



Agenda Item 5: Air Navigation Matters
5.6 Air Navigation Reporting and Monitoring activities

PERFORMANCE DASHBOARD AND THE ANNUAL AIR NAVIGATION REPORT

(Presented by the Secretariat)

SUMMARY	
This working paper presents an executive summary of the progress in air navigation matters as conducted by the Eastern Caribbean Civil Aviation Technical Group Meeting.	
References:	
<ul style="list-style-type: none">• Report of the Thirty-third Eastern Caribbean Working Group Meeting (E/CAR/WG/33), Christ Church, Barbados, 4 to 8 June 2012• Report of the First Eastern Caribbean Civil Aviation Technical Group Meeting, Martinique, France, 19 to 21 June 2013	
<i>Strategic Objectives</i>	<i>This working paper is related to Strategic Objectives: A. Safety – Enhance Global Civil Aviation Safety C. Environmental Protection and Sustainable Development of Air Transport</i>

1. Introduction

1.1 With the adoption of the performance-based approach to air navigation planning and implementation as established in the NAM/CAR Regional Performance Based Air Navigation Implementation Plan (RPBANIP), performance and implementation monitoring has been carried out through the different implementation working groups and reported in the respective NAM/CAR DCA meetings. Additionally, States and Territories shall make the transition to a performance-based approach to support their air navigation infrastructure planning based on the RPBANIP.

1.2 With planning for implementation, the next step calls for an air navigation performance measurement, monitoring and reporting strategy. A set of performance indicators and metrics based on the Aviation System Block Upgrade (ASBU) Block 0 modules have been adopted by the Air Navigation Implementation Working Group (ANI/WG), as well as the corresponding Air Navigation Report Form (ANRF) as reflected in the RPBANIP.

2. Discussion

Data Collection

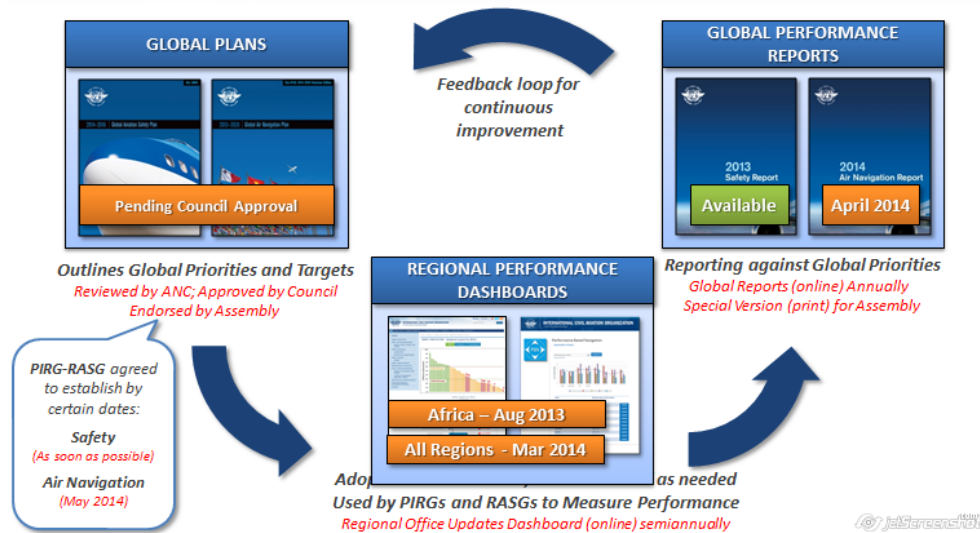
2.1 *Measurement strategy:* In 2009, all Planning and Implementation Regional Groups (PIRGs) adopted a performance-based approach to air navigation planning and implementation. While PIRGs are progressively identifying a set of regional performance indicators and supporting metrics, States have recognized that a measurement strategy comprised of data compilation, processing, storage and reporting for the identified regional performance metrics is fundamental to success of the performance-based approach. This performance measurement strategy will enable global correlation of status and expectations. In order to support this on-going task of collecting, measuring and reporting data, PIRGs will consider allocating the measurement effort to an existing PIRG subgroup or forming a new subgroup for this purpose. GREPECAS considers that these activities will be covered by the Programmes and Projects Review Committee (PPRC).

2.2 The ICAO Regional Office website, through a Geographical Information System (GIS), will provide visualization of implementation status through dynamic and interactive charts. This system will generate ad hoc reports and enable easy transferal of the dataset into the Regional Performance Dashboard and annual Global Air Navigation Report.

2.3 Additionally, in support of Regional Offices, a memoranda of understanding has been established with industry in order to obtain international aeronautical information related to the implementation status of air navigation infrastructure. This information will assist with development of the Regional Performance Dashboard and annual Global Air Navigation Report.

