

INTERNATIONAL CIVIL AVIATION ORGANIZATION

TWENTY SIXTH MEETING OF THE ASIA/PACIFIC AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (APANPIRG/26)

Bangkok, Thailand, 7–10 September 2015

Agenda Item 1B: Flight Safety and RASG-APAC activities

REPORT OF THE SECOND COORDINATION MEETING BETWEEN THE CHAIRPERSON OF APANPIRG AND RASG-APAC

(Presented by the Secretariat)

SUMMARY

This paper summarizes the outcomes of the coordination meeting between APANPIRG & RASG APAC held on 21st May 2015.

Strategic Objectives:

- A: Safety Enhance global civil aviation safety
- B: Air Navigation Capacity and Efficiency—Increase the capacity and improve the efficiency of the global aviation system

Action by the meetings is at Para 3 to this Working Paper.

1. INTRODUCTION

1.1 Pursuant to the outcomes of the First PIRG/RASG Global Coordination Meeting (Montreal, 19th March 2013) which confirmed the need for a coordination mechanism between RASGs and PIRGs in each region to ensure consistency of action and avoid overlap and encouraged the sharing of successful initiatives among each other, the APANPIRG/24 Meeting held in June 2013 adopted Decision 24/1 "*That APANPIRG coordinates with APAC–RASG to ensure consistency of action and avoid overlap*".

1.2 The APRAST/4 Meeting had also developed a Conclusion 4/11 that APRAST would engage APANPIRG to develop a process to facilitate the review of SEI outputs that have implications for air navigation.

1.3 The First APANPIRG/RASG–APAC Coordination Meeting was held in Kuala Lumpur, Malaysia, on 9 September 2014. The meeting was attended by the APANPIRG Chair, APRAST Co-Chairs, ATM, CNS & MET Sub Group Chairs and Secretariat. APANPIRG/25 and RASG–APAC/4 endorsed the coordination mechanism principles, coordination topics, lead regional groups for each, and the next steps.

2. DISCUSSION

2.1 The Second APANPIRG/RASG–APAC Coordination Meeting was held in Bangkok, Thailand, on 11 May 2015. The meeting was attended by the APANPIRG Chair, RASG Chair and Vice Chair, APRAST Co-Chairs, and Secretariat. RASG Chair is also the second Vice Chair of APANPIRG.

2.2 The outcomes of the meeting are summarized in the Appendix to this Information Paper. The ICAO Regional Office in letter AN 3/3 - AP-AGA0106/15 dated 12 June 2015 invited the APANPIRG Sub group Chairs and APRAST Co-chair to report status on the action taken by their respective Sub Group on the second coordination meeting outcomes.

2.3 The ATMSG/3, and CNS/SG/19 meetings were informed about the outcomes of the Second APANPIRG/RASG–APAC Coordination Meeting (Bangkok, Thailand, 11 May 2015). Of principle interest was coordination in fields of interests to APANPIRG Sub Groups and RASG that supported Control Flight into Terrain (CFIT), Runway Safety (RS) and Loss of Control (LOC) safety initiatives. **Table 1** illustrated the APANPIRG SG's proposed correlation between the identified RASG study and the associated Aviation Safety Block Upgrades (ASBUs). Note (red = priority ASBU elements for the Asia/Pacific Region):

CFIT	RS	LOC
B0-SNET	B0-APTA Optimization of	B0-APTA Optimization of
Safety Nets	Approach Procedures	Approach Procedures
B0-TBO Trajectory	B0-ASUR	B0-ACAS Collision
Based Operations	Initial Surveillance	Avoidance Systems
B0-NOPS	B0-SURF	B0-AMET Advanced
Network Operations	Surface Operations	Meteorological Information
	10 Apron Management	
	340 Safety Assessment of Changes	
	350 ATM Operators' Performance	

Table 1: RASG Safety Priorities (proposed as amended)

2.4 The ATM/SG Meeting studied the European Region's Key Performance Indicators (KPIs) and determined that these metrics would not be able to be easily applied across the Asia/Pacific Region due to a lack of State data and Sub-regional Air Traffic Flow Management (ATFM). Reference is invited to APANPIRG/26 – Working Paper 7.

2.5 The CNS/SG/19 reviewed the European Region's Key Performance Indicators (KPIs) and detailed information on the study is available in Appendix A to APANPIRG/26 – Working Paper 9.

