

Ibergrid conference

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disponer de QuickTime™ y de
un descompresor TIFF (sin comprimir).

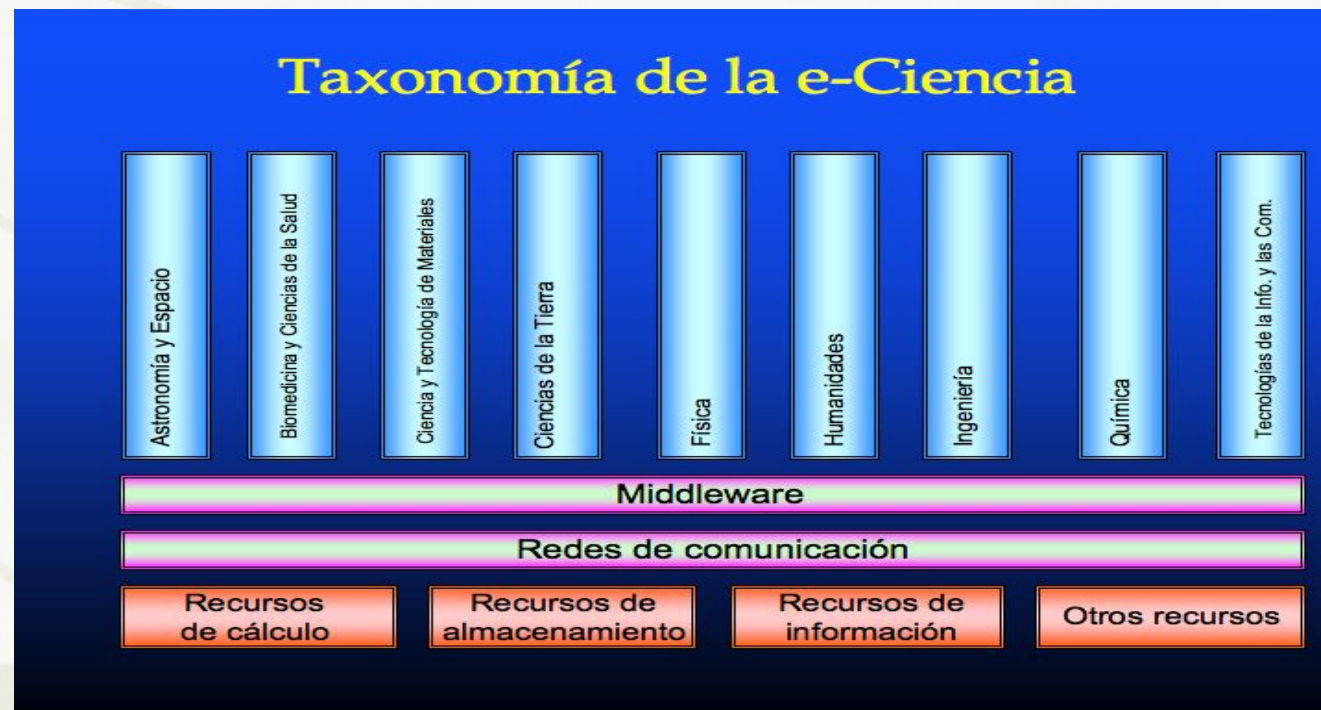
Spanish Grid and Cyber- Infrastructure Policies

Víctor Castelo, Ministerio de Educación y Ciencia,
Dirección General de Política Tecnológica

Background of e-Science

e-Science White Book (FECYT, 2004):

Definition: “Scientific activities developed using distributed resources in the network”



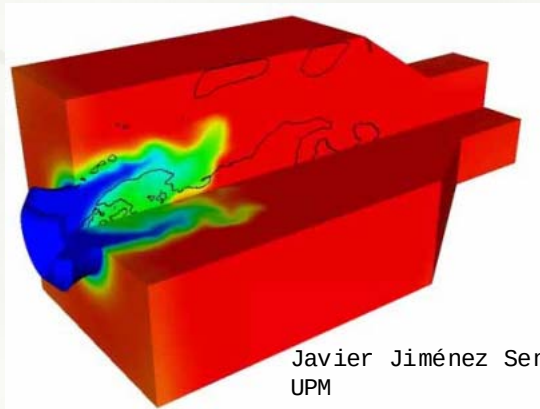
The evolution

- ★ Relevant participation of Spanish groups in European projects (started in 2001)
- ★ IRIS-Grid initiative (2002)
- ★ Important HPC sites
- ★ Consolidated high bandwidth network
RedIRIS integrated to the european GEANT2 network
- ★ New opportunities
 - ✦ Changing the way to research
 - ✦ Sharing resources to enable new applications
 - ✦ New Science thanks to new technology
 - ✦ Support for a multidisciplinary approach



