



ICAO

Twenty Ninth Meeting of the Communications/
Navigation and Surveillance Sub-group (CNS SG/29)
of APANPIRG

Bangkok, Thailand, 16-20 June 2025

Agenda Item 15: Review of ToR and Action Items

REVIEW OF ToR AND ACTION ITEMS

(Presented by Secretariat)

SUMMARY

This paper presents the Terms of Reference (ToR) for review and Action Items List of the CNS Sub-Group for review and updates.

1. INTRODUCTION

1.1 The CNS Sub-Group (CNS SG) Terms of Reference (ToR) were first adopted under APANPIRG/22 in 2011 and became effective with the 2013 meeting cycle. The ToR established the scope, objectives and reporting lines for CNS SG and its contributory bodies in support of APANPIRG's Communication, Navigation and Surveillance (CNS) work.

1.2 The CNS SG/18 Meeting in 2014 reviewed the Terms of Reference of CNS SG and did not identify the need to change. The CNS SG/18 Meeting also noted the existing terms of reference of other contributory bodies reporting to APANPIRG through CNS SG. The CNS SG/18 Meeting pointed out that these ToRs may need to be updated based on the ASBU-based performance implementation approach.

1.3 APANPIRG/25, in September 2014, established a contributory bodies structure review Task Force (ABSRTF) to align its working arrangements with the revised Global ANP. APANPIRG noted that in light of the performance-based approach to air navigation planning and implementation, there was a need to align the work programme of States, Regions and ICAO. The APANPIRG also noted that in this regard, within the ASBU framework, due consideration should be given to planning, implementation, and performance measurement, monitoring and reporting aspects and that a project-based approach for ASBU's should be applied to APANPIRG Contributory Bodies (Sub Groups, Working Groups, Task Forces) as necessary. The APANPIRG/25 meeting adopted Decision 25/50 regarding the establishment of a structure review task force.

1.4 Among the other outcomes, the ABSRTF meeting formulated five draft Decisions for consideration by the APANPIRG/26 meeting, including empowerment of the Sub Groups and proposed the revised Terms of Reference of APANPIRG Sub-groups. The APANPIRG Procedural Handbook was amended in line with the new APANPIRG structure and to promote the project management principles. After 2015, the CNS SG ToR was not reviewed.

1.5 The list of action items for CNS SG was updated by the CNS SG/28 Meeting in July 2024. Twenty (20) new action items were identified during the CNS SG/28 Meeting, which need to be reviewed by this meeting.

2. DISCUSSION

2.1 The meeting is invited to review the Terms of Reference of CNS SG effective from 2013, which is provided in **Appendix A** of this paper.

2.3 The meeting was also invited to review and update the Action Items List for CNS SG/28 provided in **Appendix B** of this paper.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) review the Terms of Reference of the CNS Sub-group provided in **Appendix A**; and
- b) review and update the Action Items List for CNS SG in **Appendix B**

5.2 Report of the APANPIRG Contributory Bodies Review Task Force Meeting

.....

5.2.5 APANPIRG/26 noted that following the reorganization of APANPIRG structure and the revised Terms of Terms of the Sub Groups, it is necessary for the Sub group to review the structure of its Working Groups and Task Forces and their Terms of Reference. APANPIRG adopted the following Decision.

Decision APANPIRG/26/66 — Review Terms of Reference of Contributory Bodies under the APANPIRG Sub Groups

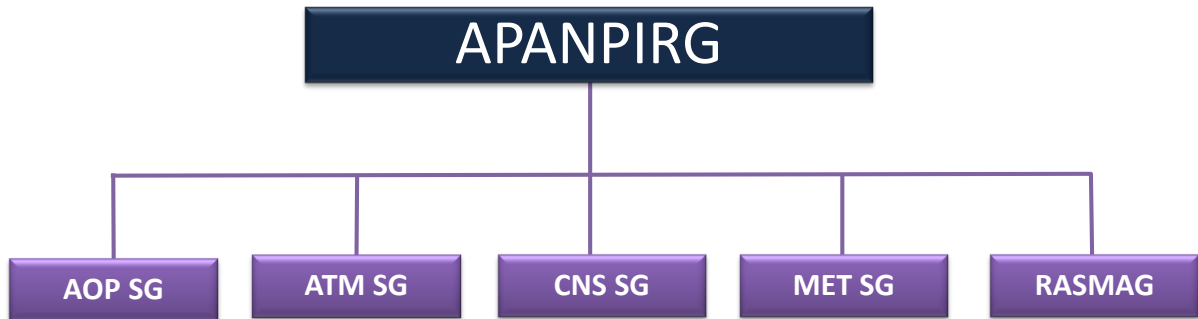
That, the Secretariat, in consultation with Chairs of the existing Task Forces and Working Groups under the APANPIRG Sub Groups, reviews the TOR as necessary, and submits to the respective Sub Groups and APANPIRG/27 for further review and adoption.

