

SciColl as part of the research infrastructure landscape

Scientific Collections International Conference
Royal Belgian Institute of Natural Sciences,
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European Science Foundation

Outline

- About ESF
- Strategy ESF/ EUROHORCS Roadmap for actions
- Member Organisation Forum on Research Infrastructures
- Mapping of European Research Infrastructure Landscape (MERIL)
- Relationship ESF - SciCOLL
- Examples of ESF activities using scientific collections

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ESF Member Organisations



ESF is an independent association of 79 Member Organisations

- research funding organisations*
 - research performing organisations*
 - academies and learned societies
- in 30 countries

****Some are also represented in the EUROHORCs***

About ESF

- Established in 1974
- Offices in Strasbourg, Brussels, Ostend
- ESF budget: 53M€ in 2008 including COST
- Staff: equivalent to 152 full time in 2008 including COST Office



ESF headquarters, Strasbourg



Marine Board, Ostend



COST Office, Brussels

ESF covers all scientific domains

Standing Committee domains

- Humanities
- Social Sciences
- Life, Earth & Environmental Sciences
- Medical Sciences
- Physical and Engineering Sciences



Expert Board/Committee domains

- Marine Sciences
- Polar Sciences
- Space Sciences
- Radio Astronomy
- Nuclear Physics
- Materials Science

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EUROHORCS and ESF Vision on a Globally Competitive ERA and their Road Map for Actions

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and ESF Vision

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for Actions to Help
Construct the ERA

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EUROHORCS-ESF
Task Force Members

Foreword

The Heads of European Research Councils (EUROHORCS) and the European Science Foundation (ESF) wish to play an active and concrete role in shaping a European Research Area of Excellence. Following the publication of the EUROHORCS and ESF's comments on the European Commission's Green Paper 'The European Research Area: New Perspectives', they therefore decided to produce a Road Map to excellence in science in Europe.

The EUROHORCS Assembly and ESF Governing Council, in their April 2005 meetings, approved a Vision Statement on the goals to be reached in the next five to ten years to build a globally competitive European Research Area (ERA). This Vision Statement was complemented by an outline for a Road Map for the actions which could be taken by EUROHORCS and ESF Member Organisations, as well as partners, to help build such an ERA ideal.

These outline actions have now been further elaborated, identifying the main goals and their timelines. Some actions are already quite concrete and compelling, others require more preparation and study. This reflects that this is a document describing a process, rather than a final statement.

It is important to stress that the Road Map is an action plan where EUROHORCS and ESF Member Organisations have a primary role. It does not intend to give a full policy agenda for all actors in the ERA.

It is a pleasure to recommend the Vision Statement and the Road Map for your consideration and support for our joint efforts. Member Organisations of EUROHORCS and ESF will take the lead in the implementation of action lines of the Road Map.

This project benefited from the continuous support from – among many others – Professor Matthias Kleiner, President of the Deutsche Forschungsgemeinschaft (DFG) and Chair of the EUROHORCS-ESF Task Force, Professor Rik Orning, Director General of the Vetenskapsrådet and former President of EUROHORCS, and Dr. John Marks, former ESF Director of Science and Strategy and Deputy Chief Executive, who actively edited the final version of this document.

Professor Ian Halliday
President of ESF

Professor Dieter Imboden
President of EUROHORCS

www.eurohorcs.org

www.esf.org

EUROHORCs-ESF roadmap for actions

Actions #	
1	Strengthen relations between science, society and the private sector and intensify the dialogue between research organisations and political actors at the European level
2	Promote European research careers
3	Develop scientific foresight and use its results as a basis for joint strategy development
4	Create a European Grant Union
5	Address peer review of proposals at European level
6	Develop common approaches to ex-post evaluation of funding scheme and research programmes
7	Create ERA Connect and Regional Clusters
8	Develop shared funding and exploitation of medium-sized research infrastructure
9	Implement a common policy on Open Access to research results and Permanent Access to research data
10	Connect European Research to the world

mandated to
DFG, who
used MO
Forum as
instrument



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ESF Member Organisation Fora



- Output-oriented discussion platforms for Member Organisations to develop joint actions on specific issues, involving others as appropriate
- Actions: to contribute to Member Organisation strategy development and/or lead to the development of
 - Best practice e.g. peer review
 - Common procedures
 - Cooperative activities
- Time-limited activities, typically two years

www.esf.org/mo-fora

ESF Member Organisation Forum on Research Infrastructures

Launched in January 2010

Currently **23 Member Organisations** and observers from the European Commission, ERC, ERF, ESFRI and ALLEA, ([SciCOLL is invited to join as observer](#))

