



## ASBU ELEMENTS

FICE-B2/7

- Functional Description
- Enablers
- Deployment Applicability
- Performance Impact Assessment

### FICE

**FICE-B2/7** Flight information management service for higher Information  
airspace operations

**Main Purpose** Higher airspace operations will have a different multi-national flavour worldwide. The FF-ICE capabilities support a strategic collaborative flight planning environment.

- New Capabilities**
- Trajectory operations based on the flight business/mission needs
  - High level of accuracy in the strategic planning of flight business/mission intent
  - Based on community flight planning rules, an operator will generate business trajectory and publically share via SWIM.
  - Updates of the intended trajectory will be provided if intended trajectory deviates from the agreed trajectory

**Description** A joint multi-national capability to support operations at these altitudes provides for strategic separation based on shared intent. Vehicles at these altitudes exhibit the widest range of operational conditions. They share in common the ability to provide long-term precise intent which allows for flight planning that support strategic conflict management. This ability to share long term intent as well as the lower number of participants allows this operational capability to be a shared as opposed to a centralized command and control state or regional based function.

**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

- Strategical
- Pre-tactical
- Tactical-Pre ops
- Tactical-During ops

#### OPERATIONS

- Departure
- En-route
- Arrival

## DEPENDENCIES AND RELATIONS

Type of Dependencies	ASBU Element
Relation-operational need	SWIM-B2/3 - SWIM registry
Relation-operational need	SWIM-B2/1 - Information service provision
Relation-operational need	SWIM-B2/2 - Information service consumption
Relation-information need	DAIM-B2/3 - Aeronautical information to support higher airspace operations

## ENABLERS

Enabler Category	Enabler Type	Enabler Name	Description / References	Stakeholders	Year
Information exchange model	Flight and flow information	Flight Information Exchange Model (FIXM) Version 4.2.0	References: PANS-ATM ICAO Doc 4444 - Procedures for Air Navigation Services and ICAO Doc 9965- FF-ICE Manual 2nd Edition.	ANSP ATM network function	2019
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 for message composition and exchange	PANS-ATM ICAO Doc 4444 - Procedures for Air Navigation Services	ANSP	2018
Ground system infrastructure	Flight and Flow information	Capability to support the assignment/recognition of GUF1	PANS-ATM ICAO Doc 4444 - Procedures for Air Navigation Services	ANSP Airspace user	2018
Ground system infrastructure	Flight and Flow information	FDP system able to process FIXM	PANS-ATM ICAO Doc 4444 - Procedures for Air Navigation Services	ANSP	2018
Ground system infrastructure	Flight and Flow information	FDP system that accesses AMET and DAIM information via SWIM services.	PANS-ATM ICAO Doc 4444 - Procedures for Air Navigation Services	ANSP Airspace user	2018
Ground system infrastructure	Flight and Flow information	FDP System that exposes the flight information to global community via SWIM services.	PANS-ATM ICAO Doc 4444 - Procedures for Air Navigation Services	ANSP	2018

Ground system infrastructure	Flight and Flow information	Capability to provide and use FF-ICE Filing Service	Upgrade to the ground system to provide and use FF-ICE Filing Service (e.g. send and process FF-ICE filed flight plans and constraints). Reference: PANS-ATM (Doc 4444) and FF-ICE Manual (Doc 9965, 2nd Edition).	ANSP Airspace user	2024
Training	Flight and Flow information	Training requirements for flight management service for higher airspace operations	Training for flight data staff and dispatch regarding the flight management service of higher airspace operations.	ANSP	2018