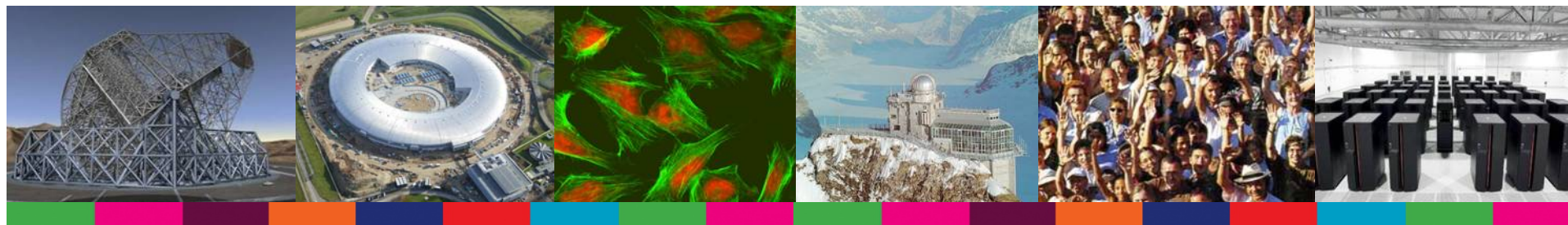European Commission

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

From FP7 (2007-2013) to HORIZON 2020 (2014-2020)

ARIADNE Kick-off Meeting, 6-8 February 2013, Rome

**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)

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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*)

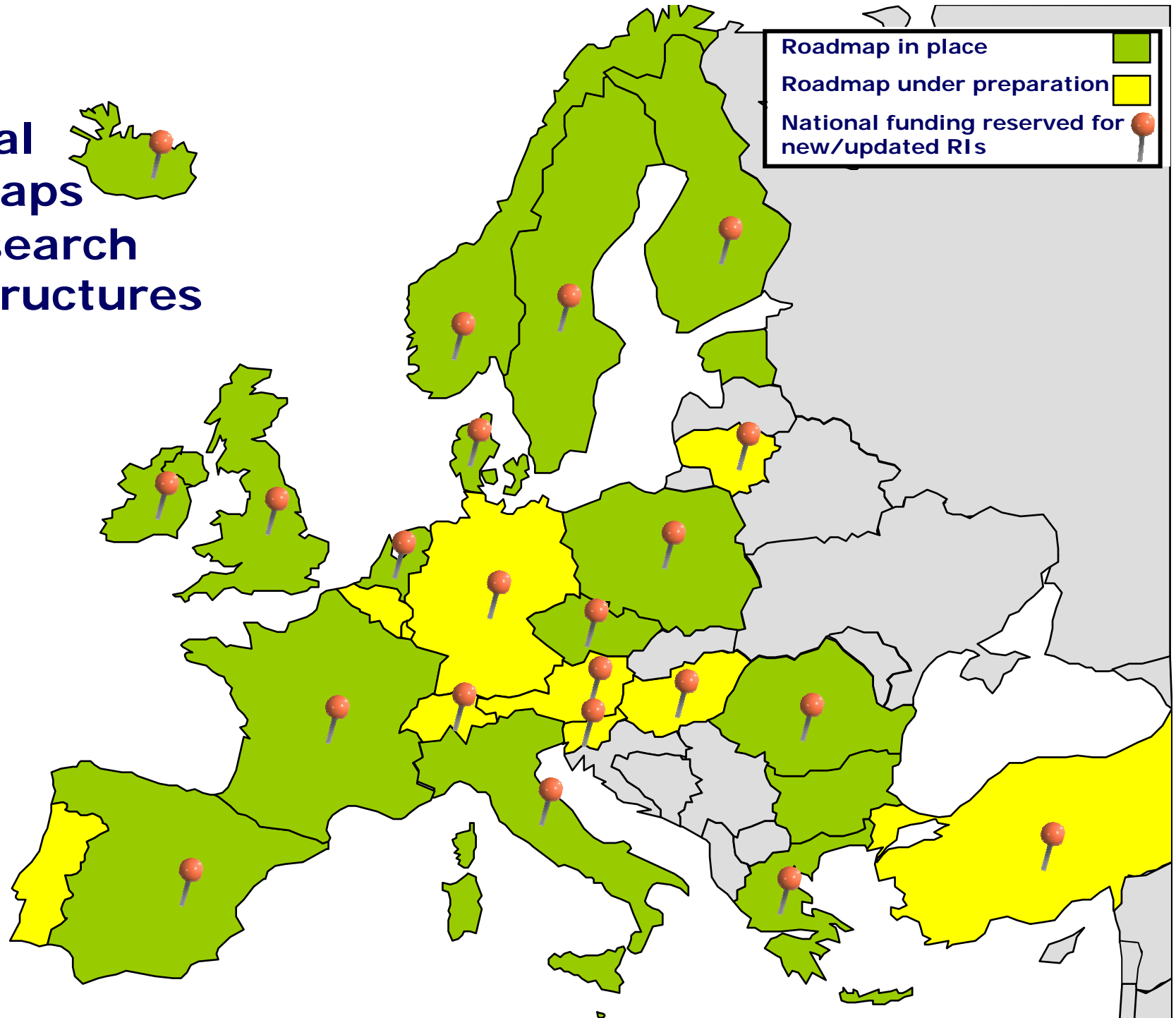| Social Sc. & Hum. (5)	Life Sciences (13)		Environmental Sciences (9)		Energy (7)	Material and Analytical Facilities (6)	Physics and Astronomy (10)		e-Infra-structures (1)
SHARE	BBMRI	ELIXIR	ICOS	EURO-ARGO	ECCSEL	EUROFEL	ELI	TIARA*	PRACE
E S Survey	ECRIN	INFRA FRONTIER	LIFEWATCH	IAGOS	Windscanner	EMFL	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

