

GÉANT –a European Research Infrastructure

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DANTE

- What is DANTE?
- What is GÉANT?
 - The GÉANT consortium
 - The GÉANT network
- Benefits of GÉANT
 - Why is GÉANT different?
 - Who uses GÉANT?
- The GÉANT cost model
 - Funding of GÉANT
 - Cost-effectiveness



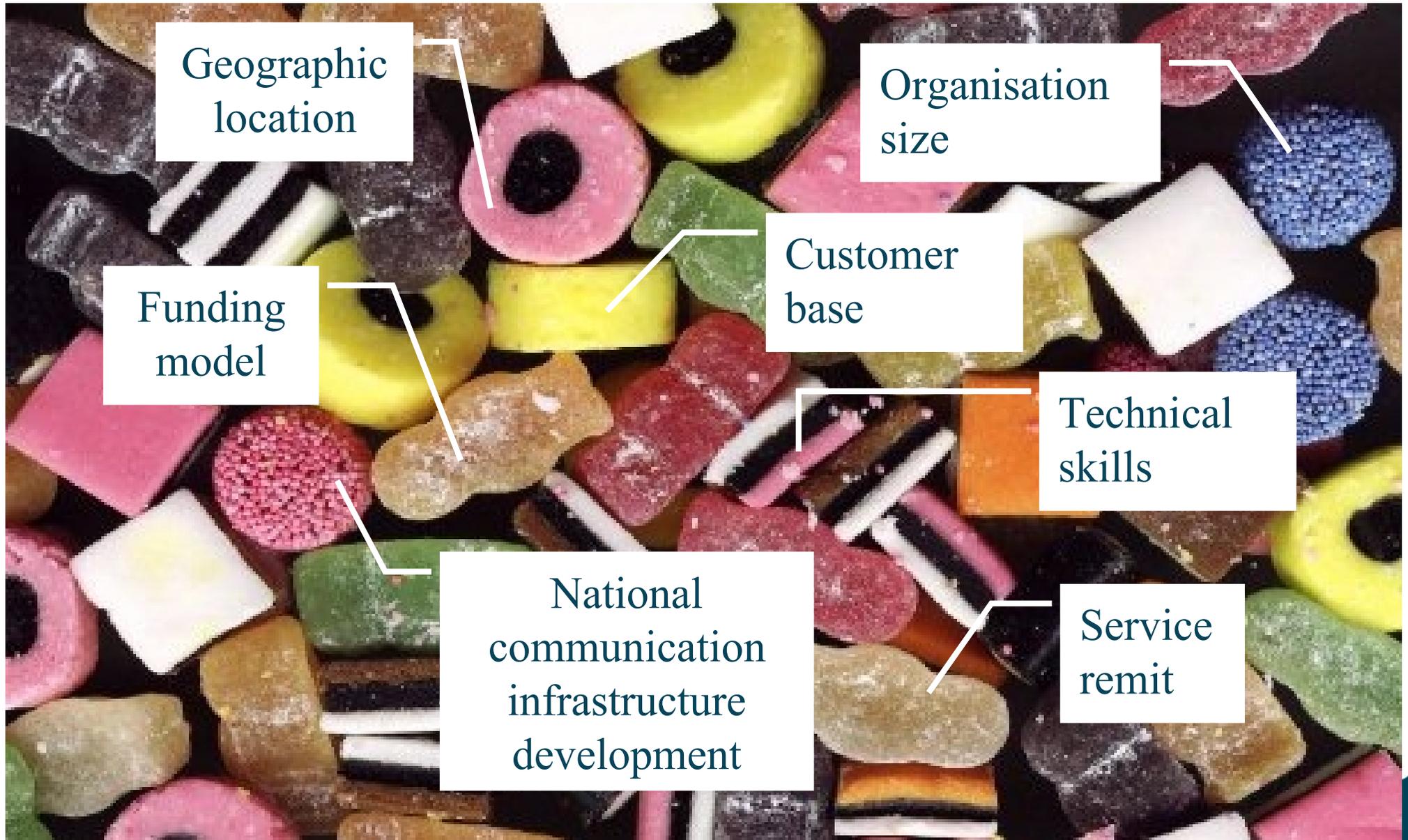
What is DANTE?



