



# ICAO

*International Civil Aviation Organization*

**THE ELEVENTH MEETING OF SYSTEM WIDE  
INFORMATION MANAGEMENT TASK FORCE  
(SWIM TF/11)**

*Bangkok, Thailand, 25 – 29 May 2026*

## **Agenda Item 7: SWIM Task Force ToR, Programme, Work Plan, and Action Items review**

- APAC Common SWIM Information Services
  - APAC Common SWIM Information Services updates
  - Guidance Material for Business Functionality of APAC Common SWIM Information Services

### **FEEDBACK ON BUSINESS FUNCTIONALITY REQUIREMENTS FOR APAC COMMON SWIM INFORMATION SERVICES – FLIGHT INFORMATION SERVICES**

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

#### **SUMMARY**

This paper presents feedback from the ICAO APAC FF-ICE Ad-hoc Group on the approach for defining business functionality requirements for APAC Common SWIM Information Services. The FF-ICE Ad-hoc Group proposes breaking down FF-ICE services into detailed operational scenarios with business completion criteria, enabling SWIM TF to determine appropriate Message Exchange Patterns (MEPs) at the scenario step level rather than the service level. This approach aims to provide clearer business requirements to enable more accurate technical specifications by SWIM TF. Detailed operational scenarios for the FF-ICE services are also provided for SWIM TF to assist in the recommendation of MEP.

## **1. INTRODUCTION**

1.1 Recognising that different levels of detail for the development of SWIM information services could be required across different information domains, SWIM Task Force (SWIM TF) presented a working paper to the Fourth Asia/Pacific FF-ICE Ad-Hoc Group Meeting held from 16 to 18 March 2026 to request for the review of the “Business Functionality for APAC Common SWIM Information Services” document. This document was developed by SWIM TF to provide guidance for States/Administrations in planning and implementing SWIM information services in the APAC region.

1.2 The Fourth Asia/Pacific FF-ICE Ad-hoc Group Meeting reviewed and agreed on the following points:

- Recognizing the limited technical expertise within the FF-ICE Ad-Hoc Group, it was agreed that the group should **focus on defining business rules and business process completion criteria** for information services. The determination of appropriate Message Exchange Patterns (MEPs) for each business process should be undertaken by SWIM TF, which possesses the relevant technical expertise.

- To support the determination of MEPs, it was agreed that comprehensive operational scenarios, including operational requirements and business process completion criteria, are essential. Accordingly, such scenarios, where required, should be provided as an appendix to the Business Functionality of APAC Common SWIM Information Services document. A reference to the appendix should also be included in the ‘Brief description of the service’ column. **Figure 1** illustrates an example of how these comprehensive scenarios may be incorporated:

Business functionality of the information service	Brief description of the service	Type of information to be exchanged	Information exchange model / Message type	Message exchange pattern	Priority of Recommended Service in Initial APAC Common SWIM-IS (1) / (2) / (3)
FF-ICE filing service	Provides a means to submit, update or cancel flight plans through a SWIM-based interface using FIXM. <b>Appendix A: Filing Scenario</b>	Flight plan for registration, update or cancellation	FIXM	Appendix A	1

SWIM TF to fill in

Appendix A: Filing Scenario

	Message	Details	Timeout	Comments	Message Exchange Pattern
1	eAU send eFPL (FFP) to eASP	Mandatory	N/A	-	
2	eASP returns Submission Response (SR) #1 to eAU	Mandatory (after eFPL received)	1 minute	eASPs validate message format and basic rules. SR ACK: Validation passed SR REJ: Validation failed SR MAN: Manual Processing needed	
3	eASP returns Submission Response (SR) #2 to eAU	Conditional (only if SR#1 = MAN)	Variable (manual processing time)	Any subsequent SR is provided after manual intervention of eFPL (after SR MAN)	
4	eASP returns Filing Status (FS) #1 to eAU	Mandatory (if final SR = ACK)	1 minute after SR “ACK”	eASPs evaluate flight plan against operational constraints and ATM configuration	
5	eASP returns Filing Status (FS) #2 to eAU	Conditional (If FS #1 = PENDING, or due to re-evaluation)	Variable (2 <sup>nd</sup> evaluation)	eASP sends updated FS when flight is ready to be evaluated (for PENDING) or when operational changes affect flight status	

Figure 1: An example of how the comprehensive scenarios may be incorporated in the Business Functionality of APAC Common SWIM Information Services.

