Proposed Regional Monitoring and Reporting Scheme for A-CDM Implementation in the Asia Pacific Region

ATM/SG/12 - WP/08

by Hong Kong China Rapporteur of ATFM/IR/SWG under ATFM/SG

Agenda



Background



Nov 2019

ICAO APAC Seamless
ANS Plan Version 3.0
Recommend all
international
aerodromes should
operate A-CDM system
integrated with the
ATM network



Jul 2021

ICAO APAC A-CDM
Implementation Plan
A-CDM
Implementation
Guidance; Milestone
Approach in A-CDM
Process



Apr 2023

ICAO APAC

ATFM/SG/13

Meeting agreed to develop an annual regional monitoring and reporting scheme for A-CDM



Mar/Aug 2024

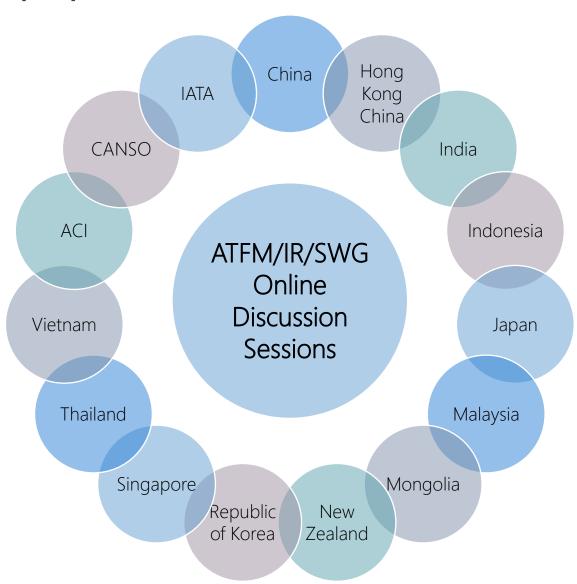
ATFM/IR/SWG
Draft reporting scheme
proposed for comment



Sep 2024

ATM/SG/12
Proposal for Asia
Pacific A-CDM
Monitoring and
Reporting Scheme

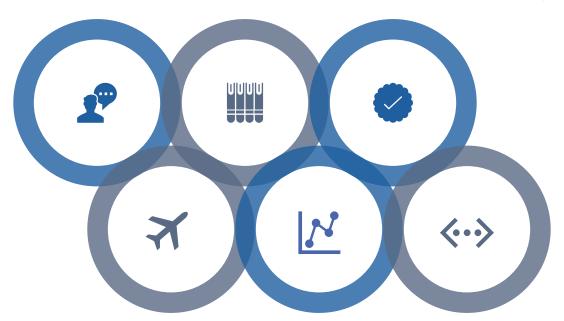
Participants of ATFM/IR/SWG Online Discussion Sessions



Comment received

A basis is needed for monitoring A-CDM implementation in the future Not all reporting elements are applicable to States with different airports operating at various scales and local needs

"Phases of Planning for A-CDM Implementation" and "Phases of A-CDM Implementation" should be clearly defined and reported

