

EGEE 6th Conference – NGI Workshop
Geneva, 26 September 2006

e-Infrastructure plans in FP7 *- a renewed strategy on sustainability -*



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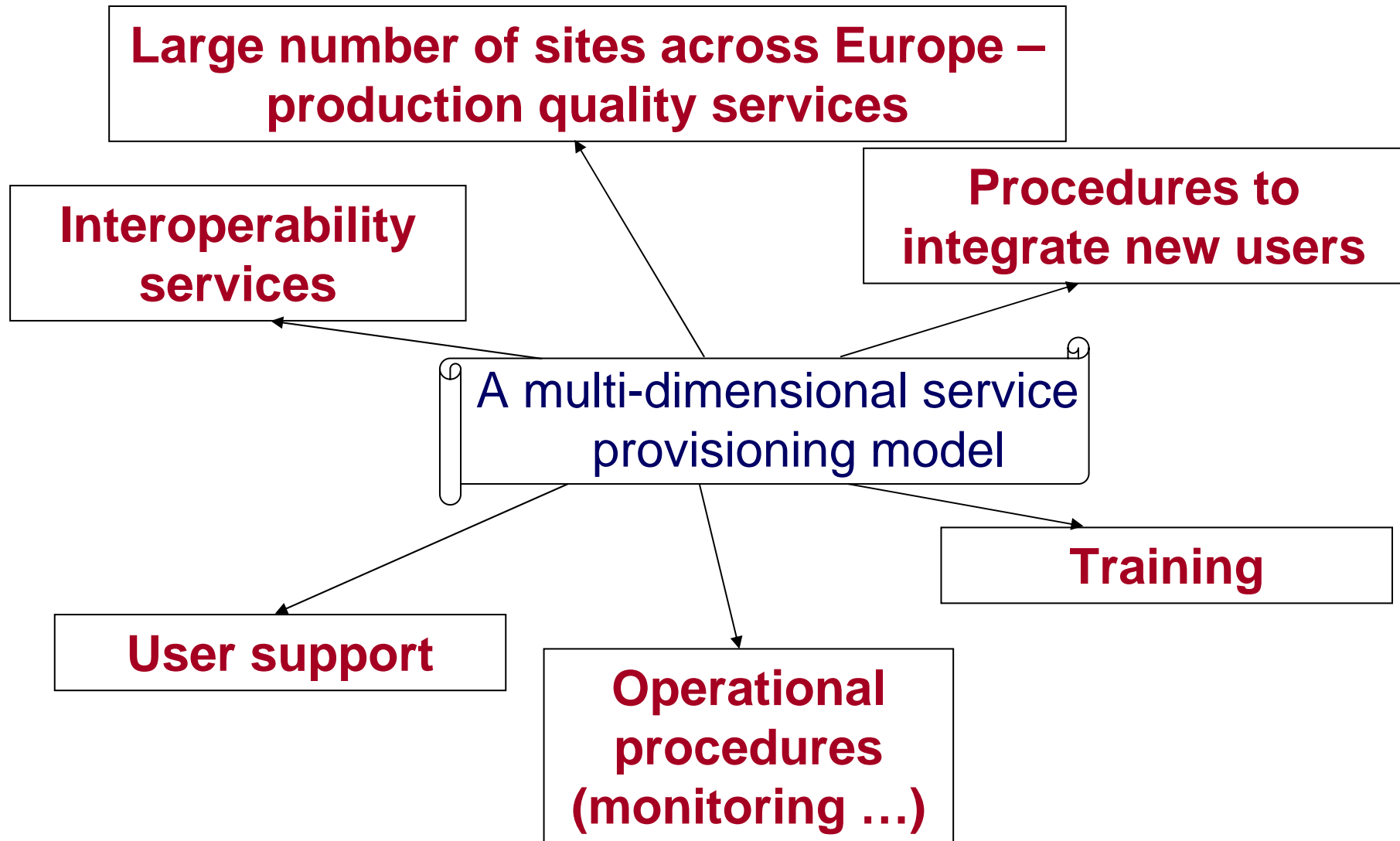
Research Infrastructures

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e-Infrastructure: <http://cordis.europa.eu/ist/rnl>

■ e-Infrastructures : a service oriented approach



*Need of sustainable service provisioning
by grid-empowered infrastructures
raised in several occasions*

- OECD raised the need of coherent approaches across disciplines and funding schemes

Grid Science Forum meeting recommendation (1):

- Grids can serve many users and communities, and are not just add-ons to individual scientific projects. Accordingly, governments should consider whether they need to modify or create institutional and organisational arrangements to ensure that Grids benefit from the correct prioritisation, planning, funding and oversight mechanisms
- Grids deserve to be treated as research infrastructures in their own right...

