

Update on the TERENA Compendium, 2003



TNC/CUC 2003, Session 7b4
Bert van Pinxteren, TERENA

<http://www.terena.nl/compendium>



Compendium: product of the COM-REN project

- A project funded by the Information Society Technologies Programme of the Commission of the European Communities.
- This presentation does not represent the opinion of the European Community; the European Community is not responsible for any use that might be made of data appearing in this presentation.
- Compendium Review Panel: Lajos Bálint, Marko Bonac, Urs Eppenberger, Sabine Jaume-Rajaonia, Mike Norris.



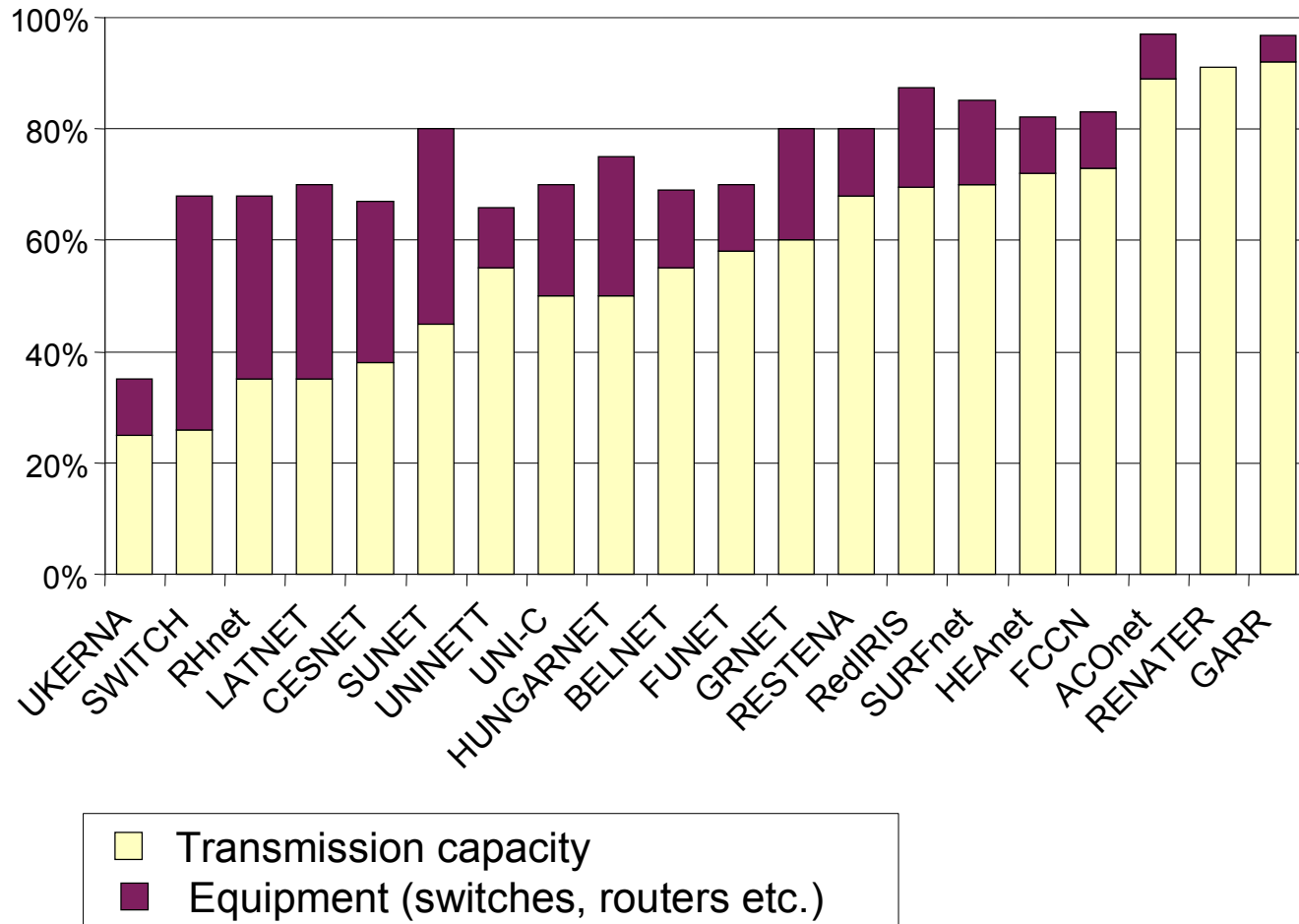
A message for our sponsors...

