INTERNATIONAL CIVIL AVIATION ORGANIZATION

SECOND MEETING OF THE APANPIRG CONTRIBUTORY BODIES STRCUTURE REVIEW TASK FORCE

Bangkok, Thailand, 24 – 25 June 2015

Agenda Item 4: Review existing structure of APANPIRG and its Contributory Bodies

PROPOSALS FOR THE RE–ORGANIZATION OF APANPIRG

(Presented by the Secretariat)

SUMMARY

The Working Paper presents a proposed re-organization of APANPIRG in accordance with its Decision 25/50. Particular consideration has been accorded to the ICAO Aviation System Block Upgrades (ASBU) which was adopted by the 12th Air Navigation Conference in 2012 as part of the 4th Edition of Global Air Navigation Plan (GANP Doc 9750).

In order to give effect to the outcomes of the AN-Conf/12, the Working Paper proposes a revised structure of the Group and the adoption of a project management approach in its planning, implementation and reporting activities in support of States' efforts to implement SARPs, Regional requirements, regional targets and objectives and other ICAO provisions and policies.

The Meeting is invited to review the existing APANPIRG structure and propose revised structure for consideration by APANPIRG/26.

This Working Paper is related to the ICAO Strategic Objectives for the 2014-2016 Triennium:

A: Enhance Global Civil Aviation Safety;
B: Air Navigation Capacity and Efficiency; and
E: Environmental Protection

Action by the Meeting is at Para 3 of this Paper.

1. INTRODUCTION

1.1 APANPIRG/22 (Bangkok, 5-9 September 2011), in consideration of optimizing the effectiveness and efficiency of the contributory bodies, established a new structure of its contributory bodies and adopted TOR of its Sub-Groups based on the Report of APANPIRG Contributory Bodies Structure Review Task Force (ABSRTF) meeting held in May 2011. The new structure included a separate MET Sub Group and establishment of an AOP Working Group. The new structure and the approved TORs for the APANPIRG contributory bodies became effective from 2013 meeting year and were subject to further review in 2016 in light of the experience gained and considering the effectiveness and workload of each of the sub groups then.

1.2 The organization structure of APANPIRG endorsed by the Twenty Second Meeting of APANPIRG comprises of 23 contributory bodies. These include 4 Sub-Groups based on main air navigation technical areas namely - ATM, CNS, MET and RASMAG.

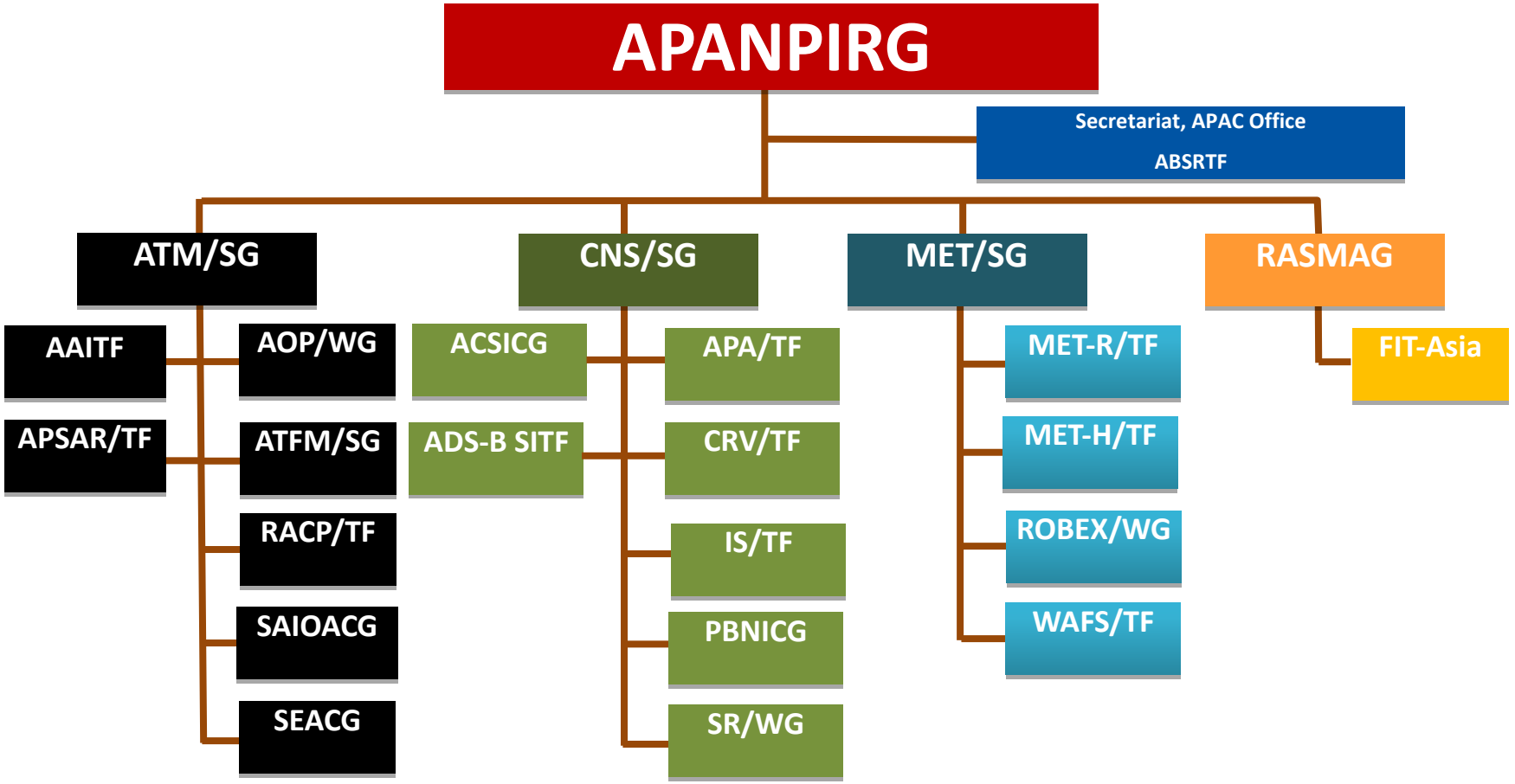
1.3 The 12th Air Navigation Conference (AN-Conf/12 - Montreal, November 2012) Recommendation 6/1 – *Regional performance framework–planning methodologies and tools*, urges that States and PIRGs finalize the alignment of their regional air navigation plans with the Fourth Edition of the Global Air Navigation Plan (GANP Doc 9750) by May 2014, and focus on implementing the ICAO Aviation System Block Upgrades (ASBUs) Block 0 Modules according to their operational needs.

1.4 Following the recommendation by the PIRG/RASG Global Coordination Meeting (Montreal, 19 March 2013) APANPIRG/24 (Bangkok, 24-26 June 2013) adopted Conclusion 24/2 on establishing regional priorities and targets in alignment with the ASBU Framework contained in the Fourth Edition of the Global Air Navigation Plan and APAC Seamless ATM Plan.

1.5 APANPIRG/25 (Malaysia, 8-11 September 2014) in Conclusion 25/2 endorsed the Regional Priorities and Targets, placed at **Attachment A** to this Working Paper. APANPIRG also endorsed the 45 Seamless ATM Plan implementation elements identified in the Seamless ATM Plan.

