



International Civil Aviation Organization

**SIXTEENTH MEETING OF THE
COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND
METEOROLOGY SUB-GROUP (CNS/MET SG/16) OF APANPIRG**

Bangkok, Thailand, 23 – 27 July 2012

Agenda Item 18: Working Arrangement for CNS and MET Sub-groups in 2013

- 1) review terms of reference for the Sub Groups

TERMS OF REFERENCE AND TASKS LIST OF THE CNS & MET SUB-GROUPS

(Presented by Secretariat)

SUMMARY

This paper presents the Terms of Reference (TOR) and Subject/Tasks Lists of the CNS and MET Sub-Groups for review and updates. The outcome of APANPIRG/22 meeting on APANPIRG structure change is also included for review.

This paper relates to -

Strategic Objectives:

A: Safety – Enhance global civil aviation safety

C: Environmental Protection and Sustainable Development of Air Transport – *Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

Global Plan Initiatives: All

1. Introduction

1.1 APANPIRG/22 established 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.

1.2 The new structure and the approved TORs for the APANPIRG Sub-groups will become effective from 2013 meeting year and is subject to further review in 2016.

2. Discussion

2.1 The meeting may recall that the following recommendations proposed by ABSRTF were noted by APANPIRG/22 meeting:

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- a) ICAO APAC Office to pursue AVSEC policy issues which are outside the purview of APANPIRG Terms of Reference;
- b) Proposal for a separate MET SG;
- c) Establishment of a new AOP Working Group under ATM SG;
- d) ICAO secretariat to coordinate with respective Chairperson for scheduling SG meetings back-to-back, as required;
- e) New structure for APANPIRG;
- f) The new APANPIRG structure to be effective from 2013 meeting year (APANPIRG/24) with 2012 (APANPIRG/23) being used for transitional arrangements;
- g) APANPIRG to review the new structure after three years i.e. in 2016 in light of the experience gained and considering the effectiveness and work load of each of the SGs; then
- h) Considering the work of AIM and MET being closely related in terms of Data sharing and information it is appropriate for AIM to join MET SG in the next structure review (2016); and
- i) The AOP Working Group will mature in light of experience gained in the next few years and should be considered as a separate sub group in the next structure review.

2.2 The APANPIRG/22 meeting reviewed the Term of Chairperson/Vice Chairperson of the Sub Groups proposed by ABSRTF and adopted the following Decision.

Decision 22/53 - Term for Chairperson/Vice Chairperson of Sub Groups

That, the term of the Chairperson and Vice Chairperson of the Sub Groups shall be for a maximum period of four years. The incumbent may stand for re-election.

2.3 The meeting is invited to note that completely separate CNS and MET Sub-groups meeting will be held in 2013 which could be organized either currently or back to back with each other. The Terms of Reference of CNS and MET SGs are provided in the **Attachment 1** to this paper which will become effective in 2013.

2.4 The meeting also invited to review and update the Subject/Tasks List for CNS provided in **Attachment 2** and for MET provided in the **Attachment 3** to this paper.

3. Action Required by the Meeting

- 3.1 The meeting is invited to note information provided in this paper and is expected to:
- a) note the revised Terms of Reference of the CNS and MET Sub-Groups approved by APANPIRG/22;
 - b) review and update Subject/Tasks List for CNS SG in the Attachment 2; and
 - c) review and update Subject/Tasks List for MET SG in the Attachment 3.

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TERMS OF REFERENCE OF CNS SUB-GROUP

- 1) Ensure continuous and coherent development of the ASIA/PAC Regional Air Navigation Plan in the CNS field in accordance with the Global Air Navigation Plan and Global Aviation Safety Plan.
- 2) Review, identify and address deficiencies that impede the implementation or provision of efficient CNS services in the ASIA/PAC Region.
- 3) Monitor CNS systems research and development, trial and demonstrations in the fields of CNS and facilitate the transfer of this information and expertise between States.
- 4) Make specific recommendations and guidance materials aimed at improving CNS services by the use of existing procedures and facilities and/or through the evolutionary implementation of CNS/ATM systems.
- 5) Review and identify inter-regional and intra-regional co-ordination issues in the field of CNS, harmonize and recommend actions to address those issues.
- 6) Ensure CNS environmental initiatives are consistently identified and progressed, and report outcomes from CNS environmental initiatives.

