



# HORIZON EUROPE Research Infrastructures

## REA.C.4

### Reforming European R&I and Research Infrastructures

*António VENTURA*  
*Project Officer*



*Mandated by the European Commission to support the EU Research and Innovation policy, REA funds high-quality research and innovation projects that generate knowledge for the benefit of society.*

# Role Distribution



## DG Research and Innovation and DG CNECT

- > Definition of Policies
- > Drafting the Work Programme



## European Research Executive Agency (REA)

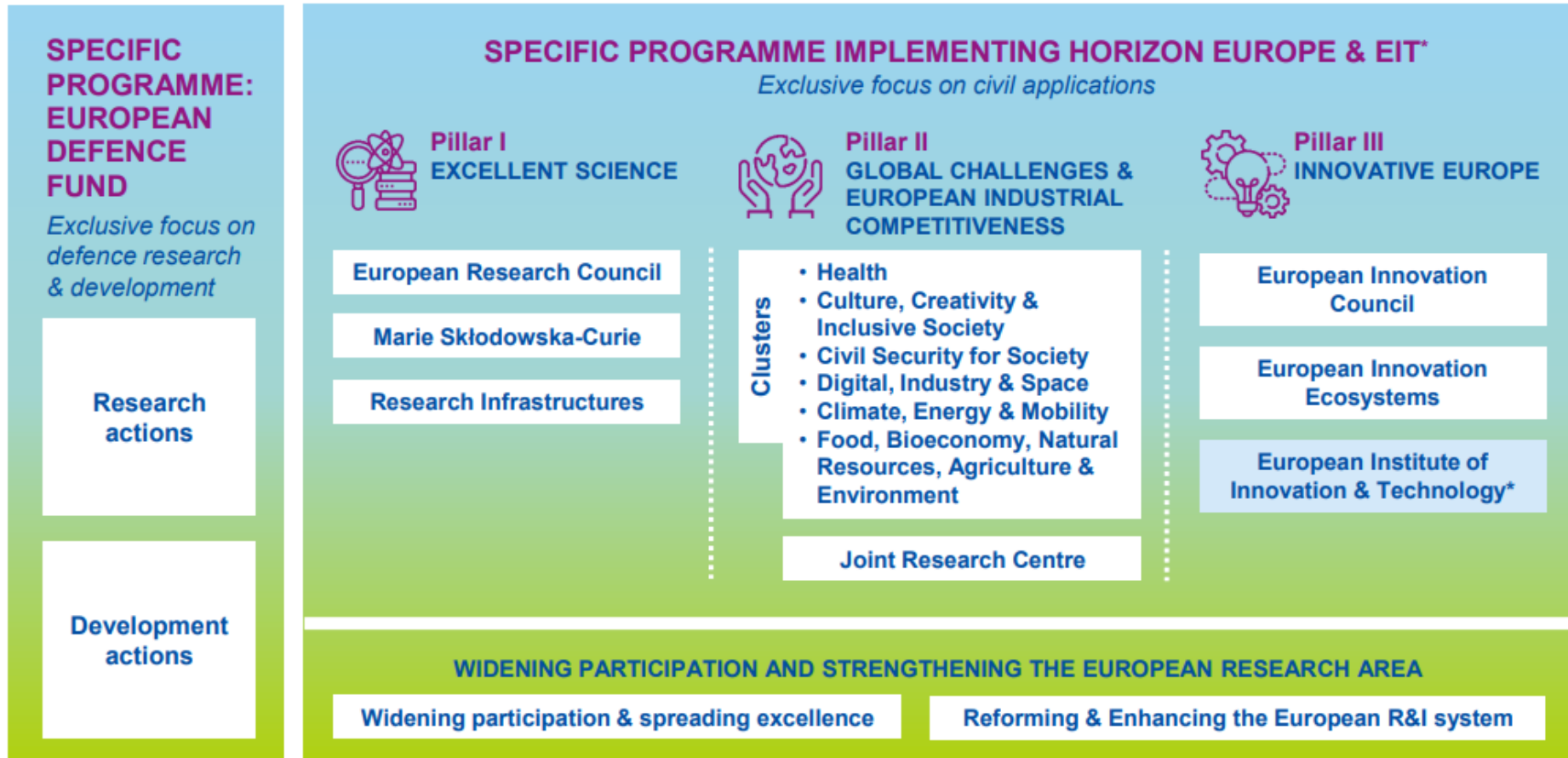
- > Implementation of calls for proposals
- > Grant Management