The Scientist Community: its needs

- ★ Using the e-Infrastructures to enhance their research work
- ★ Communication with their colleagues, the Industry, students, the Society
- ★ Global connectivity



Javier Jiménez Sendín,
UPM
DNS in turbulent
channels





Users: Information and feedback

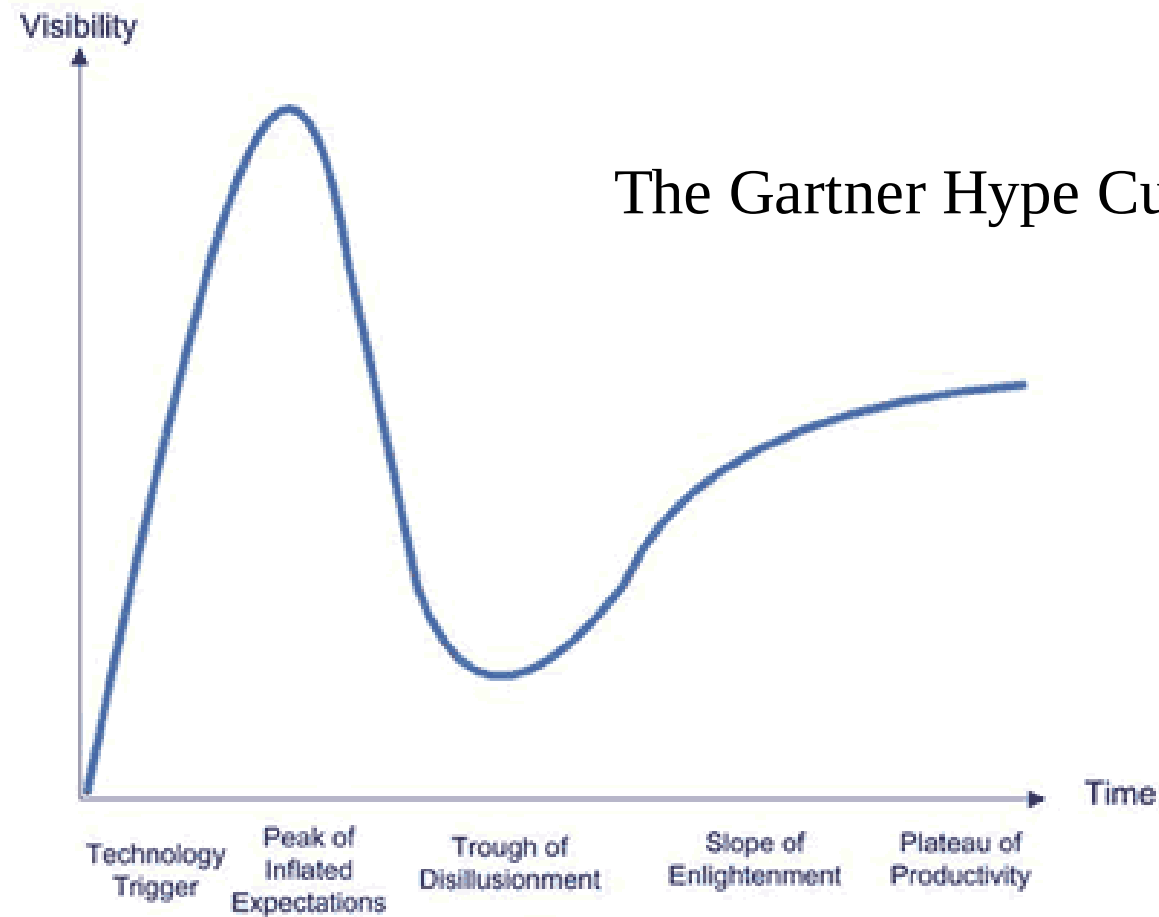
- ★ To know their needs
- ★ Actual uses
 - ★ Emblematic cases
- ★ Problems

- ★ To inform
 - ★ Possibilities
 - ★ New services
 - ★ Test points
- ★ Learning
- ★ Coordination
 - ★ e-Infrastructures
 - ★ Networks
 - ★ Other actors

Users

Institutions, other actors

Where do we stand?



