SAFE SKIES.
SUSTAINABLE FUTURE.

ICAO APAC/MID ATFM-FF-ICE Seminar 2025
Dubai, UAE, 23 – 26 February 2025

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EUROCONTROL NM Implementation of FF-ICE and Lessons learned

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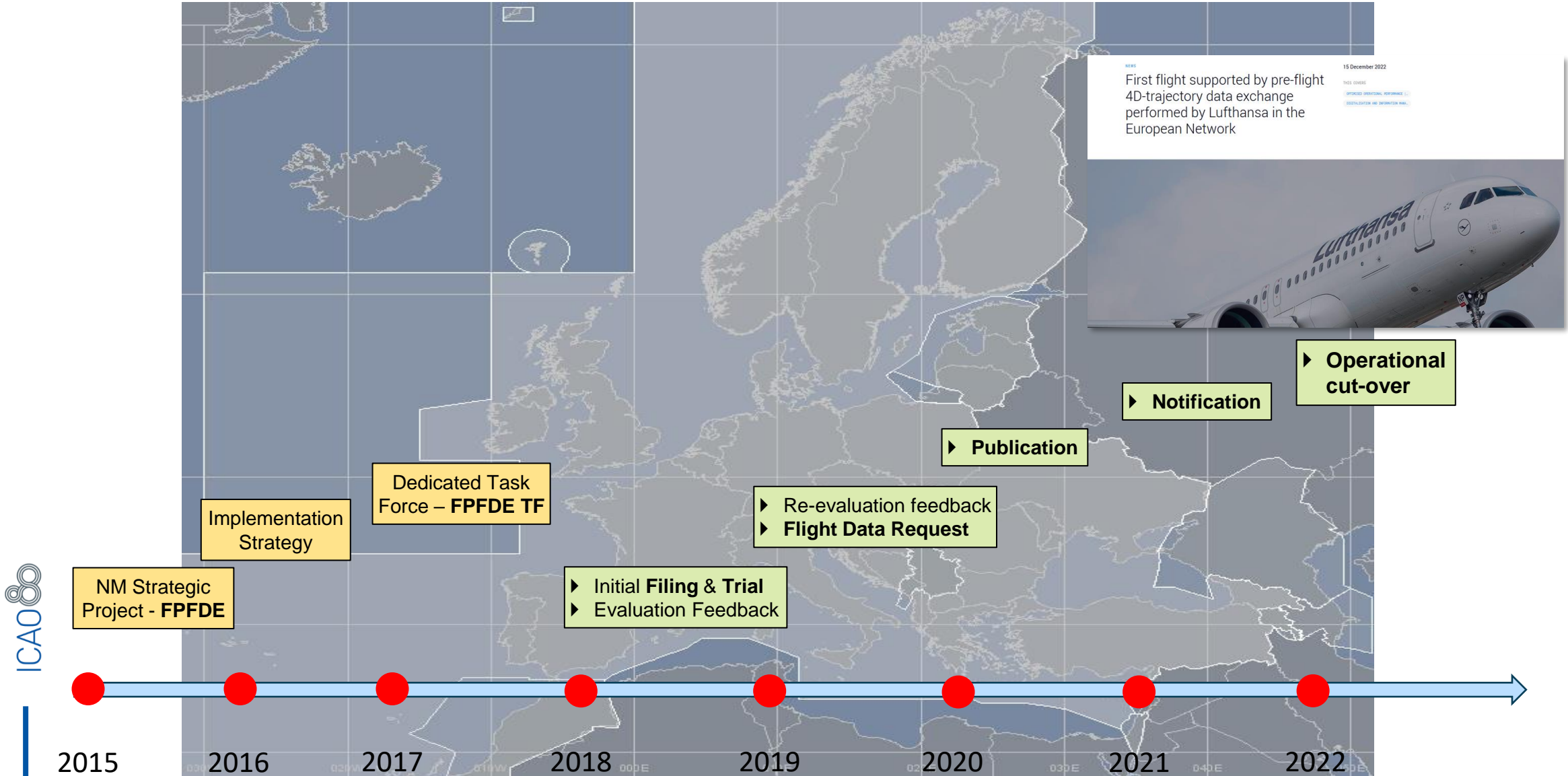1   European NM implementation

