



September – November 2023



aeros-project.eu

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ISSUE HIGHLIGHTS

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The 5th issue of aerOS newsletter presents the project activities during the period September - November 2023. This specific issue focuses on the communication and dissemination activities, EUCloudEdgeIoT Energy Event, participation to EUCloudEdgeIoT related activities, the 1st Open Call, the project upcoming deliverables and the 3rd Plenary Meeting.

aerOS trimester activities in numbers:

- 4 Publications
- 6 Presentations
- 1 Poster Session
- EUCloudEdgeIoT Energy Event
- AGRITECHNICA Trade Show
- HiPEAC Info Magazine
- EUCloudEdgeIoT Activities
- aerOS Open Call
- 5 Upcoming Deliverables
- 3rd Plenary Meeting



Communication & Dissemination Activities

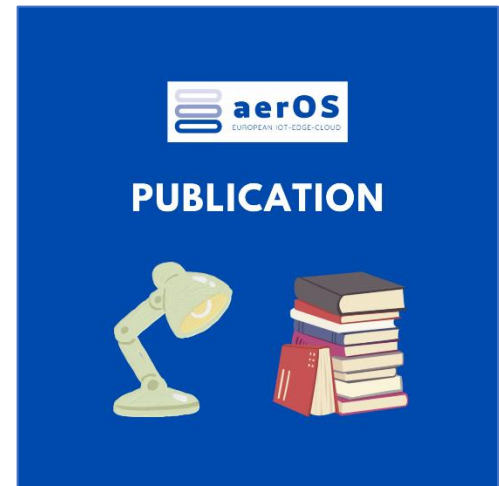
Publications

aerOS paper entitled “A novel approach to self-capabilities in IoT industrial automation computing continuum” by Ignacio Lacalle, Salvador Cunat, Andreu Belsa, Rafael Vano, Raul S-Julian, Philippe Buschmann, Jose Fontalvo-Hernandez, Korbinian Pfab, Renzo Bazan Florian Gramss, Katarzyna Wasielewska-Michniewska, Carlos E. Palau, has been accepted at WF-IoT 2023.

aerOS paper entitled, “Emerging IoT Applications and Architectures for Smart Maritime Container Terminals” by Michalis Michaelides, Sheraz Aslam, Herodotos Herodotou, Petros Dias (Cyprus University of Technology), Eduardo Garro, Álvaro Martínez Romero, María A. Burgos (Prodevelop S.L), Alessandro Cassera, George Papas (Eurogate Container) has been accepted at WF-IoT 2023.

aerOS paper entitled, “A Chatbot Assistant for Optimizing the Fault Detection and Diagnostics of Industry 4.0 Equipment in the 6G era” by Nikolaos Gkatzios, Nikolaos Vryonis, Constantinos Fragkos, Christos Sakkas, Vasileios Mavrikakis, Vaios Koumaras (INFOLYSiS P.C), George Makropoulos, Dimitrios Fragkos, Harilaos Koumaras (NCSR “Demokritos) was accepted at IEEE Conference on Standards for Communications and Networking (CSCN) – Track on Verticals, Services and Applications, 6-8 November 2023, Munich.

aerOS paper entitled “Exploiting Core Openness as Native-AI Enabler for Optimized UAV Flight Path Selection” by George Makropoulos, Dimitrios Fragkos, Harilaos Koumaras, (NCSR “Demokritos”) Nancy Alonistioti (NKUA), Alexandros Kaloxylos (UoP), Foteini Setaki (Cosmote), was accepted at IEEE Conference on Standards for Communications and Networking (CSCN) – Track on Verticals, Services and Applications, 6-8 November 2023, Munich. (Accepted Paper)



Presentations

Ignacio Lacalle Ubeda, from Universitat Politècnica de València (UPV) presented aerOS Open Call during "the Capitalising on Cloud-Edge-IoT: Building your next product, finding your next market opportunity" webinar by EUCloudEdgeIoT on 20th of September.

aerOS paper entitled "A novel approach to self-capabilities in IoT industrial automation computing continuum" was presented on 16th of October by Salvador Cunat during WF-IoT 2023!

Michalis Michaelides (CUT) presented our paper "Emerging IoT Applications and Architectures for Smart Maritime Container Terminals" at the WF-IoT2023 conference in the Special Session: Future Platforms for Cloud-Edge Continuum – Theoretical Foundations and Practical Considerations.