1.3 This paper details the considerations behind the recommendations provided by the FF-ICE Ad-Hoc Group and provides detailed operational scenarios under the FF-ICE services to support the identification of MEP by the SWIM TF.

2. DISCUSSION

Domain specific groups such as FF-ICE Ad-Hoc Group to only focus on defining business rules

2.1 The current approach requires information domain experts to specify MEPs for each service. However, most information domain experts do not have sufficient technical expertise in available protocols to select MEPs that are appropriate for their business use cases.

2.2 Furthermore, domain experts and technical implementers may have different interpretations of MEPs. Domain experts view MEPs from a business perspective, focusing on the flow of business messages, while technical implementers view them from an implementation perspective, focusing on the underlying protocol behavior. In addition, the guidance material requires domain experts to specify not just the MEP type, but also its subtype where known, such as whether a Request/Reply exchange is Synchronous (Sync R/R) or Asynchronous (Async R/R). Domain experts

may interpret a Sync R/R message exchange as having to wait for a specific business response, like a 'Filing Status' message, before a transaction can be considered complete. On the other hand, technical implementers interpret 'synchronous' as simply requiring a technical acknowledgement, such as an HTTP status code. These differing interpretations of the same MEP type can lead to misaligned implementations that do not meet operational expectations.

2.3 Given these challenges, the FF-ICE Ad-Hoc Group proposes for domain experts to focus on specifying business requirements, while technical experts at SWIM TF determine the MEPs that best facilitate those business requirements. This separation of responsibilities would help ensure that both business and technical requirements of each service are adequately addressed.

Comprehensive operational scenarios to support determination of MEPs at the scenario level

2.4 Currently, the document assigns MEPs at the service level, with each service having a broad 'Brief description of service' to capture business functionality. Information domain experts had to review if the business details and MEPs chosen for each service are appropriate. However, having a singular brief description of the services and a singular MEP assignment is assessed to be insufficient to support the multiple scenarios under most of the FF-ICE services.

2.5 FF-ICE services typically involve multiple different scenarios which might require different MEPs. For instance, the Filing Service may have scenarios including the filing of a new flight plan, updating of an existing flight plan, or cancellation of the flight plan. Each scenario has different operational requirements, business completion criteria, and message exchange sequences. FF-ICE flight plan (eFPL) filing and updating scenarios require two sequential messages after submission of a 'eFPL / Flight Plan Update' message, where a 'Submission Response' is returned followed by a 'Filing Status' message. In contrast, flight cancellation requires only one message where a 'Submission Response' is returned to the message originator after submission of a 'Flight Cancellation' message.

2.6 A single MEP assignment at the service level thus cannot represent this variety of scenarios, as each scenario has its own distinct message exchange sequence and expected behaviors. Consequently, business flows are not adequately specified, and the MEP assigned at the service level do not appropriately reflect the MEP requirements of each individual operational scenario.

2.7 It was therefore proposed and agreed by the FF-ICE Ad-Hoc Group that comprehensive operational scenarios, including operational requirements and business process completion criteria, should be developed and provided as an appendix to the Business Functionality of APAC Common SWIM Information Services document. For each step of the comprehensive operational scenario, technical expertise from SWIM TF would help to recommend the MEP.

Proposed Enhanced Methodology – Scenario-level Analysis for Complex Services

2.8 The FF-ICE Ad-hoc Group proposes a process to break down more complex SWIM Information Services into comprehensive scenarios to clearly separate definition of business requirements from technical implementation.

2.9 **Process to define complex services by domain expert groups:**

- a. **Service-Level Definition** – Domain expert groups continue to provide broad-level information service definitions by populating the existing service definition table in the "Business Functionality for APAC Common SWIM Information Services" document, as per current practice.
- b. **Scenario Identification** – Domain expert groups identify which services are complex that require scenario-level analysis, and then identify all operational scenarios associated with each of those services.

