




# SESAR 3 JU AMSTERDAM DRONE WEEK

21 - 23 March 2023

# Meet the SESAR 3 JU projects on show at Amsterdam Drone Week!

21 March 2023



<p>9.15 – 10.15</p>	<p><b>CORUS-XUAM - Concept of Operations for European U-space Services - Extension for Urban Air Mobility</b></p> <p>The project demonstrates how U-space services and solutions could support integrated Urban Air Mobility (UAM) flight operations, allowing eVTOLs/UAS and other airspace users (unmanned and manned) to operate safely, securely, sustainably and efficiently in a controlled and fully integrated airspace, without undue impact on operations currently managed by ATM. The project also involves extensive consultation and communication initiatives with reference Authorities, U-space stakeholders and end-users.</p>	
<p>10.45 – 11.45</p>	<p><b>PJ34- AURA - ATM U-space Interface</b></p> <p>The project identifies the requirements for U-space information exchange with ATM through SWIM and validates a set of selected U-space services. It defines a novel Collaborative ATM-U-space Concept of Operations (ConOps) for drones in a fully collaborative environment with ATM that go beyond the existing concepts developed for a U-space and validates these new concepts. It contributes to enable the development of Very Low Level (VLL) markets, allowing the introduction of new actors in a safe, harmonized, sustainable and efficient way and compatible with current ATM environment. Eventually, the project contributes to avoid the segregation of the airspace and increase the interoperability.</p>	
<p>13.15 – 14.15</p>	<p><b>U-ELCOME - U-space European COMmon dEpLoyment (U-ELCOME )</b></p> <p>U-ELCOME project is aiming at the fully scalable market uptake of U1 and U2 U-space services through a set of tests and demonstrations in various operational environments and European locations. The U-ELCOME demonstrations integrate the U-space ecosystems with existing ATM systems, and to each other. The U-space capabilities and U1 and U2 services of the pre-operational U-space ecosystems will be demonstrated in several live use cases in various operational environment, which represent the most typical missions for both business and civil authority use such as Medicals and Goods deliveries, Inspection flights, aerial works in urban and sub-urban environment, controlled and uncontrolled airspace.</p> <p>The project, working in close cooperation with EASA and other international and national authorities and organisations, will also contribute to the consolidation of standardisation and regulatory requirements of the proposed U-space services to further accelerate the deployment of relevant U1 and U2 services and U-space operations.</p>	<p>U-ELCOME</p>
<p>15.15 – 16.15</p>	<p><b>EALU-AER - Enhanced Automation for U-Space/ATM integration</b></p> <p>This project will see the integration of a UTM technology platform as part of the FMCI operations site, which will leverage integrated UTM technology solution that encompasses a UAS platform (WebUAS), a backhaul network (AGN), Command and Control (C2) and Surveillance equipment, and advanced three-dimensional phased array radar (Skyler). To demonstrate a range of UAM operations, across the range of U-space services projected through the SESAR U-space CONOPS (Concept of Operations), the project will execute a number of use-cases across the period of the programme that capture the operational requirements, vehicle dynamics, and technology demonstrations associated with the projected near-term UAM services market, such as local inspection, light-freight, long distance logistics, air-taxi operations, etc.</p>	<p>EALU-AER</p>
<p>16.45 – 17.45</p>	<p><b>SAFIR-MED - Safe and Flexible Integration of Advanced U-space Services for medical Air Mobility</b></p> <p>The project's vision is to achieve safe, sustainable, socially accepted and socially beneficial urban air mobility. Five unmanned UAV platforms (passenger eVTOL, hydrogen fuel cell VTOL, battery tiltwing VTOL, AED medical drone, X8 medical transport) are combined with manned aviation in real life exercises validating technology in real urban environment. Technologies of all partners are leveraged to make use of the maximum number of U-space services towards the highest possible operational safety level, including advanced detect and avoid U-space service. The project has made an important contribution to the EU healthcare system, by ensuring that future generations will continue to democratically have access to the best cure and care.</p>	