Regional Performance Dashboard

2.4 *Dataset and prototype:* Transparency and sharing of information are fundamental to a safe and efficient global air transportation system. Consistent with this principle, ICAO is planning to introduce regional 'Performance Dashboard' homepages for every public website of the ICAO Regional Offices. These dashboards will illustrate regional implementation status related to the ICAO Strategic Objectives for the period 2014-2016, which were approved by the 38th Session of the ICAO Assembly in September 2013. They will show targeted performance at the regional level and initially will contain graphics and maps with planned expansion to include the ASBU Block 0 Modules. This new interactive online system has been in Beta mode for the ICAO west and east Africa regions since August 2013, which will become active for the remaining ICAO regions in March 2014 and will be updated semi-annually.



Global Air Navigation Report

2.5 *Purpose:* Much like the existing annual Safety Report, the objective of the annual Global Air Navigation Report is to assist PIRGs and States with understanding the areas that require special attention to effectively improve air navigation performance worldwide, as well as to help propagate information on implementation success stories. The first edition of this Report, slated for April 2014, will also provide an opportunity for the civil aviation community to evaluate progress across different ICAO regions. This will facilitate more effective interregional harmonization planning. The outcomes reflected in the proposed report could also help identify annual tactical adjustment priorities for regional work programmes, as well as informing longer-term policy adjustments.

2.6 *Subjects to be covered:* The first edition of the Global Air Navigation Report is planned for release in April 2014. It will consist of qualitative and quantitative information and cover key performance areas of air navigation systems. The initial report will cover the following subjects:

- a) Global air navigation challenges, such as the capability to ensure safe, sustained growth, increased efficiency and responsible environmental stewardship
- b) Measuring against those challenges
- c) Status of operational measures for performance improvement
- d) Implementation progress in accordance with State operational requirements for selected priority ASBU Block 0 Modules. The metrics or initial dataset that includes key global air navigation priorities are Performance-Based Navigation (PBN), Continuous Descent Operation (CDO), Continuous Climb Operations (CCO), Aeronautical Information Management (AIM), Air Traffic Flow Management (ATFM) and estimated environmental benefits accrued from operational improvements based on the ICAO Fuel Savings Estimation Tool (IFSET), or if desired, any other more rigorous tool recognized by ICAO's Committee on Aviation Environmental Protection (CAEP). This initial dataset for both the Regional Performance Dashboard and Global Air Navigation Report was recently agreed by the PIRG Chairpersons, which will be proposed for regional adoption
- e) Sharing successful initiatives and key demonstrations

2.7 *Contents of the Report:* The report will open with a general overview of the global air navigation challenges in terms of capacity, sustainability and interoperability, and will discuss the methodologies in place to measure efforts to address those challenges. Through data collection by PIRGs, the report will focus on implementation status of priority operational improvements, identify roadblocks and recommend follow-up as necessary. In line with the subjects to be covered under the Global Air Navigation Report, efficiency and capacity indicators will be included to report system and service implementation progress and targets similarly to the current RPBANIP progress implementation data provided to the NAM/CAR DCAs.

2.8 *Addressing environment:* The assessment results of the potential environmental benefits associated with the implementation of certain operational improvements through specific measurement tools, such as IFSET, will also be reflected. The tool is designed to assist States with estimating and reporting fuel savings in a consistent manner with the models recognized by ICAO's CAEP and in alignment with the Global Air Navigation Plan (GANP).

2.9 The report will conclude with success stories of efficient implementation.



ANI/WG Monitoring and Reporting

2.10 Based on the ASBU ANRF for implementation monitoring, States/Territories/international organizations should select a limited number of metrics per Key Performance Area (KPA) type, to serve as implementation benefit(s) measurement. This approach would assist States with collecting data for the chosen metrics. These metrics should be in line with the regional metrics and targets adopted by the NAM/CAR Regions as established in Conclusion ANI/WG/1/14 - *Adoption of a Performance Monitoring And Measuring Programme in the NAM/CAR Regions*.

2.11 Review and agreement on Air Navigation/Safety NAM/CAR targets - initial approval of the air navigation targets will be carried out in January 2014 by the NACC Air Navigation and Safety Directors Meeting.

2.12 The final review and follow-up on the metrics and targets proposed by the implementation working groups will be presented for approval at the NACC/DCA/5 Meeting in 2014.

3. Suggested Actions

3.1 That E/CAR States:

- a) note the plan for the online Regional Performance Dashboard that will debut in March 2014 and the annual Global Air Navigation Report in April 2014;
- b) support the ICAO NACC Regional Office by providing the requested information to illustrate operational improvements on the ICAO NACC Regional Performance Dashboard; and
- c) establish a performance measurement strategy for their air navigation systems.

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