

Rome Hosts JARUS Spring Plenary Meeting Showcasing Major Strides in Unmanned Aviation Integration Regulation



Nearly 160 officials, experts, and industry representatives from 41 countries and international organizations, including EASA, EUROCONTROL, EUSPA and WFP, gathered in Rome from April 17 to 21, 2023, for the JARUS Spring Plenary Meeting, which was hosted by the Italian Civil Aviation Authority, co-organized with the Joint Authorities for Rulemaking on Unmanned Systems (JARUS). This was the first in-person meeting since the Covid-19 pandemic began. The five-day event focused on the progress of regulation for integrating unmanned aircraft systems (UAS) and Innovative Air Mobility/Advanced Air Mobility (IAM/AAM) into the airspace.

JARUS Chair **Giovanni Di Antonio**, ENAC Director of Innovation Technology, Vice Chair and Leader of WG Automation Concept of Operation Craig Bloch-Hansen from Transport Canada, Secretary General Prof. **LIU Hao**, Acting Chair of School of Global Governance, Beijing Institute of Technology (SGG BIT), **Zia Meer** Leader of WG Operation Organization & Personnel from SACAA, **Markus Farnert** Leader of WG Airworthiness from FOCA, and **Joerg Dittlich** Leader of WG Safety Risk Management from DLR/LBA were present at the meeting.

During the opening Plenary on April 17, ENAC President **Pierluigi Di Palma**, ENAC Director General **Alessio Quaranta**, EUROCONTROL Director General **Raul**

Medina, and Kazakhstan Aviation Administration Director **Catalin Radu**, provided a clear overview of the challenges of the UAS and IAM/AAM, highlighted how JARUS is at the heart of progress to safely integrate unmanned aviation and IAM/AAM into the airspace.

Updates were provided by the JARUS working groups (WG) leaders.

Zia Meer presented the WG OPS ORG & PERS update. The WG had completed the Draft Approach to Performance-based Operation in Category B & C and is preparing for External Consultation of the document.

Markus Farnier reported progress on CS-UAS Annex C and B, the White Paper-FAA & EASA light UAS Certification Requirements Factual Comparison and the additional airworthiness requirements for HAPS/HAO.

Joerg Dittrich presented the WG Safety and Risk Management update. The JARUS SORA 2.5 document package received around 1400 comments during the External Consultation period, and comment resolution has started. PDRA 06, 08 and 10 documents have completed an Internal Consultation and comment resolution is progressing as well. Special attention was directed to the planning process for a future SORA 3.0 to follow the upcoming 2.5 release with a revised air risk section and annexes.

Craig Bloch-Hansen updated that the WG AUTO CONOPS had completed the comment disposition of External Consultation of the Autonomy Evaluation document, and the Automation of the Airspace document will go for JARUS Internal Consultation before this Summer. The meeting also featured discussions on use cases for UAS and IAM/UAM, with the WG Auto ConOps reviewing Use Cases 1 and 2 over the coming months, and presenting them to the WG-SRM for the next steps.

On the last day of the JARUS Plenary, the JARUS Plenary Team (PT) unanimously approved the “White Paper-FAA & EASA light UAS Certification Requirements Factual Comparison” document for internal consultation, the “CS-UAS Annex B - Management of Multiple Simultaneous UA Flight Operation (MSO)” for external consultation, and the Publication of the document “JARUS Methodology for Evaluation of Automation for UAS Operations” as the first global experts’ deliverables on this subject.

The Plenary Team endorsed Giovanni Di Antonio to continue serving as the Chair until the upcoming election at the next Plenary Meeting in Ottawa.

Julie Garland, the Vice Chair of the Industry Stakeholder Body (ISB) and CEO of Avtrain in Ireland, provided a comprehensive debrief of the meetings held with JARUS, both internally and with the JARUS Secretariat. Ms. Garland echoed JARUS's

interpretation of internal consultation and clarified the membership and ISB subject matter expert policy. The ISB reaffirmed its unwavering commitment to collaborating with JARUS and pledged to continue working closely with the unmanned aviation community and stakeholders.

