

WORLD ATM CONGRESS
“Europe for Aviation” theatre #595

21 June

10:15-10:45 UAS – A booster for synergies between civil, defence and space Industries

Unmanned Aircraft Systems (UAS) have been actively used in the defence sector over the last 30 years mainly using US and Israeli platforms. The emergence of new types of platforms, from micro UAS to High Altitude Pseudo Satellites (HAPS), as well as the current development of Medium Altitude Long Endurance (MALE) Remotely Piloted Aircraft Systems (RPAS) by four European nations, offer an opportunity to foster sustainable and smart mobility, improve the competitiveness of European industry and strengthen Europe's strategic autonomy in this key technical domain. This also represents an excellent opportunity for civil-military cooperation since many of the technological building blocks building up these systems, such as Detect and Avoid, autonomy, datalinks, electrooptical sensors and other payloads are paradigmatic cases of dual-use enabling technologies, which ideally should also have European origin.

This panel will gather key actors from industry and European organisations to discuss the role of military UAS as a trigger for the development, standardisation and regulation of key dual-use enabling technologies in Europe.

Moderator: Juan Ignacio Del Valle, Project Officer UAS Programmes, EDA

Speakers:

- Christophe Vivier, Head of the SES Unit, EDA
- Nicolas Eertmans, Aviation Safety, Policy Officer, DG MOVE, European Commission
- Olivier Reichert, Director Innovation Programme, SAFRAN
- Robin Garrity, Senior External Affairs Officer, SESAR 3 JU

11:00-11:45 Towards greener and more resilient ATM in Europe

As part of the European Green Deal, the EU has set the target of achieving climate neutrality by 2050 with the ambition to cut greenhouse gas emissions by at least 55% by 2030. What is the current situation? How can we accelerate the shift towards a sustainable and smart mobility while ensuring a resilient air transport in Europe? And how can ATM contribute to this transition?

Moderator: Christine Berg, Deputy Director Aviation, DG MOVE, European Commission

Speakers

- Filip Cornelis, Director for Aviation, DG MOVE, European Commission
 - Mariagrazia La Piscopia, Executive Director, SESAR Deployment Manager
 - Andreas Boschen, nominated Executive Director, SESAR 3 JU
 - Regula Dettling-Ott, Chair of the Performance Review Body
 - Marylin Bastin, Head of Aviation Sustainability, EUROCONTROL
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12:00-12:30 **Preparing the European aviation network to cope with summer traffic & New NM Ops Centre**

This session will provide an overview of the traffic in the network for the summer ahead, and the progress to completing the new Network Manager Operations Centre. Airports, crises and the tips and tricks for getting the best out of the European ATM network will all be here.

Speaker: Steven Moore, Head ATM Network Operations Division, EUROCONTROL

12:45-13:15 **Civil-Military ATM/ANS cooperation in a changing European security environment**

Moderator: Michael Steinfurth, Senior Advisor, EUROCONTROL

The Russian attack on Ukraine shows that armed conflicts are still possible threats to our freedom and democratic values, requiring joint military and civil efforts to defend in what we believe. This new political situation in Europe will require adaptations in areas related to civil-military cooperation.

Therefore, balanced considerations between commercial aviation and security and defence must shift more weight towards security and defence needs to ensure that national air forces can deploy assets throughout Europe in all-weather conditions at short notice, which is paramount to establish and maintain a military readiness posture for deterrence and defence of Europe.

The panel members will be asked to share their perspectives on the potential impacts of a changing European security environment on civil-military ATM/ANS cooperation.

Speakers:

- LtGen Ignacio Bengoechea Martí, Deputy Chief of Staff Spanish Air Force
- MajGen Manuel Gimeno Aranguez, Director Civil Military Coordination, ENAIRE
- Giorgio Cioni, Director Armament & Aerospace Capabilities, NATO
- Emilio Fajardo, Director Industry, Synergies & Enablers, EDA
- MajGen Karsten Stoye, Head of Civil-Military Cooperation, EUROCONTROL

13:30-14:00 **What's new with SESAR?**

The SESAR vision aims to deliver a resilient and fully scalable ATM system capable of handling growing air traffic made up of a diverse range of manned and unmanned air vehicles in all classes of airspace, in a safe, secure, sustainable manner. How do we get there? What are the new EU instruments and incentives available to reinforce the whole SESAR innovation lifecycle?