3. ACTION BY THE MEETING

3.1 APANPIRG is invited to note the information presented in this paper and Appendix to this paper.

APPENDIX

<u>Second Asia Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) –</u> <u>Regional Aviation Safety Group (RASG–APAC) Regional Coordination Meeting</u>

ICAO APAC OFFICE 21 MAY 2015

REPORT

1 INTRODUCTION

1.1 The Second APANPIRG RASG Regional Coordination Meeting was held in Bangkok on 21st May 2015. The Agenda is shown below:

- 1. Review outcomes of the First RASG APANPIRG Coordination Meeting;
- 2. Review outcomes of the 2nd Global RASG PIRG Coordination Meeting;
- 3. Review outcomes of High Level Safety Conference 2015, APRAST and RASG
- 4. Lead Regional Group Responsibilities
- 5. Future Work Program
- 6. Any Other Business

1.2 <u>Attendance</u>

1.2.1 The meeting was attended by the following:

RASG-APAC

- 1. Chair Mr. HMC Nimalsiri, DG Sri Lanka
- 2. Vice-Chair Captain Victor Liu, Asst. DG, HKCAD

APRAST Co-chairs

- 3. State Mr. Tiang Guan Tay, DDG CAA Singapore
- 4. Industry Mr. Tony M. Houston, Asst D/SO&I, IATA

Chairman APANPIRG

5. Chair – Mr. Norman Lo, DGCA HKCAD

<u>ICAO</u>

- 6. RD Mr. Arun Mishra
- 7. DRD Mr. Yoshiki Imawaka
- 8. RO/AGA Mr. N. Sekhar
- 9. RO/FS Mr. Amal Hewawasam

Observer

- 10. Mr. Raymond LI, Asst. DG, HKCAD
- 11. Ms. Elizabeth Chau, Deputy Manager (Policy & Rulemaking) CAA Singapore

2. <u>SUMMARY OF DISCUSSIONS</u>

2.1 APANPIRG Sub Groups to coordinate with RASG APAC/APRAST, the 10 Regional Air Navigation Priorities endorsed by APANPIRG/25 and determine the ASBU modules where correlation exists so as to avoid duplication of efforts. Action by APANPIRG Sub Groups (ATM, CNS and MET).

2.2 ICAO APAC Regional Office to coordinate with ICAO Paris Regional Office to obtain the information on the Key Performance Indicators established by EUR Regions and their experience in obtaining data from States/ANSPs for performance measurement. HKCAD will share the e mail forwarded to Mr. Phil Roberts EANPG Chair. [Post meeting Note: HKCAD forwarded the relevant email that was sent out to Mr. Phil Roberts to the ICAO RO on 30 May 2015].

2.3 RASG APAC/APRAST & APANPIRG will study the 8 EUR regions KPIs and their experience with the collection of data and then identify a set of KPIs for APAC Region which should be meaningful and achievable. Clarity should be established on the criteria for the data to be collected.

2.4 APANPIRG Chair informed the meeting that the restructuring of the APANPIRG Contributory bodies should be aligned with the ASBU modules selected by APANPIRG for the APAC Region, in particular with the 10 Regional Priorities and APAC Seamless ATM Plan. Relevant experts would be nominated by States to each of the contributory bodies to discuss the implementation of the regional air navigation priorities and APAC Seamless ATM Plan elements.

2.5 The 8 EUR KPIs, 4 KPIs for air navigation and 4 KPIs for safety, presented by ICAO HQ at the 2nd RASG-PIRG Global Coordination Meeting held in Montreal Canada on 5th February 2015 were reviewed and following observations were noted:

- The KPIs presented are related to performance of operations at Aerodromes and ANSPs only. There are no KPIs showing the performance of ATM operations;
- There could be challenges in collecting data for KPIs from all APAC States/Administrations;
- The need, purpose, relevance and benefits of the KPIs have to be explained clearly to States/Administrations in order that they could give priority and facilitate in providing the necessary data. Each KPI and data to be collected should be well defined, and if necessary explained with examples;
- There was also discussion as whether the KPIs in a region would be used by the ICAO for comparing with KPIs in other regions as they might not be directly comparable due to unique regional operational considerations. A uniform methodology for collecting data should be developed and applied throughout all ICAO Regions. The KPIs for the region should also take into account the regional priorities and plans;
- The APAC could share the good experiences on other regions such as EUR. It is therefore important to know the rationale of how their KPIs were developed;
- While recognizing the challenges in collecting some ATM related data, consideration could be given to start collecting data from major/hub airports. The identification of such airports could be based on the number of aircraft movements;
- Discuss the 4 air navigation related KPIs with respective Sub Groups and submit outcomes to APANPIRG;
- Discuss the 4 safety-related KPIs with APRAST and submit outcomes to RASG-APAC;

• While noting that the submission rate of occurrences/incidents in the region is very low, members considered that reporting rate of such occurrence may not be a good item for the KPI since an increase in such reporting could also be a result of improvement in reporting and safety culture and not necessary a safety concern.

2.6 <u>Lead Regional Group responsibilities:</u>

A. <u>Regulatory oversight for the effective implementation of Performance Based</u> Navigation (PBN) - Recommendation 1/1 of HLSC 2015:

RASG-APAC

• RASG to coordinate and provide more guidance materials to States/Administrations regarding any PBN requiring operational approvals and the associated regulatory oversight.