Taking into account:

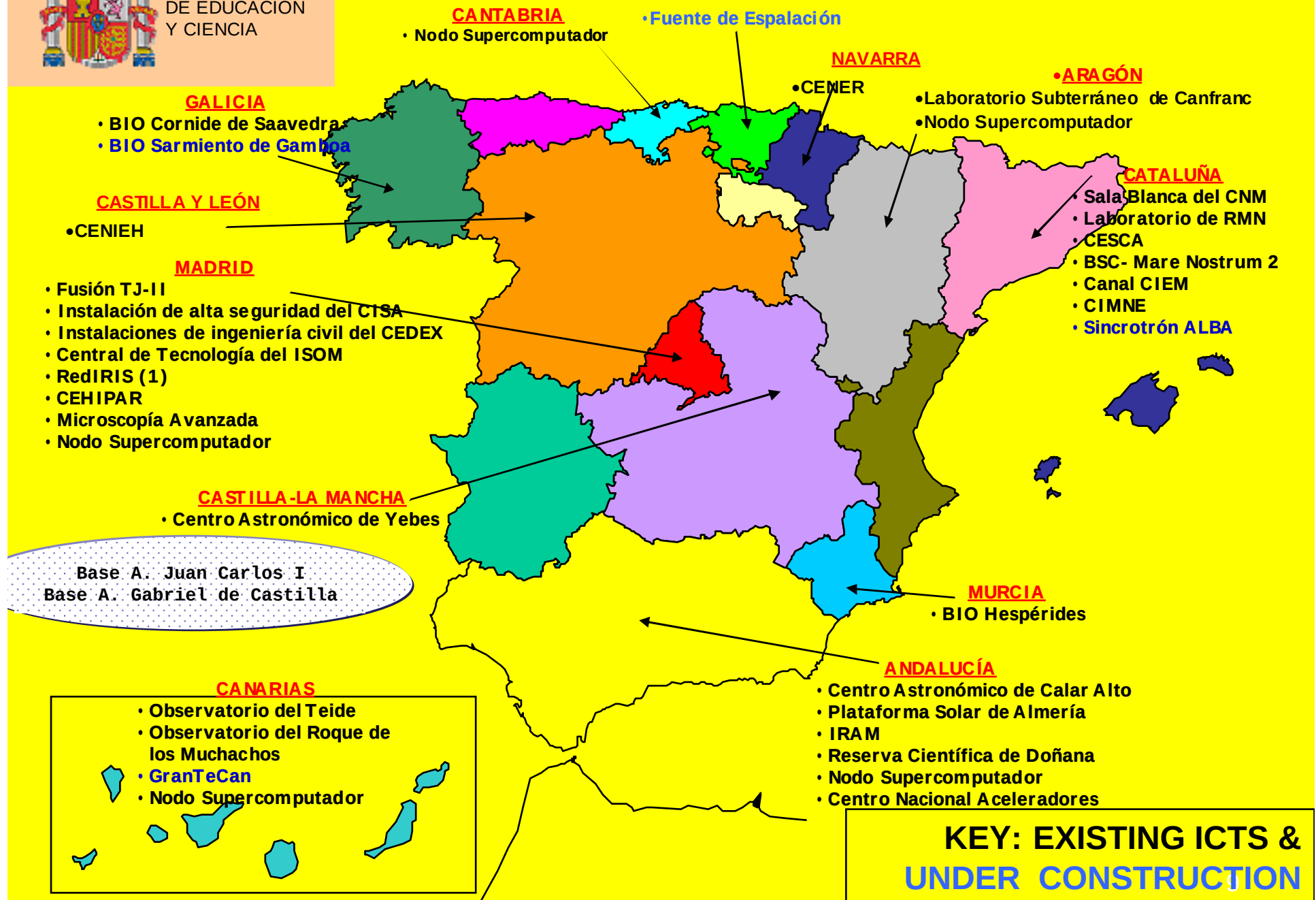
- ★ The available resources (e-Infrastructures):
 - ★ The Network: RedIRIS and Autonomous Regions Research Networks
 - ★ HPC systems (BSC, Red Española de Supercomputación, CESGA, CESCA, CIEMAT, INM, etc.)
 - ★ Grid groups
 - ★ The available ICTS (Infraestructuras Científico Técnicas Singulares) and those under construction
- ★ MEC (DGPT) promoting thematic networks
(Astronomy and Astrophysics, **e-Science**, Sciences and Technology of Sea, Biomedicine and Life Sciences, Transport and Building)
- ★ The needs and requirements from researchers

