

# Aeronautical Information Services

## Flight Information Exchange Model

Presented to: ATIEC

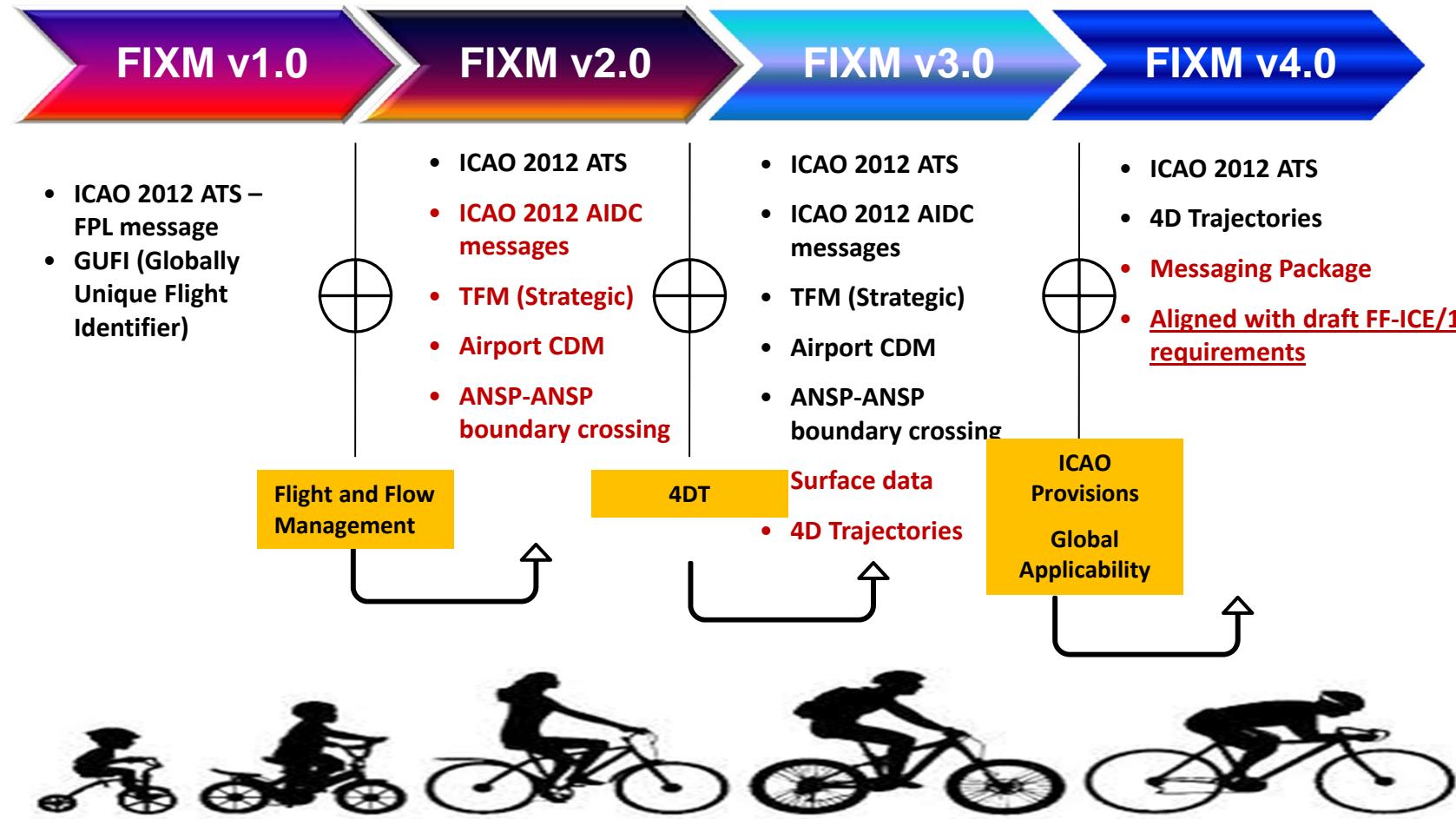
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Date: September 22, 2016