TERMS OF REFERENCE OF MET SUB-GROUP

- 1) Ensure continuous and coherent development of the ASIA/PAC Regional Air Navigation Plan in the MET field in accordance with the Global Air Navigation Plan and Global Aviation Safety Plan.
- 2) Review, identify and address deficiencies that impede the implementation or provision of efficient MET services in the ASIA/PAC Region.
- 3) Monitor research and development, trial and demonstrations in the field of MET and facilitate the transfer of this information and expertise between States.
- 4) Make specific recommendations and develop guidance materials aimed at improving MET services by the use of existing and/or new procedures, facilities and technologies
- 5) Review and Identify Inter-regional and intra-regional co-ordination issues in the field of MET and recommend actions to address those issues.

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SUBJECT/TASKS LIST IN THE CNS FIELDS

The priorities assigned in the list have the following connotation:

A = Tasks of a high priority on which work should be expedited;

B = Tasks of medium priority on which work should be under taken as soon as possible but not to the detriment of Priority "A" tasks; and

C = Tasks of medium priority on which work should be undertaken as time and resources permit but not to the detriment of priority "A" and "B" tasks.

TOR = Terms of Reference of the Sub-Group

TASKS NO. 1 TO 31 HAVE BEEN COMPLETED AND REMOVED FROM THE LIST

No.	Ref.	Associated Strategic Objective & GPIs	Task	Priority	Action Proposed/In Progress	Action by	Target Date
1 (32)							
2 (35)	(TOR 3)	C- Sustainability All GPIs	Subject: To facilitate regional implementation of CNS/ATM Tasks: a) coordinate training/workshops to allow States to develop and implement new CNS/ATM procedures; b) encourage States to participate in the evaluation and training of new CNS/ATM systems;	A	1) Identify topics for training, develop syllabi and plan training programme; 2) Encourage States in the evaluation and training of new CNS/ATM systems; 3) Co-ordinate with States and monitor progress;	CNS SG	On going On-going On-going
			c) progress the adoption of WGS-84 co-ordinate system and introduction of high integrity systems for the management of the co-ordinate data.		4) Collect information and suggest methods of resolving problems commonly faced by the States.	ATM SG CNS SG	On-going

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No.	Ref.	Associated Strategic Objective & GPIs	Task	Priority	Action Proposed/In Progress	Action by	Target Date
3 (36)	APANPIRG D. 4/46 RAN/3 C.12/3 APANPIRG 5/3 (TOR 3)	C- Sustainability All GPIs	Subject: Provision of adequate CNS services Task: Monitor CNS/ATM systems research and development, trials and demonstrations in the fields of CNS and facilitate the transfer of this information and expertise between States.	A	1) Encourage States to conduct R&D, trials & demonstrations of new CNS services; 2) Monitor global developments that may have beneficial consequences on regional planning activities; 3) Consolidate information on new capabilities in the CNS/ATM system, for the Sub-Groups review and action; 4) Serve as a focal point for review of ongoing work of Regional formal and informal working groups that is relevant to CNS; 5) Provide for coordinated training/seminars to keep all States informed on developments of trials and demonstrations.	CNS	On-going
4 (43)		C- Sustainability GPI17,18,19,22	Subject: Implementation of data link Task: Encourage implementation	A	Encourage States to implement CPDLC, D-ATIS, D-VOLMET, PDC and DPC	CNS SG	first SOCM meeting held in 2009 and second SOCM meeting in 2012

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No.	Ref.	Associated Strategic Objective & GPIs	Task	Priority	Action Proposed/In Progress	Action by	Target Date
5 (46)	APANPIRG/17 C 17/23	C- Sustainability GPI-5 GPI-11	Subject: To implement Performance Based Navigation Concept in Asia/Pacific Region Task: Implement Performance Based Navigation in the Region.	A	1) To conduct Workshops/Seminars in the Region to familiarize the States about PBN Concept 2) To develop roadmap for implementation of RNP and RNAV procedures	CNS SG ATM SG CNS SG	Seminar and Workshop on PBN were Conducted in 07/08, 03/2009 and in 05/2011. Regional PBN plan Ver. 2 was adopted in 2010.
6 (48)		C- Sustainability GPI22 GPI9	Subject: FASID Task: Updating of FASID Table CNS-1B, CNS-1C	A	Seek State revision of Tables prior to March 2010. Review and update FASID Tables with the assistance of the Secretariat	CNS SG	Completed New amendment proposal to be processed 2012
7 (49)		A-Safety C- Sustainability E-Continuity GPI23	Subject: WRC-2011 (2012) Task: Supporting ICAO position for ITU WRC-2011 on agenda items related to civil aviation	A	Seek States to support ICAO position at regional telecommunity – APT APG and at WRC.	CNS SG	On-going till 2012 RPG/1 was held in Dec. 09. APG2012-3 in March 2010.
8 (50)	CNS/MET SG/13 Decision 13/7 ToR (5)	C- Sustainability E-Continuity GPI21 GPI11	Subject: SBAS capability study Task: conduct study on the need for and feasibility of establishing a regional SBAS capability	B	To conduct study by members of the CNS/MET Sub-group	CNS SG PBNTF	2013
9 (51)	TBD by APANPIRG/20	A-Safety C- Sustainability GPI9	Subject: Study of using SSR Mode S SI code Task: Study on the need for introduction of SSR Mode S SI code for future use in the Asia and Pacific region	B	To conduct study by members by the CNS/MET Sub-group	CNS SG ADS-B SITF	2012

