

HORIZON 2020

EO Research funding opportunities within H2020 Societal Challenge 5.5:

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DG Research and Innovation

Climate Action and Earth Observation

What is Horizon 2020



A core part of Europe 2020, Innovation Union & European Research Area:

- Responding to the economic crisis to invest in future jobs and growth
- Addressing people's concerns about their livelihoods, safety and environment
- Strengthening the EU's global position in research, innovation and technology

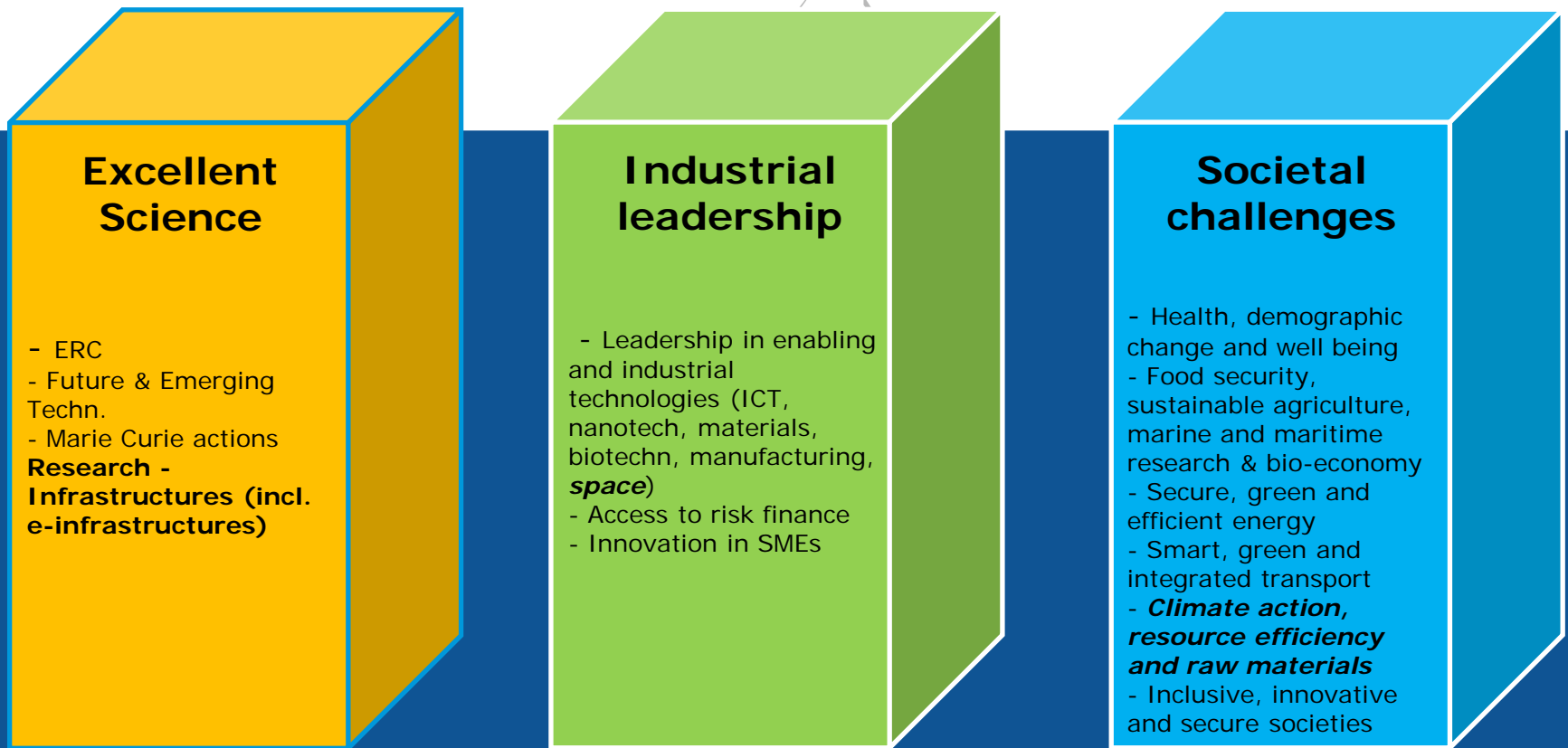


A New Start for Europe : My agenda for Jobs, Growth, Fairness and Democratic Change



