Advanced computer facilities

- Are they needed on European scale? (besides at national level)
  - Yes
    - To be competitive (to China(!), USA, Japan)
    - To keep and attract scientific talent
    - Capability computing needed (access to suitable systems) to competitively further science
    - For small countries (matter of scale)
    - Large national machines are selected for "general purposes"
    - Talented people in small(er) countries do not pursue certain research because resources are not available.
  - National resources are still required

- Per discipline or per architecture?
  - Per architecture, provided proper in depth disciplinary support is avaliable
  - Critical mass (e.g. 3 disciplines "fit" one architecture)
- How many more than one?
  - Different architectures are required at European level (policy issue)
  - Better 5 systems in top 12 than only the #1 system
    - 5 would also give a network of excellence
    - There are not so many applications that require 1 very large machine
    - The #1 system is in practice a nuisance for many users

Relation with DEISA

- Build on top of the DEISA set-up or otherwise?
  - Preserve part of the DEISA experience/effort
  - Provided DEISA is sufficiently grid-compliant

Other comments
- e-Infrastructure is not only SC but also support infrastructure (discipline oriented)
- Virtualization: resources should be easy accessible for users
- Geographical location SC not important to user
- EU plans to allocate > M€ 200 for SC until 2010

Session "remaining isues"

- Multimedia access grid i.e.
  - Access grid beyond video quality
  - Life sharing X-ray data
  - Educational environments
- Facilities for long-term preservation of data and (academic) repositories