(1): OECD report of Grids Science Forum meeting, Sydney September 25-27 2005,
www.oecd.org

■ e-IRG raises the need of sustainable e-Infrastructures

The current project-based financing model of grids presents continuity and interoperability problems; new financing and governance models need to be explored taking into account the role of national Grid Initiatives...

Recommendations ⁽¹⁾:

- Existing e-Infrastructure projects to be superseded by integrated sustainable services at national and European levels
- e-Infrastructures to be application neutral and open to all user communities and resource providers
- National funding agencies to fund multidisciplinary & inclusive infrastructures (rather than disciplinary specific alternatives)
- e-Infrastructures to interoperate in order to qualify for funding
- FP7 to facilitate a model which specifically encourages the further integration of national e-Infrastructure initiatives

(1): e-IRG report on sustainable e-Infrastructures, www.e-IRG.org

■ EGEE 6th Conference, plenary opening session...

Viviane Reding, Commissioner, European Commission

“...for Grids we would like to see the move towards long-term sustainable initiatives less dependent upon EU-funded project cycles”

Robert Aymar, Director General, CERN

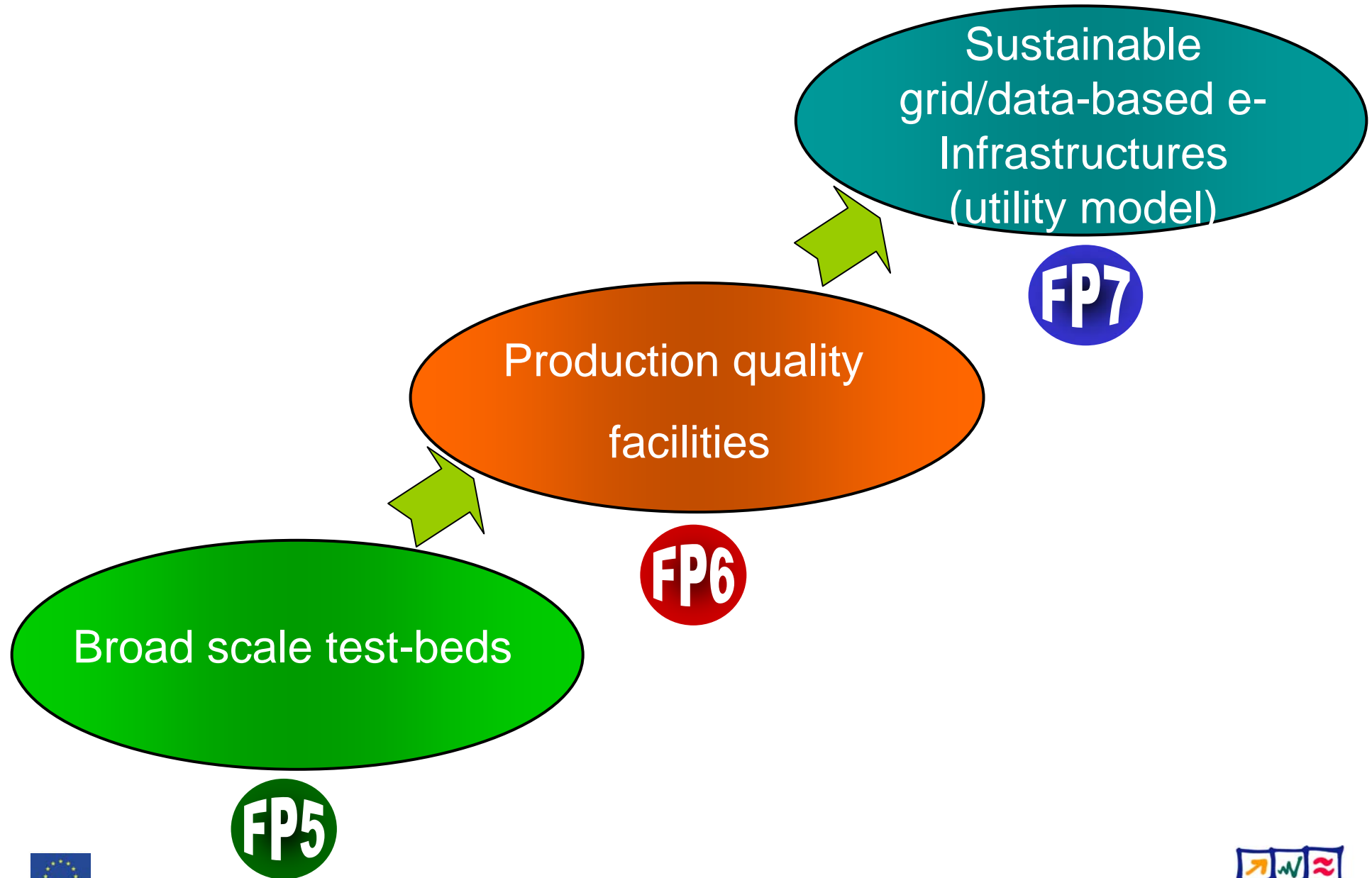
José Mariano Gago, Minister of Science and Technology, Portugal

