



ICAO

*International Civil Aviation Organization*

**Sixteenth Meeting of the Asia/Pacific Air Traffic Flow Management and Airport Collaborative Decision-Making Steering Group (ATFM & A-CDM/SG/16)**

Bangkok, Thailand, 06 – 10 April 2026

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**Agenda Item 6b: ATFM, A-CDM Systems Communication – AFTN/AMHS, FIXM, SWIM**

**ASIA/PACIFIC REGIONAL FLIGHT AND FLOW INFORMATION FOR A COLLABORATIVE ENVIRONMENT (FF-ICE) RELEASE 1 IMPLEMENTATION PLAN**

(Presented by Singapore and Thailand on behalf of the FF-ICE Ad-hoc Group)

**SUMMARY**

This paper presents the draft APAC Regional FF-ICE Release 1 Implementation Plan developed by the ICAO APAC FF-ICE Ad-hoc Group. Through a series of workshops and meetings, the group developed operational and technical requirements for regional FF-ICE/R1 services implementation. The plan also identifies and recommends areas of harmonization for the APAC region. Specifically, some ATFM scenarios were identified to benefit from harmonized FF-ICE Filing Status responses and to ensure regional interoperability and consistent handling of operational conditions.

**1. INTRODUCTION**

1.1 The ICAO APAC FF-ICE Ad-hoc Group was established by ATM/SG/11 in October 2023 through *Decision ATM/SG/11-4*. The group was formed to achieve the following objectives: to develop regional Flight and Flow Information for a Collaborative Environment Release 1 (FF-ICE/R1) operational requirements, and to develop an implementation strategy for the APAC region. To achieve these objectives, the group has undertaken several tasks, including the development of harmonised operational requirements and procedures, and coordination with relevant APANPIRG contributory bodies to ensure seamless implementation.

1.2 The FF-ICE Ad-hoc Group has conducted a total of four meetings/workshops to date. The first workshop with tabletop exercise focused on raising the region's understanding of FF-ICE through sharing of global FF-ICE developments and details on FF-ICE/R1 services. The second meeting discussed the need for an APAC Regional FF-ICE/R1 Implementation Plan (APAC FF-ICE/R1 Plan) and focused on the key topics to be included within the plan. The third and fourth meetings/workshops focused on reviewing the content and details of the APAC FF-ICE/R1 Plan with the aim of proposing its endorsement within 2026.

**2. DISCUSSION**

APAC FF-ICE/R1 Plan

2.1 The APAC FF-ICE/R1 Plan provides regional strategy and guidance for the implementation of the FF-ICE/R1 within the APAC region. This plan supplements the global FF-ICE concepts and objectives with the regional context of APAC, providing a practical roadmap for implementation in APAC States while remaining aligned with ICAO's provisions. The latest draft of

the APAC FF-ICE/R1 Plan, as reviewed and agreed by the ICAO APAC FF-ICE Ad-hoc Group in March 2026, is presented in Appendix.

2.2 The APAC FF-ICE/R1 Plan focuses on the operational and technical requirements for the implementation of FF-ICE/R1 services. It also identifies and recommends areas of harmonization for the APAC region. This includes, amongst others, the type of validation checks for FF-ICE flight plan (eFPL), the interpretation of Filing Status (a response sent upon evaluation of the eFPL under the Filing Service), the feedback methods for restrictions/constraints and the Filing Status responses for identified ATFM scenarios.

#### Interaction between ATFM and FF-ICE Services

2.3 While ATFM remains a separate process from FF-ICE services, the evaluation of eFPLs by the FF-ICE capable ATM Service Providers (eASPs) requires checks against restrictions and constraints managed by existing ATM systems to ensure comprehensive evaluation of flight plan acceptability. Restrictions and constraints considered should include but are not limited to:

- a) aerodrome, airspace and route availability;
- b) ATFM measures;
- c) environmental conditions such as SIGMETs, WAFs, TAFs, and volcanic ash areas, affecting airspace availability or constraints; and
- d) aircraft operations requirements (e.g. required navigation performance specifications, required equipage, etc.)

2.4 As an outcome of the evaluation, a Filing Status will be provided back to the FF-ICE capable airspace users (eAUs) to reflect the operational acceptability of the eFPL. While eASPs retain the option to determine the specific criteria for each Filing Status based on their operational environment, the interpretation and expected actions from the eAUs for each Filing Status value have been agreed by the FF-ICE Ad-hoc Group as described in Table 1 below.