The JARUS community expressed their gratitude to the School of Global Governance, BIT for their contribution to the JARUS new website.

The four working group leaders provided an overview of their highly productive and collaborative teamwork during the week, including the joint working group meetings. With the ongoing recovery from the pandemic, it is anticipated that additional working group meetings will take place in the upcoming months.

On the final day of the plenary meeting, distinguished speakers presented on various UAS projects, covering a wide range of topics. These included updates on regulations, as well as projects focused on High Airspace Operation (HAO), Innovative Air Mobility/Advanced Air Mobility (IAM/AAM), and humanitarian operations.

Christopher L. Swider, representing the Federal Aviation Administration (FAA), delivered an informative Integration Update. Swider discussed the latest developments in unmanned aviation, including regulatory and safety updates on the implementation of Remote Identification (RID) and Beyond Visual Line of Sight (BVLOS) Aviation Rulemaking Committee (ARC), as well as Advanced Air Mobility Developments.

Meanwhile, **ZHAO Jinyu**, representing the Civil Aviation Administration of China (CAAC), presented an update on China's UAS regulation progress, Airworthiness Certification of UAS/AAM in China, and shared several successful Certification project practices. Jinyu also reflected on the past 10 years since the first issuance of the first UAS license and how the SORA method was employed to certify the first drone pilot operation in 2019, a practice that they learned from JARUS.

Filippo Tomasello presented the three-year project Flying Forward 2020, which is dedicated to creating a new Urban Air Mobility (UAM) ecosystem aligned with the EU Digital Government Transformation (DGT). The project's main goal is to integrate UAM into the geospatial data infrastructure of cities, which will include a governance model, an interoperable and scalable framework, machine-readable and executable regulatory requirements, geospatial digital infrastructure, and an Internet of Things scheme.

Marco Ducci addressed the Project SHEPHERD, which is a two-year project funded by the European Union's Horizon Europe research and innovation program. The project's goal is to establish a methodology for technical assessment of UAS-related standards and identify their technical suitability to demonstrate compliance with the

diverse regulatory requirements. The project is still in progress and has assessed numerous unmanned aviation standards, using JARUS deliverables and European regulatory instruments as a basis for evaluation.

Jakub Karas from the European Union Agency for the Space Programme (EUSPA) presented how the EU Copernicus project, space data resources, and services may aid the safety assessment and enable unmanned aviation in Europe and beyond by supplying reliable population density data for the use the ground risk assessment as part of a SORA-based drone operation authorization processes.

Stephane Petitjean delivered a presentation on the European Operations of Airbus-Zephyr, highlighting the Zephyr Z8C System's objectives and challenges for 2024, 2025, and 2026. He also discussed the approval process in collaboration with SESAR “ECHO 2” partners and the access to European airspace, including flight approvals for commercial flights.

Oleg Aleksandrov, representing the World Food Program, discussed the challenges faced in United Nations cargo UAS/RPAS humanitarian operations, emphasizing the absence of regulatory framework in the operation country/region, and the necessity for innovation in humanitarian cargo transportation safety management and regulatory compliance. JARUS and WFP have pledged to continue their discussions and investigate the possibility of assisting in the development of the United Nations' Humanitarian Cargo UAS Ecosystem.

It was announced at the conclusion of the current Plenary that the upcoming JARUS Plenary will be held in Ottawa, Canada.

Feel free to forward this message to anyone interested in JARUS work.

Resources for Editors

JARUS is a group of experts from 65 National Aviation Authorities (NAAs) and regional aviation safety organizations, as well as EASA and EUROCONTROL.

JARUS aims to recommend a single set of technical, safety and operational requirements for the certification and the safe integration of Unmanned Aircraft Systems (UAS) in airspace and at aerodrome. Four Working Groups provide guidance material and recommendations to facilitate national aviation authorities and regional aviation safety organizations to develop their requirements and avoid unnecessary duplication of effort. A reasonable number of nations have partly or fully adopted JARUS recommendations and guidance as part of their regulatory Unmanned Aviation/UAS/Drone frameworks.

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