

Europe Shaping 2020's Science: e-Infrastructures for Scientific Data

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Bielefeld Convention Center, 3 - 5 February 2009

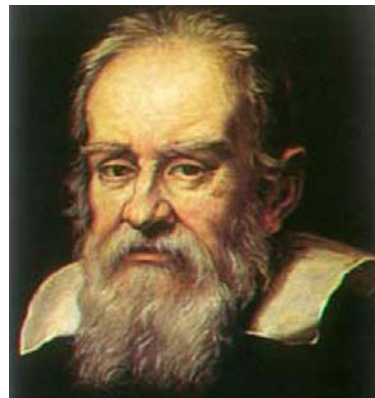


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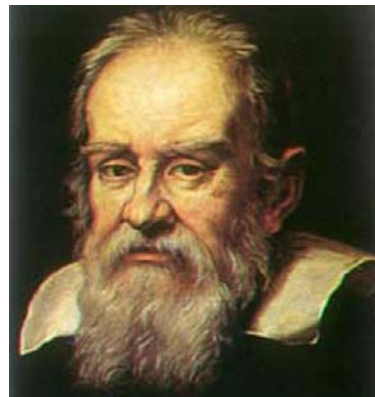
a new vision for Science

- Global challenges with high societal impact
- Big Science and the role of “empowered” citizens
- Data deluge... born digital material... virtual-labs
- Cross-disciplinarity
- Spread of skills and competences



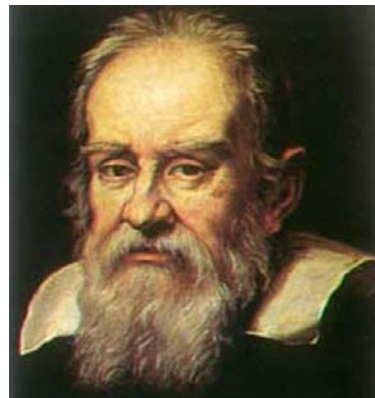
a new Scientific Renaissance

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a new Scientific Renaissance

- Science: mediation through ICT
- Science-technology interaction: positive loop
- e-Science: new research methods exploiting advanced computational resources, data collections and scientific instruments
- Rapid transition to e-Science: e-Infrastructures



