



Smart Agricultural Monitoring – Future is Here!

“DIONE will provide important socio-economic benefits, such as significant reduction of operational costs, improved delivery reliability towards on time full delivery, reductions of on-site inspections, while in parallel will improve resolution accuracy level of Sentinel data and enrich the portfolio of monitoring/evaluating services, differentiated in efficiency and reliability.”, highlighted Dr. Amditis, the project’s coordinator.

Agricultural sector has been strongly influenced by rising technologies, especially those related to collecting and monitoring agricultural production data. As climate challenges demand real actions based on tangible proofs, these data tend to be very useful, providing, among others, information about various environmental factors. To this end, new technologies aim to contribute and provide a ‘smart solution’ that will cover the complete monitoring cycle, i.e. an integrated system which will take into consideration all factors in agricultural monitoring including their associated environmental impact.

[DIONE](#), “An integrated EO-based toolbox for modernising CAP area-based compliance checks and assessing respective environmental impact” is an H2020 project aiming to respond to the above-mentioned challenges. The project aims to develop a Machine Learning (ML) enabled tool to correlate data from various sources in order to provide feedback to professionals from the green Paying Agencies about land condition and land use. This way, the compliance with subsidy rules and the modernised CAP regulations will be automatically assessed without the need of on-site inspection and installation of expensive and complicated tools. At the same time a system developed on a regional or national scale will evaluate the monitored parameters to form evidence-based conclusions regarding eventual environmental impacts on an entire region. As a result, DIONE EO-based toolbox aims to deliver **clear economic value** to the key targeted customers.

The project kick-off meeting took place on the **27th and 28th of January in Athens, Greece**. DIONE consortium consists of **eight partners** from **five European countries** including paying agencies, technology providers, research institutes, and SMEs while being supported from a variety of actors in the agricultural domain ranging from agricultural cluster and paying agencies to qualification and certification bodies.





What is DIONE's significance?

DIONE aims to offer a unique fusion of innovative technologies to improve the workflow of agricultural monitoring and compliance checks for area-based direct CAP payments and to reduce drastically related operational costs. Moreover, DIONE will **establish sustainable supply chains** with commercial value and targeted client communities. The use of the DIONE toolbox will lead to **new or improved products, processes or services** on the market and creation of an integrated system to address existing gaps and shortcomings in the CAP monitoring domain. Finally, it will provide **business support to the EO sector** in line with recognised user needs as well as will introduce **EO downstream applications** that increase efficiency across key European industries.





Editor notes

Short description: DIONE proposes a close-to-market and integrated area-based direct payments monitoring toolbox that will address the forthcoming Modernised CAP regulation of using automated technologies to ensure more frequent, accurate and inexpensive compliance checks. The project will exploit DIAS' storage of Copernicus data in its fullness, making use of not just the data but also DIAS provided services such as Data Catalogue as well as Sentinel Hub, which is operational on 3 DIASes. DIONE toolbox will be further enhanced through complementary data sources (VHR images from drones as well as ground-based images taken by the farmers). The DIONE toolbox will include a Green Compliance toolbox, allowing paying agencies to check the compliance of farmers but at the same time monitor the green direct payments' environmental performance.

Starting date: 01/01/2020

Duration: 30 Months

Total cost: 2.377.125,00

EC contribution: 1.999.837,50



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