



# GEO-CRADLE Regional Workshop

## Tel-Aviv, 14 September 2017

# Copernicus and GEO opportunities for Israel and the region

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# GEO-CRADLE Regional Workshops

**GEO-CRADLE** brings together key players representing the Region of Interest (Balkans, North Africa and Middle East) and the complete EO value chain therein, with the overarching objective of establishing a multi-regional coordination network that will:

1.....

2.....

3.....

**4. Contribute to the improved implementation of and participation in GEO, GEOSS, and Copernicus in the region.**



# GEO-CRADLE Regional Workshops

**How can we achieve that??**



**With targeted stakeholder engagement  
and communication activities!**

This will be culminated with the production of a  
dedicated **Roadmap** for the Implementation of GEO  
and Copernicus in the region.



# GEO-CRADLE Regional Workshops

Taking into consideration the EO capacities, needs and challenges of the region and the language diversity, a series of GEO-CRADLE regional workshops were organised in order to achieve an effective and coherent external communication.

10 Regional Workshops took place:

Date	Location	
27/04/2016	Cairo, Egypt	<p>The image shows three vertical banners for GEO-CRADLE Regional Workshops. The top banner is blue and red, for Bucharest on 9-5-2017. The middle banner is red and white, for Cairo on 25-5-2017. The bottom banner is green and red, for Sofia on 24-3-2017. Each banner features the GEO-CRADLE logo and the text 'GEO-CRADLE Regional Workshop'.</p>
14/07/2016	Novi Sad, Serbia	
26/09/2016	Tirana, Albania	
17-18/10/2016	Rabat, Morocco	
19/10/2016	Timimoun, Algeria	
16/11/2016	Limassol, Cyprus	
03/01/2017	Chişinău, Moldova	
02/02/2017	Abu Dhabi, United Arab Emirates	
24/03/2017	Sofia, Bulgaria	
26/04/2017	Brussels, Belgium (Industrial market)	



# GEO-CRADLE Regional Workshops

## GEO-CRADLE regional workshops

These regional workshops focus on **identifying the potential local challenges and needs** that can be addressed by Earth Observation (EO), enabling more informed decision making, while seeking solutions to enhance growth and innovation in the geo-information sector.

**Aiming to support knowledge sharing, capacity building** and an enhanced cooperation between academia and industry, the events also **provide participants with a unique cross-sector networking opportunity.**

# GEO-CRADLE Regional Workshops





# GEO-CRADLE Regional Workshops

## What we really want to know?

- Who are the EO players in each of these countries?
- What EO capacities do you have?
- Are you aware for your needs in terms of capacity building?
- Do you collaborate with other national organizations/companies?
- Which are the GEO-CRADLE pilot(s) you are interested in?
- Are you aware of GEO-GEOSS and Copernicus?
- What National EO activities do you have?
- What EO national priorities do you have?
- Do you have EO national funding instruments?

### NATIONAL ACTIVITIES

Is there funding for EO activities available in your country?

Is there a National Space Policy/Strategy?

Is there a Space Agency in your country?

Which of the following best describes the level of coordination of EO activities in your country?

Which of the following best describes the level of interaction between the EO community and decision makers in your country?

Can you give examples of high impact EO dedicated workshops organized in your country in the last decade?

### ENGAGEMENT IN GEO-CRADLE


Would your Organisation be interested in contributing with its capacities to a regional initiative of GEO and/or Copernicus, addressing regional needs in the domains of Climate Change, Access to Raw Materials, Energy, Food Security and Water?

Would you be interested in providing feedback to the GEO-CRADLE consortium for establishing a roadmap for the implementation of GEO and Copernicus in North Africa, Middle East and the Balkans?



# GEO-CRADLE Regional Workshops

## What we want to communicate?

- 
- GEO-CRADLE Knowledge and experiences
  - GEO-CRADLE Networking initiatives
  - Copernicus material
  - GEO and Copernicus initiatives
  - How to establish a GEO national or regional Initiatives
  - EU funding opportunities
  - Other Funding Instruments
  - How to get involved in Copernicus data etc
  - A survey to fill in their capacities in order to register in the GEO-CRADLE networking platform!



# What is GEO?

**GEO is a partnership of more than 100 national governments and in excess of 100 Participating Organizations** that envisions a future where **decisions and actions** for the benefit of humankind are **informed by coordinated, comprehensive and sustained Earth observations**.

**GEO is a unique global network connecting** government institutions, academic and research institutions, data providers, businesses, engineers, scientists and experts to create innovative solutions to global challenges at a time of exponential data growth, human development and climate change that transcend national and disciplinary boundaries.

