

ECRI 2007[★]


★ *european conference on research infrastructures*

Strengthening links between research infrastructure actors

Prof. Iain W. Mattaj, EMBL Director General
Hamburg, June 5-6 2007

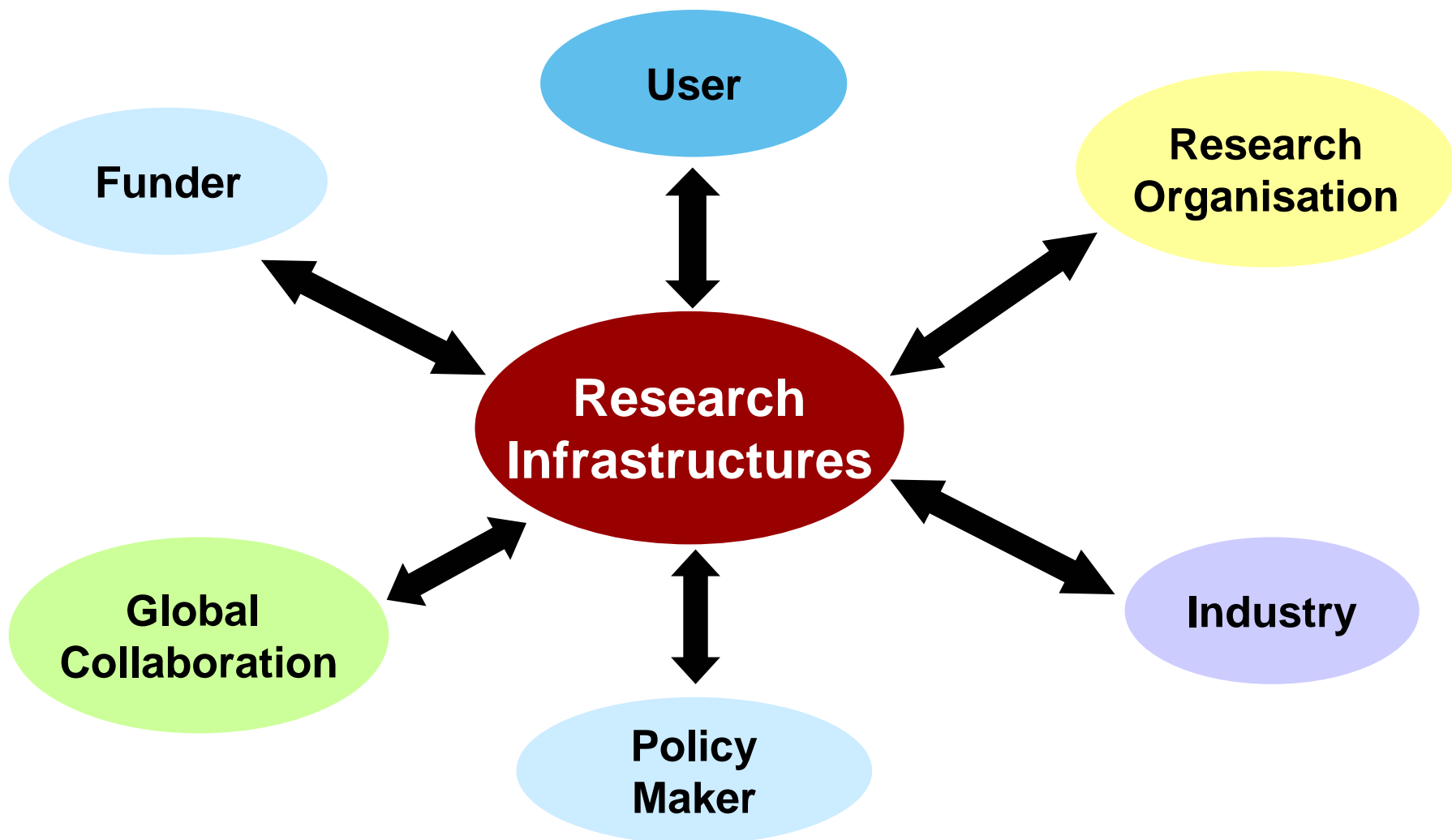
Research infrastructures

- Definition
- Actors/stakeholders
- Roles
- Coordination
- Examples

RI Definition

- Essential to the efficient progress of a research field
- Required at one or a limited no. of sites
- Acknowledged community usefulness
- Community access (virtual or actual)
- Require maintenance/upgrades
- Should cost be a factor?

RI Stakeholders



RI Missions

- Services to research community
- Technology development
- Establishing standards
- Training
- Research

RI User Communities

- Power users/Occasional users
- Virtual user communities
- Require funding to access RIs
- Need expert support to use RIs
- Provide feedback to RI, i.e. evaluation
- Provide political support?

RI Funding Organisations

- National funding agencies, ministries
- EU (FP7, structural funds, EIB)
- Industry
- Private organisations, charities

RI Policy Advice

- National roadmaps (e.g. DK, UK, S, F)
- ESFRI
- EC

Research Organisations

- Users
- Technology development collaborations
- Establishment of standards
- Research collaborations

Industry

- Users
- Driving technology development and standardisation
- Both require and provide training
- Provide funding
- Commercial applications

International Collaborations

- Necessary to ensure exchange of best practices and standards
- Avoid duplication of effort, investment
- Make RI available to all
- Achieve critical mass for very large projects

Why is European Coordination Needed?

