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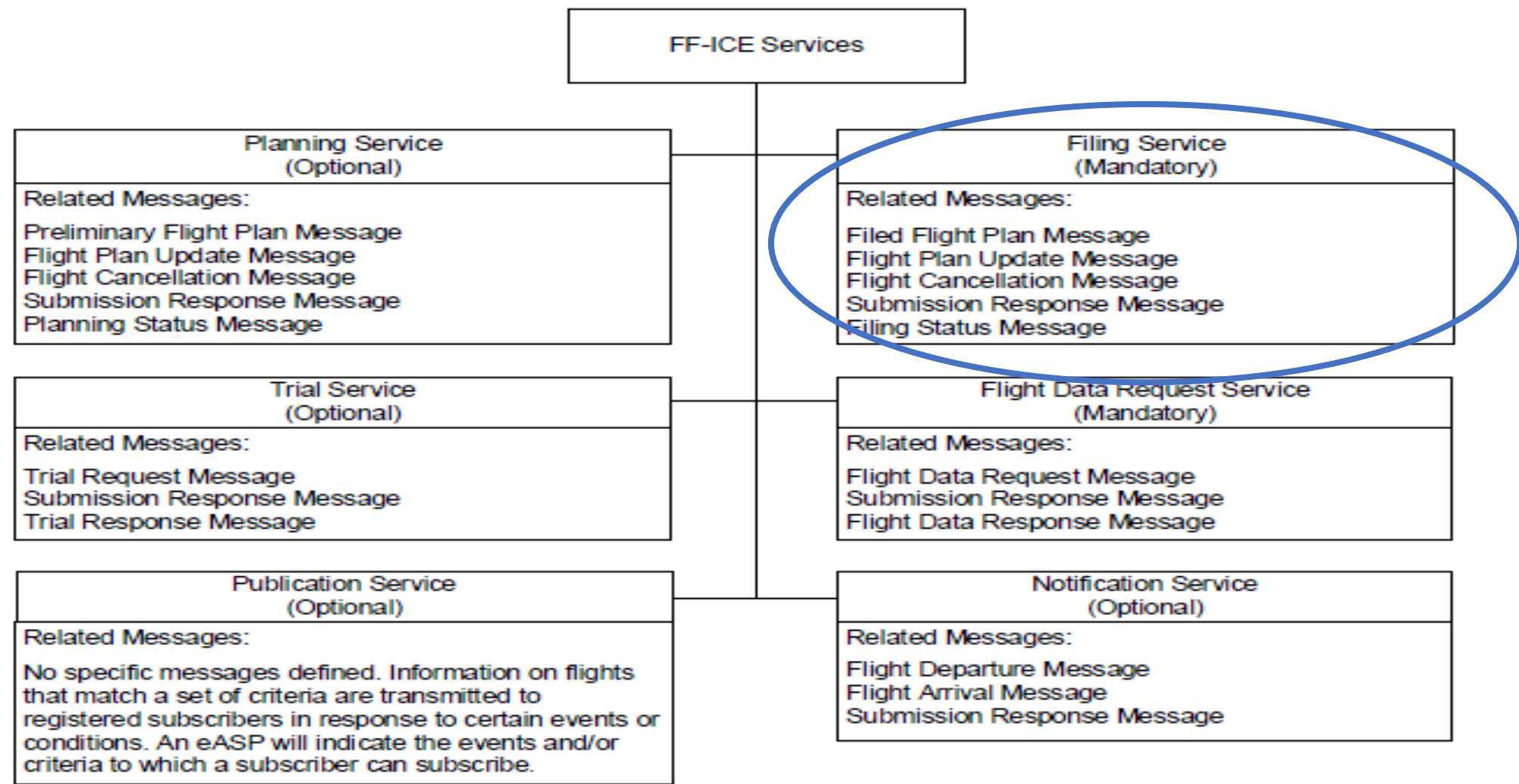
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Federal Aviation Administration
(United States)

Presented on: 18 June 2024

Flight and Flow Information for a Collaborative Environment (FF-ICE) Services

1. FF-ICE Filing Service (Mandatory)



1. FF-ICE Filing Service (Mandatory) – Overview

- Filed Flight Plan using an FF-ICE (FIXM) format in lieu of the teletype-format FPL (FPL2012).
- FF-ICE eASP's automation provides feedback to the operator regarding whether the flight plan was successfully processed, and whether it is acceptable to the eASP.
- The operator (or its designated representative), is required to generate a FF-ICE flight plan with a Globally Unique Flight Identifier (GUFI).
- Version: an increment to the version whenever an update to the flight plan data
- Reference: a submission response should reference the flight plan version

1. FF-ICE Filing Service (Mandatory) – Messages (1)

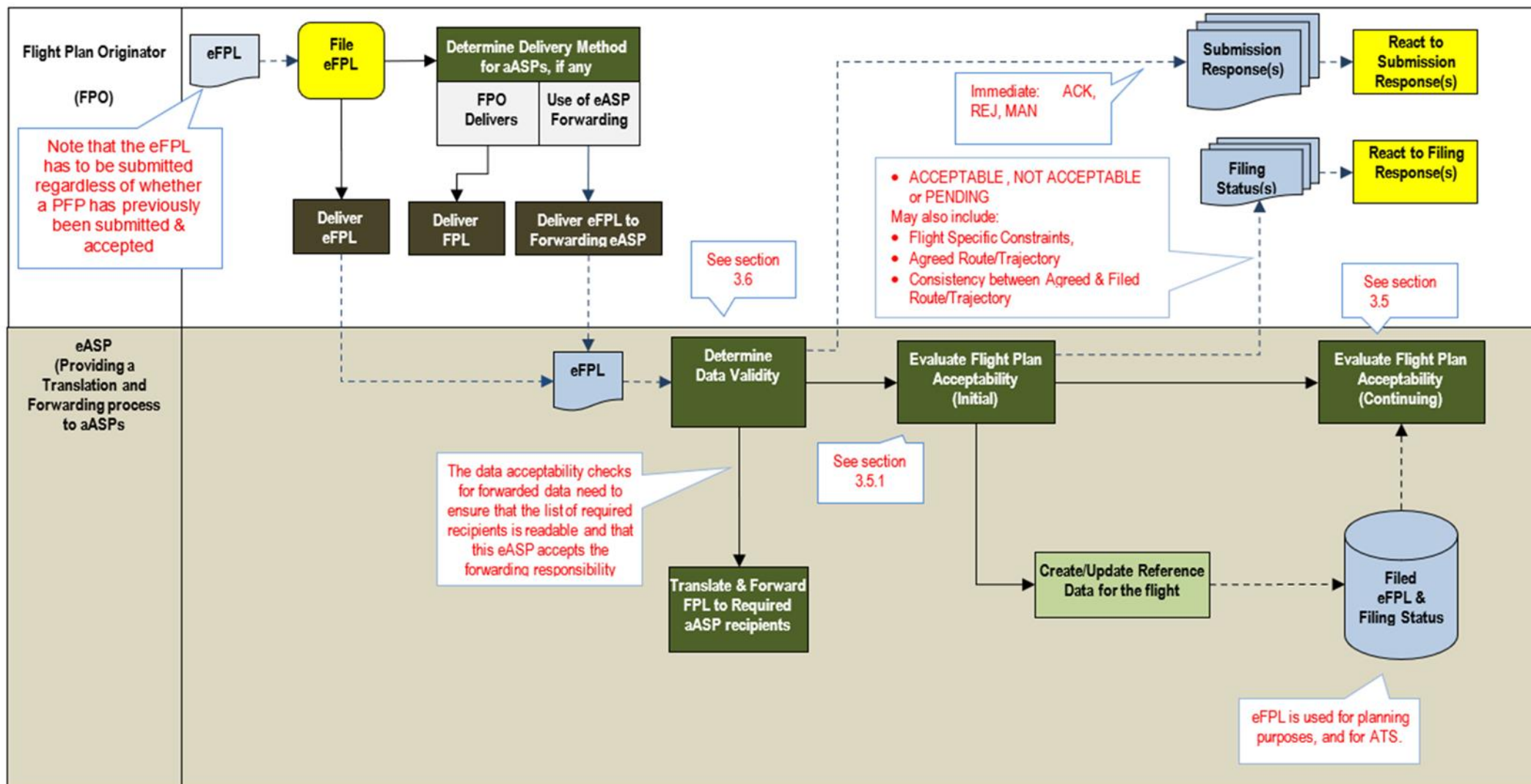
- Filed Flight Plan – In a mixed mode environment a Filed Flight Plan must be provided to ATC functions, both FF-ICE capable (eASPs) as an eFPL, and non-FF-ICE capable (aASPs) as an FPL.
- Flight Plan Update – To make changes to a flight plan, a Flight Plan Update with a GUFI may be used to update either a Preliminary Flight Plan or a Filed Flight Plan*. The eASPs then conduct an evaluation of the update and provide submission response. An eASP(s) that is no longer relevant to a flight as a result of a route update should be informed of the change of route via a Flight Update Message.
- Flight Cancellation – A Flight Cancellation should be submitted using the same procedure as that used to submit the flight plan. Flight Cancellation should be provided to all eASPs having received either the Preliminary or Filed flight plan.
- Submission Response:
 - ACK: eASP received and accepted the flight plan
 - REJ: eASP received and rejected the flight plan

* Should not be use to update GUFI or Aircraft ID

1. FF-ICE Filing Service (Mandatory) – Messages (2)

- Filing Status:
 - Acceptable – eASP systems may return with Restriction/Constraints and/or Agreed Route/Trajectory and the impact is the flight plan will be cleared; possibly with ATC changes as indicated in the response
 - Not Acceptable – The Route/Trajectory does not comply with the operating system. The eASP system returns Restriction/Constraint, it may also include either the Agreed or a Negotiating Route/Trajectory. The eAU is expected to make changes and resubmit a Flight Plan Update.
 - Pending – No evaluation performed, and no Operator action is needed.

