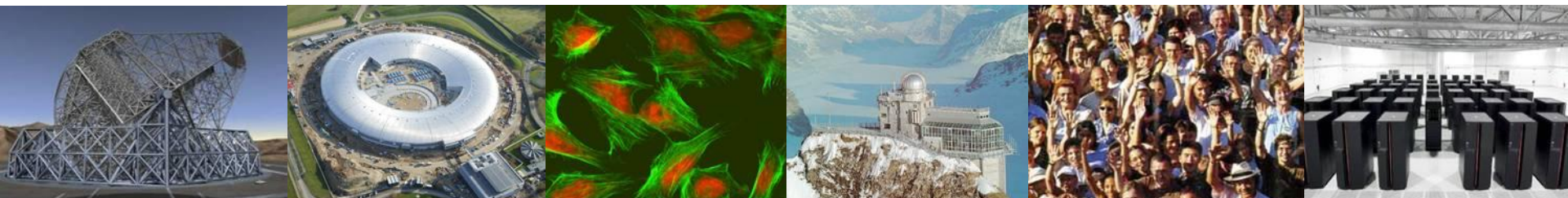European Commission

European Research Infrastructures (RI) and communities for Art, Culture and Humanities

Italian Semester of Presidency of the European Union International Conference "Research Infrastructrures and e-Infrastructures for Cultural Heritage

Rome, 13-14 November 2014

Maria Theofilatou, European Commission, DG Research and Innovation – B4 - Research Infrastructures

Summary

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)

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

Social Sc. & Hum. (5)	Life Sciences (13)		Environmental Sciences (9)		Energy (7)	Material and Analytical Facilities (6)	Physics and Astronomy (10)		e-Infra-structures (1)
SHARE	BBMRI	ELIXIR	ICOS	EURO-ARGO	ECCSEL	EUROFEL	ELI	TIARA*	PRACE
ESS Survey	ECRIN	INFRA FRONTIER	LIFEWATCH	IAGOS	Windscanner	EMFL	KM3NeT	CTA	
CESSDA	INSTRUCT	EATRIS	EMSO	EPOS	EU-SOLARIS	European XFEL	E-ELT	SKA	
CLARIN	EU-OPENSCREEN	EMBRC	SIAEOS	EISCAT_3D	JHR	ESRF Upgrade	SPIRAL2	FAIR	
DARIAH	Euro BioImaging	ERINHA BSL4 Lab		COPAL	IFMIF	NEUTRON ESS	SLHC-PP*	ILC-HIGRADE*	
	ISBE	MIRRI			HiPER	ILL20/20 Upgrade			
	ANAEE				MYRRHA				