1.6 APANPIRG/25 in Decision 25/50, established the APANPIRG Contributory Bodies Structure Review Task Force with members consisting of Chairpersons and Vice Chairpersons of APANPIRG Contributory Bodies (Sub Groups, Working Groups and Task Forces) and voluntary members nominated by States and with the Terms of Reference placed at **Attachment B** to this Working Paper.

1.7 The objective of the APANPIRG Contributory Bodies Structure Review Task Force is 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: and develop a new structure of the APANPIRG and its contributory bodies in accordance with APANPIRG Decision 25/50 for endorsement by APANPIRG/26.



ATM/SG	- ATM Sub Group
AAITF	- AIS - AIM Implementation Task Force
APSAR/TF	- APAC Search and Rescue Task Force
AOP/WG	- Aerodrome Operations and Planning Working Group
ATFM/SG	- ATFM Steering Group
RACP/TF	- Regional ATM Contingency Plan Task Force
SAIOACG	- South Asia Indian Ocean ATM Coordination Group
SEACG	- South East Asia ATS Coordination Group

CNS/SG	- CNS Sub Group
ADS-B SITF	- ADS - B Study and Implementation Task Force
ACSICG	- Aeronautical Communication Services Implementation Coordination Group
APA/TF	- AIDC Implementation Task Force
CRV/TF	- Common Regional Virtual Private Network (VPN) Task Force
IS/TF	- Ionospheric Studies Task Force
PBNICG	- Performance Based Navigation Implementation Coordination Group
SR/WG	- Spectrum Review Working Group

MET/SG	- Meteorology Sub Group
MET-H/TF	- Meteorological Hazards Task Force
MET-R/TF	- Meteorological Requirements Task Force
ROBEX/WG	- Regional OPMET Bulletin Exchange Working Group
WAFS/TF	- World Area Forecast System Task Force

RASMAG	- Regional Airspace Safety Monitoring Advisory Group
FIT-ASIA	- FANS Implementation Team - Asia

2. DISCUSSION

2.1 The Aviation System Block Upgrade (ASBU) planning framework for global harmonization and interoperability has been incorporated into the fourth edition of the Global Air Navigation Plan which was approved by the ICAO Council in May 2013. APANPIRG/23 noted the developments and agreed to take the revised edition of the Global Air Navigation Plan into account in planning and implementation of regional and national air navigation systems.

2.2 APANPIRG/25 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. APANPIRG also noted that within the ASBU framework, due consideration should be given to planning, implementation, 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.

2.2.1 The challenges with the current APANPIRG structure are

- Regional targets are not reflected in the current TOR of the existing APANPIRG and its contributory bodies structure;
- Slow decision making due to APANPIRG structure and multiple sign-offs (Refer Para 2.3.4.4 wherein mitigation measures are proposed).

2.3 Proposal for APANPIRG Re-organization

2.3.1 In developing the re-organization proposal pursuant to Decision 25/50 due consideration has been given to the lessons learnt and the recommendations made by the First APANPIRG Contributory Bodies Structure Review Task Force. As part of development of the proposal, the Secretariat undertook a review of PIRG restructuring initiatives in other ICAO Regions (**Attachment C**). The proposal emanating from these considerations is presented at **Attachment D** to this working paper. The new APANPIRG structure would be effective from 2017 meeting year with 2016 being used to implement transitional arrangements.

2.3.2 The 'APANPIRG proposed reorganization' structure, presented at **Attachment D**, to this paper includes the optional provision for a dedicated committee, the APANPIRG Coordination Committee (**ACC**), to be responsible for coordinating the project-based work programme of APANPIRG and its contributory bodies

2.3.2.1 **OPTION 1:** APANPIRG proposed reorganization <u>without</u> the ACC

2.3.2.1.1 APANPIRG itself could oversee the whole process of coordination as in the current framework. APANPIRG ensures that contributory bodies have clear defined tasks and deliverables for projects and a monitoring mechanism for implementation is in place. The present APANPIRG structure with Sub Groups and Task Forces (and Working Groups/Steering Groups/Coordination Groups) facilitating the monitoring and implementation of air navigation systems in the area of ATM, CNS, MET and Aerodromes is working well. To further improve efficiency, the APANPIRG proposed reorganization will empower the Sub Groups/Task Forces to make decisions on internal matters, especially those concerning guidance/support State in the implementation of ICAO SARPs and take corrective actions.

2.3.2.2 **OPTION 2:** APANPIRG proposed reorganization <u>with</u> the ACC

2.3.2.2.1 APANPIRG Coordination Committee (**ACC**) has been proposed to facilitate the on-going work undertaken within the APANPIRG framework; to assist the Chairman and the Secretariat and to expedite follow-up work of the APANPIRG and its Sub Groups; this will include avoiding

implementation delay in between the PIRG meetings. The Committee will also facilitate coordination between the sub Groups of APANPIRG, APANPIRG and RASG APAC and APANPIRG and other regional bodies. The draft Terms of Reference for the ACC is at **Attachment E**.

2.3.2.2.2 The ACC would be composed of the Chairperson and Vice-Chairpersons of APANPIRG, the Secretary of APANPIRG, Chairpersons and Vice Chairpersons of the Sub-Groups including RASMAG, Secretaries of Sub-Groups including RASMAG, Officials nominated by Chair APANPIRG/Secretary and experts nominated by International organization/industry.

2.3.2.2.3 Pros and Cons on introduction of the ACC

Pros

✓ High volumes of material from contributory bodies is processed and made manageable for APANPIIRG Sessions;

✓ More effective coordination within the APANPIRG framework;

✓ More effective coordination with other Regional bodies, other Regions and industry groups

Cons

✓ Additional process layer, between the SGs and APANPIRG;

✓ Additional work load and resource for secretariat and committee members.

2.3.2.2.4 At the teleconference of 8th April the concept of introducing ACC within the framework of APANPIRG was discussed. In general the introduction of ACC was supported subject to getting more information from other regions on the success. It was noted that the concept of ACC has been recently introduced in other regions and yet to be proven. In conclusion considering the additional work load and resources the secretariat supported to defer the introduction of ACC to the next review of APANPIRG structure in the future.

2.3.3 **Sub-Groups (and contributory bodies under the Sub Groups)**

2.3.3.1 The Sub-Groups proposed by ICAO secretariat are the ATM, CNS, MET and AOP.

a) It is considered that the AOP Working Group has matured to be a sub group for discussing implementation of Annex 14 provisions, AOP subject of the regional air navigation plans and the Seamless ATM Plan. It is proposed that AOP Working Group should be a Sub Group and report directly to APANPIRG; on approval the newly established AOPSG would develop the TORs for the two Task Forces shown in the re- organized structure and submit to APANPIRG for approval;

b) It is considered that the MET SG is well organized and should continue as a separate sub group reporting directly to APANPIRG; (a new Volcanic Ash Task Force (VA/TF) is included under the MET SG in accordance with APANPIRG/25 Decision 25/47);

c) It should be noted that there are discussion items not related to the ASBU elements or regional priorities, e.g. air navigation service deficiencies, human resources, trainings, Search and Rescue, and contingency plans. The discussions on these items have been retained in the APANPIRG framework under respective sub groups;

d) If there is no specific group to discuss a regional priority and monitor implementation progress, possible establishment of a new group should be considered; and

e) RASMAG monitors air space safety, coordinates all the activities of the Region's designated monitoring agencies including undertaking aircraft height-keeping monitoring for RVSM, and submits recommendations to APANPIRG for improving ATM operations. It is proposed that RASMAG reports directly to APANPIRG.

