



International Civil Aviation Organization

The Fifth Meeting of ICAO Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG/5)

Bangkok, Thailand, 30 March – 3 April 2015

Agenda Item 2: Review Outcomes of Related Meetings

RELATED MEETING OUTCOMES

(Presented by the Secretariat)

SUMMARY

This paper presents a brief summary of relevant outcomes of Asia/Pacific Region meetings relevant to the work of ATFM/SG

1. INTRODUCTION

1.1 The Second Meeting of the APANPIRG Air Traffic Management Sub-Group (ATM/SG/2) was held in Hong Kong, China, from 4 to 8 August 2014.

1.2 The Fourth Meeting of the Regional ATM Contingency Plan Task Force (RACP/TF/4) was held in Bangkok, Thailand, from 26 to 30 January 2015.

1.3 The Fifth Meeting of the South Asia/Indian Ocean ATM Coordination Group (SAIOACG/5) was held in Bangkok, Thailand, from 3 to 5 March 2015.

1.4 The Twenty-Second Meeting of the South-East Asia ATS Coordination Group (SEACG/22) was held in Bangkok, Thailand, from 9 to 12 March 2015.

2. DISCUSSION

ATM/SG/2

2.1 ICAO reported to ATM/SG/2 on the Alignment of the RANP with the Global Air Navigation Plan.

2.2 ICAO reported to ATM/SG/2 on the work of the eANP Working Group (eANP WG) which was formed in follow-up to the 12th Air Navigation Conference Recommendation 6/1 Regional Performance Framework – Planning Methodologies and Tools regarding the alignment of regional air navigation plans with the Fourth Edition of the GANP, and proposals to develop a new Asia/Pacific Regional Air Navigation Plan (RANP) document.

2.3 *The eANP WG had agreed that the ANP data related to the air navigation facilities and services could be classified as: stable, dynamic or flexible. In this regard, it was agreed that the new ANP should be composed of three volumes.*

- a) *Volume I should contain stable plan elements the amendment of which require approval by the Council;*

- b) **Volume II** should contain dynamic plan elements, the amendment of which does not require approval by the Council; and
- c) **Volume III** should contain dynamic/flexible plan elements [not subject to the reporting of Deficiencies] providing implementation planning guidance for air navigation systems and their modernization taking into consideration emerging programmes such as the ASBUs and associated technology roadmaps described in the GANP.

2.1 The ATM/SG/2 agreed with the following work plan (**Table 1**) to assist the Regional Office (RO) through electronic means and established meetings to populate or develop the new Asia/Pacific RANP, so agreement on its content might be reached by mid-2015:

Reference	Detail	Notes
Vol. I, Part I	Table GEN I-1 List of FIR names, States	RO (ATM)
Vol. I, Part II	AOP Special Regional Requirements, if any	AOP/WG; RO (AGA)
Vol. I, Part II	Table AOP I-1 International Aerodromes	RANP data; RO (AGA)
Vol. I, Part IV	Table ATM I-1 FIR descriptions	ICAOHQ data; RO
Vol. I, Part IV	ATM Special Regional Requirements, if any	ATM/SG; RO (ATM)
Vol. I, Part VI	SAR Special Regional Requirements, if any	AP SAR/TF; RO (ATM)
Vol. I, Part VI	Table SAR I-1 Search and Rescue Regions	ICAOHQ data; RO
Vol. I, Part VII	AIM Special Regional Requirements, if any	AAI/TF; RO (ATM)
Vol. II, Part I	Table GEN II-1 Major Traffic Flows	ATM/SG; RO (ATM)
Vol. II, Part II	AOP Special Regional Requirements, if any	AOP/WG; RO (AGA)
Vol. II, Part II	Assessment of aerodrome capacity	AOP/WG; RO (AGA)
Vol. II, Part IV	Process for ATS route designation	ATM/SG; RO (ATM)
Vol. II, Part IV	Table ATM II-2 ATS Routes*	ATS Route Catalogue
Vol. II, Part IV	Secondary Surveillance Radar (SSR) Codes	ATM/SG; RO (ATM)
Vol. II, Part VI	SAR SRR Facilities	RANP; RO (ATM)
Vol. II, Part VII	Table II-1 AIM responsibilities	AAI/TF; RO (ATM)
Vol. II, Part VII	Table II-2 AIM chart responsibilities	AAI/TF; RO (ATM)

Table 1: RANP Work Plan

2.2 **Figure 1** represents the updated Major Traffic Flows, which are detailed in the draft RANP Volume II, Part I Table GEN II-1 (Major Traffic Flows, **Attachment A**).

