



International Civil Aviation Organization

**The Second Meeting of the APANPIRG ATM Sub-Group  
(ATM /SG/2)**

Hong Kong, China, 04-08 August 2014

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**Agenda Item 3: Performance Frameworks and Metrics**

**ALIGNMENT OF THE RANP WITH THE GLOBAL AIR NAVIGATION PLAN**

(Presented by the Secretariat)

**SUMMARY**

This paper reports on the work of the eANP Working Group (eANP-WG) which was formed in follow-up to the 12<sup>th</sup> Air Navigation Conference Recommendation 6/1 *Regional Performance Framework – Planning Methodologies and Tools* regarding the alignment of regional air navigation plans with the Fourth Edition of the Global Air Navigation Plan (GANP, Doc 9750), and proposals to develop a new APAC Regional Air Navigation Plan (RANP) document.

**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 (BANP), and a Facilities and Services Implementation Document (FASID). The latest change to the procedures for amendment of ANPs for the Basic document was approved by the Council on 25 February 1998 (C-DEC 153/3).

1.2 The 12<sup>th</sup> Air Navigation Conference (AN-Conf/12) agreed to Recommendation 6/1 *Regional Performance Framework – Planning Methodologies and Tools* regarding the alignment of regional ANP with the Fourth Edition of the *Global Air Navigation Plan* (GANP) (Doc 9750).

1.3 The ICAO Air Navigation Bureau (ANB) established the eANP Working Group (eANP WG), a Secretariat Working Group composed of representatives from each Regional Office and ICAO Headquarters to make proposals for changes to the RANPs which included the development of a new structure, format and content of the ANP. The Terms of Reference (ToR) of the eANP working group (eANP-WG) are provided at **Appendix A**.

1.4 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 the States' national plans and actual implementation. In this regard, the Secretariat WG considered the following:

- a) the ANPs had 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 ANPs;

- 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;
- c) 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 face-to-face meetings (Paris, France, 4-8 February 2013 and Montreal, Canada, 18-22 November 2013), six Teleconferences of its Steering Committee (25 March, 3 June, 27 August, 31 October 2013, 26 March and 16 April 2014), one Teleconference of the whole WG members (5 September 2013). Most of the work was conducted through correspondence and teleconferences among the eANP WG members.

2.2 The eANP WG agreed that the development of the eANP would consist mainly of the following steps:

- development of the ANP Template;
- approval of the ANP Template;
- development of new Regional ANP ANPs based on the approved Template;
- approval/endorsement of the new Regional ANPs; and
- development of the eANP online framework (web-based platform).

### Regional Air Navigation Plan Objectives

2.3 The eANP WG agreed on the objective and purpose of the Regional ANP as follows.

- a) The ANPs provided for the planning and implementation of air navigation systems within a specified area, 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 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 an adequate integrated system with those of other States for the foreseeable future.

- e) The ANPs may serve as a legal basis for air navigation services 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).
- f) It supports 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

2.4 The eANP WG agreed that the ANP data related to the air navigation facilities and services could 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 and these elements be 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:*

- *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); and*
- *Volcano Observatories (VO).*

- b) **Volume II** should contain dynamic plan elements, the amendment of which does not 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:*

- *Major traffic flows;*
- *ATS route network;*
- *Meteorological Watch Offices (MWO);*
- *Secondary Surveillance Radar (SSR) codes;*
- *Five-letter name-codes; and*
- *VOLMET Broadcasts;*

- 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.

2.5 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 elements in ANP Volume III are thus not subject to the uniform methodology for the identification, assessment and reporting of Air Navigation Deficiencies. The amendment of these elements would not require approval by the Council (approval of Part II is by regional agreement, which includes the PIRG).

#### Description of the contents of the eANP

2.6 The general structure of the technical Parts of **Volume I** and **II** (AOP, CNS, ATM, MET, SAR and AIM) would consist of the following sections:

- a) Introduction;
- b) General Regional Requirements; and
- c) Specific Regional Requirements.

