EO4AGRI

Bringing together the Knowledge for Better Agriculture Monitoring

We welcome you to the first issue of the EO4AGRI Newsletter. A new issue will be published every 6 months from now till the end of the project with the primary aim to inform you about the progress and the results produced, as well as related and interesting activities undertaken during the course of the project. Each issue will be available from the project website: www.eo4agri.eu.

ID card

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EO4AGRI, an European initiative on Earth Observation for better agriculture policies

Started in November 2018, EO4AGRI is a CSA project financed by the European Commission under the H2020 Research and Innovation Programme in the topic of European Earth Observation and coordinated by Atos Spain.

EO4AGRI focus on building a European community of stakeholders on EO observation in agriculture, with the perspective of addressing the bottlenecks and gaps affecting the development of a strong EO sector for agriculture in Europe.

By removing or reducing these gaps and by identifying research priorities and policy recommendations, EO4AGRI contributes to the utilisation of EO data and services inside and outside of Europe in support of the whole agricultural sector, related public services and needs of the financial sector, including international policy and coordination programmes.

To achieve these objectives, the EO4AGRI methodology follows a combination of community building; service gap analysis; technology watch; strategic research agenda design and policy recommendations; and dissemination and communication activities (including the organization of hackathons).

The EO4AGRI team consists of 11 organizations, complementary in their roles and expertise, covering a good part of the value-chain.

Objectives and Approach

EO4AGRI enlarges and further systematizes the knowledge about Copernicus for agriculture and identifies gaps related to the utilisation of EO in AgriFood, related public services and needs of the financial sector, including international policy and coordination programmes. Thus, EO4AGRI approach includes:

- Assisting the implementation of the EU Common Agricultural Policy (CAP) with special attention to the CAP2020 reform, to requirements of Paying Agencies, and for the Integrated Administration and Control System (IACS) processes.
- Working with farmers, farmer associations and agro-food industry on specifications of data-driven farming services with focus on increasing the utilization of EC investments into Copernicus Data and Information Services (DIAS).
- Addressing global food security challenges coordinated within the G20 Global Agricultural Monitoring initiative (GEOGLAM) capitalizing on Copernicus Open Data as input.
- Assessing information about land-use and agricultural service needs and offers to financial investors and insurances and the potential added value of fuelling those services with Copernicus information.

Objectives

Development of scientific, technical and economic guidelines in a three-folded approach

Delivery of an end-to-end assessment of operational ICT systems using Copernicus agriculture-support products

Community building and stackeholders' identification

Provision of final recommendations for future analysis an research

EO4AGRI Foresight Methodology

Recent, on-going efforts to reform the Common Agricultural Policy call for the use of remote sensing to facilitate the process of CAP related administration and payment. This should provide significant cost savings for national payment agencies and relieve farmers of at least some of the administrative burden related to their payment for provision of environmental goods and services.

Full realization of this ambition relies on the development of new services from the satellites and in-situ services provided by the European Union COPERNICUS system for gathering raw data and from the companies that further process this data making it usable by the payment agencies. It will take a number of years to make this happen and doing so will enable arrange of new services related to precision farming, agricultural finance and international cooperation on food security. The EO4AGRI project will contribute to all of this by developing and publishing a white paper on the use of remote sensing in agriculture, a strategic research agenda, a cooperation framework and a policy roadmap. The ambition is that these project outputs will lay out the case for increased investment in the use of EO in agriculture and mobilise the fund needed to achieve the ambitions of the current program of CAP reform.

Many pilot, demonstration and proof of concept projects have already been carried out with a view to demonstrating the benefits of COPERNICUS services applied to precision agriculture. Such initiatives have been financed by EU funded programs such as H2020, those of the ESA and the EU member states.

The EO4AGRI project will examine past and on-going projects with a view to providing an authoritative vision of what can be achieved and the benefits that can be obtained from the application of next generation COPERNICUS services in the context of the ongoing CAP reform. The project will employ a Foresight approach to engagement with four main communities of actors destined to benefit from the application of existing and next generation COPERNICUS services. The use of a Foresight approach requires a combination of top-down and bottom-up activities. It involves deskwork, sense-making workshops and deep-dive workshops with a view to consolidating the results of previous research work and clarifying end-user requirements as well as presenting a vision and roadmap for how each of the four end-user communities can achieve the full potential of earth observation applied to the digital transformation of agriculture in Europe.

