

INTERNATIONAL CIVIL AVIATION ORGANISATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP (APIRG) METEOROLOGY SUB-GROUP TWELFTH MEETING (MET/SG/12)

(Dakar, Senegal, 1-5 December 2014)

Agenda Item 8:

Review of the New Structure of the AFI regional Air Navigation Plan (AFI ANP) and development of draft material for endorsement by APIRG.

REVIEW OF THE DRAFT AFI E-ANP AND DEVELOPMENT OF DRAFT MATERIAL FOR ENDORSEMENT BY APIRG

(Presented by the Secretariat)

SUMMARY

This working paper presents the development of eANP as approved by the ICAO council including the objective, format, contents as well as the work plan for the roll out. Essentially, eANP will enable authorized users to submit, store, update, manipulate, analyze and chart global air navigation planning data from a centralized ICAO server.

Action by the Meeting is in paragraph 3

References: APIRG/EO Report and Twelfth Air Navigation Conference (AN-Conf/12).

1 INTRODUCTION

- 1.1 The Council decided on 26 February 1997 (C-DEC 150/3) that the regional air navigation plans (ANPs) should be published in two volumes: A Basic ANP with stable plan material and a facilities and services implementation document (FASID). The regional ANPs have been continuously amended as per regional air navigation requirements, and recorded on hard copy.
- 1.2 The Twelfth Air Navigation Conference (AN-Conf/12) agreed to Recommendation 6/1 [Regional performance framework planning methodologies and tools] regarding the alignment of regional air navigation plans (ANPs) with the fourth edition of the Global Air Navigation Plan (GANP) (Doc 9750). In this regard, States and PIRGs including APIRG:

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

f)	develop action plans to address the identified impediments to air traffic management modernization as part
	of aviation system block upgrade planning and implementation activities
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- 1.3 The ICAO Secretariat therefore, established an Ad-hoc working group (eANP WG), composed of a representative from each Regional Office and ICAO Headquarters, to make proposals for changes to the regional ANPs which included the development of a new structure, format and content of the ANP.
- 1.4 The eANP WG reviewed the limitations of the current regional ANPs and agreed that they could be updated and approved based on the new developments in air navigation, including the outcome of the AN-Conf/12 and the revised GANP.
- 1.5 The eANP WG recognized that regional ANPs were still needed and represented the bridge between, from one side, the global provisions in the ICAO Standards and Recommended Practices (SARPs) and the GANP, and from the other side, the States' national plans and actual implementation. In this regard the Secretariat WG considered the following:
 - a) the ANPs have so far been developed to set forth, in detail, the facilities, services and procedures required for international air navigation within a specified region(s). They also contained planning and guidance material. It was noted that based on a Council decision (Eighth Meeting of its 131st Session refers), the monitoring of the implementation status of air navigation facilities and services was not part of the scope and objectives of the current ANP;
 - b) based on Recommendation 1/2 of the AN-Conf/12, and taking into consideration the new developments related to the performance based approach, the aviation system block upgrades (ASBU) methodology, etc., it was agreed that the new ANP should also include elements related to the monitoring of the status of implementation, at least related to the ASBU modules;
 - a clear separation between the mandatory requirements and the optional/selective or preferable implementation scenarios based on the ASBU methodology should be included in the ANP; and
 - d) the need to identify the elements included in the current ANPs which were no longer required.

2. DISCUSSION

2.1 The eANP WG had two (2) face-to-face meetings (Paris, France, 4-8 February 2013; and Montréal, Canada, 18-22 November 2013), six (6) teleconferences of its Steering Committee (SC) (25 March, 3 June, 27 August and 31 October 2013, 26 March and 16 April 2014) and one (1) teleconference of the whole WG members (5 September 2013). Most of the work was conducted through emails among the Secretariat WG members.

Objective and purpose of regional air navigation plans (ANPs)

- 2.2 The objective and purpose of the regional ANPs are as follows:
 - a) the ANPs provide for the planning and implementation of air navigation systems within a specified region(s), in accordance with the agreed global and regional planning framework. They are developed to meet those needs of specific areas not covered in the worldwide provisions. The development and maintenance of the ANPs is undertaken by ICAO planning and implementation regional groups (PIRGs) with the assistance of the ICAO Secretariat;
 - b) the ANPs are used as a repository document for the assignment of responsibilities to States for the provision of air navigation facilities and services within a specified area in accordance with Article 28 of the Convention on International Civil Aviation (Doc 7300);
 - c) the ANPs contain requirements related to the facilities and services to be implemented by States in accordance with regional air navigation agreements. The procedural parts of ANPs are published in the ICAO Regional Supplementary Procedures (SUPPs) (Doc 7030);
 - d) the ANPs contain provisions that States can follow in programming the provision of their air navigation facilities and services, with the assurance that facilities and services furnished in accordance with the plan will form with those of other States an integrated system adequate for the foreseeable future;
 - e) the ANPs may serve as a basis for air navigation service charges which are levied for services provided or made available to users, in accordance with ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082) and ICAO Manual on Air Navigation Services Economics (Doc 9161); and
 - f) the ANPs support the performance-based approach to planning adopted by ICAO to measure the efforts made by States in implementing the agreed requirements.

Format and Table of Contents of the ANP

- 2.3 ANP data related to air navigation facilities and services can be classified as stable, dynamic or flexible. In this regard, it was agreed that the new ANP should be composed of three volumes:
 - a) Volume I should contain stable plan elements, the amendment of which require approval by the Council, related to:
 - assignment of responsibilities;
 - mandatory requirements subject to regional agreement; and/or
 - additional requirements specific to the region which are not covered in SARPs.

