

CONTROL HTML based eAIP format. Supported publications include: AIP Amendments, AIP Supplements (SUPs) and Aeronautical Information Circulars (AICs). Special sections such as Checklist (GEN 0.4), Cover Page and TOC (GEN0.6) are all automatically generated. By default WePub provides a large set of standard rules which can be used for the generation of a regular ICAO AIP.

**CRONOS**

CRONOS provides a high performance and high availability interface for the management of dynamic aeronautical information. It provides functionalities to manage both traditional and digital NOTAM messages, MET data, flight plan (FPL) and pre-flight information bulletins (PIB). Users can interact with the system via a web-GIS environment with a high level of automation while the system architecture allows data to be shared openly with third-party applications and over SWIM infrastructure.

**Ubimex**

Ubimex is a feature packed and reliable ATS message handling system (AMHS) which handles the routing and transfer of aeronautical messages and provides a robust database for short and long term message storage. It offers an integrated web-based environment for ICAO compliant AMHS

and AFTN messaging and has proven interoperability with third-party AMHS systems.

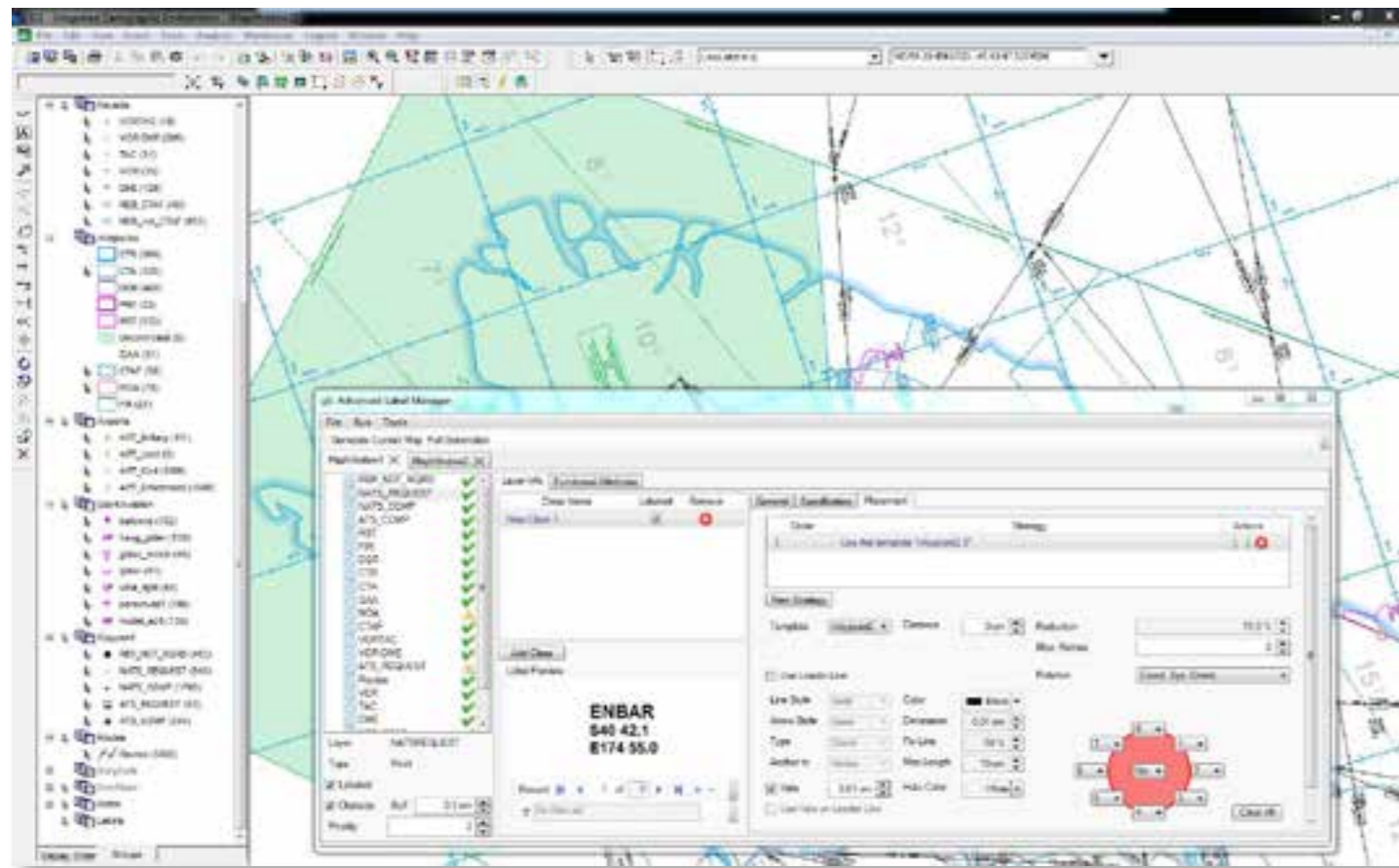
**IAM (Identity and Authorization Manager)**