*Aviation Information World - Forecasting the Future*



# FIXM Evolution



# FIXM v4.0

## FIXM Development Focus Moving More Towards Addressing Implementation/Usability Issues

### Objective

- In Support of Flight & Flow Information for a Collaborative Environment Step 1 (FF-ICE/1)

### Inputs from the Operational Community

- ICAO Documents
- Operational Scenario Narrative
- User Recommendations



# FIXM v4.0 – Cont.

## Capabilities

- The ability to communicate the operational acceptability of a flight plan
- The ability to communicate constraints affecting a flight
- The ability to describe a 4-D Trajectory (and associated performance data) for a flight
- The ability to more fully describe the capabilities of a flight
- The ability to send “what if” queries before committing to a flight plan change
- The ability to send ASP-specific information (using extensions)



# **FIXM v4.0 Includes**

## **FF-ICE/1 Support**

- Definition of flight data elements in support of FF-ICE/1 requirements
- Incorporation of a new messaging package for enabling the creation of the FF-ICE/1 messages
- Optimization of route and 4D-Trajectory data structure



# FIXM v4.0 Includes – Cont.

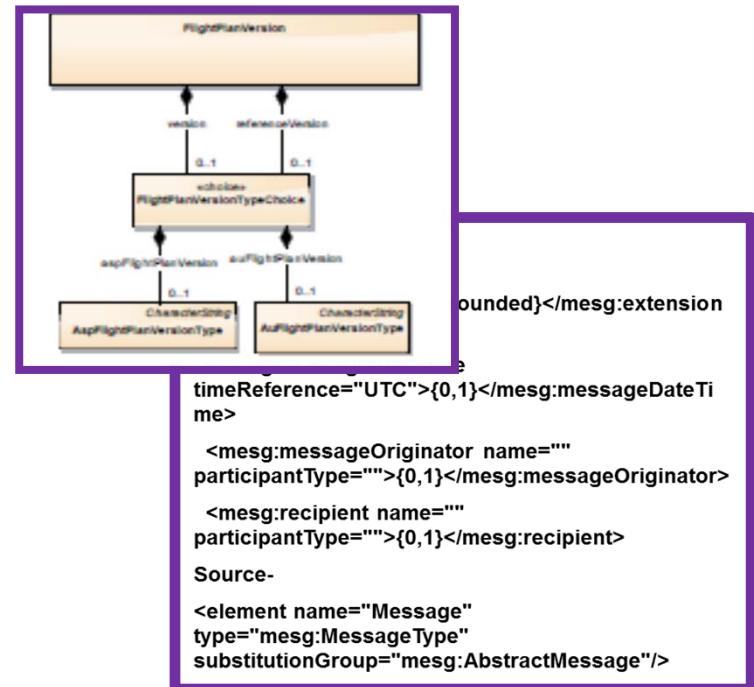
## Data Model Optimization

- Cleaner and unambiguous core information that is harmonized and applicable at global level
- Greater alignment with ISO standards (e.g., ISO 19103) and AIXM 5.1



# FIXM v4.0 – Cont. Just Released!

- UML Model
- XML Schemas
- Support Documents
- Available on:
- <https://www.fixm.aero/>



# Next Steps

- [2017] FIXM version 4.1 (TBC)
  - Continue to support any new requirements from ICAO Provisions
  - Address feedback from early FIXM v4.0 users
  - Consider integration of GML (TBD)
  - Recommendations from FIXM community



# FIXM Implementation/Demonstrations

- **Operational Users:**

- Traffic Flow Management (TFMS) (FAA)
- SWIM Flight Data Publication Services (SFDPS) (FAA)

- **Demonstrations:**

- SESAR SWIM Global Demo
- Mini-Global II Demonstrations (FAA)
- Mini-Global I Demonstration (FAA)
- Interoperability Cross Atlantic Trials (ICATS) (SESAR)
- Jumpstart (*EUROCONTROL*)
- Airport CDM Extension (*EUROCONTROL*)
- OGC – OWS – 12 (FAA, *EUROCONTROL*, OGC)



# FIXM Participants



NATS



DSNA



# Questions