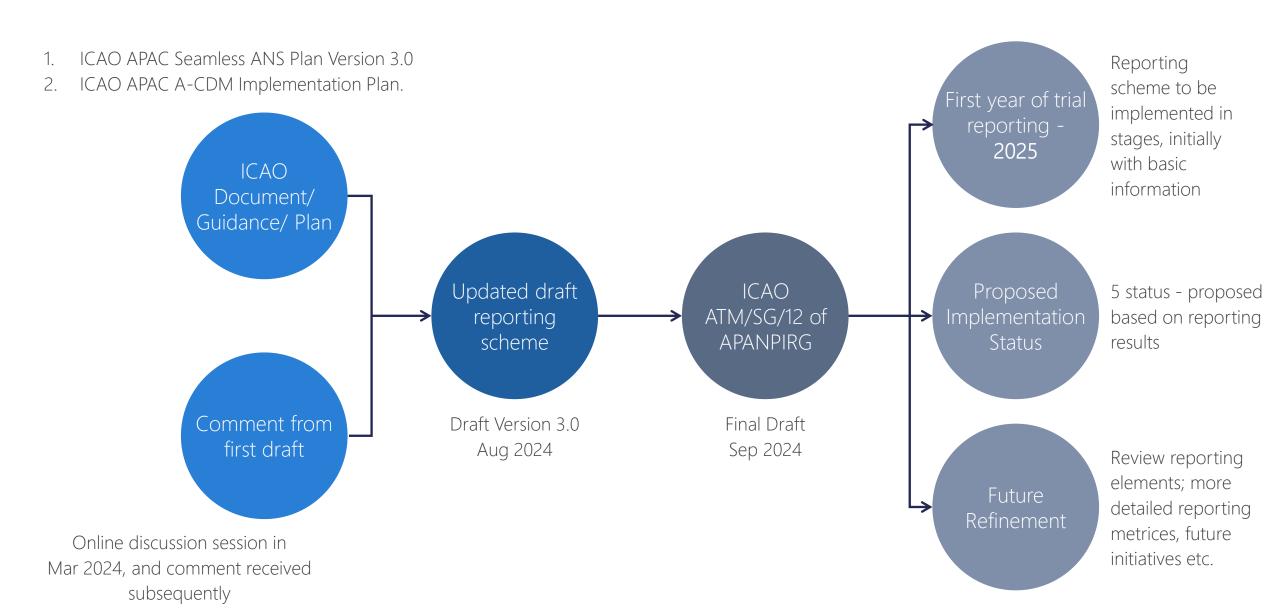


Aerodrome traffic density should be considered in the reporting scheme

Future reporting metrices to be based on airport capacity and demand

Reporting elements to be categorized as "Compulsory" and "Optional"

Proposed Approach



International/ Domestic

Elements

Refer to ICAO Annex 14 Vol. 1

- Light (less than 20 per hour)
- > Medium (20 to less than 35 per hour)
- > Heavy (more than 35 per hour)

Considerations

 Traffic density should be reported as per comment received from discussion session

Refer to ICAO APAC ANS Seamless Plan Ver. 3.0

- Reporting is initially required for international airports
- > Domestic airports are encouraged to report

- Echo the recommendation from ICAO APAC ANS Seamless Plan
- Local need for A-CDM in domestic airports varies a lot, could be challenging for domestic airports to report at initial stage

Reporting Elements

Planning for A-CDM

A-CDM mplementation

Elements

Refer to ICAO A-CDM Implementation Guidance

- > Initiation phase
- > Implementation phase
- > Operation and Monitoring Phase

Considerations

- This item should be clearly defined and reported comment from discussion session
- Detailed guidance from ICAO on determining the phases of planning for A-CDM implementation
- > Included in the sample reporting form for reference

Refer to ICAO APAC A-CDM Implementation Plan

- > Information Sharing platform
- 16 milestones in the A-CDM process (Required/ Optional), with purpose, data elements, A-CDM actions, examples etc. clearly stated for each milestone

- > Information sharing is the foundation in A-CDM process, which enable the implementation of A-CDM.
- > 16 milestones are widely accepted and known in the A-CDM process. Least difficulty for States to report the implementation of different milestones. The reporting results will be easy to be understood, monitored and followed.
- Detailed reporting metrices and reporting items could be added in next stage

Sample Reporting Form.

ICAO Asia Pacific A-CDM Monitoring and Reporting Scheme

Reporting Year: 2025

Part A (Basic Information) 1. ICAO Airport Code(s): _____ (Airports within the same State/ Administration with same status could be reported in a single form) Category a. International Airport b. Domestic Airport 3. Traffic Density (reference to ICAO Annex 14 Vol.1) a. Light (less than 20 per hour) b. ☐ Medium (20 – less than 35 per hour) c. Heavy (more than 35 per hour) 4. A-CDM Planned/Implemented? a. Yes (proceed to Part B) b. □ Not Applicable (provide justification below if "International Airport" is selected for Question 2) → End of reporting (Justification:

Sample Reporting Form.

