



SpaceGRID

Kick-Off Meeting
ESTEC, 26/09/2001



Agenda

- 10:30 Welcome (ESA)
- 10:35 GRID: Earth and Space Science Applications Perspectives (ESA)
- 10:50 ESA GRID Infrastructure (ESA)
- 11:00 Introduction to SpaceGRID (DAT)
- 11:10 Project Presentation (DAT)
 - 11:20 Earth Observation (DAT)
 - 11:40 Space Weather (CS-SI)
 - 11:55 Spacecraft - Plasma Interactions (QINETIQ + SSL)
 - 12:10 Radiation Transport Simulation (QINETIQ + SSL)
 - 12:25 Solar System Research (RAL + SSL)
 - 12:45 Mechanical Engineering (ASPI)
- 13:00 Lunch
- 14:00 Visit to Concurrent Design Facility and other labs (ESA)
- 15:00 European Commission present and future GRID actions (EC)
- 15:30 European Institutions Cooperation on GRID - Discussion (All)
- 16:45 Conclusions (ESA)
- 17:00 Adjourn

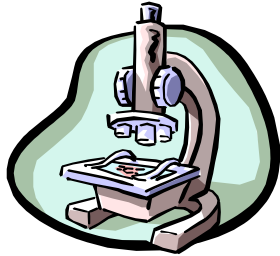
Introduction to SpaceGRID

What is it?



An **ESA funded** project with:

- a **study** component aimed at **analysing the issues** (technology, infrastructure, suitable applications) and **propose a roadmap** for the seamless access to, and exploitation of, **distributed** data, application and resources in a network of heterogeneous computing resources
- a **prototype** component aimed at implementation of small-scale dedicated test-beds based on existing infrastructure

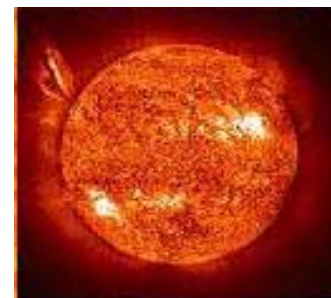
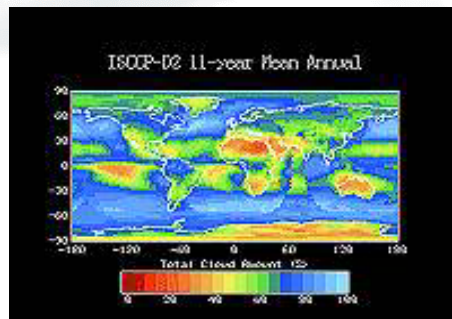
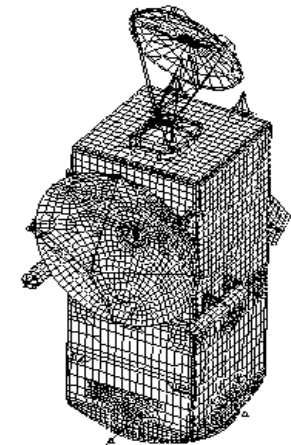
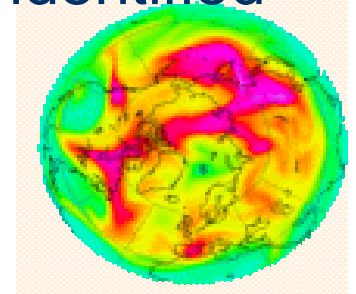
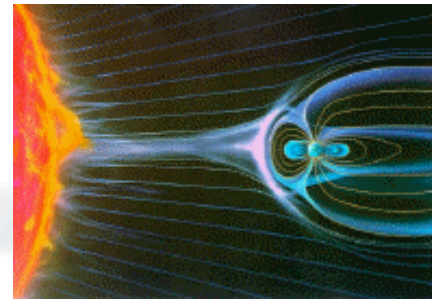


Introduction to SpaceGRID

Which focus?

Four space related disciplines have been preliminarily identified as potential candidates:

- Earth Observation
- Space Research
 - Space Weather simulation
 - S/C Plasma interaction
 - Radiation Transport simulation
- Solar System Research
- Spacecraft (Mechanical) Engineering





Introduction to SpaceGRID

Who is composing the Consortium?



- **Industrial** partners and **research** institutions
 - ✦ with strong complementary backgrounds in **application** disciplines,
 - ✦ already involved in several **on-going activities** on Grid development at National (UK) and EU level.