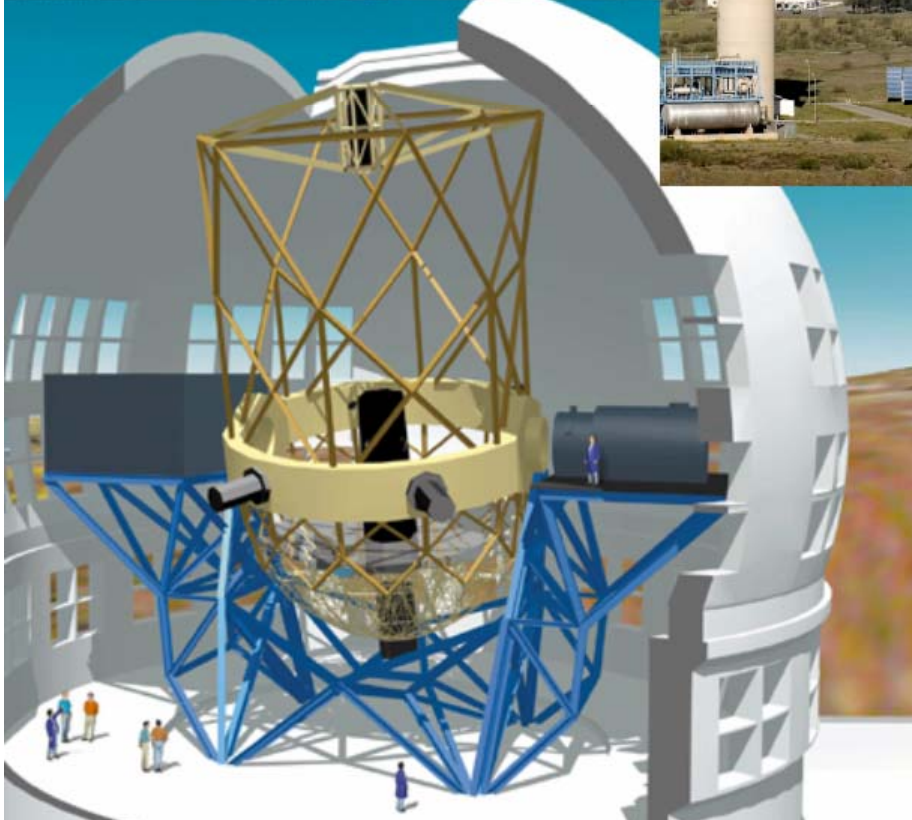
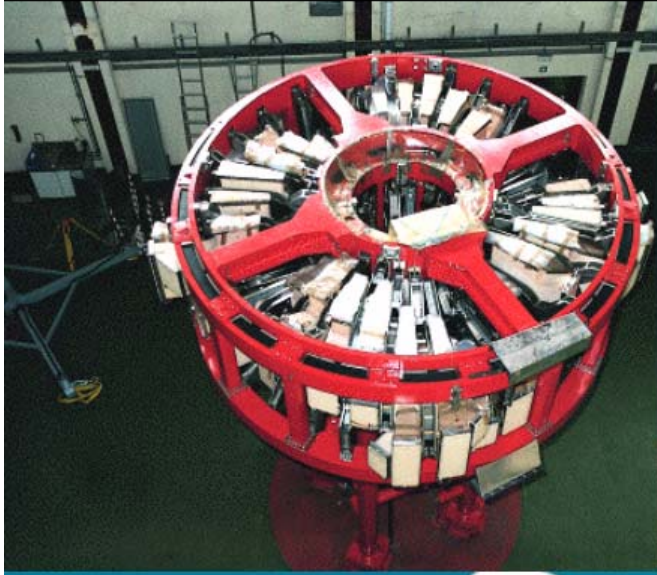