Mandate

- Achieve a **definition** of European Research Infrastructures (scope, international use, size, budget, regional distribution)
 - Discuss **standards** for European Research Infrastructures (information to external users, terms of reference, access rules, personnel)
 - Create an **overview** of European Research Infrastructures (opportunities of updating existing portal, registration procedure, definition of categories/relevant data to be supplied by RI, regular updates)
 - Enable **networking** of European RI's (by offering opportunities for RI specific workshops, user-meetings, interaction with external scientists/industry to exchange expertise, identify new developments)
 - Encourage external **access** to European RI's (access rules, user fees funding)
-

4 Working Groups

1. Access and Standards

2. Funding and Evaluation

3. Mobility and Networks

4. Mapping

- Develop a mapping/landscape/overview of the existing RIs in Europe

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Mapping of European Research Infrastructure Landscape MERIL

Aim

The MERIL project is an ESF initiative to provide the design and implementation of a comprehensive database of pan-European Research Infrastructures.

The work builds upon the existing Portal for European Infrastructure services, developed by ESF and the EC. EC funding for part of the MERIL project has been requested.

MERIL is supported by some of the main actors in European Research Infrastructures, such as the EC, EUROHORCs, ESFRI, ERF, EiroForum, ALLEA.

Longer term outreach MERIL

Research Infrastructures

- Access rules
- Gap analysis
- Linking of distributed infrastructures

Scientific Community:

- Networking
- Training
- Sharing of best practice

Policy Makers:

- Data Mining Tool
- Strategy Planning Tool
- International Visibility (e.g., OECD GSF)

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Relationship to SciCOLL

- SciCOLL is part of the Research Infrastructure landscape
- SciCOLL objectives partially coincide with those of MO Forum, MERIL and the ESF to promote world class research infrastructure in Europe
- SciCoLL is invited as observer in the MO Forum on RI's

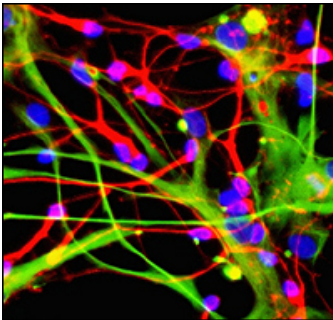
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Life, Earth and Environmental Sciences & Scientific Collections

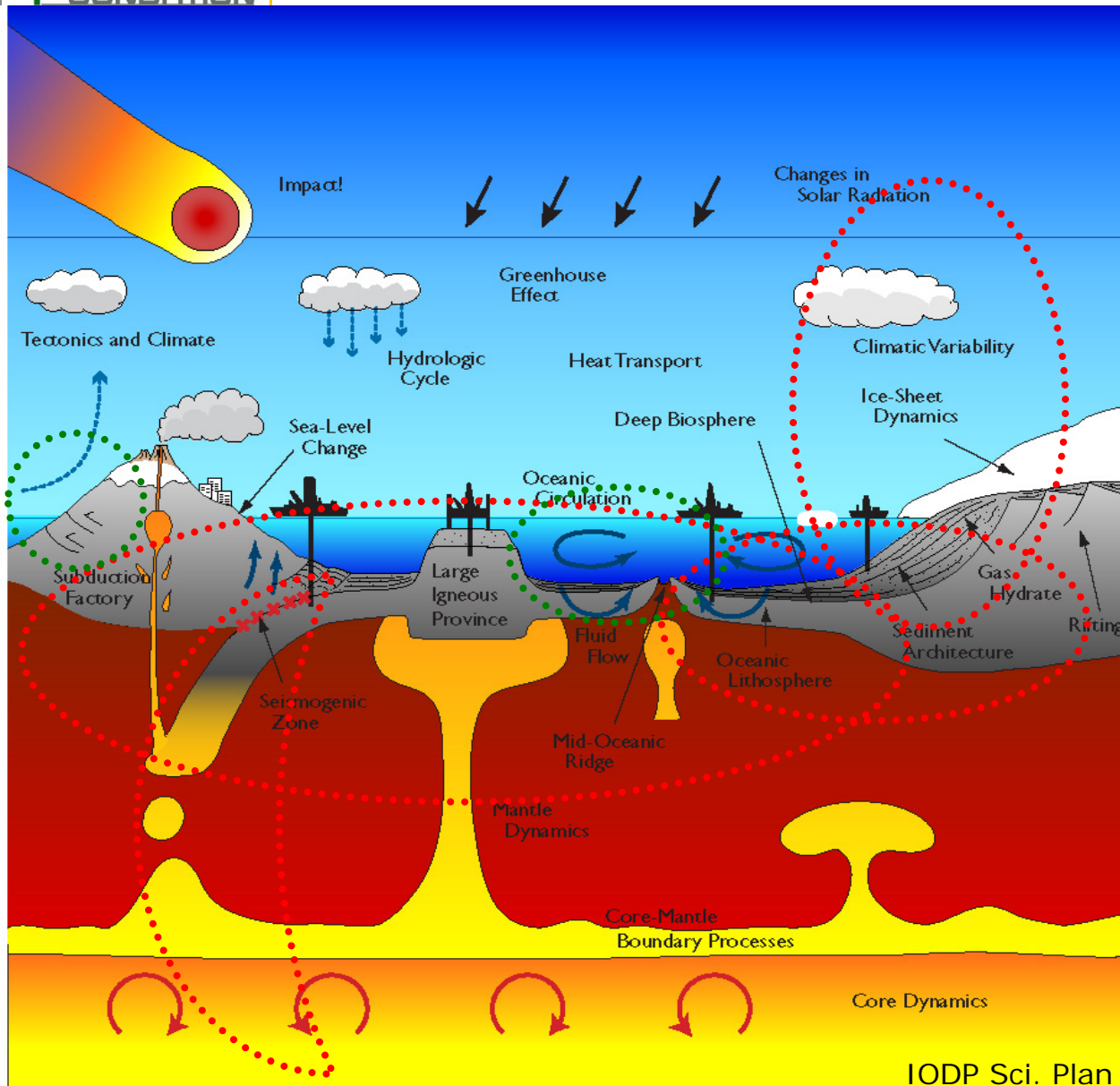
For the typical activities in these fields the quality assurance of sampling, storage of specimen, marine, lacustrine and terrestrial sediment cores, ice cores, air samples and open access to the repositories are critical issues.

