WHAT IS AERONAUTICAL INFORMATION?

High-quality, reliable information we simply cannot live without it

Information is a little bit like air; it is invisible. One cannot see it, or touch it but without air, one cannot live; or, as in the case of information, one cannot make decisions. Decision-making involves collecting information, analyzing it, and putting the information into context in order to be able to make decisions. Flight operations involve a constant sequence of well-informed decisions. Very often, these decisions and the actions that stem from them are safety critical. As a consequence, bad information lead to bad decisions, and bad decisions always compromise aviation safety! It's as simple as that.

AIS keeps information up-to-date

Annex 15 – *Aeronautical Information Services* states that aeronautical information shall be kept up to date. The timeliness of information is one of the key quality criteria for the provision of aeronautical information. AIS employs different update mechanisms to keep the information current, namely:

✈ **AIP Amendment**   ✈ **AIP Supplement**   ✈ **NOTAM**   ✈ **AIC - Aeronautical Information Circular**

Operationally significant information

Not all information is created equal! Some information is considered operationally significant, as spelled out in Annex 15. The annex states that whenever we are dealing with operationally significant information and the changes thereof, implementation dates shall be based on AIRAC effective dates. This ensures that all stakeholders within the air traffic management system are in sync, and allows for sufficient time for the processing of the information. The AIRAC cycle allows for proper planning and work load balancing across the aeronautical data chain. It also permits flight crews and other personnel concerned with flight operations to prepare for and, if needed, train for the new situation described by the information. It is imperative for the dissemination of operationally significant information to strictly adhere to the AIRAC cycle.

Digital transformation

Increasingly, aeronautical information is being provided digitally using AIS automation systems. Traditional aeronautical information products, like the aeronautical information publication (AIP), are partially being replaced by digital data sets. Annex 15 lists the first digital data sets for the provision of aeronautical information in digital format. They are:

- AIP data set;
- Terrain and obstacle data sets;
- Aerodrome mapping data sets; and
- Instrument flight procedure data sets.

Collectively, these digital data sets are at the forefront of the digital transformation from product-centric AIS to a data-centric aeronautical information management (AIM). In the future, it is envisioned for these data sets of aeronautical information to be exchanged across the entire ATM system via system-wide information management (SWIM), a network-centric approach to information exchange.

Quality

As we transition from AIS to AIM, ensuring the quality of aeronautical information becomes ever more critical. Implementing an effective quality management system covering all aspects of aeronautical information services is the means to ensure that our AIS automation systems produce high-quality information. Without stringent quality assurance and control processes, automation systems run the risk of producing aeronautical information according to the old adage of "garbage in, garbage out".

The digital transformation of AIS cannot be successful without the assurance that the aeronautical information we provide is fit for its intended use. Flight crews and other operational personnel around the world place their trust into our aeronautical information, and that trust has to be earned every single day.