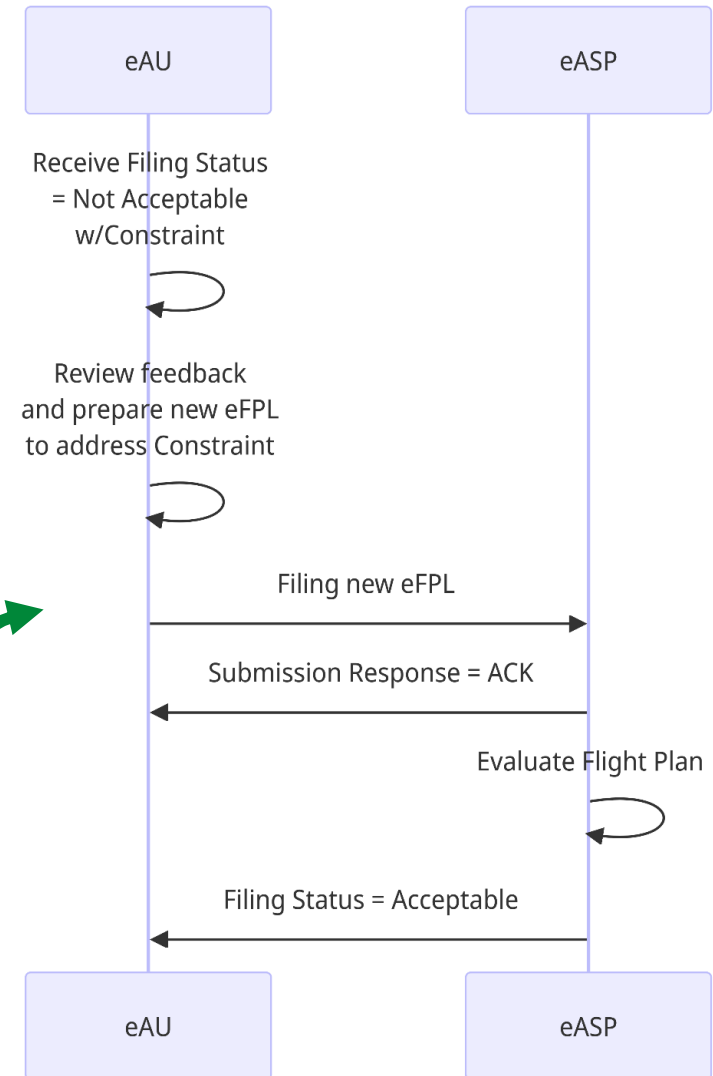
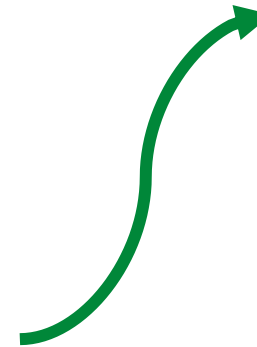
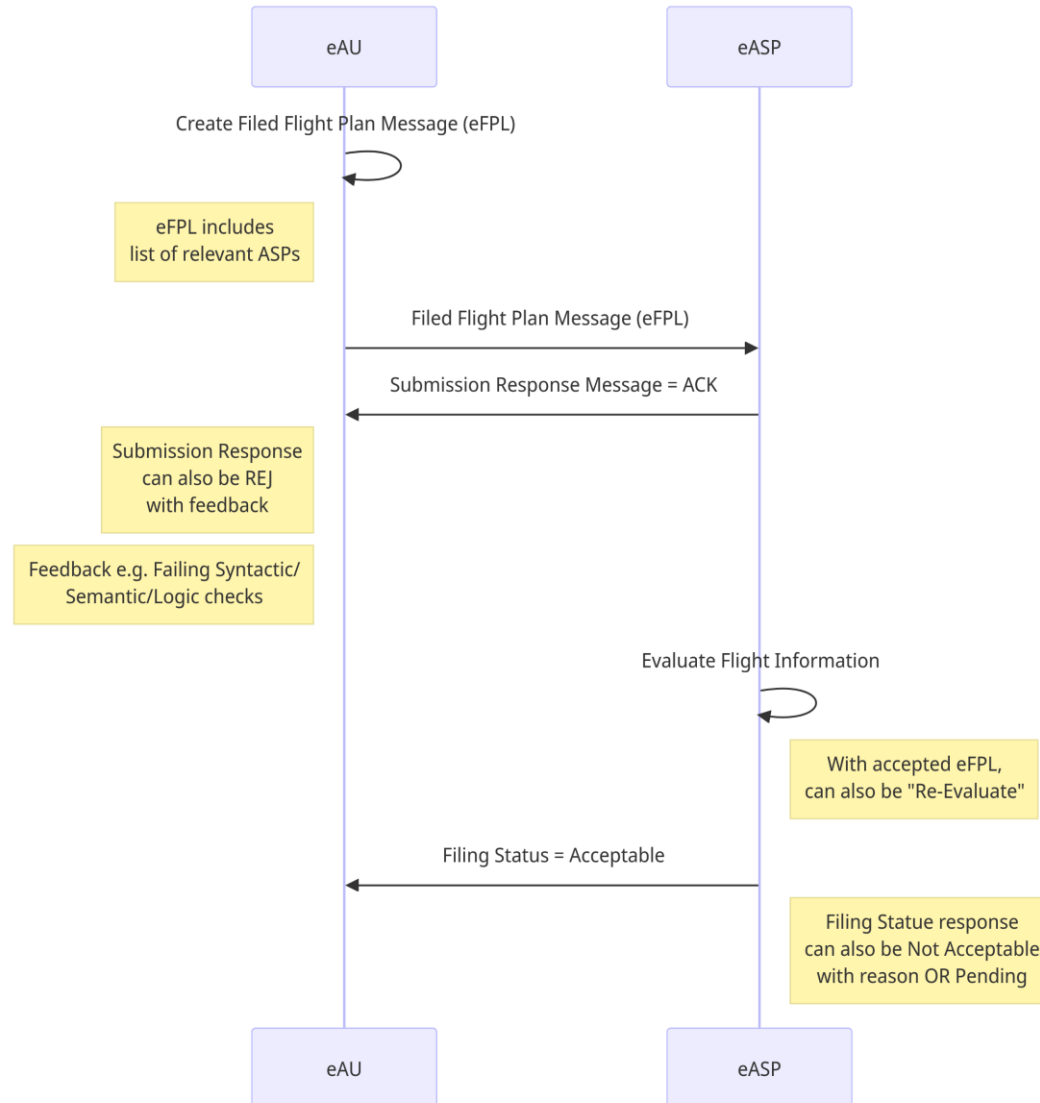
1. FF-ICE Filing Service (Mandatory) – Workflow



1. FF-ICE Filing – Pulling it together (**Nominal Scenario**)

1. Filing an eFPL, the operator should ensure that the list of addressees includes all relevant addressees; i.e. in addition to the relevant eASPs who may or may not have been provided with a **Preliminary Flight Plan** it should also include any ASPs that need to receive the FPL format.
2. An eASP, having received a **Filed Flight Plan** (eFPL), is expected to evaluate it provide the appropriate feedback as **Submission Response** and **Filing Status**. An eASP that provides a re-evaluation process should continue the provision of **Filing Status** feedback, as appropriate.
 - a) **Submission Response** – (a) ACK and Filing Status or (b) REJ
 - i. **Filing Status Response** – Acceptable, Not Acceptable and Pending
 - b) With **Re-evaluation Process** – eASP response immediately and update based on future changes
3. An eAU, having received the feedback in the form of the **Submission Response** or **Filing Status** is expected to react to the information provided as necessary by updating the **Filed Flight Plan** to address identified restrictions/constraints.

1. FF-ICE Filing Service (Mandatory) – Scenario Flow



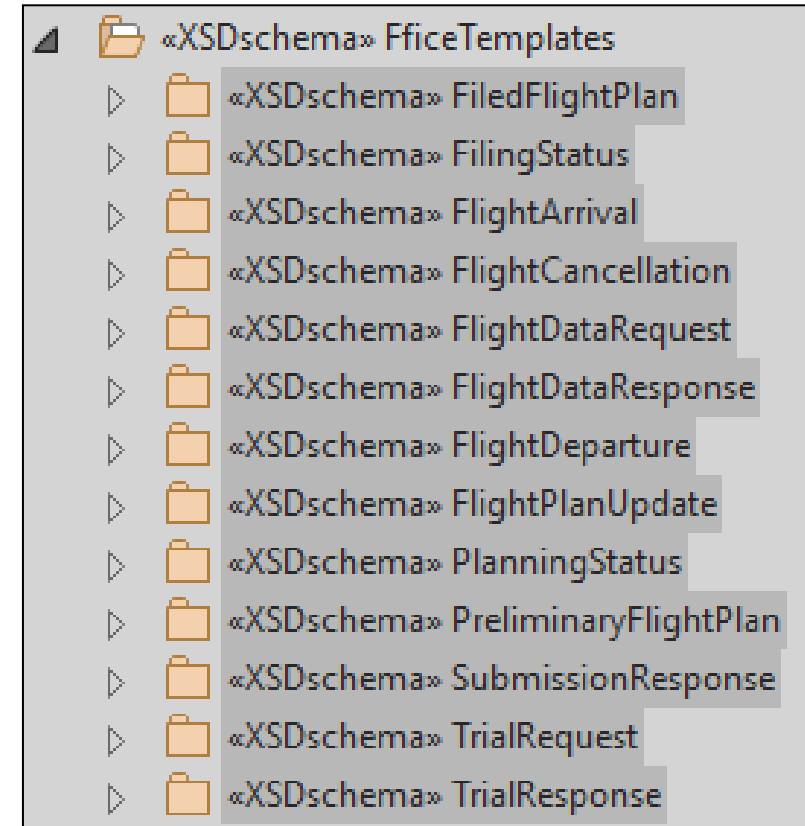


1. FF-ICE Filing Service (Mandatory) – Summary

Processing Result	Filing Status	eASP Feedback	Trajectory Purpose	eAU Response
Compliant - may or may not have included changes to the ATM configuration inc. applicable restrictions/constraints	Acceptable	None	Not provided- not imperative to return a R/T.	No action required.
		Agreed R/T	Synch- The R/T on record showing applicable constraints and details of eASP predictions. Route is consistent with eAU submitted route but R/T details may differ.	No action is required from the operator. However, it is always recommended that the eAU takes note of the R/T on record with the eASP together with its restrictions & constraints, re-computes and updates its Desired R/T accordingly.
		Agreed R/T	ATC Change- The R/T on record that is modified from eAU submitted R/T to comply with all restrictions/constraints. It contains required elements (e.g. required reroute; controlled departure time; required altitude).	Action required. The operator needs to be aware of the changes and make the necessary adjustments to the operational flight plan. In addition, the eFPL should also be updated to ensure that all relevant eASPs are aware of the R/T and to ensure that the latest operator version number reflects the correct information, consistent with the operational flight plan.
Not Compliant- a restriction/constraint is not complied with or other flight plan data is inconsistent with the submitted R/T: violated business rules e.g. CNS incompatibility	Not Acceptable	None	Not provided- not imperative to return a R/T. The violated restriction/constraint will be indicated in the error message.	Action required. The operator is required to take note of the indicated errors, re-compute its Desired R/T as required and update its flight plan accordingly.
		Agreed R/T	Synch- The R/T on record showing applicable restrictions/constraints, some of which are not met. Route is consistent with eAU submitted route but R/T details may differ.	Action required. The operator is required to take note of the indicated errors, re-compute its Desired R/T and update its flight plan accordingly. In doing so it may consult the R/T on record with the eASP.
None - Processing not yet performed	Pending	None	Not provided	No action required. The message may provide an indication of the time at which the flight plan is expected to be processed by including the Expected Evaluation Time.

EXTRA: FF-ICE Application and Message Templates

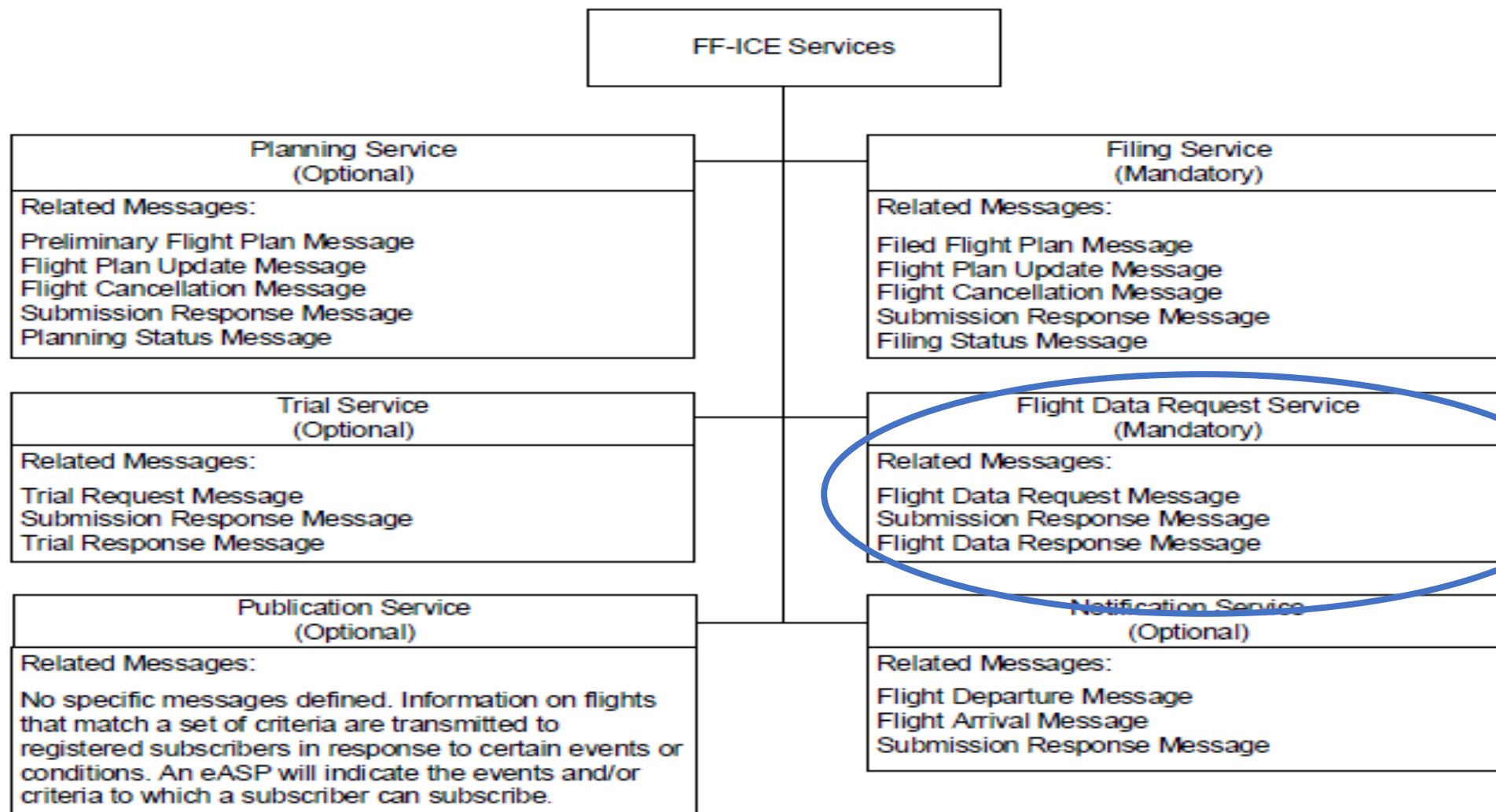
- The FIXM CCB created and maintains the FF-ICE Message Application and its thirteen message templates^[1]
 - Correspond to the thirteen FF-ICE Messages defined in the FF-ICE Implementation Guidance (IG) Manual
 - Each template's content is based on the tables present in Appendix C of FF-ICE IG



[1] <https://docs.fixm.aero/#/fixm-in-support-of-ffice/message-templates>



2. FF-ICE Flight Data Request (Mandatory*)



2. FF-ICE Flight Data Request (Mandatory) – Overview

- To allow stakeholders to obtain information about a flight:
 - AU – obtain the status of Operator's own flight
 - ASP – obtain information about a flight
 - eASP – If information is missing or uncertain, use the service to obtain flight plan from stakeholders (AU or ASP)
- Minimum set for implementation:

Type of Information Requested	Information Provided
Flight Plan	A copy of the flight plan, analogous to the use of the RQP ATS message.
Supplementary Plan	A copy of the supplementary data filed for the flight, equivalent to use of the RQS ATS message.
Flight Status	A copy of the latest Planning or Filing status for the flight.

