

European Strategy Forum
on Research Infrastructures

ESFRI

Annual Report

ESFRI Activity
Report 2011

ESFRI EUROPEAN STRATEGY FORUM ON RESEARCH INFRASTRUCTURES

ESFRI ANNUAL ACTIVITY REPORT
2011





FOREWORD FROM THE CHAIR

TOP QUALITY RESEARCH INFRASTRUCTURES ARE THE PREREQUISITE OF A SUCCESSFUL IMPLEMENTATION OF THE ERA

I am pleased to present the 9th Annual Report of ESFRI Activities for 2011, the second since I took up my responsibilities as ESFRI Chair in September of 2010.

Research Infrastructures are essential for the competitiveness of the European Research on a global scale and they are efficient means for the training of young researchers. In fact, they provide research opportunities for several thousands of scientists per year. Research Infrastructures assist technology developments and they promote knowledge and technology transfer. They provide the “critical mass” in key research areas to enable significant impact on society, on jobs and growth, and on innovation in the broadest sense - environmental, social and technological – and the transfer of knowledge to business and industry. Research Infrastructures play a vital role in the Europe 2020 Flagship Initiative, Innovation Union, which addresses the challenges and opportunities Europe is facing in key areas.

The Competitiveness Council has given ESFRI the task “that by 2015 the Member States and the Commission should have implemented about 60 % of the Research Infrastructures listed on the ESFRI roadmap”. This is a real challenge but ESFRI tries to cope with that. To do so, ESFRI has set up a Working Group on Implementation with the aim to provide advice and help for the projects to overcome obstacles in financial, governance and legal matters. To assist the Member States and Associated Countries in realising Research Infrastructures also innovative funding instruments have to be explored and the use of Structural Funds should be increased.

Although the highest priority should be given to implementation also other items have been dealt with during 2011, e.g. regional issues, international cooperation and evaluation aspects.

ESFRI is aware that the planning of new facilities should take into account the landscape of existing ones, often created with a national or regional perspective. ESFRI has received a mandate to develop an evaluation methodology for pan-European Research Infrastructures. A first report of ESFRI’s working group on evaluation will be published in early 2012. ESFRI is seeking to strengthen regional access to Research Infrastructures by encouraging collaboration between existing and proposed Research Infrastructures and specific regional ones (so called “Regional Partner Facilities”). ESFRI’s working group on Regional Issues is currently developing selection criteria for these facilities.

2011 was once again a busy year for ESFRI. Besides four plenary meetings of the Forum, various meetings of the different Working Groups took place and in addition the WIRE 2 conference was organized in Debrecen in June 2011.

I would like to conclude these introductory remarks by thanking all ESFRI delegates, the members of the different working groups, the ESFRI Secretariat in Brussels and the ESFRI Bureau in Bonn for their dedication to the work of ESFRI. I am very much looking forward to an interesting year 2012.

Beatrix VIERKORN-RUDOLPH
ESFRI Chair

RESEARCH INFRASTRUCTURE ROADMAPS

ESFRI STRATEGY REPORT AND ROADMAP UPDATE 2010

In May of 2011, ESFRI released its Strategy Report and Roadmap Update 2010. The Roadmap consists of two main parts – the work programme of ESFRI for the coming years, and a Roadmap, illustrating 48 European Research Infrastructures and major upgrades which will meet the needs of research communities in the European Union for the next 10-20 years.

The ESFRI Chair presented the Roadmap to the European Commissioner for Research, Innovation and Science, Máire Geoghegan-Quinn, in Brussels on 3 May 2011.



Beatrix Vierkorn-Rudolph, ESFRI Chair, presenting the ESFRI Strategy Report and Roadmap Update to Commissioner Máire Geoghegan-Quinn
Brussels, May 2011

The updated roadmap contains six new projects – three in the area of biological and medical sciences, and three in the field of energy. These new facilities will help boost research and innovation on key societal challenges such as energy supply, climate change and health. These projects will draw on resources pooled between various Member States and on EU funding. After realisation they will provide open access to researchers from across the EU and in some cases beyond.