Part B (Phases of Planning for A-CDM Implementation)

Select the phase according to the diagram below (extracted from ICAO A-CDM Implementation Guidance)

Initiation Implementation Operation and Monitoring Phase Phase

- Initial familiarization on A-CDM
- Stakeholder consultations
- Draft Governance Structure
- MOU between all stakeholders
- A-CDM GAP analysis
- Cost Benefit Analysis (CBA)
- Requirement Definition
- Procurement (if needed)
- High-level implementation plan

Governance

- Establish Steering Group
- Set-up of project organization with roles and responsibilities
- Develop detailed implementation plan
- Establish communication plan
- Establish training plan
- Establish data sharing agreement

A-CDM Operations

- Develop A-CDM procedures, including roles and responsibilities
- Carry out stakeholder workshops/training on A-CDM and the change it will introduce to stakeholders.
- Establish Measurement Framework, including compliance and performance
- Implement A-CDM solution
- Adapt necessary systems to provide and receive A-CDM data.
- Plan and carry out live trials

- Establish necessary framework to maintain A-CDM operations with roles and responsibilities
- Follow-up on A-CDM compliance and performance to ensure procedures are followed and objectives are met.
- Adjust procedures, as and when needed

- 5. Phases of Planning for A-CDM Implementation
 - a. ☐ Initiation Phase → End of reporting
 - b. ☐ Implementation Phase → Proceed to Part C
 - c. ☐ Operation and Monitoring Phase → Proceed to Part C

Sample Reporting Form

Part C (Phases of A-CDM Implementation)

Is	an A-CDM	information	sharing p	olatform	available?
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a. ☐ Yes → Proceed to Question 7

b. \square No \rightarrow End of reporting

7. Report the implementation status according to the 16 milestones suggested in ICAO APAC A-CDM Implementation Plan

Milestone	Barriand/ Ontional	Implementation Status			
Milestone	Required/ Optional	Not Applicable	Partly#	Completed	
MS1 ATC Flight Plan Activated	Required	□*	□*		
MS2 CTOT Allocation	Required [@]	□*	□*		
MS3 Take-off from Outstation	Optional				
MS4 FIR Entry	Optional				
MS5 Final Approach	Optional				
MS6 Aircraft Landed	Required	□*	□*		
MS7 Aircraft In-Blocks	Required	_*	□*		
MS8 Ground Handling Starts	Optional				
MS9 TOBT Updated	Required	□*	□*		
MS10 TSAT Issue	Required	□*	□*		
MS11 Boarding Starts	Optional				
MS12 Aircraft Ready	Optional				
MS13 Start Up Request	Optional				
MS14 Start Up Approved	Optional				
MS15 Off Block	Required	_*	□*		
MS16 Take Off	Required	□*	□*		

refer to "A-CDM Actions" in Table 5 of ICAO APAC A-CDM Implementation Plan (2nd Edition)

Jus	tifications/Remarks:				
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 $[\]bigstar$ please provide justifications/remarks below for choosing this status

[@] for fully integrated A-CDM - ATFM solution, select "Not Applicable" for a local A-CDM implementation

Reporting Flow Chart A-CDM Planned/ **Implementation Status** Fill in Basic No **Start Not Applicable** Implemented? Information Part A Yes Initiation **Phases of Planning** Implementation/ Phase **Operation and Monitoring Phase** for A-CDM **Initiation Implementation** Part B No **On-going Information Sharing** Platform for A-CDM? Any "Required" Implementation Status Part C Yes Yes Milestone(s) is/are **Partly Implemented** reported as "Partly"? No All "Required" Yes Milestones are reported **Fully Implemented** as "Completed" or "N/A"

To summarize

- Year 2025 as a trial
- For international airports ONLY
- Similar to other regional monitoring and reporting schemes, submission date is 28 FEB 2025
- Preliminary data collection and analysis
- Comments for refinement

Action by the meeting

- a) note the information contained in this paper;
- b) support the proposed Regional Monitoring and Reporting Scheme for A-CDM Implementation in the Asia Pacific Region;
- c) support the implementation timeline for the proposed reporting scheme;
- d) support the trial Reporting Scheme to be conducted in year 2025; and
- e) discuss any relevant matters as appropriate.

Thank You