Michalis Michaelides had the chance of presenting the aerOS conference paper entitled "IoT for the Maritime Industry: Challenges and Emerging Applications" at the FedCSIS2023 conference in Warsaw, Poland. Find more information: <https://fedcsis.org/thematic/iot-ecaw/program>



Presentations

Ignacio Lacalle Úbeda represented our project at European Big Data Value Forum 2023 which took place in Valencia. Ignacio Lacalle Úbeda had the chance to present our project and take part in a panel discussion on "The Role of Research in Advancing the Computing Continuum and Green AI Technologies" with industry and R&D experts. Find more about the event here: <https://european-big-data-value-forum.eu/>

At 21st of November, during the SME Working Group, Ignacio Lacalle Úbeda from Universitat Politècnica de València (UPV) presented the fundamental elements of our project. He had also the chance to present our Open Call.



Poster Session

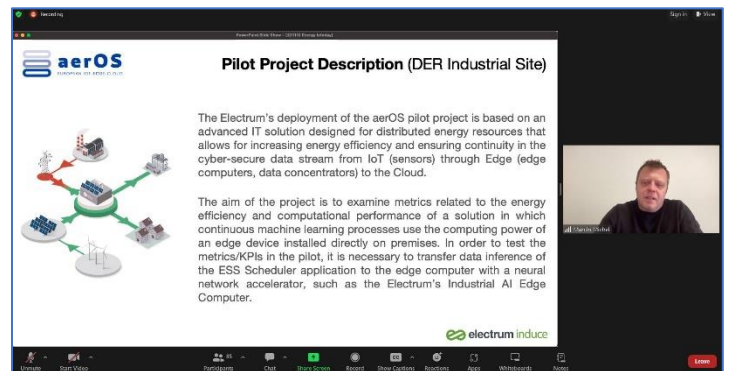
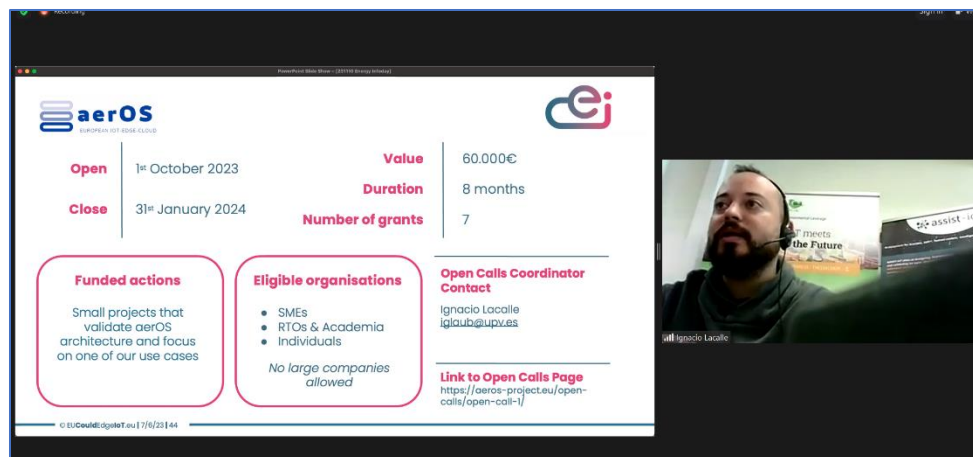
At the annual conference, "The Autonomous", the TTTech team (Anna Ryabokon, Marcela Alzin, Francesca Flamigni) represented the aerOS project in the workshop "Research & Innovation in Autonomous and Connected Mobility" and displayed the aerOS rollup in the poster session.



Giving Energy an Edge: Showcasing the Edge to Cloud Continuum in Energy

The Energy Infoday that took place on Friday 10th November 2023, at 10:00 (CET), brought together over 100 attendees, including industry experts, innovators, researchers, developers, SMEs, start-ups and energy company stakeholders to discuss the latest trends and technologies shaping the future of energy and innovations of the Cloud-Edge-IoT Continuum in Energy sector. aerOS project was there with 3 keynote presentations:

- Energy Efficient, Health Safe & Sustainable Smart Buildings by Fotini Setaki, COSMOTE
- Containerised Edge Computing Near Renewable Energy Sources by Marcin Michel, ELECTRUM
- Open Call Presentation by Ignacio Lacalle Úbeda, UPV

aerOS
EUROPEAN IOT-EDGE-CLOUD

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EUROPEAN IOT-EDGE-CLOUD

Open	1 st October 2023	Value	60.000€
Close	31 st January 2024	Duration	8 months
		Number of grants	7

Funded actions

Small projects that validate aerOS architecture and focus on one of our use cases

Eligible organisations

- SMEs
- RTOs & Academia
- Individuals

No large companies allowed

Open Calls Coordinator Contact

Ignacio Lacalle
iglaub@upves

Link to Open Calls Page
<https://aeros-project.eu/open-calls/open-call-1/>

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AGRITECHNICA Trade Show

The TTControl team was at the AGRITECHNICA trade show! In their booth you were able to find all the related information about our project along with communication material, such as posters and leaflets. Find more information about the event here: <https://www.agritechnica.com/en/>.