Speakers:

- Christine Berg, Deputy Director Aviation, DG MOVE, European Commission
- Andreas Boschen, incoming Executive Director, SESAR 3 Joint Undertaking
- Mariagrazia La Piscopia, Executive Director, SESAR Deployment Manager

14:15-15:00 **Artificial Intelligence - the European ATM approach**

Artificial intelligence is being deployed in all industrial sectors. The purpose of this session is to show how European civil and military ATM bodies, in a collaborative effort under the FLY AI initiative, are working towards its broad and rapid uptake to ensure the delivery of its impressive benefits.

Moderator: Paul Bosman, Head of ATM Infrastructure Division, EUROCONTROL

Speakers:

- Marouan Chida, Head of Innovation and Market Uptake, SESAR 3 JU
- Juan Ignacio del Valle, Project Officer UAS programmes, EDA
- Andrew Taylor, Chief Solutions Officer, NATS

15:15-16:15 **Towards U-space implementation**

The implementation of the U-space regulatory package is around the corner. 26 January 2023 is approaching fast and all stakeholders are preparing to ensure that they are in compliance with the regulation.

Important aspects of the regulation are establishment of the U-space airspace as well as the USSPs and CISP certification. The panel will discuss best practice around these two topics. EASA has already published AMC/GM and is reviewing the comments. In addition, the Agency is taking proactive steps to support Member States and stakeholders in implementation. The panel will also discuss these initiatives and further initiative needs.

Moderator: Filip Cornelis, Director Aviation, DG MOVE, European Commission

Speakers

- Maria Ruiz Algar, Drone Programme Manager, EASA
- Marina Estal Muñoz, Head of Airspace Policy Area, in charge of U-space implementation in Spain, DGAC
- Cristiano Baldoni, COO, D-Flight
- Hendrik-Jan Van Der Gucht, Managing Director, Skydrone
- Sebastian Babiarz, COO Dronehub

16:30-17:00 **Single European Sky interoperability: new ATM conformity assessment framework for ground equipment**

EASA has to elaborate a proposal for a new conformity assessment framework for ATM/ANS ground equipment as the requirements of the SES interoperability regulation will cease to apply by September 2023. The new framework should facilitate and promote a more dynamic provision of ATM/ANS and increase interoperability of systems and their constituents. Representatives from industry and authorities advising EASA on this task will provide a snapshot on current problems, challenges and opportunities of such a new conformity assessment framework.

Speakers:

- Patrick Ky, Executive Director, EASA
- Alex Bristol, CEO, SkyGuide
- Ignacio Mataix, CEO, Indra
- Christian Rivierre, VP, Airspace Mobility Solutions, Thales
- Massimo Garbini, Managing Director, Frequentis

- Arndt Schoenemann, CEO, DFS
- Angel Luis Arias Serrano, CEO, ENAIRE
- Peter Kearney, CEO, Irish Aviation Authority
- Piotr Samson, President, Civil Aviation Authority Poland
- Christine Berg, Deputy Director Aviation, DG MOVE, European Commission

17:00-18:00 OFFICIAL STAND OPENING & RECEPTION

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10:00-11:00 Space and ATM

Space services and data are supporting the transformation of Air Traffic Management (ATM), and continuously evolving to meet new needs on Communication, Navigation and Surveillance. Space has been used for more than 50 years in air navigation and the deployment of space augmentation systems, like EGNOS, is bringing Cat I to all airports with minimum investment. EGNOS is evolving to dual frequency multi-constellation, and Galileo has been baselined for use in aeronautical navigation by ICAO. Moreover, Space based ADS-B is gaining momentum and new Space services are underway to support aviation communication needs.

This panel will gather key actors from European organisations and service providers to discuss the role of Space in ATM, from research and development to deployment, discuss the service provider and user view on latest developments and look ahead in view of safer, more resilient and sustainable air transport relying on Space.