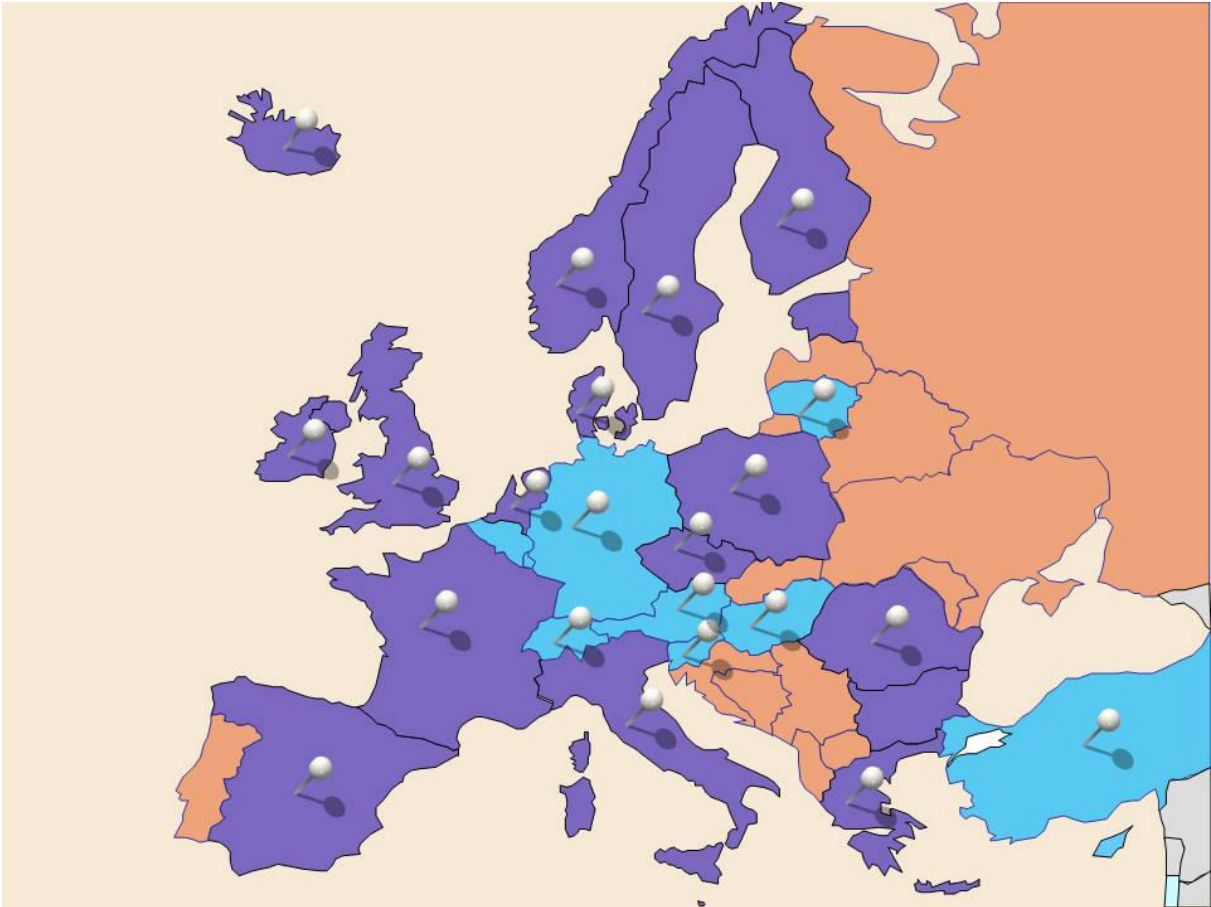
New projects in the domain of biological and medical Sciences: During the preparatory phase France will coordinate an infrastructure for studying how ecosystems respond to environment and land-use changes (ANAE). The United Kingdom will lead in setting up an infrastructure on systems biology with applications expected in the pharmaceutical, healthcare and agricultural sectors (ISBE). The third new infrastructure, to be developed in France and Germany, will significantly enhance pan-European access to viruses, bacteria and fungi needed for research on infections affecting humans and crops, as well as for research on bio-security (MIRRI).

With regard to the Energy projects: the WindScanner project –coordinated from Denmark - will produce detailed maps of wind conditions at a wind farm covering several square kilometres; the solar research infrastructure EU-SOLARIS which will be built at the Advanced Technological Centre for Renewable Energy in Tabernas, Almeria (Spain) focuses on developing new technologies for concentrated solar power; and, the nuclear fission Research Infrastructure MYRRHA, which will be constructed in Mol, Belgium, for research capacity on the reduction of radioactive nuclear waste

The ESFRI Strategy Report and Roadmap Update 2010 provides 48 projects, regarding their progress towards implementation. Ten of the projects are already in their implementation phase, whilst another sixteen are expected to proceed towards implementation by the end of 2012. ESFRI intends to embark on an ambitious programme in the next years, by striving to implement as many of the Research Infrastructures on the ESFRI Roadmap as possible. These will certainly contribute to the Europe 2020 Strategy and the Innovation Union Flagship Initiative.

“Pooling national and EU resources to build pan-European Research Infrastructures – rather than each Member State simply going it alone – is common sense and a key part of the EU’s Innovation Union plan,” said Geoghegan-Quinn. “These collaborative efforts create economies of scale, boost EU competitiveness and deliver better value for money for taxpayers.”

NATIONAL ROADMAPS FOR RESEARCH INFRASTRUCTURES



ESFRI encourages the continued elaboration and updating of National Roadmaps in the Member States and Associated Countries. These are vital blueprints which allow countries to set national priorities and to earmark funds for their development and participation of pan-European research infrastructure activities.

Implementation of the ESFRI Roadmap

In its Strategy Report and Roadmap Update 2010, ESFRI highlighted once again the importance of scientific and technological innovation as basis for the success of the European economy. Europe must fully exploit its talent and resources. The implementation of the projects on the ESFRI Roadmap will significantly advance Europe's capacity to generate new ideas, increase innovation and help to create jobs.

Research Infrastructures are large undertakings, whether in size, or by nature of their organisational complexity. Notwithstanding the current economic climate and pressure on resources, they require a considerable level of investment to build and need a long-term operation strategy. If Europe is to maintain its competitiveness, then a common strategic approach is necessary. The realisation of the ESFRI Roadmap projects will be a large step in the right direction and a strong sign that Europe is able to work together effectively.

To face the challenges ahead, in autumn 2011, ESFRI set up an Implementation Working Group, under the leadership of Leo le Duc (Dutch delegate in ESFRI). More information can be found under the chapter ESFRI Working Groups.

ESFRI WORKING GROUPS IN 2011

REGIONAL ISSUES

The more balanced distribution of Research Infrastructures in all regions of Europe continued to be a focus of ESFRI activities during 2011.