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No.	Ref.	Associated Strategic Objective & GPIs	Task	Priority	Action Proposed/In Progress	Action by	Target Date
10 (52)	ToR of CNS/MET SG (4)	C- Sustainability GPI 22	Subject: HF Radio Communication Guidance material Task: Develop HF radio communication GM for North Pacific, BoB and Indian ocean area.	B	To develop the Guidance Material by members of the CNS Sub-group.	CNS SG	2013
11 (53)	ToR of CNS/MET SG (5) and APANPIRG Conclusion 20/72	A-Safety C- Sustainability GPI-5, 9 GPI-11	Subject: Develop a standard ionospheric model to facilitate implementation of GNSS; Task: Nominate focal point of contact and exchange of ionospheric data with objective of establishing a standard ionospheric model	A	Nominate focal point of contact and coordinate for measurement campaign	CNS SG	2014
12 (54)	APANPIRG Conclusion 19/24 and Conclusion 20/32	A-Safety C- Sustainability GPI-5 and GPI22	Subject: Improve AMS(R) S communication in the remote and oceanic area; Task: Promote development of performance and provision of satellite data link communication and develop solution for the challenges	A	Conduct satellite data-link operational continuity meetings. Mobilize stakeholders of AMS(R)S to improve the performance of the Satellite communication service. SOCM/1 was held in Aug.09. SOCM/2 scheduled for Nov.11	CNS SG	2013
13 (55)	APANPIRG/13 C 13/19	C- Sustainability GPI-5 GPI-9	Subject: To improve situational awareness and enhance surveillance service Task: Implement ADS-B based surveillance service .	A	1) To conduct Workshops/Seminars in the Region to familiarize the States about ADS-B; 2) To develop sub-regional implementation plan for implementation of ADS-B;	CNS SG	Seminar and Workshop on ADS-B were Conducted in 2004/05/06/07/08/09/10 South China Sea Sub-Regional project Progressed. States started data sharing in 2011

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No.	Ref.	Associated Strategic Objective & GPIs	Task	Priority	Action Proposed/In Progress	Action by	Target Date
					3) Promote ADS-B data sharing		
14 (56)	APANPIRG/16 C 16/31	C- Sustainability GPI-22	Subject: To improve AFS in the Region Task: Implement ATN/AMHS to enhance ground to ground communication service in the Region.	A	1) To conduct Workshops/Seminars in the Region to familiarize the States about ATN/AMHS Concept 2) To develop implementation plan and coordinate trials and routing.	CNS SG	Seminar and Workshop every two years since 2005. Related FASID tables timely updated in 2012.
15 (57)	TOR	C- Sustainability GPI23	Subject: Aeronautical spectrum management Task: Review new criteria for VHF frequency allocation planning	A	To review new material being developed by ACP to be included in Radio Handbook Part. II	CNS SG	2013

* Number in bracket indicates sequential number since establishment of the Sub-group.

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SUBJECT/TASKS LIST IN THE MET FIELD

The priorities assigned in the list have the following connotation:

A = Tasks of a high priority on which work should be expedited;

B = Tasks of medium priority on which work should be under taken as soon as possible but not to the detriment of Priority "A" tasks; and

C = Tasks of medium priority on which work should be undertaken as time and resources permit but not to the detriment of priority "A" and "B" tasks.

