

# Indra Avitech enables ADQ 73/2010 compliance



Come on board and benefit from a safe, secure and low-cost route towards achieving compliance with ADQ regulations

# Indra Avitech provides AIM solutions to AISPs in Europe and all around the world.

**The Aurora System, based on the Indra Avitech AIM Solution, delivers to the AIM community a smooth path to ADQ compliance, high resilience and the ability to respond to future needs on the basis of a cost sharing model**

## Requirements

ICAO has established standards and recommended practices which require all contracting States to introduce a properly organized Quality Management System. This will ensure that quality requirements for all Aeronautical Data, including Aerodrome Mapping Data, Obstacle Data, Terrain Data etc. are achieved, as this will contribute towards the implementation of the ICAO ASBUs, CNS/ATM and PBN concepts.

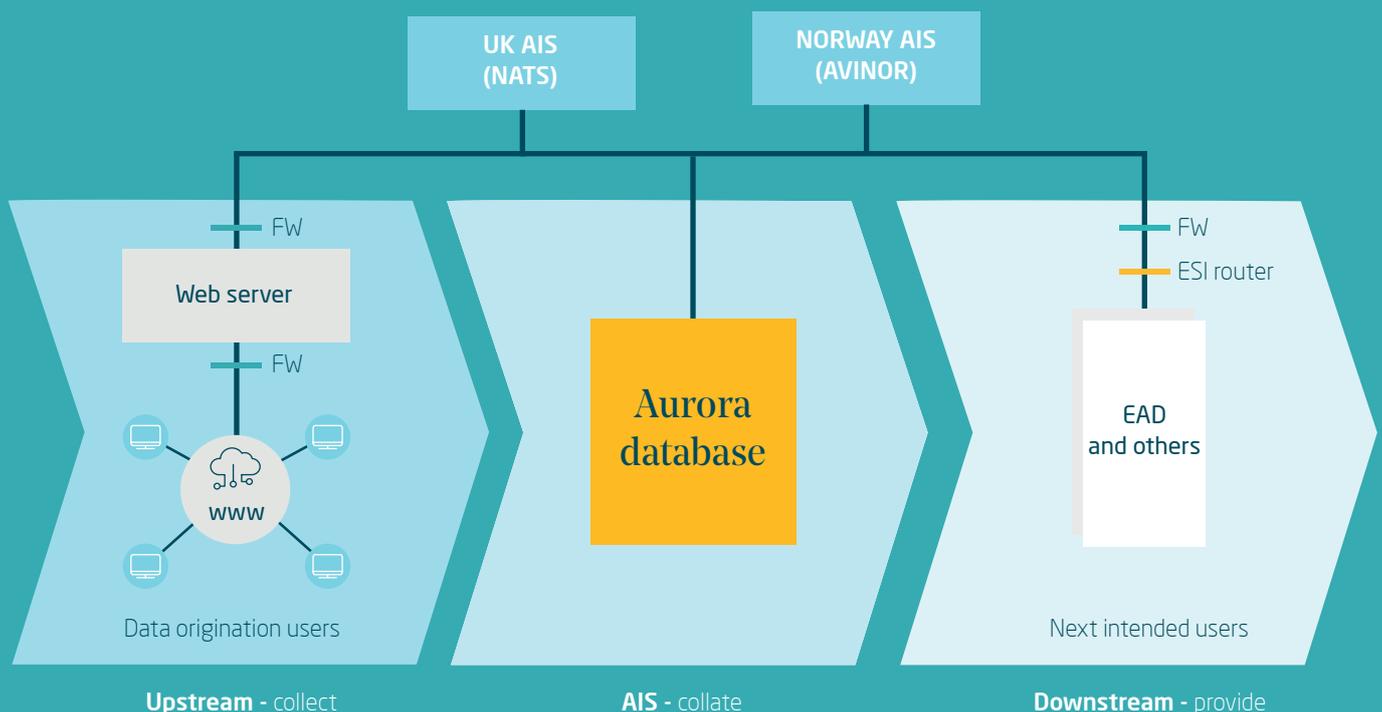
Furthermore, in Europe, the Commission Regulation (EU) 73/2010, as part of the Interoperability Framework (Regulation (EU) 552/2004), lays down additional legal requirements for aeronautical data and systems for the Single European Sky.

