



**A Holistic Approach to Sustainable, Digital EU Agriculture,
Forestry, Livestock and Rural Development based on
Reconfigurable Aerial Enablers and Edge Artificial
Intelligence-on-Demand Systems**

Newsletter

December 2023 | Vol. 3

Welcome to the third installment of the CHAMELEON e-newsletter

Greetings to all our subscribers and a warm welcome to the new members of our CHAMELEON community!

As we release our third issue, we are excited to share the latest breakthroughs and applications of our drone technology in agriculture, livestock, forestry and rural areas.



Follow us for updates

To our long-term followers, thank you for your continued support. For our newcomers, we hope to ignite your enthusiasm for the potential of unmanned vehicles in rural development. Remember, subscribing to our e-newsletter is just a click away. Click [here to sign up](#) and never miss an issue. Stay informed about the CHAMELEON project's journey and be part of the change.

Engage with us through our interactive social media presence and participate in our mission to foster sustainable practices across Europe's countryside. We are on this adventure together, shaping a better future with every flight.

Stay curious, stay informed, and watch this space for more updates from the CHAMELEON project.

Conferences & Events

At the **International Conference on Unmanned Aircraft Systems** (ICUAS 2023) in Warsaw, Poland, the CHAMELEON project took the spotlight with Professor George Arampatzis's lecture on UAVs in livestock management in Western Crete.

THE 2023 INT'L CONFERENCE ON UNMANNED AIRCRAFT SYSTEMS

ICUAS '23 | June 6 – 9, 2023 | Warsaw, Poland



His presentation highlighted the innovative merging of drone technology with traditional farming practices, illustrating CHAMELEON's role in advancing the field of unmanned systems.

[Read more](#)

At the **39th National Irrigation Congress in Úbeda**, CHAMELEON stood out by showcasing new advancements in agricultural technology. This key event in agriculture featured several presentations, with two major contributions from partner UCLM.



Industry experts were introduced to CHAMELEON's forward-thinking solutions, poised to influence future irrigation methods and emphasize CHAMELEON's dedication to sustainable farming.

[Read more](#)

Conferences & Events

CHAMELEON participated in the EC2U **"Virtual Lecture Series on Innovation"**.



The sixth edition of the Virtual Lecture Series delved into the impact of technologies such as Artificial Intelligence (AI), Big Data, and the Internet of Things (IoT) on the advancement of Agriculture 4.0. These technologies are driving unprecedented optimization in agricultural productivity and heralding a new paradigm in digital farming.

[Read more](#)

The **Belt-IoT** project, in alignment with the objectives of CHAMELEON for technological development in livestock, has been awarded the **Prize for Best Social Innovation Project**.



This project, rooted in IoT technology, has resulted in a fully functional prototype, assembled and tested in the laboratory.

The device is designed to register various metrics from the animals on which it is installed, alerting the livestock manager in real time upon detection potential threats, while also recording the health status and activity of the animal.

[Read more](#)

Conferences & Events

At a **BCO Network** event on October, Mr. Dimitris Perikleous from ACCELIGENCE highlighted the CHAMELEON's mission to enhance production and preemptively address challenges in agriculture, forestry, and livestock using AI-powered drones.



The discussion explored CHAMELEON's practical applications, spotlighting the crucial role of 5G in rural advancement and its potential to synergize with UAVs for sustainable development.

[Read more](#)

Special Issue in Drones MDPI

CHAMELEON proudly presents a **new Special Issue from Drones, an MDPI Open Access Journal**, focusing on the intersection of Unmanned Aircraft Systems and wildland fire management.

The image shows the cover of a special issue for the journal 'Drones'. The cover is blue and features the 'drones' logo on the left, which includes a stylized drone icon. Below the logo, it says 'an Open Access Journal by MDPI'. The main title is 'Drones for Wildfire and Prescribed Fire Science'. In the top right corner, there are two circular badges: a yellow one for 'IMPACT FACTOR 4.8' and a dark blue one for 'CITESCORE 6.1'. At the bottom left, it lists 'Guest Editors' as 'Dr. Brian K. Gullett, Dr. Johanna Aurell, Dr. Pantelis Velanas, Prof. Dr. Diego González-Aguilera, Katerina Margariti' and a 'Deadline' of '01 July 2024'. The bottom right corner has the text 'Special Issue' in large white letters and 'Invitation to submit' in smaller white letters. The MDPI website 'mdpi.com/si/177297' is at the bottom left.