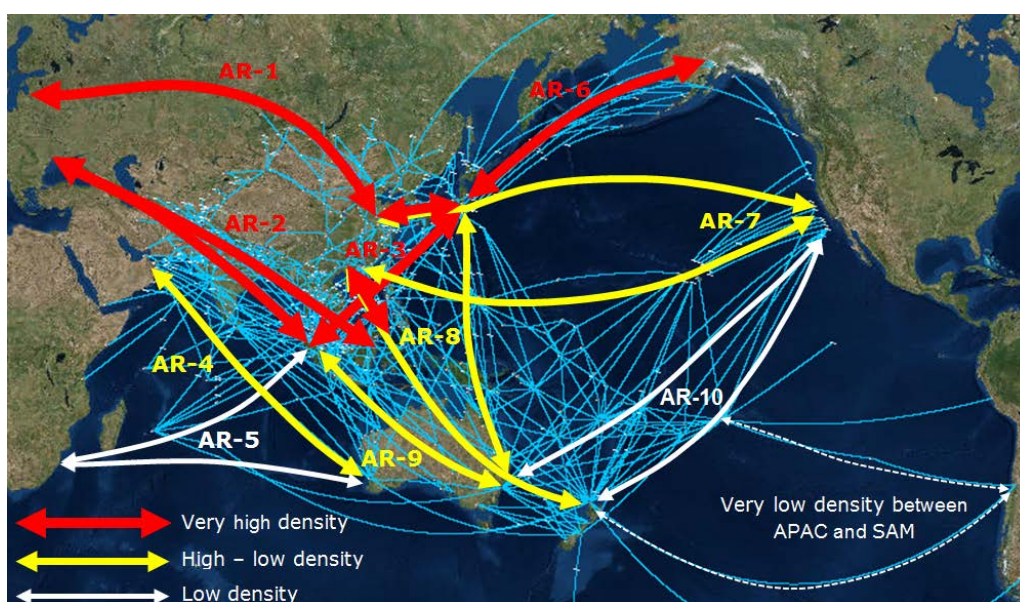


Figure 1: Major Traffic Flows

2.3 The MTF were previously included in the GANP, but were removed before publication of the Fourth (current) edition. The MTF as updated by State any inputs will be presented to ATM/SG/3 in August 2015 for endorsement. Figure 1 illustrates the MTF, which now includes representation of the cross-over of several flows.

RACP/TF/4

2.4 The RACP/TF/4 meeting was briefed on outcomes from ATFM/SG/4, and discussed the application of ATFM initiatives such as collaborative trajectory options and other tactical ATFM measures Calculated Take-off Time (CTOT) and Calculated Time Over fix (CTO) for the management of traffic flows through airspace constrained by a contingency event.

2.5 The meeting agreed to continue to monitor ATFM/SG outcomes, and discussed performance objectives for inclusion in the Regional ATM Contingency Plan that were aligned with those of the Regional Framework for Collaborative ATFM. However, the meeting considered that implementation of performance objectives by November 2015 may not be a reasonable expectation. The draft Regional ATM Contingency Plan performance improvement plan, with a provisional implementation target of 10 November 2016, included *inter alia*:

- *Capability for networked tactical ATFM measures should be implemented to manage access to contingency airspace and regulate flows of traffic avoiding contingency events;*

2.6 Version 1 of the Regional ATM Contingency Plan was expected to be finalized for presentation to APANPIRG/26 in September 2015.