2   Challenges and lessons learned
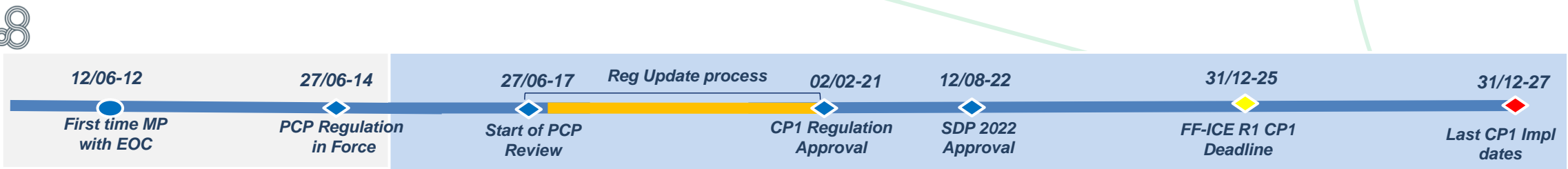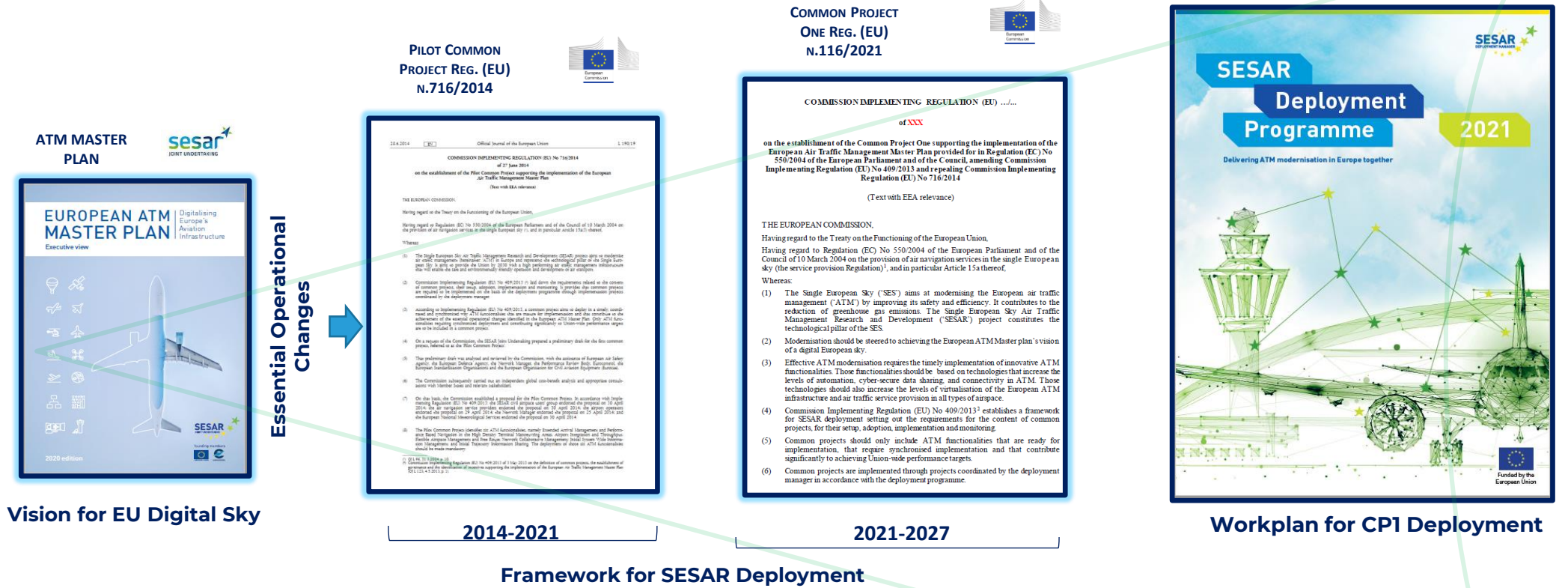
3   Mixed mode and transition operations

European Network Manager Implementation

First flight supported by pre-flight 4D-trajectory data exchange performed by Lufthansa in the European Network