- A request for flight plan data should always refer to a Filed Flight Plan.
 - A Preliminary Flight Plan should not be returned in response to a flight plan request.



2. FF-ICE Flight Data Request (Mandatory) - Messages

- Flight Data Request – To request information about a flight (Filed Flight Plan), the use of a GUF1 along with other data fields can be found in Appendix C-10 of the Implementation Guidance (Doc 9965 Vol II). This request should balance with the network/system load.
- Submission Response – with explanation
 - REJ: (1) incorrect format, (2) missing information, (3) mismatched of information, (4) non-authorization*, (5) not supported.
- Flight Data Response – Contain the same information as Flight Data Request with the addition of requested information. The specific data fields of this message can be found in Appendix C-11 of the Implementation Guidance (Doc 9965 Vol II).
 - No response is expected from the recipient of the Flight Data Response

*NOTE: If the source of the request has no authorized access to the identified flight, a Submission Response of REJ should be returned with an explanation that the recipient does not have the requested information.

2. FF-ICE Flight Data Request (Mandatory) – Data*

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Flight Data Request Message

Data Category	Data Item	Requirement	Guidance
Message Information	Recipient	Mandatory**	Identify the recipient of the request. This should be the entity most likely to have the flight information being sought.
	Message Originator	Mandatory**	Identify who sent the message.
	Message Date-Time	Mandatory**	Time that the message was sent.
	Message Identifier	Mandatory**	Unique message identifier.
	Type of Request/Response	Mandatory**	Should indicate that this is a Flight Data Request
	AFTN Address	Optional	AFTN address of the sender as an alternate means of contact.
Flight Identification	Contact Information	Optional	Phone, email or other appropriate contact information for the sender.
	GUF	Optional	Provided when known. For a query of flight status, this should always be provided.
	Aircraft Identification	Mandatory	Always provide Aircraft Identification.

* Based on information from Doc 9965 Vol II Appendix C v.0994

** Can be implemented by the communication infrastructure



2. FF-ICE Flight Data Request (Mandatory) – **Data*** (cont'd)

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Flight Data Request Message

Data Category	Data Item	Requirement	Guidance
Departure/ Destination Data	Departure Aerodrome	Optional	Provide departure, destination and EOBT when available and a GUFI is not known.
	Destination Aerodrome	Optional	
	Estimated Off-Block Time	Optional	
Requested Flight Data	Information Requested	Mandatory	Indicate what information about the flight is being requested Use FlightPlan to request the latest submitted flight plan from the user; SupplementaryFlightPlan to request the latest submitted search and rescue information; or FlightStatus to request the latest status (Planning or Filing) from an eASP. Any other codes allowed are to be established and published.

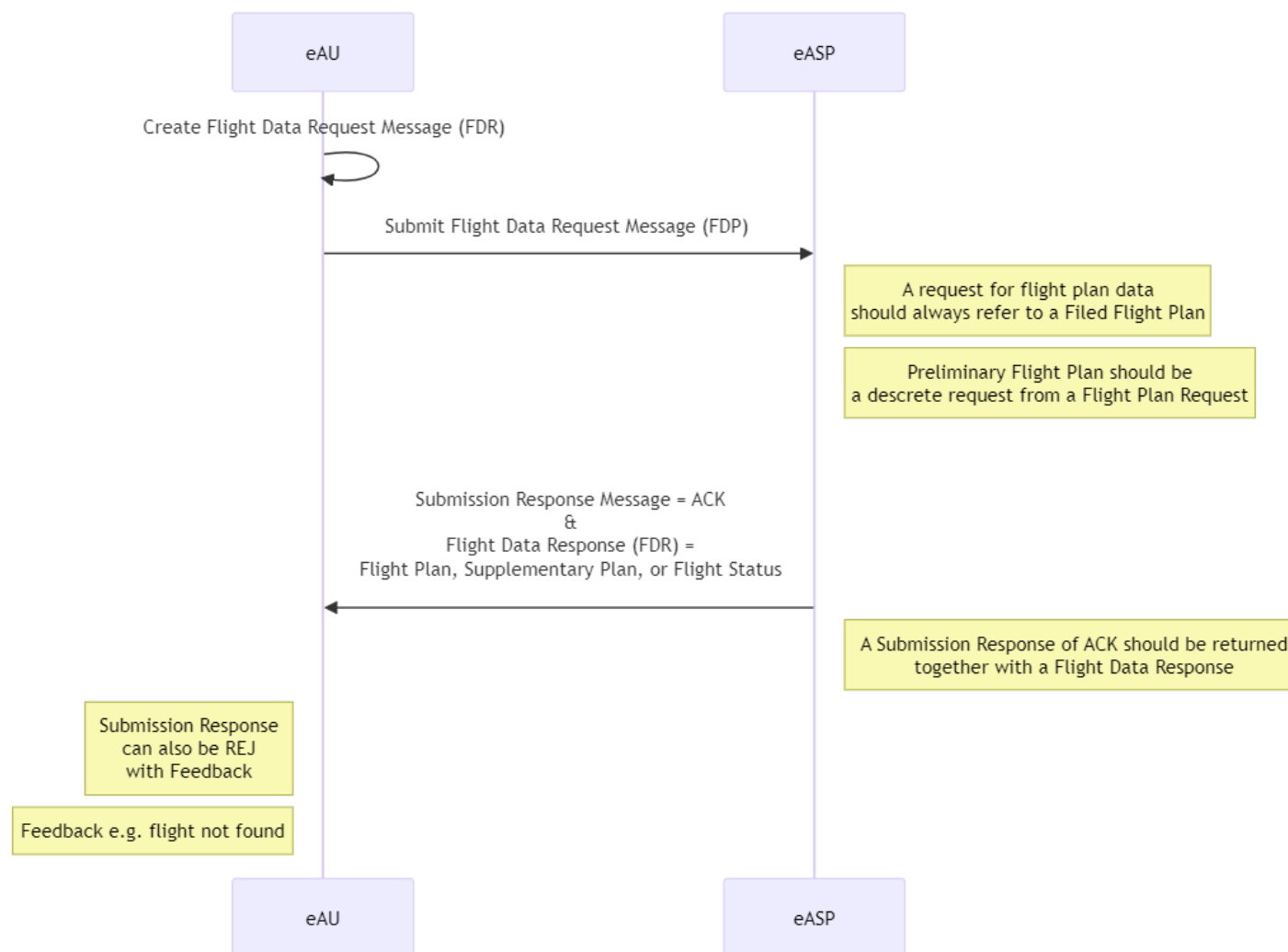
- Flight Data Response Message has the same data fields with the requested flight data provided

*Based on information from Doc 9965 Vol II Appendix C v.0994

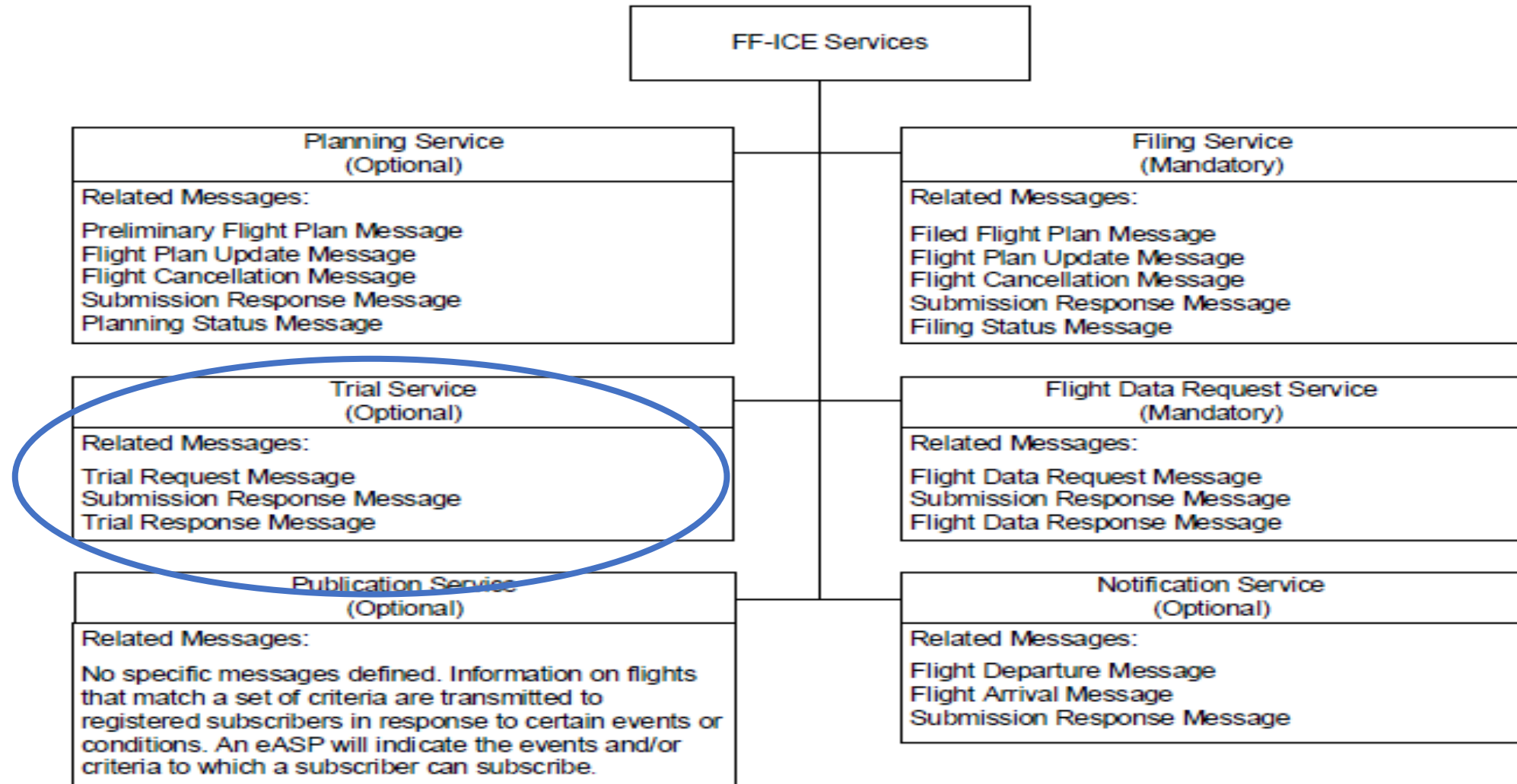
2. FF-ICE Flight Data Request (Nominal Scenario)

1. An operator needs information on a specific flight
2. The operator create and submits a FF-ICE ***Flight Data Request***, providing the flight identification and other mandatory information along with the requested information.
 - a) If the operator is requesting flight plan data, it should refer to a “Filed Flight Plan (eFPL)” and a GUF1 reference to the eFPL must be provided.
3. The eASP will respond with the ***Submission Response*** if the message pass initial validation.
 - a) Submission Response can also be “REJ” (i.e. rejected) and a feedback will be return with it for clarification.
4. The eASP subsequently response to the request with the ***Flight Data Response*** message containing the information requested e.g. flight plan, supplementary plan, or flight status.