Together, the **GEO community is creating a Global Earth Observation System of Systems (GEOSS) to better integrate observing systems and share data by connecting existing infrastructures using common standards**. There are more than 200 million open data resources in GEOSS from more than 150 national and regional providers such as NASA and ESA; international organizations such as WMO and the commercial sector such as Digital Globe.



# What is GEO?

## **The GEO Vision**

The vision set out by the Group on Earth Observations (GEO) is to realize a future where decisions and actions, for the benefit of humankind, are informed by coordinated, comprehensive and sustained Earth observation information and services.

## **Global Earth Observation System of Systems (GEOSS)**

A central part of GEO's Mission is to build the GEOSS. GEOSS is a set of coordinated, independent Earth observation information and processing systems

The aim of GEOSS is to link these systems together to strengthen the monitoring of the state of the Earth

## **European Contribution to GEO**

- GEO has divided the globe into large geographical regions such as e.g. the Americas, Asia and Africa
- Specific GEO initiatives per region have been identified; e.g. AfriGEOSS (Africa), AmeriGEOSS (Americas), AOGEOSS (Asia and Oceania).
- The aim of the EuroGEOSS initiative is to be the European contribution to GEO and to benefit from the Global Earth Observation System of Systems (GEOSS) in this geographical/regional context.



# GEO and Copernicus initiatives

## What is the status of Israel in GEO-GEOSS?



[Who we are](#) ▾

[What we do](#) ▾

[News](#) ▾

[Get Involved](#) ▾

[Events](#)

[Get Data Now](#)

[Member map](#)

[Member list](#)

[Member charts](#)

### GEO Member's Map



Click on a country to view it's information

### Member Country info

### Contributions to the GEO Work Plan



# GEO and Copernicus initiatives

## EO Capacities in the region



Saudi Arabia



United Arab Emirates



Israel



Turkey



Tunisia



Egypt

**Upstart EO Countries: United Arab Emirates and Saudi Arabia**

Both Saudi Arabia and UAE have advanced space programs that have seen rapid development over the past two decades. This development has been spurred by strong government investment. However, recent political and economic contexts have lowered available EO funding.

**Advanced ecosystem: Israel**

Israel has by far the most advanced EO capacities in the RoI, as validated in the survey. The end-user interviews demonstrate advanced commercial exploitation of EO in the country.

**Independent space programs: Egypt, Tunisia and Turkey**

The development of EO sectors in these countries was less intensively influenced by interaction with the EU, and a result of long-term efforts led by a defined space strategy. Egypt and Turkey have both launched their own EO satellites into space as part of a space program while Tunisia actively receives satellite data through ground-based segments.



# GEO and Copernicus initiatives

## GEO Regional Activities

**The AfriGEOSS initiative, developed within the GEO framework, will strengthen the link between the current GEO activities with existing capabilities and initiatives in Africa.**

This coordination initiative has been recognized essential to enhance Africa's capacity for producing, managing and using Earth observations, thus also enabling the Region's participation in, and contribution to, the Global Earth Observation System of Systems (GEOSS).

**AfriGEOSS aims to provide the necessary framework for African countries and organizations as well as international partners to access and leverage on-going local and international bilateral and multilateral EO-based initiatives across Africa, thereby creating synergies and minimizing duplication for the benefit of the continent.**