Note. — *The following is a non-exhaustive list of such elements:*

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-flight information regions (FIR) boundaries (table and charts),
-search and rescue regions (SRR) boundaries (table and charts),
-volcanic ash advisory centres (VAAC),
-tropical cyclone advisory centres (TCAC),
-volcano observatories (VO).
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- b) Volume II should contain dynamic plan elements, the amendment of which does not require approval by the Council (approval is by regional agreement involving the relevant PIRG), related to:
 - assignment of responsibilities;
 - mandatory requirements subject to regional agreement; and/or
 - additional requirements specific to the region which are not covered in SARPs.

Note. — The following is a non-exhaustive list of such elements:

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-major traffic flows;

-ATS route network;

-meteorological watch offices (MWO);

-secondary surveillance radar (SSR) codes;

-five-letter name-codes;

-VOLMET broadcasts.
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c) Volume III should contain dynamic/flexible plan elements providing implementation planning guidance for air navigation systems and their modernization taking into consideration emerging programmes such as the ASBUs and associated technology roadmaps described in the GANP. The ANP Volume III would also include appropriate additional guidance, particularly with regard to implementation, to complement the material contained in the ANP Volumes I and II. The amendment of Volume III would not require approval by the Council (approval of Part II is under the responsibility of the relevant PIRG).

Description of the contents of the eANP

- 2.4 The general structure of the technical Parts of Volumes I and II (AOP, CNS, ATM, MET, SAR and AIM) would consist of:
 - introduction;
 - general regional requirements; and
 - specific regional requirements.
- 2.5 It is to be noted that the Section "General Regional Requirements" would be harmonized for all regions. Accordingly, an amendment of the provisions (text and table templates) in "General Regional Requirements" would lead to amendment of the eANP of all regions.

- 2.6 It is highlighted that, the Statement of Basic Operational Requirements and Planning Criteria (BORPC) is not included in the new eANP, as with the revised GANP, because it repeated information published in other ICAO publications and was considered duplication as well as obsolete.
- 2.7 The BORPC was replaced with the "General" and "Specific" requirements in Volumes I and II that include the relevant planning principles of BORPC to be retained in the ANP. With regard to the table/database on ATS Routes, it was agreed that the PIRGs would decide on the need for a table/database and/or Chart on ATS Routes for their regions and on the associated mechanisms for maintaining this table/database under Specific Regional Requirements of Part IV ATM of Volume II.
- 2.8 The information contained in Volume III would be related to implementation monitoring, planning and/or guidance. The structure of Volume III would be kept simple, consisting of:
 - a) Part 0 Introduction;
 - b) Part I General Planning Aspects (GEN); and
 - c) Part II Air Navigation System Implementation.
- A table for inclusion in Part I of Volume III to define a minimum set of implementation indicator(s), based on the SMART criteria (specific, measurable, achievable, relevant and time bound), for each of the 18 ASBU Block 0 modules and to include other information as deemed necessary, for use in all regions. The details related to the monitoring of the ASBU modules, including the design of supporting enablers (tables/databases) would be left to the regions/PIRGs.

Procedure for amendment of the eANP

- A revised procedure for amendment of the eANP using a web-based platform is proposed. It is to be noted that the current Council-approved procedure for amendment of the Basic ANP (with minor changes) would be applicable to the new Volume I (approval by Council) and the current amendment procedure of the Facilities and Services Implementation Document (FASID) (with minor changes) would be applicable to Volume II (approval by regional agreement involving the relevant PIRG). The management and amendment of Volume III would be under the responsibility of the PIRGs. Nevertheless, the amendment of Parts 0 and I of Volume III should go through an inter-regional coordination mechanism and Part II would require approval under the responsibility of the relevant PIRG. The approved procedures for amendment for Volumes I, II and III will be found in **Appendix A** to this working paper.
- 2.11 It is highlighted that the endorsement of the ANP template, which includes the new procedure of amendment of the eANP, is the most important milestone in this process. The approval of the eANP of each region, based on the approved ANP template, would be accomplished with the transfer of the corresponding information from current volumes Basic and FASID to the new volumes I and II in accordance with the procedures for amendment.

Action plan for further development/approval of the eANP

2.12 The development/approval of the eANP would be in accordance with the following action plan:

ANP volume	eANP activity/task	Responsible	Completion date
Vol I, II & III	Population of eANP with existing data completed	Regional Offices	September 2014
Vol I, II & III	Agreement on the content of the eANP	PIRGs/States	Mid 2015
Vol I	Approval of Volume I of eANPs by the Council	Regional Offices/ANB	End 2015
Vol II	Approval of Volume II of eANPs by regional agreement involving the relevant PIRG	Regional Offices/PIRGs	End 2015
Vol III	Development and approval of Part II under PIRG responsibility. Inclusion of Volume III on web-based platform.	Regional Offices/ PIRGs/ANB	End 2015
Consequential amendments	Amendments to existing ICAO documentation related to ANPs to ensure harmonization, including the Regional Office Manual, and review of the applicability of the Uniform methodology for the identification, assessment and reporting of air navigation deficiencies to the new ANP	ANB	Mid 2015

Review of ICAO documentation referring to regional ANP

- 2.13 The new ANP template, consequential amendments would be required to existing ICAO documentation referring to Regional ANPs to ensure harmonization. This work will be performed by the Secretariat.
- 2.14 In this regard, Dakar and Nairobi regional Offices have populated the Template of the AFI eANP in the fields of AOP, CNS, ATM, MET, SAR and AIM, The Secretariat populated the MET related AFI eANP proposed in WP/08 for the attention of the MET/SG.

3. Action by the Meeting

- 3.1 The meeting is invited to
 - a) Note the new Regional Air Navigation Plan and associated procedures.