



International Civil Aviation Organization

ICAO

Eleventh Meeting of the Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG/11)

Video Teleconference, 02 – 06 August 2021

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## Agenda Item 2: Review Outcomes of Related Meetings

### OUTCOMES FROM THE ASIA/PACIFIC AIRPORT COLLABORATIVE DECISION-MAKING TASK FORCE

(Presented by the Secretariat)

#### SUMMARY

This paper presents outcomes relevant to ATFM/SG from the Asia/Pacific Airport Collaborative Decision-Making Task Force (APA-CDM/TF), including those outcomes subsequently approved by the Aerodromes Operations and Planning (AOP) Sub-Group of APANPIRG.

## 1. INTRODUCTION

1.1 The Sixth Meeting of the Asia/Pacific Airport Collaborative Decision-Making (A-CDM) Task Force (APA-CDM/TF/6) was held from 28 to 30 April 2021.

1.2 The Fifth Meeting of the Aerodromes Operations and Planning Sub-Group was held from 29 June to 02 July 2021.

## 2. DISCUSSION

### APA-CDM/TF/6

2.1 APA-CDM/TF/6 discussed the development of joint operational procedure guidance for the integration of ATFM and A-CDM operations under APA-CDM/TF/6 WP/03, presented by Hong Kong China, China, India, Republic of Korea, Thailand and CANSO.

2.2 The meeting noted that exploring the results of a survey conducted under ICAO State Letter Ref. AN 3/3 – AP-AGA0049/20 dated 30 November 2020, alongside the *CANSO Guide on ATFM/A-CDM Integration*, would make a worthwhile contribution to the development of a regional integration model. This would be intended to:

- a) Transform the needs of Air Navigation Service Providers (ANSPs) and aerodrome operators into a balanced system solution that meets those needs;
- b) Address the complex and technological challenges of automated operations by System-Wide Information Management (SWIM) and associated information standards, including Flight Information Exchange Model (FIXM) and ICAO meteorological information exchange model (IWXXM); and
- c) Elaborate the survey results and generalize their common features to develop the joint operational procedure guidance for the integration of ATFM and A-CDM operations, covering those topics listed for example in **Attachment A**.

2.3 The CANSO Guide on ATFM/A-CDM Integration is available through the CANSO Publications web-page at <https://canso.org/publications/>

2.4 Noting the planned dissolution of APA-CDM/TF (see also paragraphs 2.7 to 2.11, below), it was proposed that a small working group (SWG) should be established, reporting to the appropriate APANPIRG Contributory Body with members from the following domains:

- a) Experts from aerodrome operators, ANSPs and civil aviation authorities (CAAs) to share knowledge and experience on A-CDM and its enabling systems;
- b) Experts from ANSPs to share knowledge and experience on ATFM and its enabling systems;
- c) International organizations such as CANSO, IATA, ICCAIA, etc. to present broad interests of various stakeholders and contribute expertise on a balanced system solution; and
- d) Experts from the SWIM TF to help the Expert Group in applying the SWIM concept and infrastructure to cross-border ATFM/A-CDM integration.

2.5 The meeting discussed the approach that should be taken to further carry out this task by another appropriate body of APANPIRG. It was noted that ATFM/SG which, it was anticipated, would assume responsibility for progressing A-CDM matters under APANPIRG, had a current task assigned to its ATFM Information Requirement Small Working Group (ATFM/IR/SWG), to develop operational requirements for the exchange of ATFM data. The proposed activity aligned with that work.

2.6 After deliberation, the meeting agreed that this activity would be included in the APA-CDM/TF Task List as updated by the meeting, with a view to its subsequent inclusion in the ATFM/SG Task List.

#### AOP/SG/5

2.7 The AOP/SG/5 meeting agreed to the following Conclusions relating to A-CDM matters, as proposed by APA-CDM/TF/6:

##### ***Conclusion AOP/SG/5-1: A-CDM Frequently Asked Questions (FAQs)***

*That:*

1. *the Frequently Asked Questions (FAQs) on A-CDM at Appendix B to the AOP/SG/5 Report be uploaded to the ICAO Asia/Pacific Regional Office Website for reference; and*
2. *the document be updated when and as required to include new FAQs and answers.*

##### ***Conclusion AOP/SG/5-2: Framework for Monitoring the Implementation of A-CDM***

*That the survey questionnaire at Appendix C and Appendix D to the AOP/SG/5 Report be uploaded to the ICAO Asia/Pacific Regional Office website for use by States for self-assessment of their A-CDM implementation projects and to report the progress of A-CDM implementation to APAC Office in the format provided in Appendix D.*

##### ***Conclusion AOP/SG/5-3: Amendment to APAC A-CDM Implementation Plan***

*That, the Asia Pacific A-CDM Implementation Plan, Second Edition, 2021, at Appendix E to the AOP/SG/5 Report be made available on the ICAO Asia/Pacific Regional Office Website for reference by States/Administrations.*

2.8 The abovementioned documents are currently undergoing final editorial review before becoming available on the ICAO Asia/Pacific Regional Office eDocuments web-page (AGA section, A-CDM sub-section): <https://www.icao.int/APAC/Pages/eDocs.aspx>

2.9 The updated A-CDM Implementation Plan, in particular, should be taken into account in the pending revision of the Regional Framework for Collaborative ATFM, discussed under a separate WP to this meeting.