The applied methodology is described in detail in deliverable D2.1 "*End User Requirements Collection and Foresight Methodology*", available on the EO4AGRI website.

The results of the four end-user community engagement activities will be consolidated in a series of three integrative workshops that will handle cross-cutting issues and review progress on the development to a definitive list of end-user requirements, that will support the drafting of the white paper, the strategic research agenda, the collaboration framework and the policy roadmap. The first of these is scheduled to take place in July of this year.

The four community engagement processes are led by

- Vaclav Safar of WirelessInfo for precision agriculture
- David Kolitzus of GeoVille for agricultural finance
- Tomas Orlickas of NPA Lithuania for the national payment agencies
- Karel Charvat of the Club of Ossiach for international food security

Anyone interested in getting involved should contact them by email directly. EO4AGRI related-events EO4AGRI related-events.

EO4AGRI related-events

EO4AGRI Consortium Meeting

After the Kick-off Meeting in October 2018 in Brussels, the 1st Consortium Meeting for the EO4AGRI project took place on 12-13 March, 2019 hosted by Atos Spain. This time participants got together in Madrid (Spain) to discuss the project progress, giving special focus on the analysis of the EO4AGRI stakeholders and their needs.

EO4AGRI at the 2019 JRC workshop on checks and management of agricultural land in IACS

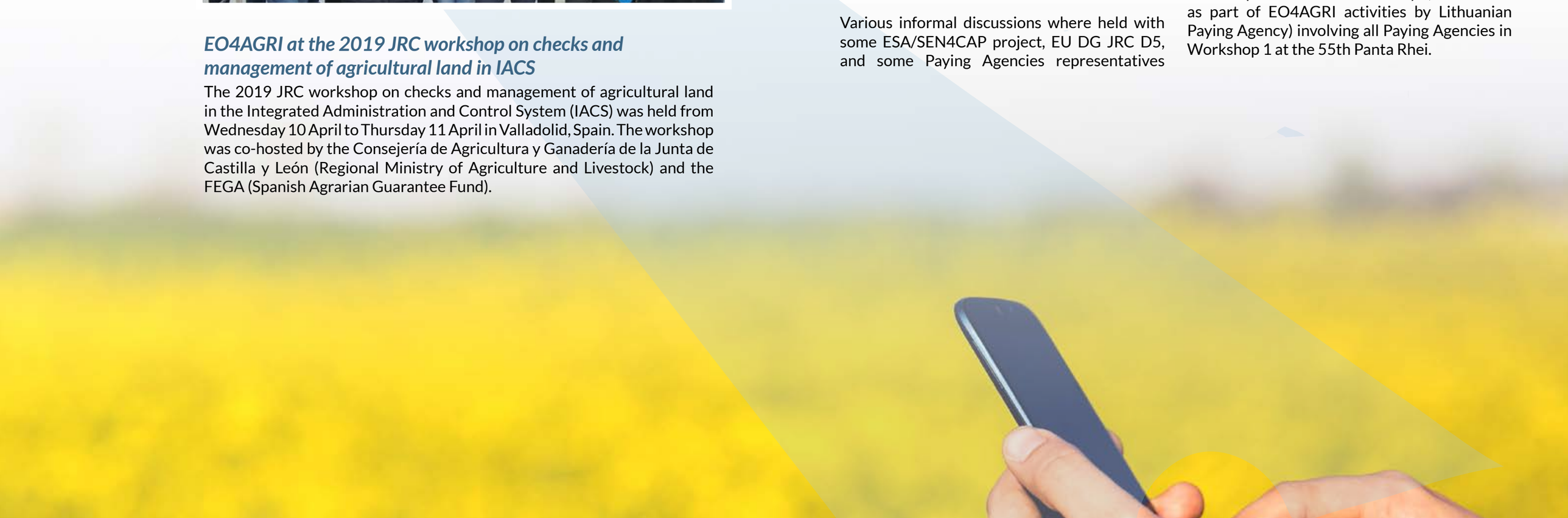
The 2019 JRC workshop on checks and management of agricultural land in the Integrated Administration and Control System (IACS) was held from Wednesday 10 April to Thursday 11 April in Valladolid, Spain. The workshop was co-hosted by the Consejería de Agricultura y Ganadería de la Junta de Castilla y León (Regional Ministry of Agriculture and Livestock) and the FEGA (Spanish Agrarian Guarantee Fund).