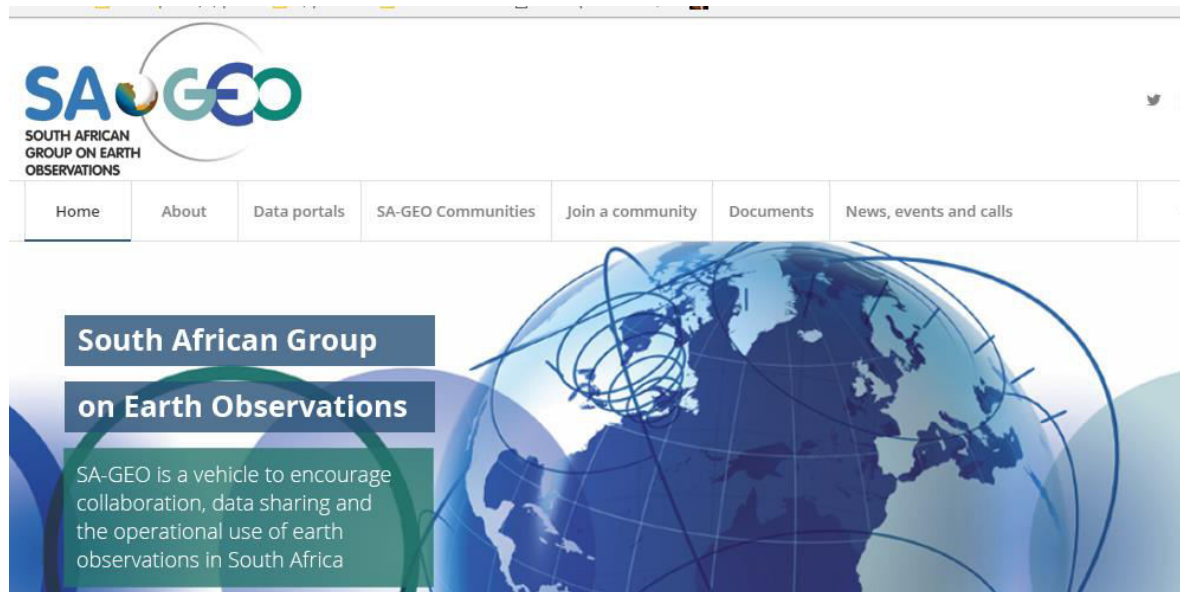


# GEO and Copernicus initiatives

## National GEO Initiatives

### South African Group on Earth Observations,

The objectives of SA-GEO are to promote the use and application of Earth observations in daily activities; promote networking within the South African Earth Observations communities; share scientific and applications knowledge on the uses of earth observations; provide a forum for researchers, academics, public officials, industry, data suppliers, consultants, NGOs and other professionals interested in earth observations to interact.





# GEO and Copernicus initiatives

## National GEO Initiatives

### Greek GEO Office

**GGO, as the focal point of GEO activities in Greece, addresses the need for a permanent coordination mechanism of GEOSS activities at the national level, at the same time building interfaces with GEO and the Greek State.** Its main vision is to act as a springboard for the implementation of GEOSS in Greece and promote collaboration within the country but also with neighboring countries with proven capacity in the field.

In this context, GGO aspires to:

- **participate** with leading role in national strategic planning towards meeting GEO's regional vision
  - **provide** reference and optimize efforts for coordinating EO activities and capacities in the region
- to effectively address national and regional needs
- **maximize** synergies amongst key EO partners in Greece, placing special effort in engaging user communities, stakeholders and the industry sector (including SMEs)
  - **foster** the exploitation of best practices between EO players at the national level
  - **identify** and trigger exploitation of synergies in terms of funds raising, capacities and cross-discipline research, via community building and networking



# GEO and Copernicus initiatives

## First steps to establish a National GEO Office

1. Establish direct link with your National GEO Delegation team and contact persons.
2. Inquire with them the relevant Ministry/Directorate/Secretariat or other governmental entity that supervises GEO activities at the national level (e.g. the one that has assigned your National GEO Principles), and decide the process to officially establish a National GEO Office, upon consensus regarding the necessity and benefits of such an initiative.
3. Decide commonly an efficient structure for your GEO Office, a framework of operation and duties, and assign active and envisioned persons to undertake its operation. The Greek GEO Office structure is here presented for your reference while more information can be found in the Greek GEO Office site (<http://www.greekgeo.noa.gr>).
4. It is suggested that your GEO Office could be hosted by an EO relevant authority or (research) institution, that will be able to handle logistics or cover small starting expenses (e.g. travel costs, office consumables). The selection of the GEO Office personnel could also derive from this hosting entity, and given the work load from the Greek experience it can efficiently be a part time job of existing, still dedicated and experienced, personnel.