ESFRI actively pursues opportunities to involve and exploit the potential for scientific excellence and technological reinforcement of the convergence and outermost regions and Associated Countries (CORegions) through their involvement, wherever appropriate, in the development of Research Infrastructures, including:

- § support for their participation in construction and access to infrastructures of pan-European dimension, in particular to large single site facilities;
- § support for setting-up on their territory nodes of distributed infrastructures of pan-European dimension; and
- § stimulation of emergence on their territory of regional Research Infrastructures.

In 2011, Anneliese Stoklaska (Austria) chaired the Group up to June and presented the ESFRI Regional Issues Working Group Report 2011 to the WIRE Conference in Debrecen, Hungary (<http://www.wire2011.eu/>). The Annual Report addressed a number of conclusions and recommendations to be considered by ESFRI, Member States and Associated Countries. At the June meeting, Jacek Gierlinski (Poland) was elected to lead the group during the next working period.

One of the activities of this WG, during this year, was to introduce the concept of the "regional Research Infrastructures". The proposed definition was agreed by ESFRI during the September meeting, while there is still an on-going discussion how to select such facilities.

EVALUATION WORKING GROUP

In 2010, ESFRI set up a working group to explore the possibility of developing an evaluation methodology and assessment scheme of Research Infrastructures. The Working Group was invited to advise ESFRI on the development of a framework for the evaluation and assessment of RIs (existing facilities, or proposals for new or upgraded ones) which could, in due course, be used for benchmarking RIs of pan-European interest and impact.

Under the leadership of Nadezda Witzanyova (Czech Republic), a group of experts from across Europe worked intensively since mid-2010 to:

- § Define feasible steps and procedures for a system of evaluation of Research Infrastructures, which would build trust and coherence between national policies, which could lead in the end to a more efficient use of resources in Europe;
- § Identify a methodology based on best practices in evaluating and benchmarking RIs at different levels.

This resulting report is currently under preparation and will be presented in early 2012. The report will represent a survey and compendium of best practice for the evaluation of Research Infrastructures in Europe; it will be the first of its sort.

It would be appreciable if in future in further discussion with all stakeholders in Europe harmonised criteria and indicators could be elaborated for future ex-ante and ex-post evaluations of Research Infrastructures of national, regional and pan-European relevance.

ESFRI STRATEGY WORKING GROUPS

Following the publication of the ESFRI Strategy Report and Roadmap Update 2010, the Forum took stock and reflected on how to support the scientific community properly and to fulfill its incubator role during the next working period. In this respect, a consultation process was launched in spring 2011 whereby the Forum sought the opinion of the managers of the ESFRI Roadmap projects, as well as the national authorities (via their delegates in the Forum).

The outcome of this consultation process, and discussions which took place during the Forum's 37th meeting in Debrecen in June 2011, gave impetus and an indication on how ESFRI and its Working Groups should underpin the important process of supporting the European Research Infrastructure landscape and the timely implementation of the projects on the ESFRI Roadmap.

It was recognized that the intensive dialogue with the scientific communities which had been set up by the Thematic Working Groups over the last years should be maintained, whilst at the same time the clear necessity to focus on implementation was highlighted. As such, it was agreed to set-up Strategy Working Groups (SWGs) which would work in close contact to a dedicated group dealing with Implementation. These SWGs will have strong focus on the so-called Grand Challenges and will deal more with future policy-oriented needs.

The ESFRI SWGs shall:

- § propose to the Forum a joint vision and a strategic research agenda in the domain(s) of its competence;
- § advise ESFRI on potential improvements in the pan-European availability and management of existing Research Infrastructures (RIs);
- § follow the implementation of the projects on the ESFRI Roadmap and give appropriate expert feedback to ESFRI, e.g. on the needed coordination between different projects in the area;

- § identify the needs and, whenever appropriate, propose to ESFRI possible coordination actions between the remaining Preparatory Phase projects and with the other Working Groups;
- § propose to ESFRI possible solutions (related to RIs) able to help tackling the Grand Challenges facing our society, such as climate change, energy and resource efficiency, food security, health or demographic change;
- § advise ESFRI on whether projects should remain on future editions of the Roadmap, and, following a decision by ESFRI, to evaluate possible proposals according to the agreed procedure for the update of the Roadmap;
- § monitor the dynamics of the EC Integration Projects that complement the EU actions on new Research Infrastructures and give feedback to the Forum;
- § advise ESFRI, how cooperation with Joint Programming Initiatives and with industry (or relevant European industrial organisations) could be strengthened and, whenever appropriate, to identify common areas of interest, which might be further elaborated by the Forum.

Strategy Working Groups (period 2010-2013)

Domain	Chair
Energy	Gabriele Fioni (France)
Health & Food	Murat Özgoren (Turkey)
Environment	Carlos Martinez Riera (Spain)
Social & Cultural Innovation	Adrian Dusa (Romania)
Innovation and Emerging Technologies	To be confirmed

IMPLEMENTATION GROUP

The ESFRI Implementation Group, set up in June 2011 under the leadership of Leo le Duc, will work in close contact to the Strategy Working Groups and the coordinators and managers of the ESFRI Roadmap Projects. It will play a vital role in supporting the implementation process from a practical viewpoint (for example, legal and financial issues).

A first workshop took place in the Netherlands in September 2011. This event gathered together representatives of the ESFRI projects, Forum delegates and other interested stakeholders. This workshop marked a very efficient start of this Group and provided a useful insight into the current status of the Implementation of the 38 projects and addressed many issues related to the acceleration and improvement of the Implementation process and procedures. Within the context of a preparatory consultation process, the ESFRI project coordinators and/or representatives briefly presented their situation and discussed the bottlenecks of the implementation phase and in particular how close each project is to its real launch dependent on decisions of individual countries or legal entities.

