Research Infrastructures (RI) for Social Sciences and Humanities (SSH)


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Maria Theofilatou, European Commission, DG Research and Innovation - B3 - Research Infrastructures
Summary of the Presentation

European Research Area and European Strategy Forum for RI (ESFRI): the European and National Roadmaps

EU Legal Framework, European Research Infrastructure Consortium (ERIC)

Examples of FP7 Financial Support to RI for SSH (2007-2013): new end existing

RI in HORIZON 2020 (2014-2020)

RI in the ERA COM for a Reinforced ERA Partnership for Excelence and Growth (ERA COM 2012, 392 FINAL)
ERA Strategy for European Research Infrastructures

• Reduce fragmentation of efforts
• Optimize use and sharing of the existing SSH research infrastructures
• Exploit better the immense opportunities of ICT technologies.
• Enhance investment in new European RIs for SSH, namely, ESFRI projects
ESFRI – The Roadmap mandate

- Mandated by the EU Council of Research Ministers of November 2004 to develop a strategic roadmap in the field of Research Infrastructures for Europe
- First ESFRI Roadmap published in 2006, followed by two updates in 2008 and 2010:
  - Sets Priorities for the Creation of New European RI or Major up-grades of the existing ones
  - Contains now 48 projects in various scientific domains
  - Requiring major financial investment for their implementation (≈20 b€) and long term commitment for their operation (≈2 b€/year)
### ESFRI roadmap 2010

10+38 new - or major upgrade of - Research Infrastructures of pan-European interest (+ 3 additional projects from the CERN Council strategic roadmap for particle physics*)

<table>
<thead>
<tr>
<th>Social Sc. &amp; Hum.</th>
<th>Life Sciences (13)</th>
<th>Environmental Sciences (9)</th>
<th>Energy (7)</th>
<th>Material and Analytical Facilities (6)</th>
<th>Physics and Astronomy (10)</th>
<th>e-Infrastructures (1)</th>
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<tbody>
<tr>
<td>SHARE</td>
<td>BBMRI</td>
<td>ICOS</td>
<td>EURO-ARGO</td>
<td>ECCSEL</td>
<td>EUROFEL</td>
<td>ELI</td>
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<td>E S Survey</td>
<td>ECRIN</td>
<td>LIFEWATCH</td>
<td>IAGOS</td>
<td>Windscanner</td>
<td>EMFL</td>
<td>KM3NeT</td>
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<td>CESSDA</td>
<td>INSTRUCT</td>
<td>EMSO</td>
<td>EPOS</td>
<td>EU-SOLARIS</td>
<td>European XFEL</td>
<td>E-ELT</td>
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<td>CLARIN</td>
<td>EU-OPENSSCREEN</td>
<td>SIAEOS</td>
<td>EISCAT_3D</td>
<td>JHR</td>
<td>ESRF Upgrade</td>
<td>SPIRAL2</td>
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<td>DARIAH</td>
<td>Euro BioImaging</td>
<td>ERINHA BSL4 Lab</td>
<td>COPAL</td>
<td>IFMIF</td>
<td>NEUTRON ESS</td>
<td>SLHC-PP*</td>
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<td>ISBE</td>
<td>MIRRI</td>
<td>HIPER</td>
<td>MYRRHA</td>
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**RIs in the implementation phase**

**ERIc**

**Distributed research infrastructures**

**Single sited research infrastructures**
National Roadmaps for Research Infrastructures

Roadmap in place
Roadmap under preparation
National funding reserved for new/updated RIs
How did FP7 support Research Infrastructures?

Existing infrastructures
- Integrating activities
  - e-Infrastructures
    - ~ 1050 M€

New infrastructures
- Design studies
  - Construction
    - (Preparatory phase; Implementation phase)
    - ~ 355 M€

Policy development / Programme implementation
- ~ 85 M€

ESFRI Roadmap
- RSFF 200 M€
FP7 – Financial Support to Preparatory Phase ESFRI RI for Art and Humanities

4. Digital Research Infrastructure for the Art and Humanities (DARIAH)-Preparatory Phase
   EU support 2,5 M€. Estimated Construction costs 12 M€

5. Common Language Resources and Technology Infrastructure (CLARIN)-Preparatory Phase
   EU support 4,1 M€. Estimated total construction costs 104 M€

A legal instrument at EU level, to facilitate the joint establishment and operation of RI of European interest.

- Legal personality recognized in all Member States
- Qualifies as an international organization for the purposes of VAT (exemption under certain limits and conditions from VAT and excise duties) and Public Procurement Directives
The Commission has awarded already the ERIC status to SHARE and CLARIN

It has received the ERIC application from the ESS and DARIAH

CESSDA ERIC application is under preparation
FP7- Financial Support to Implementation Phase of the five ESFRI SSH projects

DASISH (Data Service Infrastructure for the Social Sciences and Humanities)

- Common solutions to common issues for the five ESFRI SSH projects: CESSDA, CLARIN, DARIAH, ESS and SHARE.
- Four major areas of common concern: data quality, data archiving, data access and legal and ethical issues.
- Educational activities and outreach to the communities of researchers that will benefit from these infrastructures
FP7 Integrating Activities for Existing RI Art and Humanities

1. Cultural Heritage Advanced Research Infrastructures: Synergy for a Multidisciplinary Approach to Conservation/Restoration (CHARISMA)

It brings together 21 leading European infrastructures in order to improve research on the restoration of artwork and support access of researchers to the services of three different and complementary groups of facilities, involving material sciences and artwork and restoration.

