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## **INFORMATION MANAGEMENT IN AIR TRAFFIC**

In our day-to-day lives we get information from around the world using telephones, e-mails, newspapers, TV or radio. The challenge is to keep out the accessing of all the necessary information at the right time. And this challenge is the same in air traffic management (ATM).

The Aeronautical Information Service (AIS) is responsible for collecting, publishing and distributing the aeronautical data necessary for aircraft operations. The change from paper based AIS to digital AIM involves transposing all this data into electronic format and improving Data Management in terms of availability, accuracy and integrity.

EUROCONTROL has provided the project that shows the practical visibility of Information Management in ATM and shows what can we achieve when ATM data is available and shared digitally.

System Wide Information Management (SWIM) is a network-centric information environment in Europe represented by EUROCONTROL. SWIM creates the conditions for advanced end-user applications based on extensive information sharing and the capability for finding the most appropriate source of information.

SWIM is an enabler for end-user applications in ATM; a means to make information more commonly available; an environment to create the conditions for end-user applications based on extensive information sharing; the capability of finding the most appropriate source of information.

SWIM involves essential elements of SESAR, net-centric operations, Collaborative Decision Making, trajectory management, new separation modes, improved MET, improved aeronautical information and improved access to information and services.

It is no doubt that none of this can work effectively without SWIM. At the system an aircraft is a source and user of data, a node in the SWIM-network. All the data should be safe, secure and reliable.

SWIM Data Pool collects the information such as: aeronautical information, flight information, weather, traffic demand, network capacity and surveillance data. It makes this information possible to use for: airspace users, ATM service, providers ATM support organizations. SWIM is very essential system as far as information availability for all users will increase the situation awareness and flights safety.

For education process support a special Weather Web Service was created at the department web site [www.ANS.nau.edu.ua](http://www.ANS.nau.edu.ua). This Web Service collects all the data that a pilot also can get on-board.

It includes METAR, TAF, SIGMET information; image of different weather conditions; astronomical information about Sun and Moon; current weather.