2. FF-ICE Flight Data Request (Mandatory) – Scenario Flow



3. FF-ICE Trial Service (Optional)



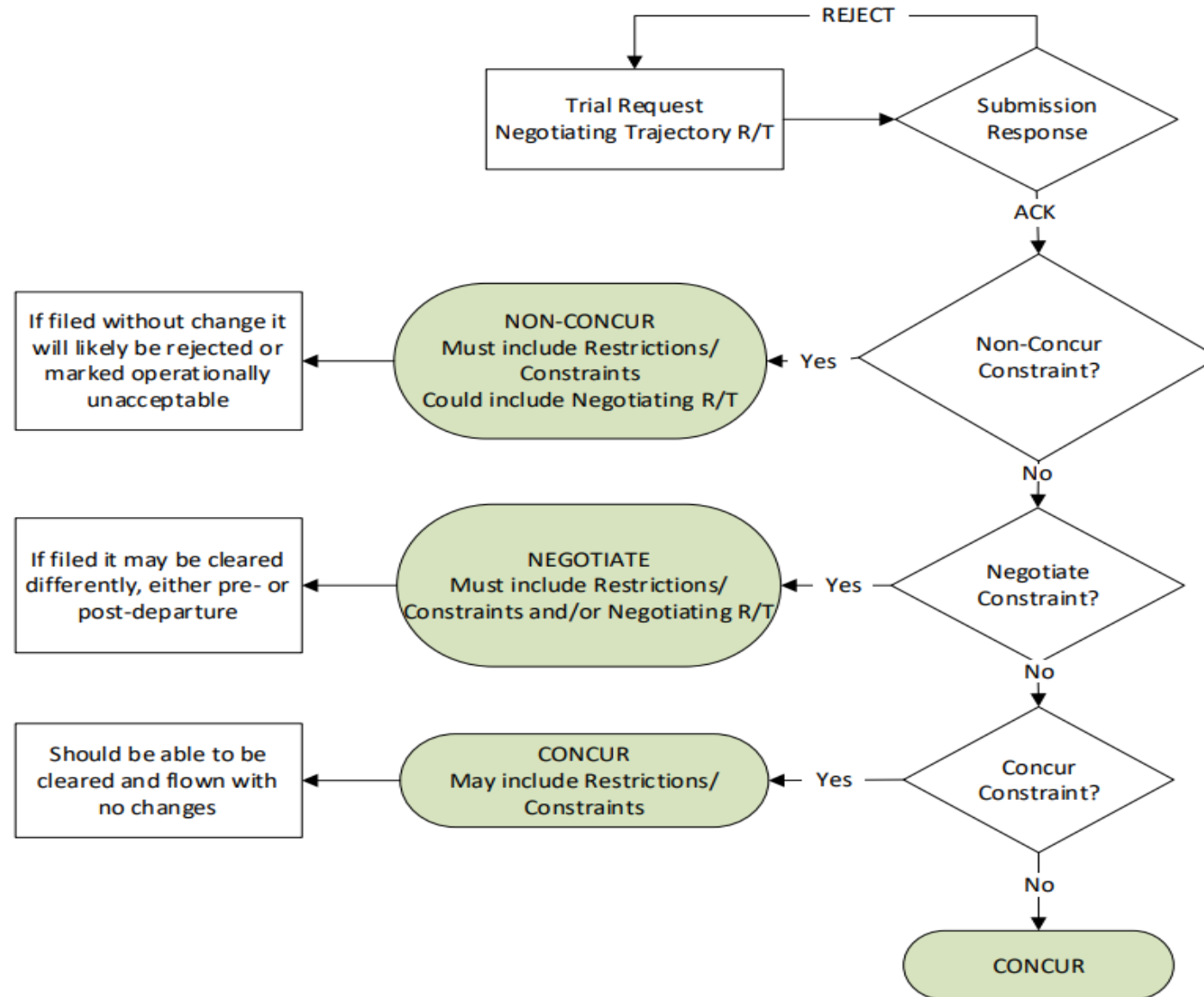
3. FF-ICE Trial Service (Optional) - **Overview**

- Perform by eAUs to evaluate an alternative to an existing flight plan, either Preliminary or Filed.
 - “What-if” type of investigations
- The request is treated by the eASP as a separate, standalone transaction and existing flight plan data will not be modified as a result of a Trial Request.
- Initiated through the submission of a **Trial Request** to the relevant eASP(s).
- Although GUF1 is not required for Trial Request, if a Preliminary or Filed or Flight Plan is already in the system the GUF1 provides correlation to them.

3. FF-ICE Trial Service (Optional) – Messages

- Trial Request:
 - Trial Request message may contain the minimal content as described in AppendixC-6. The R/T provided should be Negotiating R/T
- Submission Response:
 - ACK – eASP received and accepted the Trial Request.
 - REJ – The message failed validation
- Trial Response:
 - Concur – The Route/Trajectory proposed **comply with** the eASP operating system. The response may return with Restriction/Constraints
 - Non-Concur – The Route/Trajectory proposed **does not comply** with the operating system. The eASP system will return Restriction/Constraint, it may also include a Negotiating Route/Trajectory.
 - Negotiate – The Route/Trajectory proposed **maybe comply** with the operating system. The eASP system will return Restriction/Constraint, it may also include a Negotiating Route/Trajectory.

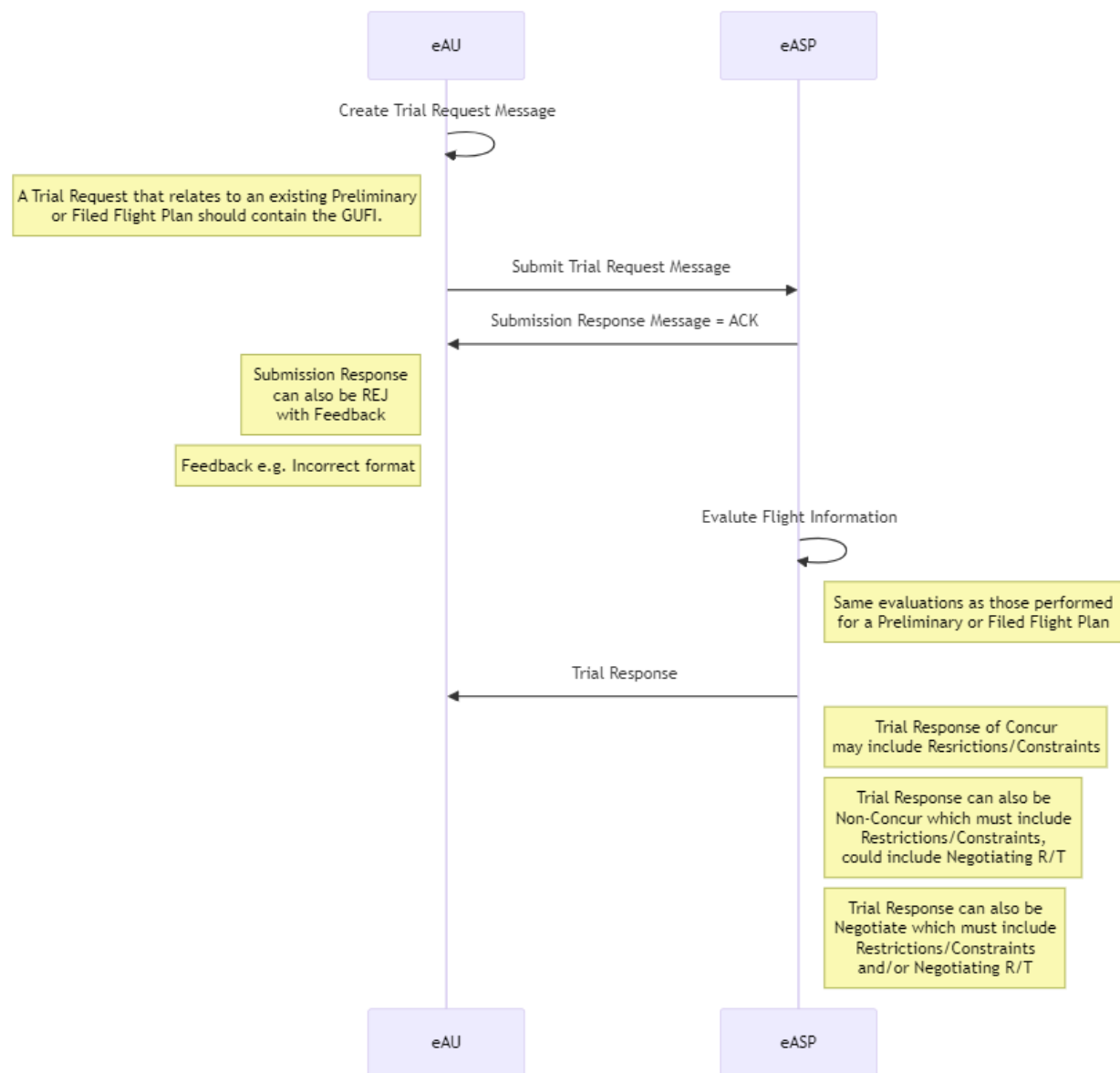
3. FF-ICE Trial Service (Optional) – Workflow



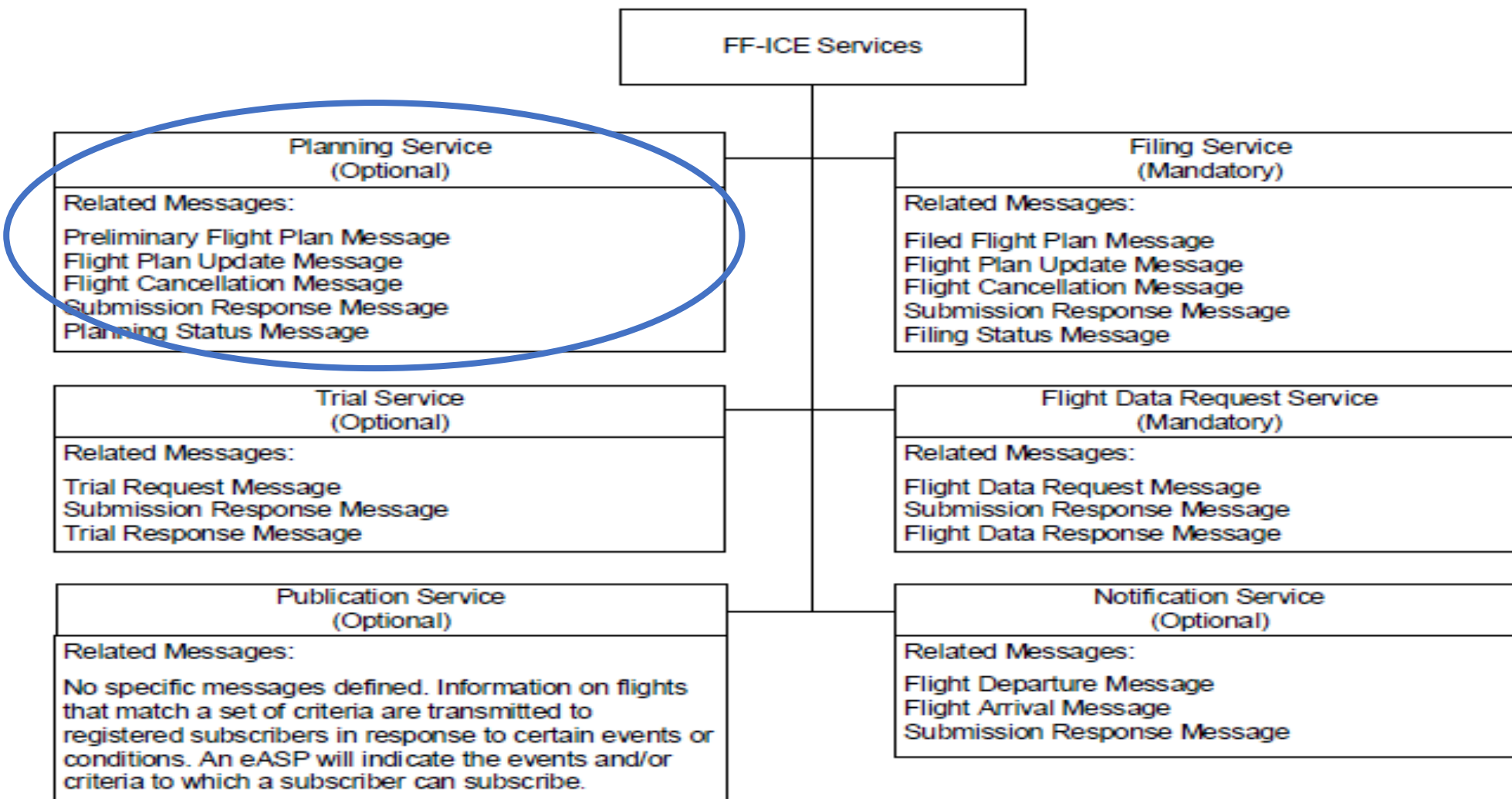
3. FF-ICE Trial Service (Nominal Scenario)

1. The eAU wants to understand if a particular flight route will be accepted by the eASP.
The eAU creates a Trial Request message.
 - a) If this Trial Request relates to an existing Preliminary or Filed Flight Plan, the eAU should provide the GUF1 associated with the flight plan in the Trial Request message
2. The eAU submits the Trial Request via the Trial Service.
3. An eASP, having received the ***Trial Request***, is expected to evaluate it provide the appropriate feedback as ***Submission Response*** and ***Trial Response***.
 - a) ***Submission Response*** – (a) ACK and Trial Response or (b) REJ
 - i. ***Trial Response*** – Concur, Non-Concur, or Negotiate with additional information of Constraint or Restriction or Negotiating R/T
4. An eAU, having received the feedback in the form of the ***Submission Response*** or ***Trial Response*** is expected to react to the information provided as necessary by:
 - a) Take no action and let the ATC tactically adjust, if needed.
 - b) Submit a ***Filed Flight Plan*** (or Preliminary Flight Plan) based on the R/T in the Trial Request
 - c) Submit a ***Filed Flight Plan*** (or Preliminary Flight Plan) while addressing identified restrictions/constraints.

