



ICAO

WP-04

**Meeting for the Establishment of the APIRG Information and Infrastructure Management
Sub-Group (IIM/SG/1), Dakar, Senegal, 28-30 November 2016**

Agenda Item 2.2: AFI Air Navigation Plan (AFI ANP, AFI e-ANP, Doc 7474)

OUTCOME OF THE TWELFTH AIR NAVIGATION CONFERENCE
RELEVANT TO AIR NAVIGATION PLANNING
(Presented by the Secretariat)

SUMMARY

This paper presents the outcome of, and actions taken by, the Council of ICAO on the Twelfth Air Navigation Conference (AN-Conf/12) Recommendations relevant to Air Navigation Planning

Action by the meeting is at paragraph 3 :

<i>References:</i>	AN-Conf/12 Report
<i>Strategic Objectives:</i>	This working paper relates to the Safety and Air Navigation and Capacity Strategic Objectives.

INTRODUCTION

1.1 The Twelfth Air Navigation Conference (AN-Conf/12) held in Montréal from 19 to 30 November 2012 dealt with six agenda items. The conference was attended by a total of 1032 participants from 120 Contracting States and 30 observer delegations. The Conference adopted 56 Recommendations.

1.2 The AN-Conf/12 addressed the Global Air Navigation Plan that draws heavily on the aviation system block upgrades that were introduced to the international community at the Global Air Navigation Industry Symposium (GANIS). The block upgrades comprise various operational improvements aimed at harmonizing and improving the efficiency of the Global Air Navigation System. To aid in the harmonization the block upgrades are supported by roadmaps for communications, navigation and surveillance as well information management and avionics.

1.3 During January 2013, the Air Navigation Commission reviewed and acted under delegated authority on forty-eight of the recommendations and proposed action by the Council on eight recommendations. Subsequently, the Council on 1 March 2013 considered and approved the report of the AN-Conf/12, as presented by the Air Navigation Commission. In taking action recommended by the Commission, the Council confirmed ICAO's role in the follow up, and called upon States, international organizations, PIRGs and stakeholders to initiate action on specific recommendations as necessary.

2. DISCUSSION

2.1 The meeting may wish to note that with a focus on harmonization and interoperability leading to a global air traffic management (ATM) system, the AN-Conf/12 noted that the revised Fourth Edition of the *Global Air Navigation Plan* (Doc 9750, GANP) version provides a global planning framework which, among other it provides a timeline for which future improvements can be implemented by States in accordance with their needs. In addition, it identifies the need for the development of standards and recommended practices, regulatory

requirements, procedures and technology associated with the aviation system block upgrades (ASBU). The ASBUs are supplemented by Communications, Navigation, Surveillance (CNS), avionics and information management roadmaps. High-level impediments to implementation such as cyber security were identified and considered during the discussions. Arrangements to ensure the periodic update of the ASBUs and roadmaps on a rolling fifteen-year planning horizon were discussed.

2.2 The AN-Conf/12 agreed that the ASBUs and associated technology roadmaps were an integral part of the GANP and a valuable implementation tool kit, and they will continue to evolve as more work is done on refining and updating their content and in subsequent development of related provisions, support material and training.

2.3 Although the GANP has a global perspective, it is not intended that all ASBU modules are to be applied around the globe. When the ASBU blocks and modules are adopted by regions, sub regions or States they should be followed in close accordance with the specific ASBU requirements to ensure global interoperability and harmonization of air traffic management. It is expected that some ASBU modules will be essential at the global level and therefore may eventually be the subject of ICAO mandated implementation dates.

2.4 The implementation of air navigation measures, including those identified in the ASBUs can require significant investment of finite resources by ICAO Regions, Sub regions, States and the Aviation Community. When considering the adoption of different blocks and modules, ICAO regions, sub regions and States should undertake cost benefit analyses to determine the business case for implementation in their particular region or State.

2.5 The AN-Conf/12 agreed that ICAO should complete the development of guidance material on cost-benefit analysis for the purposes of advising the States and implementing the GANP. ICAO should review the GANP every three years and if necessary, all relevant air navigation planning documents through the established and transparent process. Furthermore, the appendices to the GANP should be analysed annually by the Air Navigation Commission to ensure they remain accurate and up-to-date.

2.6 The progress and effectiveness of ICAO Regions and States against the priorities set out in their respective regional and State air navigation plans should be annually reported, using a consistent reporting format, to ICAO. This will assist Regions and States adjust their priorities to reflect actual performance and address any emerging air navigation issues.