15 December 2022

▸ **Operational cut-over**

▸ **Notification**

▸ **Publication**

Dedicated Task Force – **FPFDE TF**

▸ Re-evaluation feedback
▸ **Flight Data Request**

Implementation Strategy

NM Strategic Project - **FPFDE**

▸ Initial **Filing** & **Trial**
▸ Evaluation Feedback

2015   2016   2017   2018   2019   2020   2021   2022

Regulatory framework

Developed and consulted by all stakeholders

SESAR DEPLOYMENT PROGRAMME

ATM MASTER PLAN

PILOT COMMON PROJECT REG. (EU) N.716/2014

COMMON PROJECT ONE REG. (EU) N.116/2021

Vision for EU Digital Sky

Essential Operational Changes

2014-2021

2021-2027

Workplan for CP1 Deployment

Framework for SESAR Deployment

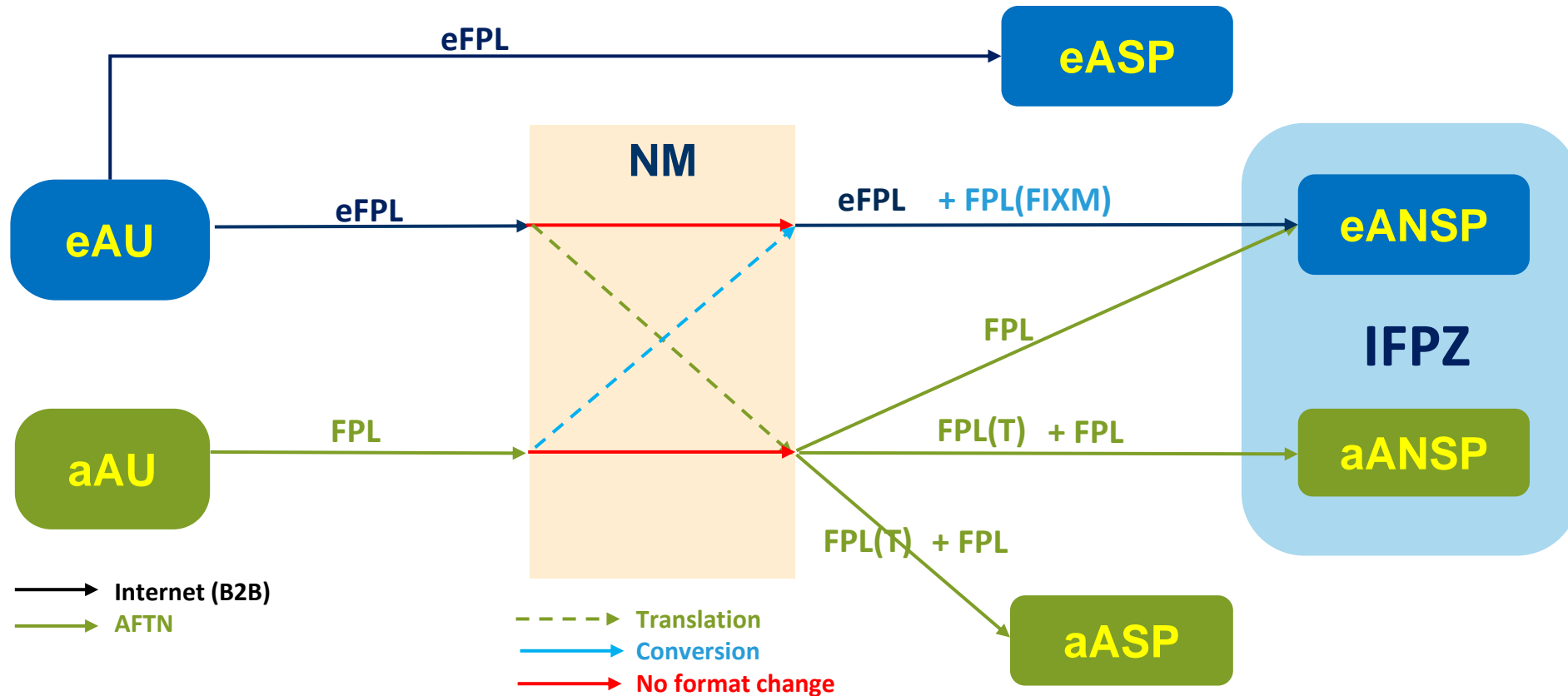| 12/06-12	27/06-14	27/06-17	Reg Update process	02/02-21	12/08-22	31/12-25	31/12-27
First time MP with EOC	PCP Regulation in Force	Start of PCP Review		CP1 Regulation Approval	SDP 2022 Approval	FF-ICE R1 CP1 Deadline	Last CP1 Impl dates

Challenges and lessons learned

- Attract main players

- Education through discussions
  - Guided by use cases and scenarios

- Address identified concerns
  - Promote collaboration for solution finding

- Implement test & development platform (mirroring OPS)