- 1. A New Boost for Jobs, Growth and Investment**
- 2. A Connected Digital Single Market**
- 3. A Stronger Global Actor**

I want a European Union that is bigger and more ambitious on big things,
and smaller and more modest on small things



Excellent Science

- ERC
- Future & Emerging Techn.
- Marie Curie actions
- Research - Infrastructures (incl. e-infrastructures)**

Industrial leadership

- Leadership in enabling and industrial technologies (ICT, nanotech, materials, biotechn, manufacturing, *space*)
- Access to risk finance
- Innovation in SMEs

Societal challenges

- Health, demographic change and well being
- Food security, sustainable agriculture, marine and maritime research & bio-economy
- Secure, green and efficient energy
- Smart, green and integrated transport
- **Climate action, resource efficiency and raw materials**
- Inclusive, innovative and secure societies

- Integrated approach: social science included as an integral part of the activities
- Simple rules for grants (flat rate for indirect costs, no time-sheets for personnel working full time on a project, broader acceptance of participants accounting practices for direct costs etc.)
- Larger SME support
- Tailor-made IPR provisions for new forms of funding
- Strategic partnerships (PPPs) incl. international cooperation / cooperation with pan-European organisation
- A new emphasis on open access

Developing comprehensive and sustained global environmental observation and information systems - Rationale



This sub-challenge EO is a response to:

- **The need for Global Earth Observations data** that underpins all the research and innovation activities under this programme and EU policies.
- The fact that **Europe and the European Commission** are **committed at international level** to contribute to Global Earth Observation datasets.
- The need to engage more towards **the delivery of new systems** that can create business opportunities and growth.

Developing comprehensive and sustained global environmental observation and information systems - Rationale



- FP7 projects have contributed to the development and strengthening of the European capacity in Earth Observation, supporting the objectives of the GEOSS 10-Year Implementation Plan and the GEO Work Plan through ad-hoc research projects.
- However more cross-cutting integration will be required in Europe in the period 2014-2020 in order to further advance the implementation and use of Global Environmental Datasets and the information that can be derived from them.
- Actions are aiming at structuring better the Research and Innovation activities in Europe related to EO and fill the gaps identified.