Total NREN budgets, EU and EFTA countries:

300 MEUR



... and what do they spend it on?

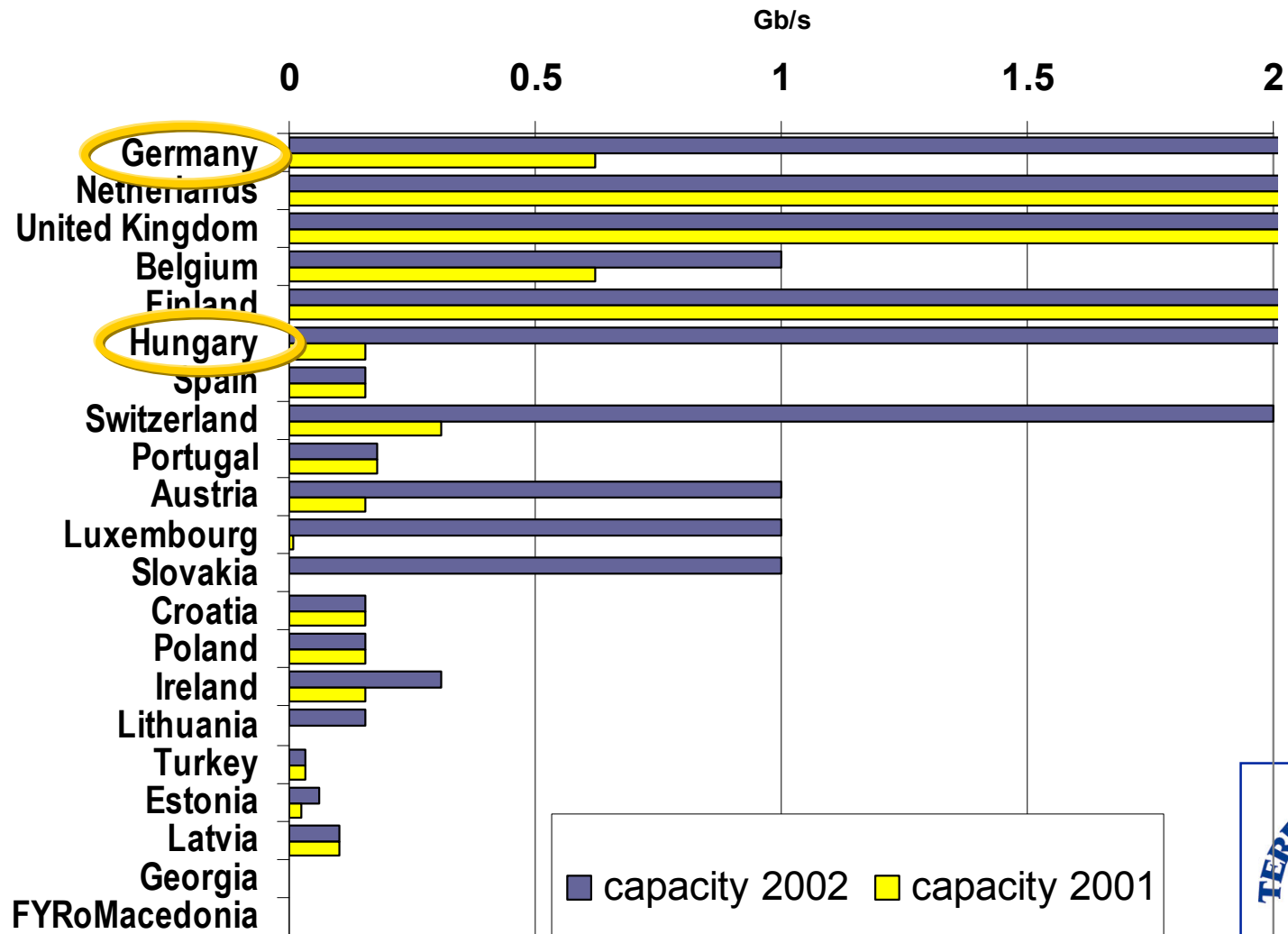


Structure of talk

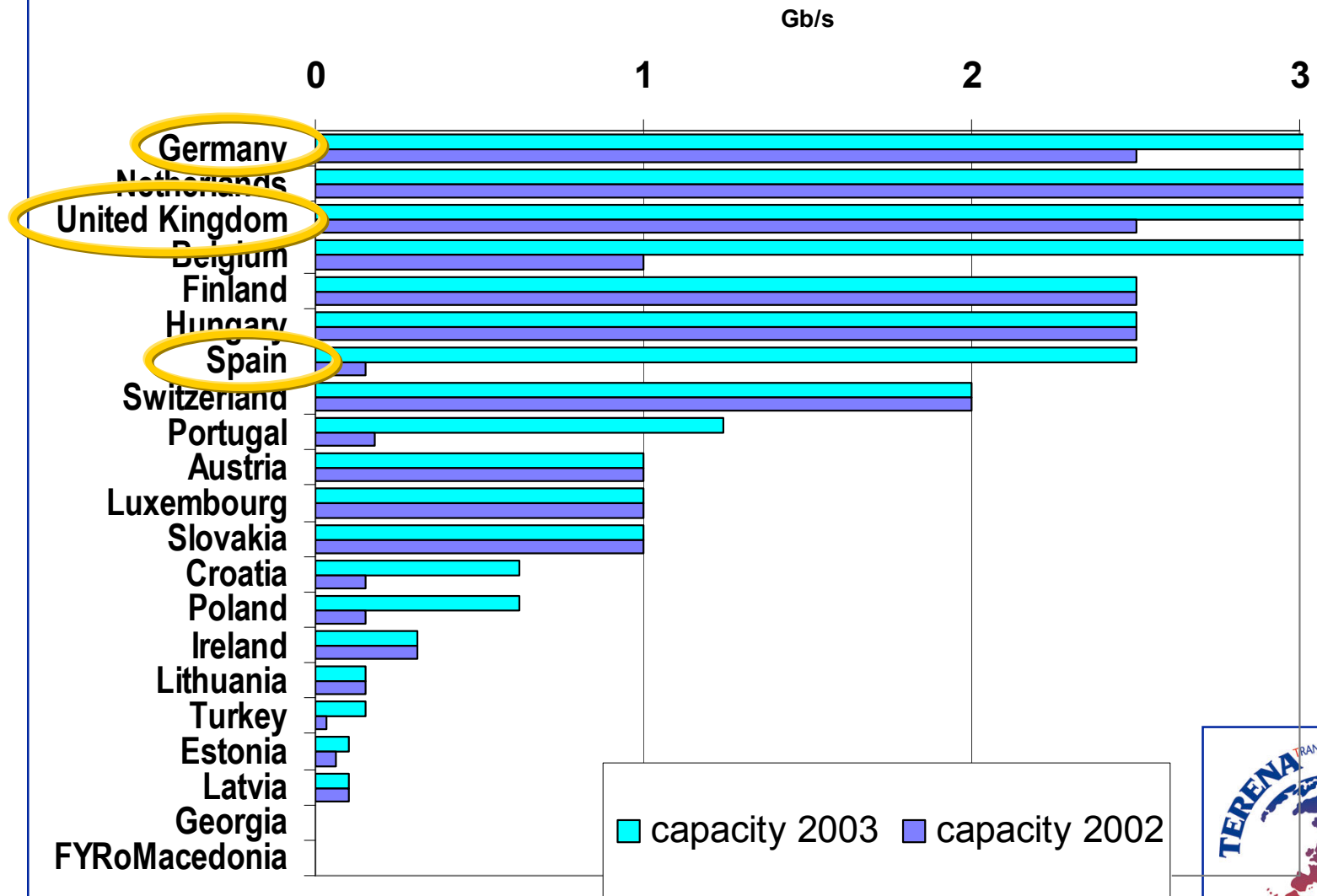
- Some new data and trends:
 - Core Capacity on the network;
 - Connectivity and traffic;
 - The projected spread of IPv6
- Apples and oranges: some data and their problems:
 - Numbers of connected institutions;
 - Bandwidth for Universities;
 - Where is the ‘Digital Divide’?
- Questionnaire mongering
- Areas for further consideration