.....

APPENDIX B to the APANPIRG/26 Report on Agenda Item 5

APPENDIX B

PROPOSED NEW STRUCTURE OF APANPIRG



- AOP SG: Aerodrome Operations and Planning Sub Group
- ATM SG: Air Traffic Management Sub Group
- CNS SG: Communications, Navigation and Surveillance Sub Group
- MET SG: Meteorology Sub Group
- RASMAG: Regional Airspace Safety Monitoring Advisory Group

Note: The scope of the ABSRTF is limited to APANPIRG Sub Groups

APPENDIX C

APPENDIX C to the Report on Agenda Item 5

**Terms of Reference for APANPIRG Communications, Navigation and Surveillance/Sub Group
(CNS/SG)**

The Objectives of the CNS/SG are to:

- 1) *ensure continuous and coherent development of the CNS parts of the Asia/Pacific Regional Air Navigation Plan (APAC ANP) in a manner that is harmonized with adjacent regions, consistent with ICAO SARPs, the Global Air Navigation Plan and the Global Aviation Safety Plan;*
- 2) *facilitate the implementation of CNS systems and services identified in the APAC ANP, Aviation System Block Upgrade (ASBU) priority modules and Asia/Pacific Seamless ATM Plan elements using the project management principles where appropriate;*
- 3) *review, identify and address deficiencies that impede the implementation or provision of efficient CNS services in the Asia & Pacific Regions.*

Deliverables to meet the Objectives:

- 1) *Progress report to be **submitted** to APANPIRG addressing the CNS SG deliverables (listed in 2 to 9 below);*
- 2) *CNS parts of the APAC ANP to be **reviewed** and, as necessary, amendment proposals **prepared** to update the APAC ANP to reflect changes in the operational and global requirements;*
- 3) *Level of implementation of CNS systems and services to be **monitored** and, as necessary, **facilitated** to support the effective implementation of ASBU priority modules and the Asia/Pacific Seamless ATM Plan elements;*
- 4) *Air navigation deficiencies in the field of CNS to be **identified** (which may require any necessary systems performance monitoring to be **facilitated**) and, where necessary, appropriate corrective action **proposed** and the development and implementation of action plans by States to resolve identified deficiencies **facilitated**;*
- 5) *Air navigation deficiencies in the field of CNS (as listed in the APANPIRG database) to be **reviewed** and, as necessary, **updated** to reflect the current situation;*
- 6) *Research and development, trials and demonstrations in the field of CNS and other relevant areas to be **monitored** and, as necessary, the transfer of this information and expertise between States **facilitated**;*
- 7) *Specific recommendations to be **made**, and guidance materials **developed**, aimed at improving CNS services by the use of existing and/or new procedures, facilities and technologies;*
- 8) *Inter-regional and intra-regional co-ordination issues in the field of CNS to be **reviewed** and **identified** and, as necessary, actions **recommended** addressing those issues;*
- 9) *CNS environmental initiatives are consistently identified and progressed; and report outcomes from CNS environmental initiatives;*
- 10) *Draft Conclusions and Decisions to be **formulated** relating to matters in the field of CNS that come within the scope of the APANPIRG work plan.*

APPENDIX D to the APANPIRG/26 Report on Agenda Item 5

APPENDIX D

Project Management Principles

1 In the context of a project management approach, projects will be identified primarily from ASBU Modules adopted by APANPIRG, agreed regional targets and objectives and existing initiatives. Any ANS operational improvement is conducted through a project¹. The Seamless ATM implementation guidance published and maintained by the ICAO Regional Office would apply for structuring the project and providing the necessary technical guidance (standards etc). However the level of documentation required would be commensurate with the project objectives and scale (see below).

2 Where it is not the case, a project team will be nominated by States and concerned international organizations in coordination with SG. The Task Force Chair and/or the ICAO Secretariat will act as Project Managers.