EU support 7.6 M€, Duration 4 years (October 2009-September 2013), coordinated by the University of Perugia
FP7 Integrating Activities Humanities

2. European Holocaust Research Infrastructure, (EHRI)

It brings together 20 institutions in 13 countries. It is a Pan-European network of researchers, Holocaust archives and computer scientists, who work together to transform the data available for Holocaust research around Europe and elsewhere into a cohesive corpus of resources and provide access of researchers to a wide variety of dispersed key Holocaust archival materials.

EU support 7 M€, Duration 4 years (October 2010 – September 2014), Coordinated by NIOD, The Dutch Institute for War, Holocaust and Genocide Studies
3. CENDARI (Collaborative European/Digital Archival Infrastructure)

It brings together 14 institutions in order facilitate online access to a broad range of historical information and material resources in Europe. The development of the enquiry environment is at the heart of this IA, which will create new ways to allow researchers to engage with large data sets across ERA in two domains: Medieval culture and the First World War.

**EU support 6,5 M€, Duration 4 years (January 2012-December 2015), Coordinated by Trinity College, Dublin**
FP7 Integrating Activities Humanities

4. Advanced Research Infrastructure for Archaeological Dataset Networking in Europe (ARIADNE)

It involves 25 partners with the aim to encourage stakeholders to share their data and integrate existing distributed archaeological data services. ARIADNE will develop new services and methods promote interoperability and a culture of data sharing. A transnational access program will offer also opportunities to archaeologists to visit the participating data services and institutions and conduct their research on site.

**EU Support 6,5 M€, Duration 4 years (February 2013-January 2017), Coordinated by the University of Florence**
Can we delete some of the "data" words?

"with" instead of "of" in "to provide users of archaeological data centralized access......"?
EU budget 2014-2020 & Horizon 2020

Commission proposals of 29 June 2011 and 30 November 2011

Key challenge: to stabilise the financial and economic system while taking measures for smart sustainable and inclusive growth (cf. R&I)
Horizon 2020: What’s new?

- A single programme bringing together three separate programmes/initiatives (FP7, CIP, EIT)
- Coupling research to innovation - from research to all forms of innovation
- Simplified access for all companies, universities, institutes in all EU countries and beyond
- Focus on three pillars:
  - Excellent science
  - Industrial leadership
  - Societal challenges

Excellent science

- European Research Council
- Future and Emerging Technologies
- Marie Curie actions
- European Research infrastructures (including e-infrastructures)

Societal challenges

- Health, demographic change, wellbeing
- Food security, sustainable agriculture, marine-maritime research, bio-economy
- Secure, clean and efficient energy
- Smart, green, integrated transport
- Climate action, resource efficiency, raw materials
- Inclusive, innovative and secure societies

Industrial leadership

- Leadership in enabling and industrial technologies (ICT, space, nanotechnologies, advanced materials and advanced manufacturing and processing, biotechnology)
- Access to risk finance
- Innovation in SMEs
Research Infrastructures in Horizon 2020

1. Developing the European RIs for 2020 and beyond
   - Developing new world-class RIs
   - Integrating and opening national and regional RIs of pan-European interest
   - Development, deployment and operation of ICT based e-Infrastructures

2. Fostering the innovation potential of RIs and their human resources

3. Reinforcing European RI policy and international cooperation
SSH Research in Horizon 2020

- Included in the Societal Challenge 'Inclusive, innovative and secure societies'
- Integrated in all Societal Challenges
- Supported through the 'Excellent Science' part of H2020 (ERC, Marie Curie and Infrastructures)
- Humanistic, cultural, artistic and fine arts perspective are included within the "Social innovation" framework
Horizon 2020: Next steps

- Ongoing: Parliament and Council negotiations on EU budget 2014-20 (including R&I) and Horizon 2020

- Mid 2013: Adoption of legislative acts by Parliament and Council on Horizon 2020

- 1 January 2014: Horizon 2020 starts & launch of 1st calls
Call Member States to:

- Confirm financial commitments for the construction and operation of ESFRI projects;
- Remove legal and other barriers to cross-border access to RIs

Sets a new framework for actions of the European Commission:

- Develop in cooperation with ESFRI, e-IRG and other stakeholders: Charter of Access setting out common access rules and conditions for the use of RI
- ERA Evaluation Principles, Impact-Assessment criteria and New Monitoring tools
- Encourage Member States to link RI roadmaps to the ESFRI roadmap and smart specialisation strategies in Structural Funds
- Support through Horizon 2020 access to RIs as well as the on-going overall integration of EU RIs particularly those awarded ERIC status
Progress has been made in the ERA for RI for SSH

- Considerable progress has been made in the linking and shared use of existing research infrastructures for SSH.

- The realisation of the 5 SSH ESFRI projects is now high on the EU and national political agendas.

- The new EU legal instrument, the European Research Infrastructure Consortium (ERIC), has proven to be well suited to the needs of new European distributed research infrastructures for SSH.
A lot remains to be done

To improve the transnational use of the existing RI across ERA and make the implementation of the ESFRI RI a reality.

Enable long term preservation of our cultural and scientific memory and keep the records of science accessible to future generations of researchers.