- c. **Scenario-Level Analysis** – Domain expert groups expand on the ‘Brief Description of Service’ column by conducting detailed analysis for each identified scenario and documenting it in appendices, including:
  - i. **Business completion criteria:** Define when actors can consider their business operation complete and proceed with subsequent operations for that specific scenario
  - ii. **Detailed workflow analysis** – Define each message exchange step using the Scenario Steps Table (presented in **APPENDIX A**)

2.10 Based on the business requirements and completion criteria defined by domain expert groups, it is proposed that the SWIM TF takes the responsibility to determine the appropriate MEPs for each step in the Scenario Steps Table.

2.11 **Table 1** below specifies and elaborates the fields in the Scenario Steps Table, as well as indicates who is responsible for completing each field.

<b>Fields</b>	<b>Description</b>	<b>Responsibility</b>
<b>Step</b>	Sequential identifier for each message exchange within the scenario	Domain Expert Group
<b>Message</b>	Specific message type, e.g. FF-ICE message type, with sender and recipient identification (e.g., "eAU sends Filed Flight Plan to eASP", "eASP returns Submission Response to eAU")	Domain Expert Group
<b>Message Requirements</b>	Message requirement classification and prerequisite conditions that must be satisfied prior to message transmission <ul style="list-style-type: none"> <li>• Mandatory - Message must be sent/received in all instances of the scenario without exception</li> <li>• Conditional - Message must be sent/received when specific triggering conditions are met, but is not required when those conditions do not occur</li> </ul>	Domain Expert Group
<b>Business Timeout</b>	Maximum acceptable time duration for message response from an operational perspective. The message originator is expected to contact the recipient if no response is received within the timeout period.	Domain Expert Group
<b>Comments</b>	Additional operational context, processing requirements, or business rule specifications that inform technical implementation	Domain Expert Group
<b>Message Exchange Pattern</b>	A template or pattern that defines sequence and structure of messages exchanged between interacting components to accomplish a single complete information exchange. The Message Exchange Pattern helps the information service provider understand how the information service should behave, and the information service consumer understand how to interact with the information service.	SWIM TF

*Table 1: Scenario Step Table Fields*

2.12 Detailed breakdowns for more complex FF-ICE services (specifically Filing, Flight Data Request, Notification, Planning, and Trial services) have been developed and are provided in

**APPENDIX A** of this paper. It is proposed for the technical experts in SWIM TF to recommend the MEP for each step of the detailed scenarios. A completed copy of Appendix A should then be included into the Business Functionality of APAC Common SWIM Information Services document.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) agree with the proposed enhanced methodology to analyze complex services through detailed scenario breakdowns, including the specification of business completion criteria and the Scenario Steps Table;
- c) undertake the determination of appropriate MEPs for each scenario step based on business requirements defined by domain expert groups;
- d) include an updated copy of Appendix A into the Business Functionality of APAC Common SWIM Information Services document
- e) consider applying this approach to other complex SWIM Information Services that contain multiple operational scenarios with varying business requirements;  
and
- f) discuss any relevant matter as appropriate.

— END —

## APPENDIX A

### Purpose

This appendix provides detailed operational scenarios for FF-ICE Flight Information Services, with the corresponding recommended MEP by the SWIM Task Force. Each FF-ICE service could contain multiple operational scenarios that have varying requirements and business completion criteria. Hence, technical specifications cannot be defined at the FF-ICE service level. They require more granular scenario-based analysis.

### Scope and Application

Five of the six FF-ICE/R1 services are covered. Publication Service is not included as it requires a straightforward Pub/Sub MEP. For each of the 5 FF-ICE/R1 services, the possible operational scenarios were identified. Within each operational scenario, the business completion criteria and a table containing the scenario steps, message exchanges, actors involved, message requirements and business timeouts were detailed. With this information, the SWIM TF recommended the corresponding MEP.