- Not for profit
- Cambridge, UK, based
- Wholly-owned by European NRENs
- Operates international networks for research and education:



The GÉANT Partnership: diversity of NRENs



Geographic location

Organisation size

Customer base

Funding model

Technical skills

National communication infrastructure development

Service remit

- Total cost ca 182 M€ over 4 years
- Approximately 51% EC funding
- 38 project partners (NRENs + DANTE + TERENA)
- Ca 500 person years over 4 years for service development, research, and networking
- Began in April 2009

- Challenges:
 - building a distributed virtual team
 - Flexibility and efficiency



The GÉANT Partnership



- 34 Project Members

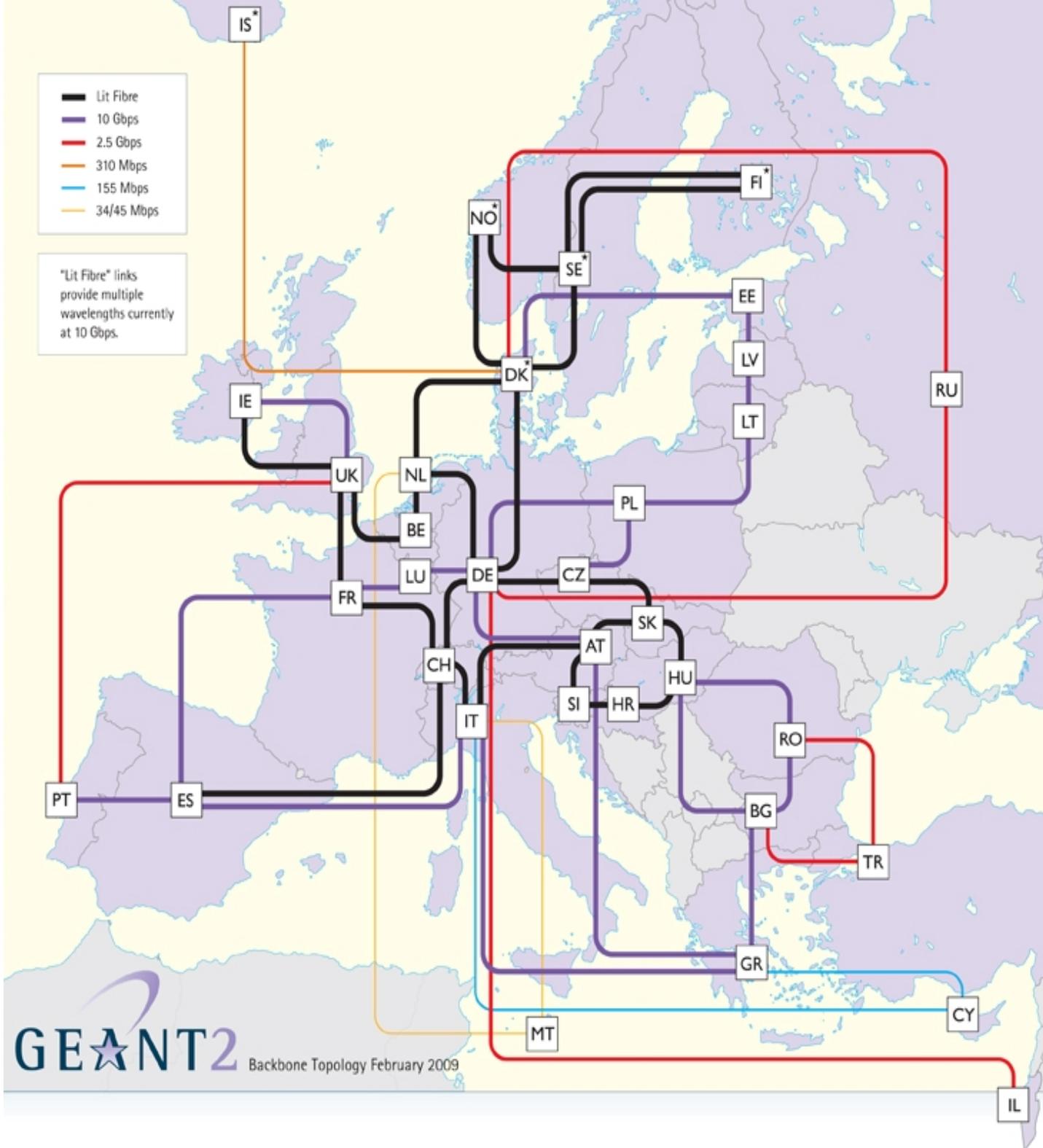
- An expanding consortium...