- Transition measures and mixed mode operations
  - NM to support until FPL2012 sunset date

Airline Flight Production Environment	ICAO2012 FPL via AFTN	NM OPS

Flight data is automatically copied

Flights are automatically copied

CFSP/Airline Flight Test Environment	eFPL via NM B2B Web Services	NM PREOPS

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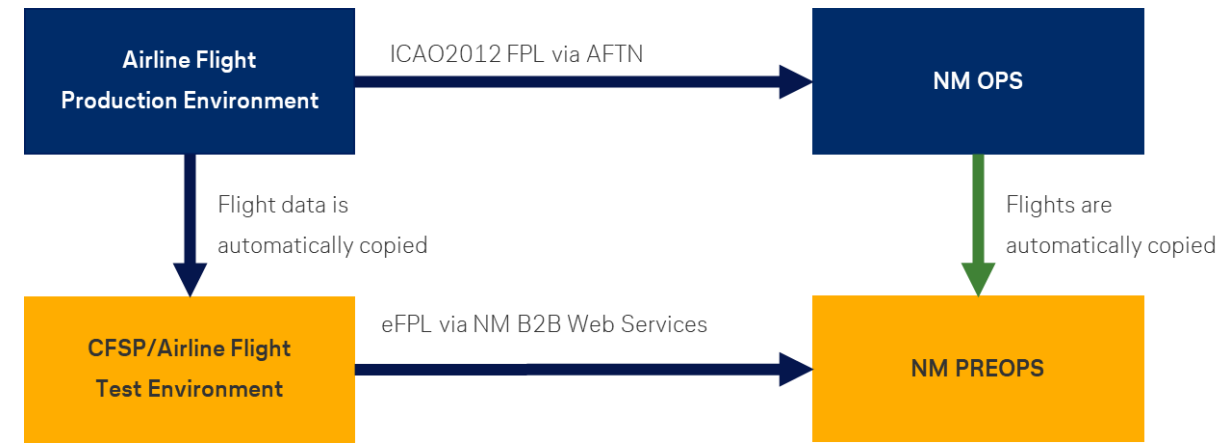
Mixed mode and Transition operations

- NM implemented FF-ICE while supporting FPL2012 over AFTN/AMHS
  - Translation of FF-ICE FPLs to FPLs and distribution via AFTN/AMHS to non-migrated ANSPs
  - Allows to decouple the migration of the AUs from the migration of ANSPs
    - Predictability improvements already expected by the AUs migration
  - Allows for a smooth and progressive migration of all actors

Mixed Mode (1)

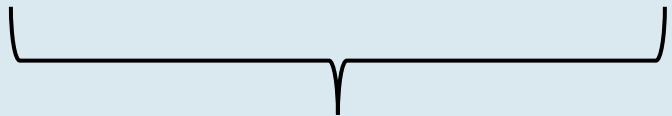| Input message type	ICAO 2012 flight plan	FF-ICE flight plan
FPL	- No change	- Reject FPL
CHG	- No change (- Process message; Integrate into existing FPL data)	- Process message - Integrate into existing eFPL data
DLA	- No change (- Process message; Integrate into existing FPL data)	- Process message - Integrate into existing eFPL
CNL	- No change (Cancel flight plan)	- Cancel flight plan

Mixed Mode (2)

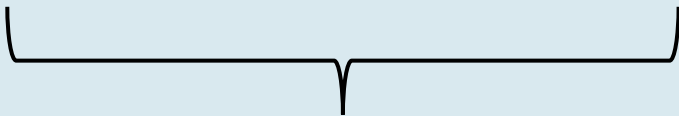| Input message type	ICAO 2012 flight plan	FF-ICE flight plan
eFPL	- Process, even if from different originator - Update FPD with eFPL data, including GUFI - The resultant FPD becomes eFPL (FF-ICE)	- Reject eFPL
eFPL Update	- Process - Update FPD with eFPL data, including GUFI - The resultant FPD becomes eFPL (FF-ICE)	- Process - update eFPL data
eFPL Cancel	- Cancel flight plan	- Cancel flight plan