Research & Innovation

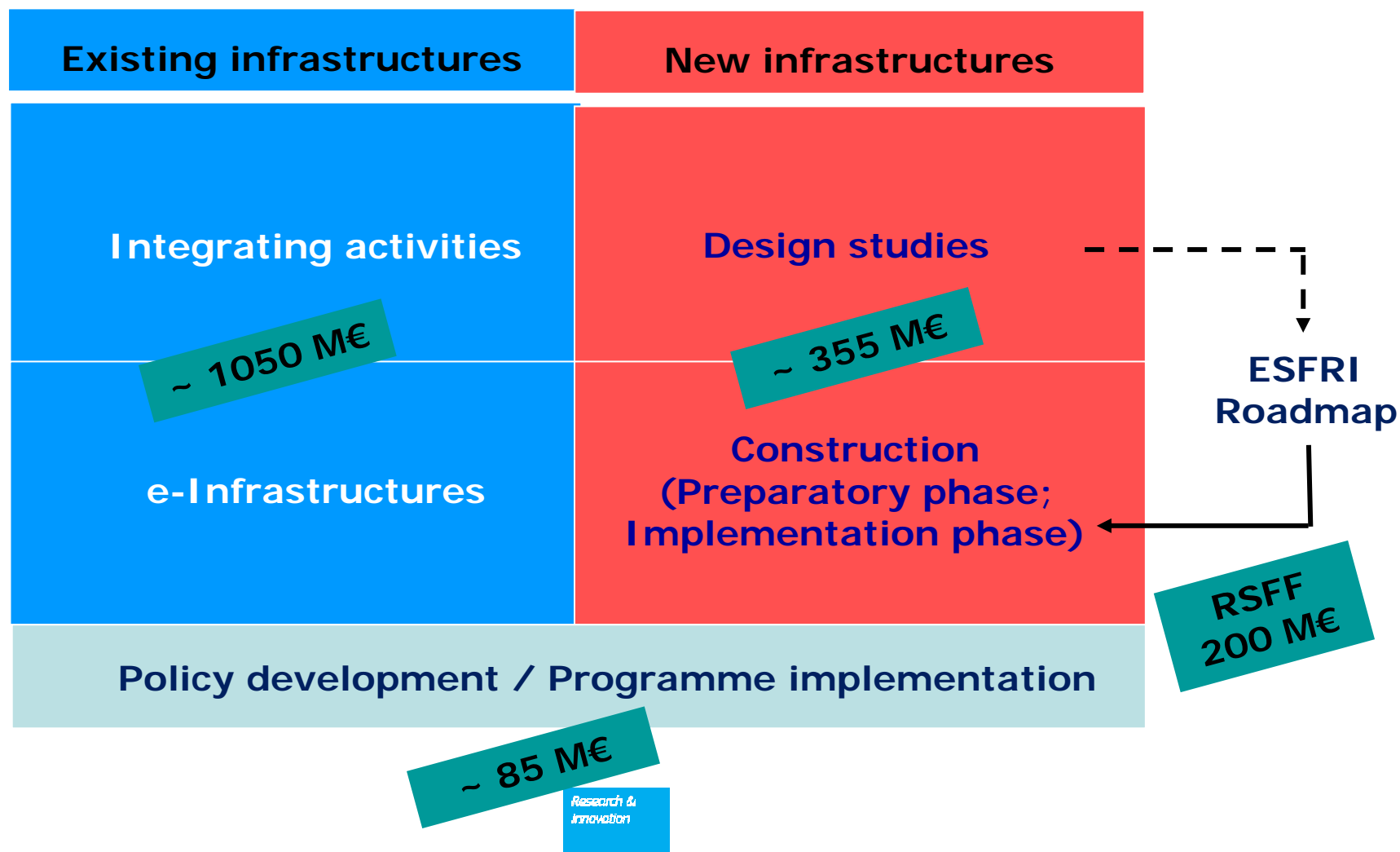Distributed research infrastructures

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	New infrastructures
Integrating activities	**Design studies**
	~ 355 M€
~ 1050 M€	
e-Infrastructures	**Construction (Preparatory phase; Implementation phase)**