### Role Delineation

- Domain Expert Groups: The FF-ICE Ad-Hoc Group defined the operational scenarios and business completion criteria based on operational requirements
- SWIM Task Force: Determined appropriate technical specifications and Message Exchange Patterns based on the clearly defined business requirements provided

### Business Completion Criteria Definition

- **Business Completion Criteria** — The point at which the relevant actor can consider their operational procedure for the specific flight to be complete and proceed with subsequent flight operations for that specific flight. This is defined by specific message receipts by the relevant actor.
  - *Format: [Actor] receives/sends [Message Type] [with specific status/condition when applicable]*

### Scenario Steps Table

#### Table Column Definitions

- **Step**: Sequential identifier for each message exchange within the scenario
- **Message**: Specific FF-ICE message type with sender and recipient identification (e.g., "eAU sends Filed Flight Plan to eASP", "eASP returns Submission Response to eAU")

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- **Message Requirements:** Message requirement classification and prerequisite conditions that must be satisfied prior to message transmission
  - Mandatory - Message must be sent/received in all instances of the scenario without exception
  - Optional - May or may not be sent/received based on operational requirements, system capabilities, or business decisions
  - Conditional - Message must be sent/received when specific triggering conditions are met, but is not required when those conditions do not occur
- **Business Timeout:** Maximum acceptable time duration for message response from an operational perspective. The message originator is expected to contact the recipient if no response is received within the timeout period
- **Comments:** Additional operational context, processing requirements, or business rule specifications that inform technical implementation
- **Message Exchange Pattern:** A template or pattern that defines sequence and structure of messages exchanged between interacting components to accomplish a single complete information exchange. The Message Exchange Pattern helps the information service provider understand how the information service should behave, and the information service consumer understand how to interact with the information service **[description here to be confirmed by SWIM TF]**.

**FILING SERVICE SCENARIOS**

**Scenario 1: Submission of Filed Flight Plan (eFPL) by eAU**

**Business Completion Criteria:**

- eAU receives Filing Status with ACCEPTABLE or NOT ACCEPTABLE status indication; or
- eAU receives Submission Response with REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	eAU sends Filed Flight Plan (eFPL) to eASP	Mandatory	N/A	Initial flight plan submission	
2	eASP returns Submission Response (SR) to eAU	Mandatory (following reception) eFPL	1 minute following eFPL submission	Message format validation and basic rule compliance check  <b>ACK:</b> Flight plan received and stored on file <b>REJ:</b> Flight plan rejected and not stored on file <b>MAN:</b> Manual intervention required	
3	eASP returns subsequent Submission Response(s) to eAU	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	Additional Submission Responses will be sent after manual processing.  Response can be <ul style="list-style-type: none"> <li>• MAN (manual processing ongoing);</li> <li>• ACK (manual processing resolved and proceed to Filing Status); or</li> <li>• REJ (manual processing failed)</li> </ul>	
4	eASP returns Filing Status (FS) to eAU	Conditional (when SR = ACK)	1 minute following SR "ACK"	Operational evaluation against ATM configuration and applicable restrictions/constraints	

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Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
				<b>ACCEPTABLE:</b> Complies with requirements <b>NOT ACCEPTABLE:</b> Does not comply with requirements <b>PENDING:</b> Not yet evaluated	
5	eASP returns Filing Status(es) to eAU	Conditional (when previous FS = PENDING or triggered by re-evaluation process)	Variable	Additional Filing Status messages sent when: 1) Initial status was PENDING and eASP subsequently completed flight plan evaluation, or 2) Re-evaluation of eFPL detects changes in ATM restrictions/constraints affecting flight plan acceptability	

**Scenario 2: Submission of Flight Plan Update (FPU) by eAU**

**Business Completion Criteria:**

- eAU receives Filing Status with ACCEPTABLE or NOT ACCEPTABLE status indication; or
- eAU receives Submission Response with REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	eAU sends Flight Plan Update (FPU)	Mandatory	N/A	Modification to existing flight plan data via update message	
2	eASP returns Submission Response (SR) to eAU	Mandatory (following reception) FPU	1 minute following FPU submission	Message format validation and basic rule compliance check  <b>ACK:</b> Update processed successfully, flight plan modified	