embracing paradigm shift



EU e-Infrastructure – 5 domains



Linking the ideas at the speed of the light:
GÉANT



Sharing the best resources:
e-Science grid



Accessing knowledge:
scientific data



Innovating the scientific process:
global virtual research communities



Designing future facilities:
novel e-Infrastructures

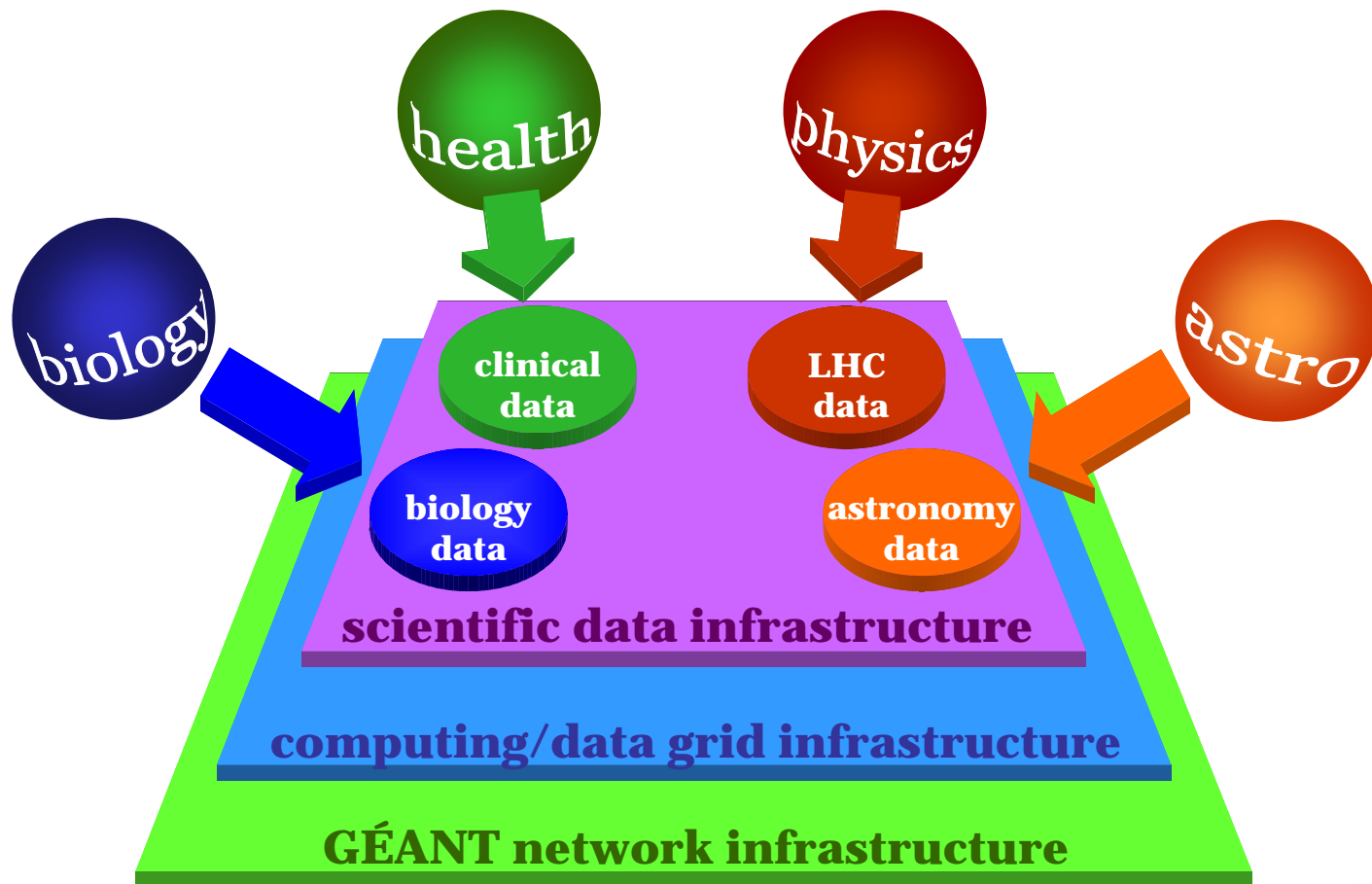


important issues

- “Information deluge”...
 - European labs producing more and more data (bio databanks at EBI, LHC at CERN, bio-diversity, earth sciences, social sciences...)
- Availability of Information as a basis for Knowledge creation
- Need for an e-Infrastructure addressing Scientific Information



