



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

2.1 Result of the PIRG AND RASG Global Coordination Meeting

REGIONAL PRIORITIES AND TARGETS FOR AIR NAVIGATION

(Presented by the Secretariat)

SUMMARY	
<p>The Global Air Navigation Plan (GANP, Doc 9750), while providing the strategic direction for the technical work programme of ICAO in the air navigation field, serves as planning and implementation guidance for planning and implementation regional groups (PIRGs), States, service providers, airspace users and other stakeholders. In May 2013, the Council approved the Fourth Edition of the GANP which contains the new Aviation Systems Block Upgrades (ASBU) framework. As PIRGs are progressing with regional performance improvements through implementation of relevant ASBU Block 0 Modules of the GANP, this paper presents an approach to prioritization and methodology to assist determining regional priorities and targets for air navigation.</p>	
<p>The action by the Meeting is in paragraph 4.</p>	
References	
<ul style="list-style-type: none"> • Global Air Navigation Plan (Four Edition); • Twelve Air Navigation Conference (Montreal, Canada, 19-30 November 2012); • Planning and Implementation Regional Groups (PIRGs) and Regional Aviation Safety Groups (RASGs) Global Coordination Meeting (GCM) (Montreal, Canada, 19 March 2013); • GREPECAS/15 meeting (Rio de Janeiro, Brazil, 13-17 October 2008), and • GREPECAS/16 meeting (Punta Cana, Dominican Republic, 28 March – 1 April 2011). 	
<p><i>ICAO Strategic Objectives:</i></p>	<p><i>A - Safety</i> <i>C - Environmental Protection and Sustainable Development of Air Transport</i></p>

1. INTRODUCTION

1.1 *PIRG mechanism:* The Planning and Implementation Regional Groups (PIRGs) were established by the Council with the objective of planning for the development of regional air navigation systems and infrastructure. The six regional groups are: APANPIRG (ASIA/PAC Air Navigation Planning and Implementation Regional Group), APIRG (Africa-Indian Ocean Planning and Implementation Regional Group), EANPG (European Air Navigation Planning Group), GREPECAS (CAR/SAM Planning and Implementation Regional Group), MIDANPIRG (Middle East Air Navigation Planning and Implementation Regional Group), and NAT SPG (North Atlantic Systems Planning Group). This paper discusses how the PIRGs are progressing in determining regional priorities for operational improvements along with corresponding targets for air navigation systems.

2. REGIONAL PRIORITIES AND TARGETS FOR AIR NAVIGATION

2.1 *Prioritization:* To support a globally harmonized air navigation system, ICAO has developed the fourth edition of the GANP to provide clear guidance on the guiding operational targets and supporting technologies, avionics, procedures, standards and regulatory approvals needed to realize them. The GANP additionally establishes a framework for incremental implementations based on the specific operational profiles and traffic densities of each region and State. This is accomplished through the Aviation System Block Upgrades (ASBUs), a consensus-driven framework which forms the basis of the revised GANP.

2.2 Although the GANP has a global perspective, all ASBU modules may not be applicable to all States or regions. Some of the modules are specialized packages that should be applied where specific operational requirements or corresponding benefits exist. Therefore, implementation priorities for Air Traffic Management (ATM) enhancements will vary between regions as each has different operational environments, traffic volumes, etc. This prioritization exercise could be done by individual States and regionally by the PIRGs. It is expected that a limited number of ASBU modules be essential at a global level and, therefore, may eventually become the subject of ICAO Standards with mandated implementation dates. For other modules, implementation should follow the common methodology that allows flexibility in deployment but at the same time ensures global interoperability. ICAO to continue to work on guidance material for the categorization of block upgrade modules for implementation priority and provide guidance as necessary to planning and implementation regional groups and States.