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Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
				<b>REJ:</b> Update failed, flight plan unchanged <b>MAN:</b> Manual intervention required	
3	eASP returns subsequent Submission Response(s) to eAU	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	Additional Submission Responses will be sent after manual processing.  Response can be <ul style="list-style-type: none"> <li>• MAN (manual processing ongoing):</li> <li>• ACK (manual processing resolved and proceed to Filing Status); or</li> <li>• REJ (manual processing failed)</li> </ul>	
4	eASP returns Filing Status (FS) to eAU	Conditional (when SR = ACK)	1 minute following SR "ACK"	Operational evaluation against ATM configuration and applicable restrictions/constraints  <b>ACCEPTABLE:</b> Complies with requirements <b>NOT ACCEPTABLE:</b> Does not comply with requirements <b>PENDING:</b> Not yet evaluated	
5	eASP returns Filing Status(es) to eAU	Conditional (when previous FS = PENDING or triggered by re-evaluation process)	Variable	Additional Filing Status messages sent when: 1) Initial status was PENDING and eASP subsequently completed flight plan evaluation, or 2) Re-evaluation of FPU detects changes in ATM restrictions/constraints affecting flight plan acceptability	

**Scenario 3: Submission of Flight Cancellation (FC) by eAU**

**Business Completion Criteria:**

- eAU receives Submission Response with ACK or REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	eAU sends Flight Cancellation (FC) to eASP	Mandatory	N/A	Termination of flight plan and associated GUFi operational use	
2	eASP returns Submission Response (SR) to eAU	Mandatory (following Flight Cancellation message reception)	1 minute following FC submission	Message format validation and basic rule compliance check  <b>ACK:</b> Cancellation processed successfully, flight plan cancelled <b>REJ:</b> Cancellation failed, flight plan remains active <b>MAN:</b> Manual intervention required, flight plan remains active	
3	eASP returns subsequent Submission Response(s) to eAU	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	Additional Submission Responses will be sent after manual processing.  Response can be <ul style="list-style-type: none"> <li>• MAN (manual processing ongoing);</li> <li>• ACK (manual processing resolved, cancellation successful);</li> </ul> or <ul style="list-style-type: none"> <li>• REJ (manual processing and cancellation failed)</li> </ul>	

**PLANNING SERVICE SCENARIOS**

**Scenario 1: Submission of Preliminary Flight Plan (PFP) by eAU**

**Business Completion Criteria:**

- eAU receives Planning Status with CONCUR, NEGOTIATE, OR NON-CONCUR status indication; or
- eAU receives Submission Response with REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	eAU sends Preliminary Flight Plan (PFP) to eASP	Mandatory	N/A	Initial preliminary flight plan submission for collaborative decision making	
2	eASP returns Submission Response (SR) to eAU	Mandatory (following reception) PFP	1 minute following PFP submission	<p>Message format validation and basic rule compliance check</p> <p><b>ACK:</b> Preliminary Flight plan received and stored on file</p> <p><b>REJ:</b> Preliminary Flight plan rejected and not stored on file</p> <p><b>MAN:</b> Manual intervention required</p>	
3	eASP returns subsequent Submission Response(s) to eAU	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	<p>Additional Submission Responses will be sent after manual processing.</p> <p>Response can be</p> <ul style="list-style-type: none"> <li>• MAN (manual processing ongoing);</li> <li>• ACK (manual processing resolved and proceed to Planning Status); or</li> <li>• REJ (manual processing failed)</li> </ul>	
4	eASP returns Planning Status (PS) to eAU	Conditional (when SR = ACK)	1 minute following SR "ACK" if re-	Planning evaluation against ATM configuration and applicable restrictions/constraints.	

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Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
			evaluation process is provided	<b>CONCUR:</b> Complies with requirements <b>NEGOTIATE:</b> Would be accepted if filed, but eASP proposes modifications/constraints or identifies differences from desired route/trajectory <b>NON-CONCUR:</b> Does not comply with requirements	
5	eASP returns Planning Status(es) to eAU	Conditional (when re-evaluation process detects changes)	Variable	Additional Planning Status messages sent when re-evaluation detects changes in ATM restrictions/constraints affecting preliminary flight plan acceptability	