2.3.3.2 At the Teleconference of 8th April 2015 RASMAG Chair advised that as the task of the RASMAG is to review airspace safety performance and facilitate the implementation of airspace safety monitoring and performance assessment services, APANPIRG is the right Forum for reporting. Following this the option for RASMAG reporting to RASG APAC was therefore not considered. RASMAG would however continue to share the ATS Data and analysis submitted by RMAs and EMAs with RASG/APRAST.

2.3.4 **Application of Project Management Principles**

2.3.4.1 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. 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.

2.3.4.2 Project teams, also known as task forces, would be proposed to take over the deliverables assigned to Sub groups and it will comprise of experts nominated by States and concerned international organizations, and where relevant, include "Champions."

2.3.4.3 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.

2.3.4.4 The details of the project management principles are presented at **Attachment F** to this paper.

2.3.5 **Conclusion**

2.3.5.1 In view of the foregoing the meeting may wish to consider adopting the following draft Decision:

Draft Decision ABSRTF/XXX: Reorganization of APANPIRG Structure

That, in accordance with APANPIRG/25, 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 contributory bodies be adopted as presented in **Attachment D to this paper**; and

b) the APANPIRG Procedural Handbook be amended in line with the new APANPIRG structure and to promote the project management principles outlined in Attachment F to this paper.

Note: (1) the new structure of APANPIRG and its contributory bodies shall become effective from 2017 meeting year with 2016 being used for transitional arrangement; and (2) the amendment to the APANPIRG Procedural Handbook shall be submitted to APANPIRG/27 for endorsement

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

a) Note the contents of this Working Paper;

b) Deliberate on the proposals presented in this Working Paper and agree on the reorganized structure and working methods of APANPIRG;

c) Agree on the Draft Decision under paragraph 2.3.5 of this Working Paper; and

d) Review and approve the proposed project management principles presented in Attachment F to this Working Paper.

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ATTACHMENT A

APANPIRG Regional Priorities, Targets and Metrics

Priority	ASBU module or Seamless Element	Targets	Target date (Seamless ATM Phase 1 Plan)	Metric
PBN	B0-APTA	1. Approach: Where practicable, **all high-density aerodromes** with instrument runways serving aeroplanes should have precision approaches or APV or LNAV. *Note 1: High density aerodrome is defined by Asia-Pacific Seamless ATM Plan as aerodromes with scheduled operations in excess of 100,000/year.* *Note 2: the Asia/Pacific PBN Plan Version 3 required RNP APCH with Baro-VNAV or APV in 100% of instrument runways by 2016*	12 November 2015	% of **high density aerodromes** with precision approaches or APV or LNAV.
Network Operations	B0-NOPS	2. **All High Density FIRs** supporting the busiest Asia/Pacific traffic flows and high-density aerodromes should implement ATFM incorporating CDM using operational ATFM platform/s. *Note: **High Density FIRs are defined as:*** *a) South Asia: Delhi, Mumbai;* *b) Southeast Asia: Bangkok, Hanoi, Ho Chi Minh, Jakarta, Kota Kinabalu, Manila, Sanya, Singapore, Vientiane; and* *c) East Asia: Beijing, Fukuoka, Guangzhou, Hong Kong, Kunming, Incheon, Shanghai, Shenyang, Taibei, Wuhan.* *[APANPIRG Conclusion 22/8 and 23/5 refer]*	12 November 2015	% of **High Density FIRs** supporting the busiest Asia/Pacific traffic flows and high density aerodromes using operational ATFM platforms incorporating CDM
Aeronautical Information Management	B0-DATM	3. ATM systems should be supported by digitally-based AIM systems through implementation of **Phase 1 and 2 of the AIS-AIM Roadmap**	12 November 2015	% of Phase 1 and 2 AIS-AIM elements completed
Flight and Flow Information for a Collaborative Environment (FF-ICE)	B0-FICE	4. All States between ATC units where transfers of control are conducted have implemented the messages ABI, EST, ACP, TOC, AOC as far as practicable.	12 November 2015	% of FIRs within which all applicable ACCs have implemented at least one interface to use AIDC / OLDI with neighbouring ACCs

Civil/Military	B0-FRTO	5. Enhanced En-Route Trajectories: All States should ensure that SUA are regularly reviewed by the appropriate Airspace Authority to assess the effect on civil air traffic and the activities affecting the airspace.	12 November 2015	% of States in which FUA is implemented
Civil/Military	Strategic Civil Military coordination (Regional)	6. Enhanced En-Route Trajectories: All States should ensure that a national civil/military body coordinating strategic civil-military activities is established.	12 November 2015	% of States which have established a national civil/military body that performs strategic civil-military coordination
Civil/Military	Tactical Civil Military coordination (Regional)	7. Enhanced En-Route Trajectories: All States should ensure that formal civil military liaison for tactical response is established.	12 November 2015	% of States which have established a formal civil military liaison for tactical response
Ground Surveillance	B0-ASUR	8. All Category S upper controlled airspace and Category T airspace supporting high density aerodromes should be designated as non-exclusive or exclusive as appropriate ADS-B airspace requiring operation of ADS-B.	12 November 2015	% of FIRs where Category S airspace and Category T airspace supporting high density aerodromes are designated as ADS-B airspace
Ground Surveillance	B0-ASUR	9. ADS-B or MLAT or radar surveillance systems should be used to provide coverage of all Category S-capable airspace as far as practicable, with data integrated into operational ATC aircraft situation displays.	12 November 2015	% of ACCs with ATS Surveillance using ADS-B, MLAT or radar in Category S airspace, and having data integrated into the ATC system situation display
Trajectory-Based Operations-Data Link En-Route	B0-TBO	10. Within Category R airspace, ADS-C surveillance and CPDLC should be enabled to support PBN-based separations.	12 November 2015	% of FIRs using data link applications to support PBN-based separations in Category R airspace

Note 1: **high density aerodromes:** based on 2012 ICAO data, as per Seamless Plan v1.0, the 21 busiest Asia/Pacific aerodromes were:

- Australia (Sydney, Melbourne);
- China (Beijing, Shanghai Pudong and Hong Jiao, Guangzhou, Hong Kong, Xi'an, Shenzhen, Chengdu, Kunming);
- India (New Delhi, Mumbai);
- Indonesia (Jakarta);
- Japan (Haneda, Narita);
- Malaysia (Kuala Lumpur);
- Philippines (Manila);
- Republic of Korea (Incheon);
- Singapore (Changi); and
- Thailand (Suvarnabhumi).

ICAO definition for Aerodrome traffic density included in Annex 14 is:
c) Heavy. Where the number of movements in the mean busy hour is of the order of 26 or more per runway or typically more than 35 total aerodrome movements.
Note 1.— The number of movements in the mean busy hour is the arithmetic mean over the year of the number of movements in the daily busiest hour.
Note 2.— Either a take-off or a landing constitutes a movement.