TOR = Terms of Reference of the Sub-Group

No.	Ref.	Associated Strategic Objective & GPIs	Task	Priority	Action Proposed/In Progress	Action by	Target Date
1 (32)	RAN/3 C.8/14 APANPIRG/14 (TOR 3)	A-Safety Sustainability GPI-19	Subject: Inadequate implementation of procedures for advising aircraft on volcanic ash (VA) and tropical cyclones (TC) and other hazardous weather Task: Monitoring of the implementation of meteorological advisories and warnings which includes VA and TC	A	Monitor and provide assistance in the implementation of meteorological advisories and warnings procedures to ensure provision of timely information on weather hazardous to aircraft. Monitor outcomes of ICAO global groups and WMO for developing framework of contingency plan for specific phenomenon including VA, TC, radioactive cloud and Tsunami for the Region (coordinate with MET/ATM TF and proposed RACP TF when necessary)	MET SG Task Force on the implementation of meteorological advisories and warnings (METWARN/ITF)	On going
2 (36)	APANPIRG D. 4/46 RAN/3 C.12/3 APANPIRG 5/3	C- Sustainability All GPIs	Subject: Provision of adequate MET services Task: Monitor performance based systems research and development, trials and demonstrations in the fields of MET and facilitate the transfer of this information and expertise between States.	A	1) Encourage States to conduct R&D, trials & demonstrations of new MET services; 2) Monitor global developments that may have beneficial consequences on regional planning activities;	MET SG	On-going

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No.	Ref.	Associated Strategic Objective & GPIs	Task	Priority	Action Proposed/In Progress	Action by	Target Date
	(TOR 3)				3) Consolidate information on new capabilities in the CNS/ATM system, for the Sub-Groups review and action; 4) Serve as a focal point for review of ongoing work of Regional formal and informal working groups that is relevant to MET; 5) Provide for coordinated training/seminars to keep all States informed on developments of trials and demonstrations.		
3 (37)	C 12/24	C- Sustainability GPI-19	Subject : Transition to the GRIB and BUFR coded WAFS products Task : Implementation of the transition to the GRIB and BUFR coded WAFS products	A	1) Monitoring of implementation of BUFR coded SIGWX forecasts 2) Monitoring of the migration to SADIS 2G 3) Assist in preparation for the new gridded products for turbulence, icing and cumulonimbus 4) Monitoring of the implementation of WIFS until cessation of ISCS G2 broadcast	MET SG WAFS Implementation Task Force WAFS/I TF WAFS/I TF	Completed Completed 2013 2012

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No.	Ref.	Associated Strategic Objective & GPIs	Task	Priority	Action Proposed/In Progress	Action by	Target Date
4 (38)	C12/36 APANPIRG C14/45	C- Sustainability GPI-19	Subject: Developing the new requirements for MET products and services in support of ATM.	A	1) Development of the initial draft of the MET Chapter;	CNS/MET SG with assistance of MET	Completed
					2) Development of the MET components of the CNS/ATM concept/ strategy;	WG on CNS/ATM Plan	Completed
					3) Inclusion of ATM requirements for MET information in the CNS/ ATM Plan;	CNS/MET SG	Completed
					4) MET/ATM Coordination Seminar – February 2006.	METATM TF	Completed
					5) Conduct survey on ATM requirements for MET information	METATM TF	Reconvene
					6) MET/ATM meeting in 2009	MET ATM TF	Completed
					7) MET/ATM seminar in 2010 (in coordination with WMO)	MET ATM TF	Completed
5 (39)	APANPIRG/13 D 13/28	A - Safety C- Sustainability GPI-19	Subject: To improve the efficiency of the regional and inter-regional OPMET exchange and the availability of OPMET information from the ASIA/PAC Region Task: Review and optimize the ROBEX scheme and other	A	1) Review and update regional ROBEX tables and relevant documents;	MET SG	Recurrent task
					2) Propose optimization changes to the ROBEX scheme;	OPMET Management Task Force (OPMET/M TF)	Completed
					3) Improve the availability		On-going

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No.	Ref.	Associated Strategic Objective & GPIs	Task	Priority	Action Proposed/In Progress	Action by	Target Date
			OPMET exchanges; introduce monitoring and management procedures for the ROBEX centres and Regional OPMET data banks		of OPMET data at the Regional OPMET Data Banks (RODB); 4) Improve the availability of OPMET information from the Pacific States; 5) Introduce monitoring and management Procedures. 6) reconsider current RODB structure in light XML implementation		On-going Completed 2015
6 (43)		C- Sustainability GPI17,18,19,22	Subject: Implementation of data link Task: Encourage implementation	A	Encourage States to implement CPDLC, D-ATIS, D-VOLMET, PDC and DPC	MET SG CNS SG	
7 (45)	APANPIRG List of deficiencies	A – Safety GPI - 19	Subject: Implementation of SIGMET Task: Improve regional procedures and availability of SIGMET from ASIA/PAC States	A	1) Assist States in implementing SIGMET requirements; 2) Conduct regular SIGMET tests; 3) Review and update training and guidance material; 4) Regular monitoring on the availability and quality of SIGMET and advisories.	MET SG METWARN/I TF in coordination with OPMET/M TF	Recurrent task Recurrent task Recurrent task Recurrent task

* Number in bracket indicates sequential number since establishment of the Sub-group.