

CRISP

A Quick Overview

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Rationale

The Lisbon Strategy (2000)



- Develop a European Research Area (ERA) (no fragmentation)
- Generate synergies between RI
- Involve different actors (Academia/Research/Industry)

→ Drive Innovation

European Commission, Capacities – Infrastructures INFRA2011-2.3.4 Call: Synergies in ESFRI Infrastructures (global budget 30 M€)

Priority Axis	ESFRI	Other	Other	Other	Other
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ESFRI
Roadmap

European
Scientific
Forum
Research
Infrastructures

Cluster of Research Infrastructures for Synergies in Physics

Build up collaborations and create long-term synergies between research infrastructures on the ESFRI roadmap in the field of physics, astronomy and analytical facilities to facilitate their implementation and enhance their efficiency and attractiveness.

Project start: 1 October 2011
Project duration: 3 years
Funding from EC 12 M€ (40 % of total)

Management Kick-off: October 17, Czech embassy, Paris



11 Research Infrastructures



- European Synchrotron Radiation Facility (ESRF)
- Facility for Antiproton and Ion Research (FAIR)
- Institut Laue-Langevin (ILL)
- Super Large Hadron Collider (SLHC)
- SPIRAL2
- European Spallation Source (ESS)
- European X-ray Free Electron Laser (XFEL)
- Square Kilometre Array (SKA)
- European Free Electron Lasers (EuroFEL)
- **Extreme Light Infrastructure (ELI)**
- International Liner Collider (ILC)

11/17 RI out of the ESFRI Roadmap
(Material science / Physical science)

Representing a European investment for construction of ~7 G€

16 Partners (beneficiaries)

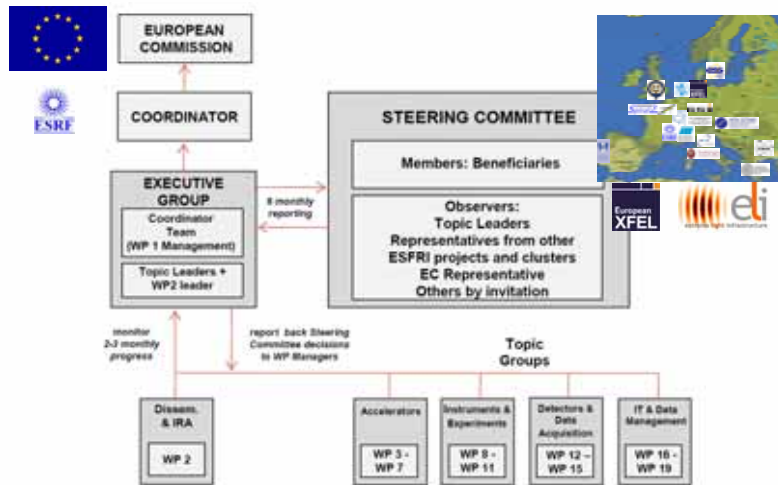


- European Synchrotron Radiation Facility (ESRF)
- Deutsches Elektronen Synchrotron (DESY)
- European Organisation for Nuclear Research (CERN)
- European Spallation Source (ESS)
- Grand Accélérateur National d'Ions Lourds (GANIL)
- GSI Helmholtz Centre for Heavy Ion Research (GSI)
- Institut Laue-Langevin (ILL)
- European X-ray Free Electron Laser (XFEL)
- **University of Rome La Sapienza (ROMA1)**
- **Foundation for Research and Technology Hellas (FORTH)**
- **Instituto Superior Técnico (IST)**
- **Istituto Nazionale di Fisica Nucleare (INFN)**
- **MTA SZTAKI Hungary**
- **Horia Hulubei National Institute of Physics and Nuclear Engineering (IFIN-HH)**
- University of Oxford
- Paul Scherrer Institut (PSI)

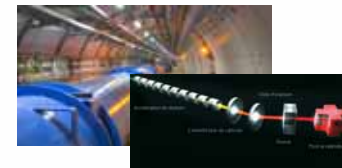
Potential of >10000 direct collaborators

ELI received ~1 M€

Organization



Accelerators



Instruments & Experiments



Development and implementation of common solutions
Harmonisation, cost-efficiency and interoperability

Detectors & Data Acquisition



IT & Data Management



Accelerators

Beam shape monitor for Accelerators



Joint Access to Accelerator component test infrastructure



Novel compact accelerators
ROMA1
INFN
IST



Fast Ramped Superconducting Magnets



High performing Solid State Amplifier



Instruments & Experiments

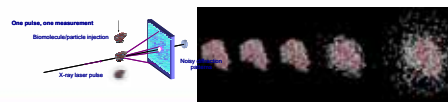
Time resolved studies
FORTH



Tools for operating a radioactive safe environment



New experimental approach for biological scattering (n+γ)



Enhancement of neutron beams

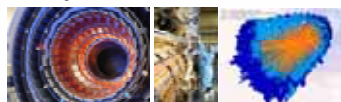


Detectors and Data Acquisition

High-throughput detector data streaming
IFIN-HH



Lower cooling for improved detector



Innovative solutions for neutron and gamma-ray detectors
IFIN-HH
INFN



New large-area thermal neutron detectors



IT and Data Management

Unique User Identity



Metadata and Catalogues



High-speed Data Recording



Distributed Data Infrastructure
MTA SZTAKI

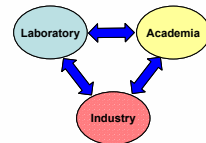


Strategy

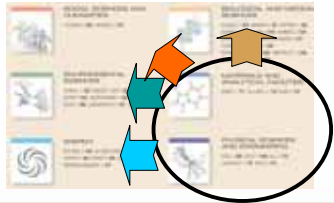
Largest Knowledge base



Become an actor of innovation



Transversal effects to other ESFRI communities



Long term



Thank you

1st annual meeting April 2011

www.crisp-fp7.eu/

Areas of Activity

	ELI	ESRF	ESS	EuroFEL	FAIR	ILC	ILL	SKA	SLHC	SPIRAL2	XFEL
Accelerators											
Instr & Exp											
Det & DAQ											
IT & DM											

COMMUNICATION

Unique User Identity

Metadata and Catalogues

High-speed Data Recording

Distributed Data Infrastructure