# GEO and Copernicus initiatives

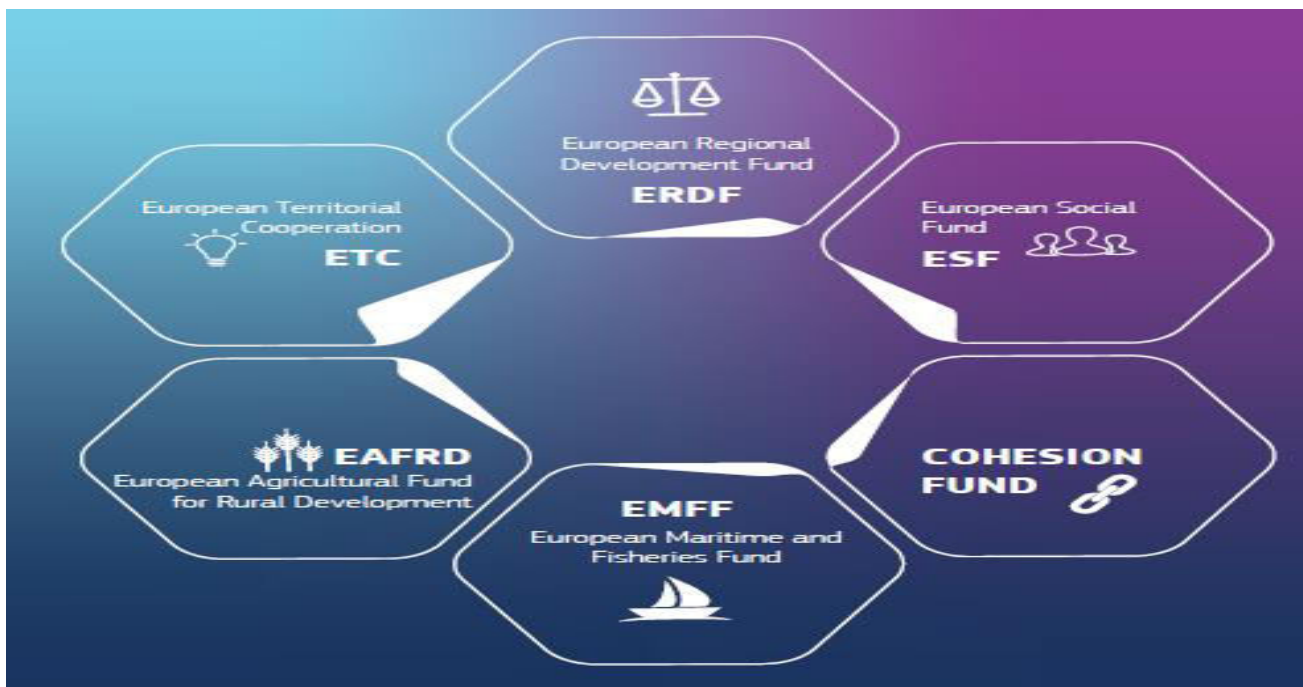
5. Inform GEO Secretariat accordingly and communicate to them respective contact persons for your GEO Office. It would be kind to mention in this first contact that this initiative was triggered by GEO-CRADLE's regional coordination mechanism and was supported by its Liaison activities that brought to your attention the successful paradigm and best practices of the Greek GEO Office.
6. Develop (if you do not already have) a national GEO logo according to the specifications provided by GEO Secretariat (the Greek GEO Office, among the first to have done so, will be pleased to provide further assistance on this). The Greek GEO logo, officially presented by GEO Director in GEO XI Plenary, together with the logo of South Africa, are here presented for your reference.
7. Establish a website for your National GEO Office. For an example for the contents and functionality of such a site, please feel free to visit the site of the Greek GEO Office (<http://www.greekgeo.noa.gr>).





# EU Funding Opportunities

## European Structural and Investment Funds (ESIF) 2014-2020



- 1) European Regional Development Fund (ERDF)\*
- 2) European Social Fund (ESF)
- 3) Cohesion Fund (CF)
- 4) European Maritime and Fisheries Fund (EMFF)
- 5) European Agricultural Fund for Rural Development (EAFRD)

\* including European Territorial Cooperation (ETC) / INTERREG

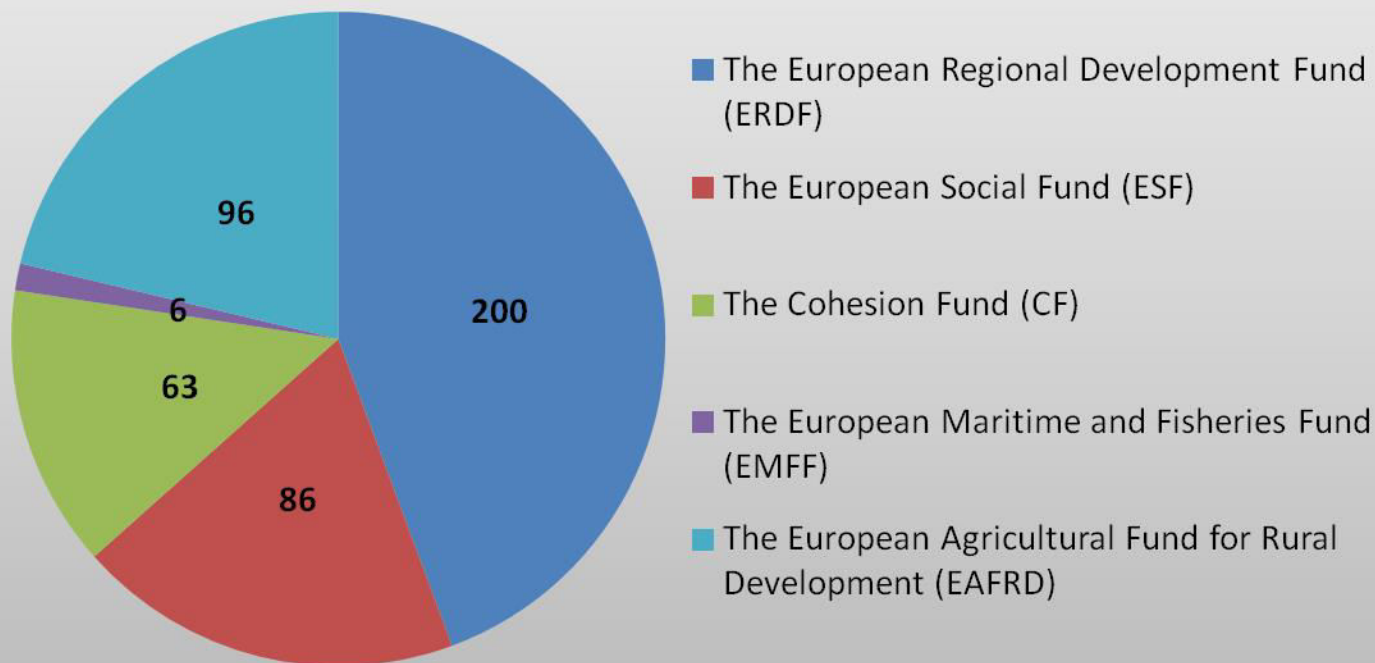
[https://ec.europa.eu/info/funding-tenders/european-structural-and-investment-funds\\_en](https://ec.europa.eu/info/funding-tenders/european-structural-and-investment-funds_en)