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Current situation



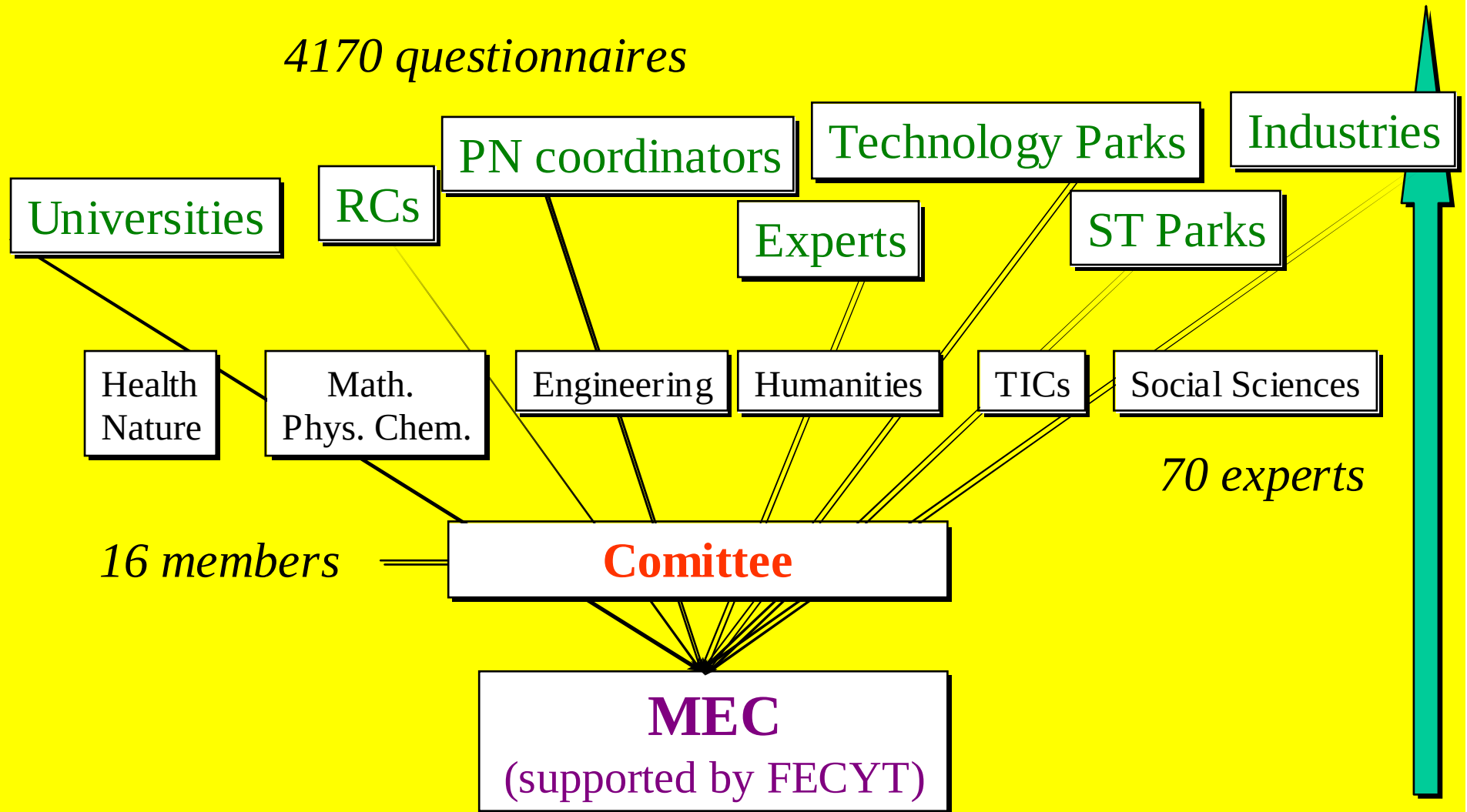




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Spanish Roadmap

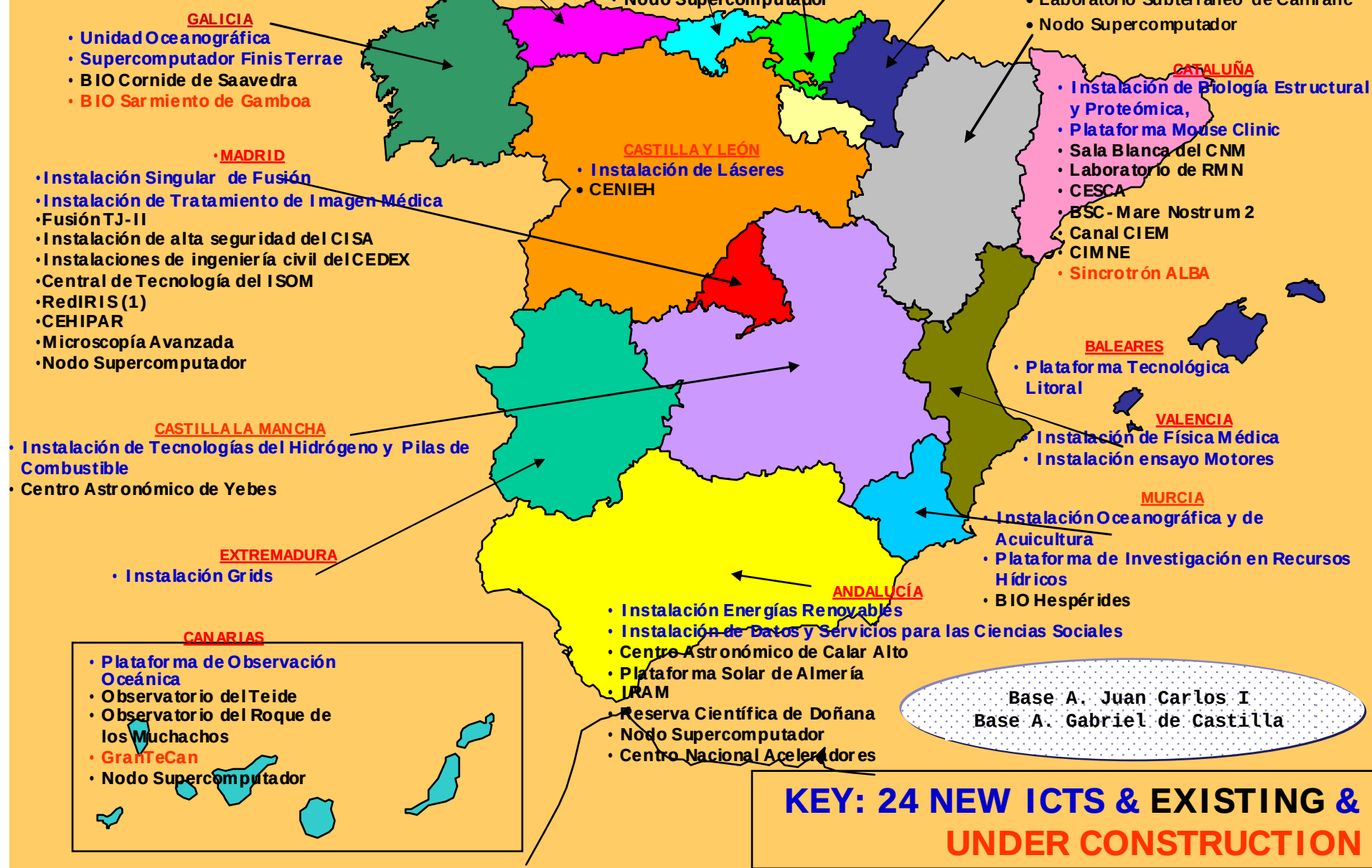
Elaboration process (1. bottom-up)





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ICTS Roadmap



The e-Science Network

- ★ First bottom-up, now catalyzing the actually developed activities with top-down actuations from the MEC trying to co-ordinate the resources: networking, Grid, HPC, sensors, visualization, etc, in order to satisfy the needs of the users



PIC



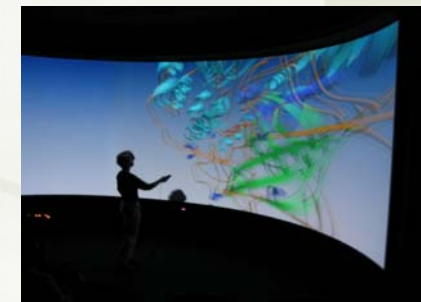
<http://www.cesga.es/ga/Recetga/Infraestructuras/AccessGrid/accessgrid.html>

