



POLICY IMPLICATIONS AND RECOMMENDATIONS

POLICY BRIEF COMMON TEMPLATE

RESEARCH INFRASTRUCTURES

INTRODUCTION: PROJECT TITLE AND PROJECT OBJECTIVES

CALL: [HORIZON-INFRA-2021-SERV-01](#)

TOPIC: [HORIZON-INFRA-2021-SERV-01-06](#)

PROJECT: iMagine. <https://www.imagine-ai.eu/>.

PROJECT OBJECTIVES:

1. Deliver a scalable, shared IT platform for image analysis in marine and freshwater research
2. Advance existing image analytical services to increase research performance in aquatic sciences
3. Develop prototype new image analytical services and datasets that can accelerate progress towards healthy oceans, seas, coastal and inland waters
4. Capture and disseminate development and operational best practices to imaging data and image analysis service providers
5. Deliver a portfolio of scientific images and image analytics services targeting researchers in marine and aquatic sciences

Name and email address of the operational project coordinator.

[Gergely Sipos \(gergely.sipos@egi.eu\)](#)

- Implementation of research infrastructures.

Key Results: "Free at the point of use" AI-driven imaging services and the iMagine AI platform, along with Best Practices documents and labelled datasets.

How: The project's results will continue to contribute towards implementations of the related RIs¹, enabling them to make these resources and services available to research communities and beyond to conduct research and foster innovation.

Recommendations: The EU needs to support sustained funding for the long-term operational capacities of these services (which is a much lower effort than their development) and incentivise innovation in AI techniques for aquatic sciences. In parallel, policy guidance should encourage existing aquatic science RIs to integrate iMagine's outputs (e.g. the AI Competence Centre and federated AI tools) into their core operations, thereby institutionalising continued innovation in AI techniques for aquatic sciences.

- Access to research infrastructures.

Key Results: "Free at the point of use" AI-driven imaging services and the iMagine AI platform and labelled datasets to researchers.

How: The services have been made accessible using Virtual Access for a much wider group of researchers. The labelled data are discoverable on Zenodo and domain-

¹ These are: Antares, Copernicus Marine Service, EMBRC, EMODnet, EMSO ERIC, EuroArgo, JERICO RI, LifeWatch, OBSEA, PAP, SeaDataNet

specific repositories (like SEANOE), and image sets have been made searchable by metadata through the cataloguing systems.

Recommendations: Continue and expand further the Virtual Access funding mechanism to facilitate cross-national uptake of digital services like the iImagine Platform that should not be replicated in multiple countries and need to be delivered outside their prime user communities.

- Funding of research infrastructures.

Key Results: “Free at the point of use” AI-driven imaging services and the iImagine AI platform, along with Best Practices documents and labelled datasets.

How: iImagine made available substantial shared infrastructure, over 132,000 GPU-hours and 6,000,000 CPU-hours of computing were made available via a federated cloud. The services and best practices combined will enhance the efficiency and effectiveness of AI-driven research processes within the related RIs. More importantly, the use of AI will significantly speed up the processes and reduce manual labour, freeing up the researchers and technical personnel to focus on actual research and data production. All this will have a positive impact on the funding model and mechanisms for the RIs, as it will create new opportunities and new avenues for funding.

Recommendations: The EU should establish a mechanism to bridge R&D outputs and long-term RI financing, ensuring the developments made in projects like iImagine have a path to sustainability. This is necessary to incentivise researchers to develop solutions that can rely on the RIs after the end of the project. The EC should promote these outcomes towards RIs, encouraging them to integrate these outcomes within their core service portfolios.

- International cooperation of research infrastructures.

Key Results: Competence Centre for AI-based image analysis to support the uptake of AI approaches in aquatic sciences and publishing FAIR AI models and data.

How: iImagine brought together 23 partners and 13 research infrastructures from across Europe, uniting marine and freshwater research communities with e-infrastructure providers in a single consortium. The Competence Centre established during the project operates as a distributed, virtual team that pools expertise across the RIs and technological institutes active in the field to promote knowledge sharing.

Recommendations: The EU should promote the uptake of services, data and best practices in international venues such as relevant conferences, supporting or co-locating the organisation of training and workshops where possible.

- Employment and skills in research infrastructures.

Key Results: Training, Webinars, Competence Centre and Best Practices documents.