**Table 1: FF-ICE Filing Status Interpretation and Expected eAU Action**

<b>Filing Status</b>	<b>Interpretation</b>	<b>Expected eAU Action</b>
ACCEPTABLE	The flight plan complies with operational requirements. Any constraints identified can be accommodated without flight plan modifications.	No immediate action or update required.  Note any provided constraints for awareness.  Prepare for possible tactical clearances reflecting identified constraints.

Filing Status	Interpretation	Expected eAU Action
NOT ACCEPTABLE	The flight plan does not comply with operational requirements and requires modification.	<p>Submit Flight Plan Update to address non-compliance.</p> <p>If close to EOBT, the operator may be unable to update their flight plan in time using FF-ICE/R1 processes. In these cases, the operator may update their flight plan as needed through tactical coordination with ATC.</p> <p><i>Note: if departure eASP provides a “Not Acceptable” Filing Status, eAU can expect refusal to start-up clearance if non-compliance requires flight plan modification (e.g. aerodrome closure). This does not apply to “Not Acceptable” status received from downstream eASPs.</i></p>
PENDING	Flight plan evaluation has not yet been performed.	<p>Await subsequent Filing Status update.</p> <p>Monitor Expected Evaluation Time if provided.</p>

2.5 The Filing Status is intended to indicate the acceptability of a proposed route or trajectory within airspace where ATS is provided. It cannot be interpreted as the issuance of ATC clearance.

Harmonised Filing Status Responses for Identified ATFM Scenarios

2.6 While eASPs maintain flexibility in determining their trajectory evaluation criteria and feedback methods, certain scenarios require pre-determined Filing Status responses to ensure regional interoperability and consistent handling of operational conditions. The following ATFM scenarios were identified to benefit from pre-established Filing Status responses:

- a) Calculated Time Over (CTO) a point or Calculated Landing Time (CLDT) imposed by eASPs;
- b) Ground Stop (GSt) imposed by arrival eASPs;
- c) flight level restrictions imposed by relevant eASPs;
- d) fix balancing imposed by relevant eASPs; and
- e) re-routing imposed by relevant eASPs.

2.7 The regionally agreed Filing Status Responses for these scenarios are elaborated in sections 6.3.6.4.3 to 6.3.6.4.7 of the draft APAC FF-ICE/R1 Plan. The FF-ICE Ad-Hoc Group proposed to provide Filing Status of “NOT ACCEPTABLE” when the mentioned ATFM measures are imposed, as this would highlight to eAUs on the need to action. The expected eAU action upon receiving a “NOT ACCEPTABLE” Filing Status was to submit a Flight Plan Update to comply with the assigned restrictions/constraints. Thereafter, the eASPs shall evaluate the updated eFPL to check for compliance against the restrictions/constraints. Section 6.3.6.4.9 of the draft APAC FF-ICE/R1 Plan elaborates on the compliance checking.

2.8 In addition to the Filing Service, the Planning Service also provides evaluation of the flight plans resulting in a Planning Status. Given the similar expectation that eAUs should update their flight

plans to comply with the ATFM measure, the FF-ICE Ad-Hoc Group proposed to provide a Planning Status of “NON CONCUR” when the mentioned ATFM measures are imposed. A summary of the response to be provided by eASPs to eAUs, for the mentioned ATFM scenarios, under the Filing Service and Planning Service, can be found in Appendix C of the draft APAC FF-ICE/R1 Plan.

#### Next Steps

2.9 Following ATFM & A-CDM SG/16, the draft APAC FF-ICE/R1 Plan, including feedback of ATFM & A-CDM SG/16, will be submitted to SWIM TF/11 (25-29 May 2026) for review. The updated draft Plan will then be submitted to CNS SG/29 (6-10 July 2026) and ATM SG/14 (3-7 August 2026) for approval. Subject to approval by both groups and the availability of Doc 9965 Manual on FF-ICE Vol. II – Implementation Guidance, the draft APAC FF-ICE/R1 Plan will be submitted to APANPIRG/37 (tentatively, November 2026) for endorsement.

2.10 Additionally, it will also be proposed to ATM SG to dissolve the FF-ICE Ad-Hoc group and establish the APAC FF-ICE Implementation Task Force. The Implementation Task Force would, *inter alia*, address the transition from 2012 Flight Plan (FPL2012) to FF-ICE, operations in a mixed-mode environment, and FF-ICE/R1 implementation issues in the APAC region.

### **3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) review the APAC FF-ICE/R1 Plan, including the harmonized responses for the selected ATFM scenarios; and
- c) discuss any relevant matters as appropriate.

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