# EU Funding Opportunities

## European Structural and Investment Funds (ESIF) 2014-2020

Available budget for 2014-2020  
(in Billions €)

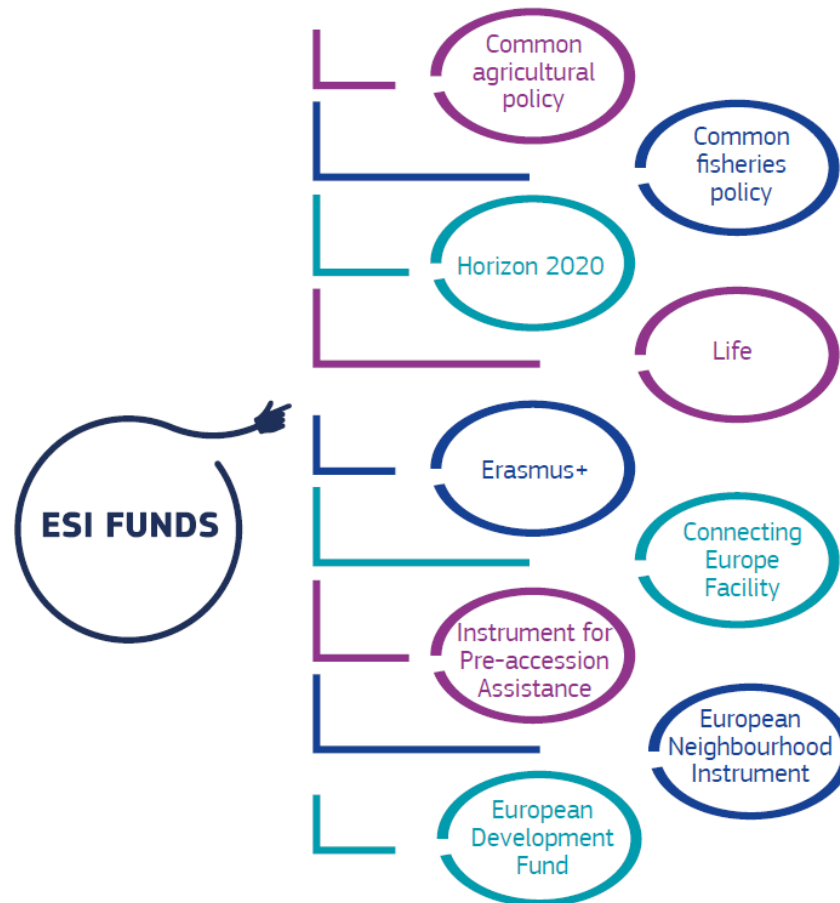




# EU Funding Opportunities

## European Structural and Investment Funds (ESIF) 2014-2020

The Common Strategic Framework also sets out practical ways to build synergies between the ESI Funds and other EU policies and instruments:



<http://geocradle.eu>



# EU Funding Opportunities

## The case of Israel

The European Neighbourhood Instrument (ENI) is the main EU financial instrument during the financial period 2014-2020.

**The ENI funds the European Neighbourhood Policy (ENP) which covers cooperation with EU's 16 Neighbours.**





# EU Funding Opportunities

## European Neighbourhood Instrument (ENI)

Budget of ENI for 2014-2020: € 15.4 billion.