both raised the need of new organisational models for grid (and data) infrastructures

■ Can industry also benefit from new models?

- Pool of technologies (SW/Middleware-repositories...)
- Pool of skills, expertise; training
- Easier implementation of public procurement mechanisms (drive innovation) – *positive experience from GÉANT/NRENs...*
- More coordinated input to standards (accelerate creation)

■ Towards sustainable grid-empowered e-Infrastructures



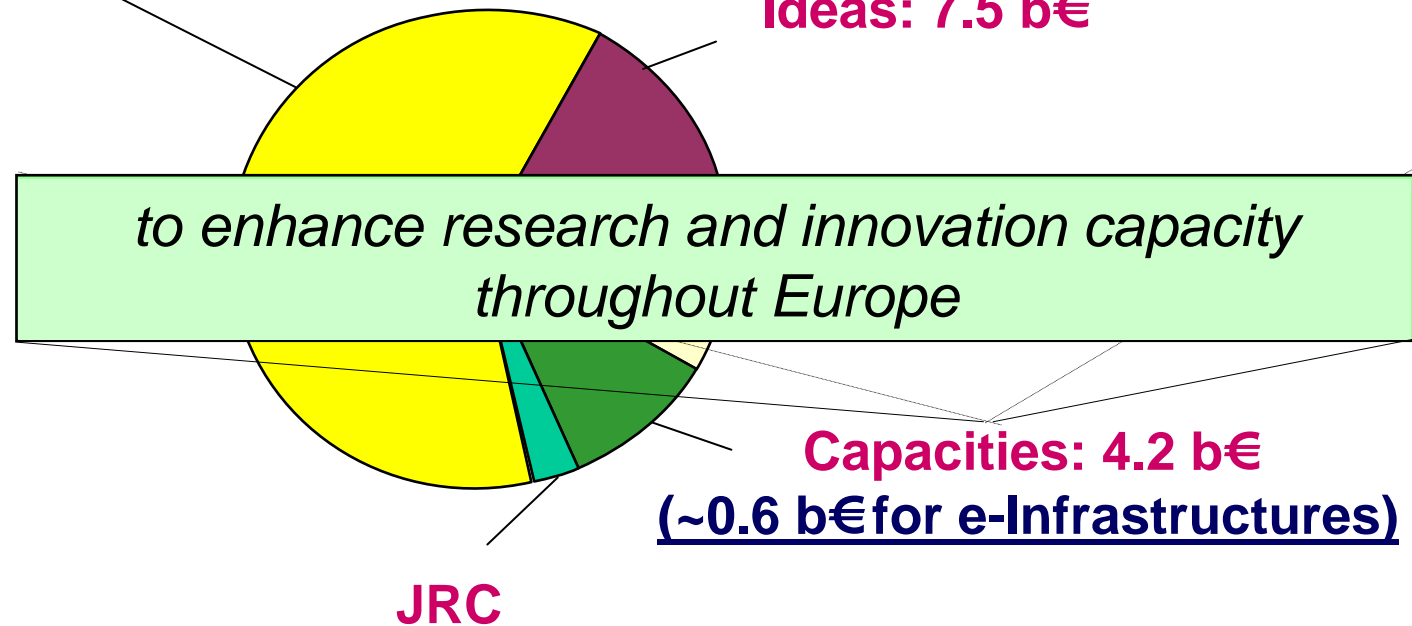
Planned actions in FP7

■ FP7 overview – 2007-2013
(includes latest budget figures by European Council)

Max total: 54500 M€ (-25%)

Cooperation: more than 32 b€
(~9 b€ for ICT)

Ideas: 7.5 b€



Capacities: 4.2 b€
(~0.6 b€ for e-Infrastructures)