Objectives



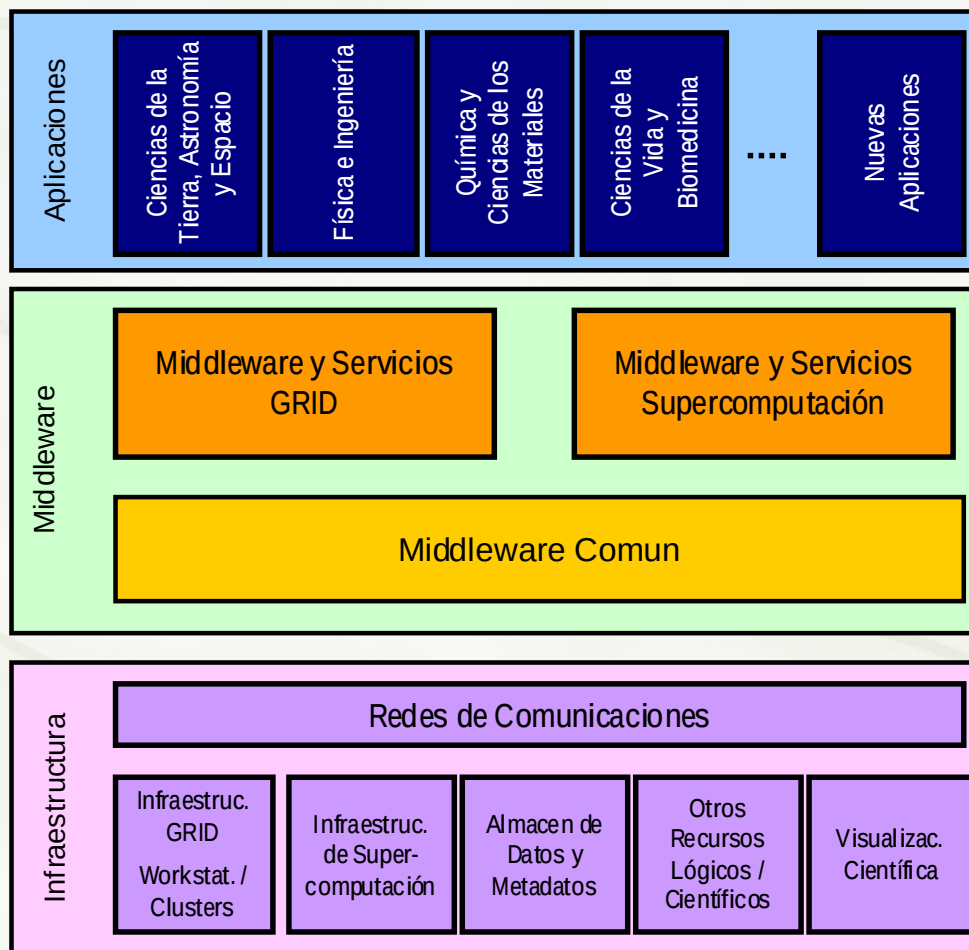
O.Pierre Auger

- ★ To promote and co-ordinate the e-Science in Spain
- ★ To be the Spanish contact for the e-Science activities
- ★ Co-ordinate the infrastructures from the point of view of:
 - ★ Investments, management and interoperability and the services to the end users
- ★ Co-operation with other projects
- ★ Dissemination and training
- ★ To foster the collaboration in e-Science with other countries, mainly with Portugal and Latin-American countries.