**Scenario 2: Submission of Flight Plan Update (FPU) by eAU**

**Business Completion Criteria:**

- eAU receives Planning Status with CONCUR, NEGOTIATE, OR NON-CONCUR status indication; or
- eAU receives Submission Response with REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	eAU sends Flight Plan Update (FPU) for PFP to eASP	Mandatory	N/A	Modification to existing preliminary flight plan data via update message	
2	eASP returns Submission Response (SR) to eAU	Mandatory (following reception) FPU	1 minute following FPU submission	Message format validation and basic rule compliance check  <b>ACK:</b> Update processed successfully, preliminary flight plan modified	

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Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
				<b>REJ:</b> Update failed, preliminary flight plan unchanged <b>MAN:</b> Manual intervention required	
3	eASP returns subsequent Submission Response(s) to eAU	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	Additional Submission Responses will be sent after manual processing.  Response can be <ul style="list-style-type: none"> <li>• MAN (manual processing ongoing);</li> <li>• ACK (manual processing resolved and proceed to Planning Status); or</li> <li>• REJ (manual processing failed)</li> </ul>	
4	eASP returns Planning Status (PS) to eAU	Conditional (when SR = ACK)	1 minute following SR "ACK"	Planning evaluation against ATM configuration and applicable restrictions/constraints.  <b>CONCUR:</b> Complies with requirements <b>NEGOTIATE:</b> Would be accepted if filed, but eASP proposes modifications/constraints or identifies differences from desired route/trajectory <b>NON-CONCUR:</b> Does not comply with requirements	
5	eASP returns Planning Status(es) to eAU	Conditional (when re-evaluation process detects changes)	Variable	Additional Planning Status messages sent when re-evaluation detects changes in ATM restrictions/constraints affecting preliminary flight plan acceptability	

**Scenario 3: Submission of Flight Cancellation (FC) by eAU**

**Business Completion Criteria:**

- eAU receives Submission Response with ACK or REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	eAU sends Flight Cancellation (FC) to eASP	Mandatory	N/A	Termination of preliminary flight plan and associated GUFU operational use	
2	eASP returns Submission Response (SR) to eAU	Mandatory (following Flight Cancellation message reception)	1 minute following FC submission	<p>Message format validation and basic rule compliance check</p> <p><b>ACK:</b> Cancellation processed successfully, preliminary flight plan cancelled</p> <p><b>REJ:</b> Cancellation failed, preliminary flight plan remains active</p> <p><b>MAN:</b> Manual intervention required, preliminary flight plan remains active</p>	
3	eASP returns subsequent Submission Response(s) to eAU	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	<p>Additional Submission Responses will be sent after manual processing.</p> <p>Response can be</p> <ul style="list-style-type: none"> <li>• MAN (manual processing ongoing);</li> <li>• ACK (manual processing resolved, cancellation successful);</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• REJ (manual processing and cancellation failed)</li> </ul>	

**NOTIFICATION SERVICE SCENARIOS**

**Scenario 1: Dissemination of Flight Departure (FD) Notification by Departure eASP**

**Business Completion Criteria:**

- Departure eASPs receives Submission Response with ACK or REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	Departure eASP sends Flight Departure (FD) to relevant eASP(s)	Mandatory	N/A	Notification of actual departure event (equivalent to DEP message)	
2	Receiving eASP returns Submission Response (SR) to departure eASP	Mandatory (following departure message reception)	1 minute following dissemination of FD	Message format validation and basic rule compliance check  <b>ACK:</b> Departure notification successful <b>REJ:</b> Departure notification failed <b>MAN:</b> Manual intervention required	
3	Receiving eASP returns subsequent Submission Response(s) to departure eASP	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	Additional Submission Responses will be sent after manual processing.  Response can be <ul style="list-style-type: none"> <li>• MAN (manual processing ongoing);</li> <li>• ACK (departure notification successful); or</li> <li>• REJ (departure notification failed)</li> </ul>	