ATTACHMENT B

TERMS OF REFERENCE

APANPIRG Contributory Bodies Structure Review Task Force (ABSRTF)

Deliverable(s)

Recommendation on New APANPIRG structure and revised Terms of Reference for its contributory bodies

Scope of work

The following are the broad principles describing the scope of work:

a) Review of the existing APANPIRG structure which has become effective since 2013 and suggest new structure to APANPIRG/26 to meet the changing environment; and

b) Review and propose Terms of Reference (TOR) of the APANPIRG contributory bodies under the new structure. The proposed new structure and TOR shall reflect the need for supporting:

   i) planning and implementation of air navigation systems/services accorded as priority elements for the Asia Pacific Region (established regional priorities and associated targets according to AN-Conf/12 Recommendation 6/1); and
   ii) monitoring and reporting of the seamless ATM elements for the Asia Pacific Regions.

Composition

The task force would be composed of members consisting of Chairpersons/Vice Chairpersons of APANPIRG contributory bodies (Sub-groups, working groups and task forces) and voluntary members nominated by States;

Conduct of the work and schedule

The task force shall complete its work and submit the new structure to APANPIRG/26 for endorsement by September 2015. The work would be carried out by means of electronic correspondence as far as practicable. Minimum amount of face to face meetings would be planned.

ATTACHMENT C

REVIEW OF ORGANIZATION STRUCTURES OF OTHER PIRGS

The Secretariat reviewed the organizational structures of other PIRGs. Observations from the review are summarized as follows.

1. AFI Planning and Implementation Regional Group (APIRG)

The APIRG was re-organized in July 2014. With the re-organization, APIRG established APIRG Project Coordination Committee (APCC) to coordinate and guide planning and implementation activities within the framework of APIRG, to facilitate the activities of APIRG in its Sessions and to facilitate coordination between PIRGs, other Regional Groups and international organizations identified by APIRG. The APIRG also established two Sub Groups, namely the Airspace and Aerodrome Operations Sub-Group (AAO/SG) and the Infrastructure and Information Management Sub-Group (IIM/SG). The AAO/SG deals with the ASBUs Performance Improvement Area (PIA) 1 (Airport Operations), PIA 3 (Optimum Capacity and Flexible Flights), PIA 4 (Efficient Flight Paths), while the IIM/SG focusses on implementation in the context of PIA 2 (Globally Interoperable Systems and Data) and focuses on the role of digital processing and management of aeronautical information, meteorological information and the data link communications in support of the provision of Air Traffic Services (ATS). Details of APCC are at Appendix A.

2. EUR/NAT Planning Group (EANPG)

The EANPG established the EANPG Programme Coordination Group (COG) at its 37th meeting held in 1995, to facilitate the on-going work undertaken within the EANPG framework and to assist the Chairman and the Secretariat and to expedite follow-up work of the EANPG and its working groups between plenary meetings. TORs of COG is at Appendix B.

3. CAR/SAM Regional Planning and Implementation Group (GREPECAS)

The 16th meeting of the GREPECAS (March 2011) through Decision 16/45 - New GREPECAS Organization and Decision 16/47 - Transformation of the GREPECAS subgroups, approved the transformation of the Subgroups and their respective Task Forces into programmes and projects. The GREPECAS structure does not have the level of Sub-Groups. A number of implementation projects was established. The GREPECAS features the Programmes and Projects Review Committee (PPRC) which is the only layer between the GREPECAS and the implementation projects. The PPRC is to identify the need for new projects; prioritize resource allocation; authorize the establishment of new projects; recommends actions to eliminate obstacles encountered in achieving proposed objectives; and ensures that the programmes and projects are consistent with and aligned to the terms of reference of GREPECAS. The GREPECAS structure and terms of reference of the PPRC are reflected at Appendix C.

4. MIDANPIRG

The 14th Meeting of MIDANPIRG (December 2013) endorsed a revised organizational structure of the Group. The structure a MIDANPIRG Steering Group (MSG), two Boards managing specific projects, namely MID Region ATM Enhancement Programme Board (MAEP Board) and Middle East Regional Monitoring Agency Board (MIDRMA Board); and a group called Air Navigation Systems Implementation Group (ANSIG) responsible, inter-alia, of the monitoring of the status of implementation of the MID Region Air Navigation Systems and related ASBU Modules included in the MID Region Air Navigation Plan/Strategy; the ANSIG should also ensure that the implementation of Air Navigation Systems in the MID Region is coherent and compatible with developments in adjacent Regions, and is in line with the ATM Operational Concept (Doc 9854), Global Air Navigation Plan (GANP), the Aviation System Block Upgrades (ASBU) methodology and the MID Region Air Navigation Plan/Strategy. More details are in **Appendix D.**

Appendix A

APIRG Projects Coordination Committee (APCC)

Composition

- Chairperson
- Vice-Chairpersons of APIRG
- Secretary of APIRG,
- Elected Officials of the Sub-Groups and
- Secretaries of Sub-Groups

Terms of Reference

The APCC is mandated by APIRG to carry out specific functions in order to coordinate and guide planning and implementation activities within the framework of APIRG, to facilitate the activities of APIRG in its Sessions, and to facilitate coordination between PIRGs, other Regional Groups and international organizations identified by APIRG. The APCC shall specifically ensure continuity between the APIRG meetings and take necessary action to avoid implementation delays in between meetings of APIRG.

Key functions

1. Direct the work programmes and tasks of the contributory bodies of APIRG, in order to ensure that:
   a) contributory bodies have clearly defined tasks and deliverables;
   b) projects are clearly defined and monitoring information made available. This will include update of the ICAO Regional Performance Indicators Dashboard.
2. Review reports of the contributory bodies of APIRG in order to:
   a) provide guidance to the contributory bodies, including strategies and roadmaps on achieving the objectives of APIRG; and
   b) determine materials that have matured sufficiently for consideration and adoption of conclusions and decisions by APIRG.
3 Monitor progress including the life of Projects carried within the framework of APIRG.
4. Facilitate coordination between the following bodies:
   a) Sub-Groups of APIRG;
   b) APIRG and the RASG-AFI;
   c) APIRG and other Regional bodies and international organizations identified by APIRG.

Tasks

a) to prepare the agenda for APIRG meetings in consultation with the Secretary of APIRG;

b) to prepare the list of working documents (WPs, IPs, etc.) on materials considered ready for consideration by APIRG;

c) review reports of the APIRG Sub-Groups including draft Conclusions and Decisions, information from other Regional Groups and international organizations and identify prioritised materials for consideration by APIRG;

d) review trends on implementation shortcomings and deficiencies in accordance with the Council approved Uniform Methodology, and make recommendations for APIRG Conclusion and Decisions;

