Global Information Management

Aviation Information Data Exchange (AIDX)

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What is AIDX?

- **Aviation Information Data Exchange (AIDX)** is the XML standard for transfer of data from airlines to airports and 3rd party consumers of operational flight related data.

- **AIDX is endorsed as a standard by:**
  - IATA Recommended Practice 1797A;
  - ATA Recommended Practice 30.201A;
  - ACI Recommended Practice 501A07.

- **AIDX Status:**
  - Global standard for exchange of data between airlines and airports and 3rd parties consuming real-time flight info. in the operational (non-ATM) window of a flight;
  - Implementation by over 100 airlines, airports and vendors;
  - ACI's ACRIS adopted AIDX as its flight data schema;
  - AIDX is the de facto standard for A-CDM information sharing used by almost all A-CDM implementations;
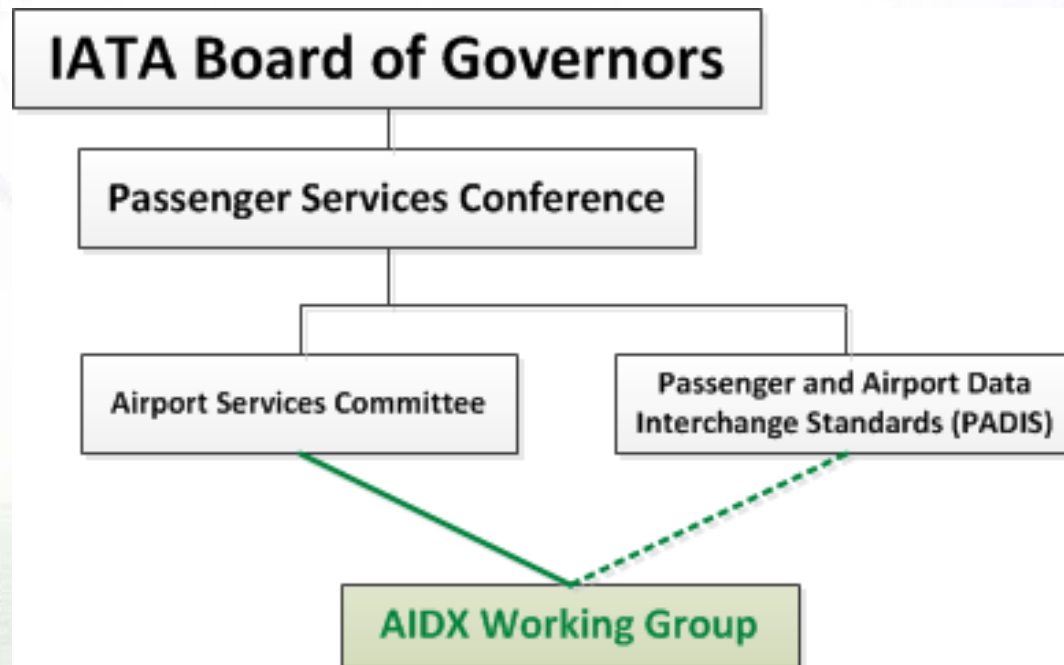 - The AIDX implementation guide v4.0 will soon be published.

AIDX scope

- The AIDX schema, which was initially launched in October 2008, currently comprises 95 distinct data elements, covering multiple aspects of Operational Flight Legs such as:

  – Flight Identification;

  – Codeshare;

  – Line of Work;

  – Operational Times;

  – Disruption Detail;

  – Status and Remarks;

  – Airport Resource Requirement;

  – Passenger;

  – Baggage;

  – Fuel;

  – Cargo;

  – Aircraft Detail.

