**Twenty Seventh Meeting of the Communications/
Navigation and Surveillance Sub-group (CNS SG/27)
of APANPIRG**

Bangkok, Thailand, 28 August – 01 September 2023

Agenda Item 9:   Regional implementation review and updates

> 9.1   Seamless ANS Reporting Process including the ASBU regional performance dashboard/implementation plan

> 9.2   National ANP and elements related to CNS

UPDATES ON REGIONAL CNS REQUIREMENTS IN ICAO APAC e-ANP

(Presented by the Secretariat)

SUMMARY

Further to last CNS SG/25 and CNS SG/26 meetings, this paper summarizes latest updates by States/Administrations on CNS requirements specified in ICAO APAC e-ANP. The paper reminds States/Administrations to review the data affecting their administration and provide feedback to ICAO on the data's accuracy in requisite format to update the relevant CNS requirements.

1.   INTRODUCTION

1.1   ICAO Secretariat has published WP/15 in CNS SG/25, WP/15 in CNS SG/26 summarizing the CNS requirements in ICAO APAC e-ANP, APAC Seamless ANS Plan Version 3.0 and NANP, and reminding States/Administrations to timely submit/update status as necessary.

1.2   The ICAO APAC e-ANP can be accessed at http://www.icao.int/APAC/Pages/APAC-eANP.aspx and the Asia/Pacific Seamless ANS Plan can be accessed at https://www.icao.int/APAC/Documents/edocs/Asia%20Pacific%20Seamless%20ATM%20Plan%20V%203.0.pdf

2.   DISCUSSION

Regional e-ANP and its CNS-related Requirements

e-ANP Volume I

2.1   e-ANP Volume I Part III CNS constitutes the agreed regional requirements considered to be the minimum necessary for effective planning and implementation of CNS facilities and services in the Asia and Pacific Region and complements the provisions of ICAO SARPs related to CNS. It contains stable plan elements related to the assignment of responsibilities to States for the provision of CNS facilities and services within the ICAO Asia and Pacific Regions in accordance with Article 28 of the Convention on International Civil Aviation (Doc 7300) and mandatory requirements related to the CNS facilities and services to be implemented by States in accordance with regional air navigation agreements. *The amendments to e-ANP Volume I necessitates approval by the Council.*

e-ANP Volume II

2.2   e-ANP Volume II Part III CNS complements the provisions in ICAO SARPs and PANS related to CNS. It contains dynamic plan elements related to the assignment of responsibilities to States for the provision of CNS facilities and services within a specified area in accordance with Article 28 of the Convention on International Civil Aviation (Doc 7300) and the current to medium term mandatory requirements related to CNS facilities and services to be implemented by States in accordance with regional air navigation agreements involving the APANPIRG. Such agreement indicates a commitment on the part of the State(s) concerned to implement the requirement(s) specified. *The amendment of these elements does not require approval by the Council.*

2.3   e-ANP Volume II contains the General Regional Requirements and Specific Regional Requirements related to CNS from Member States. As such, *Member States are encouraged to review on the information contained in the following tables in e-ANP Volume II*:

General Regional Requirements

TABLE CNS II-1 AERONAUTICAL FIXED TELECOMMUNICATIONS NETWORK (AFTN) PLAN
TABLE CNS II-2 REQUIRED ATN INFRASTRUCTURE ROUTING PLAN
TABLE CNS II-3 ATS DIRECT SPEECH CIRCUITS PLAN
TABLE CNS II-4 HF NETWORK DESIGNATORS

Specific Regional Requirements

TABLE CNS II-APAC-1 ATS INTER-FACILITY DATA COMMUNICATION (AIDC) IMPLEMENTATION PLAN
TABLE CNS II-APAC-2 RADIO NAVIGATION AIDS
TABLE CNS II-APAC-3 SURVEILLANCE

2.4   ACSICG/10 held on 24-26 May 2023 noted that AMHS has been a centric for telecommunication infrastructure before CRV was implemented. CRV now allowed direct connection over Internet Protocol (IP) network without the need of AMHS routing plan. As such, the current tracking table developed for AMHS should be modified to reflect CRV infrastructure. For better management and coordination, a draft version of Telecommunication Infrastructure table was proposed, reviewed and adopted by the meeting, which was recommended be posted on the CRV OG website for members to update, and supersede the Table CNS II-2 — Required ATN Infrastructure Routing Plan in the ANP VOL II part III, and CRV OG will be the task owner to maintain the table in future. The meeting also agreed to **stop** the updating of **Table CNS II-1** and **II-2** in APAC e-ANP Volume II in APAC region.