## Coordinator

- > Monitor that the action is implemented properly
- > Act as the intermediary for all communications with REA
- > Distribution of payments

# Horizon Europe



\* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

# Research Infrastructures

*The overall objective of the Research Infrastructures Programme under Horizon Europe is to empower Europe through world-class and accessible research infrastructures, as part of an integrated European research and technology infrastructures landscape.*

# Destinations

- **INFRADEV** - Developing, consolidating and optimising the European Research Infrastructures landscape, maintaining global leadership
- **INFRAEOSC** - Enabling an operational, open and FAIR EOSC ecosystem
- **INFRASERV** - Research Infrastructure services to support health research, accelerate the green and digital transformation, and advance frontier knowledge
- **INFRATECH** - Next generation of scientific instrumentation, tools and methods and advanced digital solutions

# Horizon Europe WP - 2024 Call - INFRADEV

Developing, consolidating and optimising the European research infrastructures landscape, maintaining global leadership

3 topics / €23.0 M



DEV-01-01: Research infrastructure concept development (RIA - LS)



DEV-01-02: Strengthen the bilateral cooperation on research infrastructures with Africa (CSA - LS)



DEV-01-03: Consolidation of the RI landscape – Individual support for evolution, long term sustainability and emerging needs of pan-European research infrastructures (RIA)

**Opening – 6 December 2023**  
**Call deadline – 12 March 2024**

**TTI the applicants – beginning of July 2024**  
**TTG – beginning of November 2024**

# Horizon Europe WP - 2024 Call - INFRAEOSC

Enabling an operational, open and FAIR EOSC ecosystem

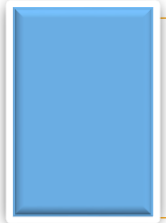
5 topics / €61.0 M



EOSC-01-01: FAIR and open data sharing in support of the mission adaptation to climate change (RIA)



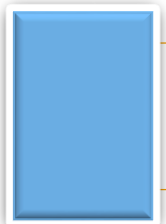
EOSC-01-04: Long-term access and preservation infrastructure development for EOSC, including data quality aspects (RIA)



EOSC-01-02: Supporting the EOSC Partnership in further consolidating the coordination and sustainability of the EOSC ecosystem (CSA - LS)



EOSC-01-05: Innovative and customizable services for EOSC Exchange (RIA)



EOSC-01-03: Enabling a network of EOSC federated and trustworthy repositories and enhancing the framework of generic and discipline specific services for data and other research digital objects (CSA - LS)

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# Horizon Europe WP - 2024 Call - INFRATECH

Next generation of scientific instrumentation, tools, methods, and advanced digital solutions for RIs

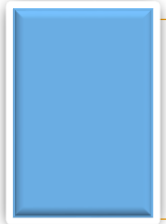
4 topics / €173.5 M



TECH-01-01: R&D for the next generation of scientific instrumentation, tools, methods, solutions for RI upgrade (RIA)



TECH-01-03: New digital twins for Destination Earth (RIA - LS)



TECH-01-02: Development of tools, solutions, modules to enable R&I on the social aspects of the green transition (RIA - LS)



TECH-01-04: AR/VR-empowered digital twins for modelling complex phenomena in new RI application areas (RIA - LS)