Rutherford
Appleton
Laboratory



Introduction to SpaceGRID

Why?

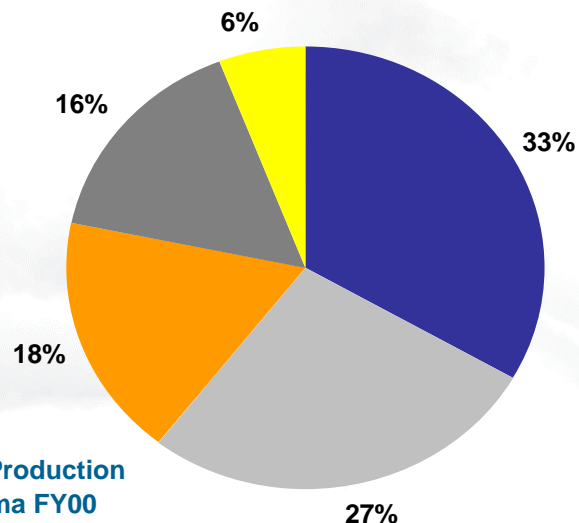


- Partners' traditional focus is on **innovation**, with a long record of **international** RTD projects
- The concept of **GRID** is one of the most promising novelties for ICT market, representing a **fundamental gap** in how computing is perceived and used, as WWW was in the 90's
- A **technology transfer** schema may be profitably used towards several **complex** environments in other markets and disciplines

DATAMAT Profile



- A top player in Italian ICT market with **30+** years experience in Italy and abroad:
 - **152.6** M€ revenues (FY2000),
 - 10% yearly **R&D** investment,
 - **1500** young and highly qualified employees.



Value of Production
Pro-forma FY00

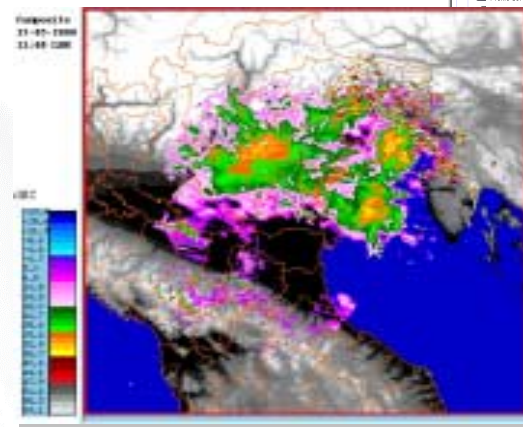
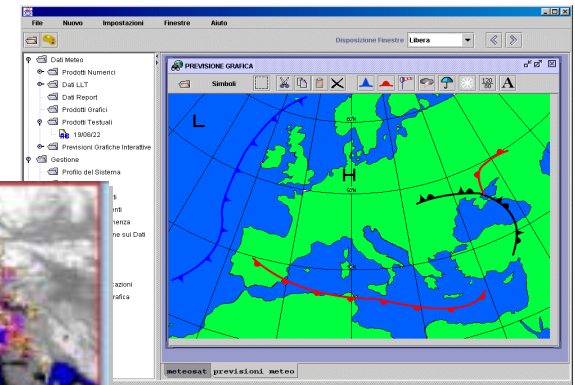
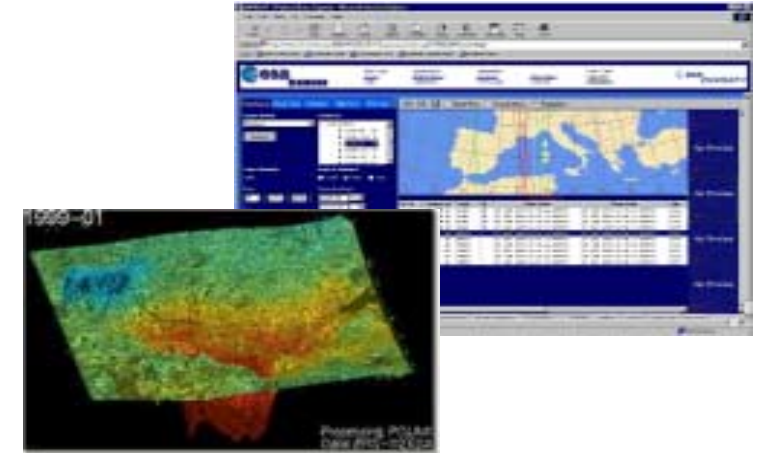
- Bank & Finance
- PA & Healthcare
- Telecom & Utilities
- Other Markets
- Defence & Aerospace

- Clear focus on **high growth** high value-added vertical segments
- **Broad** presence, with hi-tech **systems** and **services**, on most ICT markets sectors.

