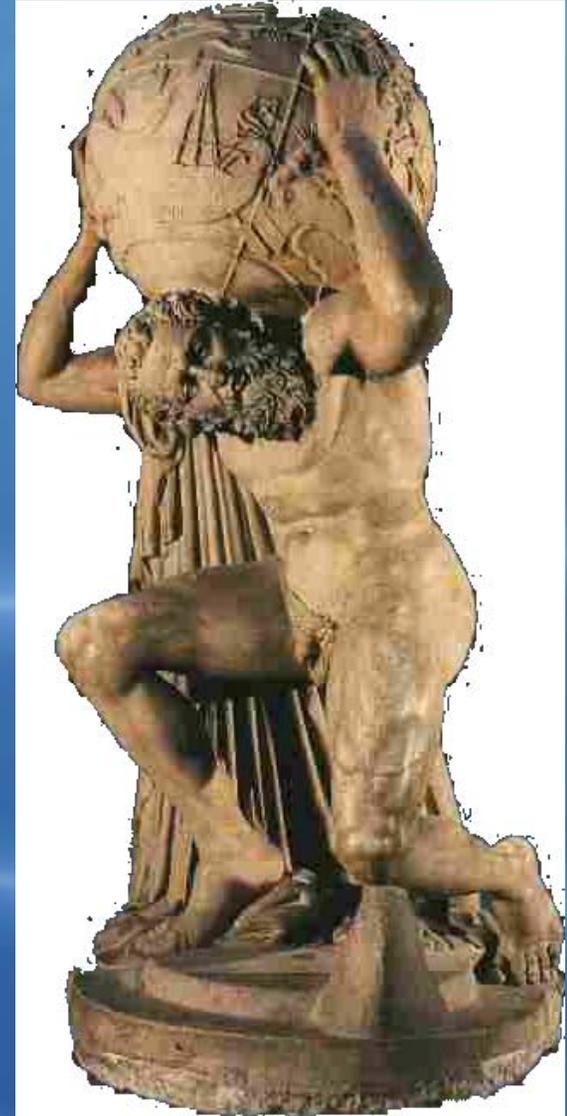


On the shoulders of



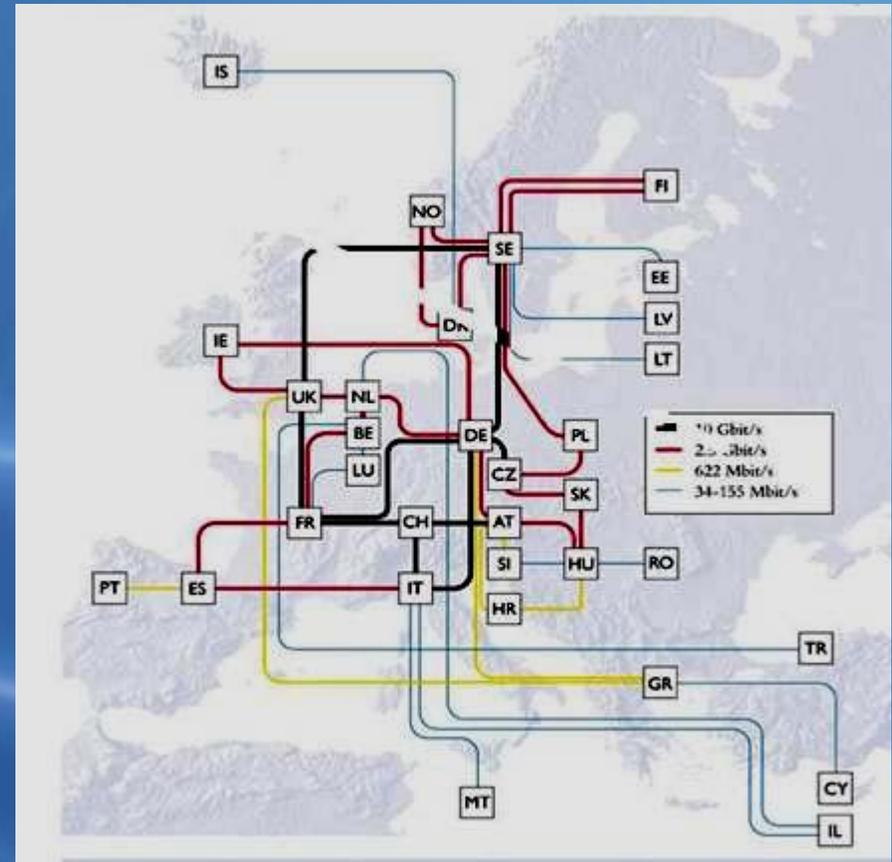
Moving Towards European Research Area: the two sides of the Coin

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Presented by Enzo Valente



Europe has filled the Gap

- GEANT is the most advanced network in the world, today
- Exploit liberalization in Europe
- The rich experience made by the NRENs
- The essential support of the funding bodies



A Layered Structure in line with the subsidiarity principle

The Research network as seen by the user

International

**European NREN
Consortium** **GÉANT**

National

National

NREN

Campus

Campus

Campus

Campus

**University or
Laboratory**

Complementarity's Success

- **GEANT and the NRENs**
 - One without the others would be useless
 - The Frame and the Contents
 - More complex but more flexible architecture
- **Independency and Coordination**
 - The end-to-end challenge
- **Scientific and Technological Research are in the driving seat**
 - Through the agencies (NREN) mandated to that
 - Without forgetting sound operation

Infrastructure, Development

- Network for Research
 - Research requires support of IT Services
 - Advanced
 - Transparent
 - Worldwide
- Research on Networking
 - Requires a fast evolving infrastructure
 - To develop and experiment new technologies
 - The ability of segregating *risky* activities



European Research Network and the GRID

- Services are the keyword
 - Bandwidth for the sake of bandwidth is useless
 - Researchers must be supported with the most advanced services
- The successful experience in FP5
 - Support of other projects' communication requirements
 - The fruitful experience of DATAGRID and DATATAG



Research Excellence and Global Collaborations

- Communication of ideas and results
 - Access to data
 - Communication services
- Allow People and Resources to meet
 - Mobility of the Researchers
 - (Virtual) Mobility of Resources
- New approaches
 - Virtual Communities
 - Virtual Instruments

Research Networks in the 6th Framework Programme

- Fight the divide created by different markets in Europe
- Diversified procurement strategies in different parts of Europe
- Stronger involvement of the NRENs
- Tight coordination and collaboration with the GRID infrastructure initiatives

Europe is Not Enough

- Research is Global: Research Networks must be global as well
- Intercontinental initiatives are not specifically included in the main stream of EC support
- But intercontinental connectivity is of strategic value to exploit the ERA potential
- We have to seek specific support wherever is possible

The NREN Consortium and EC opened the way

- Connectivity with other regions on a bilateral basis
 - North America
 - Japan
- Projects to encourage and support the emergence of regional networks in other areas and to connect them to GEANT
 - Mediterranean countries
 - Latin America
 - Pacific Rim



Thank you