This Workshop generated concrete and very useful discussions on the various bottlenecks and the potential solutions

- § how to establish an ERIC;
- § what the foreseen Governance structure is; is there a site issue;
- § what is the level of the construction costs;
- § which are the major technical problems;
- § how can we define the configuration of distributed services;
- § the ESFRI assistance is needed;
- § the role of the European Commission in the implementation phase.

Based on the answers of the above questions and the extended discussion that took place, some useful conclusions were drawn related to the assistance needed and or requested by the project representatives.

ESFRI Implementation Working Group:

Identification and analysis of best practices as well as of bottlenecks for an efficient implementation process,

Propose solutions to solve bottlenecks with relevant parties in view of ESFRI's incubator role.

Continuous support of the implementation of the ESFRI projects, regarding:

- Governance;
- Legal issues (e. g elaborating statutes, facilitating the use of the ERIC regulation);
- Access and data policy.

Assess financial funding schemes (including Structural Funds).

Report regularly on the above issues to ESFRI.

Stimulate communication at an early stage between the scientific communities and funding agencies.

Coordinate actions, as appropriate, with the ESFRI WG on Regional Issues and other Working Groups or Institutions (e.g. EIB).

Summarize the lessons learned and provide recommendations on specific issues to the Forum.



Hans Chang and Robert-Jan Smits
ESFRI Implementation Workshop, Amsterdam, September 2011
© photograph courtesy Alex Tromp

ESFRI WORKING GROUP CHAIRS

Adrian Duşa
Chair of the ESFRI Social & Cultural Innovation Working Group
Director of the Romanian Social Data Archive and Chair of the Romanian
Social Data Archive



Leo le Duc
Chair of the ESFRI Implementation Working Group
Head Sciences & Humanities (and deputy-director) at the Directorate for
Research and Science Policy at the Ministry of Education Culture and
Science in the Netherlands.



Jacek Gierlinski
Chair of the ESFRI Regional Issues Working Group
Ministry of Science and Higher Education in Poland



Gabriele Fioni
Chair of the ESFRI Energy Strategy Working Group
Deputy Director for Research & Innovation
Ministry for Higher Education and Research in France



Murat Özgoren
Chair of the ESFRI Health & Food Strategy Working Group
Professor at Faculty of Medicine, Dokuz Eylul University
Turkey



Carlos Martinez Riera
Chair of the Environment Strategy Working Group
Ministry of Science & Innovation, Spain



OVERVIEW OF ESFRI MEETINGS IN 2011

36TH MEETING, BRUSSELS, 25 MARCH

The 36th meeting of the Forum took place in Brussels 25 March. During this meeting, the delegates gave their approval to the ESFRI Strategy Report and Roadmap Update 2010. In addition to the usual ESFRI business, the Forum welcomed a presentation from Michel van der Rest (ERF) and Gudmund Host, the newly elected Chair of e-IRG, the e-Infrastructure Reflection Group.

37TH MEETING, DEBRECEN, HUNGARY, 6 JUNE

The 37th ESFRI meeting took place in Debrecen, Hungary, under the auspices of the Hungarian Presidency of the EU and hosted by ATOMKI, the Institute of Nuclear Research of the Hungarian Academy of Science.

The delegates were pleased to be welcomed by the Institute's director, Dr. Fülöp and were privileged to receive a tour of the extensive facilities. Thanks are extended to our hosts for the excellent hospitality and meeting organization.

During this meeting, Jacek Gierlinski (Poland) was nominated as Chair of the Regional Issues Working Group for the next period, whilst Leo le Duc (Netherlands) and Giorgio Rossi (Italy) were elected to the ESFRI Executive Board. Ionel Andrei's mandate was extended for another term. The Forum thanked the outgoing Executive Board Members, Nadezda Witzanyova (Czech Republic) and Jean Moulin (Belgium).



ESFRI Meeting at ATOMKI
Debrecen, June 2011

38TH MEETING, BRUSSELS, 23 SEPTEMBER

During the 38th ESFRI meeting which took place in Brussels on 23 September, an in-depth discussion took place on the challenges ahead for the Forum and the European Research Infrastructure landscape.



ESFRI Executive Board deliberating
Debrecen, June 2011

The delegates agreed to the setting-up of Strategy Working Groups which the Forum is confident will shape its workprogramme and ambitions for the next working period.

During this meeting, the Forum unanimously agreed to the extension of the mandate of the Chair, Beatrix-Vierkorn Rudolph. At the same time, the delegates said farewell to two of ESFRI's long-standing delegates – Anneliese Stoklaska (Austria) and Jørgen Kjems (Denmark). Both delegates made an excellent contribution to the work of ESFRI during their mandates and they were warmly thanked. In addition, Hervé Péro bade farewell after serving ESFRI as its Executive Secretary for almost 7 years. His dedication, vision and excellent work were acknowledged by all.

39TH MEETING, WARSAW, 23 SEPTEMBER

The 39th meeting of ESFRI was held in Warsaw under the Polish Presidency of the EU and hosted by the Poland Delegates in ESFRI. It took place at the Institute of Biocybernetics and Biomedical Engineering of the Polish Academy of Sciences.

During this meeting, the Forum agreed that focus should remain and intensify around the implementation of the Roadmap projects.

The Chair and delegates warmly thanked the Academy and the Polish hosts for their kind hospitality.