3. FF-ICE Trial Service (Optional) - Scenario Flow



4. FF-ICE Planning Service (Optional)



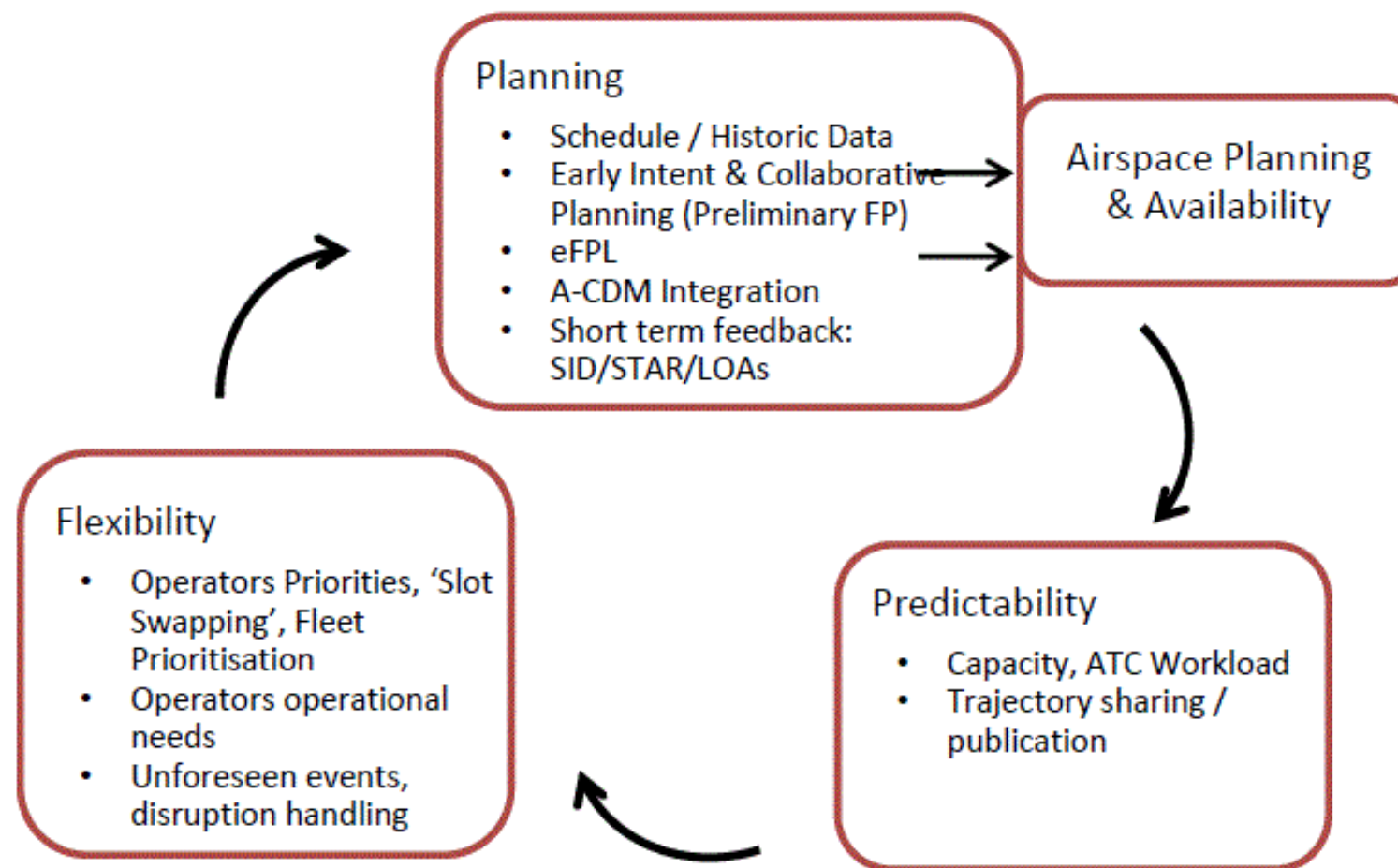


4. FF-ICE Planning Service (Optional) – Overview

- Planning Service is expected or recommended to be provided by an eASP whose airspace is complex and/or regularly constrained e.g. high traffic demand where an ATFM service is already provided, area with frequent military activities, or area with frequent severe weather conditions
- Provides a CDM process between the eAU and eASP(s) concerning intended operation of a flight. Serve 2 main purposes:
 - Assist the eAU in determining the optimal route for a flight
 - Enable eASP(s) to obtain an earlier, more detail and more accurate assessment of the anticipated traffic demand
 - Improvement in predictability will enable eASP the flexibility and ability to facilitate eAU in overcoming short-term difficulties
- Detail provided via the exchange of trajectory information allows the eAU and the eASP to share their expectation in an unambiguous manner
 - eAU provides a “Desired” Trajectory/Route* for planning
- Once a flight plan (eFPL) has been filed for the flight it becomes the reference for all ATM purposes and the Preliminary Flight Plan is no longer relevant.

* Format can be found in Appendix B of the FF-ICE Implementation Guidance

4. FF-ICE Planning Service (Optional) – Planning Process



The eAU generates a GUF1 with the submission of the Preliminary Flight Plan. The same GUF1 should then be used for all communications concerning the same flight.



4. FF-ICE Planning Service (Optional) – Messages (1)

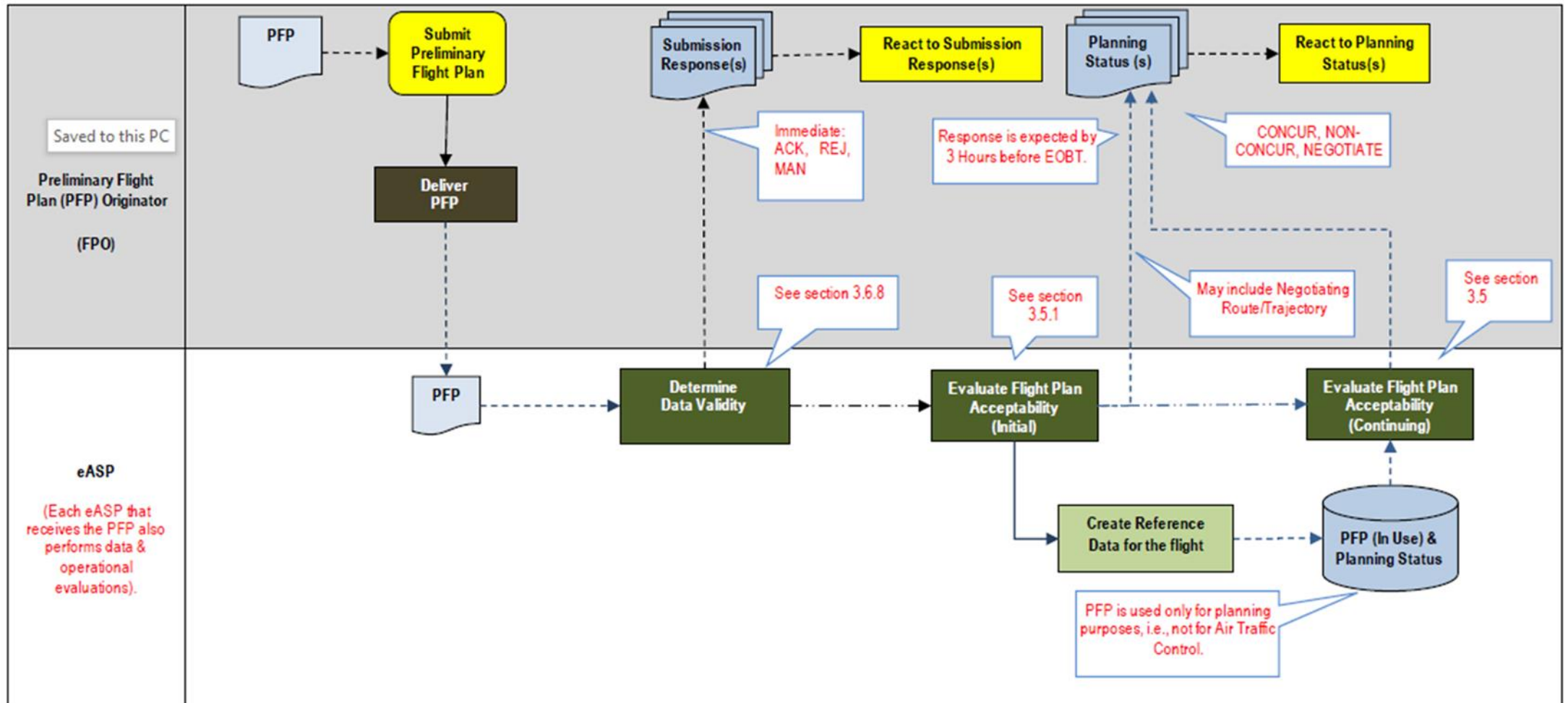
- Preliminary Flight Plan – can only be provided to eASPs that provide a Planning Service and will be of interest only to planning and resource management functions such as ATFM and ASM, not to ATC
 - Not available for non-FF-ICE capable (aASPs)
 - Reduce any surprise when filing Filed Flight Plan
- Flight Plan Update – A Flight Plan Update with a GUF1 may be used to update the Preliminary Flight Plan*. The eASPs should conduct evaluation and provide submission response. An eASP(s) that is no longer relevant to a flight as a result of a route update should be informed of the change of route via a Flight Update Message.
- Flight Cancellation – A Flight Cancellation should be submitted using the same procedure as that used to submit the corresponding flight plan. Flight Cancellation should be provided to all eASPs having received either the Preliminary or Filed flight plan.
- Submission Response:
 - ACK: eASP received and accepted the flight plan
 - REJ: Message is malformed or failed to be properly received

* Should not be use to update GUF1 or Aircraft ID

4. FF-ICE Planning Service (Optional) – **Messages (2)**

- Planning Status:
 - Concur – eASP systems may return with Restriction/Constraints and/or Agreed Route/Trajectory and the impact is the flight plan will be cleared; possibly with ATC changes as indicated in the response
 - Non-Concur – The Route/Trajectory does not comply with the operating system. The eASP system returns Restriction/Constraint, it may also include either the Agreed or a Negotiating Route/Trajectory. The eAU is expected to make changes before filing eFPL or resubmit a Flight Plan Update.
 - Negotiate – The is acceptable and would be accepted if filed. However, the Route/Trajectory determined by eASP have included ATM factors (such as runway-in-use or MET data), resulting in some differences with the Desired Route/Trajectory. The eASP system returns Restriction/Constraint and/or a Negotiating Route/Trajectory. If filed without change, the flight may be cleared differently.

