# Panel on Data Interoperability Françoise Genova









#### Global research data interoperability

- Diversity is a keyword of the research data infrastructure
  - The communities of data providers have different cultures and are in different states of preparation, from operational distributed interoperable systems to communities not convinced of the interest of sharing data
  - A global endeavour data providers from many countries in different contexts
- Accommodate diversity, no monolithic system

# Among the stakeholders (1)

- Among the users: scientists
  - Using data produced by their communities
  - Using data produced by other communities
- Data providers
  - From communities already organised to provide their data
  - From communities organising themselves
  - Large AND smaller data providers (not only ESFRI-like projects but also community knowledge)
- "Technologists"
  - Proposing technological solutions
  - Providing generic environments or elements of the framework

# Among the stakeholders (2)

- It is critical that data providers, users and technologists participate.
  - "Data centres" have a good idea of the user needs and often include scientists and technology-aware staff, these "data practitioners" are key participants
  - To have content in the system, one has to engage the communities, which will provide the data
- Take-up by data providers and scientific users is a critical issue
  - Small overhead to implement the framework
  - The proposed system must fullfil science needs
    - of the original community (this is important also for the data providers to legitimate their efforts)
    - for interdisciplinary research
    - REAL science cases please

## Overcome fragmentation?

- Propose generic frameworks which will help new communities and small providers (eg EUDAT)
- But diversity will remain
- "Interoperability layer" interoperability building blocks – good practices
- Useful and usable solutions have a chance to make it
- If not done the right way potential providers and users will rapidly be discouraged with strong consequences on the whole process
- "Technology driven" approach can be an issue if it is the dominant approach

### RDA possible role

- A good momentum
  - Many proposed IGs and WGs
  - Good spirit and fruitful discussions at the kick-off meeting and since then
- Allow tackling different types of questions with a practical approach
  - Building blocks
  - Good practices
  - Can host communities which have no other place to discuss their interoperability questions
  - IGs for discussion and WGs with focussed, short term aims
- Collaboration mandatory with other organisations on topics of common interest (cf ICSU CODATA and WDS)

# Top-down or bottom-up?

- Both please
- Bottom-up activities with motivated participants dealing with problems that they find important – this allows to move on!
- These activities have to be put in a general view of the "landscape"
- Technical Advisory Board role
- Also identify critical gaps and find knowledgeable people to tackle them