3 In this regard it is proposed that the ToR of the Sub Groups should be reviewed to better support the ICAO performance framework, in particular implementation activities to align with ASBUs and regional priorities. It is also proposed to empower the Sub Groups/Task Forces to make decisions on internal matters and take corrective actions. The Sub Groups would have the ability to agree, without further APANPIRG endorsement, any Conclusion or Decision (especially those concerning guidance to States in the implementation of ICAO SARPs) that does not have significant additional economic, environmental or political effects, which should be considered at a higher level at APANPIRG.

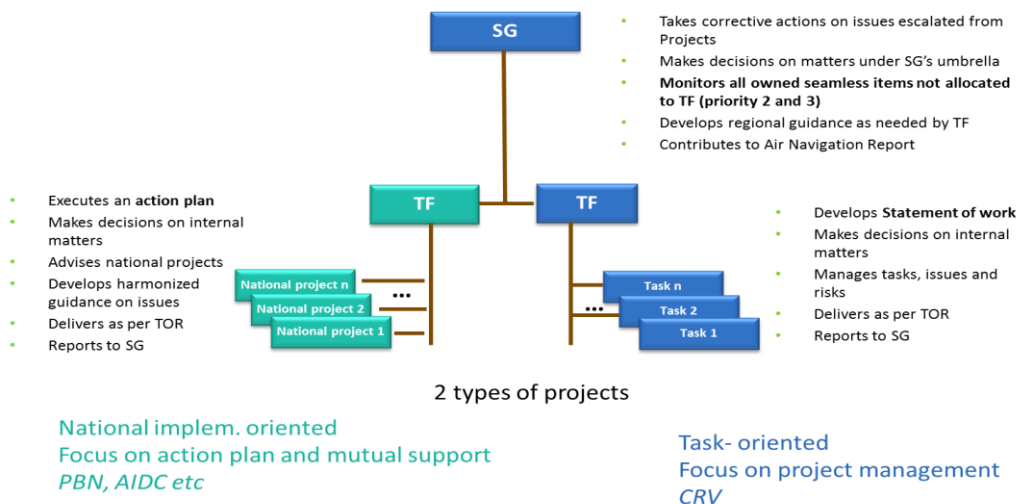
Scale of projects

4 The scale of the project will be defined as experience shows that coordination and control activities vary accordingly:

- interregional (example: definition of an interregional AIDC standard)
- regional (examples: CRV, ATFM projects)
- sub-regional (example: Implementation of new PBN routes between States in a sub region)
- a collection of national projects driven by a State/Administration

Types of project

5 Depending on the objective of the project, 2 types of projects could be defined:



1 Project: according to ISO 10006, unique process consisting of a set of co-ordinated and controlled activities with start and finish dates, undertaken to achieve an objective conforming to specific requirements, including constraints of time, cost and resources.

APPENDIX D to the Report on Agenda Item 5

Documents and tools

6 TORs of the Project should define timelines from start to completion. These timelines should be consistent with eANP Volume III main planning table, stating all deadlines for ASBU and regional objectives and related ANRF.

7 TORs will record also the project manager(s), the project team, the reporting lines (SG and APANPIRG) and scale (interregional, regional, sub-regional, or national) of the project.

8 Projects should be conducted using standardised and simple documents for which templates would be proposed on ICAO APAC RO website:

- Statements of work for the definition of tasks inside a project
- Action list for the allocation and follow-up of actions inside the project and outside the project (dependencies)
- Basic Risk table for the identification and mitigation of risks inside a project
- Project report (1 slide) to report to the SG(s)
- Summary of discussions of the meeting

9 At the creation of the project, the set of applicable documents would be proposed by the Project Manager according to the scale and type of project, endorsed by the SG, and recorded in the TOR.

10 The use of ICAO portal and teleconferences should be generalized to control and coordinate the activities conducted under a project.

Safety management

11 For inter-regional, regional and sub-regional projects undertaking major changes to the air navigation system in Asia Pacific Region, a safety analysis may have to be conducted² in the framework of the project. For national projects, the analysis would more probably be conducted inside the State/organizations involved. Such analyses have to comply with ICAO Doc 9859, Safety Management Manual, particularly the Safety risk probability table and the Safety risk severity table.

12 If no other process is available or preferred, the analysis could be based on:

- A Concept of Operations (CONOPS) and/or OSED identifying the new operational services/environments being envisaged;
- Operational Hazard Analysis (OHA) identifying hazards brought by the new operational services;
- Preliminary System Safety Assessment (PSSA) as per ARP 4761 identifying and mitigating the causes of hazards (people, equipment, procedures)
- System Safety Assessment (SSA) as per ARP 4761 establishing that the risk is acceptable according to ICAO Doc 9859.