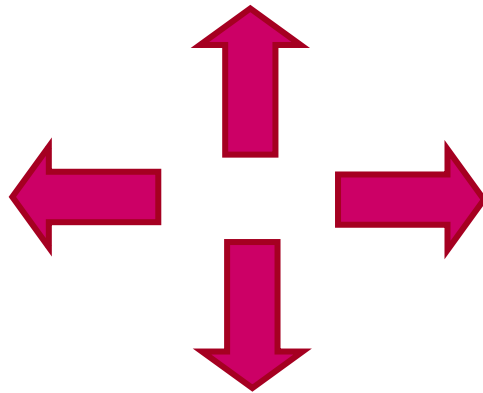
www.consilium.europa.eu/Newsroom
http://ec.europa.eu/research/future/documents_en.cfm

■ e-Infrastructure orientations in FP7



Support the further evolution and deployment of grid and networking infrastructures and foster the pooling of more resources in the grid; emphasize on provision of persistent, cross-disciplinary services with increased levels of interoperability, trust and security

EC & Member States to co-fund Tier-1 (petaflop machines) of a European HPC Platform

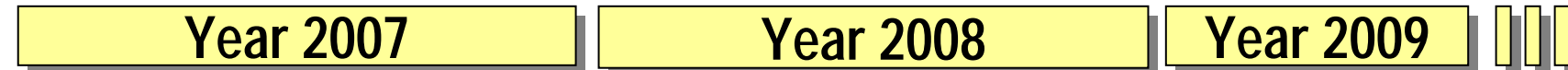


Foster a coordinated and federated approach in the domain of digital repositories to enable researchers to effectively aggregate and combine information to generate and share knowledge

Support emergence of new organisational models for service provisioning in the domain of grid and data infrastructures; foster evolution of current discipline/project based service provisioning schemes to new sustainable ones, application neutral and open to all user communities and resource providers

Support resource sharing policy initiatives (e-IRG...), International coop.

■ First e-Infrastructure Calls in FP7



Publication: early 2007
Closure: spring 2007

Publication: late 2007/early 2008
Closure: spring 2008

1. GÉANT
2. Scientific Data Infrastructures
3. Support measures (studies, policy initiatives, international co-operation,...)

1. e-Science Grid Infrastructures
2. Scientific Digital Repositories
3. Deployment of e-Infrastructures for new Scientific Communities
4. New Research Infrastructures – Design studies
5. New Research Infrastructures – Preparatory phase
6. Support measures (studies, policy initiatives, international co-operation,...)

■ First e-Infrastructure Call in FP7



Year 2007

Year 2008

Year 2009

Publication: early 2007
Closure: spring 2007

1. e-Science Grid Infrastructures
2. Scientific Digital Repositories
3. Deployment of e-Infrastructures for new Scientific Communities
4. New Research Infrastructures – Design studies
5. New Research Infrastructures – Preparatory phase
6. Support measures (studies, policy initiatives, international co-operation,...)

■ The first e-Infrastructure Call in FP7



Year 2007

Publication: early 2007
Closure: spring 2007

- Support the further evolution and deployment of grid infrastructures and foster the pooling of more resources in the grid
- Emphasize on provision of persistent, cross-disciplinary services with increased levels of interoperability, trust and security

1. e-Science Grid Infrastructures
2. Scientific Digital Repositories
3. Deployment of e-Infrastructures for new Scientific Communities
4. New Research Infrastructures – Design studies
5. New Research Infrastructures – Preparatory phase
6. Support measures (studies, policy initiatives, international co-operation,...)

■ The first e-Infrastructure Call in FP7



Year 2007

Publication: early 2007
Closure: spring 2007

- Support deployment of digital repositories for scientific communities by pooling existing resources at European level and supporting data storage, archiving, access, interpretation, interoperability, management & curation activities
- Enable scientists to effectively aggregate and combine information to generate and share knowledge, profiting from a transparent underlying data infrastructure across communities, institutions & geographic boundaries

1. e-Science Grid
2. Scientific Digital Repositories
3. Deployment of e-Infrastructures for new Scientific Communities
4. New Research Infrastructures – Design studies
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6. Support measures (studies, policy initiatives, international co-operation,...)

■ The first e-Infrastructure Call in FP7



Year 2007

Publication: early 2007
Closure: spring 2007

- Reinforce impact, adoption and global relevance of e-Infrastructure across various areas of science and engineering;
- Support continuous consolidation and expansion of e-Infrastructures
- Provide advanced applications and capabilities to more researchers, capturing commonalities, fostering interoperability, promoting open standards and federating approaches across disciplines

1. e-Science Grid Infra
2. Scientific Digital Re
3. Deployment of e-Infrastructures for new Scientific Communities
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■ The first e-Infrastructure Call in FP7



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6. Support measures (studies, policy initiatives, international co-operation,...)