- All EU member states
- New partners in South Eastern Europe
- Associate and co-operate with Eastern European partners



GÉANT

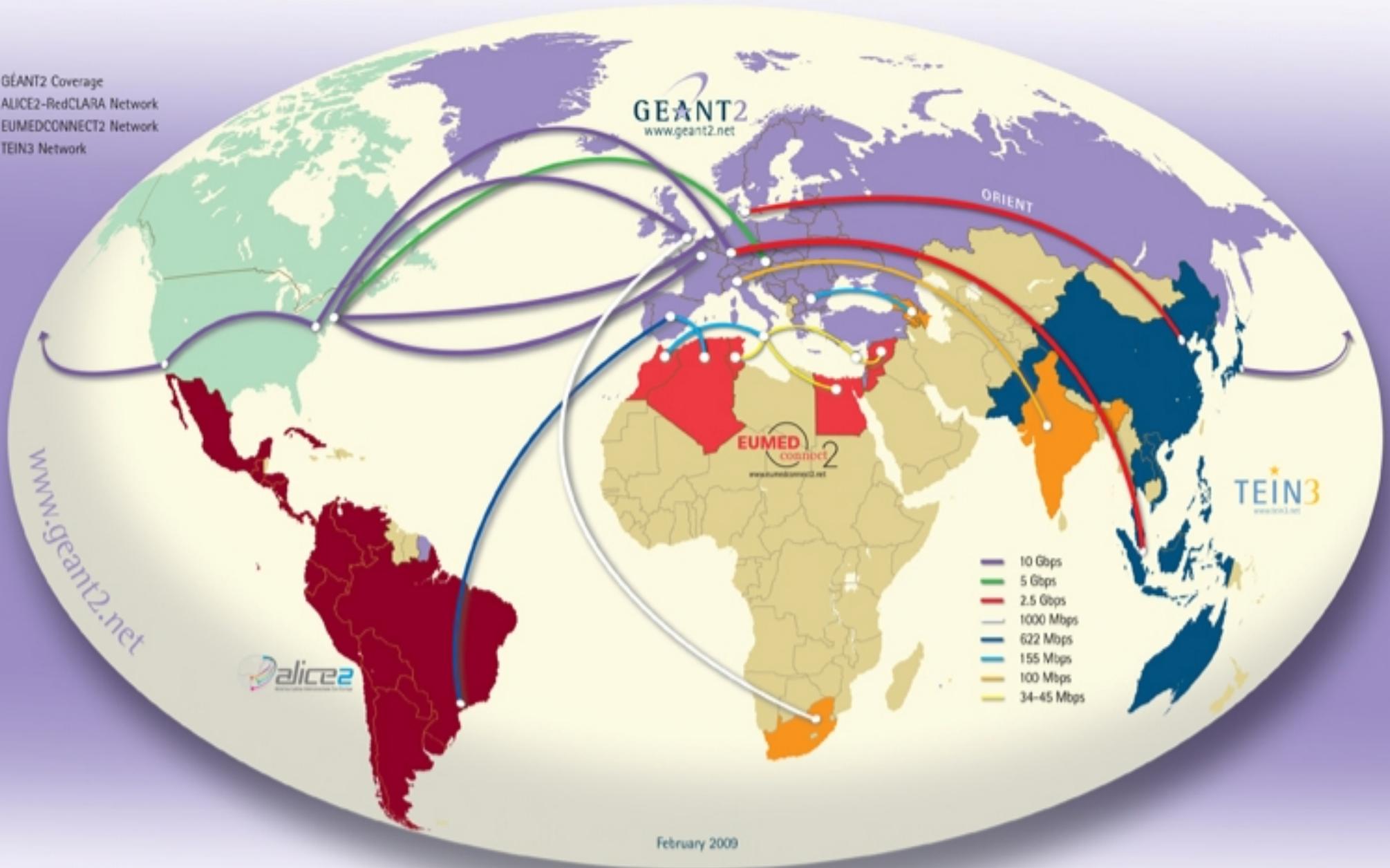
- 38 European Countries
- Dark Fibre
- Hybrid network:
 - IP Packet routed
 - Switched point-to-point - Circuits
 - Dedicated wavelengths - Lambdas