4. FF-ICE Planning Service (Optional) – Procedure Workflow



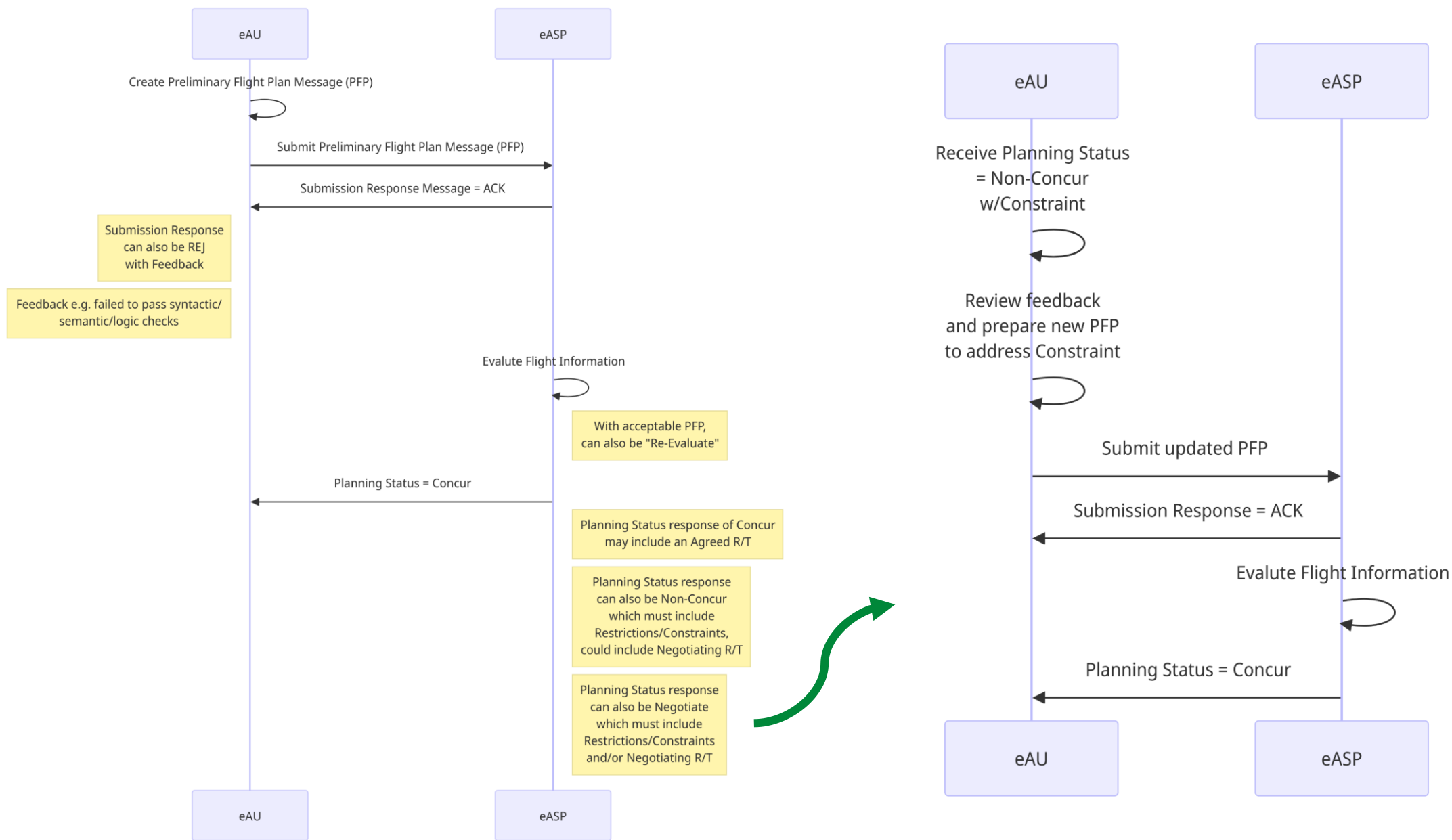


4. FF-ICE Planning Service (Optional) – Nominal Scenario

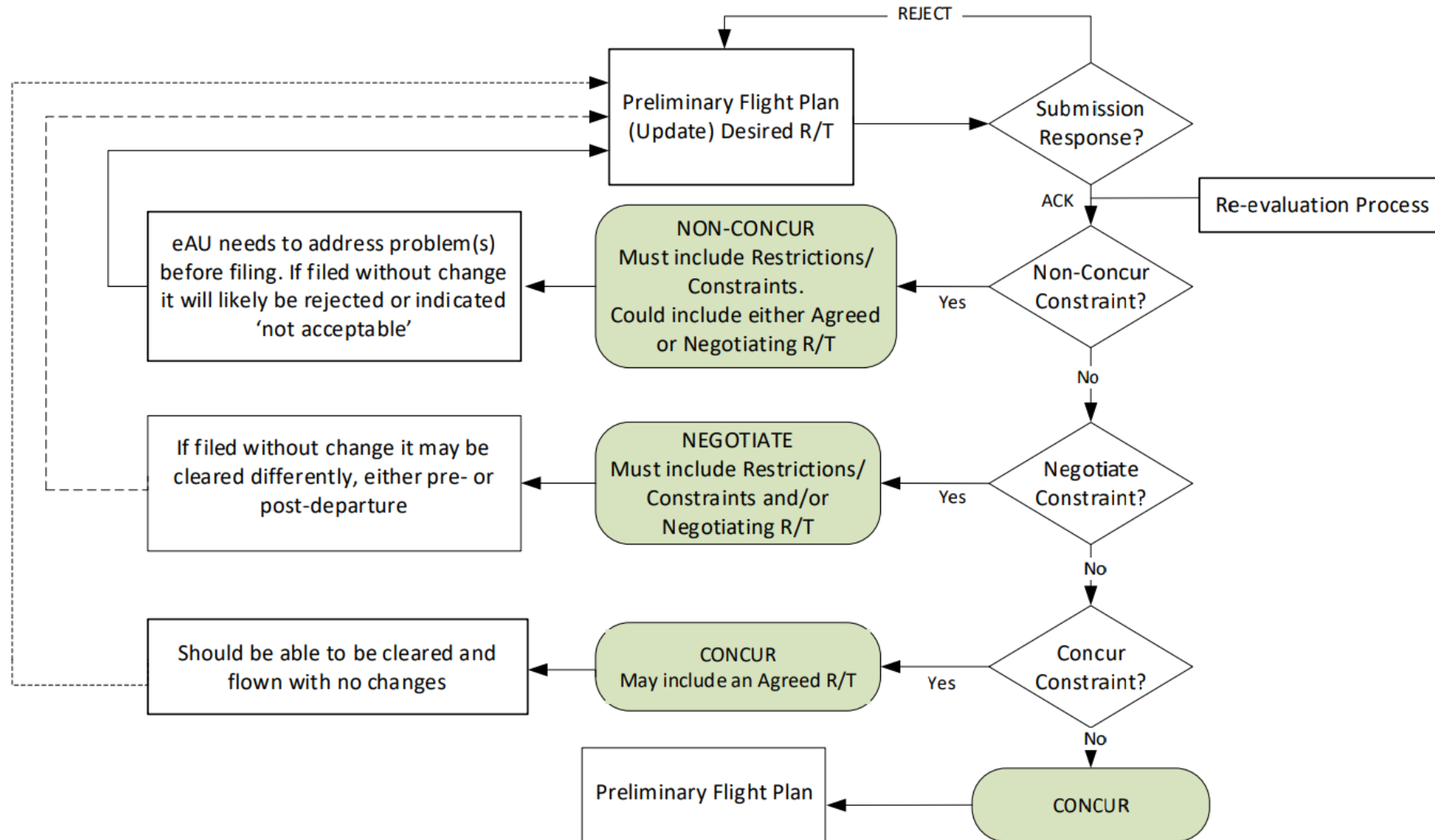
1. Preliminary flight plan filing follows the same steps as filing flight plan.
2. Filing **Preliminary Flight Plan** (PFP), the operator (eAU) should ensure that the list of addressees includes all relevant addressees
3. An eASP, having received a **Preliminary Flight Plan** (PFP), is expected to evaluate it provide the appropriate feedback as **Submission Response** and **Planning Status**. An eASP that provides a re-evaluation process should continue the provision of **Planning Status** feedback, as appropriate.
 - a) **Submission Response** – (a) ACK and Planning status or (b) REJ or MAN
 - i. **Planning Status Response** – Concur, Non-Concur and Negotiate which include Restriction or Constraint or negotiating R/T information
 - b) With Re-evaluation Process – eASP response immediately and update based on future changes
4. An eAU, having received the feedback in the form of the **Submission Response** or **Planning Status** is expected to react to the information provided as necessary by:
 - a) Updating the **Preliminary Flight Plan** to address identified restrictions/constraints.
 - b) Or reflect the information in the filed **Flight Plan** when that is submitted.

4. FF-ICE Planning Service (Optional) – Scenario Flow

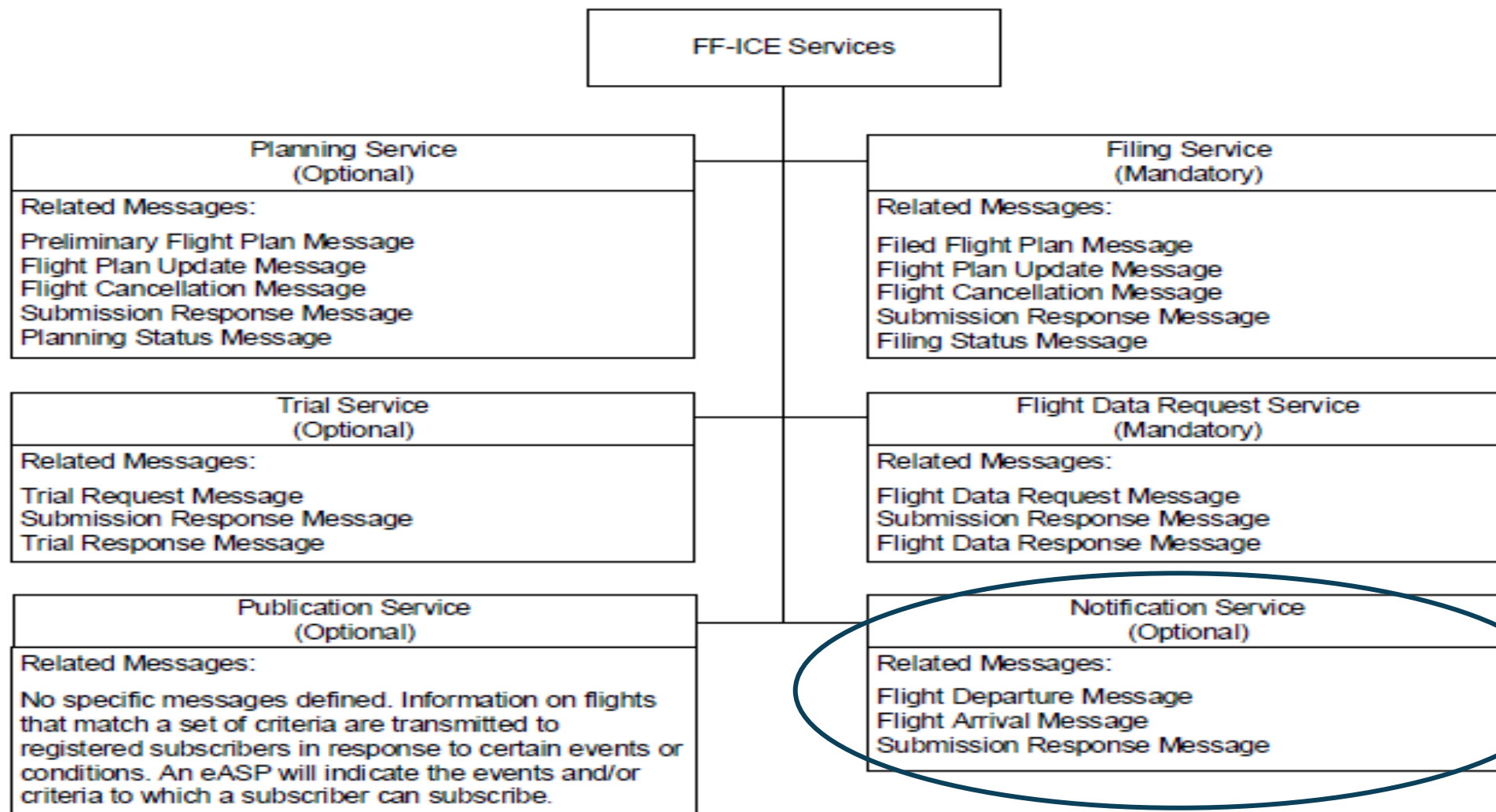
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4. FF-ICE Planning Service (Optional) – Simplified Flow



5. FF-ICE Notification Service (Optional*)



* Link to FPL2012 sunset

5. FF-ICE Notification Service (Optional) – Overview

- Currently foreseen for the notification of departure and arrival.
 - Anticipated that as FF-ICE develops beyond pre-departure other events in the life cycle of a flight will be added.
 - An event would usually be a physical one related to the progress of the flight such as Off-Block, Airborne, Landed, etc., as opposed to a status which is usually specific to the local system.
- The information support further processing of the flight within the ATM system
 - The provider of the information needs confirmation that the information has been received, just as the filing of a flight plan receives a confirmation response.
- There are two events currently defined to be notified via the Notification service:
 - **Departure** notification, which equate to the ATS messages **DEP**
 - **Arrival** notifications, which equate to the ATS messages **ARR**.