**Scenario 2: Dissemination of Flight Arrival (FA) Notification by Arrival eASP**

**Business Completion Criteria:**

- Arrival eASPs receives Submission Response with ACK or REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	Arrival eASP sends Flight Arrival (FA) to relevant eASP(s)	Mandatory	N/A	Notification of actual arrival event (equivalent to ARR message)	
2	Receiving eASP returns Submission Response (SR) to arrival eASP	Mandatory (following arrival message reception)	1 minute following dissemination of FA	Message format validation and basic rule compliance check  <b>ACK:</b> Arrival notification successful <b>REJ:</b> Arrival notification failed <b>MAN:</b> Manual intervention required	
3	Receiving eASP returns subsequent Submission Response(s) to arrival eASP	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	Additional Submission Responses will be sent after manual processing.  Response can be <ul style="list-style-type: none"> <li>• MAN (manual processing ongoing);</li> <li>• ACK (arrival notification successful); or</li> <li>• REJ (arrival notification failed)</li> </ul>	

**TRIAL SERVICE SCENARIOS**

**Scenario 1: Submission of Trial Request (TRQ) by eAU**

**Business Completion Criteria:**

- eAU receives Trial Response with CONCUR, NEGOTIATE, or NON-CONCUR; or
- eAU receives Submission Response with REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	eAU sends Trial Request(s) (TRQ) to eASP	Mandatory	N/A	Multiple independent requests can be sent simultaneously without waiting for responses.  These "what-if" requests allow evaluation of flight plan alternatives without creating new flight plans or modifying existing flight plans.  eASPs may limit number/frequency of requests.	
2	eASP returns Submission Response (SR) to eAU	Mandatory (following each trial request reception)	1 minute following TRQ submission	Message format validation and basic rule compliance check  <b>ACK:</b> Trial request processed and will be evaluated <b>REJ:</b> Trial request rejected <b>MAN:</b> Manual intervention required	
3	eASP returns subsequent Submission Response(s) to eAU	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	Additional Submission Responses will be sent after manual intervention.  Response can be	

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Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
				<ul style="list-style-type: none"> <li>• MAN (manual processing ongoing);</li> <li>• ACK (manual processing resolved and proceed to Trial Response); or</li> <li>• REJ (manual processing failed)</li> </ul>	
4	eASP returns Trial Response (TRP) to eAU	Conditional (when SR = ACK)	1 minute following SR "ACK"	<p>Evaluation against ATM configuration and applicable restrictions/constraints.</p> <p>.</p> <p><b>CONCUR:</b> Complies with requirements</p> <p><b>NEGOTIATE:</b> Would be accepted if submitted as eFPL or PFPs, but eASP proposes modifications/constraints or identifies differences from desired route/trajectory</p> <p><b>NON-CONCUR:</b> Does not comply with requirements</p>	

**FLIGHT DATA REQUEST SERVICE SCENARIOS**

**Scenario 1: Submission of Flight Data Request (FDRQ) by eAU/eASP**

**Business Completion Criteria:**

- Requestor (eAU/eASP) receives Flight Data Response; or
- Requestor (eAU/eASP) receives Submission Response with REJ status indication

Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
1	eAU or eASP sends Flight Data Request (FDRQ) to eASP or eAU	Mandatory	N/A	Request for flight plan data, supplementary data, or flight status. Additional flight information may be provided, subjected to eAUs/eASPs implementation	
2	Receiving party returns Submission Response (SR) to message originator	Mandatory (following each flight data request reception)	1 minute from submission of FDRQ	Message format validation and basic rule compliance check  <b>ACK:</b> Flight data request processed and flight information will be provided <b>REJ:</b> Flight data request rejected (invalid format, unauthorized access, or data not found etc.) <b>MAN:</b> Manual intervention required	
3	Receiving party returns subsequent Submission Response(s)	Conditional (only when previous SR = MAN)	Variable (dependent on manual processing duration)	Additional Submission Responses will be sent after manual intervention.  Response can be <ul style="list-style-type: none"> <li>• MAN (manual processing ongoing);</li> <li>• ACK (manual processing resolved and proceed to Flight Data Response); or</li> </ul>	

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Step	Message	Message Requirements	Business Timeout	Comments	Message Exchange Pattern
				<ul style="list-style-type: none"> <li>• REJ (manual processing failed)</li> </ul>	
4	Receiving party returns Flight Data Response (FDRP)	Conditional (when SR = ACK)	1 minute following SR "ACK"	Requested flight information provided.  No response expected from recipient of Flight Data Response	