

Coordinating and integrating state-of-the-art Earth Observation Activities in the regions of North Africa, Middle East, and Balkans and Developing Links with GEO related initiatives towards GEOSS¹ - GEO-CRADLE



In a Nutshell

The continuous provision of accurate and timely information through coordinated and sustained Earth Observation (EO) activities is considered a key enabler for informed decision making in response to challenges such as adaptation to climate change, improved food security & water extremes management, better access to raw materials and energy and many more. In this context, large international initiatives such as GEO

(URL: <https://www.earthobservations.org/index.php>) and Copernicus program (URL: <http://copernicus.eu/>) are promoting the integration and coordination of EO capacities at regional, national and international levels.

Despite the important progress made over the past years in the Balkans and in North Africa, in both regions, but even more so in the Middle East, there are still critical gaps in the uptake of EO activities. This includes a disparate level of development with regards to cooperation between the various EO stakeholders, ineffective exploitation of available resources and expertise, limited public awareness on the benefits of EO services and low involvement of the industrial sector of the economy.

GEO-CRADLE has received funding from the European Union's Horizon 2020 Research and Innovation Programme, and will be running from 2016 to 2018 with the aim to tackle these challenges and "*promote the uptake and exploitation of Earth Observation activities in North Africa, Middle East and the Balkans*". To this end, the project has brought together **25 partners from 3 continents**, to work in a highly-complementary team that combines a strong background in EO coordination activities with proven scientific excellence in four key thematic areas – adaptation to climate change, improved food security & water extremes management, access to raw materials, and access to energy.

The project strives to:

- enhance the current knowledge of existing EO capacities in the region (through an ongoing survey),
- facilitate the cooperation between EO stakeholders (through a networking platform and several events),

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- identify the gaps and the maturity level (through analysis) and boost the maturity of the different countries in the region,
- enable the exchange of EO data (by setting up a Regional Data Hub),
- showcase concrete ways of tackling regional challenges related to adaptation of climate change, improved food security & water extremes management, better access to raw materials and energy (through feasibility studies),
- propose a roadmap for the implementation of GEO, GEOSS and Copernicus in the three regions.

Project Objectives

GEO-CRADLE brings together key players from three regions (Balkans, North Africa and Middle East) representing the entire Earth Observation (EO) value chain, with the overarching objective of establishing a multi-regional coordination network that:

1. promotes the uptake of EO services and data in response to regional needs;
2. supports the effective integration of existing Earth Observation Capacities in the region;
3. facilitates the engagement of the complete ecosystem of EO stakeholders in the region;
4. enhances the participation in and contribution to the implementation of GEOSS and Copernicus in North Africa, Middle East and the Balkans

The vision of GEO-CRADLE is to pave the way for the sustainable and continuous uptake and exploitation of Earth Observation services in North Africa, Middle East and the Balkans. The different activities undertaken by the GEO-CRADLE have been defined and are pursued in a way that ensures appropriate coordination mechanisms and necessary tools are put in place during the lifetime of the project but are also used beyond that. Therefore, through the establishment of the GEO-CRADLE network and the parallel support of networking activities by a dedicated portal, the project aspires to ensure one of the fundamental requirements for coordinated EO activities; that is an attractive and comprehensive platform, named the Regional Networking Platform, where regional stakeholders can be informed on existing capacities, complementary skills and collaboration opportunities. Another key output of GEO-CRADLE that can contribute to the long-term uptake of EO activities in the region is the operation of the Regional Data Hub. By providing access to region-related datasets and services, directly fed from the GEOSS-portal, and at the same time being the centralized gateway for regional data providers to contribute easily and timely their products to GEOSS, the Regional Data Hub is designed to become the focal node in the region in the context of GEOSS and Copernicus implementation.

Project web-site: <http://geocradle.eu/en/>