Highly relevant to  
GEO-CRADLE!

ANSA - Centimetri for the EU Neighbourhood Info Centre - [www.enpi-info.eu](http://www.enpi-info.eu)

<http://www.enpi-info.eu/files/publications/ENI.pdf>

<http://geocradle.eu>



# EU Funding Opportunities

- **Israel benefits** from the [European Neighbourhood Instrument \(ENI\)](#), which provides most of the funding under [European Neighbourhood Policy](#). For the period 2014-2020, the sum of 2 million euros per annum in ENI funding is foreseen for cooperation with the government of Israel to cover [Twinning](#) projects.
- Israeli non-governmental bodies are eligible for support under a variety of programmes funded under ENI and other EU budgets.
- **Research & Innovation.** Israel has been associated to the EU Research and Technological Development Framework Programmes since 1996. The agreement on Israel's participation in the [Horizon 2020](#) programme was signed in June 2014.



# EU Funding Opportunities

## Bilateral Cooperation

### Twinning

The EU contribution to Twinning programmes in Israel under bi-lateral ENI allocations averages €2 million per year.

Since 2008, several Twinning projects have been launched in the areas of data protection, urban transport, equal employment opportunities, rural development, statistics, veterinary inspection and telecommunications. On-going Twinning projects are in the areas of statistics, environmental regulatory tools and veterinary diagnostic capacities.

In addition, Israel is a full partner in the **Horizon 2020 Research Programme**.



# EU Funding Opportunities

## Some statistics

### FP7

In FP7, Israel participated in 1,626 signed agreements involving 1,984 Israeli participations for which they received a total of EUR 876.839 million.

Israel's strongest areas of participation were the European Research Council grants for cutting edge research which represented 46% of funds received by Israel, and ICT (Information and Communications Technology) which represented 15%.

The other areas that make up the bulk of Israel's participation are Health (7%), Joint Technology Initiatives (5%) Nanotechnology (5%) and the Marie Curie Actions which focus on mobility for researchers (8%). Israel's main Member State partners in FP7 were Germany, the UK, France, Italy and Spain. Almost 70% of the FP7 funding goes to institutes of higher education. FP7 became the first source of competitive public funding for civilian R&D in Israel.



# EU Funding Opportunities

## Horizon 2020

So far, Israel is participating in 310 signed agreements involving 369 participations for which they will receive a total of €203,875 million. The breakdown of funding received so far is similar to that of FP7.

European Research Council grants accounting for 47% of the Horizon 2020 funding received. 23% of the funding has gone to LEIT (Leadership in Enabling and Industrial Technologies) projects. 64% of the total funding has gone to institutes of higher education.

Israel's main collaborators remain Germany, France, Spain, the UK and Italy.



# EU Funding Opportunities

## Funding opportunities for GEOSS and Copernicus Implementation

### EU Funding Opportunities

#### **GMES AND AFRICA – MAKING DEVELOPMENT SUSTAINABLE**

The GMES & Africa Support Programme has an indicative envelope of €30 million. It is funded by the European Commission through Pan African Programme for €29.5 million distributed as follows:

- €17.5 million for Grants
- €6 million for capacity development, outreach and awareness creation, PMU staff salaries, programme management and coordination, etc.
- €6 million for the technical support, including the technical assistance.

<https://au.int/web/en/GMESAfrica/2017call>



# EU Funding Opportunities

## Funding opportunities for GEOSS and Copernicus Implementation

### EU Funding Opportunities

#### The PRIMA initiative

The Commission has agreed on a proposal for a Partnership for Research and Innovation in the Mediterranean Area, PRIMA, which is set to develop much-needed novel solutions for sustainable water management and food production.

Funding for the €400 million partnership will come from the participating countries (currently around €200 million), matched by a €200 million contribution from the EU through its current research framework programme Horizon 2020.

The partnership is scheduled to run for 10 years, starting in 2018.

The PRIMA Joint Programme involves 19 countries:

- 11 Member States: Croatia, Cyprus, the Czech Republic, France, Greece, Italy, Luxembourg, Malta, Portugal, Slovenia and Spain;
- 8 third countries: Algeria, Egypt, **Israel**, Jordan, Lebanon, Morocco, Tunisia and Turkey.

Of these, 14 countries (Cyprus, the Czech Republic, Egypt, France, Greece, Israel, Italy, Lebanon, Luxembourg, Malta, Morocco, Portugal, Spain and Tunisia) have agreed to jointly undertake the PRIMA initiative.