This publication invites global researchers to contribute original studies and reviews, especially those demonstrating UAS utility in enhancing firefighter safety, fire management, and ecological monitoring.

Contributions will deepen our collective knowledge and improve wildland fire handling

[Read more](#)

Synergies



CHAMELEON took stage at **SAH Synergy days** in Thessaloniki on October, a summit for Europe's agri-food digital leaders. Highlighting a commitment to sustainable agriculture via AI and aerial technology, CHAMELEON stood out among the initiatives.

The Conference facilitated an exchange of innovative solutions and discussions on digital trends in agri-food. Gratitude was expressed towards the organizers and participants, with anticipation for future collaborative endeavors in the sector's digital transformation.



[Read More](#)

A promotional banner for a webinar. The background is orange with a sunburst pattern. Text includes: 'Topics 2023 Webinars', 'EO&GEO Series: Drones for Rural Development', '09 October 2023, 2:00 pm CEST', and 'Remote Sensing, Drones, ISPRS International Journal of Geo-Information, Land, Geomatics'. It features five circular portraits of the speakers and chairs: Prof. Dr. Diego González-Aguilera, Dr. Pablo Rodríguez-González, Dr. Aristotelis C. Tagarakis, Dr. Pantelis Velanias, and Dr. Aikaterini Kasimati. The MDPI logo is at the bottom right.



CHAMELEON, together with our sister projects **ICAERUS** and **SPADE**, participated in the webinar held in October, entitled “**Drones for Rural Development**”, with **MDPI** editorial.

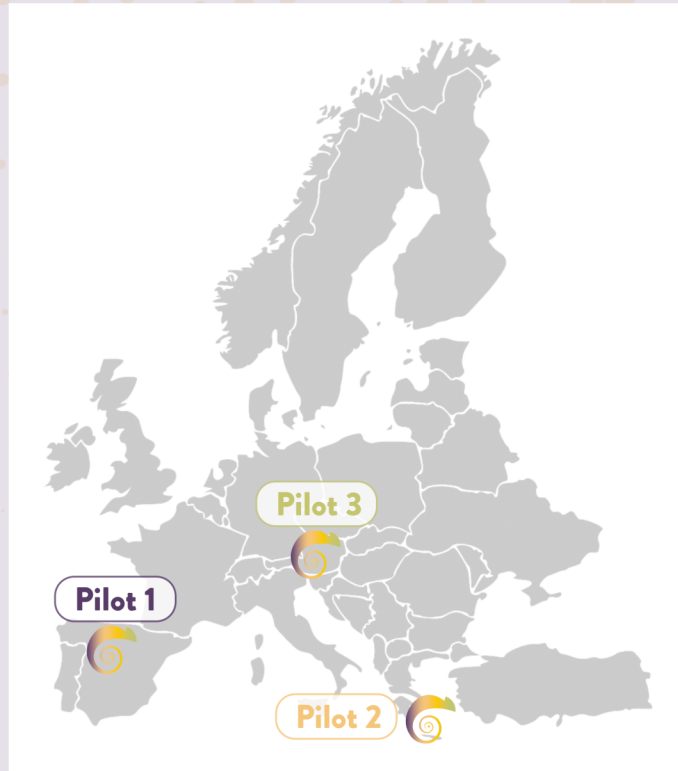
The webinar highlighted the contributions of these three significant European projects that are harnessing drone technology to foster growth and development in rural communities.








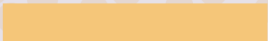
















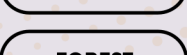

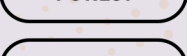

Industry experts and academic scholars were in attendance to impart insights and share experiences, engaging a diverse audience of researched and general drone enthusiasts in the latest drone technology dialogue.

[Read More](#)

Bundles









We are pleased to introduce the new **Bundles section on our website**, which will be regularly updated with the latest developments and technical advancements of the project.



