide specific implementations. To determine implementations, it is necessary a level of detail that was not provided in the GANP.

The group reviewed a working document used by some of its members to map their national air navigation implementation plans to ASBU implementation. The document consisted of the basic Module information provided in the GANP, plus the elements for each Module, determined by careful review of the ASBU Working Document of March 2013. The group agreed on this and provided a straightforward tool for States and Regions to determine how their particular air navigation improvements would address ASBU implementation. It was noted that the ASBU Working Document (Attachment to 12TH ANCONF/12 Report) dated March 2013 is very large, not generally available and inconsistently written. Additionally, the Module elements were only sometimes directly listed; for many modules, it is necessary to extract the elements from the descriptive text.

The group examined the performance needed to be measured, particularly in regard to ICAO's No Country Left Behind initiative. The group agreed that the first indicator to be measured is if a State has assessed the requirement and feasibility of implementing a specific operational improvement. The group agreed that a flow chart description of the assessment, planning and implementation process would assist States in reporting their actual implementation status and also ICAO in monitoring if a State was being "Left Behind" at critical steps of the implementation process.

The meeting developed a table of metrics for all ASBU Block 0 elements and then reviewed the RPBANIP and inserted already agreed metrics in the appropriate places in the reviewed ANRF. All metrics from the RPBANIP were highlighted. This was possible for all ASBU Block 0 Modules except APTA (Airport Accessibility), for which the RPBANIP descriptions were not technically correct. It is therefore suggested that this section is reviewed later by the corresponding subject matter experts.

In this regard, a preliminary analysis for completing the Air Navigation targets was conducted, where several metrics need to be defined starting with the definition of the criteria for success and selection and the selection that will apply.

This new approach for the ANRFs was a more practical and simple way of using the ANRFs for States and Regions to determine how their particular air navigation improvements would address ASBU implementation. Also the Meeting considered that training and more practical exercises on the new ANRFs will facilitate its understanding and application. In this sense, the meeting agreed on the following conclusion:

CONCLUSION
ANI/WG/2/xx

**ADOPTION OF NEW ANRF AND REPORTING APPROACH TO
ASBU IMPLEMENTATION**

That, in order to provide a straightforward tool for States/Territories/International Organizations to determine their operational air navigation improvements:

- a) NAM/CAR States/Territories to review and adopt the proposed new ANRFs for application by June 2016;
- b) NAM/CAR States/Territories to assess their status of implementation and report to ICAO NACC Regional Office by 30 July 2016; and
- c) ICAO to organize by the first semester of 2016 a hands-on ANS/ASBU ANRF workshop for the use and understanding of the new ANRFs with the participation of CANSO, IATA , Civil Aviation Training Centers and air navigation planning experts.

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