MANAGEMENT OF RESEARCH INFRASTRUCTURES

ERIC: THE EUROPEAN RESEARCH INFRASTRUCTURE CONSORTIUM

The first ERIC, entitled SHARE-ERIC (Data infrastructure for socio-economic analysis of ongoing changes due to population ageing) was formally established by Commission Decision in March 2011. In the course of 2011, CLARIN (Common Language Resources and Technology Infrastructure), ECRIN (European Clinical research Infrastructures Network) and Euro Argo (Global Ocean Observing Infrastructure) started the ERIC application process.

Further ESFRI projects that plan to start the ERIC application in 2012 are the ESSurvey (European Social Survey), DARIAH (Digital Research Infrastructure for arts and humanities), LIFEWATCH (Science and Technology Infrastructure for Research on Biodiversity and Ecosystems), BBRMI (Bio-banking and Biomolecular Resources), CESSDA (Council of European Social Sciences Data archive), EMSO (European Multidisciplinary Seafloor Observatory) and EATRIS (European Advanced Translational Research Infrastructure in Medicine). Other ESFRI projects that are considering the forming of an ERIC are ESS (European Spallation Source), Infrafrontier (phenotyping and archiving of mouse model mammalian genomes), ICOS (Integrated Carbon Observation) and ELI (Extreme Light Infrastructure).



SHARE-ERIC: Research and Innovation Director General, Robert-Jan Smits, presenting a plate to Philip Eijlander, Rector Magnificus University of Tilburg, Professor Boersch-Supan, coordinator of SHARE, and Frank van der Duijn Schouten, head of research of SHARE Tilburg, July, 2011

The ERIC management committee that was set up in October 2009 met eight times before the end of 2011 and has successfully facilitated the start of the implementation procedures within the Member States necessary for accommodating an ERIC. Although some issues require further discussion (like for example the VAT exemption for an ERIC), many Member States are now getting ready to participate in or to host an ERIC.

RAMIRI: REALISING AND MANAGING INTERNATIONAL RESEARCH INFRASTRUCTURES

RAMIRI, Realising and Managing International Research Infrastructures, (EC funded under FP7), aims to develop a training and networking environment for mid-career managers who are involved either in setting up a new research facility, managing an established research infrastructure, or are working in a relevant national ministry around issues of science, higher education and research development.

RAMIRI 1 (formerly RAMIRI) ran from 2008-2010. RAMIRI 2 will run until the end of October 2012, and will see the project evolve further in the direction of a training and networking environment.

The Programme: Each RAMIRI 2 learning programme consists of two residential workshops, attended by a class of around 40 selected participants, about 5-6 days in total.

In 2011, the first workshop (43 participants) took place in Amsterdam (14-16 June) the second took place in Trieste in October.

The Learning Programme addresses 6 broad management topics: Making the Case; Financing; Legal and Governance issues; Project Management ('life-cycle' of a RI); Human Resources and Strategic planning for an established RI.



RAMIRI Workshop
Amsterdam, June 2011
© photograph courtesy Fabio
Mazzolini



The 2012 RAMIRI Workshops will take place in Prague and Trieste and registration is open. Applications from "newer" Member States and Associated Countries are particularly welcomed. More information can be found on www.ramiri.eu.

EVENTS IN 2011: RESEARCH INFRASTRUCTURES

WIRE2: WEEK OF INNOVATIVE REGIONS IN EUROPE DEBRECEN, 7-9 JUNE 2011

Under the auspices of the Hungarian EU Council Presidency the conference Week of Innovative Regions in Europe 2011 (WIRE2011), took place in Debrecen, Hungary from 7-9 June 2011. With the support of the European Commission, this Conference was a follow-up to WIRE1, which took place in Granada, Spain in 2010.

The conference considered the 'EUROPE 2020, a strategy for a smart, sustainable and inclusive development strategy' and the 'Innovation Union Flagship Initiative'. It focused on questions related to knowledge, innovation and competitiveness in the economy with respect to research infrastructure investments, clusters and on how they can support smart growth in the regions.



WIRE 2: Key conclusions Debrecen Declaration

- A resolve to strengthen the competitiveness of the EU economy and social development through the enhancement of Research & Innovation capabilities
- The need for synergies among European, national and regional policies in the field of research infrastructures;
- A call on the European Commission to pursue and strengthen Cluster policies;
- The regional dimension of the Innovation Union within the framework of the EU2020 Strategy;
- The need to promote Smart Specialisation Strategies;
- The need to increase synergies between Structural Funds and Framework Programme funding for the design, preparation and construction of Research Infrastructures.

EC WORKSHOP: RESEARCH INFRASTRUCTURES FOR INDUSTRIAL INNOVATION, BRUSSELS, 20 OCTOBER 2011

In October, the European Commission organised a workshop on Research Infrastructures for Industrial Innovation. There was strong ESFRI participation at this Workshop which brought together over 100 participants from diverse research domains including energy, aeronautic research, material sciences, physics and biomedical research. They represented research institutions, like CERN, and industry, but also for example the European Investment Bank and representatives of the member states.

The event mainly:

Clarified the role Research Infrastructures could have in the innovation process and to define possible new activities in the RI programme to enhance cooperation with industry;

and

Deliberated on concrete recommendations for the next European research and innovation Framework Programme "Horizon 2020".

The importance of the issues and challenges identified and tackled in this meeting led to the conclusion that more dedicated actions will be required in the near future allowing the perusal of objectives of an Innovation Union through increased synergies between Research Infrastructures and Industry.



