

MERIL MAPPING OF THE EUROPEAN RESEARCH INFRASTRUCTURE LANDSCAPE

An Inventory of Research Infrastructures in Europe



The RRS James Clark Ross during the JR240 ICEBell Cruise in the Bellingshaussen Sea © Pete Bucktrout/

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Research Infrastructures – *a sine qua non* of research in Europe

The infrastructure supporting research activity is increasingly acknowledged to be of fundamental importance in many, if not all, domains of scientific and scholarly activity. Excellent research infrastructures are not only the basis for top-level research; they also create an attractive, stimulating and formative environment for world-class and promising early-stage researchers. Support for research infrastructures is a pillar of the European Research Area and the Innovation Union.

What is MERIL?

Complementing the work of the European Strategy Forum on Research Infrastructures (ESFRI) on future needs for pan-European Research Infrastructures, the 'Mapping of the European Research Infrastructure Landscape' (MERIL) project was launched in 2010 to address the need for an overview of existing research infrastructures in Europe, both as a baseline for strategic policy-making and as a source of information for scientists and other stakeholders in research and technology.

The MERIL mapping is an online inventory of research infrastructures recognised as being of more-than-national relevance, across all categories and scientific domains. The information is available to the public through a userfriendly, interactive online portal with search and data visualisation capabilities: http://portal.meril.eu



The MERIL procedure

All research infrastructures (RIs) entered in the MERIL portal have been screened by responsible 'National Data Intermediaries' in the relevant country, or by the MERIL Steering Committee in the case of international RIs, to ensure that they meet the common minimum standards of quality, access and management. Inclusion in MERIL is thus a label of relevance and quality, and could in the future inform investment decisions at national or international level.

The database is continuously being updated with RIs that meet the eligibility criteria. RI staff are then invited to enter data through a personalised user account. When data for an RI is complete, the entry is published on the public portal.

How will MERIL serve science and policy?

MERIL provides a core set of relevant information commonly required by researchers seeking access to particular services or equipment, or by policy makers seeking an overview of the research infrastructure landscape in all scientific domains. Data on individual RIs are CERIF*-compliant.

As a single source of information about RIs of more-thannational relevance in Europe, MERIL will:

- help the scientific community 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 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).
- * CERIF is the Common European Research Information Format, which is now a standard for research-related information systems in Europe.

What is a research infrastructure?

MERIL employed the following definition of a research infrastructure:

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 e-infrastructures, and can be part of a national or international network of facilities. or of interconnected scientific instrument networks. An infrastructure should:

- offer top quality scientific and technological performance, recognised as being of 'more-than-national' relevance;
- offer access to scientific users from Europe and beyond through a transparent selection process on the basis of excellence;
- have a management structure.



Artist impression of the Herschel spacecraft ©ESA/AOES Medialab; background:

Hubble Space Telescope image (NASA/ESA/STScI)

Background and timeline

MERIL emerged in the framework of an ESF Member Organisation Forum on Research Infrastructures (2010-2012). The stakeholders behind the project were the ESF, EUROHORCS (later Science Europe), the European Commission, ESFRI, the European Association of National Research Facilities (ERF), EIROforum, the wider scientific community, and ministries. Most of these are represented in MERIL's governance through its Steering Committee.

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The MERIL portal is currently being populated and will be formally launched in autumn 2013.

Looking to the future

MERIL is designed to be a dynamic knowledge management tool; as an e-infrastructure, it already collects, manages and shares information on research infrastructures at European scale. In the future, MERIL could serve as the hub in a distributed information system, starting with RI websites, and later linking systematically with other RI observatories and information sources. As such, it will be able to help address some of the greatest challenges driving the development of e-infrastructures – the exploitation of data and facilitation of open access, interoperability and scientific collaboration.

Find out more

For more information on the MERIL portal, including how to add an RI to the database, visit <u>http://portal.meril.eu</u> or contact the MERIL team at meril@esf.org