ESFRI Roadmap

RSFF 200 M€

Policy development / Programme implementation

~ 85 M€

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FP7 – Financial Support to Preparatory Phase
ESFRI RI for Social Sciences

1. **The European Social Survey (ESS)-Preparatory Phase**
   <u>EU support 1,5 M€.</u> Estimated total financial commitment of around 54 M€ over 6 years

2. **Survey for Health Ageing and Retirement in Europe (SHARE-Preparatory Phase)**

   <u>EU support 2,5 M€.</u> Estimated total costs 58 M€ for 5 waves

3. **Council of the European Social Sciences Data Archives (CESSDA) -Preparatory Phase**

   <u>EU support 2,7 M€</u>. Estimated Construction costs 30 M€

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

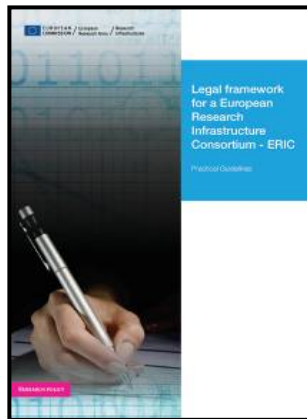4. **Digital Research Infrastructure for the Art and Humanities (DARIAH)-Preparatory Phase**
   EU support 2,5 M€. Estimated Construction costs 12 M€

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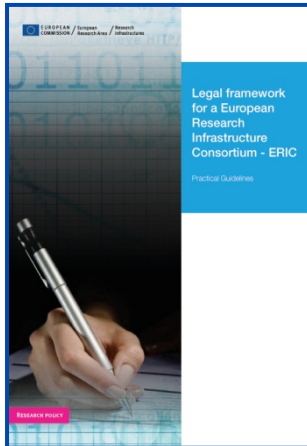   EU support 4,1 M€. Estimated total construction costs 104 M€

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**

European Research Infrastructure Consortium (ERIC)

- 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

- <u>EU Support 5.991,052 M€</u>, (January 2012 – December 2015)

International Co-operation – global SSH RIs to address global research challenges

- ESFRI SSH projects can participate in international networks to address global challenges

- We have started reflecting upon setting priorities for global collaboration through the OECD Global Science Forum and its Expert Group on "Data and Research Infrastructures for Social Sciences"

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 Pisa

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

FP7 Integrating Activities
Humanities

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 CM(transnational access program will offer also opportunities to archaeologists to visit the participating data ser CM(2 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

CM(2   Can we delete some of the "data" words?
CIOROIU Mirela (RTD); 09/10/2012

CM(4   "with" instead of "of" in "to provide users of archaeological data centralized access......"?
CIOROIU Mirela (RTD); 09/10/2012

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)

EU budget € 1,025bn

Horizon 2020 € 80bn

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 – Excellent Science

European Research Council Frontier research by the best individual teams
Future and Emerging Technologies Collaborative research to open new fields of innovation
Marie Curie actions Opportunities for training and career development
Research infrastructures (including e-infrastructure) Ensuring access of researchers to world-class facilities

Societal challenges

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

*Additional activities for nuclear safety and security from the Euratom Treaty activities (2014-18)

Research & Innovation

Industrial leadership

Leadership in enabling & industrial technologies ICT, nanotechnologies, materials, biotechnology, manufacturing, space
Access to risk finance Leveraging private finance and venture capital for research and innovation
Innovation in SMEs Fostering all forms of innovation in all types of SMEs

EIT and JRC

European Institute of Innovation and Technology (**EIT**) Combining research, innovation & training in Knowledge and Innovation Communities (**KICs**)
Joint Research Centre (**JRC**)   Providing a robust, evidence base for EU policies

Horizon 2020 – Commission's Proposal for RI

Increased budget from € 1715 million (FP7) to € 2802 (Horizon 2020)

New activities to support the implementation and operation of new European RI such as the ESFRI projects

Continuation of the successful FP7 integrating activities for the existing research infrastructures

More support to e-infrastructures

Support to the training of the human capital of RI and activities fostering knowledge transfer and the innovation potential of RI

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

Towards a Reinforced ERA
Partnership for Excellence and Growth
COM(2012) 392 final, adopted on 17/07/2012

- **ERA priorities for action:**

  - More effective national research systems;
  - **Optimal transnational co-operation and competition**;
  - An open labour market for researchers;
  - Gender equality and gender mainstreaming in research;
  - Optimal circulation, access to and transfer of scientific knowledge including via digital ERA

- **Section on Research Infrastructures under "transnational co-operation and competition"**

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**

European Commission

Research & Innovation

Progress has been made in the ERA
for RI for SSH

CM(5

- 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

CM(5   linked?

CIOROIU Mirela (RTD); 09/10/2012

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

Let's leave ARIADNE now to play an active role in the transformation of the European research infrastructure landscape of the Humanities

Link existing archaeological research facilities and resources in the European Research Area

Enable transnational access of researchers to scattered material and resources and new European and global research avenues

Strengthen Europe's science base in the domain of archaeological research infrastructures