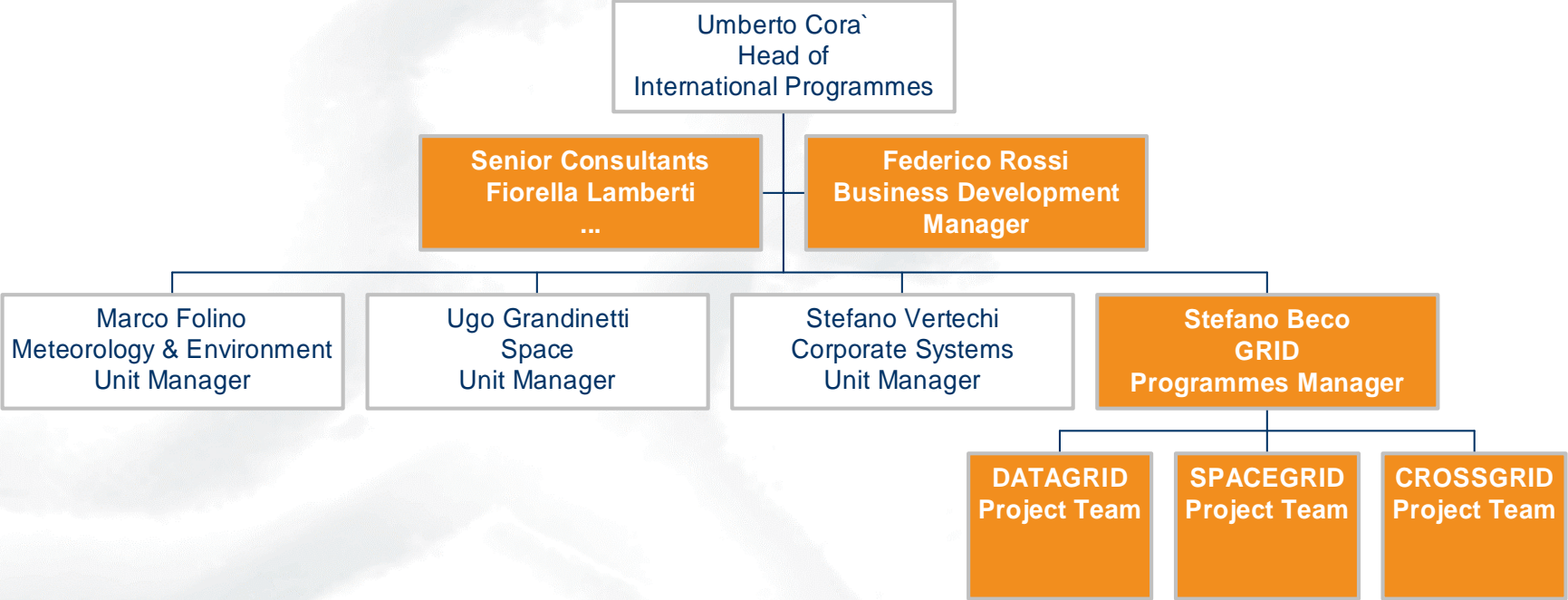


DATAMAT Specific Experience

- Earth Observation Ground Segment
 - *ENVISAT PDS (User Services, AIV)*
 - *ENVISAT PAC's*
 - *MUIS*
- Meteorology and Environment Systems
 - *Weather Radar Systems*
 - *Weather Forecast Centres*
 - *Emergency Management*
- GRID
 - *DATAGRID*
 - *CROSSGRID*