2.7 It should 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 this section would lead to amendment of the eANP of all regions.

2.8 It is also to be noted that the Statement of Basic Operational Requirements and Planning Criteria (BORPC) is not included in the new Regional ANP or the revised GANP, because it repeated information published in other ICAO publications and was considered duplication and obsolete. 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.

2.9 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**.

2.10 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 the following sections:

- a) Part 0 – Introduction;
- b) Part I - General Planning Aspects (GEN); and
- c) Part II – Air Navigation System Implementation.

2.11 A table for inclusion in Part I of **Volume III** to define a 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. ICAO would intend to use a table aligned to the regional monitoring process outlined in WP06.

#### Procedure for Amendment of the eANP

2.12 A revised procedure for amendment of the eANP using a web-based platform is proposed. It should 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).

2.13 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 to ensure harmonisation, while Part II (Air Navigation System Implementation) would require approval by regional agreement, which includes APANPIRG.

2.14 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 the current volumes of Basic ANP and FASID to the new **Volumes I and II** in accordance with the procedures for amendment.

Action Plan for further development of the ANP/ eANP

2.15 In accordance with its Terms of Reference, the eANP WG developed a new structure, format and content of the Regional ANPs, harmonized the tables contained in the current FASID to support the implementation of the ASBUs and reviewed and proposed amendments to the ANP amendment process. The eANP WG coordinated for the development of the eANP on a web-based platform.

2.16 The ANP template was reviewed by the ANC in May 2014, and approved by the Council in its session held in June 2014. The ANP templates approved by the Council are at **Attachments A, B and C**. **Attachment D** provides the Asia/Pacific’s expected input to Vol III Appendix B - Main Planning Table Template.

2.17 The development/approval of the new ANPs/eANP would be in accordance with the following tentative Action Plan. Most of the work to populate the ANPs will be conducted by the Regional Office, but there will be occasions when the Regional Office some advice will be sought from the participants of task forces and chairpersons by electronic means.

| ANP Volume               | eANP   | Responsible                 | Date           |
|--------------------------|--|-----------------------------|----------------|
| Vol I, II & III          | Population of new ANPs with existing data  | Regional Offices            | September 2014 |
| Vol I, II & III          | Agreement on the content of new ANPs   | PIRGs/States                | Mid 2015       |
| Vol I                    | Approval of Volume I of new ANPs by the Council  | Regional Offices/ ANB       | End 2015       |
| Vol II                   | Approval of Volume II of new ANPs by regional agreement  | Regional Offices/PIRGs      | End 2015       |
| Vol III                  | Approval of Part II by regional agreement. 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       |

2.18 The following work plan (**Table 1**) is suggested to assist the Regional Office (RO) through electronic means and established meetings to populate or develop the new Asia/Pacific RANP, so agreement on its content might be reached by mid-2015:

| Reference         | Detail                                     | Notes                    |
|-------------------|--|--------------------------|
| Vol. I, Part I    | Table GEN I-1 List of FIR names and States | RO (ATM)                 |
| Vol. I, Part II   | AOP Special Regional Requirements, if any  | AOP/WG; RO (AGA)         |
| Vol. I, Part II   | Table AOP I-1 International Aerodromes     | RANP data; RO (AGA)      |
| Vol. I, Part IV   | Table ATM I-1 FIR descriptions             | ICAOHQ data; RO (ATM)    |
| Vol. I, Part IV   | ATM Special Regional Requirements, if any  | ATM/SG; RO (ATM)         |
| Vol. I, Part VI   | SAR Special Regional Requirements, if any  | APSAR/TF; RO (ATM)       |
| Vol. I, Part VI   | Table SAR I-1 Search and Rescue Regions    | ICAOHQ data; RO (ATM)    |
| Vol. I, Part VII  | AIM Special Regional Requirements, if any  | AAI/TF; RO (ATM)         |
| Vol. II, Part I   | Table GEN II-1 Major Traffic Flows         | ATM/SG; RO (ATM)         |
| Vol. II, Part II  | AOP Special Regional Requirements, if any  | AOP/WG; RO (AGA)         |
| Vol. II, Part II  | Assessment of aerodrome capacity           | AOP/WG; RO (AGA)         |
| Vol. II, Part IV  | Process for ATS route designation*         | ATM/SG; RO (ATM)         |
| Vol. II, Part IV  | Table ATM II-2 ATS Routes*                 | ATS Route Catalogue data |
| Vol. II, Part IV  | Secondary Surveillance Radar (SSR) Codes   | ATM/SG; RO (ATM)         |
| Vol. II, Part VI  | SAR SRR Facilities                         | RANP; RO (ATM)           |
| Vol. II, Part VII | Table II-1 AIM responsibilities            | AAI/TF; RO (ATM)         |
| Vol. II, Part VII | Table II-2 AIM chart responsibilities      | AAI/TF; RO (ATM)         |