2.7 With regard to Regional Air Navigation Plans (ANPs) and for the process of aligning the regional ANPs with the GANP, AN-Conf/12 agreed that PIRGs should focus initially on implementing ASBU Block 0 Modules and finalize the development of their ASBU aligned regional plans by May 2014. The AN-Conf/12 also agreed to the following recommendations concerning the Regional performance framework – planning methodologies

2.8 Based on all above and relevant discussion concerning the Regional performance framework – planning methodologies the AN-Conf/12 agreed to the following recommendations:

Recommendation 1/1 – The draft Fourth Edition of the Global Air Navigation Plan (Doc 9750, GANP)

That, States:

- a) agree in-principle, with the inclusion of high level policy principles and other proposed improvements made at this conference, with the updated draft Fourth Edition of the GANP;*
- b) should have the opportunity to provide any final comments on the updated draft GANP to ICAO before it is considered by the ICAO Assembly in 2013;*

That, ICAO:

- c) convene a symposium in 2014 where interested stakeholders will be invited to join together to provide end-to-end system demonstrations of new Air Traffic Management (ATM) concepts;*
- d) develop financial policies which support efficient acquisition and implementation of global air navigation services infrastructure and aircraft equipment;*

e) taking a total systems and performance-based approach, create a Standards and Recommended Practices development plan for the Aviation System Block upgrades including the establishment of agreed global priorities between the different blocks and modules;

f) define a stable and efficient process for endorsement by the 38th Session of the Assembly, for updating the GANP that ensures stability in module timelines for any future updates; and

g) ensure that the nature and status of the planning information in the various documents pertaining to the GANP are consistent and complete and allow due account to be taken of the inputs from ATM research, development and deployment programmes.

Recommendation 1/2 – Implementation

That, ICAO:

a) through its Regional Offices, provide guidance and practical assistance to States and Regions and Sub-Regions when they decide to implement individual blocks or modules of the ASBUs;

b) establish a group and improved mechanism for interregional cooperation to ensure harmonization of ATM; and

c) assist States and regions in training and capacity-building towards implementation of the relevant modules of the Aviation System Block upgrades

Recommendation 6/1 – Regional performance framework – planning methodologies and Tools

That States and PIRGs:

a) develop and maintain regional air navigation plans consistent with the Global Air Navigation Plan;

b) finalize the alignment of regional air navigation plans with the Fourth Edition of the Global Air Navigation Plan by May 2014;

c) focus on implementing aviation system block upgrade Block 0 Modules on the basis of operational requirements, recognizing that these modules are ready for deployment;

d) use the electronic regional air navigation plans as the primary tool to assist in the implementation of the agreed regional planning framework for air navigation services and facilities;

e) consider how the continuous monitoring approach to safety oversight maps to the evaluation of Member States' safety oversight capabilities concerning aviation system block upgrades;

f) involve regulatory and industry personnel during all stages of planning and implementation of aviation system block upgrade modules;

g) develop action plans to address the identified impediments to air traffic management modernization as part of aviation system block upgrade planning and implementation activities;

That, ICAO:

h) review the current amendment process to the Regional Air Navigation Plans (ANPs) and recommend improvements to increase efficiencies related to the approval and maintenance of the data in the regional ANPs;

i) develop guidance material, on the basis of best practices employed worldwide, for the regional/local deployment of new ATM technologies, required procedures, operational approvals and continue to support States in the implementation of the aviation system block upgrades;

j) identify the issues, funding, training and resource requirements necessary to support a safety framework that would lay the foundation for successful implementation the aviation system block upgrades;

k) develop an outreach strategy to address the economic and institutional impediments to implementation of the aviation system block upgrades; and

l) develop a mechanism for sharing of best practices for the aviation system block upgrade implementation.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) Note and take appropriate actions as necessary

- b) note that e Recommendation 6/11 “Alignment of air navigation plans and regional supplementary procedures” was agreed by the AN-Conf/12 and ICAO was tasked to develop and circulate the corresponding proposals for amendments to the ANPs which would be submitted to the Council for approval
- c) note that proposal presented to the AN-Conf/12 (AN-Conf/12-WP/24 refers), the transfer of the requirements for air navigation services and facilities of FIR Tunis , FIR Casablanca and FIR Algeria which were eventually transferred from the Africa-Indian Ocean (AFI) ANP (Doc 7474) to the European (EUR) ANP (Doc 7754).
- d) review and note the current version of the AFI ANP/FASID as per **Appendix-A**, and **B** to this WP 4 taking cognizant of Recommendations 1/1;1/2 ; and 6/1 of the 12th AN Conference.
- e) note and review IP-1 to WP 4 concerning the relevant Review of Assembly Resolutions, Council Decisions and other ICAO Documentation referring to Regional ANPs (Including ROM)

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