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<p>10.30 – 11.00</p>	<p><b>EALU-AER - Enhanced Automation for U-Space/ATM integration</b>                  This project will see the integration of a UTM technology platform as part of the FMCI operations site, which will leverage integrated UTM technology solution that encompasses a UAS platform (WebUAS), a backhaul network (AGN), Command and Control (C2) and Surveillance equipment, and advanced three-dimensional phased array radar (Skyler). To demonstrate a range of UAM operations, across the range of U-space services projected through the SESAR U-space CONOPS (Concept of Operations), the project will execute a number of use-cases across the period of the programme that capture the operational requirements, vehicle dynamics, and technology demonstrations associated with the projected near-term UAM services market, such as local inspection, light-freight, long distance logistics, air-taxi operations, etc.</p>	<p>EALU-AER</p>
<p>11.30 – 12.00</p>	<p><b>BURDI - BeNe U-space Reference Design Implementation</b>                  The Belgium-Netherlands U-space Reference Design Implementation (BURDI) project aims to: implement a U-space airspace concept able to manage various, dense and complex UAS operations in controlled, uncontrolled and UAM environment; make this implementation a reference to develop best practices, standardisation, harmonisation and/or interoperability requirements fostering operational deployment of U-space airspaces in Europe; ensure that solutions to be deployed are economically sustainable and socially acceptable/supported for the benefit of the general public.</p>	<p>BURDI</p>
<p>14.00 – 14.30</p>	<p><b>SAFIR-MED - Safe and Flexible Integration of Advanced U-space Services for medical Air Mobility</b>                  The project's vision is to achieve safe, sustainable, socially accepted and socially beneficial urban air mobility. Five unmanned UAV platforms (passenger eVTOL, hydrogen fuel cell VTOL, battery tilting VTOL, AED medical drone, X8 medical transport) are combined with manned aviation in real life exercises validating technology in real urban environment. Technologies of all partners are leveraged to make use of the maximum number of U-space services towards the highest possible operational safety level, including advanced detect and avoid U-space service. The project has made an important contribution to the EU healthcare system, by ensuring that future generations will continue to democratically have access to the best cure and care.</p>	
<p>15.15 – 16.30</p>	<p><b>Technical Workshop 4B - SESAR U-Space research</b>                  The first set of U-space services is now ready for deployment under the regulatory framework of the new European U-space regulation, which has come into force in January 2023. Three SESAR very large demonstrations kicked off in November 2022 with the aim of realising the full deployment of initial U-space services for drones at multiple sites across Europe; their first flights will take place in the summer of 2023. The panel will feature speakers from all three demonstrations, as well as from SESAR projects SAFIR-MED, AURA and CORUS-XUAM, which have validated and demonstrated important processes between U-spaced and Air Traffic Management for manned aviation.</p>	
<p>11.30 – 12.30</p>	<p><b>CORUS-XUAM - Concept of Operations for European U-space Services - Extension for Urban Air Mobility</b>                  The project demonstrates how U-space services and solutions could support integrated Urban Air Mobility (UAM) flight operations, allowing eVTOLs/UAS and other airspace users (unmanned and manned) to operate safely, securely, sustainably and efficiently in a controlled and fully integrated airspace, without undue impact on operations currently managed by ATM. The project also involves extensive consultation and communication initiatives with reference Authorities, U-space stakeholders and end-users.</p>	

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## Technical Workshop 4B - SESAR U-Space research

### EASA High Level Conference on Drones

22 March, 15.15 – 16.30

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- **Giancarlo Ferrara** - *Eurocontrol*
- **Mikael Shamim** - *Helicus*
- **Luc Antoon**- *Skeyes*
- **Wassim Derguech** - *Future Mobility Ireland*
- **Andrew Hately** - *Eurocontrol*
- *Moderated by **Robin Garrity**, SESAR 3 JU*



BURDI

EALU-AER

U-ELCOME

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