IAM is a web application designed for centralized user and role management. IAM is fully integrated with all the other applications and allows the control of user access to various application functions. IAM is fully compatible with the LDAP protocol. Benefits

- Compliance with the main aeronautical regulations, standards and concepts;
- Improve the integrity and accuracy of AIS/AIM data through the use of a single central database for all aeronautical data;
- Increase the efficiency and effectiveness of data and product editing through the usage of automation and the consequent reduction of manual operations;
- Improve the detection and correction of defects via automated data analysis and validation;
- Improve the performance of internal AIS processes by means of a centralized workflow management system that allows processes to be defined and their effectiveness to be measured;
- Integrated data traceability from data origination to data distribution.

# AIS/AIM Suite

An Integrated Suite for Aeronautical Information Services and Management



**AIS to AIM Transition**

Aeronautical Information Services have an essential role in the evolving world of ATM. Computer-based navigation systems, area navigation (RNAV), required navigation performance (RNP) and ATM requirements introduced a need for corresponding AIS requirements for better data distribution in terms of quality and timeliness in order to contribute to improved safety, increased efficiency and greater cost-effectiveness of the air navigation system.

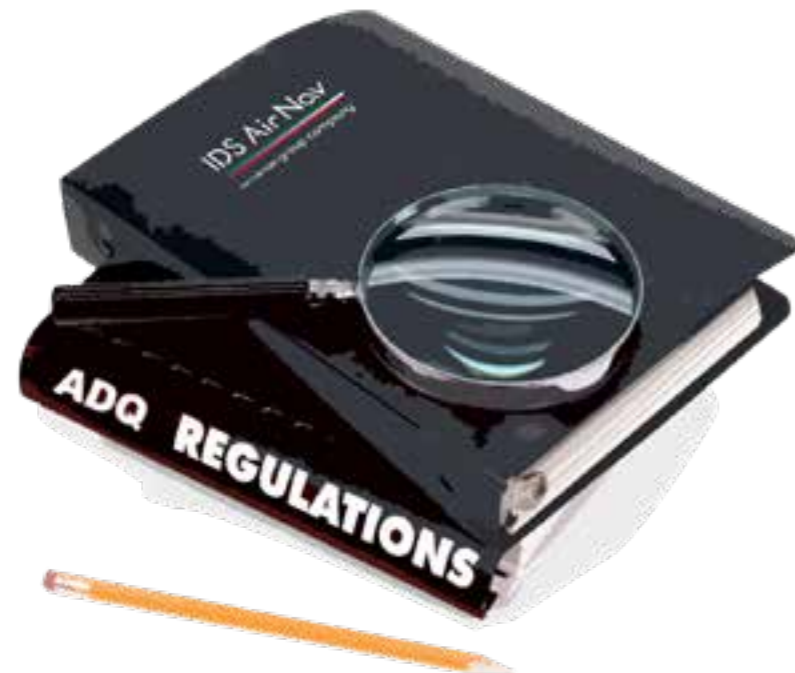
For this reason, states, international organizations and industry are committed to the evolution from traditional product-centric AIS to the enlarged scope of data-centric Aeronautical Information Management (AIM) according to the roadmap defined by ICAO.