2 A criterion could be that if an initial Hazard Analysis identifies hazards with severity being major or more severe (significant reduction in safety margins, a reduction in the ability of the operators to cope with adverse operating conditions as a result of an increase in workload or as a result of conditions impairing their efficiency, Serious incident, Injury to persons) then an extensive process would have to be conducted. Otherwise a lighter process would be conducted.

APPENDIX D to the Report on Agenda Item 5

Checking/Reporting

13 It is proposed that interregional, regional and sub-regional projects report to their SG through a one page slide on their progress, issues and top risks. National projects would be tracked through the seamless ATM plan on-line reporting process.

14 In order to track the progress of implementation, data collection will be done through the seamless ATM plan on-line reporting process using the metrics defined.

15 A regional picture could be developed to graphically illustrate the progress by seamless ATM plan implementation item. The project was started but is frozen. ICAO's resources would need to be mobilized to support the regional picture.

Acting/correcting

16 A SG would have an overview of all its projects: objectives, achievements, issues, top risks. It will take action on issues escalated by any project supervised or identified between projects supervised. APANPIRG would have an overview of all the projects and will take corrective actions on issues escalated from SGs or identified between SGs.

17 SGs would monitor dependencies between projects. APANPIRG would monitor dependencies between projects supervised by different SG. APANPIRG could review periodically the top 10 risks. A table of projects for the region could be maintained by APANPIRG.

Change management

18 The project management principles presented in this Attachment and considered beneficial by ABSRTF should be refined and recorded in the APANPIRG Procedural Handbook.

19 All principles would need a certain time to be properly and homogeneously applied throughout the region. Selection and briefing of project managers would be necessary. Certain principles may be regarded as guidance/good practice first and later on become recommendations.

— — — — —

ACTION ITEMS OF CNS SG/28				
Action Item	Subject	Status / Target Date	Action Party	Status
28-1	ATM AS TF was invited to produce a pictorial map to show the latest update for the AIDC implementation against Hotspots in the Region in next CNS SG/29 meeting using WP/03 of CNS SG28	CNS SG/29	ICAO Secretariat, ATMAS TF	Open
28-2	APAC States/Administration would need adequate time to study and understand the content and recommendations contained in the ISMS Manual before making a decision on the appropriate way forwards. Therefore, it was advised that the discussion on forming a dedicated group be deferred to the CNS SG/29 Meeting in 2025. It was anticipated that, by the next CNS SG Meeting, most States/Administrations would have enough details and knowledge to share their views on the need for a formal group along with the required expertise and ToR	CNS SG/29	ICAO Secretariat, All Member States	Open
28-3	About proposed timelines to cater to a mixed-mode environment where both the current flight plan (FPL2012) and the FF-ICE flight plan co-exist, the Meeting was informed that a global cessation of the ICAO 2012 Flight Plan by 2034 is recommended by ICAO Secretariat for consideration of the AN-Conf/14 to be held from 26 August to 6 September 2024 in Montréal, Canada. If the AN-Conf/14 agrees to the recommendation, the timeline for a complete migration to the FF-ICE flight plan would be 2034. The ICAO Secretariat will share further information in the next Meeting	CNS SG/29	ICAO Secretariat	Open
28-4	The Secretariat will notify the CNSS of the ANB about updates to the regional VHF COM Allotment Plan, if adopted by APANPIRG/35, to ensure the Frequency Finder tool incorporates the latest revisions	CNS SG/29	ICAO Secretariat	Open
28-5	The Meeting was informed that the publication of Frequency List 2 (37th edition) will be prepared by Frequency Finder in 2024. After adopting the CNS SG/28/07 (SRWG/8/4), the ICAO APAC Regional Office will stop the regular publication of Frequency List 2	CNS SG/29	ICAO Secretariat	Open
28-6	CNS SG should start early consideration on the provisions of the CNS infrastructure (such as tracking of AAM and interfacing with existing systems etc.) to support AAM development in the Region. The Chair suggested that relevant topics on such CNS provisions should be included in future CNS SG Meetings The ICAO Secretariat will coordinate with the FANS Interoperability Team – Asia (FIT- Asia) and Regional Airspace Safety Monitoring Advisory Group (RASMAG) to share the information presented in the IP/28 along with the proposal to consider the NODAR template and NORIA Handbook to use and implement in the APAC and check the equivalent documents availability for APAC region	CNS SG/29	ICAO Secretariat	Open
28-7		CNS SG/29	ICAO Secretariat	Open
28-8	The Meeting supported the detailed deliberation on the concerns raised by Australia in WP/07 of PBNICG/11 titled “Implementation of PBN Separation across FIR boundaries” and WP07 presented by Australia in Separation and Airspace Safety Panel (SASP) 39th Working Group Meeting held in Montréal, Canada from 6 to 17 May 2024 titled “Issues with the requirement to ‘designate’ airspace or ATS routes for the application of some performance-based separation standards where RNP is specified”. ICAO Secretariat will share both papers with ATM SG to deliberate on the issues raised in the paper and to provide guidance to review the application of RNP separation within Doc 4444 PANS-ATM to include a transition from RNP routes or airspace to other routes or airspace to improve the seamless nature of boundaries	Jul-24	ICAO Secretariat	Open