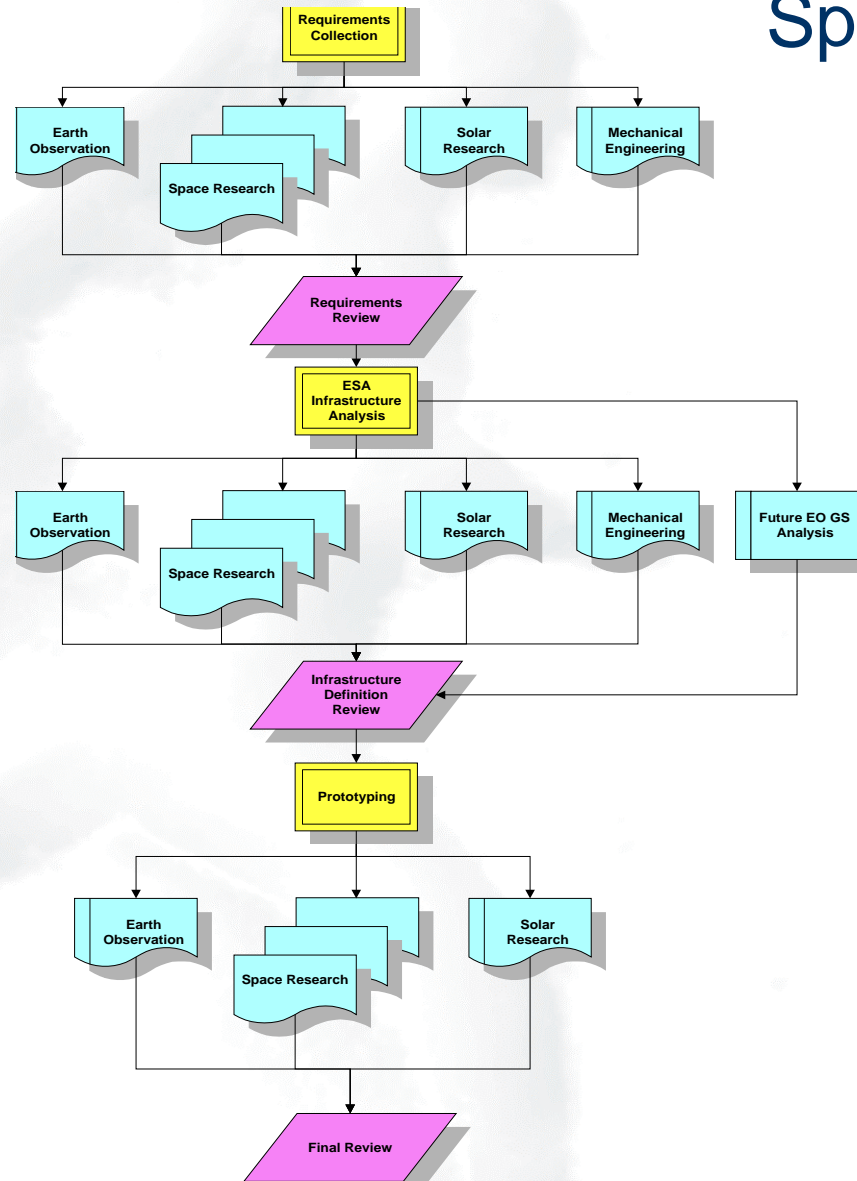


DATAMAT Organisation Chart



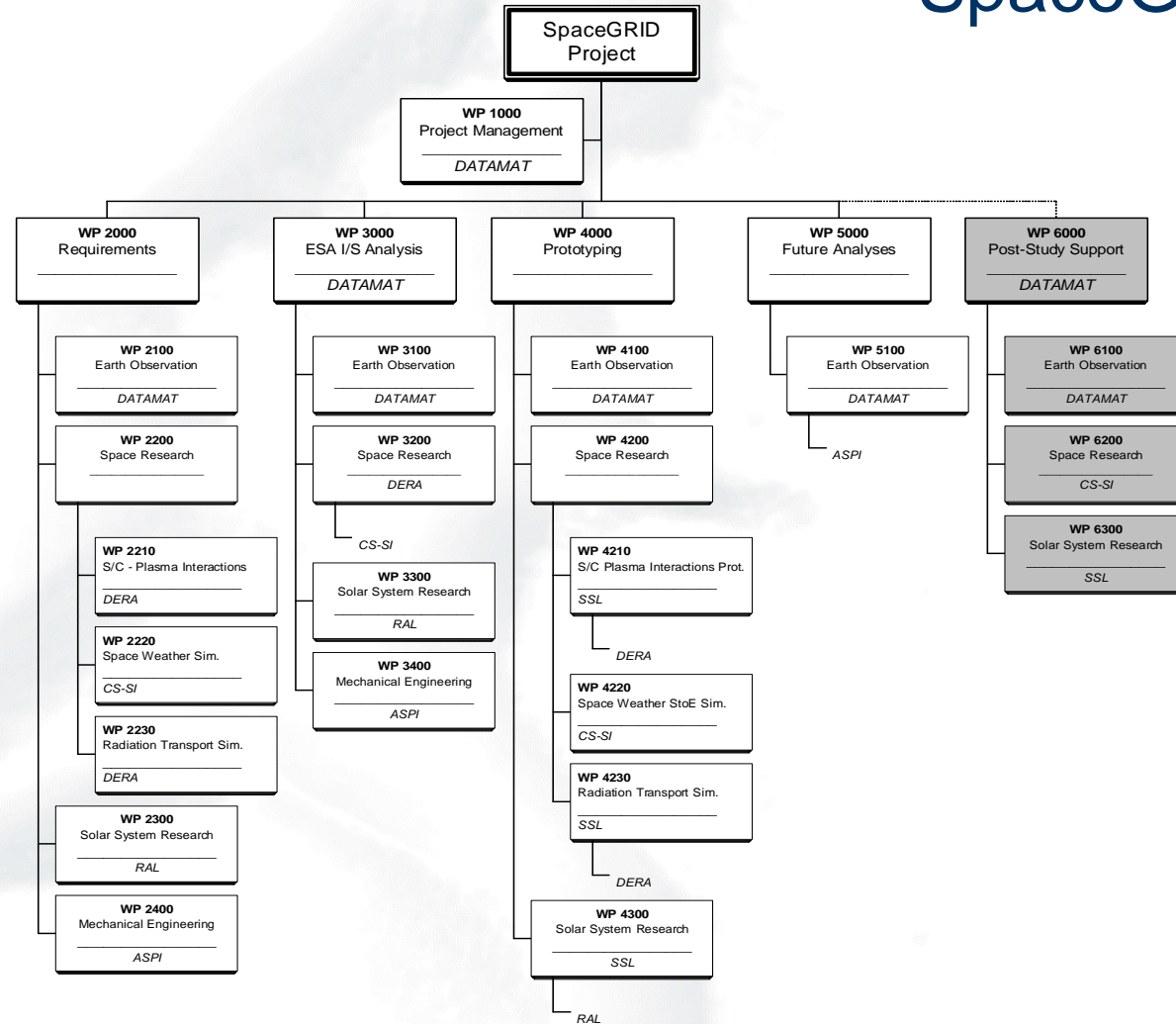
Project Presentation

SpaceGRID Logic



Project Presentation

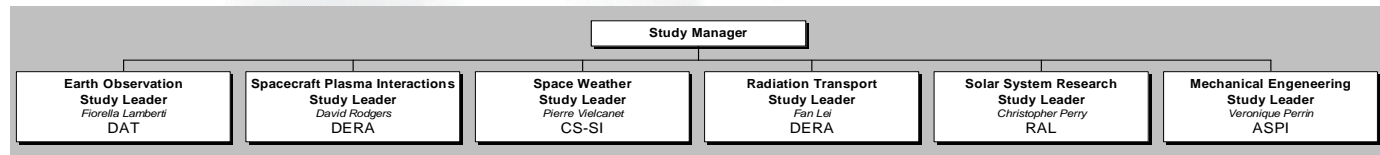
SpaceGRID WBS



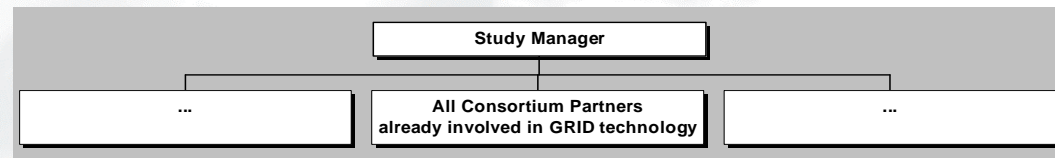
Project Presentation

SpaceGRID Organisation

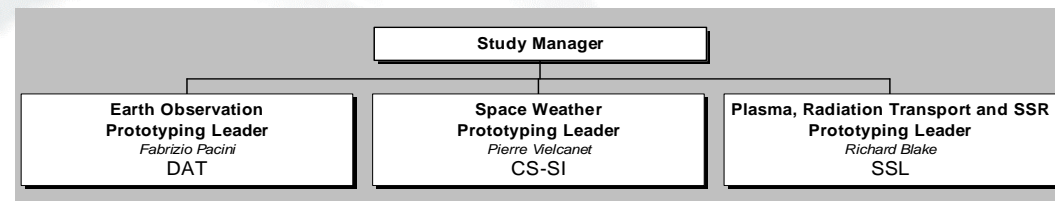