SAIOACG/5

2.7 The SAIOACG/5 meeting was informed of India's establishment of a Central Air Traffic Flow Management (C-ATFM) system within the Delhi, Kolkata, Chennai and Mumbai FIRs. India had noted that while ATFM had been proven to enhance safety and provide measurable efficiency gains, it was also viewed as a transformational concept that introduced new levels of Collaborative Decision Making (CDM) and offered potential for harmonizing seamless airspace operations. The C-ATFM baseline system would be in place by end of 2015, providing significant capabilities to perform strategic, pre-tactical, and tactical ATFM and CDM using data such as flight plans, weather, and aerodrome and airspace capacity. Phase 2, a nationwide ATFM system covering airports throughout India would become operational by the end of 2016. Finally, in Phase 3 before 2018 the C-ATFM system will have capabilities to expand as a sub-regional or regional ATFM system. The system would also have scope for interfaces for seamless data exchange with other ATFM systems in the sub-region and region, thus supporting evolution of an international ATFM system.

SEACG/22

2.8 The meeting reviewed the outcomes of the First Meeting of the South China Sea Major Traffic Flow Review Group (SCS-MTFRG), which had been established by SEACG/21 to review Major Traffic Flow (MTF) conflicts with specific ATS routes and the overall South China Sea airspace, air route and the suitability of the FLOS to optimise airspace capacity and enhance flight safety in the long term and report outcomes of the review and recommendations to the ATM/SG/2 or SEACG/22 meetings.

2.9 In considering the information provided by SCS-MTFRG, SEACG/22 noted that the purpose of the group was to ensure harmonized ATC capability to handle increasing traffic in the future, as described in the Asia/Pacific Seamless ATM Plan. The terms of reference for the SCS-MTFRG, adopted by SEACG/22, included *inter alia*:

- *(Objective) – to analyse the MTF in the overall South China Sea airspace, air routes and the suitability of the FLOS to optimize airspace capacity and enhance flight safety in the long term;*
- *(Task) - Identify reduced horizontal separation based on the current and planned CNS/ATM capabilities, taking into account aircraft approval status of the traffic operating on the relevant routes as well as the new CNS capabilities available; and*
- *Make recommendations to SEACG on implementation plans for route structures, airspace, FLOS and separation solutions to meet the expectations of the Asia/Pacific Seamless ATM Plan.*

Tasks transferred to ATFM/SG

2.10 SAIOACG/5 transferred a number of tasks to ATFM/SG. These tasks related to:

- Poor on-time performance of BOBCAT aircraft subject to ATFM procedures;
- More information from BOBCAT to be made available for tactical decisions; and
- Consideration of BOBCAT slot allocation beyond the current 2000 – 2359 UTC timeframes.

2.11 SEACG/22 transferred a task relating to concerns about Sanya FIR occasionally imposing increased longitudinal spacing requirements to ATFM/SG.

2.12 The tasks transferred to ATFM/SG are listed in **Attachment B**, and will be further considered in the review of the task list.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.

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TABLE GEN II-1 – HOMOGENEOUS ATM AREAS AND/OR MAJOR TRAFFIC FLOWS IDENTIFIED IN THE ASIA AND PACIFIC REGIONS

Area of routing (AR)	Homogeneous Areas and/or Traffic flows	FIRs involved	Type of area covered	Remarks
1	2	3	4	5
AR1	Between Europe and East Asia – north of the Himalayan Mountains	Ulan Bator Urumqi FIR Lanzhou FIR Kunming FIR Shenyang FIR Beijing FIR Guangzhou FIR Shanghai FIR Pyongyang FIR Incheon FIR Fukuoka FIR Hong Kong FIR	Category S airspace (Asia/Pacific Seamless ATM Plan) high density	EUR/NAT-APAC, previously AR-3, Trans-Asia
AR2	Between Europe and South/Southeast Asia – south of the Himalayan Mountains (includes Inter-Asian flow from India to Southeast Asia)	Kabul FIR Lahore FIR Karachi FIR Delhi FIR Kolkata FIR Chennai FIR Mumbai FIR Yangon FIR Bangkok FIR Ha Noi FIR Vientiane FIR Phnom Penh FIR Kuala Lumpur FIR Singapore FIR Jakarta FIR	Category S airspace, high density	EUR/NAT-APAC, previously AR-4, Trans-Asia

