



International Civil Aviation Organization

**THE SECOND MEETING OF ASIA/PACIFIC ATS INTER-FACILITY
DATA COMMUNICATION (AIDC) IMPLEMENTATION TASK FORCE
(APA TF/2) OF APANPIRG**

Bangkok, Thailand, 16 - 18 March 2016

Agenda Item 2: Review of outcomes of relevant meetings

REVIEW OF THE TERMS OF REFERENCE OF APA TASK FORCE

(Presented by the Secretariat)

SUMMARY

This paper presents the terms of reference of APA Task Force for review by the meeting in accordance with **Decision APANPIRG/26/66**, and considerations of project management principles.

1. INTRODUCTION

1.1 The Terms of Reference of the AIDC Implementation Task Force was adopted by APANPIRG at its Twenty Fifth meeting through Decision 25/37. The ToR of the APA Task Force was provided to the first meeting of this Task Force under WP/02.

2. DISCUSSION

APANPIRG Contributory Bodies Review Task Force

2.1 In September 2015, APANPIRG/26 reviewed the Report of the Second Meeting of the APANPIRG Contributory Bodies Structure Review Task Force (ABSRTF/2) held from 24 to 25 June 2015.

2.2 APANPIRG/26 noted the following recommendations proposed by ABSRTF which is relevant to APA Task Force :

- APANPIRG Sub Groups should have the ability to adopt, without further APANPIRG endorsement, any technical Conclusion or Decision (especially those concerning guidance to States in the implementation of ICAO SARPs, GANP, RANP, Seamless ATM Plan) that does not have additional economic, environmental or political effects; It is recommended that Sub Groups should be empowered to adopt draft Conclusions/Decisions on behalf of APANPIRG, which are developed by their respective Working Groups and Task Forces;
- The respective APANPIRG Sub Group should examine and review the usefulness and continuity of the Working Groups & Task Force reporting to it and propose their new structure to APANPIRG/27 (2016) for approval;

- ABSRTF also agreed to the concept of the project management principles to promote a more project-management-driven approach to regional air navigation planning and implementation, which is guided by and aligned with regional priorities and the Global Air Navigation Plan/ASBU strategy;

2.3 Based on past trends and the maturity level of the Sub Groups, it was decided to empower the Sub Groups, noting that the decision could be reversed in 2018 if the arrangement was found to be not functioning satisfactorily.

2.4 It was agreed to strengthen the APANPIRG Handbook with clear definitions and procedures to ensure conformity with the expectations of APANPIRG (in particular, regarding which Draft Conclusions would need to be reviewed by APANPIRG). Moreover, empowerment to Sub Groups would become effective from 2017 (2016 would be used for transitional arrangements). APANPIRG adopted the following Decision.

Decision APANPIRG/26/65 — Revised APANPIRG Structure, Terms of Reference and APANPIRG Sub Group Empowerment

That, in accordance with APANPIRG Decision 25/50, and to promote a more project-management-driven approach to regional air navigation planning and implementation which is guided by and aligned with regional priorities and the Global Air Navigation Plan/ASBU Strategy:

- a) the new structure of the APANPIRG and its Sub Groups [placed at **Appendix A**] is adopted as presented in Appendix B to the Report on Agenda Item 5;
- b) the revised Terms of Reference of APANPIRG Sub Groups [placed at **Appendix B**] is adopted;
- c) to enhance the efficiency of APANPIRG approval process, the Sub Groups are empowered to adopt Conclusions and Decisions on technical matters (especially those concerning guidance to States in the implementation of ICAO SARPs, GANP, RANP, Seamless ATM Plan) that do not have additional economic, environmental or political effects, which should be considered at a higher level at APANPIRG; and
- d) the APANPIRG Procedural Handbook be amended in accordance with the new APANPIRG Structure, Terms of Reference, project management principles [**Appendix D**] and procedures to be followed for the processing of Sub Group- endorsed Conclusions and Decisions.

2.4 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

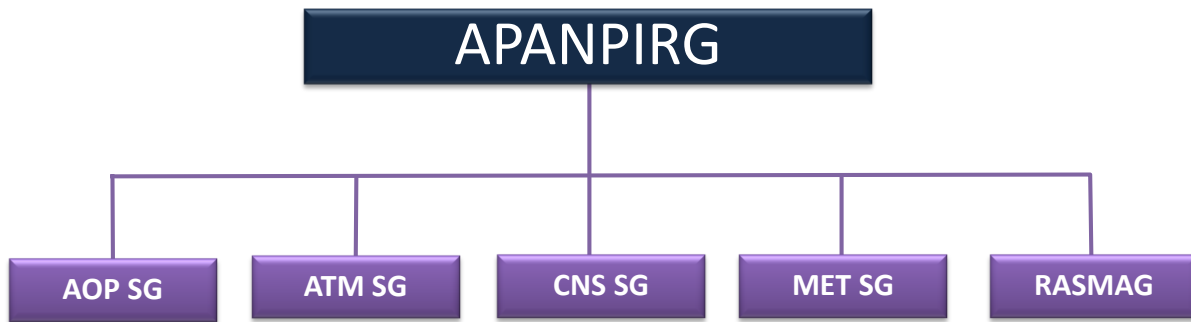
That, the Secretariat, in consultation with Chairs of the existing Task Forces and Working Groups under the APANPIRG Sub Groups, reviews the TOR as necessary, and submits to the respective Sub Groups and APANPIRG/27 for further review and adoption.