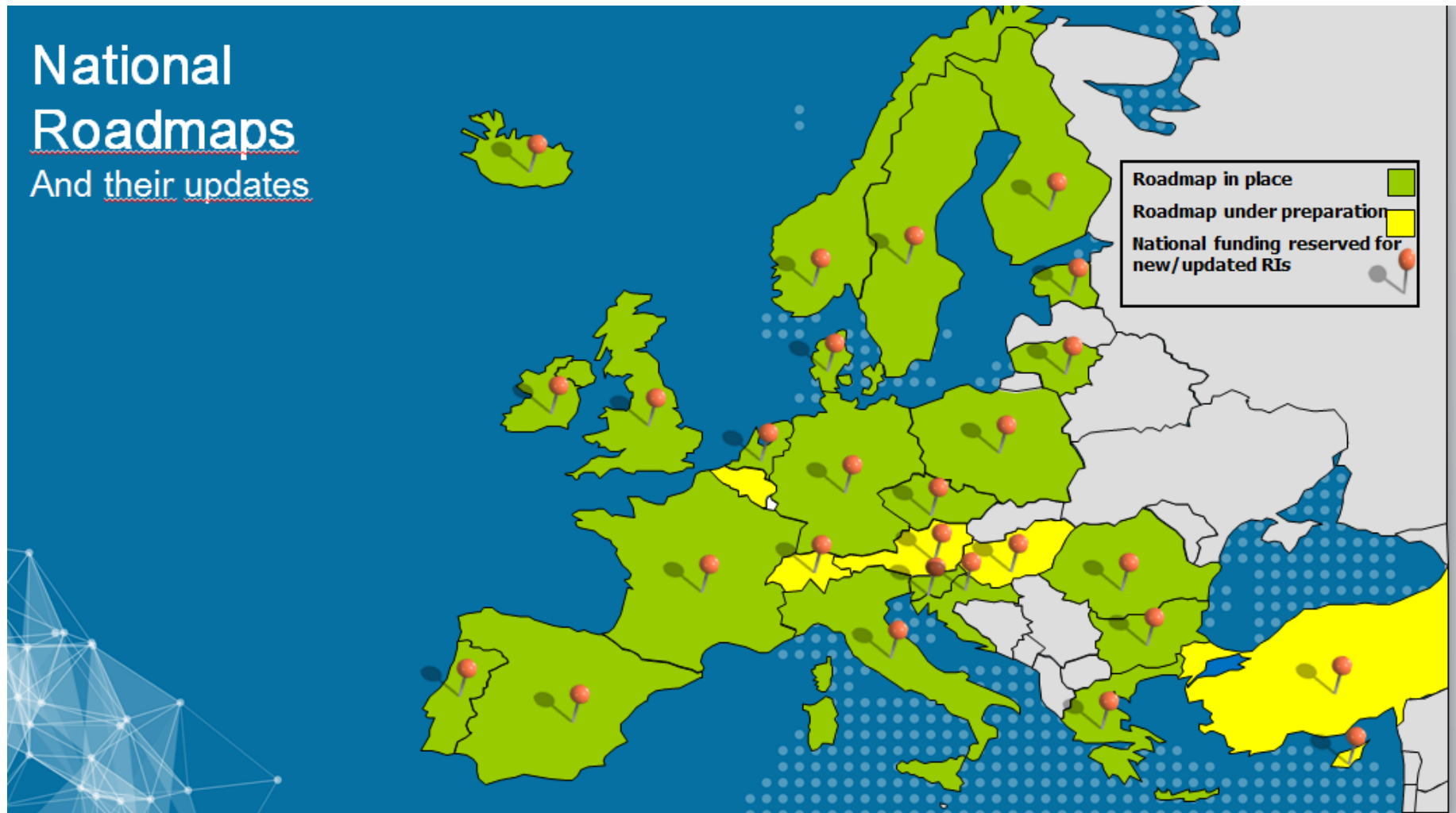**RIs in the implementation phase**

ERIC established

ERIC in preparation

Research & Innovation

Distributed research infrastructures

Single sited research infrastructures

National
Roadmaps
And their updates

Roadmap in place
Roadmap under preparation
National funding reserved for
new/updated RIs

European Commission

Research &
Innovation

RI in the ERA Communication
COM(2012) 392 final, adopted on 17/07/2012

Calls 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**

FP7 – Financial Support to Preparatory Phase ESFRI RI for Art and Humanities

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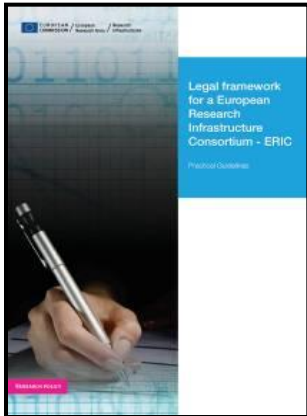
EU support 2,5 M€. Estimated Construction costs 12 M€

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

ERIC - European Research Infrastructure Consortium *(Council Regulation (EC) No 723/2009 of 25 June 2009)*

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 CLARIN and DARIAH**

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

- EU Support 5.991,052 M€, (January 2012 – December 2015)

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 art restoration and preservation infrastructures in order to improve European 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-March 2014), coordinated by the University of Perugia

FP7 Integrating Activities
Humanities – European History

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 – March 2015), Coordinated by NIOD, The Dutch Institute for War, Holocaust and Genocide Studies

FP7 Integrating Activities Humanities

3. CENDARI (Collaborative European/Digital Archival Infrastructure)- European History

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

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**

Horizon 2020 – Framework Programme
for Research and Innovation (2014-2020) ~ *80B€*

Excellent science

- European Research Council
- Future and Emerging Technologies
- Marie Curie actions
- **European Research infrastructures (including e-infrastructures) – 2.488 M€**

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 reflective societies
- Secure societies

- *Spreading excellence & Widening Participation*
- *Science with and for Society*

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

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 Art, Culture and Humanities

- 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 Art, Culture and Humanities

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