AR3	Between Southeast Asia and East Asia	Singapore FIR Jakarta FIR Kuala Lumpur FIR Ho Chi Minh FIR Ha Noi FIR Phnom Penh FIR Vientiane FIR Manila FIR Sanya FIR Hong Kong FIR Taipei FIR Guangzhou FIR Shanghai FIR Fukuoka FIR Incheon FIR	Category S airspace, high density	APAC, previously AR-9, Inter-Asia
AR4	Between West Asia (Middle East) and Australia	Mumbai FIR Male FIR Colombo FIR Melbourne FIR	Category R airspace, low density	MID – APAC, previously AR-10, Trans-Indian Ocean
AR5	Between Southern Africa and Southeast Asia/Australia	Mumbai FIR Male FIR Colombo FIR Jakarta FIR Kuala Lumpur FIR Singapore FIR Melbourne FIR	Category R airspace, low density	AFI – APAC, previously AR-1, Trans-Indian Ocean
AR6	Between East Asia and North America – North Pacific	Incheon FIR Fukuoka FIR Anchorage Oceanic FIR Oakland Oceanic FIR	Category R and S airspace, high density	APAC – NAM, previously AR-5, Trans-Pacific
AR7	Between East Asia and North America – Central Pacific	Hong Kong FIR Fukuoka FIR Taipei FIR Oakland Oceanic FIR	Category R airspace, low density (except for the portions between China and Republic of Korea/Japan and between Hawaii and the US mainland)	APAC – NAM, previously AR-6, Trans-Pacific

AR8	Between East Asia and Australasia	Fukuoka FIR Hong Kong FIR Taipei FIR Manila FIR Ujung Pandang FIR Port Moresby FIR Brisbane FIR Auckland Oceanic FIR	Category R and S airspace, low density (except for high density flow between China and Taiwan/Philippines)	APAC, previously AR-2, Trans-Pacific
AR9	Between Southeast Asia and Australia	Bangkok FIR Ho Chi Minh FIR Ha Noi FIR Jakarta FIR Kuala Lumpur FIR Kota Kinabalu FIR Ujung Pandang FIR Brisbane FIR Melbourne FIR	Category R and S airspace, low density	APAC, Trans-Pacific
AR10	Between Australasia and North America	Brisbane FIR Auckland Oceanic FIR Nadi FIR Tahiti FIR Oakland Oceanic FIR	Category R airspace, low density	APAC – NAM, previously AR-8; note: the Low density between South Pacific and South America previously AR-7 is not considered to be a Major Traffic Flow

SAIOACG — TASK LIST ITEMS TRANSFERRED TO ATFM/SG

(last updated SAIOACG/5)

ACTION ITEM	DESCRIPTION	TIME FRAME	RESPONSIBLE PARTY	STATUS	REMARKS
20/3	<p>Poor on time performance of BOBCAT aircraft subject to ATFM procedures has direct impact on efficiency of ATFM procedures. All parties to undertake investigation as to reason for poor on-time performance including:</p> <ul style="list-style-type: none"> a) Incorrect flight planned EET, b) Non compliance with BOBCAT AWUT – early and late departures c) Non compliance with BOBCAT Kabul entry time – early and late at Kabul entry fix. 	Update SAIOACG/5	Affected States, IATA	Closed	<p>Poor punctuality performance is actively being monitored and rectified where possible by IATA/States.</p> <p>SAIOACG/5: this is still problematic. Action by transferred to ATFM/SG</p>
2/13	WP07: ATFM SWG- More information from BOBCAT to be made available for tactical decisions in addition to the Kabul FIR entry	2013	Thailand, India	Closed	Thailand will communicate with stakeholders about an upgrade in terms of sharing information more like a CDM system. It needs to be clear that the extra information was not a ‘controlling’ tool. Transfer to ATFM/SG
2/16	WP07: ATFM SWG- BOBCAT slot allocation may be considered beyond 2000 – 2359UTC	2013	India	Open closed	India to provide data to support an extension. All involved to consider operational impact. Thailand to consider operational impact of the extension – need to share data and airlines to look at impact. Such change will require a 90-day notice. Data provided by India as part of WP03 Transferred to ATFM/SG

SEACG TASKS TRANSFERRED TO ATFM/SG

	ACTION ITEM	RESPONSIBLE PARTY	STATUS	REMARKS
16	Sanya FIR Restrictions	Vietnam-Hong Kong China, China, China, RSO	OPEN	The SEACG/21 meeting was apprised of concerns that the Sanya FIR was occasionally imposing increased longitudinal spacing requirements. The parties to meet and discuss a resolution plan. To be considered by ATFM/SG.

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