5. FF-ICE Notification Service (Optional) – Data

- DEP:
 - Guidance – PANS-ATM 11.4.2.2.6 or PANS-ATM Appendix 3
 - Format – **DEP and GUF1**
 - Information – Wheel-Off or Off-Block
 - ASP Response – Submission Response
- ARR:
 - Guidance – PANS-ATM 11.4.2.2.7 or PANS-ATM Appendix 3
 - Format – **ARR and GUF1**
 - Information – Wheel-In or In-Block
 - ASP Response – Submission Response



5. FF-ICE Notification Service (Optional) – Message Data Field*

Flight Departure Message (1 of 2)

Data Category	Data Item	Requirement	Guidance
Message Information	List of Recipients	Mandatory**	Identify each relevant eASP for the flight.
	Message Originator	Mandatory**	Identify who sent the message.
	Request for Translation and Delivery	Optional	Identify an eASP that has been requested to translate and deliver the Flight Plan to identified Requested Recipients.
	Requested Recipients	Optional	If translation and delivery process is requested, this is the list of aASP recipients and their AFTN address to which delivery is needed.
	Request for Forwarding	Optional	Identifies an eASP that has been requested to forward the Flight Plan to all Relevant ASPs.
	Relevant ASPs	Mandatory**	The entire list of Relevant ASPs for this flight.
	Message Date-Time	Mandatory**	Time that the message was sent.
	Message Identifier	Mandatory**	Unique message identifier.
	Type of Request/Response	Mandatory**	Should indicate that this is a Flight Departure message.
	AFTN Address	Optional	AFTN address of the sender as an alternate means of contact.
	Contact Information	Optional	Phone, email or other appropriate contact information for the sender.

* Based on information from Doc 9965 Vol II Appendix C v.0994

** Can be implemented by the communication infrastructure

5. FF-ICE Notification Service (Optional) – Message Data Field*

Flight Departure Message (2 of 2)

Data Category	Data Item	Requirement	Guidance
Flight Identification	GUF1	Mandatory	
	Aircraft Identification	Mandatory	
Departure/Destination Data	Departure Aerodrome	Mandatory	
	Destination Aerodrome	Mandatory	
	Estimated Off-Block Time	Mandatory	Required in each message except for flight plans filed while in the air or for which the departure aerodrome is not known.
	Actual Departure Time	Mandatory	
	Actual Departure Reference Data	Optional	The location on the aerodrome to which the departure time refers.

* Based on information from Doc 9965 Vol II Appendix C v.0994

** Can be implemented by the communication infrastructure



5. FF-ICE Notification Service (Optional) – Message Data Field*

Flight Arrival Message (1 of 2)

Data Category	Data Item	Requirement	Guidance
Message Information	List of Recipients	Mandatory**	Identify each relevant eASP for the flight.
	Message Originator	Mandatory**	Identify who sent the message.
	Request for Translation and Delivery	Optional	Identify an eASP that has been requested to translate and deliver the Flight Plan to identified Requested Recipients.
	Requested Recipients	Optional	If translation and delivery process is requested, this is the list of aASP recipients and their AFTN address to which delivery is needed.
	Request for Forwarding	Optional	Identifies an eASP that has been requested to forward the Flight Plan to all Relevant ASPs.
	Relevant ASPs	Mandatory**	The entire list of Relevant ASPs for this flight.
	Message Date-Time	Mandatory**	Time that the message was sent.
	Message Identifier	Mandatory**	Unique message identifier.
	Type of Request/Response	Mandatory**	Should indicate that this is a Flight Departure message.
	AFTN Address	Optional	AFTN address of the sender as an alternate means of contact.
	Contact Information	Optional	Phone, email or other appropriate contact information for the sender.

* Based on information from Doc 9965 Vol II Appendix C v.0994

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5. FF-ICE Notification Service (Optional) – Message Data Field*

Flight Arrival Message (2 of 2)

Data Category	Data Item	Requirement	Guidance
Flight Identification	GUF1	Mandatory	
	Aircraft Identification	Mandatory	
Departure/Destination Data	Departure Aerodrome	Mandatory	
	Destination Aerodrome	Mandatory	
	Estimated Off-Block Time	Mandatory	Required in each message except for flight plans filed while in the air or for which the departure aerodrome is not known.
	Actual Arrival Time	Mandatory	
	Actual Arrival Reference Data	Optional	The location on the aerodrome to which the arrival time refers.
	Arrival Aerodrome	Mandatory	

* Based on information from Doc 9965 Vol II Appendix C v.0994

** Can be implemented by the communication infrastructure

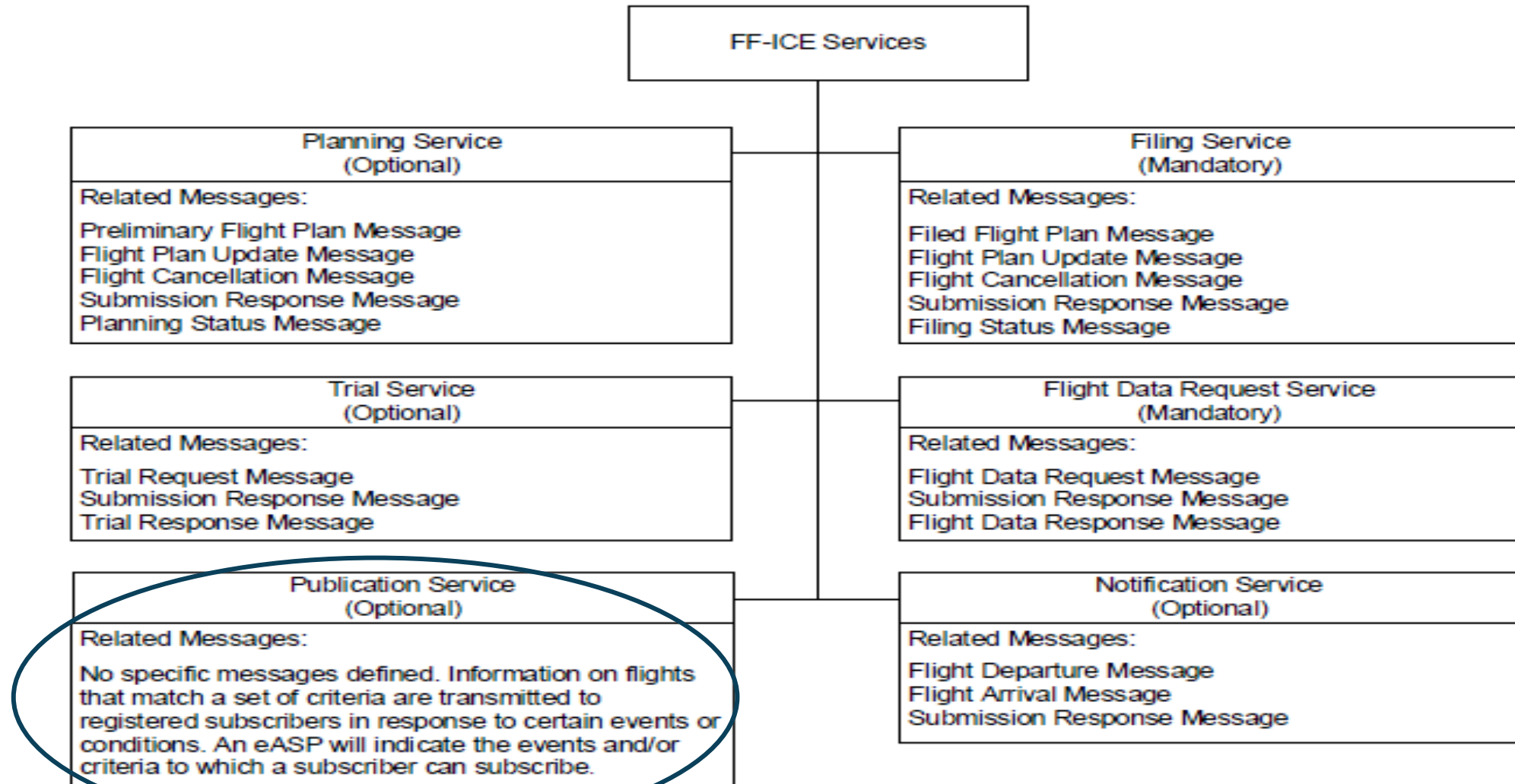
5. FF-ICE Notification Service (Notional Scenario)

1. Assume that the flight plan (eFPL) has been filed and accepted by all relevant ASPs.
2. The departure aerodrome's ATS unit transmits, to all recipients, of "basic flight data" (all those who got the filed flight plan)
 - a) A **Flight Departure** message through the notification service to all the eFPL recipients identified in the eFPL message
 - b) The recipient of notification **Flight Departure** message will response indicating that the message was received.
 - c) The departure ATS unit would send a DEP message in legacy format to those who got the FPL

NOTE:

- The procedure for what to do if this response comes back negative is still in work and has not been fully defined.
- ATS Unit refers to a facility or organization responsible for providing various air traffic services within a defined aerodrome or airspace