- Avoid duplication
- Use synergies
- Save resources
- Exchange best practices
- Interdisciplinarity
- Critical mass (funding, strategy, evaluation)

Coordination Mechanisms

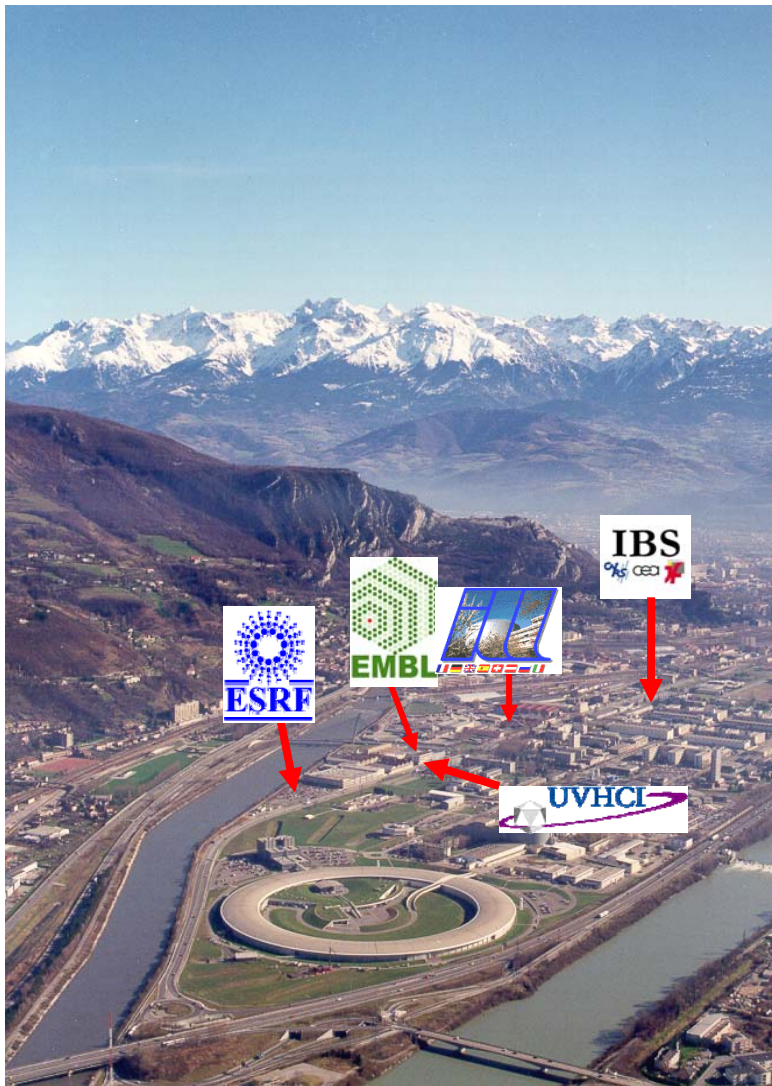
- ESFRI: setting priorities in Europe
- EC: ERA-NET, NOE, JTI
- Interest groups: EIROforum, European National Research Facilities (ERF), EuroHORCS etc.
- Grass-roots initiatives (ELSF)

Implementation of European RI

- Set priorities (ESFRI)
- Decide on several projects in different fields simultaneously to achieve balance
- European coordination of priorities needed
- European legal, funding and governance structures are needed

Examples

- Centre for Integrated Structural Biology
- European Mouse Mutant Archive (EMMA)
- European Molecular Biology Laboratory (EMBL)



Partnership for Structural Biology



European Synchrotron Radiation Facility



European Molecular Biology Laboratory, Grenoble Unit



Institute Laue-Langevin



Institute for Structural Biology (UJF-CNRS-CEA)



Unit of Virus Host Cell Interactions, UMR5233 UJF-EMBL-CNRS

European Mouse Mutant Archive

Network of partner laboratories:

- CNR Istituto di Biologia Cellulare in Monterotondo, Italy
- CNRS Centre de Distribution, de Typage et d'Archivage animal in Orleans, France
- MRC Mammalian Genetics Unit in Harwell, UK
- Karolinska Institutet in Stockholm, Sweden
- FCG Instituto Gulbenkian de Ciência in Oeiras, Portugal
- GSF Institute of Experimental Genetics in Munich, Germany
- EMBL European Bioinformatics Institute in Hinxton, UK

Network director: Professor Martin Hrabé de Angelis

European Mouse Mutant Archive

The EMMA network is a partnership of several laboratories and other institutions throughout Europe. “ A Virtual Infrastructure”

- Nationally funded laboratories form nodes of network
- Staff is employed by individual laboratories
- No transfer of funds between partners
- No exchange of staff
- Coordination at European level is supported by EU FP grants
- This allows joint projects, common priority setting, standardisation of methods etc.
- Network governance changes with grants
- Scientific focus has to be adapted to fit calls
- Construction and upgrading of infrastructures such as databases is difficult under these conditions



EMBL- Member of EIROforum

- Intergovernmental organisation funded by 19 member states
- Legal entity suitable for establishing and operating research infrastructures
- Site agreements with host countries
- Operates independently of national policies but with member state control
- Continuous external evaluation through member states