GÉANT global connectivity



- GÉANT2 Coverage
- ALICE2-RedCLARA Network
- EUMEDCONNECT2 Network
- TEIN3 Network



Benefits of GÉANT



Why is GÉANT different?



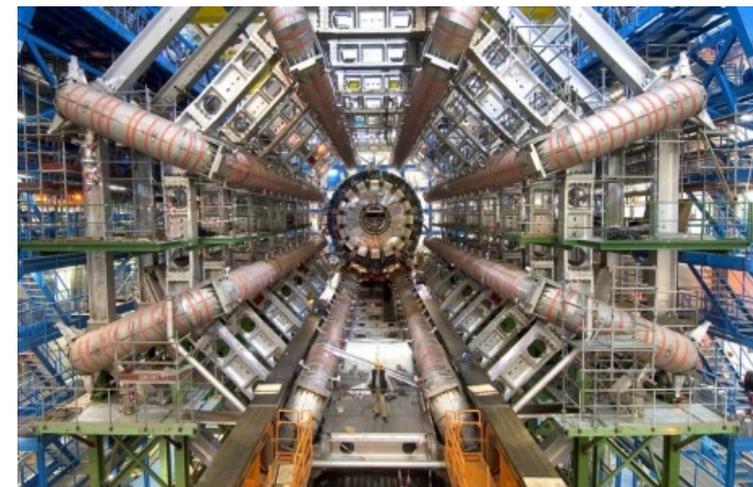
- Dedicated to research and education
- Un-congested
- Advanced services
- Key part of EC research strategy



Who uses GÉANT? Projects Using GÉANT & NRENs



- Sichuan Earthquake Recovery Efforts
- Radio Astronomy e-VLBI
- EGEE II
Distributed computing across Europe
- Large Hadron Collider at CERN
The world's largest scientific experiment



The GÉANT Cost Model: funding of GÉANT



Who pays for GÉANT?

- EC = 50%
- NREN consortium = 50%
- Total operating cost = €40M/year

Special Associate Partners (Ukraine)

- Below 1Gbps access –no charge
- Pay cost of access circuit only

The cost-sharing model

- Cross subsidising across Europe
- Value for smaller countries

Subscription based upon:

- Cost of local circuits
- Interconnection speed

DANTE World Service

- Commercial Internet access for R&E
- Bulk-buying power -25% reduction for 2009
- Usually much cheaper than local market

Aim is to provide maximum value-for-money



Summary



- GÉANT is an essential European infrastructure for advanced research and education
- GÉANT forms an important part of EC research and education strategy
- GÉANT connects together **ALL** EU member states and many other countries –its value is universally recognised
- GÉANT is run on a not-for-profit basis and is subsidised at 50% by the European Commission
- Your support is much appreciated –GÉANT only has value because of the partner networks that it connects

Thank you for your attention!