ESFRI Chair, Beatrix Vierkorn-Rudolph
Hungary, June 2011

EC WORKSHOP: ESFRI RESEARCH INFRASTRUCTURES AND JOINT PROGRAMMING INITIATIVES IN THE FIELD OF LIFE SCIENCES, BRUSSELS, 23 JUNE 2011

This Workshop, organised by DG Research & Innovation, brought together representatives of the six Joint Programming Initiatives (JPIs) and coordinators of 13 Research Infrastructures (RIs) identified in the ESFRI roadmap in the field of biological and medical sciences. The core aim of this event was to develop synergies and potential common areas of activity and potential for cooperation between the RIs and the JPIs in this field, as follows:

Key Conclusions and areas of potential synergy:

- Coordination activities in the running or future preparatory phases of ESFRI projects;
- more formal links between ESFRI and JPIs at governance level, making best usage of Advisory Boards, dedicated Working Groups, and Strategic Research Agendas;
- The data issue emerged as an important challenge that will require specific mutual information and dedicated efforts for harmonisation;
- Linking RIs and JPIs with industry.

The workshop was unanimously considered by participants as a very timely and worthwhile event. Discussions led to a strong consensus on the need for structured communication and networking.

EU-US WORKSHOP ON ENVIRONMENT - BRUSSELS, 13-14 SEPTEMBER 2011

The objective of the workshop was to identify issues at stake and steps for a better integration (both thematic and cross-cutting) of existing Research Infrastructure initiatives in the US and EU.

Some of the main findings of the workshop:

- identification of the financial, legal and governance obstacles is a crucial step that should be followed by the formulation of suggestions for (top down) EU, US and global interventions

- possible cooperation activities could include expert group meetings, exploratory visits, desk studies and development of use cases
- The workshop was considered by all participants very useful to trigger the preparation of the future cooperation action, to provide the right links with the relevant counterparts, and to start identifying issues at stake and possible activities to address them.

The main outcome can be summarized as: an enhanced knowledge of what happens across Atlantic, a strong commitment in fostering interoperability between EU-US corresponding infrastructures and a growing awareness that links must be maintained and enhanced with other communities and technical initiatives to ensure interoperability and inter-workability among the different environmental research infrastructures.

EC WORKSHOP: DEVELOPING SYNERGIES BETWEEN RESEARCH INFRASTRUCTURES AND JOINT PROGRAMMING INITIATIVES IN THE FIELD OF ENVIRONMENT, BRUSSELS, 17TH OCTOBER 2011

The overall objective of this workshop was to develop synergies between ESFRI research infrastructures (RI) in the field of Environmental Sciences and relevant Joint Programming Initiatives (JPI).

The workshop offered the opportunity to discuss the needs, commonalities and possible interfaces between the RI projects and the Joint Programming Initiatives. It is expected that this better mutual knowledge will help developing links and synergies as well as helping the European Commission services identifying issues that may require generic approaches

ESFRI AND CONTACTS WITH OTHER ORGANISATIONS

E-INFRASTRUCTURE REFLECTION GROUP (E-IRG)



Gudmund Høst of the Research Council of Norway took up his position as Chair of e-IRG in 2011. ESFRI is pleased to have continued the excellent cooperation as it enjoyed with his predecessor.

In July 2011, e-IRG presented its White Paper 2011, featuring the following topics:

- e-Infrastructure governance: From management and international aspects, to legal and financial issues;
- Future of Research Networking; Authentication, Authorisation and Accounting; Energy and Green IT;
- Exascale computing and related software; e-Infrastructure services; Data infrastructures.

A copy of the White Paper can be downloaded from the group's website at www.e-irg.org.

The need for cooperation between ESFRI and the e-IRG in the context of data management of Research Infrastructures is increasingly prevalent. To increase the cooperation further, Bjorn Henrichsen was nominated as ESFRI delegate to e-IRG, Leif Laaksonen was nominated as e-IRG representative for the Implementation Group of ESFRI.

JRC

JOINT RESEARCH CENTRE



The Director-General of the Joint Research Centre, Mr Dominique Ristori, met with the ESFRI Executive Board in May 2011 to explore potential areas of mutual interest.

The discussion highlighted the added value of cooperating more closely in key areas.

The June 2012 meeting of ESFRI will take place at the JRC in ISPRA, Italy, in combination with a workshop dedicated to Research Infrastructures in the Environment domain.

COST

EUROPEAN COOPERATION FOR SCIENCE AND TECHNOLOGY

In June 2011 the Chairs of ESFRI and COST met to exchange views on possible areas of deepening the cooperation between the two bodies. The discussions highlighted the following possible areas of synergies:

- Common matching of EU-Research Infrastructure (RI) with COST Actions to promote its wide and inclusive use as well as to connect the RI with the scientific communities that will be their users and support.
- Training schools at the premises of relevant RIs for researchers.
- COST Actions in the field of Forestry, Food and Agriculture could be used to identify emerging needs for RIs at EU level in these domains (in support of the ESFRI Health & Food WG for example).
- COST Actions could reinforce its inclusiveness activities by stimulating participation of less performing European countries (especially in the RI field).

ESFRI looks forward to strengthening and continuing cooperation with COST in 2012.

ESFRI AND CONTACTS INTERNATIONAL COOPERATION

During 2011 ESFRI has seen an increase in its discussions with non-European countries on a number of aspects related to Research Infrastructures (RIs). This reflects the challenging reality whereby facilities of global relevance, for whatever reason, cannot any longer be built individually by different countries or even regions. Regarding individual countries, dialogue focussed with Australia, the Russian Federation, and USA (including participation to the AAAS Conference).