AGRITECHNICA 2023 demonstrated the innovation power of agricultural technology and how international agriculture can benefit optimally.

With 2,812 exhibitors from 52 countries and more than 470,000 visitors from 149 countries, the world's leading trade fair for agricultural machinery boasts a record result. Under the guiding theme of "Green Productivity", AGRITECHNICA underscored its claim to technical leadership with over 300 international events and conferences.



HiPEAC Info Magazine

The latest HiPEAC Info magazine is now available! In this issue you can also find information about our project. HiPEAC (High Performance, Edge And Cloud computing) is the premier focal point for networking, dissemination, training, and collaboration activities in Europe for researchers, industry, and policy related to computing systems. Today, its network, the biggest of its kind in Europe. You may find the magazine online here: <https://www.hipeac.net/news/7037/publication-of-hipeacinfo-70/>



EUCloudEdgeIoT Activities

News Digest Issues

- September 2023
<https://preview.mailerlite.io/preview/185345/emails/94936390685426767>
- October 2023
<https://preview.mailerlite.io/preview/185345/emails/103081037750339342>

Other Activities

- "Developing a Reference Architecture for the Continuum - Concept, Taxonomy and Building Blocks" document. Find it online here: <https://zenodo.org/record/8403593>



aerOS Open Call #1

The 1st aerOS Open Call was officially initiated on 1st of October. It will last 4 months until the end of January 2024 and will fund 7 different projects based on [aerOS use cases](#). aerOS consortium has established eligible criteria that do not allow large companies to take part in, while permission is granted only for SMEs, RTOs, Academia and individuals. Each funded project will last a maximum of 9 months. For more information you may access the aerOS Open Call #1 webpage [here](#) and also the EUCloudEdgeIoT dedicated webpage [here](#).



October 2023 - January
2024

Open Call



 **aerOS**
EUROPEAN IOT-EDGE-CLOUD

SMEs, RTOs and
Academia, Individuals
Max. duration: 9 months



Upcoming Deliverables

D2.3 Use cases manual, requirements, legal and regulatory analysis [M18] – Initial and final version of requirements elicitation, use cases and scenarios definition and legal and regulatory analysis.

D3.2 Intermediate distributed compute infrastructure implementation [M18] – Intermediate implementation of infrastructure components, and update in the implementation.

D4.2 Software for delivering intelligence at the edge intermediate release [M18] – Initial software release of the components to deliver intelligent applications.

D5.3 Use cases deployment and implementation (1) [M18] – Will document the three pilots and integrated third parties, addressing the proposed use cases and scenarios. This will be the final version.

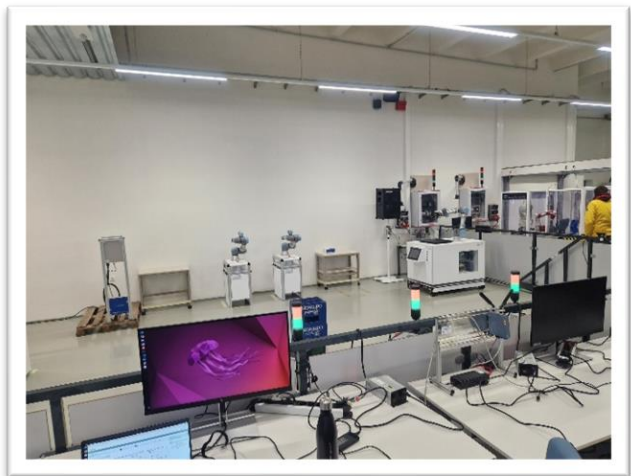
D6.2 Intermediate report on impact activities [M18] – Intermediate report on the communication, dissemination, standardization, initial exploitation and innovation activities as well as on the initial business value and market propositions during the first period of the project (M1-M18)

All public aerOS deliverables are available for downloading
at aerOS website: <https://aeros-project.eu/dissemination/deliverables/>



3rd aerOS Plenary Meeting in Nuremberg

aerOS 3rd Plenary Meeting took place in Siemens premises in Nuremberg. The meeting lasted two days (29 & 30 of November) and proved to be very fruitful. Partners were able to discuss the project status, the upcoming activities and the pilots' development. As usual, the traditional group photo was taken. Also, during this meeting, all participants had the chance to visit the Siemens Innovation lab where part of aerOS Pilot 1 is located! All partners had the chance to watch a short demo on Data-Driven Cognitive Production Lines use case and be informed of the recent advances.



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This project has received funding from Horizon Europe, the EU's key funding programme for research and innovation, under grant agreement No 101069732

Call: WORLD LEADING DATA AND COMPUTING TECHNOLOGIES 2021

Topic: HE-CL4-2021-DATA-01-05

Type of Action: RIA

Duration: 36 Months

Start Date: 1 September 2022