Core capacity, 2001 and 2002

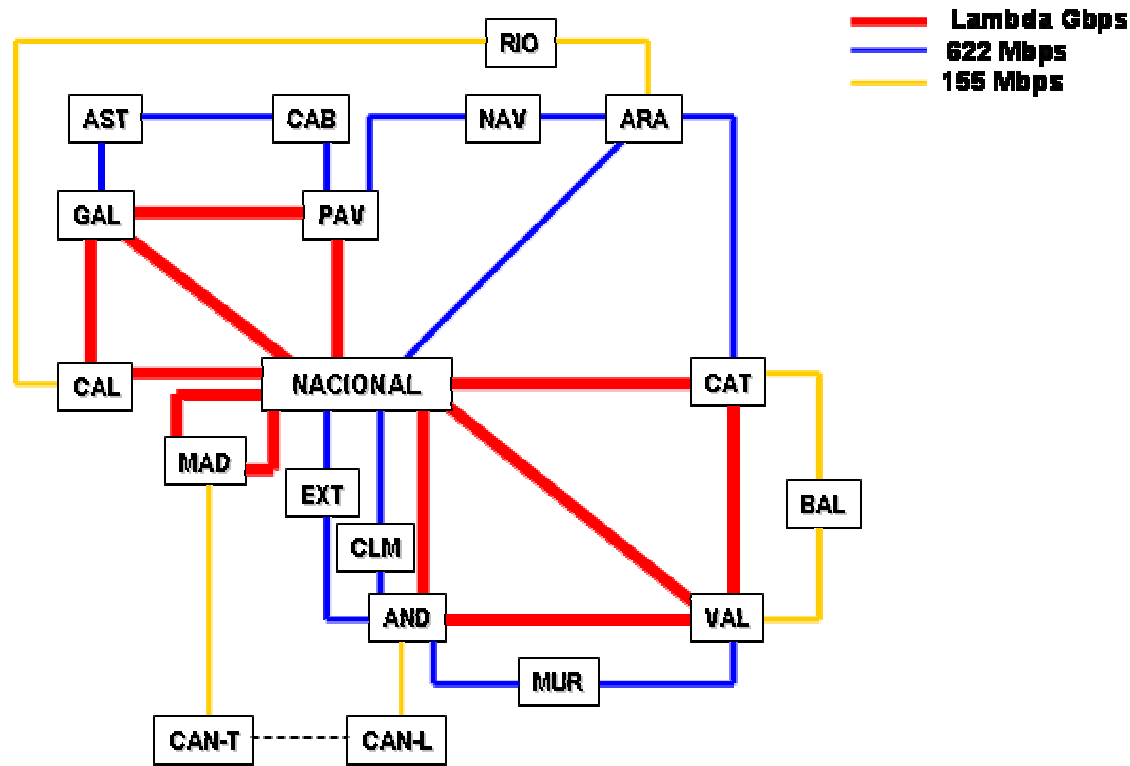