FIRST EU-AUSTRALIA WORKSHOP ON RESEARCH INFRASTRUCTURES

Australia invests significantly in Research Infrastructures (RIs) in all fields of science and technology, and like ESFRI has a strategic approach to identifying its priorities for investment. During 2011 the Department of Innovation, Industry, Science and Research (DIISR) published its second strategic roadmap for RIs, and many priority areas in the environment and health area have parallels with facilities on the ESFRI roadmap. Consequently, a first EU-Australia workshop on RIs was organised in Brussels on 4-5 April 2011 to explore the way forward. It concentrated on perspectives for cooperation on RIs in Medical Applications of Synchrotron Radiation, Microscopy and Microanalysis and Marine Information Infrastructure, with e-infrastructures and data as cross-cutting issues. In parallel, the first meeting between officials of DIISR, EC and ESFRI took place to exchange information and best practice on a range of policy issues related to prioritisation, funding, governance and management of RIs. This workshop will be followed by a second one, to be organised in Brussels on 23-24 April 2012 which will again focus on environmental and health RIs as well as non-nuclear energy.

GROUP OF SENIOR OFFICIALS ON GLOBAL RESEARCH INFRASTRUCTURES

At the first G8+O5 S&T Ministers' meeting, held in Okinawa in 2008, it was decided to set up an ad hoc Group of Senior Officials (GSO) with the objective of developing a non-binding international framework for the development of global Research Infrastructures. Two meetings of the GSO took place during 2011 (Brussels, 24 March, and Cape Town, 9-10 November), during which the different elements of the framework were discussed. The draft document will be discussed at the third GSO meeting in Hamburg (3-4 April 2012) and sent to the Carnegie Group for endorsement at the end of 2012.

EU-RF WORKING GROUP ON RESEARCH INFRASTRUCTURES

The first meeting of the EU-Russian Federation Working Group on Research Infrastructures (RIs) took place in Brussels on 28 June 2011. Amongst the EU experts were Joergen Kjems, Jean Moulin and Stavros Malas. The WG shared information about the ESFRI process and the 2010 ESFRI strategy report, about the Russian Large Facility projects and about Russian participation in FP7 RI. The WG stressed the importance to share extended and updated information in order to facilitate complementary approaches for the road-mapping exercises of both parties. Further discussion focused on how to facilitate the implementation of projects of mutual interest, including global RI projects:

EU-USA COOPERATION

Cooperation with USA increased significantly since the first EU-USA workshop on Research Infrastructures (Roma, 30 October 2010). A concrete follow-up of this workshop was the participation of ESFRI projects to the AAAS through a symposium entitled "Research Infrastructures: The Emergence of Key Players for Environmental Research". The symposium concentrated on the presentation and discussion of the ICOS and EPOS projects by the respective project coordinators, as well as the US counterpart presented by T. Killeen (NSF). The AAAS was also a good venue to continue discussing the outcome of the Rome workshop, and the necessary steps for the preparation of the first EC-NSF coordinated call on Research Infrastructures for environmental science data. Projects applying to this call focused on the development of EU/US common data policies and data standards in the field of environmental research, in particular related to space weather facilities, atmospheric observatories, ocean observatories, tectonics-related observatories, facilities for research on biodiversity and ecosystems. The EC part of the call closed on 23rd November 2011, with evaluation of the EU component of the project foreseen early in 2012. Funding to the US component will be available as part of the 2011 NSF budget via response to a "Dear Colleague" letter published by NSF.

EU POLICY RELATED TO RESEARCH INFRASTRUCTURES

COMPETITIVENESS COUNCIL OF 9 MARCH 2011

The Competitiveness Council recalled the need to accelerate the transformation of Europe through innovation in a fast changing world, and highlighted that Research Infrastructures (RIs) are amongst the main pillars of ERA. In this context, greater synergy is needed between the strategic aims of RI funding provided by FP7 and the Member States taking into account the ESFRI roadmap, taking into consideration the differences of Member States and the specific goals of the related policies and initiatives, such as Cohesion Policy and the Joint Programming Initiatives. Based on the European added value a more integrated approach is needed to boost RIs (through the FP7). In addition, there should be a focus on promoting their impact by establishing synergies between training instruments and utilisation of RIs and by further stimulating access of European researchers to RIs.

COMPETITIVENESS COUNCIL OF 31 MAY 2011

The Council invited the European Strategic Forum on Research Infrastructures (ESFRI) to contribute towards supporting the implementation and monitoring of progress of the Innovation Union initiative, and to provide input, as appropriate, to the development of a proposal on the ERA Framework. This should be done in the frame of a strengthened coordination between ERAC and the ERA-related groups in line with the 2010 Council Resolution on the developments in the governance of the ERA establishing the mandate of ERAC.

RESEARCH WORKING PARTY OF THE COUNCIL, OCTOBER, 2011

The ESFRI Chair delivered a presentation in the Research Working Party of the Council on October 2011. The Chair focused on current ESFRI activities and the challenges ahead. An interesting discussion followed with the Member-States, in particular focused on the ERIC regulation and the regional Research Infrastructures.



UPDATE OF ESFRI MANDATE, HANDED DOWN BY THE COUNCIL, MAY 2011:

The Council invites ESFRI to contribute towards supporting the implementation and monitoring of progress of the Innovation Union initiative (Competitiveness Council of 31 May 2011), and to provide input, as appropriate, to the development of a proposal on the ERA Framework. This should be done in the frame of a strengthened coordination with ERAC.

