ICAO GANP PORTAL

ASBU ELEMENTS

FICE-B2/9

☑ Functional Description | ☑ Enablers | ☑ Deployment Applicability | ☑ Performance Impact Assessment

FICE

FICE-B2/9	Flight information management support for inflight re-planning	Information

Main Purpose

To enable aircraft operators and service providers (ATFM functions) to coordinate the re-optimization of flights based upon changing circumstances. Trajectory changes are limited to those occurring beyond an operationally-appropriate horizon. Service providers (ATFM functions) provide full constraint evaluation on proposed changes.

New Capabilities

- Collaborative planning via flight information exchange applications available between traffic management and airspace users.
- Synchronization process to align trajectories for shared planning.
- Information standards and protocols for sharing network operations objectives and information exchanges supporting collaborative in-flight re-planning. Information models allow for consistent, integrated flight, flow and constraint information.
- Operator constraints that the ATM service provider can consider when re-planning.

Description

Globally consistent processes and information exchanges are applied to support collaborative inflight re-planning between the AU and ASPs, integrating applicable RSEQ and NOPS planning processes. Information exchange models (e.g., MET, Aeronautical, Flow and Flight) support the application of consistent methods for evaluation of expected impacts on flows and individual flights as circumstances change. Automated applications employ these methods in support of in-flight re-planning. The flight is cleared to the new flight plan by ATC as appropriate.

Maturity Level

Validation

Human Factor Considerations

1. Does it imply a change in task by a user or affected others? Yes
2. Does it imply processing of new information by the user? Yes
3. Does it imply the use of new equipment? Yes
4. Does it imply a change to levels of automation? Yes

PLANNING LAYERS

Tactical-During ops

OPERATIONS

Taxi-out | Departure | En-route | Arrival

DEPENDENCIES AND RELATIONS

Type of Dependencies	ASBU Element
Relation-operational need	FICE-B0/1 - Automated basic inter facility data exchange (AIDC)
Relation-operational need	FICE-B2/1 - Planning Service
Relation-operational need	FICE-B2/2 - Filing Service
Relation-operational need	FICE-B2/3 - Trial Service
Relation-operational need	FICE-B2/4 - Flight Data Request Service
Relation-operational need	FICE-B2/5 - Notification Service
Relation-operational need	FICE-B2/6 - Publication Service
Relation-benefit	AMET-B2/1 - Meteorological observations information
Relation-information need	AMET-B2/2 - Meteorological forecast and warning information
Relation-benefit	AMET-B2/4 - Meteorological information service in SWIM
Relation-operational need	SWIM-B2/1 - Information service provision
Relation-operational need	SWIM-B2/2 - Information service consumption
Relation-operational need	SWIM-B2/3 - SWIM registry
Relation-information benefit	SWIM-B2/4 - Air/Ground SWIM for non-safety critical information
Relation-information need	DAIM-B2/1 - Dissemination of aeronautical information in a SWIM environment
Relation-information need	DAIM-B2/2 - Daily Airspace Management information to support flight and flow
Relation-information need	DAIM-B2/5 - NOTAM replacement

ENABLERS

Enabler Category	Enabler Type	Enabler Name	Description / References	Stakeholders	Year
Regulatory provisions	SMS	Apply SMS	Apply Safety Management System in accordance with the national requirements and guidance.	ANSP	2013
Operational procedures	Flight and flow information	Procedures to coordinate re-optimization of flight	Procedures for flight plan evaluation, submission and clearance delivery while in-flight. Reference: PANS-ATM (Doc 4444) and FF-ICE Manual (Doc 9965, 3rd Edition)	ANSP	2025

Airborne system capability	Flight and Flow information	Flight deck communication capability	Upgrade the ground system to allow the participation of the flight deck in replanning (e.g., A/G with FOC or A/G SWIM as applicable). References: TBD	Airspace user	2025
Ground system infrastructure	Flight and Flow information	Automated capability to coordinate re-optimization of flights	Upgrade the ground system to provide applicable constraints and operational acceptability of a proposed change to a flight plan for an active flight. References: TBD	ANSP	2025
Ground system infrastructure	Flight and Flow information	Synchronization of trajectory information	Upgrade of the gorund system to enable the synchronization of trajectory information suitable for RSEQ and NOPS planning. References: TBD	ANSP	2025
Ground system infrastructure	Flight and Flow information	Provision of updated plan to ATCO position	Upgrade of the ground system to enable the provision of updated flight plan to ATCO position for clearance delivery. References: TBD	ANSP	2025
Training	Flight and Flow information	Training requirements for inflight re-planning	Training for flight data staff, dispatch, ATCOs, flight crew, AIS staff and ATM/ASM staff regarding inflight re-planning.	ANSP Airspace user	2025
Ground system infrastructure	Flight and Flow information	Enhance flight planning capability	Upgrade of the ground systems to allow the update and exchange flight plans and process constraints received. References: TBD	Airspace user	2025
Information exchange model	Flight and flow information	Flight Information Exchange Model (FIXM) Version x.x.x	Reference: PANS-ATM (Doc 4444) and FF-ICE Manual (Doc 9965, 3rd Edition)	ANSP ATM network function	2023