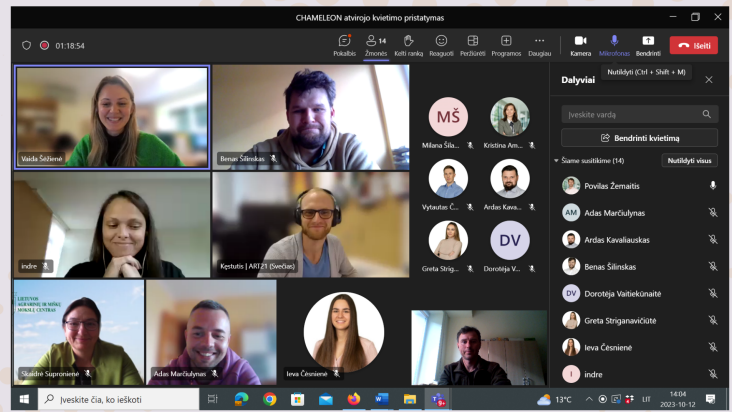
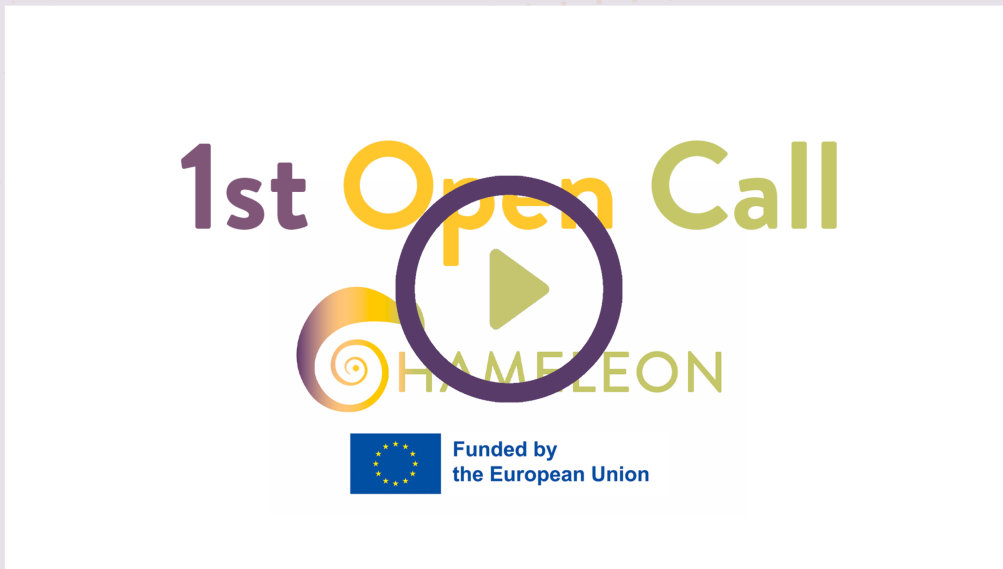
 AGRICULTURE	Crop growth and development monitoring	
 AGRICULTURE	Vineyard water stress due to drought	
 AGRICULTURE	Soil zonification	
 PASTURE	Monitoring flora at high-altitude grazing areas	
 LIVESTOCK	Monitoring livestock health and stress indicators	
 LIVESTOCK	Lameness detection in cows	
 LIVESTOCK	Herd management and individual monitoring	
 LIVESTOCK	Animals' health	
 FOREST	Vegetation monitoring and census	
 FOREST	Continuity of vegetation	
 FOREST	Characterization of Wildland-Urban Interface	
 FOREST	Hotspot identification at the beginning of wildfire	
 FOREST	Large woody debris on rivers	
 FOREST	Health status of vegetation	

CHAMELEON Open Calls

CHAMELEON's **First Open Call** and **Call for Experts** opened for proposals on August 1st and concluded on November 1st.

First Open Call	Second Open Call	Call for Experts
 Main Objective Attract third parties to develop bundles to be added to the CHAMELEON platform	 Main Objective Integrate pilot use cases using CHAMELEON solutions	 Role Proposal evaluation for OC1 and/or OC2
 When Call started on August 1st 2023 and closed on November 1st, 2023	 When To be announced	 When Call started on August 1st 2023 and closed on November 1st, 2023
 Budget 300,000 €	 Budget 300,000 €	

Outreach efforts were initiated prior to and throughout this period, featuring the official promotional video for the First Open Call, television interviews, and specialized webinars.



The quantity and excellence of the proposals received have constituted an overwhelming success. Currently, these submissions are under the evaluation of external specialists. Updates will be provided as new information emerges.

[Read more](#)

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