How: Beyond technical outputs, iImagine prioritised capacity building by establishing a Competence Centre that provided training, developed best practices, and supported its use-case teams. Regular workshops and knowledge-exchange activities have enhanced the digital skills of researchers and staff across participating infrastructures and beyond, ensuring they can effectively use AI tools and manage imaging data to high standards.

Recommendations: Invest in comprehensive upskilling programs for research infrastructure personnel to build essential digital skills (AI, data science, engineering, and data management) needed for the next generation of RIs.

- Greening of research infrastructures.
-

How: Though no direct results contribute towards this, the underlying infrastructure will benefit from the results of the Greener Future Digital Research Infrastructures (GreenDIGIT) project.

Recommendations: NA.

- Interaction of research infrastructures with industry.

Key Results: Marine Ecosystem Monitoring service at EMSO, ZooProcess Service, Oil Spill Detection service, Underwater Noise Detection service and the Beach Monitoring service.

How: These services will serve the industry as one of their key users, as some segments of the industry will have a vested interest in the tools and/or results from the analyses provided by these services. These services can usher in new policies governing the related industries.

Recommendations: The EC should support multi-channel outreach via relevant industry associations and clusters (e.g. maritime technology, environmental monitoring) to raise awareness and showcase success stories, fostering adoption of these AI-driven services in the Blue Economy and related industries.

- ERIC legal framework.
Not Applicable

- Technology development, data and digital services, digitalisation.

Key Results: “Free at the point of use” AI-driven imaging services and the iImagine AI platform, along with Best Practices documents and labelled datasets.

How: By integrating big-data capabilities, real-time analysis of sensor streams, and open data resources, the project exemplifies how modern research infrastructures can drive digital innovation in environmental research and improve scientific productivity.

Recommendations: Continue the support of R&D calls that encourage the co-development of new services and service prototypes across multiple groups of stakeholders on the RI, e-infrastructure landscape.

- Level of connection of your RI to EOSC.

Key Results: “Free at the point of use” AI-driven imaging services and the iImagine AI platform, along with Best Practices documents, labelled datasets and other deliverables

How: All of the project’s results have been made available through Zenodo. The integration activities with EOSC were eventually abandoned due to the changes in the EOSC landscape and architecture. However, iImagine services are expected to be integrated with future thematic EOSC nodes.

Recommendations: EOSC is still relatively unknown among researchers, so more effort must be taken to communicate and disseminate it. Furthermore, the structure of EOSC (especially with the nodes) may hinder its understanding, so it should be better obscured from the end users.

- Contribution to other research areas and broader EU priorities.

Key Results: “Free at the point of use” AI-driven imaging services and the iImagine AI platform, along with Best Practices documents, labelled datasets and other deliverables

How: iImagine has continuously collaborated with other projects, e.g. ANERIS, BlueCloud 2026, under the theme Healthy oceans, seas, coastal and inland waters.

iImagine also established a successful collaboration with the Zenodo platform to implement an aquatic-domain specific metadata for its datasets. This should bolster

the EU's open science policy by making the data available in a FAIR manner. The selected use cases in iImagine tackle topics such as Pollution, Biodiversity, Climate Change, and Ecosystems, promoting non-invasive monitoring methods to the maximum extent possible. All the results of the project, including publications, follow an open license or open access policy, thereby contributing greatly to the EU Open Access policy.

Recommendations: The Commission should leverage iImagine's outcomes as a blueprint for interdisciplinary innovation, extending similar AI-driven open platforms to other research areas (e.g. biodiversity, climate science, health) and continue funding projects that simultaneously further scientific excellence and address strategic EU policy targets.

- Sustainability of research infrastructures.

Key Results: AI-driven imaging services and the iImagine AI platform.

How: The core sustainability pathway for the imaging services lies in integrating them into the portfolio of the Research Infrastructures related to the services.

Recommendations: The EU should establish dedicated sustainability funding calls under Horizon Europe, specifically designed to transition successful project outcomes such as iImagine's AI-driven platform and Competence Centre into permanent operational components of European RIs. These funding mechanisms should incentivise RIs to adopt proven project outputs, ensuring continuous support beyond initial project timelines. Without this, the developments made in projects will always target short-term goals or will have to rely on internal resources for continued operations, hence weakening the purpose of the RIs.