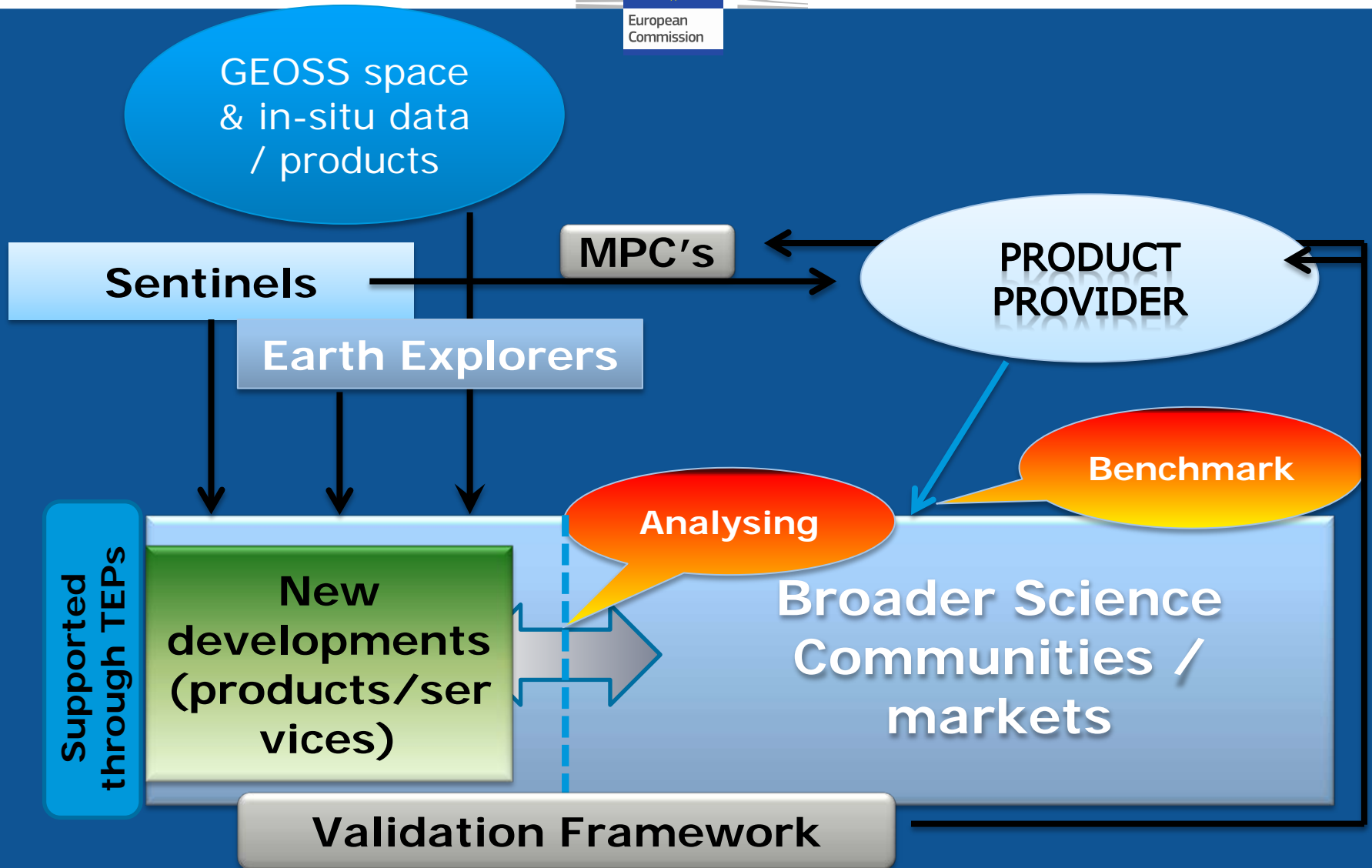


Copernicus Data & Products

are also supporting the knowledge base of GEO's SBAs and GEOSS information system is best suited supporting R & I for Copernicus Downstream services

- Data continuity of existing sensor systems
- Long-term commitment
- 2 sats per Sentinel (S1,2,3) in orbit at the same time
- Improved temporal, spectral, spatial and radiometric resolutions
- Different Sentinels flying at the same time

Exploitation & Benchmarking:



H2020 WP 2014/15 – EO activities (RIs excluded)



	SC5 + focus area BG	SPACE
2014	<ul style="list-style-type: none"> SC5-8a-2014: Coordinating and supporting EO research: EU EO networks SC5-16-2014: EO for Ecosystem BG-08-2014: Atlantic Observing System (Blue Growth focus area) <p>~37 Mio</p>	<ul style="list-style-type: none"> EO 1 – 2014: new ideas for Earth-relevant space applications EO 2 – 2014: Climate change-relevant space data reprocessing and calibration EO 3 – 2014: Observation capacity mapping for Atmosphere and Climate Change monitoring Plus continuity MACC (atmosphere) & MyOcean (marine): 11M€ <p>~21 Mio</p>
2015	<ul style="list-style-type: none"> SC5-18b-2015: Integrating North African, Middle East and Balkan Earth Observation-Coordination and Supporting Action SC5-15-2015: ERA-NET Cofund (~11Mio) SC5-17-2015: Demonstrating 'Citizens' Observatories' <p>~33 Mio</p>	<ul style="list-style-type: none"> EO 1 - 2015: Bringing EO applications to the market - <i>Innovation Actions</i> EO 2 – 2015: Stimulating wider research use of Copernicus Sentinel data EO 3 -2015: Imaging technologies from space <p>~26 Mio</p>



Looking into the future

- Development of a European Hub of the GEOSS information system
- Incubating new services and products for the citizens integrating Earth Observation
- Integrated Arctic Observing System
- Novel in-situ observation systems
- Provide disease emergence/break out monitoring platforms
- Stimulating operational Global Monitoring of Agriculture in the GEOGLAM context

Summary:



- ~ 115 Mio directly related to EO within the first H2020 WP (not accounting for RIs)
- Resources will be used for dedicated actions supporting:
 - The Copernicus service evolution/new services and uptake
 - Coordination mechanism in Europe for streamlining national and pan-European EO research (ERA coordination)
 - Promoting GEOSS as a source of dataset for H2020 and as a system for sharing data and information resulting from H2020 activities
 - Integrating Copernicus into GEOSS and reinforcing their in-situ components
 - Consulting and mobilising the EU EO private sector and to develop a EU strategy to transform GEO into a lever to support EU industry



HORIZON 2020

Find out more:

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

**Thank you
for your attention!**