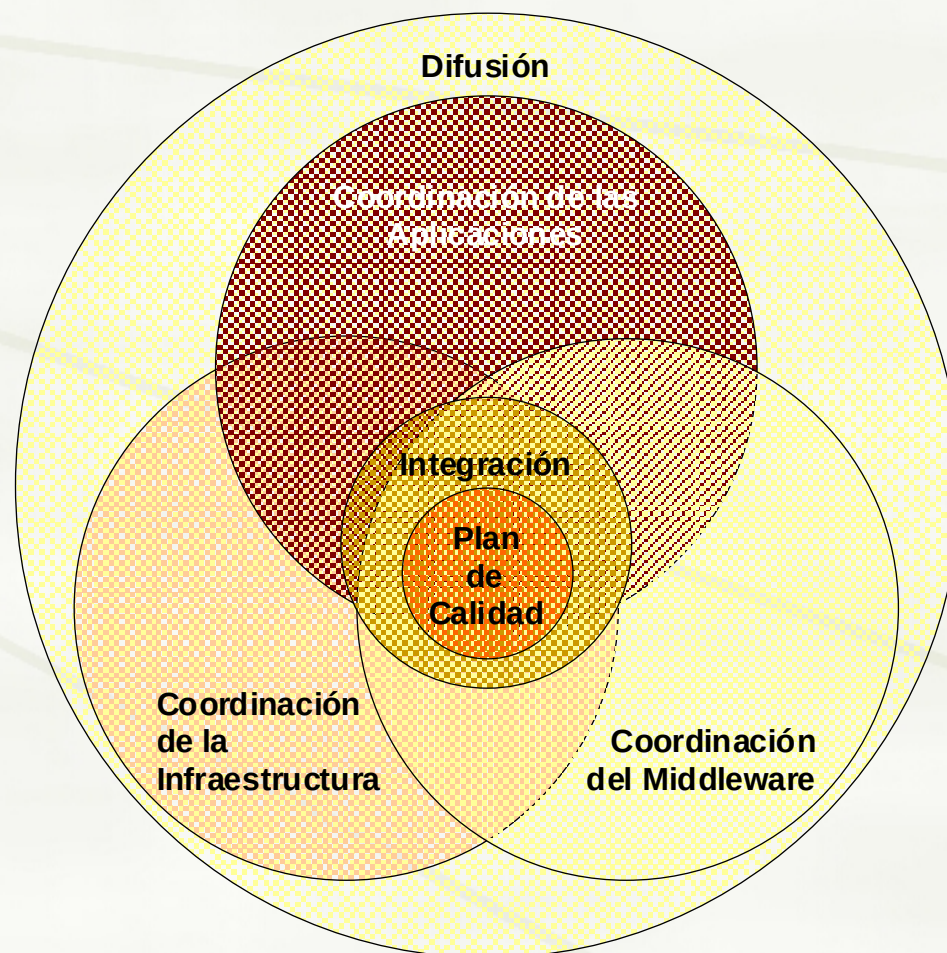


UNAM

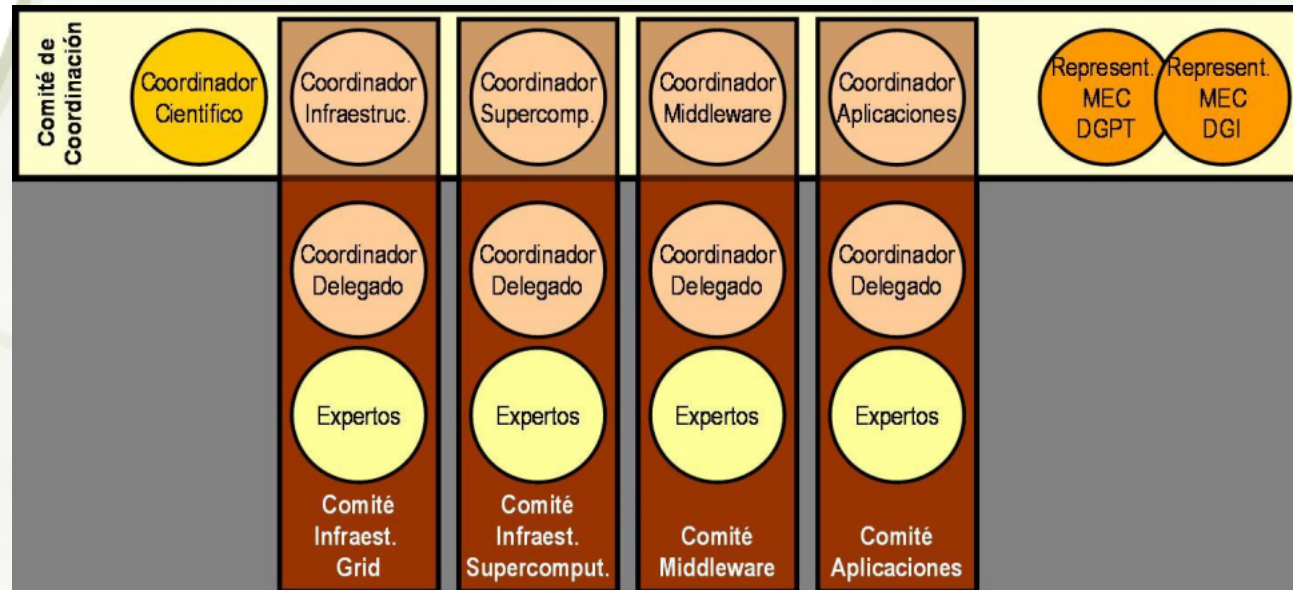
Infrastructure



Interactions between areas



Co-ordination structure



- ✦ Open structure
- ✦ Global co-ordination, interaction using with local agents
- ✦ Co-ordination with the Ministry of Education and Science. And feedback to the Policy.
- ✦ Vicente Hernández, scientific co-ordinator

Connected to Europe

- ★ ESFRI roadmap
- ★ e-IRG (Infrastructure Reflection Group)
- ★ To participate in the creation of EGI (European Grid Initiative)
- ★ Tier0 of the European HPC (initiative PACE)

And of course:

The co-operation with Portugal: **Ibergrid**

Next steps

- ★ Response of a core group to the call of the MEC in order to build the e-Science network
- ★ Start of the activities organized around the network
- ★ Development of the NGI (National Grid Initiative)
- ★ Evolution of RedIRIS to use a global dark fibre redundant network, and a direct connection to the Portuguese network