2.10 AOP/SG/5 also agreed to the following Draft Decision for consideration by APANPIRG/32, noting that if APANPIRG agrees to the dissolution of APA-CDM/TF the ATFM/SG is (likely to be) expected to undertake any ongoing APAC regional work in the A-CDM field:

***Draft Decision AOP/SG/5-4: Dissolution of the APA-CDM/TF***

*That:*

- a) the Airport Collaborative Decision Making Task Force (APA-CDM/TF), having completed most of the tasks assigned under its Terms of Reference, be dissolved, and any further Asia/Pacific Regional work in the A-CDM field (including the Task List in Appendix A to the AOP/SG/5 Report) be undertaken by the Air Traffic Flow Management Steering Group (ATFM/SG) or other appropriate body determined by APANPIRG; and*
- b) A-CDM Experts nominated by States and International Organizations are encouraged to attend the ATFM/SG Meetings.*

2.11 In that regard, the meeting is invited to recall that the dissolution of APA-CDM/TF and the consolidation of its residual functions within ATFM/SG was previously discussed at the joint plenary session of APA-CDM/TF/4 and ATFM/SG/9 (April 2019), summarized in the following extract from the Report of the ATFM/SG/9 meeting:

*5.34 The Secretariat informed the meeting of the status of work completed by APA-CDM/TF, with reference to the scope and objectives of its TOR. All items of the TOR scope and objectives had been completed, and there were no remaining tasks.*

*5.35 The Secretariat proposed a Draft Decision (APA-CDM/TF) dissolving the Task Force, with any further APAC Regional work in the A-CDM field to be undertaken by ATFM/SG.*

*5.36 The meeting noted that A-CDM was widely considered to be a component of collaborative ATFM, and that other bodies such as CANSO and ICAO (technical panels) had merged A-CDM work into their ATFM-related technical working groups.*

*5.37 ATFM/SG/9 agreed that, should the APA-CDM/TF be dissolved by APANPIRG, it would be appropriate that any further work in the A-CDM field be undertaken by ATFM/SG, with the participation of appropriate experts from that domain. While noting that APA-CDM/TF/4 had not yet reached agreement on its dissolution or continuance, and the final decision would be made by APANPIRG/30, ATFM/SG/9 agreed that the draft amendment to the ATFM/SG TOR provided in **Appendix E to the ATFM/SG/9 Report** should be considered by ATFM/SG and APANPIRG, should the APA-CDM/TF be dissolved.*

2.12 As AOP/SG has endorsed the Draft Decision proposing the dissolution of APA-CDM/TF, the following consequential Draft Decision is proposed for consideration by the meeting:

**Draft Decision ATFM/SG/11-X: Revised ATFM/SG Terms of Reference**

That, in the event that APANPIRG/32 adopts Draft Decision AOP/SG/5-4: Dissolution of the APA-CDM/TF and determines that ongoing APAC regional A-CDM work be conducted by ATFM/SG, the revised ATFM/SG Terms of Reference at **Attachment B** be adopted.

2.13 The meeting is also invited to note the following residual action items from the APA-CDM/TF Task List which was also reviewed by AOP/SG/5:

	<b>Action Item</b>	<b>Responsible Party</b>	<b>Time Frame</b>	<b>Status</b>	<b>Remarks</b>
5/2	Develop joint operational procedure guidance for the integration of ATFM and A-CDM operations, focusing the integration between A-CDM and "cross-border" ATFM in collaboration with Experts from ATFM/SG and SWIM TF	Hong Kong China to lead China, India, Republic of Korea, Thailand, Group of Experts, CANISO	(APA- CDM/TF/6)	In progress	APA-CDM/TF/6 WP/03 Task to be carried out by the APANPIRG technical body assigned ongoing responsibility for oversight of A- CDM.
5/3	Identify any other data attributes which are necessary to support the A-CDM and ATFM integrated operations (from A-CDM perspective), in addition to the ones already included in the current version of the FIXM v4.1 Extension in collaboration with Experts from ATFM/SG and SWIM TF.	Thailand to lead Hong Kong China, India, Group of Experts, CANISO	(APA- CDM/TF/6)	To be commenced	Task to be carried out by the APANPIRG technical body assigned ongoing responsibility for oversight of A- CDM.

2.14 It is proposed that this action item be included in the ATFM/SG Task List, subject to APANPIRG agreement to the proposed consolidation of regional APA-CDM work within ATFM/SG.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) agree to the Draft Decision proposing the revised ATFM/SG Terms of Reference; and
- c) discuss any relevant matters as appropriate.