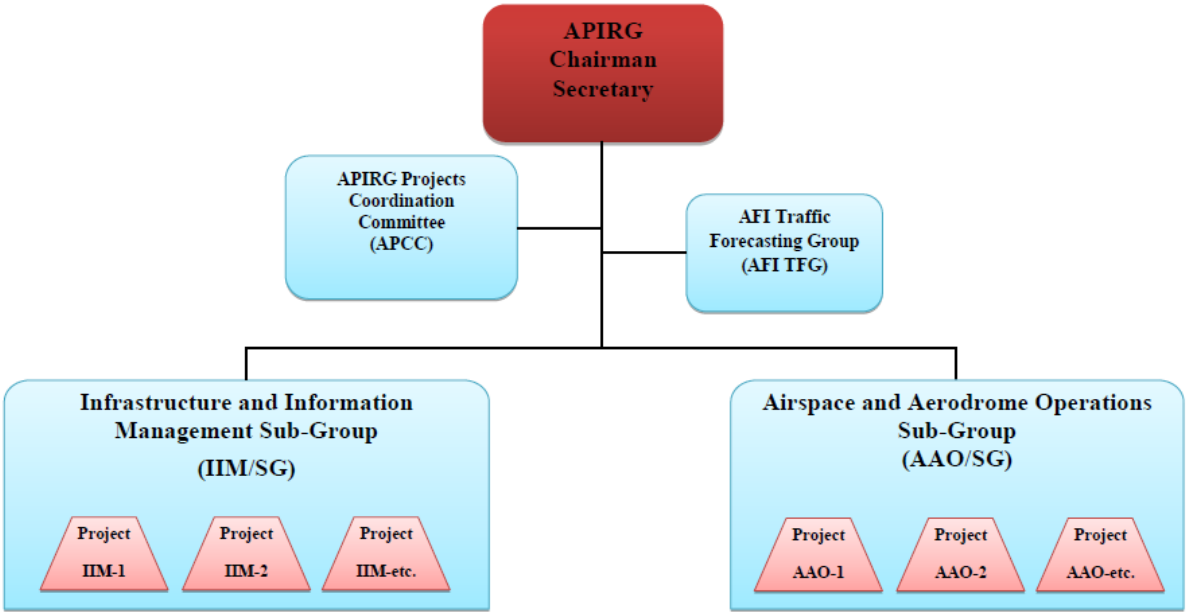
e) provide guidance for the APIRG contributory bodies including implementation strategies and roadmaps on achieving the objectives of APIRG;

f) carry necessary coordination between the Sub-Groups with particular focus on operational and infrastructure issues; and

g) carry out other tasks as assigned by APIRG

Working methods

APCC shall convene at least once a year which shall include a preparatory Session for an APIRG meeting. As the Committee also prepares for APIRG meetings, one of its Sessions shall take place approximately six weeks prior to an APIRG meeting. The Committee shall in between meetings, make use of available means of electronic communication including teleconferencing to progress its work and keep its members up to date on issues of concern, as well as to discuss specific issues.



Appendix B

EANPG PROGRAMME COORDINATING GROUP (COG)

TERMS OF REFERENCE

Establishment

The COG was established by EANPG/37 according to the following Decision 37/26

"Creation of an EANPG Programme Coordinating Group (COG)"

That:

a) an EANPG Programme Coordinating Group (EANPG-COG) be established to facilitate the on-going work undertaken within the EANPG framework, and to assist the Chairman and the Secretariat and to expedite follow-up work of the EANPG and its working groups between plenary meetings, taking into account the work undertaken by other bodies active in the air navigation field in the EUR Region as well as in adjacent Regions and to ensure that duplication of work does not occur;

b) the EANPG-COG be composed of the Chairman and Vice-Chairmen of the EANPG, Representatives from Czech Republic, France, Germany, Italy*, Portugal, Russian Federation, Spain, United Kingdom, United States, as well as from relevant State groupings (e.g. Nordic States, Benelux States, Baltic States), a representative of the grouping of States composed of Azerbaijan, Georgia, Kazakhstan, Republic of Moldova and Ukraine**, and International Organizations (IAC **, CEC, EUROCONTROL, IACA, IATA);

c) the EANPG-COG invite additional State representatives in those cases when it may discuss matters of particular concern to them;

d) preview draft Conclusions and Decisions emerging from the work of EANPG working groups and other input for the attention of the EANPG;

e) prepare and refine EANPG material to assist and guide the ICAO Secretariat in its work in support of the EANPG; and

f) carry out specific tasks given to it by the EANPG to advance its work at the required speed.

* EANPG Decision 43/42 – Expansion of the membership of COG to include Italy
** EANPG Decision 44/13 – additional participation of Grouping of States and IAC

MANDATE:

(EANPG Decision 43/2 - Mandate of the EANPG Programme Coordinating Group (COG) refers)

That the EANPG Programme Coordinating Group:

a) execute its pivotal function as a coordinating and steering organ with highest possible efficiency in accordance with the goals set by the EANPG;

b) direct the work programmes and tasks of contributory bodies in the best manner commensurate with the overall EANPG work programme;

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* EANPG/43 decided to expand the membership of COG and include Italy (EANPG Decision 43/42)
** EANPG Decision 44/13 – additional participation of Grouping of States and IAC

c) ensure that contributory bodies have clearly defined tasks, deliverables and target dates in line with the goals of the EANPG; and

d) review the reports made to COG by the contributory bodies to provide guidance to these bodies as may be necessary and to determine which subjects have matured for submission to the EANPG for conclusion and/or decision.

Objectives

As (a), (d), (e) and (f) of the above EANPG Decision 37/26

Major Tasks To assist the chairman of the EANPG and the Secretariat in particular:

a) to prepare the agenda for EANPG meetings, including the background notes;

b) to prepare the list of working/information papers that could be expected to be sufficiently mature for submission to the EANPG;

c) to provide guidance in the preparation of the documentation for EANPG meetings;

d) to coordinate and harmonize the work of the contributory bodies of the EANPG;

e) to review outstanding shortcomings and deficiencies in accordance with the Council approved Uniform Methodology; and

f) in doing so, best advantage will be taken of modern communications methods, particularly electronic mail, facsimile, etc. to keep the Members and the Secretary in permanent touch with each other.

Composition As (b) of the above EANPG Decisions 37/26, 43/42 and 44/13.

That the EANPG Programme Coordinating Group (EANPG-COG):

a) facilitate the on-going work undertaken within the EANPG framework, assist the Chairman and the Secretariat to expedite follow-up work of the EANPG and its contributory bodies between plenary meetings, taking into account the work undertaken by other bodies active in the air navigation field in the EUR Region as well as in adjacent Regions, and ensure that duplication of work does not occur;

b) execute its pivotal function as a coordinating and steering organ with highest possible efficiency in accordance with the goals set by the EANPG;

c) carry out specific tasks given to it by the EANPG to advance its work at the required speed;

d) review outstanding deficiencies in accordance with the Council approved Uniform Methodology (Appendix A refers);

e) ensure that the work programme of the EANPG and the tasks assigned to its contributory bodies cover all air navigation planning and implementation aspects of the entire EUR Region;

f) direct the work of contributory bodies in the best manner commensurate with the overall EANPG work programme, with clearly defined tasks, deliverables and target dates;

g) prepare the Agenda for EANPG meetings, including the background notes;

h) preview draft Conclusions and Decisions emerging from the work of EANPG contributory bodies and other input for the attention of the EANPG;

i) prepare and refine EANPG working/information papers to assist and guide the ICAO Secretariat in its work in support of the EANPG, and

j) in doing so, best advantage will be taken of modern communications methods, particularly electronic mail, facsimile, etc. to keep the Members and the Secretary in permanent touch with each other.

Composition:

That the EANPG Programme Coordinating Group (EANPG-COG):

a) be composed of the Chairman and Vice-Chairmen of the EANPG, Representatives from Czech Republic, France, Germany, Italy, Portugal, Russian Federation, Spain, United Kingdom, United States, as well as from relevant State groupings (e.g. Nordic States, Benelux States, Baltic States, etc.), a representative of the grouping of States composed of Azerbaijan, Georgia, Kazakhstan, Republic of Moldova and Ukraine and International Organizations (CEC, IAC/CIS, IACA, IATA, EUROCONTROL); and

b) invite additional State representatives in those cases when it may discuss matters of particular concern to them.