Federal Aviation Administration

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IATA

Governance

- The IATA AIDX Working Group is **governed** by the Airport Services Committee (ASC) that goes into the Passenger Services Conference (PSC). The XML Schemas reside with IATA Passenger and Airport Data Interchange Standards (PADIS).
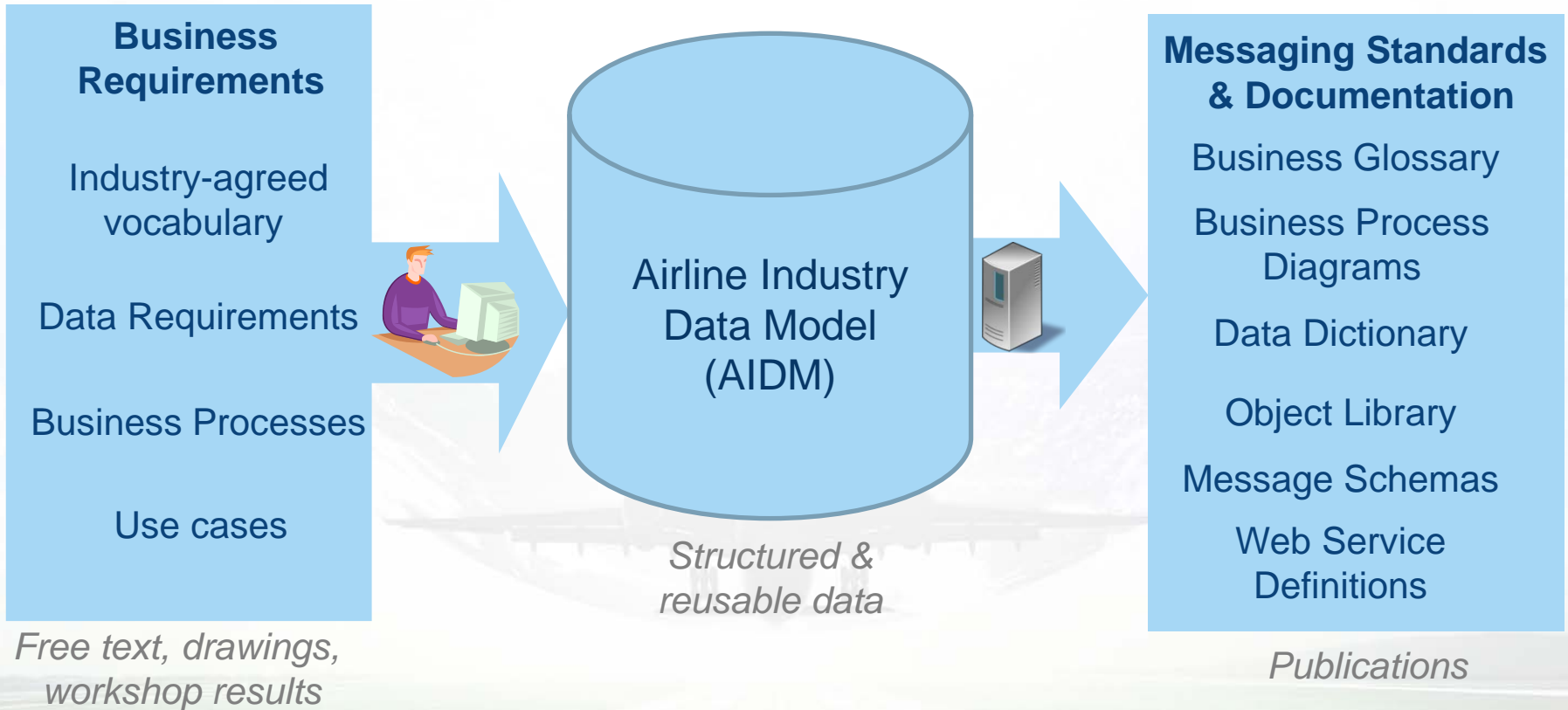
Work in progress

- **GUFI/UFI (FIXM/AIDX)** cross-domain harmonization and alignment;

- The Aviation Industry is presently involved in a substantial amount of work to introduce a common data model. As an IATA data exchange standard, AIDX will be migrated to the **Airline Industry Data Model**, which is currently being developed;

- The current release of AIDX supports **SESAR/ACRIS A-CDM** (Airport Collaborative Decision Making). The AIDX working group continues to work with SESAR/ACRIS to ensure that the schema will support A-CDM as it evolves;

- Although the current schema is focused on Commercial Aviation, the AIDX working group is in discussions with NBAA (National Business Aviation Association) to extend the scope of AIDX to **General Aviation**;

