

FOREWORDS

Eurocontrol



By David McMillan, Director General

Eurocontrol is a civil/military inter-governmental organisation comprising 38 Member States with a mission to harmonise and integrate air navigation services in Europe. Its focus is on the evolution of a safe and efficient pan-European Air Traffic Management network to facilitate the sustainable growth of aviation in Europe.

As well as having direct operational experience, both in ATC (through the Maastricht Upper Air Control Centre) and at network level (the Central Flow Management Unit), Eurocontrol is a major contributor to the SESAR (Single European Sky ATM Research) programme - which will map out the future of ATC within Europe.

With the ultimate aim of integrating UAS safely into general air traffic, Eurocontrol is developing UAS air traffic management (ATM) requirements into a comprehensive set of globally interoperable certification and operational approval criteria. These will require UAS to fit in with the existing ATM system, rather than adapting the system to accommodate UAS.

In providing the lead on ATM for UAS flight in Europe, Eurocontrol is following a number of well-established principles. Firstly, UAS operations should not increase the risk to other airspace users; secondly, ATM procedures should mirror those applicable to manned aircraft; and, thirdly, the provision of air traffic services to UAS should be transparent to air traffic controllers. Naturally, the safety of all airspace users remains paramount.

The short-term focus is on the expected arrival of Global Hawk/Euro Hawk in Europe towards the end of this year. In preparation, Eurocontrol is drafting a set of ATM guidelines which Hawk operators will be able to use as a basis for negotiating access to airspace in individual European States. The guidelines also aim to inform, educate and provide guidance to air navigation service providers, Hawk operators and other stakeholders on the safe application of ATM procedures for Global Hawk/Euro Hawk in European airspace.

Although the guidelines are not mandatory, it is hoped that States will consider incorporating most, if not all, of them into their national rules and procedures should they allow Global Hawk/Euro Hawk to fly in their airspace. This will ensure that a greater degree of harmonisation is obtained than would otherwise be the case.

UAS integration into European airspace will be an incremental process. Eurocontrol therefore regards the introduction of Global Hawk/Euro Hawk as an important and essential early step in the successful accommodation and safe operation of this rapidly-emerging technology.

Looking further ahead, it is equally important to ensure that UAS are fully integrated into the ATM regulatory, operational and technical environment of the SESAR programme.

Indeed, the unique capabilities of UAS may be particularly well suited to some aspects of SESAR, such as 4-D trajectory management. UAS also complement the SESAR concept

in areas such as improved Sense and Avoid; advanced communications; autonomous flight and new collision avoidance systems.

Eurocontrol is providing direct support for UAS integration into SESAR, in its role as a founding member of the SESAR Joint Undertaking, a public-private partnership dedicated to transforming European ATM.

Eurocontrol does not work in isolation on UAS. Indeed, progress would stall very quickly without effective coordination and cooperation between the various national and international bodies concerned with UAS integration.

Eurocontrol works in extremely close collaboration with EUROCAE (the European Organisation for Civil Aviation Equipment), ICAO (the International Civil Aviation Organisation), NATO, the European Aviation Safety Agency (EASA) and the European Defence Agency (EDA).

Cooperation with the United States' Federal Aviation Administration (FAA) will be taken a step further with a new Memorandum of Cooperation to be signed between the European Commission and the FAA to coordinate the development of SESAR and the FAA's NextGen programme for the future ATM systems in both continents.

Eurocontrol's overall aim in this cooperation is to support the safe, secure and efficient integration of UAS into non-segregated airspace. Because of its unique civil-military composition, Eurocontrol is well able to assist with both current and future UAS developments, while it continues to support the needs of other airspace users.

Eurocontrol values the wide-ranging coordinating role played by UVS International, and appreciates that organisation's support for the work being done to integrate UAS into European airspace.

David McMillan
Director General
Eurocontrol

