MERIL, Research Infrastructures of European relevance A comprehensive inventory



Research excellence requires excellent research infrastructures which not only support research but also lead its development into new directions and create an attractive environment for world-class researchers. Research Infrastructures which promote research, education and innovation are integral. They are the engine that drives the development of research skills and knowledge to support EU competitiveness.

In the report 'EUROHORCs and ESF Vision on a Globally Competitive ERA and their Road Map for Actions' (2009), the European Science Foundation (ESF) and the European Heads of Research Councils (EUROHORCs) highlight the need to develop shared funding and exploitation of research infrastructures. In January 2010, the ESF launched a Member Organisation Forum to address this issue among its members and other key players in Europe. The importance of Research Infrastructures as a corner stone of the European Research Area has once more been endorsed in the 'Europe 2020 Flagship Initiative Innovation Union' communication of the European Commission (2010). The European scientific community and policy makers would therefore benefit from a comprehensive inventory of the research infrastructures in Europe.



Reading room of the British Library (now British Museum) RI Category: Research Libraries © Nguyen-Anh Le

What is MERIL?

The MERIL project (Mapping of the European Research Infrastructure Landscape) aims to achieve this comprehensive inventory of research infrastructures of European relevance and make the information publicly available through an interactive online portal.

What is meant by research infrastructures?

Considering existing definitions from the European Commission and the European Strategy Forum on Research Infrastructures (ESFRI), MERIL established the following definition of Research Infrastructures: a European Research Infrastructure is a facility or (virtual) platform that provides the scientific community with resources and services to conduct top-level research in their respective fields. These research infrastructures can be single-sited or distributed or an e-infrastructure, and can be part of a national or international network of facilities, or of interconnected scientific instrument networks

The infrastructure should:

- offer top quality scientific and technological performance, that should be recognised as being of European relevance
- offer access to scientific users from Europe and beyond through a transparent selection process on the basis of excellence
- have stable and effective management



The RRS James Clark Ross during the JR240 ICEBell Cruise in the Bellingshaussen Sea RI Category: Research Vessels and Underwater Vehicles

© Pete Bucktrout/ British Antarctic Survey

Why is it important to have an inventory of research infrastructures?

MERIL will be a unique resource for the scientific community, policy makers and other communities such as research performing and research funding organisations. As the Member States of the European Union continue to develop a more co-ordinated and strategic approach to scientific research, it is important to have a clear picture of the research infrastructure landscape. A single source of information about all the principal research infrastructures throughout Europe would:

- Help the scientific community to identify and gain access to a wide range of resources, services and facilities.
- Allow policy makers to assess the state of research infrastructures throughout Europe to pinpoint gaps and possible duplications and make decisions about where best to direct funding.
- Encourage cross-border and cross-sector collaboration and more efficient use of resources within the European research community.
- Promote individual research infrastructures by raising their profile and fostering a greater sense of partnership across Europe.
- Contribute with this state-of-the-art analysis to the planning for future needs in cooperation with the European Strategy Forum on Research Infrastructures (ESFRI).

Who are the stakeholders?

The stakeholders at the origin of the MERIL project are the scientific community, EUROHORCs, ESF, European Commission, ESFRI, European Association of National Research Facilities (ERF), EIROforum, and Ministries. Most of these are represented in MERIL's governance through its Steering Committee.

At the operational level, the scientific committees of the ESF have nominated experts to represent their scientific domains in the MERIL Science Advisory Board. Support from the scientific units at the ESF is provided in order to ensure coherence and liaison with the project.

What type of research infrastructures will be included in the MERIL portal?

For the current contract, research infrastructures that will be included are research infrastructures that have been evaluated through a national or European initiative on the basis of the commonly agreed definition and seen as relevant to Europe by the scientific community and policy makers. The set of common criteria relevant for registration into MERIL will be made explicit and transparent. This consists of:

- scientific and technological excellence
- management including access policy, services, quality assurance and funding
- governance
- capacity to generate impact
- and education and training

with the latter two being desirable but not mandatory at present. The MERIL portal will include categories and types of research infrastructures in all scientific domains. At this stage, MERIL should not be a validation tool but a label of quality.

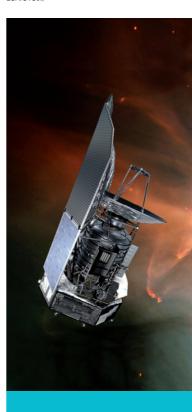
In September 2012 at the end of the MERIL contract, the stakeholders will address future entries into the MERIL portal in light of its sustainability as a dynamic knowledge management tool.

What kind of information might the MERIL portal contain?

MERIL will be an online portal. Each research infrastructure will be described in a standard format and some search capacities will be available. The aim is to provide a limited set of relevant information that most users need on research infrastructures and a web link to each research infrastructure for more information. It will be a user-friendly resource structured around providing information commonly requested by researchers seeking access to an infrastructure and by policy makers to analyse the current status of research infrastructures in Europe.

Artist impression of the Herschel spacecraft RI Category: Space-based telescopes

©ESA/ AOES Medialab; background: Hubble Space Telescope image (NASA/ ESA/STScI)



Patient diagnosis during a clinical trial RI Category: Biomedical Imaging Facilities ©iStockPhotos



It will also promote the use of a common set of quality criteria as good practice for the evaluation of research infrastructures. This would in particular serve as a basis for future inclusion in national surveys and roadmaps and ultimately benefit the quality of the MERIL portal.

Will policy recommendations be issued as a result of MERIL?

In addition to the building of a dynamic interactive portal, the findings from the MERIL project will enable stakeholders, research organisations or networks like the Member Organisation Forum on Research Infrastructures to issue recommendations through the form of a policy document. These recommendations will concern all scientific domains and will present common and specific issues of research infrastructures. These policy recommendations will feed into future research and innovation funding programmes at the national and EU level.

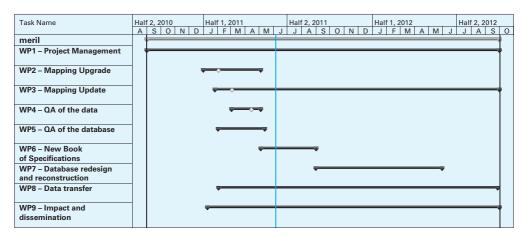
The policy document will stress the importance for each infrastructure to make available a comprehensive detailed description of what the infrastructure does, what kind of research it has supported and what its capabilities are. Information relating to access (e.g. waiting lists, cost of access, contact details, accommodation) and training and education programmes is also under consideration.

Who is funding and carrying out the project?

The MERIL project is funded by the European Commission under Framework Programme 7 – Contract # 262159 and is being coordinated by the European Science Foundation (ESF).

What is the timeline for the project?

The MERIL project was launched on 1 October 2010 and will run for two years. Once the first data have been gathered and logged, test runs will be carried out. It is expected that this will be done during early 2012 when 30% of the data is expected to have been gathered. Subsequent data acquisition will be undertaken with the aim to have the MERIL portal up and running by September 2012.



MERIL Timeline

Where can I find out more?

For more information on the MERIL project and team, please visit **www.meril.eu** or contact **meril@esf.org**.

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