FUTURE OUTLOOK AND ACTIVITIES

ESFRI STRATEGY REPORT AND ROADMAP UPDATE

As mentioned previously, in 2012 ESFRI expects to continue its efforts to ensure the effective and timely implementation of the projects on the ESFRI Roadmap. The ESFRI forum therefore decided in its December meeting to set up, with the help of the European Commission, an expert group with a mandate to assess the progress of each project towards implementation and to focus only with the focus on the non-scientific issues of the projects. The scientific bottlenecks would be identified by the SWGs.

ESFRI will consider possible measures according to the report of the assessment group. The Forum with the help of its strategic working groups will continue to monitor the scientific landscapes and needs and will advise, as appropriate, where gaps exist for a future update of the Roadmap.

MANAGEMENT OF RESEARCH INFRASTRUCTURES

A consultation workshop on the possible content of "Horizon 2020" - Common Strategic Framework for Research and Innovation (2014-2020) took place in July 2011, during which the importance of training of managers of RIs was highlighted. The RAMIRI Initiative is an important predecessor for future initiatives.

CONFERENCES ON RESEARCH INFRASTRUCTURES (ICRI 2012)

An International Conference on Research Infrastructures, ICRI 2012, will take place from 21-23 March next in Copenhagen under the auspices of the Danish Presidency of the European Union, in cooperation with ESFRI and with the support of the European Commission. This will be the Seventh Conference on Research Infrastructures. It will focus on how global Research Infrastructures can tackle the so-called Grand Challenges.

The Conference will make specific recommendations on how international cooperation for Research Infrastructures can be most effective in the future. This could include calling for a coordinated support to (and strengthening of) existing initiatives, highlighting possible needs for additional effort, and developing a vision for open science. ICRI 2012 will also provide important input to the European Strategy and to the implementation of the next EU Framework Programme – "Horizon 2020", supporting the strengthening of a global ecosystem of Research Infrastructures. More information will be available in early 2012.

ESFRI MEMBERSHIP

ESFRI CHAIR

Beatrix VIERKORN-RUDOLPH

MEMBER STATES

AUSTRIA

Anneliese STOKLASKA
Daniel WESELKA

BELGIUM

Jean MOULIN
André LUXEN

BULGARIA

Orlin KUZOV
Anna PROYKOVA

CYPRUS

Christos ASPRIS
Evgenios EPAMINONDOU

CZECH REPUBLIC

Jan HRUSÁK.
Nadezda WITZANYOVA

DENMARK

Henrik BINDSLEV
Hans Müller PEDERSEN

ESTONIA

Toivo RÄIM
Indrek REIMAND

FINLAND

Petteri KAUPPINEN
Merja HILTUNEN

FRANCE

Gabriele FIONI
Susana GOTA GOLDMANN

GERMANY

Wilfried KRAUS
Eckhart Curtius

GREECE

George KOLLIAS
Ion SIOTIS

HUNGARY

Péter LÉVAI

IRELAND

Jacqueline E M Allan
Eucharía MEEHAN PhD, CDipAF

ITALY

Giorgio ROSSI
Glaugo TOCCHINI-VALENTINI

LATVIA

Maija BUNDULE
Kaspars LĀCIS

LITHUANIA

Gintaras VALINCIUS
Stanislovas ŽURAUSKAS

LUXEMBURG

Pierre DECKER
Robert KERGER

MALTA

Joseph MICALLEF
Nicholas SAMMUT

POLAND

Jacek T. GIERLINSKI
Anna OSTAPCZUK

PORTUGAL

Gaspar BARREIRA

ROMANIA

Ionel ANDREI
Adrian DUSA

SLOVAK REPUBLIC

CIMBAKOVA
Pavol SOVÁK

SLOVENIA

Miran CEH
Albin KRALJ

SPAIN

Carlos MARTINEZ RIERA
Luis E. RUIZ LÓPEZ DE LA TORRE AYLLÓN

SWEDEN

Lars BÖRJESSON
Mats JOHNSSON

THE NETHERLANDS

Hans CHANG
Leo L. LE DUC

UNITED KINGDOM

Alf GAME
John WOMERSLEY

EUROPEAN COMMISSION

Anneli PAULI

ASSOCIATED COUNTRIES

ALBANIA

Alban YLLI

CROATIA

Hrvoje MEŠTRIC,

ICELAND

Fridrika HARDARDOTTIR, Adviser

ISRAEL

David HORN

LIECHTENSTEIN

Karl-Heinz OEHRl

MONTENEGRO

Dr. Ramo SENDELJ

NORWAY

Odd Ivar ERIKSEN

Bjørn HENRICHSEN

SERBIA

Viktor NEDOVIC

Darko DJUKIC

SWITZERLAND

David BOHMERT

Philipp LANGER

TURKEY

Murat OZGOREN

ESFRI SECRETARIAT

Elena RIGHI-STEELE (Acting Executive Secretary)

Sharon KEARNEY

Christos VASILAKOS

Mirela JUNIE

OFFICE OF THE ESFRI CHAIR

(Provided by the German Federal Ministry of
Education and Research)

Andrea OEPEN

Claudia RITTER

Beate WARNECK

Daniela SCHMITZ



For further information, please contact
ESFRI Secretariat
Postal Address
European Commission
SDME 01/143
B-1049 Brussels, Belgium

ESFRI@ec.europa.eu