3. ACTION REQUIRED BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) note the revised structure of APANPIRG and TOR of CNS SG provided in Appendices A and B;
- c) review the TOR of the APA Task Force provided in Appendix C in accordance with Decision APANPIRG/26/66;
- d) note the project management principles recommended by ABSRTF and considered by APANPIRG provided in Appendix D to this paper; and
- e) discuss any relevant matters as appropriate.

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

APPENDIX B

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.*

ASIA/PACIFIC
ATS INTER-FACILITY DATA-LINK COORDINATION (AIDC)
TASK FORCE (APA/TF)
TERMS OF REFERENCE

APA/TF Objective and Scope

The Asia/Pacific ATS Inter-Facility Data-Link Coordination Task Force (APA/TF) shall be responsible for overseeing the expedition of AIDC implementation in accordance with the Asia/Pacific Seamless ATM Plan within the Asian Region, with a particular focus on the Bay of Bengal (BOB) and South China Sea (SCS) areas.

Tasks

The APA/TF shall support the implementation of AIDC within the Asia/Pacific Region by:

- a) identifying problems and barriers for implementation of AIDC, with a particular focus on the BOB and SCS areas and establish an **action plan** committing the stakeholders to agreed and realistic* milestones. The action plan should prioritize the actions according to the potential safety impacts of the considered issues and **use the most efficient mechanisms** including Small Working Groups (SWGs), aviation industry teams and/or Go-teams (subject to funding) where required, to directly assist Asia/Pacific administrations within the BOB and SCS areas;
- b) solving the problems according to the action plan; and**
- c) taking any appropriate action **to meet the AIDC regional targets (phase 1 for 2015 and prepare phase 2018)** as far as practicable, including the development of Asia/Pacific AIDC implementation guidance material** to complement ICAO Standards and Recommended Practices and the deliverables of the ICAO Inter-Regional AIDC Task Force (IRAIDC TF).

* This means that the milestones will take into account the delays induced by funding and implementation of ATM systems upgrades and associated procedures if needed.

** Such guidance material should take into account the density and complexity of air traffic (including the prevalence of ATC coordination errors), the requirements for User Preferred Routing (UPR) and Dynamic Airborne Re-route Planning (DARP), the Flight Information Region Boundary (FIRB) proximity to departure and arrival aerodromes or other FIRBs and ancillary AIDC functions (including automated transfer of Controller-Pilot Data-link Communications (CPDLC) data authority).

Frequency

The APA/TF shall meet approximately twice a year and will use webconferences.

Schedule

The TF should complete its work in accordance with the planning. An indication could be 1 to 2 years for tasks a) and b) and 2 to 3 years for task c).

Reporting

The TF should report to APANPIRG through CNS SG.

Composition of APA/TF

The APA/TF will consist of ATM and CNS representatives from Asia/Pacific States (ANS Providers), IATA, CANSO, IFALPA and IFATCA. Experts on AIDC from outside the Asia/Pacific may attend if their technical input would be beneficial to the APA/TF.

Trans-regional States to the Asia/Pacific concerned by the action plan or having an interest in AIDC may also be invited.

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:

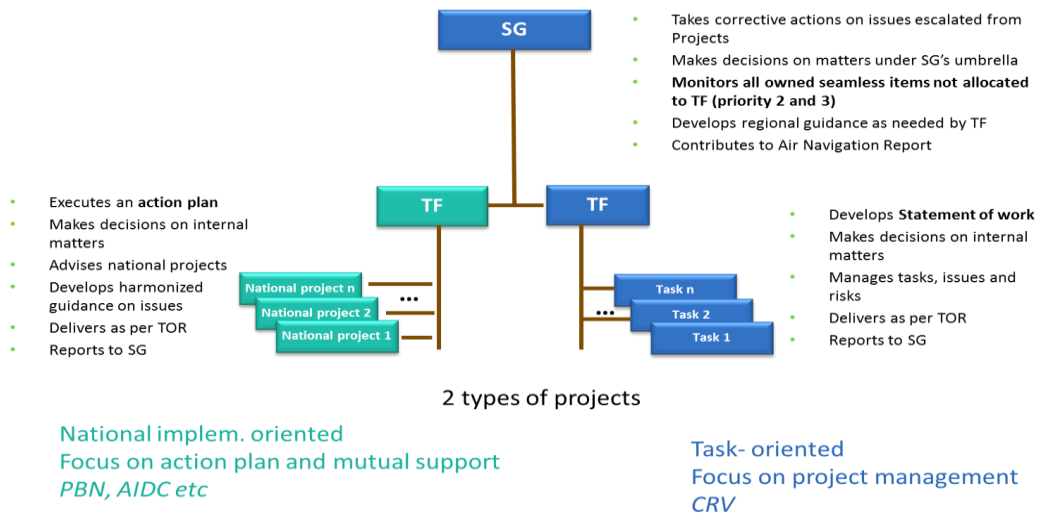
- interregional (example: definition of an interregional AIDC standard)
- regional (examples: CRV, ATFM projects)
- sub-regional (example: Implementation of new PBN routes between States in a sub region)
- a collection of national projects driven by a State/Administration

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.

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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

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

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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.

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.

impairing their efficiency, Serious incident, Injury to persons) then an extensive process would have to be conducted. Otherwise a lighter process would be conducted.

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.