APANPIRG

- Discuss assistance provided to States/Administrations in designing and publishing PBN procedures
- B. <u>Recommendation 1/2 Global Flight Tracking:</u>
 - a) APANPIRG- SAR training exercise;
 - b) Interaction between Annex 12 *Search and Rescue* and Annex 13- *Aircraft Accident and Incident Investigation*: Accident Investigation Group (AIG) of RASG will coordinate with APSAR/TF (APANPIRG's Search and Rescue Task force) for the necessary works;
 - c) APANPIRG Civil Military Cooperation; and
 - d) CAPSCA current mechanism to continue.
- C. <u>RASG Regional priorities and Targets Jointly develop the proper structures to</u> sustain the collection and sharing of ATM Data:

SRPWG of RASG to coordinate with ATM/SG of APANPIRG to explore the best mechanism/structure to facilitate the collection and sharing of ATM data so that the data could be gainfully used for safety enhancement in the APAC Region, for example- safety data on stabilized approaches (deviation from safety profiles). Such data could also be used for the evaluation on the benefit of APV approaches in improving safety.

D. <u>Outcomes of RASG APAC Meetings – Conclusion 4/4 and 4/23:</u>

RASG-APAC to establish the areas of coordination, composition of experts and coordination mechanism for attendance at relevant APANPIRG coordination bodies; this will include endorsement of the APAC seamless ATM Plan by RASG APAC.

RASG-APAC to continue with the lead responsibility for the implementation of TCAS II; APANPIRG will provide results of monitoring collected through the seamless ATM online reporting process to RASG APAC.

RASG APAC Decision 4/9 – RASG APAC/APRAST to circulate the draft Advisory Circulars developed to improve safety to the relevant APANPIRG Sub Groups for review and comments.

2.7 The RASG APAC/3 Final Report noted three areas under their work programme where the resulting findings would greatly enhance the PIRGs work towards ASBU implementation. These areas include Control Flight into Terrain, Runway Safety and Loss of Control. Currently the RASG APAC is collecting information and studying the challenges facing the aviation community regarding these three areas. RASG APAC to share the results of these studies related to safety with APANPIRG Sub Groups to improve efficiency and effectiveness. The chart below illustrates the correlation between the identified RASG study and the associated ASBUs. Note: *The red are priority ASBU elements and blue are elements of the APAC Seamless ATM Plan (version 1.0)*.

	CFIT	RS	LOC
ASBU Modules	SNET	APTA	AMET
	Safety Nets	Optimization of	Advanced
		Approach	Meteorological
		Procedures	Information
	TBO	RSEQ	ACAS
	Trajectory Based	Runway	Collision Avoidance
	Operations	Sequencing	Systems
	NOPS	SURF	
	Network Operations	Surface	
		Operations	
		ASUR	
		Initial Surveillance	

2.8 The coordination meeting noted the advice provided by RASMAG Chair that the task of the RASMAG is to review airspace safety performance and facilitate the implementation of airspace safety monitoring and performance assessment services and agreed that RASMAG would continue its current function as an APANPIRG Sub-group and report to APANPIRG. The meeting also noted that RASMAG would however continue to share the ATM Data and analysis submitted by RMAs and EMAs with RASG/APRAST.

3. <u>FUTURE WORK PROGRAMME</u>

3.1 The Third RASG APANPIRG Regional coordination meeting will be held in April/May 2016 to discuss the progress achieved on the actions suggested in this Report and subsequently meet during the sidelines of 53^{rd} DGCA Conference scheduled to be held in Sri Lanka from 1 to 5 August 2016.

3.2 Mr. Arun Mishra ICAO APAC Regional Director and secretary for both the APANPIRG and RASG acknowledged the attendance by the Chairs and thanked the meeting for the fruitful discussions. He also pointed out that 2016 being an Assembly year all ICAO APAC meetings will have to be advanced. He further suggested to the APANPIRG chair to consider holding the APANPIRG/27 as planned in September and sought the advice on this proposal noting that the 53rd DGCA Conference to be held from 1 to 5 August 2016 would contain agenda on report of APANPIRG Meeting.

Measuring Global Air Navigation

Proposed Core Key Performance Indicators

Capacity throughput KPIs

- Peak Arrival Capacity
- Peak Arrival Throughput

Customer-focused KPIs: On-Time Punctuality / Schedule Delay

- Actual off-block time against scheduled departure time
- Actual on-block time against scheduled arrival time

Flight efficiency KPIs

- Taxi-Out Additional Time
- Taxi-In Additional Time

Delay KPIs (if ATFM exists)

- En-Route ATFM Delay
- Airport/Terminal ATFM Delay

Measuring Global Aviation Safety

Proposed Core Key Performance Indicators (HLSC/15-IP/1 Appendix)

Effective Implementation of State Safety Oversight System

- USOAP EI scores overall
- Number and duration of USOAP CMA SSCs by technical area
- Number and percentage of certified international aerodromes

Progress in SSP/SMS Implementation

- Percentage of implemented gap analysis questions (per operator and State)

Frequency and Severity of Accidents and Incidents

- Occurrences by type per number of departures (rate)
- Number and distribution of occurrences by severity level and category

Fleet Modernization and Industry Certification

- Percentage of operated aircraft above 20 years
- Number of operators holding industry certifications (IOSA, etc.)

—END—