Study Team



Technological Steering Board

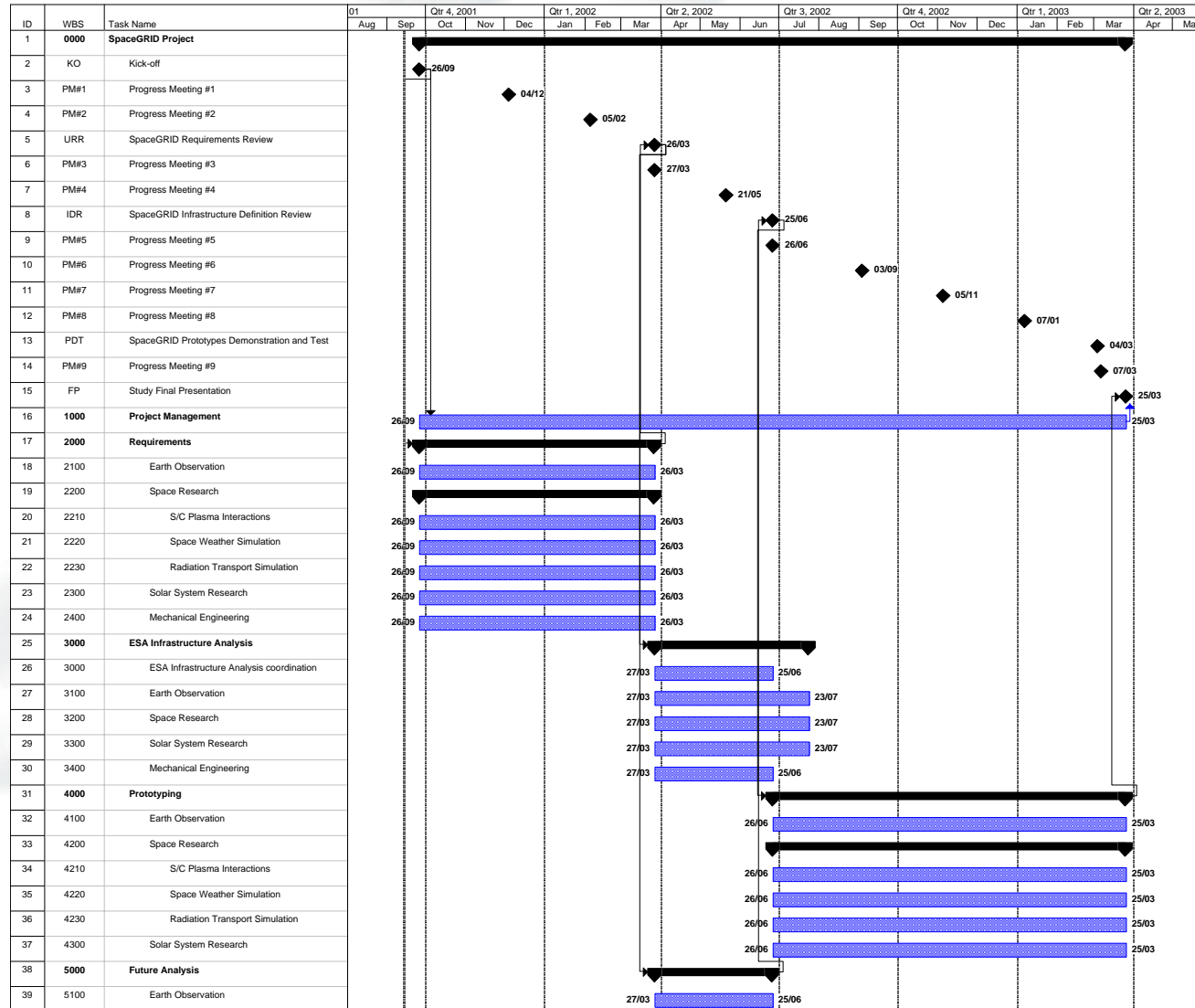



Prototyping Team



Project Presentation

SpaceGRID Schedule





Project Presentation

SpaceGRID Dissemination Activities

- The Consortium will take up a set of actions aimed at involving the European scientific communities in SpaceGRID activities and disseminating the project results
- Each partner will promote the usage of GRID technology within the relevant scientific/ application communities, showing the benefits resulting from usage of such technology in their environment
- Global Grid Fora will be target events concerning technological aspects of SpaceGRID activities