Moderator: Carmen Aguilera, EUSPA

Speakers:

- Dragos Tonea, Manager iNEO, EUROCONTROL
- Ruben Flohr, ATM Expert, architecture & systems engineering, SESAR 3 JU
- Cristian Pradera, ATM Modernisation Planning Coordinator, SESAR Deployment Manager

11:15-11:45 iNM digital transformation

Speaker: Tony Licu, Head of Operational Safety, NMD SQS and Integrated Risk, EUROCONTROL

The EUROCONTROL Network Manager (NM) has embarked on a digital transformation journey to replace its core legacy systems which have successfully ensured flow and network management for over 25 years. Known as iNM – the integrated network management programme will put in place a range of innovative digital products enabling EUROCONTROL to maximise the efficiency, safety and sustainability of the European aviation network through a new generation of cutting-edge, resilient and scalable operational systems.

The ten-year iNM programme envisages by 2030 the incremental renewal of all the NM's main operational systems, resulting in a new digital architecture that will harness the power of innovation and enable NM to deliver ever more integrated business services and products to its stakeholders.

12:00-12:30 CNS Strategy

The CNS Advisory Group, comprising experts from across the European ATM community, delivered a draft report with 12 recommendations and an action plan to ensure the best possible organisation, management and implementation of a CNS infrastructure based on past experiences. After a short overview of the report, the panel will exchange views on the main recommendations and actions to progress towards a stakeholders' endorsement.

Moderator: Filip Cornelis, Director Aviation, DG MOVE, European Commission

Speakers:

- Christine Berg, Deputy Director Aviation, European Commission
- Giancarlo Buono, Director Safety and Flight Operations for Europe, IATA
- Eduardo Garcia, Manager European ATM Coordination and Safety, CANSO
- Luc Laveyne, Senior Advisor, ACI EUROPE
- Emilio Farjardo, Director Industry, Synergies and Enablers, EDA

12:50-13:15 LAUNCH OF THE NEW SDM PARTNERSHIP

13:15-14:00 RECEPTION

14:00-14:45 Accelerating market uptake and deployment

The modernisation of Europe's ATM is entering a new phase with the establishment of the new SESAR 3 Joint Undertaking public-private partnership and the new SESAR Deployment Manager, in which EUROCONTROL Network Manager is taking on the role of consortium coordinator. The SESAR 3 JU has an explicit regulatory objective to develop and accelerate the market uptake of innovative solutions to establish the Single European Sky airspace as the most efficient and environmentally friendly sky to fly in the world.

This session will explore how the Europe for Aviation partners are working together to meet this objective, focusing on SESAR solutions that can be implemented rapidly and that can bring environmental benefits in the short to medium term. The panellists will also explore solutions that allow for a more flexible and resilient infrastructure that is capable of withstanding unpredictable shocks like COVID-19 and will explain how close cooperation with regulatory and standardisation bodies, notably the European Union Aviation Safety Agency (EASA) and EUROCAE, are key to accelerating the market uptake and deployment of such solutions.

Moderator: Paul Bosman, Head of ATM Infrastructure Division, EUROCONTROL

Speakers:

- Marco De Sciscio, SESAR Team Leader, DG MOVE, European Commission
- Marouan Chida, Head of Innovation and Market Uptake, SESAR 3 JU
- Cristian Pradera, ATM Modernisation Planning Coordinator, SESAR Deployment Manager
- Anna von Groote, Director General, EUROCAE
- Manuel Rivas Vila, ATM Oversight Section Manager, EASA

15:00-15:45 Higher airspace operations

This panel will discuss ATM aspects of Higher Airspace Operations (HAO) and will allow for discussion on HAO from a number of different stakeholder perspectives. Speakers cover the European institutions and research activities, a higher-air-space vehicle manufacturer and operator, commercial space operations and military considerations. Short introductory presentations will be followed by an inter-panellist discussion which will enable the audience to understand the impact of Higher Airspace Operations from multiple perspectives.