Future Developments
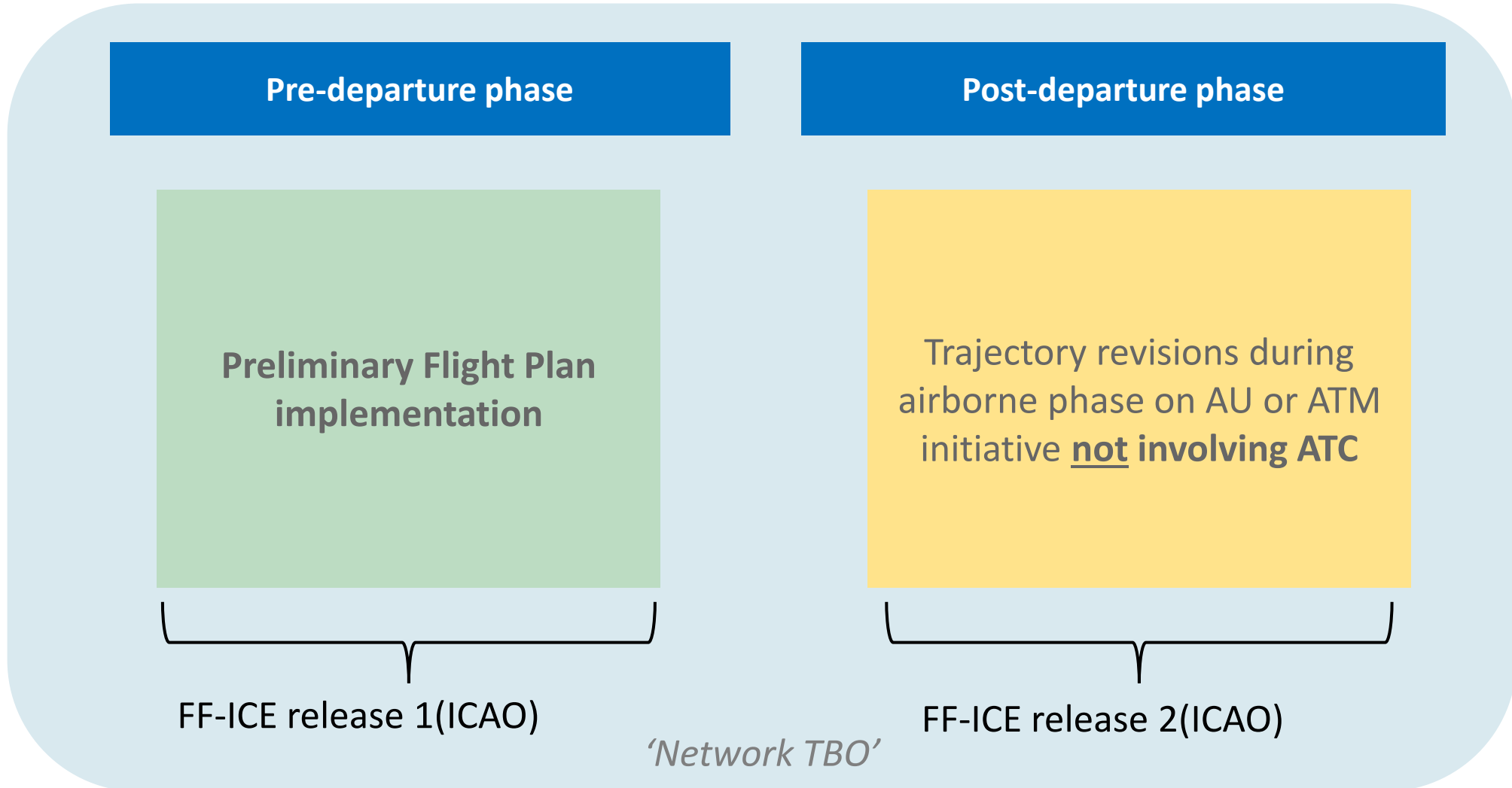
Pre-departure phase	Post-departure phase
Preliminary Flight Plan implementation	Trajectory revisions during airborne phase on AU or ATM initiative **not involving ATC**
FF-ICE release 1(ICAO)	FF-ICE release 2(ICAO)

'Network TBO'

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Documentation

- *The IFPS Users Manual
  (https://www.eurocontrol.int/publication/ifps-users-manual)*

- *NM B2B Reference Manual
  (https://ost.eurocontrol.int/sites/B2BWS/default.aspx)*

- *FPFDE NFPM Implementation Guidelines
  (https://www.eurocontrol.int/publication/fpfde-nfpm-implementation-guid*

- *Implementation Strategy for FPFDE NFPM (https://www.eurocontrol.int/publication/implementation-strategy-fpfde-nfpm)*

- *Dedicated FF-ICE website
  (http://www.eurocontrol.int/ffice)*

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