**Table X:** RANP Work Plan

\*This was a temporary process until the ICARD ATS Route feature became available, at which time Table ATM-II ATS Routes would be deleted from the RANP by the RO.

#### eANP Web-Based Platform Development

2.19 In view of the agreed format of the eANP, the eANP WG considered that the current ANP application under SPACE (iSTARS 2.0) could be used as the basis for the development of the eANP web-based platform.

2.20 Focal points designated by States and international organizations would be given access to the ANP web-based platform to develop and submit Proposals for Amendments (PfAs) to the ANP of each region concerned as per corresponding procedures for amendment and the public would be given read-only access to the ANPs.

2.21 The access to the eANP through the web based platform would facilitate the consultation of the air navigation plans of all regions, thus providing a global view of air navigation planning. The new approach in **Volumes II** and **III** of the eANP would allow significant flexibility for States to plan whilst increasing the possibility to enhance coordination, particularly for States in the interface area with adjacent Regions.

**3 ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the new Regional Air Navigation Plan template and associated procedures, approved by the Council;
- b) consider a work plan for populating or developing a new Asia/Pacific Regional Air Navigation document, that should obtain agreement to its content by mid-2015.
- c) discuss any relevant matters as appropriate.

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## **Appendix A - TERMS OF REFERENCE OF THE eANP WORKING GROUP (eANP-WG)**

### 1. Background

1.1 The eANP Working Group was established on 19 December 2012 by the Air Navigation Bureau (ANB) as a result of the recommendations formulated by the ICAO Deputy Regional Directors (DEPRD) training (Montreal, November 2012), taking into consideration new developments, including the outcome of the AN-Conf/12.

### 2. Terms of Reference

2.1 The Working Group is expected to:

- a) Make proposals for changes to the Regional Air Navigation Plans (ANPs), including:
  - development of a new structure, format and content;
  - harmonization of the tables contained in the current Facilities and Services Implementation Documents (FASID) to support the implementation of the ICAO Aviation System Block Upgrades (ASBUs); and
  - relevant implementation monitoring and reporting process.
- b) Review and propose amendments to the current ANP amendment procedures and approval process, as appropriate;
- c) Coordinate with the ICAO Aviation Safety Tools (SAST) Section the development of the electronic Air Navigation Plan (eANP) on a web-based platform;
- d) Prepare an action plan to carry out the above activities.

2.2 The results and proposals developed by the eANP Working Group will be presented to the Director of Air Navigation Bureau (D/ANB) for necessary action.

### 3. Working Methods

- a) The Working Group should avoid duplication of work with other ANB projects and maintain close coordination among the existing entities, including the ROs, to optimize the use of available resources and experience;
- b) The Working Group may designate, as necessary, ad-hoc groups to work on specific topics and activities; all tasks and activities should be clearly defined by time and deliverables; and
- c) The Working Group should conduct its work electronically (emails and teleconferences), and only hold meetings when necessary.

### 4. Composition

- a) Designated members from each Regional Office and Headquarters; and
- b) Focal points/experts from ICAO to support the designated members and the activities of the Working Group.