Appendix C

GREPECAS PROGRAMMES AND PROJECTS REVIEW COMMITTEE TERMS OF REFERENCE AND WORK PROGRAMME

1. Introduction

PPRC activities are performed by high-level member State representatives on behalf of all GREPECAS member States. The representatives selected to the PPRC are envisioned to focus their activities on the review of GREPECAS programmes and projects with regard to objectives, implementation progress, challenges encountered results achieved and not duplicate the work performed by the technical experts. The PPRC will make recommendations for approval by GREPECAS on programme and project results, as well as the establishment, modification and termination of programmes and projects.

2. Membership

The PPRC comprises the GREPECAS Chairperson, Vice-Chairperson, Secretary and Co-Secretary, eight States of the CAR Region and eight States of the SAM Region identified by the Directors of Civil Aviation of the States[1]. Other GREPECAS member States may participate in meetings if the agenda includes a topic of interest. The international organizations listed in the GREPECAS Procedural Handbook and affected States of other Regions may participate in meetings as Observers when relevant to the agenda.

3. The Terms of Reference of the Committee are:

a) coordinate and harmonize GREPECAS administrative matters and participate in its internal management and scheduling of events;

b) review and approve the planning, progress and execution of programmes and projects to ensure their alignment with the GREPECAS terms of reference, ICAO strategic objectives, business plan and global air navigation plan; and

c) follow-up on high-risk safety deficiencies and take action to promote their resolution.

4. In order to comply with its Terms of Reference the Committee shall:

a) review and propose amendments to the GREPECAS Procedural Handbook;

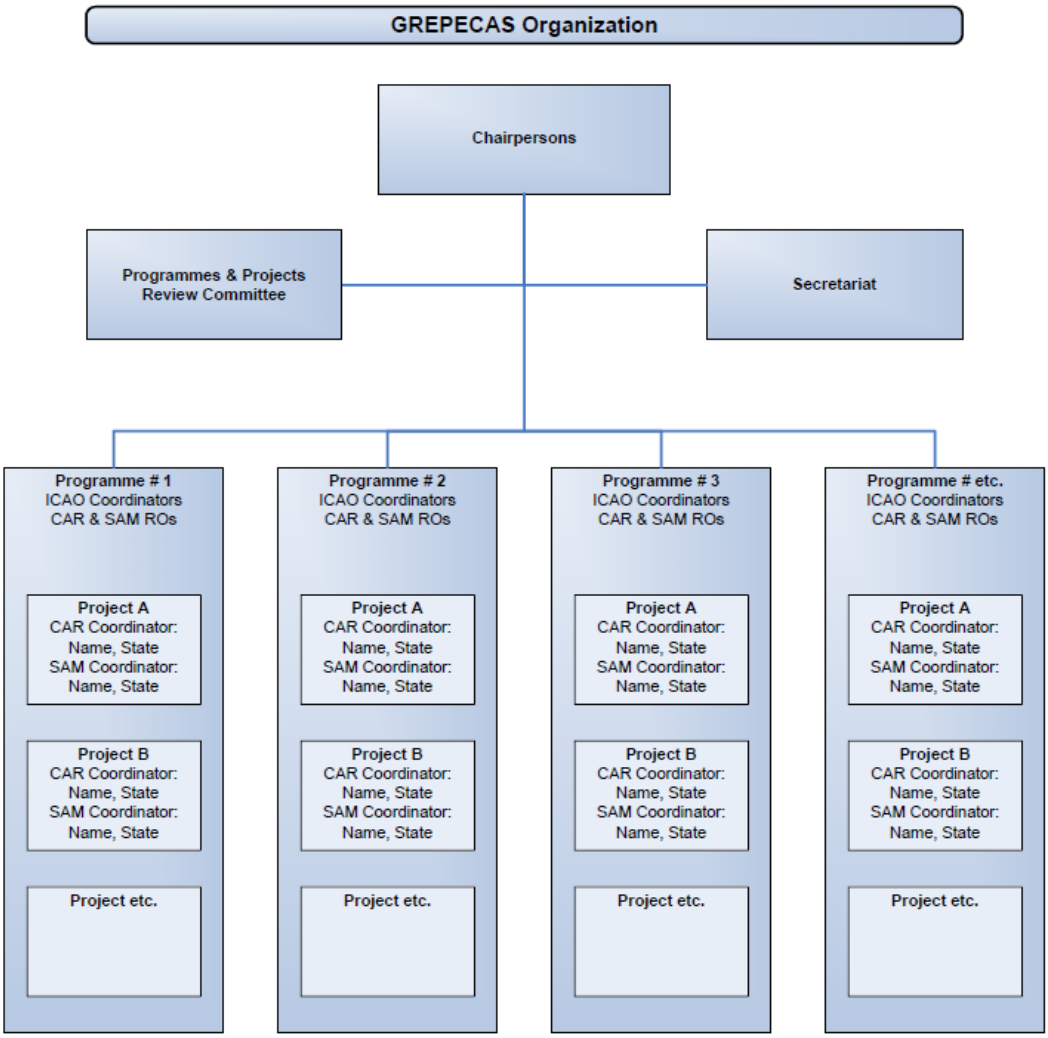
b) review the GREPECAS work methodology and propose specific actions to improve its performance;

c) follow-up the programmes and projects on a continuous basis and, if necessary, intervene in project development to ensure that results are achieved according to approved timeframes;

d) prepare reports on PPRC activities, progress and results of programmes and projects for each GREPECAS meeting and annual GREPECAS reports in between GREPECAS meetings;

e) prepare the draft agenda for GREPECAS meetings; and

f) in cases of high-risk safety deficiencies, request the respective ICAO Regional Office to request the Air Navigation Bureau to inform the Air Navigation Commission


GREPECAS Organization
Chairpersons
Programmes & Projects Review Committee
Secretariat
Programme # 1
ICAO Coordinators
CAR & SAM ROs
Project A
CAR Coordinator: Name, State
SAM Coordinator: Name, State
Project B
CAR Coordinator: Name, State
SAM Coordinator: Name, State
Project etc.
Programme # 2
ICAO Coordinators
CAR & SAM ROs
Project A
CAR Coordinator: Name, State
SAM Coordinator: Name, State
Project B
CAR Coordinator: Name, State
SAM Coordinator: Name, State
Project etc.
Programme # 3
ICAO Coordinators
CAR & SAM ROs
Project A
CAR Coordinator: Name, State
SAM Coordinator: Name, State
Project B
CAR Coordinator: Name, State
SAM Coordinator: Name, State
Project etc.
Programme # etc.
ICAO Coordinators
CAR & SAM ROs
Project A
CAR Coordinator: Name, State
SAM Coordinator: Name, State
Project B
CAR Coordinator: Name, State
SAM Coordinator: Name, State
Project etc.