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# ESFRI Landscape analysis

## Marine: from coastal to deep oceans and ice caps

- River-sea interaction, freshwater, water-ice: the **ESFRI Project DANUBIUS-RI**, the **ESFRI Landmark LifeWatch ERIC** as e-RI, HYDRALAB+, AQUACOSM (mesocosms).
- Open ocean mobile platforms: the **ESFRI Landmark EURO-ARGO ERIC**, EuMarineRobots.
- Open ocean and coastal fixed-point observatories: the **ESFRI Landmark EMSO ERIC**, Coastal/shelf seas observatories like JERICO.
- Research vessels and underwater vehicles: ARICE, EUROFLLEETS.
- Data storage and standards, access: EMODnet and linked Copernicus Marine Service (CMEMS) for operational oceanographic services; EuroGOOS, SeaDataNet/ SeaDataCloud.
- Marine biology, omics and bio-informatics: the **ESFRI Landmark ELIXIR** (H&F), the **ESFRI Landmark EMBRC ERIC** (H&F), the **ESFRI Landmark LifeWatch ERIC** as e-RI, and the **ESFRI Landmark AnaEE** (H&F).
- Marine Renewable Energy: the **ESFRI Project MARINERG-i** (ENE).
- Carbon cycle: the **ESFRI Landmark ICOS ERIC**, and the **ESFRI Landmark LifeWatch ERIC** as e-RI.



# Examples of RI Projects - Marine Research



## JERICO-S3

Joint European Research Infrastructure of Coastal Observatories: Science, Service, Sustainability

Coordinator: IFREMER  
H2020-INFRAIA

## JERICO-DS

Joint European Research Infrastructure of Coastal Observatories – Design Study

Coordinator: IFREMER  
H2020-INFRADEV



Metrology for Integrated Marine Management and Knowledge-Transfer Network

Coordinator: CSIC  
H2020-INFRAIA

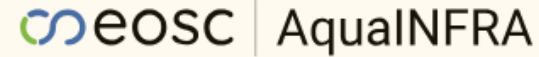


EU network of mesocosm facilities for research on marine and freshwater ecosystems open for global collaboration

## AQUACOSM-plus

Network of Leading Ecosystem Scale Experimental AQUatic MesoCOSM Facilities Connecting Rivers, Lakes, Estuaries and Oceans in Europe and beyond

Coordinator: FVB-IGB  
H2020-INFRAIA



Infrastructure for Marine and Inland Water Research

Coordinator: AAU  
HE-INFRAEOSC



Gliders for Research, Ocean Observations and Management: Infrastructure and Innovation

Coordinator: ARMINES  
H2020-INFRADEV



AQUAculture infrastructures for EXCELLENCE in EUropean fish research 3.0

Coordinator: INRAE  
H2020-INFRAIA



A federated European FAIR and Open Research Ecosystem for oceans, seas, coastal and inland waters

Coordinator: CNR  
HE-INFRAEOSC



ASSOCIATION OF EUROPEAN MARINE BIOLOGICAL LABORATORIES EXPANDED

Association of European Marine Biological Laboratories Expanded

Coordinator: SU  
H2020-INFRAIA



High Arctic Ocean Observation System

Coordinator: NERSC  
HE-INFRA TECH

# HE Online Manual

<https://webgate.ec.europa.eu/funding-tenders-opportunities/display/OM/Online+Manual>



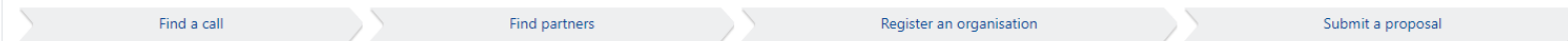
- 🏠 Online Manual
- > My Area — User account and roles
- > Participant Register — Register your
- > Grants
  - Procurement
  - Prizes
  - Financial instruments
- > Working as an expert
- Help

## Online Manual

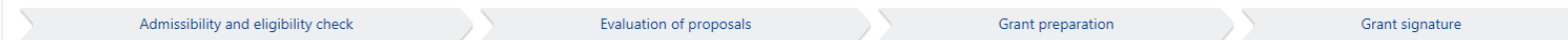
My Area — User account and roles

### Grants

#### Applying for funding



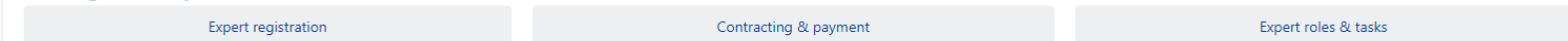
#### Evaluation & Grant signature



#### Grant management



#### Working as an expert



Prizes

Financial instruments

Top

# Keep in touch



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# Thank you



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