International Civil Aviation Organization
CAR/SAM Regional Planning Implementation Group (GREPECAS)
Second Meeting of the Programmes and Projects Review Committee (PPRC/2)
(Lima, Peru, 16 to 18 July 2013)

Agenda Item 2:   **Air navigation activities at global and inter-regional level**

2.1 Result of the PIRG AND RASG Global Coordination Meeting

REGIONAL AND GLOBAL AIR NAVIGATION REPORTING

(Presented by the Secretariat)

SUMMARY
Since the 37th Session of the ICAO Assembly, and within the context of Resolutions A37-12, much development has taken place related to the implementation of a global air navigation system. The Global Air Navigation Plan (GANP, Doc 9750) has been revised as the Fourth Edition released in 2013 and includes the new Aviation Systems Block Upgrades (ASBU) framework. Also, States and Planning and Implementation Regional Groups (PIRGs) are transitioning to a performance-oriented approach to support their air navigation infrastructure planning.
As PIRGs are progressing with planning for implementation, the next step calls for an air navigation performance measurement, monitoring and reporting strategy. Accordingly, this paper presents the ways and means to report the progress of regional implementation through planned online system referred to as the Regional Performance Dashboard (March 2014) which will also support an annual Global Air Navigation Report (April 2014).
Action by the Meeting is in paragraph 5.

References
37th Session of the ICAO Assembly (Montreal, 28 September—8 October 2010)   - Global Air Navigation Plan (Fourth Edition)   - All PIRGs Meetings (Montreal, 19 March 2012)

ICAO Strategic Objectives:	*A - Safety* *C - Environmental Protection and Sustainable Development of Air Transport*

1.   **INTRODUCTION**

1.1   *Regional Planning:* The development and maintenance of Regional Air Navigation Plans (ANPs) is undertaken by ICAO's six Planning and Implementation Regional Groups (PIRGs) with the assistance of the Regional Offices. Regional work programmes are derived from the Global Air Navigation Plan (GANP) on the basis of operational needs. Tactical adjustments to the work programmes are made on an ongoing basis and supported by online tools. Analysis of data is carried out collaboratively and the results, which will be available through the *Regional* Performance Dashboard and the annual *Global* Air Navigation Report as discussed in the ensuing paragraphs, will help make a determination of the tactical adjustments needed.

2.   DATA COLLECTION

2.1   *Measurement strategy*: In 2009, all PIRGs adopted a performance-based approach to air navigation planning and implementation. The next step calls for establishment of measurement and reporting strategy. While PIRGs are progressively identifying a set of regional performance indicators and supporting metrics, States have recognized that a measurement strategy comprising 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 ongoing 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, for the GREPECAS it would be considered that these activities will be covered by the PPRC

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

2.3   In support of regional offices, in addition, memoranda of understanding have been established with industries in order to obtain international aeronautical information related to the status of implementation of the air navigation infrastructure. This information will assist in the development of Regional Performance Dashboard and the annual Global Air Navigation Report.

3.   REGIONAL PERFORMANCE DASHBOARD

3.1   *Dataset and prototype*: Transparency and sharing of information are fundamental to a safe and efficient global air transportation system. Consistent with this principle, the Organization is planning to introduce regional 'Performance Dashboard' homepages for every public website of the ICAO Regional Offices. These dashboards will illustrate the regional implementation status relating to the strategic objectives for the period 2014-2016 to be approved by the 38th Session of the Assembly in September 2013. They will show targeted performance at the regional level and will, initially, contain graphics and maps with a planned expansion to include the Aviation System Block upgrades (ASBU) Block 0 Modules. This new interactive online system will be in place for Africa in August 2013 and for the remaining regions in March 2014, and will be updated semi-annually.

4.   GLOBAL AIR NAVIGATION REPORT

4.1   *Purpose*: Much like the existing annual Safety Report, the objective of the annual Global Air Navigation Report is to assist PIRGs and States in understanding which areas require special attention to effectively improve air navigation performance worldwide as well as to help propagate information on implementation success stories. This 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.

4.2   *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 a safe, sustained growth, an increased efficiency and a 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, of 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 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 *Regional* Performance Dashboard and the *Global* Air Navigation Report was recently agreed by the PIRG Chairs which will be proposed for regional adoption ; and
e) sharing of successful initiatives and key demonstrations.

4.3   *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 up against those challenges. Through the data collection by PIRGs, the report will focus on the implementation status of priority operational improvements, identify roadblocks and recommend a follow-up as necessary.

4.4   *Addressing environment*: The results of the assessment 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 in estimating and reporting fuel savings in a manner consistent with the models recognized by ICAO's Committee on Aviation Environmental Protection (CAEP) and in alignment with the GANP.

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

5.   **CONTENTS OF THE REPORT IN THE CAR/SAM REGIONS**

Report in the SAM Region

5.1   In the SAM Region, it has been deemed convenient that, in addition to the elements indicated in paragraph 4.2 d), the report contain metrics and indicators on other air navigation aspects such as AMHS, AIDC or OLDI interconnections, surveillance data exchange, ADS-B multilateration, implementation of national IP networks, etc.

5.2   With the aim of achieving the metrics and indicators of the elements to be contained in the report, a Declaration will be presented at the Thirteenth Meeting of Civil Aviation Authorities of the SAM Region (RAAC/13) to be held in Bogota, Colombia, from 4 to 6 December 2013, for the approval and commitment of the SAM States to achieve the metrics and indicators established.

Report in the CAR Region

5.3   With the adoption of performance-based approach to air navigation planning and implementation as established in the NAM/CAR Regional Performance based Air Navigation Implementation Plan (RPBANIP), performance monitoring has been carried out through the different Air CAR Implementation working Groups and recently reported in the CAR working Groups. The existing set of performance indicators and metrics will be reviewed based on the ASBU Block 0 modules to be selected and the Air Navigation report Form (ANRF) to be adopted during the Workshop on ASBU Framework: Planning, Implementation and Monitoring to be held in the ICAO NACC Regional Office in Mexico City, 22-26 July 2013).

5.4   In line with the subjects to be covered under the Global Air Navigation Report, efficiency indicators should be included to report the system and service implementation progress and targets similarly to the current RPBANIP progress implementation data provided to the NAM/CAR DCAs.

5.5   The revision and update to the metrics and targets proposed by the CAR Implementation working groups will be presented for approval in the DCA Meetings in 2013 and in the NACC/DCA/05 in 2014.

6.   **ACTION BY THE MEETING**

6.1   The Meeting is invited to:

   a) note the plan for an online Regional Performance Dashboard in March 2014 and annual Global Air Navigation Report in April 2014;
   b) assign the performance measurement to the Programmes and Projects Review Committee (PPRC);
   c) urge States to support the ICAO Regional Office by providing the requisite information to demonstrate operational improvements; and
   d) request States that have not yet done so, to establish a performance measurement strategy for their air navigation system.

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