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<b>Draft Decision ATFM/SG/11-X: Revised ATFM/SG Terms of Reference</b>		
<b>What:</b> That, in the event that APANPIRG/32 adopts <i><b>Draft Decision AOP/SG/5-4: Dissolution of the APA-CDM/TF</b></i> and determines that ongoing APAC regional A-CDM work be conducted by ATFM/SG, the revised ATFM/SG Terms of Reference at <b>Attachment B</b> be adopted.	<b>Expected impact:</b> <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical	
<b>Why:</b> To ensure the continuity of regional A-CDM activity	<b>Follow-up:</b> <input type="checkbox"/> Required from States	
<b>When:</b> 5-Nov-21	<b>Status:</b> Draft to be adopted by Subgroup	
<b>Who:</b> <input checked="" type="checkbox"/> Sub groups <input type="checkbox"/> APAC States <input type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: XXXX		

**BASIS FOR DEVELOPMENT OF JOINT OPERATIONAL PROCEDURE GUIDANCE FOR THE INTEGRATION OF ATFM AND A-CDM OPERATIONS**

**A. Details about national and/or local model/guidance for integrating ATFM and A-CDM operations**

- A1. Concept of operations (CONOPS) describing the characteristics of the integrated ATFM/A-CDM model from the viewpoint of efficiency and effectiveness of overall workflow
- A2. Details of the operational workflow of integrated ATFM/A-CDM
- A3. The implementation model for computerising the integration of ATFM and A-CDM
- A4. Data items exchanged between the ATFM and A-CDM systems
- A5. Use of data items for updating flight information, including flight plan and current flight trajectory
- A6. Interaction and influence of flight update and departure Information on ATFM measures and A-CDM milestones
- A7. The methods for engaging stakeholders in the integrated processes of ATFM and A-CDM
- A8. The integration planning and execution of the integrated processes
- A9. The methods for verifying the information quality and validation the operational workflow
- A10. The key performance indicators for measuring the successful integrated system

**B. Suggestions on generalising and enhancing the national and/or local models/procedures for cross-border application**

- B1. Concept of operations (CONOPS) describing the characteristics of the cross-border model for integrated ATFM/A-CDM from the viewpoint of efficiency and effectiveness of cross-border workflow
- B2. Operational workflow suggested for cross-border application
- B3. Considerations and constraints for generalising the national/local ATFM and A-CDM operational workflow
- B4. Data items suggested for cross-border application
- B5. Support tools suggested for integrated cross-border ATFM/A-CDM application
- B6. Key performance indicators for cross-border application
- B7. Timeframe suggested for planning and execution of cross-border integration
- B8. Verification and validation methods suggested for cross-border integration
- B9. Methods suggested for engaging cross-border stakeholders

**DRAFT AMENDMENT -Terms of Reference**

**AIR TRAFFIC FLOW MANAGEMENT STEERING GROUP (ATFM/SG)**

1. Having considered relevant documents such as the *Manual on Collaborative Air Traffic Flow Management* (Doc 9971), regional air traffic data and the Asia/Pacific Region city pairs and associated airspace and ATS routes and aerodromes experiencing the most significant traffic demand, and noting the Asia/Pacific Seamless ATM Plan provisions for structural airspace capacity increasing measures, develop an Asia/Pacific Regional ATFM Framework which addresses ATFM implementation and ATFM operational issues in the Asia/Pacific Region;
2. Identify, research and recommend appropriate guidance regarding:
  - a. capacity assessment and adjustment mechanisms;
  - b. regular review for all aerodromes and ATC sectors where traffic demand is expected to reach capacity, or is resulting in traffic congestion;
  - c. mechanisms for ATFM and A-CDM data gathering, collation and sharing between States, International Organizations and ICAO, which may include;
    - i. capacity assessments, including factors affecting capacity such as special use airspace status, runway closures and weather information;
    - ii. traffic demand information which may include flight schedules, flight plan data, repetitive flight plan data as well as associated surveillance updates of flight status; and
    - iii. ATFM Daily Plan;
  - d. compliance by airspace and aerodrome users with ATFM and A-CDM measures; and
  - e. any other guidance relevant to the Regional ATFM Framework and Asia/Pacific A-CDM Implementation Plan.
3. Maintain an overview of CDM/ATFM and A-CDM programs being conducted within the Region, with a view to facilitating their coordination and alignment, and to promote;
  - a. harmonized procedures;
  - b. Implementation of the performance expectations of the Regional ATFM Framework and Asia/Pacific A-CDM Implementation Plan;
  - c. Interoperability of A-CDM with ATFM
4. Review the effectiveness of existing and planned ATFM and A-CDM programs in the Asia and Pacific Region, and make specific recommendations regarding ATFM, including any adjacent airspace affecting the Asia and Pacific Regions, and research and recommend appropriate mechanisms for the on-going review of such programs.

5. The Group coordinates closely with other relevant bodies such as ~~the Airport Collaborative Decision Making Task Force (APA-CDM/TF)~~, Airport Operations and Planning Sub-Group, the Meteorological Requirements Working Group (MET/R WG) and System-Wide Information Management Task Force (SWIM TF).
6. The Group reports to the ATM Sub-Group.

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