Appendix D

MIDANPIRG Steering Group (MSG)

Term of Reference of the MSG

The Terms of Reference of the MIDANPIRG Steering Group (MSG) are:

a) execute its pivotal function as a coordinating and steering organ with highest possible efficiency in accordance with the goals set by MIDANPIRG;

b) define and keep under review the MID Region Air Navigation Strategy, including the air navigation priorities, targets and associated action plans;

c) ensure that the planning and implementation of air navigation systems in the Region, is coherent and compatible with systems in adjacent Regions, and that it is carried out within the framework of the ATM Operational Concept (Doc 9854) and the Global Air Navigation Plan (GANP, Doc 9750);

d) manage the MID Air Navigation Plan (Doc 9708) and ensure its alignment with the GANP (Doc 9750);

d) direct the work of the MIDANPIRG subsidiary bodies in the best manner, commensurate with the overall MIDANPIRG work programme, with clearly defined tasks, deliverables and target dates;

f) approve, on behalf of MIDANPIRG, those Draft Conclusions/Decisions emanating from MIDANPIRG subsidiary bodies, which necessitate urgent follow-up action(s);

In order to meet the Terms of Reference, the MSG shall:

a) develop and continuously update the MID Region performance objectives in the light of new developments, taking into consideration the region priorities and MID States national plans;

b) provide necessary high level assistance and guidance to the MIDANPIRG subsidiary bodies to ensure harmonization and interoperability in line with the GANP, the MID ANP and Aviation System Block Upgrade (ASBU) methodology;

c) ensure that the work programmes of the different MIDANPIRG subsidiary bodies are in line with the agreed air navigation priorities;

d) follow-up the on-going work undertaken within the MIDANPIRG framework and make recommendations for further evolution of the framework;

e) manage the MID Air Navigation Plan (Doc 9708) and related documentation and facilitate the implementation of the international operational requirements contained therein;

f) identify the issues related to funding, training and resource requirements necessary to support a safety framework that would lay the foundation for successful implementation of the ASBUs;

g) develop action plans to address the identified impediments to air traffic management modernization as part of ASBU planning and implementation activities;

h) develop a mechanism for sharing of best practices for the ASBU implementation;

i) carry out specific tasks assigned to it by MIDANPIRG to advance its work at the required speed; and

j) address special issues of strategic and/or financial nature for which no agreement has been reached by the appropriate MIDANPIRG subsidiary body, with a view to facilitate their presentation to MIDANPIRG.

Composition

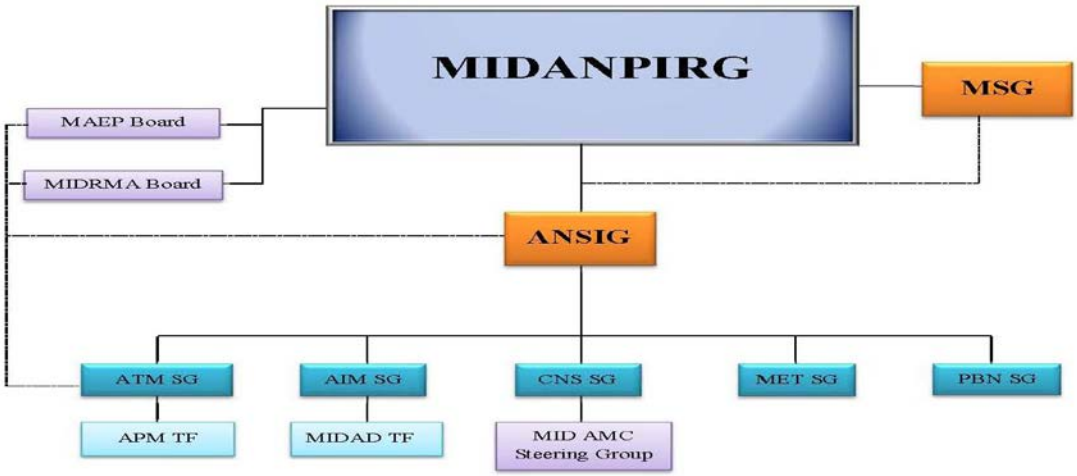
The MSG is composed of:

a) the Chairperson and in his/her absence the First Vice-Chairperson of MIDANPIRG;

b) MIDANPIRG Member States;

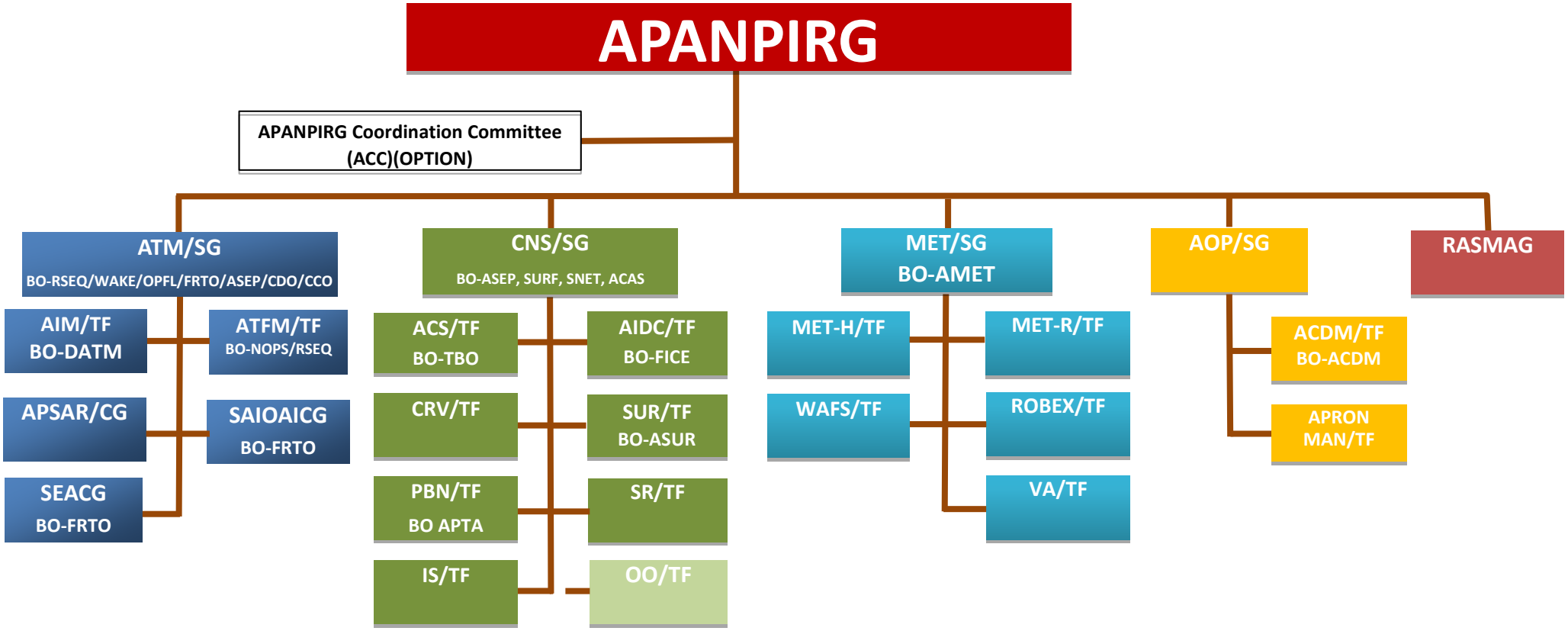
c) concerned International and Regional Organizations as observers; and

d) other representatives from provider States and Industry may be invited on ad hoc basis, as observers, when required.