2.3 *Methodology:* Guided by the Global Air Navigation Plan, the regional planning process starts by identifying the homogeneous ATM areas, major traffic flows and international aerodromes. An analysis of this data should lead to the identification of opportunities for operational performance improvement. Modules from the ASBUs would be evaluated to identify which of those modules best provide the needed operational improvements. Depending on the complexity of the module, additional planning steps may need to be undertaken including financing and training needs. Finally, regional plans would be developed for the deployment of modules by drawing on supporting technology requirements. This is an iterative planning process which may require repeating several steps until a final plan with specific regional targets is in place. This planning methodology requires full involvement of States, service providers, airspace users and other stakeholders, thus ensuring commitment by all for implementation. This approach would facilitate the response to Recommendation 6/1 of AN-Conf/12 that calls on States and PIRGs to finalize the alignment of regional air navigation plans with the Fourth Edition of the Global Air Navigation Plan by May 2014.

2.4 *PIRG-RASG GCM:* A Planning and Implementation Regional Groups (PIRGs) and Regional Aviation Safety Groups (RASGs) Global Coordination Meeting (GCM) was held in Montreal on 19 March 2013 under the Chairmanship of the President of the ICAO Council. The main objective of the meeting was to exchange views on the readiness and ability of the PIRGs and RASGs to set priorities and targets in line with the new versions of the GANP and the Global Aviation Safety Plan (GASP). A secondary objective was to share successful initiatives of each of the PIRGs and RASGs to ensure the best possible synergy. The outcome of the meeting includes:

- a) agreement on establishing regional priorities and targets for air navigation by May 2014 consistent with the GANP/ASBU framework;
- b) agreement on the need to measure performance improvements to help demonstrate their positive impact on the environment;

- c) endorsement of the envisioned regional performance dashboard prototype and envisioned determination of an initial set of indicators and metrics for air navigation;
- d) confirmation of the need for a coordination mechanism in each region between the RASG and PIRG to ensure consistency of action and avoid overlap;
- e) encouragement of the sharing of successful initiatives among one other;
- f) identification of the need for training on how to determine priorities for the aviation system block upgrades; and
- g) agreement on utilizing specific interface groups where required for addressing the harmonization of air navigation plans in adjacent areas of PIRGs.

2.5 Since GREPECAS/15 meeting, the CAR/SAM Regions have been working in the implementation of systems and services in support of air navigation through performance-based criteria and with the identification of metrics to measure the progress in their implementation. In addition, GREPECAS/16 meeting amended the GREPECAS terms of reference, with the inclusion of the Group having to coordinate safety issues with RASG-PA.

2.6 The envisioned regional performance dashboard prototype and envisioned determination of an initial set of indicators and metrics for air navigation are described with more details in WP/17.

2.7 In the SAM Region, identification was made of the ASBU Block 0 modules to be implemented, defining the respective priorities for their implementation. In this regard, the Air Navigation System Performance-Based Air Navigation System Implementation Plan for the SAM Region (SAM PBIP, Version 1.3) was revised.

2.8 In the CAR Region, the evaluation and agreement for the ASBU Block 0 modules to be adopted and implemented will be carried out during the alignment and update of the NAM/CAR Regional Performance based Air Navigation Implementation Plan (RPBANIP), which will take place in 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). The set of selected ASBU Block 0 modules will then be submitted to the Directors of Civil Aviation for formal approval. Meanwhile the implementation of air navigation matters is being conducted in accordance to the regional performance objectives of the RPBANIP.

2.9 It was decided to convene the PIRG-RASG global coordination meeting in this format once every two years with the next one planned for spring 2015.

3. CONCLUSION

3.1 The ASBUs described in the Fourth Edition of the GANP (Doc 9750) are designed to achieve harmonization and interoperability leading to improvements in the provision of air navigation services worldwide. Although the ASBU modules provide the basis for a globally interoperable system, not all of the modules are intended to be implemented everywhere nor at the same time. Since , a means of prioritizing the operational improvements through ASBU modules along with corresponding targets is necessary to assist PIRGs and States in determining which modules to implement and in what circumstances and timeframes.

4. **ACTION BY THE MEETING**

4.1 The Meeting is invited to:

- a) establish, consistent with Recommendations 6/1 and 6/12 of the Twelfth Air Navigation Conference, priorities and targets for air navigation by May 2014;
- b) share successful initiatives among one other;
- c) utilize specific interface groups, where required, for addressing the harmonization of air navigation plans in adjacent areas of PIRGs; and

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