Life \leftrightarrow Environmental \leftrightarrow Earth Sciences



→ better understand biological, environmental and Earth systems across time and space

EUROCORES in Geo- & Environmental Sciences



EUROMARGINS

Processes at the Passive
Continental Margins

EuroCLIMATE

Climate Variability and the
(past, present and future)

Carbon Cycle

EuroMARC

Challenges of Marine Coring
Research

EuroMinSci

European Mineral
Sciences Initiative

EuroDIVERSITY

Challenges of Biodiversity
Science

EuroDEEP

Biodiversity and Ecology of
Deep-Sea Ecosystems

TOPO-EUROPE

4-D Topography Evolution in
Europe: Uplift, Subsidence
and Sea level Change

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2 - Impact of Population Surveys and Biobanking
3 - European Strengths

4 - European Population Surveys and Biobanking: Rationale, Current Status and International Context
5 - Key Challenges of European Biobanking

8 - Recommendations for European Biobanking and Population Surveys and Biobanking
10 - Expert Group on Population Surveys and Biobanking

Foreword

Rapid developments in medical research produce a continuous stream of new knowledge about disease processes. However, the possibilities for early detection or, preferably, prevention of disease remain limited. Population-based prospective studies investigating the interaction between genetic predisposition to a disease and exposure to environmental factors are a prerequisite to gain knowledge for the development of disease-preventing strategies. Increasingly, it is being realised that population surveys and biobanking – systematically assembling collections of genetic material and other relevant information about individuals – will play a key role in achieving the medical paradigm shift from "cure" to "prevention".

A multitude of national and regional population- and disease-oriented biobanks have been established in Europe. However, the exchange of data and materials within national legal frameworks is still difficult and European biobanking efforts are characterized by fragmentation.

The European Science Foundation's medical section, the European Medical Research Council (EMRC), initiated this science policy activity because studies of complex diseases require population surveys directed at building a knowledge base to improve early detection techniques and ultimately develop primary preventive measures.

This report is the outcome of an ESF/EMRC Workshop on Population Surveys and Biobanking, involving an international high-level expert group, whose members made specific recommendations to stimulate co-ordinated activity in population surveys and biobanking across Europe. The recommendations, summarized at the end of this report, are intended to trigger targeted efforts by relevant stakeholders, including the ESF and its Member Organisations, governments, the European Commission, other international agencies, industry and academia.

To strengthen Europe's position in this scientific field, emphasis has to be put on increased collaboration to converge European biobanking activities, to address ethical issues and to prevent fragmentation by integrating parallel activities in this field. Sustained funding of biobanks is a prerequisite to fostering further development of this research area in Europe.

Professor Marja Makarow
Chief Executive, ESF

Professor Liselotte Højgaard
Chair, EMRC

www.esf.org

Science Policy Briefing Population Surveys & Biobanking

- Workshop on Population Surveys and Biobanking (7-8 Dec 2006, Amsterdam, NL)
- Chairs: Professor Gertjan van Ommen, Leiden University Medical Center (LUMC), NL
Professor Frank Skorpen, Norwegian University of Science and Technology, NO
 - Report published in May 2008
- **Impact** of Population Surveys and Biobanking
 - European **Strengths**
 - **Rationale**, Current **Status** and International **Context**
 - Key **Challenges** of European Biobanking
 - **Recommendations** for European Biobanking and Population Surveying