MSG	MIDANPIRG Steering Group	PBN SG	Performance Based Navigation Sub-Group
ANSIG	Air Navigation Systems Implementation Group	APM TF	ATM Performance Measurement Task Force
AIM SG	Aeronautical Information Management Sub-Group	MIDAD TF	MID Region AIS Database Task-Force
ATM SG	Air Traffic Management Sub-Group	MAEP Board	MID Region ATM Enhancement Programme Board
CNS SG	Communication Navigation Surveillance Sub-Group	MIDRMA Board	Middle East Regional Monitoring Agency Board
MET SG	Meteorology Sub-Group	MID AMC Steering Group	MID Region ATS Message Management Centre Steering Group

APANPIRG proposed reorganization



ATM/SG - Air Traffic Management Sub Group
AIM/TF - Aeronautical Information Management Task Force
ATFM/TF - Air Traffic Flow Management Task Force
APSAR/CGTF - Asia Pacific Search and Rescue Steering Group
SEACG - South East Asia ATS Coordination Group
SAIOACG - South Asia/Indian Ocean ATM Coordination Group

CNS/SG - Communications, Navigation and Surveillance Sub Group
ACS/TF - Aeronautical Communication Services Task Force
AIDC/TF - ATS Inter-Facility Data-Link Communication Implementation Task Force
CRV/TF - Common Regional Virtual Private Network (VPN) Task Force
SUR/TF - Surveillance Task Force
PBN/TF - Performance Based Navigation Task Force
IS/TF - Ionospheric Studies Task Force
SR/TF - Spectrum Review Task Force
OO/TF - Operations Oversight Task Force for CRV Operations

MET/SG - Meteorology Sub Group
MET-H/TF - Meteorological Hazards Task Force
WAFS/TF - World Area Forecast System Task Force
MET-R/TF - Meteorological Requirements Task Force
ROBEX/TF - Regional OPMET Bulletin Exchange Task Force
VA/TF - Volcanic Ash Task Force

AOP/SG - Aerodromes Operations and Planning Sub group
ACDM/T - Airport Collaborative Decision Making Task Force
APRON MAN/TF - Apron Management Task Force

RASMAG - Regional Airspace Safety Monitoring Advisory Group

Remark: PIRG informal groups are shown in light shaded boxes and dotted lines

ATTACHMENT E

APANPIRG Coordination Committee (ACC)-OPTION
Draft Terms of Reference

Tasks

APANPIRG Coordination Committee (ACC) is to

a. ensure that the implementation of Air Navigation Systems in the Asia/Pacific Region is coherent and compatible with developments in adjacent regions and is in line with the ATM Operational Concept (Doc 9854), Global Air Navigation Plan (GANP), the Aviation System Block Upgrades (ASBU) methodology and the APAC Regional Air Navigation Plan.

b. monitor the status of implementation of the APAC Region Air Navigation Systems, the APAC regional air navigation priorities endorsed by APANPIRG and other required air navigation facilities and services.

c. review air navigation shortcomings and deficiencies in accordance with the Council approved Uniform Methodology, and make recommendations for APANPIRG Conclusions and Decisions.

d. review the APAC Air Navigation Strategy (CNS strategies, regional implementation guidance materials) and propose changes to the APAC Regional Air Navigation Plan and regional air navigation priorities, as appropriate.

e. coordinate and guide implementation activities within the framework of APANPIRG,

f. recommends APANPIRG on effective implementation.

g. facilitate coordination with other PIRGs, RASG-APAC and regional bodies on air navigation systems/services.

Key functions

1. Direct the work programmes and tasks of the APANPIRG contributory bodies, in order to ensure that:
    a) Define tasks and deliverables for contributory bodies; approve Terms of Reference of coordinating bodies/project management plans;
    b) define projects and monitor status based on seamless reporting process; This will include update of the ICAO Air Navigation Report and Regional Performance Indicators Dashboard.

2. Review reports of the APANPIRG contributory bodies in order to:
    a) provide guidance to the contributory bodies, including strategies and roadmaps on achieving the objectives of APANIRG; and
    b) determine materials developed by the TFs that have matured sufficiently for consideration and adoption by APANPIRG.

3. Monitor progress of the implementation of APAC regional air navigation priorities and implementation items identified in the Asia/Pacific Seamless ATM Plan.

4. Facilitate coordination between the following bodies:
   a) Sub-Groups of APANPIRG;
   b) APANPIRG and RASG-APAC;
   c) APANPIRG and other regional bodies (i.e. APEC-GIT, ASEAN-ATMG, etc) on air navigation subjects.

Working methods

APANPIRG coordination Committee shall convene a meeting at least once a year which may include a preparatory meeting for an APANPIRG meeting. The ACC meetings may be held taking into consideration the APANPIRG/RASG-APAC coordination meeting.

Composition

The ACC shall comprise of the following:

- Chairperson of APANPIRG
- First and Second Vice Chairperson of APANPIRG
- Secretary of APANPIRG (APAC Regional Director)
- Chairpersons and Vice Chairpersons of the Sub-Groups
- Secretaries of the Sub-Groups;
- Officials nominated by Chairperson of APANPIRG or the Secretary of APANPIRG
- Experts nominated by International Organizations/Industry

ATTACHMENT F

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 project[1]. 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

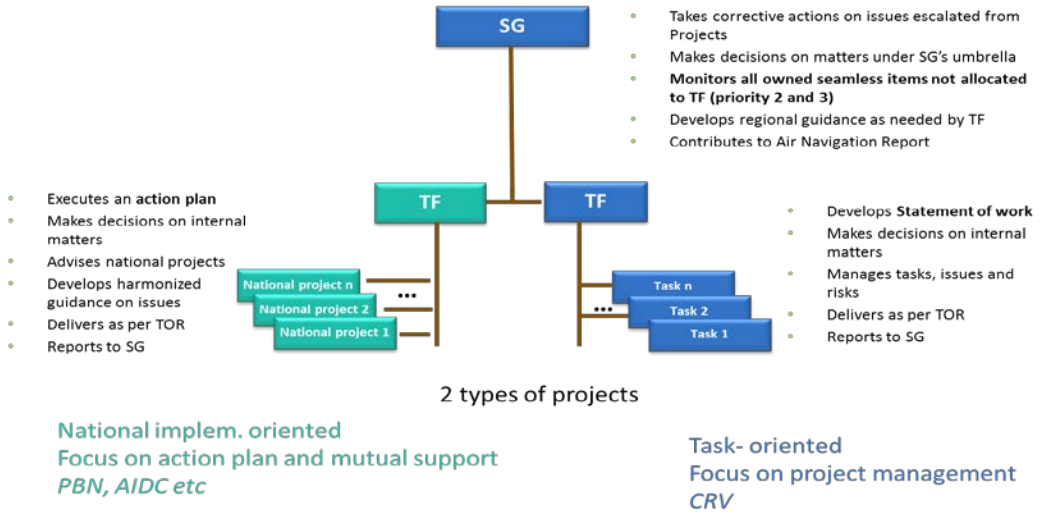
4 The scale of the project will be defined as experience shows that coordination and control activities vary accordingly:

- 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.



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 conducted[2] in the framework of the project. For national projects, the analysis would more probably be conducted inside

[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.

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**.**

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.

— END —