information infrastructure

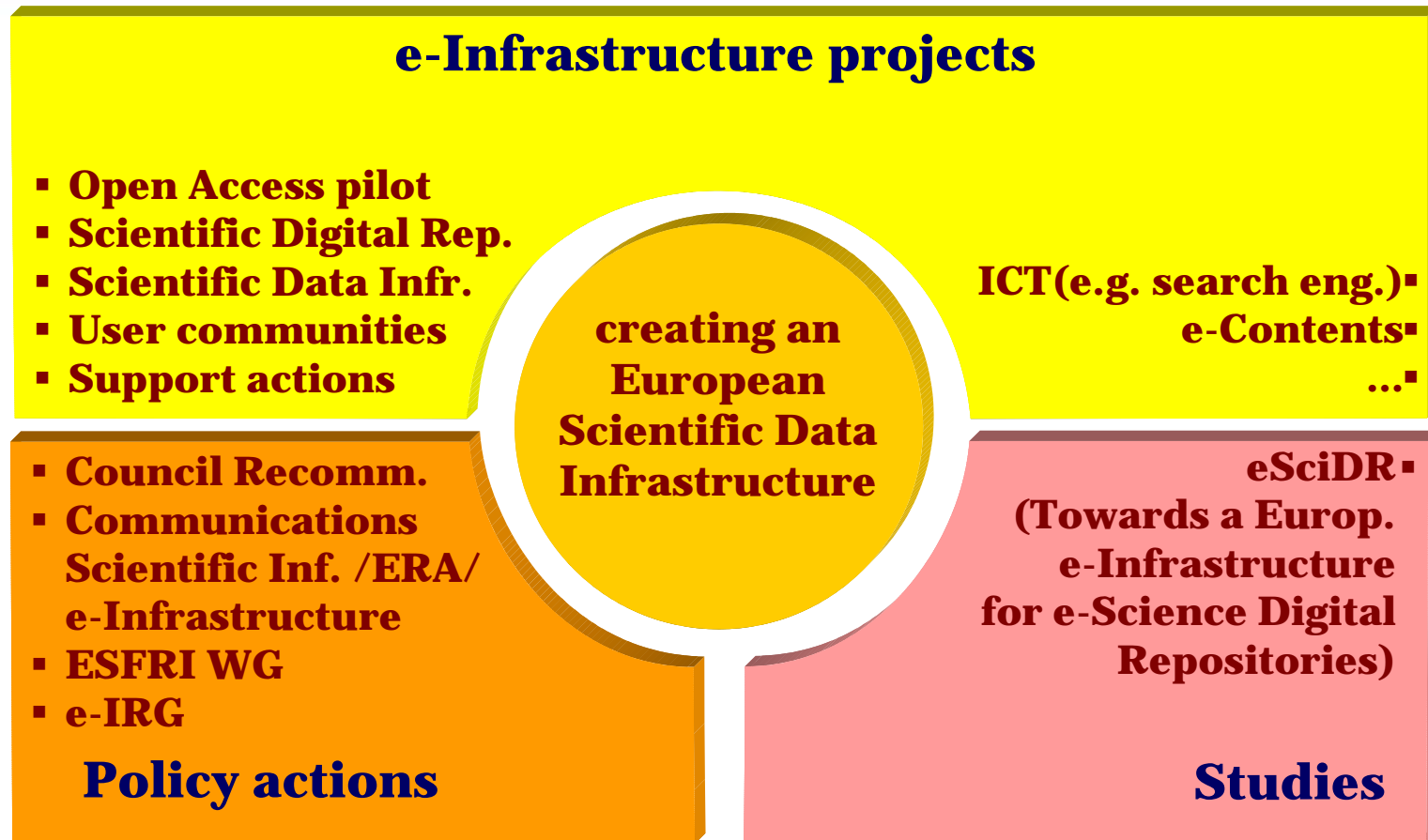


scientific information continuums

- between past, present and future
- between raw experimental data and publications
- Between data and visualisation
- between different scientific disciplines
- between different institutions
- between research and education

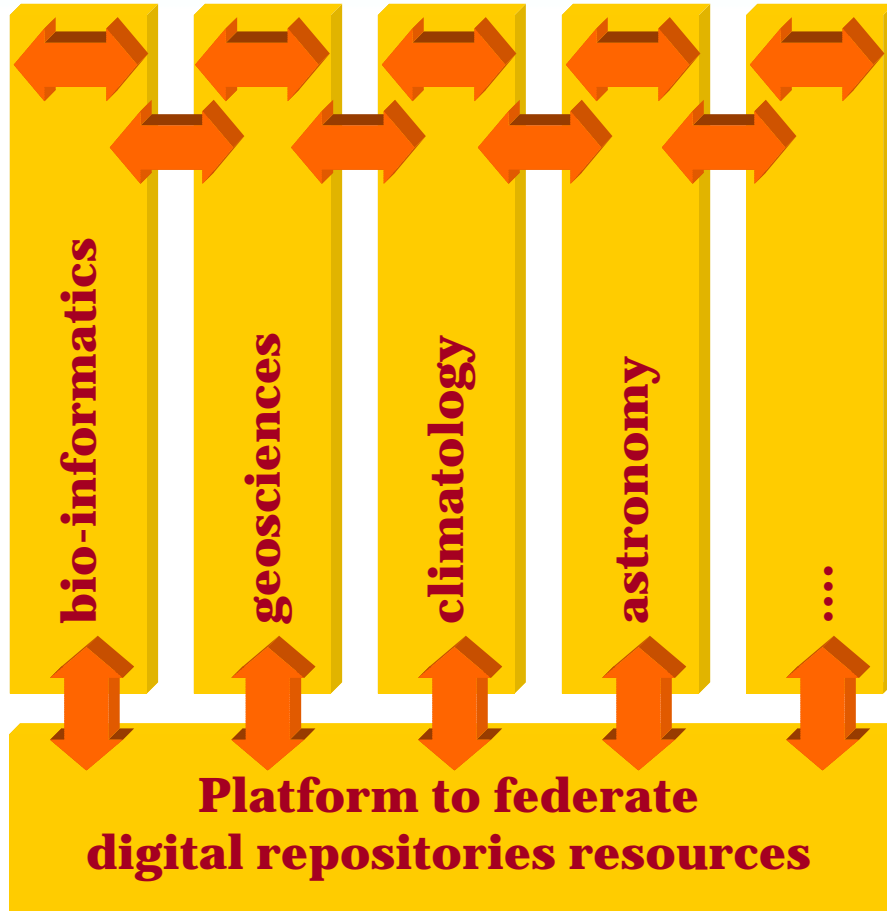


scientific repositories: EU strategy



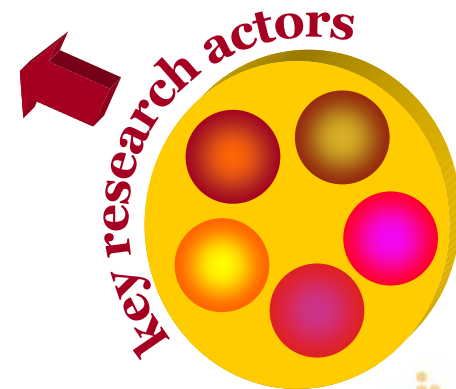
e-Infrastructures projects

EC contribution = 37 M€



**Alliance for
Permanent Access**

policy co-ordination action



open access pilot in FP7

“If I have seen further it is by standing on the shoulders of giants”

Isaac Newton, 1676

- Scope – covers several areas, 20% of the budget
- Clause in contracts - deposit articles, make best efforts to ensure open access after embargo period.
- Deposit final articles, peer reviewed manuscripts and data... in institutional or subject based repositories
- The e-Infrastructure will provide a Scientific Information Repository

(Call open now, 4 M€)



further information

www.cordis.europa.eu/fp7/ict/e-infrastructure/