Airline Industry Data Model
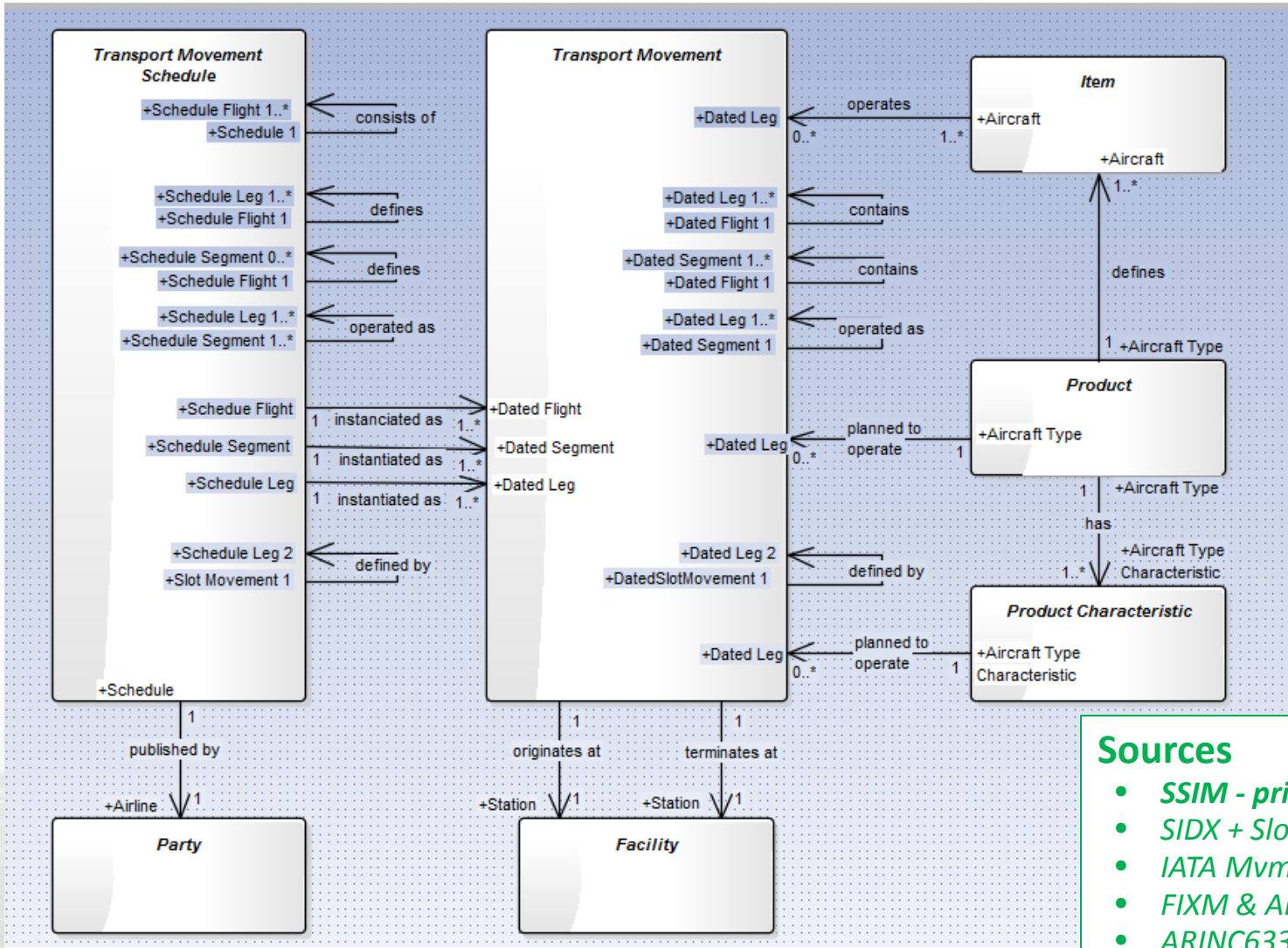
- Living model with defined structure and behavior enabling model-driven generation of message standards

  - Speed up the development of specifications through reuse and automated generation

  - Improve level of interoperability among industry players and systems

- Users of model will be able to use, extend and adapt definitions contained in the model

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All info. in one repository

Business Requirements

Industry-agreed vocabulary

Data Requirements

Business Processes

Use cases

Free text, drawings, workshop results

Airline Industry Data Model (AIDM)

