ASBU ELEMENTS

FICE-B3/1

☑ Functional Description

☑ Deployment Applicability

☑ Performance Impact Assessment

FICE

FICE-B3/1

Flight information management services for enhanced trajectory operations

Information

Main Purpose ?

To provide automatic exchanges of up-to-date flight trajectories tailored to the individual flight operation in support of post-departure coordination and trajectory sharing.

- New Capabilities
 Mechanisms are in place to support exchange and synchronization of individual trajectory intent/projections (FDP/FMS/DST) for use across planning and tactical operations
 - · Enhancement of automated coordination between ATS facilities supporting seamless delivery of Agreed trajectory
 - Support for flight-specific, dynamic constraint and separation application considering operator constraints, preferences and capabilities

Description ?

Mechanisms are in place to support exchange of intent allowing for advanced applications which can synchronize and share a common trajectory intent agreed to facilitate TBO in execution. The use of synchronized trajectories by automation and for ATC Coordination support a wider range of operational techniques within and across ANSP boundaries. Constraints are applied only where and when necessary and tailored to flight-specific capabilities.

Maturity Level ?

Concept

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 2

Departure En-route Arrival

DEPENDENCIES AND RELATIONS 3

Type of Dependencies

ASBU Element

| 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-operational need | SWIM-B2/5 - Global SWIM processes |
| Relation-operational need | SWIM-B3/1 - Air/Ground SWIM for safety critical information |
| Relation-benefit | AMET-B3/1 - Meteorological observations information |
| Relation-benefit | AMET-B3/2 - Meteorological forecast and warning information |
| Relation-benefit | AMET-B3/4 - Meteorological information service in SWIM |
| Relation-information need | FICE-B2/7 - Flight information management service for higher airspace operations |
| Relation-information need | FICE-B2/9 - Flight information management support for inflight re-planning |
| 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 for enhanced automated coordination | Procedures for enhanced automated coordination between ATS units. References: TBD | ANSP | 2031 | | |
| Airborne system capability | Flight and Flow information | Provision of aircraft-derived information | Update of the ground systems to allow the provision of aircraft-derived information supporting trajectory synchronization. References: TBD | Airspace user | 2031 | | |
| Ground system infrastructure | Flight and Flow information | Trajectory synchronization | Update of the ground system to allow trajectory synchronisation across ground automation and using aircraft-derived information, including both the sharing and use of trajectory information. References: TBD | ANSP | 2031 | | |

| Ground system infrastructure | Flight and Flow information | ATCO awareness and flight-specific application | Update of the ground systems for enhanced HMI supporting ATCO awareness and flight-specific constraint application. References: TBD | ANSP | 2031 |
|--|-----------------------------------|---|--|--------------------|------|
| Ground system infrastructur e | Flight and Flow information | Trajectory-based automated coordination between ATS facilities. | Update of the ground system to allow trajectory-based automated coordination between ATS units. References: TBD | ANSP | 2031 |
| Training | Flight and Flow information | Training requirements for enhanced trajectory operations. | Training for flight data staff, ATCOs, flight crew and ATM/ASM staff regarding enhanced trajectory operations. | ANSP Airspace user | 2031 |
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