



International Civil Aviation Organization
MID Air Navigation Plan Ad-hoc Working Group

Second Meeting (ANP WG/2)
(Cairo, Egypt, 16 - 18 December 2014)

Agenda Item 2: Review of Global developments related to Air Navigation Planning

GLOBAL DEVELOPMENTS RELATED TO AIR NAVIGATION PLANNING

(Presented by the Secretariat)

SUMMARY

This paper presents the global developments related to air navigation planning.

Action by the meeting is at paragraph 3.

REFERENCES

- ICAO Council-202nd Session, fourth meeting Working Paper C-WP/14174.
- ICAO Council-202nd Session, fourth meeting Summary of Decisions.

1. INTRODUCTION

1.1 The 12th 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 (ANP) with the Fourth Edition of the Global Air Navigation Plan (GANP) (Doc 9750).

1.2 In this respect, the Secretariat established a 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.

1.3 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.

1.4 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 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;
- 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 Secretariat WG had two face-to-face meetings (Paris, France, 4-8 February 2013; and Montreal, 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 Teleconference of the whole WG members (5 September 2013). Most of the work has been conducted through emails among the Secretariat WG Members. The eANP WG submitted the final regional ANP Template on 22 April 2014.

2.2 Based on the above, the Secretariat WG agreed that the ANP should contain provisions related to:

- 1) assignment of responsibilities;
- 2) mandatory requirements subject to regional agreement;
- 3) additional requirement specific to the region which are not covered in SARPs; and
- 4) elements related to the implementation of certain air navigation systems based mainly on the ASBU modules endorsed at regional or sub-regional level.

Objective and purpose of Regional Air Navigation Plans (ANP)

2.3 The Secretariat WG agreed on the objective and purpose of the Regional ANP as follows:

- a) The ANPs provide 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 with those of other States an integrated system adequate 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) 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 eANP

2.4 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:
 - 1) assignment of responsibilities;
 - 2) mandatory requirements subject to regional agreement; and/or
 - 3) 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), volcano observatories (VO).

- 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:
 - 1) assignment of responsibilities;
 - 2) mandatory requirements subject to regional agreement; and/or
 - 3) 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; 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. 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

2.5 The general structure of the technical Parts of Volumes I and II (AOP, CNS, ATM, MET, SAR and AIM) would consist of:

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

2.6 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.

2.7 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.

2.8 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

2.9 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.

2.10 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.

Development of the eANP on a web-based platform

2.11 In view of the agreed format of the eANP, it is considered that the current ANP application under SPACE (iSTARS 2.0 website) could be used as the basis for the development of the eANP web-based platform with some improvements.

2.12 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 (PAs) 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.

2.13 The access to the eANP through the web-based platform would facilitate the consultation of the ANPs 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 to States to plan while increasing the possibility to enhance coordination, particularly for States in the interface area with adjacent regions.

2.14 The meeting may wish to note that the Council approved the new eANP Template (Volumes I, II and III) and corresponding procedure for amendment on 18 June 2014 (202nd session, Fourth meeting).

Action plan for further development/approval of the eANP

2.15 With the approval by the Council of the new ANP Template, 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/ANB	End 2015
Vol III	Development and approval of Part II of Volume III by PIRG. 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	ANB	Mid 2015

ANP Volume	eANP Activity/Task	Responsible	Completion Date
	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		

3. ACTION BY THE MEETING

3.1 The meeting is invited to take into consideration the global developments related to air navigation planning in the development of the MID eANP.

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