



International Civil Aviation Organization

**The Fifth Meeting of the South Asia/Indian Ocean ATM Coordination Group  
(SAIOACG/5)**

Bangkok, Thailand, 03-06 March 2015

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**Agenda Item 4: Implementation of CNS/ATM Systems**

**SEAMLESS ATM REPORTING AND MONITORING**

(Presented by the Secretariat)

**SUMMARY**

This paper presents an overview of the Seamless ATM planning and reporting required by States, and provides an update on the progress towards the performance-based monitoring regime being implemented during 2014/2015.

**1. INTRODUCTION**

1.1 APANPIRG/24 noted that although the Global Air Navigation Plan (GANP) had a global perspective, all ASBU modules may not be applicable to every State or Region. Some of the modules were specialized packages that should be applied only where specific operational requirements or corresponding benefits existed. Implementation priorities for Air Traffic Management (ATM) enhancements would vary between regions, as each had different operational environments, traffic volumes etc. Prioritization could be determined by individual states and regionally by APANPIRG. Guided by the GANP, APANPIRG/24 acknowledged that the regional planning process required the full involvement of States, service providers, airspace users and other stakeholders, thus ensuring commitment by everyone for implementation.

1.2 APANPIRG/24 further noted that the PIRG-RASG Global Coordination Meeting held on 19 March 2013 requested PIRGs to establish regional priorities and set targets and report to ICAO by May 2014. APANPIRG/24 also noted that the APAC Seamless ATM Plan spelt out six regional ASBU priorities, which are aligned to GANP (ASBU modules) and adopted Conclusion 24/2:

***Conclusion 24/2 — Establishing Regional Priorities and Targets***

*That, following the PIRG - RASG Global Coordination meeting held in March 2013 APANPIRG/24 invited the Chairpersons of ATM, RASMAG, CNS, and MET sub groups to establish regional priorities and targets for the APAC Region in alignment with the GANP and APAC Seamless ATM Plan by December 2013 in order to facilitate submission to ICAO by May 2014.*

1.3 The Chairpersons of the Sub Groups agreed on the regional priorities and targets for the APAC Region which was based on the highest priority elements. In addition, all 42 Seamless ATM elements were assigned priorities.

## 2. DISCUSSION

### Seamless ATM Implementation Guidance

2.1 The Seamless ATM Plan version 1.0 was endorsed by APANPIRG in June 2013 (Conclusion 24/54). Seamless ATM Implementation Guidance Material was adopted at APANPIRG/25. The latest version is available on the ICAO Asia/Pacific Office's website at: <http://www.icao.int/APAC/Documents/edocs/Seamless%20ATM%20Implementation%20Guidance%20v4-3.pdf>

### ANRF

2.2 A total of 18 Air Navigation Reporting Forms (ANRF) corresponding to the 18 Aviation System Block Upgrade (ASBU) elements were endorsed by APANPIRG/25 – these replaced the earlier Performance Framework Forms (PFF).

### State Seamless ATM Plans

2.3 The State Seamless ATM Plans were intended to be high-level and concise, so that each of the Seamless ATM elements that were applicable to the State could be elucidated in a brief paragraph, explaining the basic benefits and costs, barriers and steps to implementation, and an outline of the expected result. A template of a State Seamless ATM Plan is available on the same web page that the Seamless ATM Plan is located on the ICAO Asia/Pacific Office website at [http://www.icao.int/layouts/download.aspx?SourceUrl=/APAC/Documents/edocs/State Seamless ATM Implementation Plan Template v3.0.doc](http://www.icao.int/layouts/download.aspx?SourceUrl=/APAC/Documents/edocs/State_Seamless_ATM_Implementation_Plan_Template_v3.0.doc). It was not necessary to submit the State Seamless ATM Plan to the Regional Office at this juncture, although this may become necessary in the future.

### Seamless ATM Reporting Forms

2.4 The reporting of implementation progress of the Seamless ATM Plan elements in accordance with APANPIRG Conclusion 24/55 c) was crucial for:

- airspace users (for planning of equipage and fleets);
- neighbouring Flight Information Regions (FIRs, for harmonisation of progress);
- Regional Office (to update the Seamless ATM Plan and for APANPIRG); and
- ICAO HQ (to update the GANP in response to regional implementation feedback).

### Web-based Reporting Process

2.5 The ICAO Asia/Pacific Regional Office had developed a web-based tool in an effort to ease the submission of Seamless ATM reports for States, and reap the benefits of data analysis for ICAO. This tool is available at [https://portal.icao.int/RO\\_APAC/Reporting/Pages/default.aspx](https://portal.icao.int/RO_APAC/Reporting/Pages/default.aspx), and would provide the ability to submit up to four reports times a year, as well as exporting and archiving functions. It would be possible for users to prepare a report based on the previous submissions, which should minimize the input workload.

2.6 Thus far, a total of 9 States and Administrations (Australia, French Polynesia, Hong Kong China, India, Japan, Macao China, Singapore, Thailand, and United States) had submitted a Seamless ATM report, while a total of 8 other States and Administrations (Bangladesh, China, India, Malaysia, New Zealand, Philippines, Republic of Korea and Sri Lanka) were known to be in the process of completing their submissions (forms in preparation).