ACTION ITEMS OF CNS SG/28				
Action Item	Subject	Status / Target Date	Action Party	Status
28-9	The Meeting suggested sharing the information and concerns communicated by IATA,(IATA proposed simplifying and standardising authorisations and FPL notations for PBN capabilities and their related interpretations in the PBNICG/11 Meeting) supported by PBNICG, with relevant HQ panels for further discussion	CNS SG/29	ICAO Secretariat	Open
28-10	After a discussion on WP/32, WP/33, and WP/35 on GNSS interference issues, it was agreed that this concern should be presented to ATM SG by the Secretariat and shared by IATA with the Regional Aviation Safety Group (RASG)	CNS SG/29	ICAO Secretariat, IATA	Open
28-11	The AAC Secretary will share the paper along with the ICAO guidance document with WS1 in the next AAC Meeting to be held in Chengdu, China, from 8-10 July 2024	5-Jul-24	ICAO Secretariat	Open
28-12	The ICAO Secretariat is working with the ICAO HQ IT team to improve the ANS reporting tool's functionality	CNS SG/29	ICAO Secretariat Taken over by ATM section. Propose to close	Open
28-13	WP25- Hong Kong China shared their offer to host the workshop for achieving high resilience in Sustaining operations of Critical Aeronautical Infrastructure and suggested that a 1-to 2-day workshop may be conducted along with relevant CNS contributory body Meetings to save travel costs by Member States/Administrations	CNS SG/29	ICAO Secretariat	Open
28-14	USA proposed to share the WP/25 and workshop proposal with the AAC/3 Meeting planned to be held from 8-10 July 2024 in Chengdu, China	AAC/3	USA	Open
28-15	WP-34- The Meeting agreed to add this new draft chapter to the guidance material. The Meeting requested Member States/Administrations to assess the content of the new proposed chapter and provide their comments to the ICAO Secretariat for review and compilation by the Ad-hoc work group	CNS SG/29	ICAO Secretariat, All Member States, Human factor guidance Ad-hoc Group	Open
28-16	The Ad-hoc group will present a revised chapter consolidating all comments for CNS SG/29 review and adoption	CNS SG/29	ICAO Secretariat, IFATSEA, Human factor guidance Ad-hoc Group	Open
28-17	After discussion on IP/17, IP/18 and IP/25, the Chair considered that to further steer the ATSEP development in APAC and global perspectives, CNS SG to conclude the ATSEP Guidance Material in paragraph 11.3 above, and Member States / Administrations to consider preparing joint paper, and deliberate the strategy in future CNS SG meetings to include ATSEP licensing in Annex 1.	CNS SG/29	ICAO Secretarait, Hong Kong China	Open
28-18	Sri Lanka queried any regional cooperation to support APAC States/Administrations in developing Standard Training Packages (STP). The Chair advised that the established Task Force for Strengthening and Evolving Existing Regional Mechanisms for Regional Cooperation towards Capability and Capacity Building and Technical Assistance (RCM TF) may help support this request. The Chair later updated the Meeting that he had proposed and the RCM/TF Chair had agreed to follow-up possible regional collaboration on ATSEP trainingICAO Secretariat will coordinate with RCM TF Secretary to share this information and proposed action	CNS SG/29	ICAO Secretarait	Open
28-19	Considering the importance of cybersecurity in civil aviation, Hong Kong China offered to liaise with ICAO HQ via the APAC Office to discuss feasibility in hosting cybersecurity seminars/workshops bundled with AWD exercise in Hong Kong in 2025. The ICAO Secretariat will coordinate with Hong Kong China, to plan this workshop further	CNS SG/29	ICAO Secretarait, Hong Kong China	Open