Structured & reusable data

Messaging Standards & Documentation

Business Glossary

Business Process Diagrams

Data Dictionary

Object Library

Message Schemas

Web Service Definitions

Publications

IATA

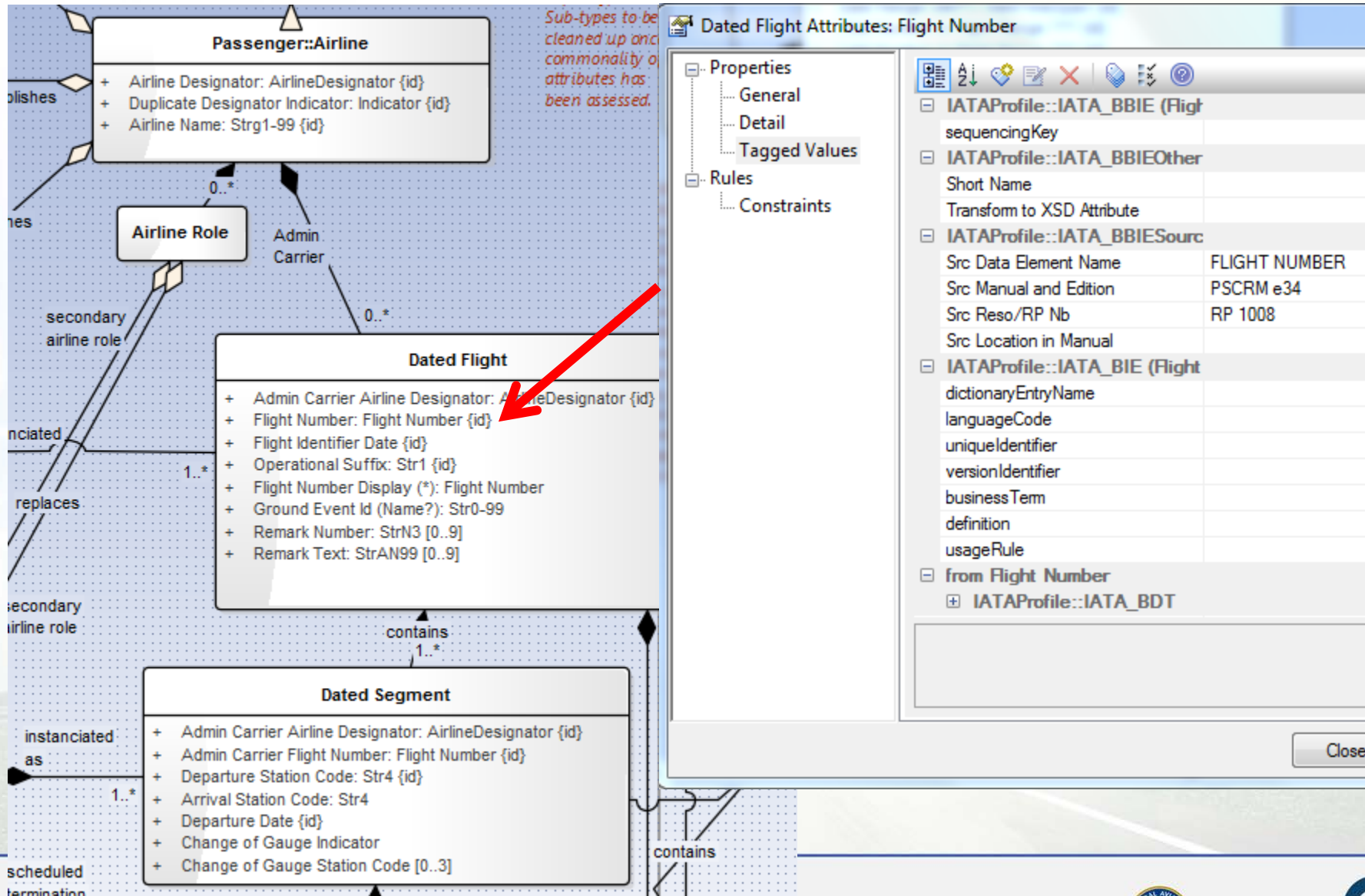Federal Aviation Administration
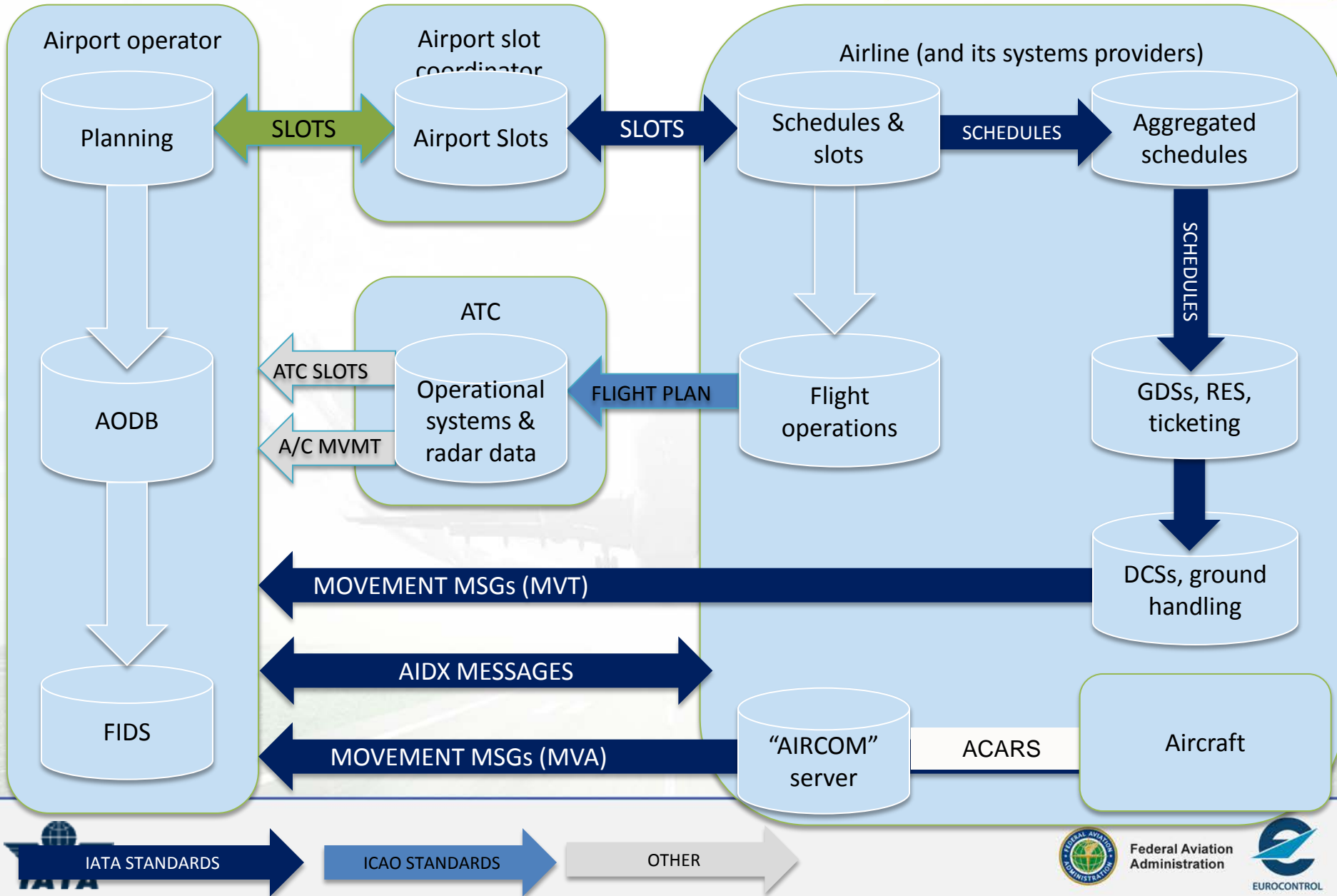
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Flight Draft Conceptual Model

Sources
- **SSIM - primary**
- *SIDX + Slots*
- *IATA Mvmt : AIDX*
- *FIXM & AIXM*
- *ARINC633 ACARS*
- *PBCS Model*
- *models from contributors*

Sample Logical Model

Airline perspective

Airport operator

Airport slot coordinator

Airline (and its systems providers)

Planning

Airport Slots

Schedules & slots

Aggregated schedules

← SLOTS → (green)

← SLOTS → (to Schedules & slots)

SCHEDULES →

SCHEDULES ↓

ATC

ATC SLOTS ←

Operational systems & radar data

A/C MVMT ←

← FLIGHT PLAN

AODB

Flight operations

GDSs, RES, ticketing

FIDS

← MOVEMENT MSGs (MVT)

DCSs, ground handling

← AIDX MESSAGES →

← MOVEMENT MSGs (MVA)

"AIRCOM" server

ACARS

Aircraft

IATA STANDARDS → ICAO STANDARDS → OTHER →

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Thanks for your attention

Join the Flight to establish cross-domain harmony and alignment!

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