The participation of Germany is currently under negotiation. As the initiative is evolving over time, more participants are expected to follow, both EU and non-EU countries.

<http://ec.europa.eu/research/environment/index.cfm?pg=prima>

## Development Cooperation Instrument (DCI)

The DCI covers all the developing countries except the countries eligible for the Pre-Accession Instrument. There are 3 specific components covered:

Geographic programmes

Thematic programmes

Pan-African Programme

**Geographic programmes** support cooperation with around 47 developing countries in Latin America, South Asia and North and South East Asia, Central Asia, **Middle East** and South Africa. They support actions based on the European Consensus for Development and the following areas:

- ✓ Human rights, democracy and good governance
- ✓ **Inclusive and sustainable growth for human development** (e.g. health, education, social protection, sustainable agriculture, food and nutrition security...)
- ✓ Migration and asylum
- ✓ The link between humanitarian relief and development cooperation
- ✓ **Resilience and disaster risk reduction**
- ✓ Development and security, including conflict prevention.

Highly relevant to  
GEO-CRADLE!

<http://geocradle.eu>



# EU Funding Opportunities

The DCI covers all the developing countries except the countries eligible for the Pre-Accession Instrument. There are 3 specific components covered:

Geographic programmes

Thematic programmes

Pan-African Programme

## Development Cooperation Instrument (DCI)

Thematic programmes benefit all developing countries (including those covered by the ENPI and the EDF). These programmes add value, complementarity and coherence to the geographical programmes. There are 2 categories:

- ✓ 'Global public good and challenges': this programme addresses **climate change, environment, energy**, human development, **food security** and migration while ensuring coherence with the poverty reduction objective. No less than 27% of this programme is spent on climate change and environment objectives. At least 25% of the programme is used to support social inclusion and human development.
- ✓ 'Civil society organisations and local authorities': this programme provides greater support to civil society and local authorities to encourage them to play a bigger role in development strategies.

Highly relevant to  
GEO-CRADLE!



# EU Funding Opportunities

## GEO and Copernicus

### **EUROGEOSS: The European Contribution to GEOSS**

“EuroGEOSS is envisaged to be an 'umbrella framework' under which GEO member states and relevant European organisations can propose activities to support the promotion, definition and scaling up of applications and services”

The EuroGEOSS Objective  
“The EuroGEOSS initiative is an application/service oriented framework initiative. The aim is to focus on delivering knowledge for the achievement of the 2030 Agenda for Sustainable Development and other GEO engagement priorities in a European context”



# EU Funding Opportunities

## GEO and Copernicus

### **EUROGEOSS: The European Contribution to GEOSS**

#### **EuroGEOSS Actions**

- Proposing and showcasing existing actions

A small number of pilot actions shall be identified and agreed by the GEO HLWG EuroGEOSS shall build consensus regarding objectives, information and knowledge in support of EU policies, SDGs, GEO SBAs and GEO priorities

- Copernicus-DIAS utilisation and use of Copernicus Services

Supporting the Copernicus services within a GEO context. Copernicus-DIAS shall be used to discover Copernicus data

- NextGEOSS Utilisation

Tools and applications being developed for NextGEOSS can be used to support the pilot test cases developing greater awareness and engagement



# EU Funding Opportunities

## GEO and Copernicus

### **EuroGEOSS Actions**

- Leverage data sets not yet integrated at European Levels

Examples geological survey, geographical data, socio-economic, statistics

- Scaling up existing initiatives

Existing European initiatives can be scaled up to deliver new applications, bringing together EU, European and national level e.g. Copernicus, H2020 related to in-situ from diverse data sources, INSPIRE etc.

- Introduce product commercialisation

Introduce commercial products into the framework to demonstrate the added value for domains such as e.g. insurance, transport, agriculture

- Ensuring Linkage and Supporting national efforts

Ensure linkage between EuroGEOSS actions, GEO flagships, national GEO offices, coordinating structures, raising awareness of GEO in Europe

- Support Efforts

Support efforts national GEO offices or coordinating structures to raise awareness of GEO within Europe and strengthen the linkages between activities undertaken in GEO initiatives, Flagships and national level -> European GEO investment has a visible return for Europe



# EU Funding Opportunities

## GEO and Copernicus

### Next Steps

- 2017: Development and Preliminary Showcasing

Develop EuroGEOSS framework resourcing, governance and protocols Showcase selected existing actions

- 2018: Scaling up and Leveraging

Launch of a Horizon2020 call to establish EuroGEOSS based on policy needs and existing resources.

Scale-up selected existing European initiatives in order to deliver new applications

Leverage national relevant EO activities not yet integrated at European level through EuroGEOSS

Link with GEOSS flagship and engagement priorities Showcasing added value of EuroGEOSS using selected application examples

- 2019-2020: Demonstration and Showcasing



thank you!