The purpose of the workshop was to bring together the technical experts from the Member States and the European Commission to find appropriate solutions and foster innovative developments. The 2019 IACS workshop mainly addressed i) aspects of the introduction of monitoring as a means to substitute on-the-spot checks (OTSC); ii) Current developments on data sharing; iii) Presentations of H2020 projects targeting the CAP; and iv) Hints on the CAP2020+.

EO4AGRI presented the current status of the project during the H2020 agriculture related projects concertation session and offering its view on how Copernicus and DIAS could support National Paying Agencies in the implementation of monitoring (as replacement of OTSC) as part of the new IACS.

Various informal discussions where held with some ESA/SEN4CAP project, EU DG JRC D5, and some Paying Agencies representatives present at the workshop, which led to the possibility of establishing a “Focussed Open Source Software Initiative” around SEN4CAP results. Further evolutions of this software and other software packages should be pooled in an open (e.g. Github) repository and measures should be taken to build a wider community of contributors, integrators and users around it which the objective of sustainability. The EO4AGRI project, as Coordination and Support Action, offered itself as facilitator to promote this initiative and support organizing community measures (Webinars, hackathons, training, and feedback/requirements collation, promotions, etc.).

Finally, audience was also informed about the presentation of the preliminary results of a Copernicus related survey (carried out as part of EO4AGRI activities by Lithuanian Paying Agency) involving all Paying Agencies in Workshop 1 at the 55th Panta Rhei.



EO4AGRI workshop at 55th Panta Rhei conference,

This conference, which took place in Copenhagen (Denmark),gathered all Paying Agencies from the European Union, which are responsible for the funding of agriculture lands and subsidising farmers in regards to their crop. These Paying Agencies belong to the European Network for Rural Development (ENRD), that acts as a hub for connecting rural Europe and serves as a platform for the sharing of ideas and experiences on how Rural Development Programmes are working in practice.

The main stakeholders of the ENRD include National Rural Networks (NRNs), RDP Managing Authorities and Paying Agencies, Local Action Groups (LAGs); European stakeholder organisations; agricultural advisory services and other interested rural development stakeholders and organisations.

Tomas Orlickas (National Paying Agency of Lithuania) introduced the EO4AGRI survey results during one workshop organised in the framework of the conference.

45th Conference of the Directors of the Paying Agencies

Between May 15 and 17, 2019, the 45th Conference of the Directors of the Paying Agencies of the European Union took place in Bucharest under the Romanian Presidency at the Council of the European Union, organized by the Paying and Intervention Agency for Agriculture, together with the Rural Investments Financing Agency, under the patronage of the Ministry of Agriculture and Rural Development. The focus of this conference is the use of t

This event gives us the chance to present our project by Jorge López (Atos Spain) during the second day of the plenary session. Further details can be read at the project website.

EO4AGRI, key partner in the Nairobi INSPIRE Hackathon 2019

The Nairobi INSPIRE Hackathon 2019 took place from mid March till mid May 2019 organised in the frame of the IST Africa 2019 Conference. The hackathon is a collaborative event organised by Plan4all and Club of Ossiach associations and EU projects including EO4AGRI.

The hackathon addressed some of the key topics identified by the IST-Africa conference, such as agriculture, environmental sustainability, collaborative open innovation and ICT-enabled entrepreneurship. In order to discuss the different topics in an effective way, the hackathon was organised around nine (9) teams lead by a mentor, gathering 228 participants from 41 countries across 4 continents (26 African countries). Firstly, the teams worked virtually led by the team mentors and supported by educational webinars to facilitate the progress/collaboration. Finally, a closing workshop was held on the 10th of May in Nairobi, where the results of the hackathon were presented.

The reports with the conclusions are already available here.

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Take action today - Connect with EO4AGRI: **www.eo4agri.eu**

Miguel Ángel Esbri - EO4AGRI Project Coordinator - **miguel.esbri@atos.net**

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