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Euro-Atlantic Partnership – firm anchor in a turbulent world



Rebuilding institutions, cementing structures

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Prague



The leadership role of transatlantic partners

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Ambassador of the United States,
Berlin

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Sharing of airspace between civil and military airspace users

(BSC/Peter Rudolph*/Avitech) Flexible

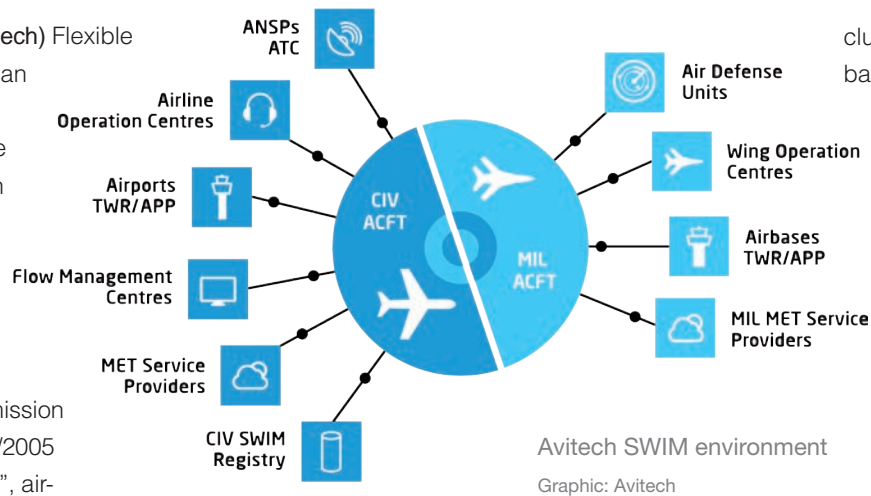
Use of Airspace (FUA) is an airspace management concept described by the International Civil Aviation Organization (ICAO) and developed by the European Organization for the Safety of Air Navigation (Eurocontrol).

According to the Commission Regulation (EC) No 2150/2005 "Flexible Use of Airspace", airspace should not be designated as either purely civil or purely military airspace, but should rather be considered as one continuum in which all users have to accommodate related requirements to the maximum extent possible. The European Union (EU) Member States agreed, in a Statement on Military Issues related to the Single European Sky, to cooperate with each other, taking into account national military requirements, in order to ensure that the concept of flexible use of airspace is fully and uniformly applied in all Member States by all users of airspace. Non-EU Member States of the European Economic Area (EEA) have joined the Single European Sky Initiative to work collaboratively on the reduction of the fragmentation of the European airspace.

To fulfill these requirements a closer, faster, and higher quality of aeronautical, meteorological, and flight data sharing between military and civil air navigation systems is needed than in the past. Data need to be shared quicker and uncompromised. This affects all Military Air Traffic and Air Defense Services, and all Air Navigation Service Providers in the EU and EEA.

This higher value data sharing is defined within ICAO, the EU/EEA, Eurocontrol, and within other states or groups of states under the term SWIM – System Wide Information Management. System Wide means, in this case, the civil and military air navigation system in its totality from the concept level to the technical protocol level. For this higher integrated data sharing, Safety Regulations and IT Security Rules for network gateways between networks with different classification levels need to be adhered. In Germany e.g. the Classified Material Instructions of the Federal Ministry of the Interior define those requirements.

The Role and significance of aeronautical data has changed importantly with introduction of Required Navigation Performance, and Flight Management System based navigation, in-



cluding the usage of global Satellite Navigation Systems as primary mean of navigation. All these concepts and systems are data dependent. The aeronautical data have become a critical and inevitable component of the system. Consequently, damaged or corrupted aeronau-

tical data may potentially affect the safety of air navigation. For this reason ICAO has introduced Standards and Recommended Practice's (SARPs), which require from the member states to introduce a well organized Quality Management System (QMS). This QMS must give data users the assurance and confidence that the distributed aeronautical data are conform to the operational data quality requirements (accuracy, integrity, and resolution), completeness and timeliness. The required data integrity is not reached yet. Data re-entry or manual transfer of data is an important reason for the loss of data integrity; a missing verification process is the cause of corruption.

The 38th Session of the ICAO Assembly, held 24th September to 4th October 2013 in Montreal, adopted Resolutions which setting the framework, inter-alia, for FUA and SWIM. Currently various ICAO Panels and Study Groups develop new ICAO SARPs to define a performance framework to support world wide harmonized implementation of FUA and SWIM. This will cause amended Annexes to the ICAO Convention and Procedures to Air Navigation Services. Accordingly the respective EU Regulations and e.g. the European Air Traffic Management Master Plan will face amendments to ensure ICAO compliant implementation in the EU/EEA States.

The supplier industry and industry associations like RTCA, EUROCAE, and the Airline Electronic Engineering Committee support this work on FUA and SWIM.

All current initiatives are military and civil aviation community integrated which will allow using the airspace more effectively by all airspace users.

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