- Support conceptual design studies for new RI (or major upgrades of existing ones) of clear European dimension and interest; such studies will help to assess technical and financial feasibility of proposed new RI
- Action should also foster emergence of new organisational models to consolidate a sustainable approach to e-Infrastructures, in particular in the domain of grids and data repositories
- New service provisioning schemes to be more neutral and open to all user communities and resource providers

■ The first e-Infrastructure Call in FP7



Year 2007

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Year 2009



Publication: early 2007
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6. Support measures (studies, policy initiatives, international co-operation,...)

- Provide catalytic and leveraging support for the preparatory phase leading to construction of new RIs (support only to ones included in ESFRI roadmap); this phase aims at bringing the project to a level of technical, legal and financial maturity required for implementation
- Work could include strategic, technical, governance/logistics, financial, legal etc activities

■ The first e-Infrastructure Call in FP7



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6. Support measures (studies, policy initiatives, international co-operation,...)

- Encourage coordination between National and pan-European e-Infrastructure initiatives, namely through support of policy groups such as the e-IRG
- Specific studies and conferences on e-Infrastructure related topics, complementing and paving the way to improved multidisciplinary e-Infrastructures
- International cooperation

■ Funding schemes

Collaborative projects (CP)

Coordination and Support
actions (CSA)

■ Funding schemes

Collaborative projects (CP)

Coordination and
actions (C

- *Support to research projects carried out by consortia with participants from different countries, aiming at developing new knowledge, new technology, products, demonstration activities or common resources for research. The size, scope and internal organisation of projects can vary from field to field and from topic to topic.*

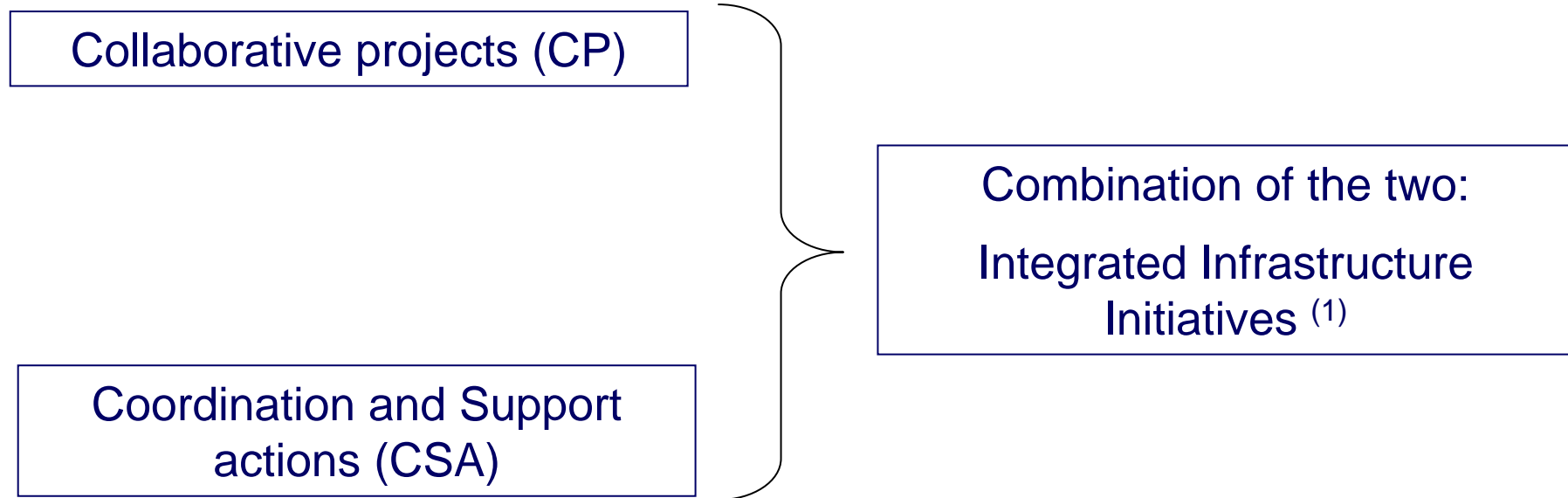
■ Funding schemes

Collaborative projects (CP)

Coordination and Support actions (CSA)

- *Support to activities aimed at coordinating or supporting research activities and policies (networking, exchanges, trans-national access to research infrastructures, studies, conferences, etc)*

■ Funding schemes



(1): Consisting of Networking Activities, Specific Service Activities, and Joint Research Activities (as in FP6) but with all above categories of activities mandatory in FP7-projects

■ Further information



e-Infrastructures: www.cordis.europa.eu/ist/rn/