2.5   SURICG/8 held on 6-9 June 2023 reviewed regional requirements specified in **Table CNS II-APAC-3** in APAC e-ANP Volume II. Some Member States proposed changes to this Table during the meeting, the Secretariat and the concerned Member States were requested to formally update the e-ANP Volume II Table CNS II-APAC-3 SURVEILLANCE in due course at earliest convenience. The Table is to be updated on yearly basis by States in SURICG meetings.

2.6   **TABLE CNS II-APAC-2** RADIO NAVIGATION AIDS has been updated from time to time with respect to the change of operations in States. **TABLE CNS II-APAC-1** ATS INTER-FACILITY DATA COMMUNICATION (AIDC) IMPLEMENTATION PLAN has been replaced by the repository of AIDC Implementation Status in APAC region (Table of AIDC Implementation Status in APAC) which now is maintained by ATMAS TF and ACSICG on yearly basis.

2.7   SRWG is studying the issues identified in current frequency allotment plan and explore on handling HF resource utilization including the review of **TABLE CNS II-4** HF NETWORK DESIGNATORS.

2.8   The ICAO Third Asia/Pacific Regional Air Navigation (ASIA/PAC/3 RAN) Meeting, held in Bangkok from 19 April to 7 May 1993, agreed that the frequency lists prepared by the Asia and Pacific Regional Office will be the frequency planning documents for the Regions. The relevant conclusions of the meeting which outline the procedure are as follows:

Conclusion 12/9 - Procedure for Radio Navigation Aids Frequency Assignment

That:

a) the development of the radio navigation aids plan, and its subsequent documentation in relevant air navigation plan (ANP) publications, will define the respective radio navigation aid requirements at each location without reference to discrete frequency assignment;

b) the ICAO Regional Office will continue to maintain its frequency selection and coordination role, including the maintenance and promulgation of Frequency List Nos. 1 and 2 in a timely and periodic manner; and

c) additions, deletions and changes to discrete frequency assignments to radio navigation aids will not require amendment to the ANP.

Conclusion 11/4 - Procedure for very high frequency (VHF) aeronautical mobile Service (AMS) frequency assignment

That:

a) the development of the VHF AMS plan, and its subsequent documentation in relevant air navigation plan (ANP) publications, will define the numbers of VHF assignments (channels) required for the respective functions at each location without reference to discrete frequency assignment; and

b) the ICAO Regional Office will continue to maintain its frequency selection and coordination role, including the maintenance and promulgation of Frequency List No. 3 at appropriate periodic intervals.

2.9   In accordance with above Conclusions of the RAN Meeting, ICAO APAC Regional Office maintains and publishes the updated APAC frequency lists 1, 2 and 3 annually.

Alignment between CNS and AOP Tables regarding newly-reported Aerodromes

2.10   It was noticed that the information contained in e-ANP Volume I Table AOP I-1 – International Aerodromes Required in the Asia/Pacific Regions, and Volume II Table AOP II-1 – Requirements and Capacity Assessment in International Aerodromes in the Asia and Pacific Regions have been updated by various States. In this connection, the Table CNS II-APAC-2 Radio Navigation Aids, which contains the details of each runway in aerodromes, will need corresponding updates with inclusion of new aerodromes to reflect the latest status and align with tables aforementioned. States/Administrations should submit the updates through PfA process with relevant templates and documents available at https://www.icao.int/APAC/Pages/APAC-eANP.aspx.

e-ANP Volume III

2.11   e-ANP Volume III contains dynamic/flexible plan elements providing implementation planning guidance for air navigation systems and their modernization taking into consideration emerging programmes such as the ICAO Aviation System Block Upgrades (ASBUs) and associated technology roadmaps described in the Global Air Navigation Plan (GANP) (Doc 9750). 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).

2.12   It should be noted that e-ANP Volume III should be used as a tool for monitoring and reporting the status of implementation of the elements planned, through the use of tables/databases and/or references to online monitoring tools, as endorsed by APANPIRG. The status of implementation is updated on a regular basis as endorsed by APANPIRG. APAC Regional Objectives defined in former Seamless ATM Plan V2.0 were incorporated in the e-ANP Volume III and supporting documents within the APAC main planning table in accordance with the e-ANP template adopted by the Council in 2014. *Updating of e-ANP Vol III by incorporating latest requirements defined in Seamless ANS Plan V3.0 is in process.*

2.13   In general, Member States/Administrations are reminded to review and update all CNS facilities listed and CNS requirements specified in the e-ANP to verify that the information provided for their States/Administration is up-to-date and correct.

3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

a)   note the information in this paper;

b)   remind States/Administrations to review details in mentioned CNS Tables, be actively involved in the maintenance of the CNS related Tables in e-ANP VOL II which are discussed in this paper;

c)   approach ICAO APAC Office in case of any assistance in using the process; and

d)   discuss any matters as appropriate.

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