**AIS/AIM Suite**

In order to support Aeronautical Information Management, IDS Air Nav offers an integrated suite of software products for the acquisition, validation, storage and distribution of both static and dynamic aeronautical data.

The IDS Air Nav AIS/AIM Suite is deployed as a set of independent modules supporting the different areas of AIS/AIM. This deployment can be performed using either a single step or a phased approach.

By using state-of-the-art information technology, IDS Air Nav's AIS/AIM Suite allows the automation of aeronautical data management and publication processes, increasing the quality of both data and products and reducing the effort required by AIS operators. The support of standard interfaces based on Service Oriented Architecture (SOA) allows the IDS Air Nav AIS/AIM Suite to be easily interfaced with external systems (e.g. European Aeronautical Database).



IDS Air Nav's AIS/AIM Suite is designed in accordance with the main aeronautical regulations, standards and concepts, including:

- ICAO ANNEX 15 – Aeronautical Information Services;
- ICAO ANNEX 4 – Aeronautical Charts;
- ICAO AIS to AIM Roadmap;
- (EU) No 73/2010 of January 2010 – Aeronautical Data Quality (ADQ);
- RTCA DO-200A- Standards for Processing Aeronautical Data;
- RTCA DO-201A – Standards for Aeronautical Information;
- UNI EN ISO 9001 ed.2008 Quality Management System - Requirements;
- EUROCAE-ED-153: Guidelines for ANS Software Safety Assurance;
- Aeronautical Information Exchange Model (AIXM) version 4.5 and 5.1;
- System Wide Information Management (SWIM).

**Products**

The AIS/AIM Suite includes:

**PLX (Planning eXtensions)**

PLX is a web application designed to:

- Design, execute and track processes and workflows in compliance with ICAO Annex 15 requirements for data integrity and the Controlled and Harmonised
- Aeronautical Information Network (CHAIN) model;
- Distribute aeronautical data and products via web interfaces and web services (SWIM).

**DO Interfaces (Data Origination Interfaces)**

DO Interfaces are designed to collect data change requests from data originators by means of any 1 of 3 different secure electronic connections:

- Web forms;
- Web services;
- Mail box.

**Data Maintenance**

Data Maintenance is a set of products for aeronautical data visualization, editing and validation which lies at the heart of the IDS Air Nav AIS/AIM Suite.

IDS Air Nav AIS/AIM suite provides:

- A centralized, AIXM 5.1 based, extensible Aeronautical Database (AeroDB);
- Temporality and data staging management;
- Metadata management;
- Data Integrity control based on the CRC32Q algorithm;
- GIS engine for data visualization and analysis;
- Tabular and geographical interfaces for aeronautical data visualization and editing;
- Advanced and fully configurable validation engine for automatic business rules validation;
- Full data changes traceability and history management.

**Translators**

Translators is a set of tools which offers fast and safe methods of importing and exporting electronic aeronautical data in various formats such as ASCII, ARING 424, AIXM (4.5, 5.1), DAFIF and custom formats. It also provides integration with the European AIS Database (EAD), allowing EAD data providers and data users to exchange data in both directions.

**ICE (Integrated Cartographic Environment)**

ICE (Integrated Cartographic Environment) is a template based charting system that allows the automatic production of ICAO Annex 4 and tailored aeronautical charts in a GIS environment. ICE is connected live to the Aeronautical Database and can be linked to other (geo) graphical data sources. ICE includes an intelligent labeling engine that automatically places and declutters labels on the charts, dramatically reducing the effort required for chart cleaning.

**WePub (Aeronautical Publication)**

WePub is an automatic rules based system for the generation of the ICAO compliant Aeronautical Information Publications (AIP) from data stored in the Aeronautical Database. The publication format is fully configurable and can be adapted to specific needs (civil AIP, military AIP, custom publications, etc.). Publications are generated in PDF format (both Amendment and full book versions) or in the EURO-