Moderator: Robin Garrity, Senior External Affairs Officer, SESAR 3 Joint Undertaking

Speakers:

- Dragos Tonea, iNEO Manager, EUROCONTROL
- Paul Mansfield, Future Approvals Manager, Zephyr Programme, Airbus Defence & Space
- Paul Cremin, Head of Commercial Space, UK Department for Transport
- Vicente de Frutos Cristóbal, SESAR Project Officer, EDA

16:00-16:30 ATM digitalisation through SWIM deployment

CP1 Regulation sets expectations for the deployment of SWIM in support of business operational improvements. Stakeholders need to understand how to deploy this technology modernisation enabler while bringing benefits to their organisation.

Speakers:

- Magnus Molbaek, AF5 SWIM Expert, SESAR Deployment Manager
- Pedro Fernandez Sancho, Information Management Expert, EUROCONTROL

16:45-17:15 Virtual centres

This session will look at the rapidly evolving context of the Virtual Centre concept and efforts for Virtual Centres services standardisation. It will look specifically at the status of research & development activities, industrialisation and stakeholders' needs, recent first achievements as well as next steps towards a performance-based approach to the Virtual Centres services standardisation.

Speakers:

- Anna von Groote, Director General, EUROCAE
- Olivia Nunez, ATM Expert, SESAR 3 JU
- Nicolás Suárez Tetzlaff, ENAIRE, Chair of EUROCAE's WG-122
- Ben Stanley, Egis Aviation, WG-122 Secretary

17:30-18:00 Space for UAS

UAS are increasingly dependent on robust navigation and position information, as well as precise planning of their missions, in order to ensure the safety of their operations. This session will explore how Space services and data support UAS operations, implementation of U-space and pave the way for urban air mobility. The speakers will discuss the role of EU navigation systems, Galileo and EGNOS, and Earth Observation, Copernicus. They will provide an outlook of the roadmap, actions and opportunities to integrate EGNOS/Galileo in U-Space, propose answers based on Space to the increasing needs for safe navigation and

integrity tailored to the particularities to UAS, and introduce the role of Earth Observation to support flight planning and risk assessment.

Moderator: Carmen Aguilera, Head of Mobility and Operational Market Development, EUSPA

Panel speakers

- Miguel Aguilera, EGNSS Aviation Advisor, DG DEFIS, European Commission
- Pablo Haro, Space Aviation and UAS Advisor, EUSPA
- Pawel Korzec, CEO, Droneradar

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10:15-10:45 **Mitigating the climate impact of non-CO₂ emissions: MUAC/DLR contrail prevention trial: first results and way ahead**

This presentation will focus on the results of the first worldwide live operational trial on contrail prevention aimed at mitigating non-CO₂ emissions which was carried out in 2021 by EUROCONTROL's Maastricht Upper Area Control Centre (MUAC), in partnership with the German Aerospace Centre (DLR).

With two-thirds of the impact of aviation on climate change believed to come from aircraft non-CO₂ emissions, contrail prevention has a key role to play in curbing global warming. In total, 209 aircraft trajectories were included in the trial over 10 months.

The MUAC/DLR trial on contrail prevention is one contributor and component in a much wider picture of mitigating climate change. It is an important milestone from theory to practice and a stepping stone from science to engineering. Scientists and ATM managers will share the results in a bid to spark decisions for the future of aviation. The way-ahead in contrail prevention will be explained.

Speakers

- Ilona Sitova, ATC Environmental Performance Specialist, EUROCONTROL Maastricht Upper Area Control MUAC
- Professor Dr. Robert Sausen, Coordinator of the German project D-KULT, DLR

11:00-11:30 **Initial TBO deployment with ADS-C**

This presentation will focus on the preparatory steps supporting the deployment of initial trajectory sharing as described by the CP1 regulation (AF6). EUROCONTROL and SDM have teamed up to lead the Operational Excellence Programme on ATS B2 to ensure the timely availability of complementary specifications on ADS-C/EPP data receipt and distribution for CP1 AF6. The presentation will also provide an outlook of where the community sees the extended use of ATS B2 datalink services in the context of TBO.

Speakers:

- Eivan Cerasi, Deputy Head of Standardisation, EUROCONTROL
- Cristian Pradera, ATM Modernisation Planning Coordinator, SESAR Deployment Manager