

## Serco Italia S.p.A

(Among Others) Space Earth Observation, Serco is a proud provider of a wide range of services to the European Space Agency (ESA) and national space agencies, the European Commission (EC), and EUMETSAT. Serco's teams of engineers, technicians and operations specialists support a wide range of space and ground activities: from data archiving and exploitation, data processing; to systems design, operation and maintenance; data production quality control; and support of and delivery to end-users. By providing our customer with critical support services, we proudly make a difference every day.

### **EOPEN: opEn interOperable Platform for unified access and analysis of Earth observation data & Managing crop water Saving with Enterprise Services**

Two H2020 projects are considered, namely EOPEN and MOSES. One of the main objectives of EOPEN ( <https://cordis.europa.eu/project/id/776019> ) is to fuse Sentinel data with multiple, heterogeneous and big data sources, to improve the monitoring capabilities of the future EO downstream sector. EOPEN (using DIAS for retrieving of Copernicus data), demonstrates in real use case scenarios in flood risk monitoring, food security and climate change monitoring; they are located, respectively, in Italy, South Korea and Finland. The Consortium led by Serco Italia, included universities, research institutes, industry, SME and public bodies and organizations. The main objective of MOSES ( <https://cordis.europa.eu/project/id/642258> ) is to put in place and demonstrate at the real scale of application an information platform devoted to water procurement and management agencies (e.g. reclamation consortia, irrigation districts, etc.) to facilitate planning of irrigation water resources, with the aim of saving water; improving services to farmers; reducing monetary and energy costs. Four Demonstration areas were setup, located respectively in Italy, Romania Spain and Morocco. The consortium led by ESRI Italia included universities, research institutes, industry, SME, and public bodies. Main system components are: 1. early season irrigated crop mapping 2. seasonal weather forecasting and downscaling 3. in-season monitoring of evapotranspiration and water availability 4. seasonal and medium/short term irrigation forecasting. The video shows an example of combined use of the two platforms for in-season monitoring of evapotranspiration in Andalusia (Spain) - in this example the MOSES Crop Water Demand module in the EOPEN framework allows the further exploitation of the surface water bodies change monitoring module implemented in the EOPEN Project for flood and

drought risk management. Contact: Gabriella Scarpino

<https://www.ecca21.eu/participants/1929> Official website of the project:

<https://eopen-project.eu>

Applies to

ICT solutions

Water management

Earth observation

Agriculture, forestry

Demonstration activities

Climate change adaptation



ECCA 2021 - Climate Adaptation solutions - EOPEN

Video <https://youtu.be/yDTt4bRrYUw>