6. FF-ICE Publication Service (Optional)



6. FF-ICE Publication Service (Optional) – Overview

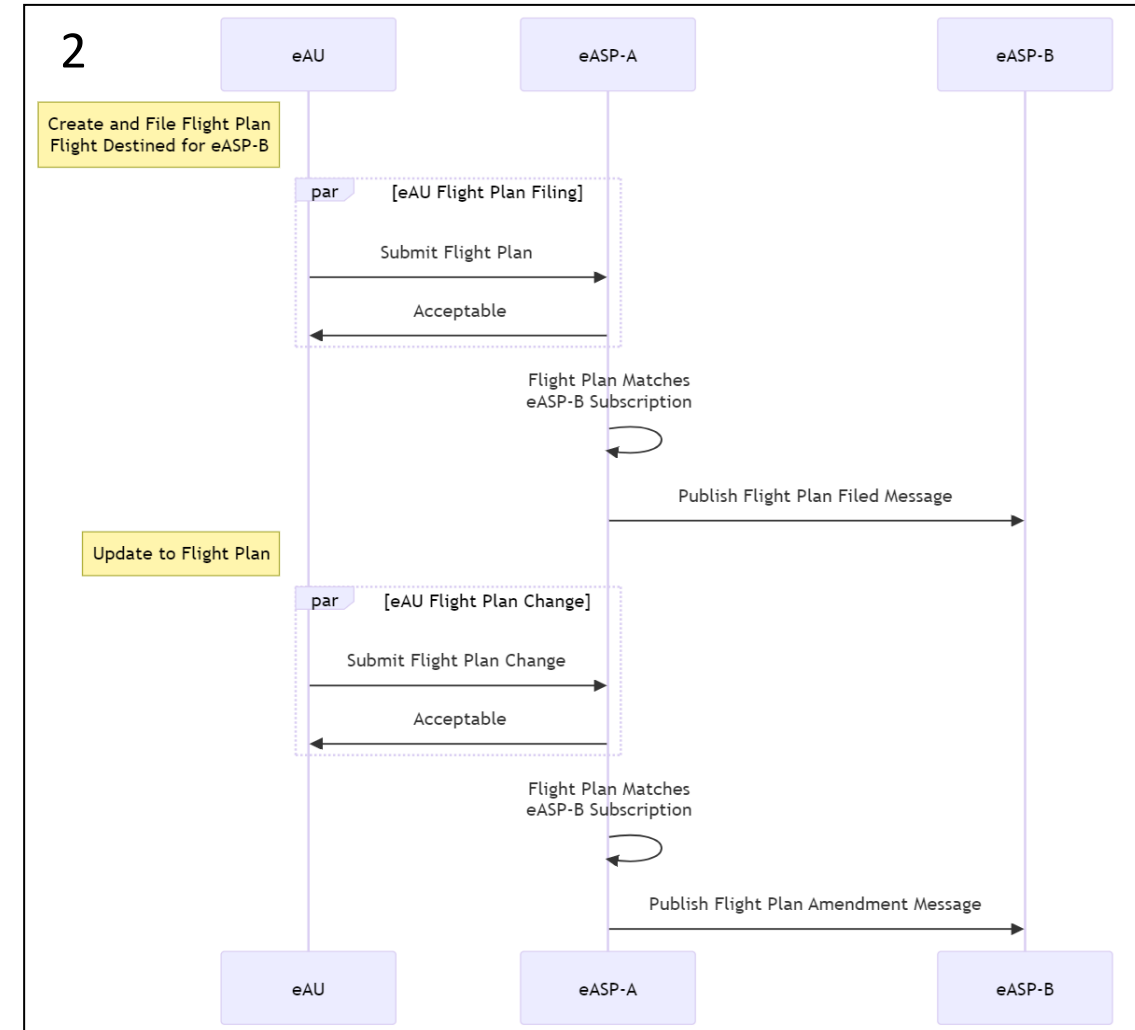
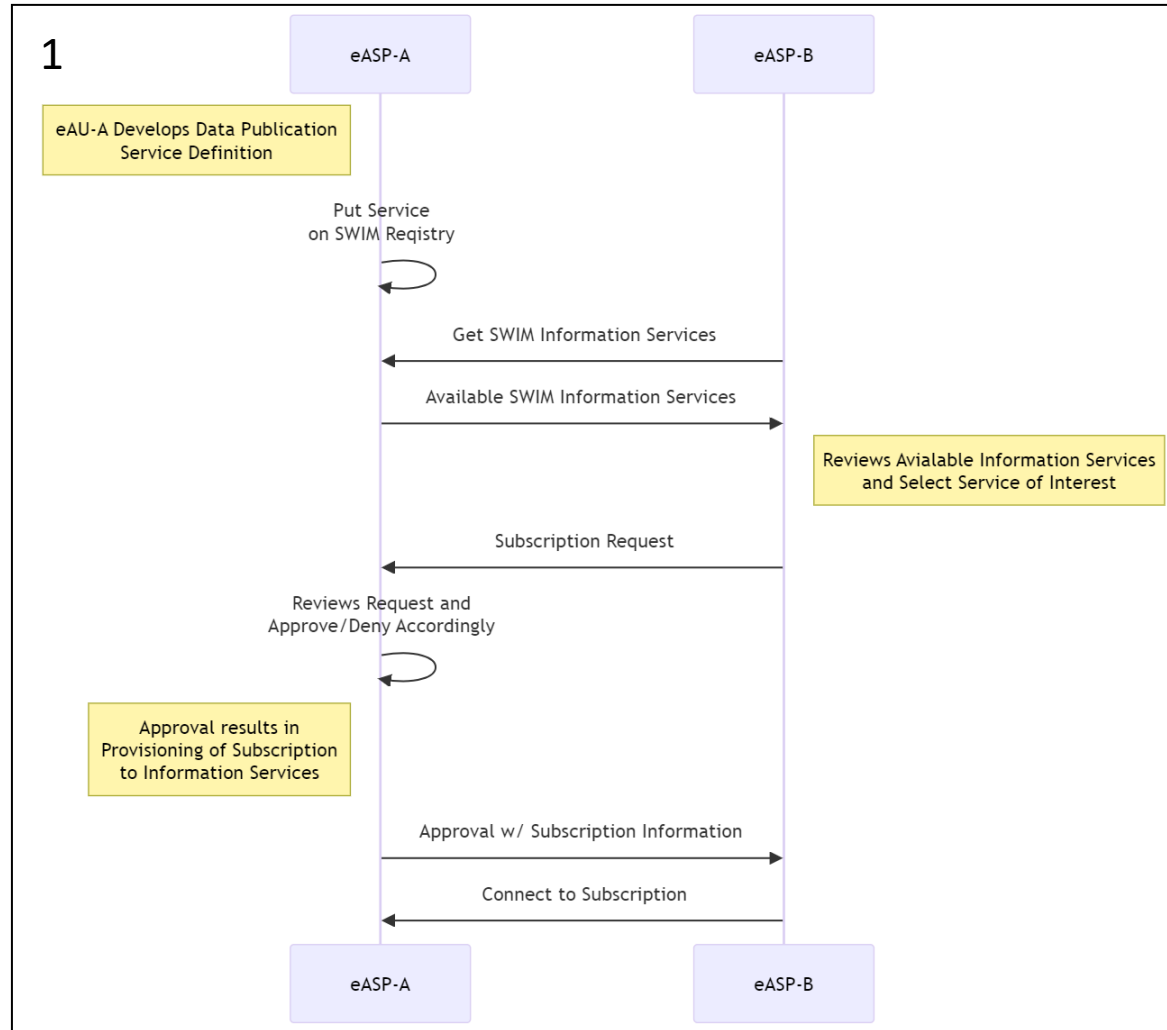
- Provides flight plan data using a subscription mechanism: information on flights that match a set of criteria are transmitted to registered subscribers in response to certain events or conditions.
 - Subscribers: airspace users, military authorities, ATM providers and aerodrome service providers such as aircraft maintenance and ground/gate service providers, general aviation fix-based operators, and other groups such as Customs and Immigration
 - An eASP should indicate the events and/or criteria to which a subscriber can subscribe.
- Leverage on the SWIM architecture and information services to support dissemination of flight information to multiple stakeholders in an efficient manner.
- Allows subscribers to maintain an awareness of changes to flight plan and trajectory information that will affect flights relevant to them.

6. FF-ICE Publication Service (Nominal Scenario)

1. eASP-A publishes, on the SWIM registry, the information service for flight-depart-aerodromeX
2. eASP-B (i.e. nearby eASP) review the SWIM registry and discovered the information service for flight-depart-aerodromeX
 1. eASP-B requests subscription to the service
 2. eASP-B is approved for subscription and connected to the service
3. eAU files flight plan to eASP-A and is accepted
 1. eASP-A makes the departure information (from the flight plan) available through the flight-depart-aerodromeX service
4. The departure information matches the eASP-B subscription, the information is received by eASP-B through the subscription
5. In the event that the eAU makes change to the filed flight plan and change has been accepted, the updated departure information is then published and made available to eASP-B per its subscription

6. FF-ICE Publication Service (Nominal Scenario)

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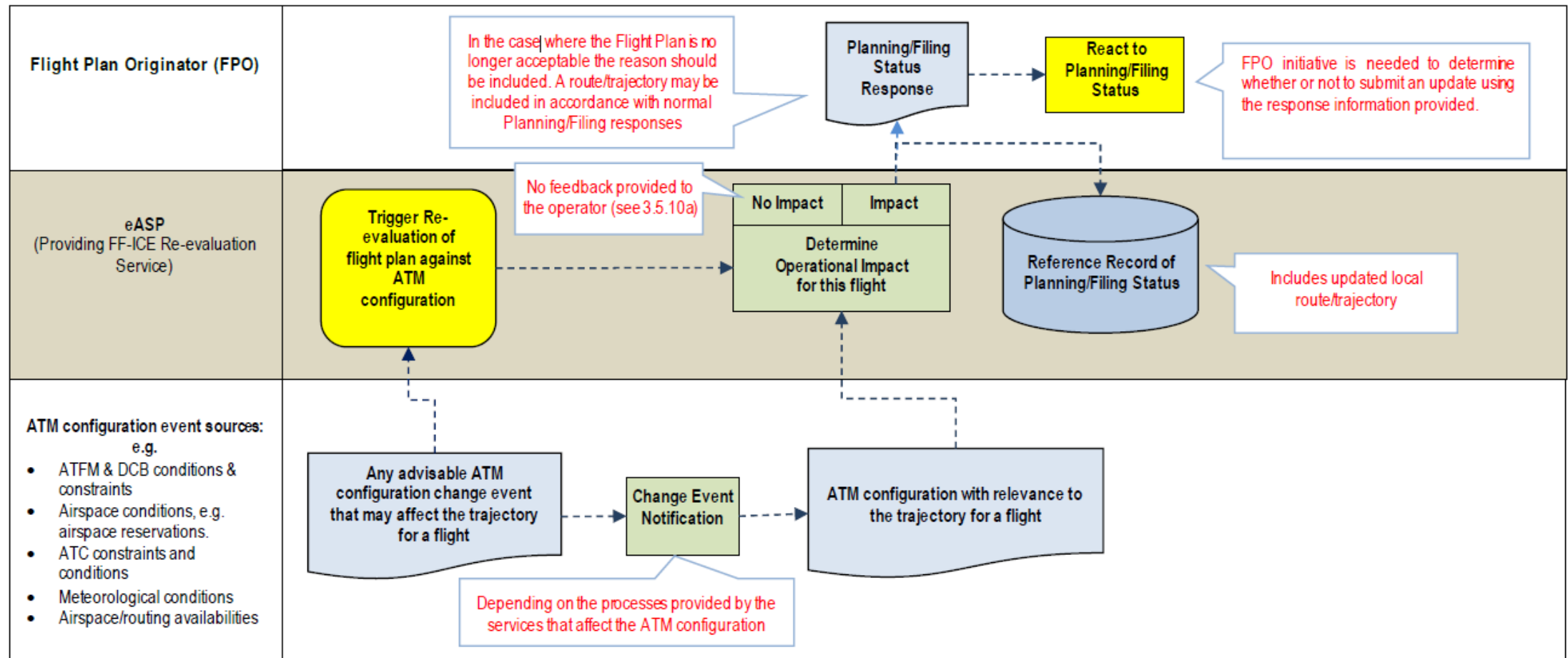


Re-Evaluation Process

FF-ICE Re-Evaluation Process

- Provides the AU with information concerning the impact on the individual flight plans, as perceived by the eASP.
 - Linked to Planning and Filing Services.
 - Basic – Indication of a change of status for a flight plan with respect to that eASP.
 - Advanced – Indication of addition or removal of a restriction or constraint without impacting the status of the flight plan.

FF-ICE Re-Evaluation Process



FIXM APAC Extension

FIXM APAC Extension - Background

- Asia/Pacific Regional Framework for Collaborative Air Traffic Flow Management (ATFM), version 4 (October 2022) called for a FIXM extension to capture APAC requirements
- In December 2023, the FIXM version 4.2 Extension was adopted by APANPIRG/34 (Conclusion APANPIRG/34/9) to be the Asia/Pacific (APAC) FIXM version 4.2 Extension for use by Asia/Pacific States/Administrations to support the cross-border ATFM information exchange and the ATFM/A-CDM integration

FIXM APAC Extension – International Coordination

- The FIXM Development Team completed a review of the APAC FIXM 4.2 Extension in March 2024
- Findings/feedback included the following topics:
 - Schema imports;
 - Class to extend for particular data elements;
 - The modeling suggestion to use sequence instead of choice structure; and
 - Clarifications on the types of positions that would be captured in the Extension.
- All of the recommendations/feedback are optional, and this APAC Extension does not require any changes to be made at this time. The teams will continue discussions to better understand the data requirements.
- The FIXM CCB additionally discussed the Extension at the May 2024 CCB meeting. The CCB's review is on-going and coordinating feedback with APAC Extension team.



ICAO

APAC FF-ICE Ad hoc Group Workshop with TTX



Thank You

FF-ICE Acronym

Acronym	Description
ASP	ATM Service Provider
aASP	Legacy ATM Service Provider (when discussing FF-ICE content)
AFTN	Aeronautical Fixed Telecommunication Network
ATC	Air Traffic Control
ATMRPP	Air Traffic Management Requirements and Performance Panel
ATS	Air Traffic Services
AU	Airspace Users
CNS	Communications, Navigation and Surveillance
eASP	Enhanced ATM Service Providers
eAU	enhanced Airspace User
eFPL	enhanced Flight Plan
FDP	Submit Flight Data Request
FDR	Create Flight Data Request

Acronym	Description
FF-ICE	Flight and Flow-Information for a Collaborative Environment
FIXM	Flight Information Exchange Model
FPL	ICAO Flight Plan
FPL2012	ICAO Flight Plan 2012
FPO	Flight Plan Originator
GUFID	Globally Unique Flight Identifier
ICAO	International Civil Aviation Organization
IG	Implementation Guidance
PANS-ATM	Procedures for Air Navigation Services - Air Traffic Management
R/T	Route/Trajectory
RQP	ATS Message - Request Flight Plan Message
RQS	ATS Message - Request Supplementary Flight Plan Message