

AIM Workshop

Digitalisation – challenging and enabling future AIM

2-3 November 2020

Key message

by the FABEC AIM Steering Group

Digitalization enables productivity increases in orders of magnitude and can dramatically reduce unit costs. Digitalization is helping to build a seamless, transparent airspace management structure that transcends national borders and enables multiple players to access common data. Aeronautical Information Management - AIM - ensures the exchange of quality-assured digital aeronautical information between all parties and relies on digital tools to deliver timely, reliable data.

However, we - as AIM - are not yet there. This is partly brought by inadequate standardization mechanisms which are unsuitable for efficient digitization. Aeronautical data formats and interfaces are not sufficiently standardized for their efficient exchange and subsequent processing. These shortcomings need to be addressed.

This InterFAB workshop considered and evaluated the procedures and tools necessary to harmonize and standardize AIM between Air Navigation Service Providers and users to ensure data consistency across the entire user community, whether for ATM or UTM.

These are the key messages of this workshop:

1 The safe and efficient functioning of AIM relies on the continuous evolution of (interoperability) standards.

- > In future, reference implementations and compliance testing for new AIM standards is a must.
- > Once data formats and interfaces are sufficiently standardized, competition is based on best customer value.
- > Only platform standards will allow AIM to generate the economies of scale necessary for a successful digitalization.

- > AIXM 5.1.1 is the proper international standard, but not suitable for all stakeholders.
- > Real digital data is needed that can be seamlessly exchanged and processed by all compliant systems without the friction we experience with AIXM today.
- > AIM data are just one flavor of geospatial data, consider using mainstream geospatial data tools wherever possible.

2 The harmonization and exchange of information between AIM service providers (AISP) can and should be improved.

- > Start working on detection and mitigation of existing inconsistencies.
- > Harmonised AIM data that use the same AIXM dialect are required to facilitate cross-border data sets.
- > Data consistency checks and resolutions must be performed before publication and are required for automation.
- > Automated system to system data exchanges simplify routine tasks in ATM.
- > A MIA arrangement permits the AISPs to assist in and to safeguard, validated and coordinated requests for publication of aeronautical information.
- > The establishment of such MIA arrangements between other ANSPs and/or between FABs is essential.

3 Geodata have enormous potential and not only in the field of UTM. However, this potential can only be exploited if investments are also made in digital infrastructure and expertise.

- > The impact of Geodata will increase with the implementation of UAS Geozones in Europe.
- > Single-Source of truth for official Geodata is crucial for air safety.
- > Openness to new technologies and solutions from other industries is required.
- > The Common Unique Digital Format is the ED-269 (Chapter 8).

Aeronautical Information Management will provide a new impetus to the Single European Sky. But to make progress, we need to work together to finally achieve seamless interoperability of AIM data and coordinate with each other to create harmonized, international data sets.

Let us work together to make harmonised data sets for manned and unmanned aviation, which can be exchanged directly among all stakeholders, a reality. The signing of the declaration of the InterFAB Cooperation on AIM is an important first step in this direction but this collaboration should be extended.

We are all in this together!