## User roles

Role management is one of the key components of the data origination process that is necessary to ensure the required data quality, to manage the "4-eyes" principle for data verification and the correct processing chain between the data managers within and across organisations. In Aurora this is important because initially two organisations, Avinor and NATS, share the system.

Regulation-driven authorization management enables managers to specify resources and groups based on legal requirements.

## Aurora system solution



## Service availability and security

The Aurora System is remotely hosted to provide an effective long-term solution using a common, shared set of Indra Avitech AIM and SWIM Server Software that allows an AIM community, wherever it is located, to remotely use the system based on appropriate service level agreements.

All Data Originators are connected through a secure web portal application using Indra Avitech SWIM and AIM software, which complies with the EU ATM SWIM Master Plan software architecture.

## Community

Avinor and NATS are committed to long-term community benefits and the door is open for any AIS Service Provider to share the benefits. New users can be remotely hosted on the solution for ANSPs and AIS organisations.

The Aurora System complements the European AIS Database (EAD) by allowing Aurora community members to interface with the EAD system.



## Quotes

*"Our project has already saved both Avinor and NATS considerable resources and capital investment – but that's just the start."*

A. Sage, Head of NATS Information

*"By working together with NATS in this procurement with Indra Avitech, and by welcoming other ANSPs to join a community of users, while retaining the flexibility to meet local requirements, our intention is to ensure stable and robust AIM Services for many years to come."*

T. Carlsson, Head of Technical and AIM at Avinor.

## System outline

### Benefits from a proven system architecture

The Indra Avitech AIM Solution provides integrated quality process management for the collection of all data needed for the publication of AIP Amendments, AIP Supplements, AIC, maps and charts as well as other applications. Indra Avitech AIM Static Database provides features for:

- Data storage
- Data management
- Workflow management
- Change & data interface management
- Aerodrome mapping data management
- Aeronautical data management
- Terrain data
- Obstacle data
- Data import/export

The database is a physical implementation of the Aeronautical Information Conceptual Model (AICM/AIXM 5.1). It allows private extensions and the database is fully temporal. To maintain data integrity and to avoid human errors, the solution applies a "4-eyes" principle.

### Conformance Statement

Conforms to ICAO Annex 15 recommended Quality System to publish AIPs and data including Terrain and Obstacle Data. Also conforms to European Commission Regulation No. 73/2010 (ADQ), and Eurocontrol Static Data Procedures (SDP), AIXM 4.5 and AIXM 5.1 as well as to the following RTCA/EUROCAE Documents: DO-272B/ED-99B, DO-276A/ED-98A and DO-291A/ED-119A, and DO-200A/ED-76.

## Solution overview

The Data Origination Upstream Portal is equipped with a comprehensive workflow engine to ensure that the collect and collate activities of all incoming changes are managed in a pre-defined quality process. Workflow engine features include:

- Fully configurable workflows
- Role-based responsibilities
- Automatic notifications
- Traceability and Legal Recording
- Reporting

In order to support complex origination and approval workflows involving different organizations and units, the workflow engine enables an extension of the process even before the submission of the data to the AIS Centre.

The Upstream Portal is delivered pre-configured based on the Indra Avitech Standard Workflow implementing ICAO and regional requirements, and uses the Indra Avitech AIM AIXM 5.1 Database, AIP and Charting Solution. The main workflow applications for data origination are:

- Change request manager
- Obstacle survey manager
- Procedure design management

For our worldwide references please refer to: [www.indra-avitech.aero](http://www.indra-avitech.aero)



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