2.7 States that had not notified their points of contact and submitted their reports were urged to do so at the earliest opportunity.

### Monitoring

2.8 Two levels of monitoring were desirable:

- monitoring of the regional performance gains, through the Regional Performance Dashboard, allowing global correlation of status and expectations for selected priority items; and
- monitoring of regional implementation progress through a Regional Picture, one level below, allowing corrective actions by APANPIRG on the implementation. The monitoring would be done for all 45 Seamless ATM items.

2.9 In the discussions of the Chairpersons meetings, the added value of having two levels of monitoring (the high level regional performance dashboard and the process-orientated regional picture, focusing on the 42 Seamless ATM elements) to steer the air navigation improvements was acknowledged. It was envisaged that the monitoring tools (regional picture and regional performance dashboard) could serve a more streamlined project-oriented process for the Asia/Pacific Region by identifying issues, challenges or risks and speeding up the decision-making process to take corrective actions and adapt plans.

2.10 Concerning the items of interest to this group, the outcome of the seamless ATM reporting process is attached.

### Regional Picture (Project)

2.11 Export functions including calculation were provided to the ICAO Regional Office staff members to analyse the inputs from States/Administrations and later on, feed a GIS-based regional picture that would present a regional picture (i.e. a regional map with the progress on each item for all States/administrations). However this project was frozen, due to the lack of resources at ICAO HQ.

### Regional Performance Dashboard

2.12 The Performance Dashboards presented up-to-date regional implementation results, highlighting what States and groups of States were achieving in collaboration with their respective Planning and Implementation Regional Groups (PIRGs) and Regional Aviation Safety Groups (RASGs). Their ultimate intention, besides ICAO's basic measurement, accountability and transparency goals, was to help motivate aviation groups and stakeholders to continue to participate in and improve upon the applicable cooperative programmes being implemented at the regional level. The dashboards were available at: <http://www.icao.int/safety/Pages/Regional-Targets.aspx>. This link would be provided in the dedicated State/administration web-based Reporting Process Home page as well.

### Action Plans

2.13 The Planning and Implementation Regional Groups (PIRGs) and Regional Safety Aviation Groups (RASGs) Global Coordination Meeting (GCM) was held in Montreal on 19 March 2013. The PIRG/RASG GCM urged each PIRG to establish regional priorities and targets, and to develop action plans for regional priorities. In addition, APANPIRG Contributing Bodies should be discussing action plans for each ASBU element.

2.14 Regarding the priority ASBU elements (refer **Attachment A**), the following are areas that should be discussed by APANPIRG bodies to develop action plans and monitor progress:

- a) B0-NOPS (primary responsibility – ATM/SG via the ATFM/SG):
- the following States should submit progress reports to the ATFM/SG on their ATFM status to meet the target date of 12 November 2015 for implementation of an effective ATFM system, and if assistance is required, to detail the barriers and requested assistance that might be necessary –
    - **China** (Beijing FIR, Guangzhou FIR, Hong Kong FIR, Kunming FIR, Shanghai FIR, Shenyang FIR, Sanya FIR, Taibei FIR, Wuhan FIR);
    - **India** (Delhi and Mumbai FIRs);
    - **Indonesia** (Jakarta FIR);
    - **Japan** (Fukuoka FIR);
    - **Laos** (Vientiane FIR),
    - **Malaysia** (Kuala Lumpur FIR, Kota Kinabalu FIR);
    - **Philippines** (Manila FIR);
    - **Republic of Korea** (Incheon FIR);
    - **Thailand** (Bangkok FIR);
    - **Singapore** (Singapore FIR);
    - **Viet Nam** (Hanoi and Ho Chi Minh FIRs);
- b) B0-DATM (primary responsibility – ATM/SG via the AAITF):
- **All Asia/Pacific States** should submit progress reports to the AAITF on their AIS – AIM transition progress to meet the target date of 12 November 2015 for implementation of Phase 1 and 2 in accordance with the Seamless ATM Plan (note the information in WP02 Attachment A), and if assistance is required, to detail the barriers and requested assistance that might be necessary;
- c) B0-FRTO (primary responsibility – ATM/SG):
- **All Asia/Pacific States** which have military operations should submit progress reports to the ATM/SG through the Seamless ATM reporting system (re paragraph 2.5) on their progress on implementing the following elements to meet the target date of 12 November 2015 in accordance with the Seamless ATM Plan, and if assistance is required, to detail the barriers and requested assistance that might be necessary:
    - A mechanism is established for the regular review of Special Use Airspace (SUA) to minimize the effect of SUA on civil air traffic;
    - A body is formed to conduct strategic civil/military cooperation; and
    - A mechanism is established to conduct tactical (day-to-day) civil/military cooperation liaison between military and civil activity.

2.15 The SAIOACG and SEACG are invited to submit ideas on action plans that might assist the accelerated implementation of these priority elements.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) note the outcome of the seamless ATM reporting process for 2014 for the items of interest to this meeting;
- c) if having not done so already, notify two points of Contact to [apac@icao.int](mailto:apac@icao.int), prepare and submit a Seamless ATM report at the earliest opportunity;
- d) discuss the information on action plans noted in paragraphs 2.14 and 2.15; and
- e) discuss any relevant matters as appropriate.

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