# GEO-CRADLE Communication, Dissemination & Engagement Activities

## GEO-CRADLE Regional Workshop in North Africa 25/05/2017, Cairo, Egypt

- ✓ Brought together 50 participants from Egypt and the neighboring countries, from both public and private sector, including public authorities, academia and industry.
- ✓ Gave participants the opportunity to network, share knowledge and experiences from other previous or ongoing projects, exchange views and begin or enhance cooperation.
- ✓ Highlighted the products and services of Copernicus and GEO and presented the available EU and international funding opportunities and current initiatives in the EO sector.
- ✓ Updated the GEO-CRADLE inventory on the regional EO capacities and skills, user needs, challenges and priorities.
- ✓ Confirmed the interest of end-users for the GEO-CRADLE pilots and further advanced their active engagement.





# GEO-CRADLE Communication, Dissemination & Engagement Activities

## GEO-CRADLE Regional Workshop in the Middle East 02/02/2017, Abu Dhabi, UAE

- ✓ **Brought together public administration, academic and research organizations, as well as SMEs.**
- ✓ Presented different but complementary perspectives on EO, providing participants with a unique cross-sector networking opportunity, supporting knowledge sharing and an enhanced cooperation between academia and industry.
- ✓ **Disseminated Copernicus and GEO** and provided information on available EU and international funding in the EO sector.
- ✓ **Identified the potential local challenges** hindering the EO market uptake and business performances, seeking solutions to enhance growth and innovation in the geo-information sector.
- ✓ Enriched GEO-CRADLE findings in EO capacities and skills recording, user needs analysis, maturity assessment and priorities setting in the region.





# GEO-CRADLE Communication, Dissemination & Engagement Activities

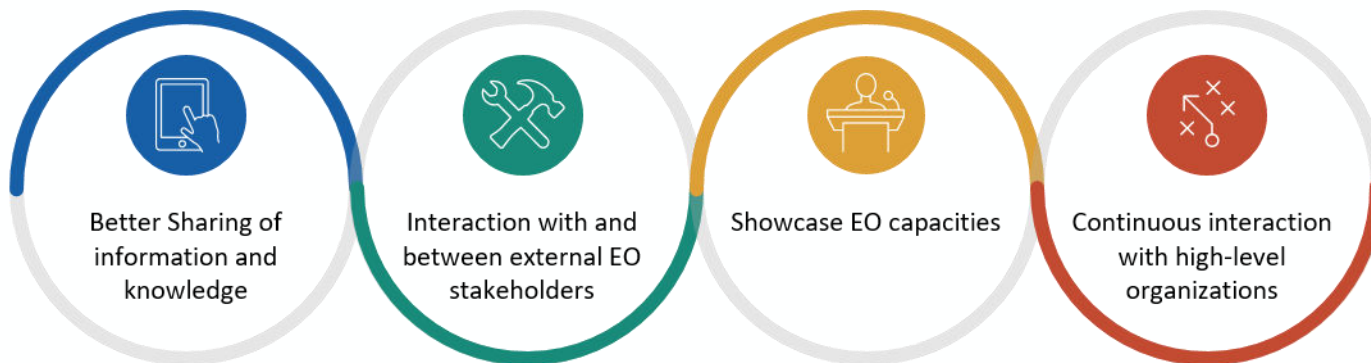
## GEO-CRADLE Regional Workshop in the Balkans 14/07/2016, Novi Sad, Serbia

- ✓ Brought together 80 participants from over 10 countries, in a region where the EO community is highly fragmented.
- ✓ Provided various organizations along the EO value chain with firsthand insights into existing regional capacities, new approaches in EO on a regional scale and success stories.
- ✓ Explored end-user needs, EU funding options and the opportunities for future cooperation and long term beneficial engagement.
- ✓ Connected the dots across the EO value chain, by providing the ground for key players from public sector, academia and innovative SMEs to consider challenges and areas for improvement of EO-based services in the Balkans with real impact in the public and private sectors.





## GEO-CRADLE Engagement Activities



**245** EO stakeholders in the RoI

**4** Stakeholder engagement tools and mechanisms

**9** Stakeholder Meetings and Workshops

**>15** Support Engagement Actions

GEO-CRADLE engaged 245 entities from 26 different countries

Networking Platform  
Social Media Presence  
Website  
e- Newsletter

Target to:  
i.Uptake of Earth Observation  
ii.Capacity Building  
iii.SMEs and users' Involvement

Cooperation with other European projects and activities  
Cooperation with GEO activities  
Internal Engagement and Capacity Building