Core capacity, 2002 and 2003

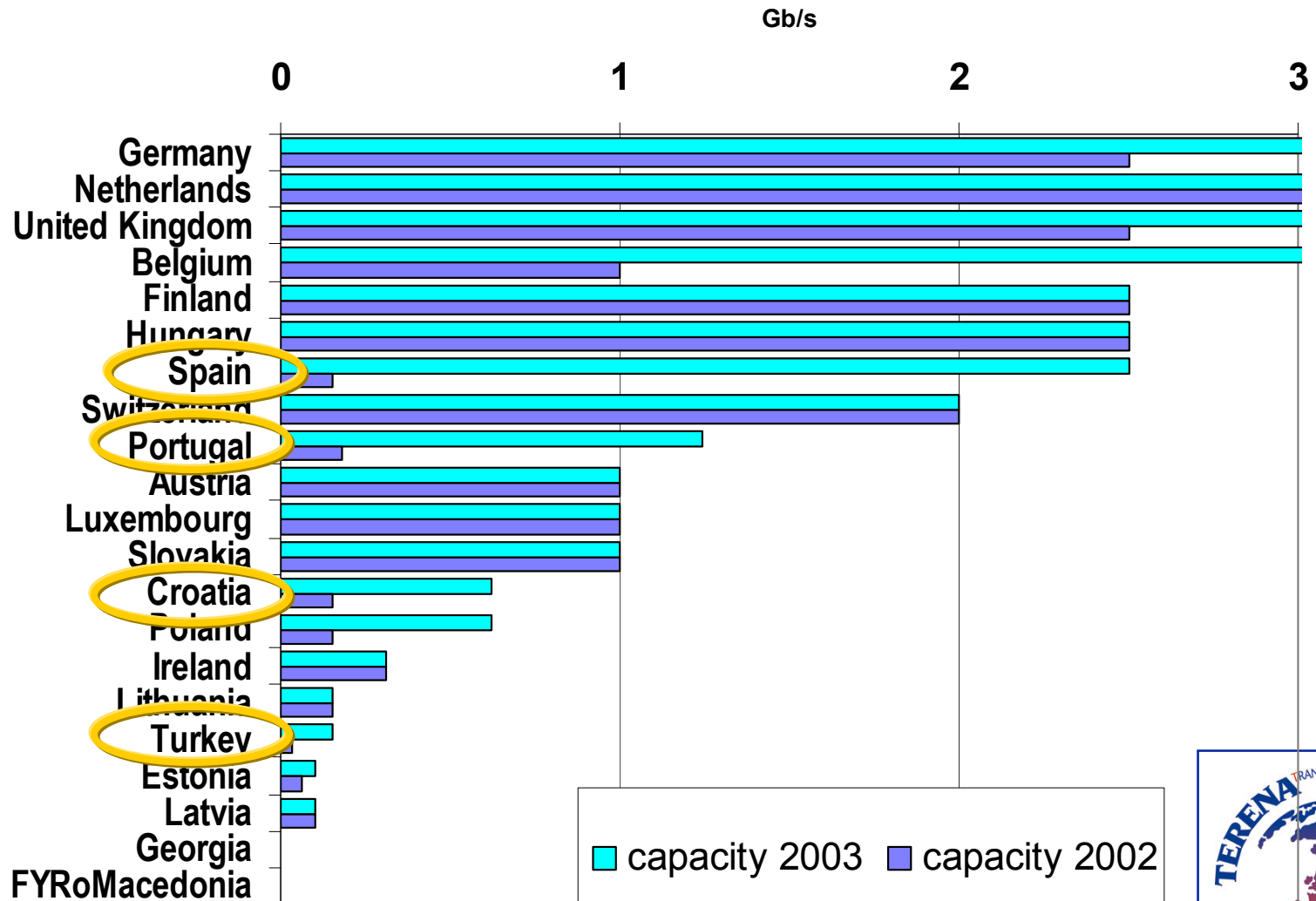


the case of Spain

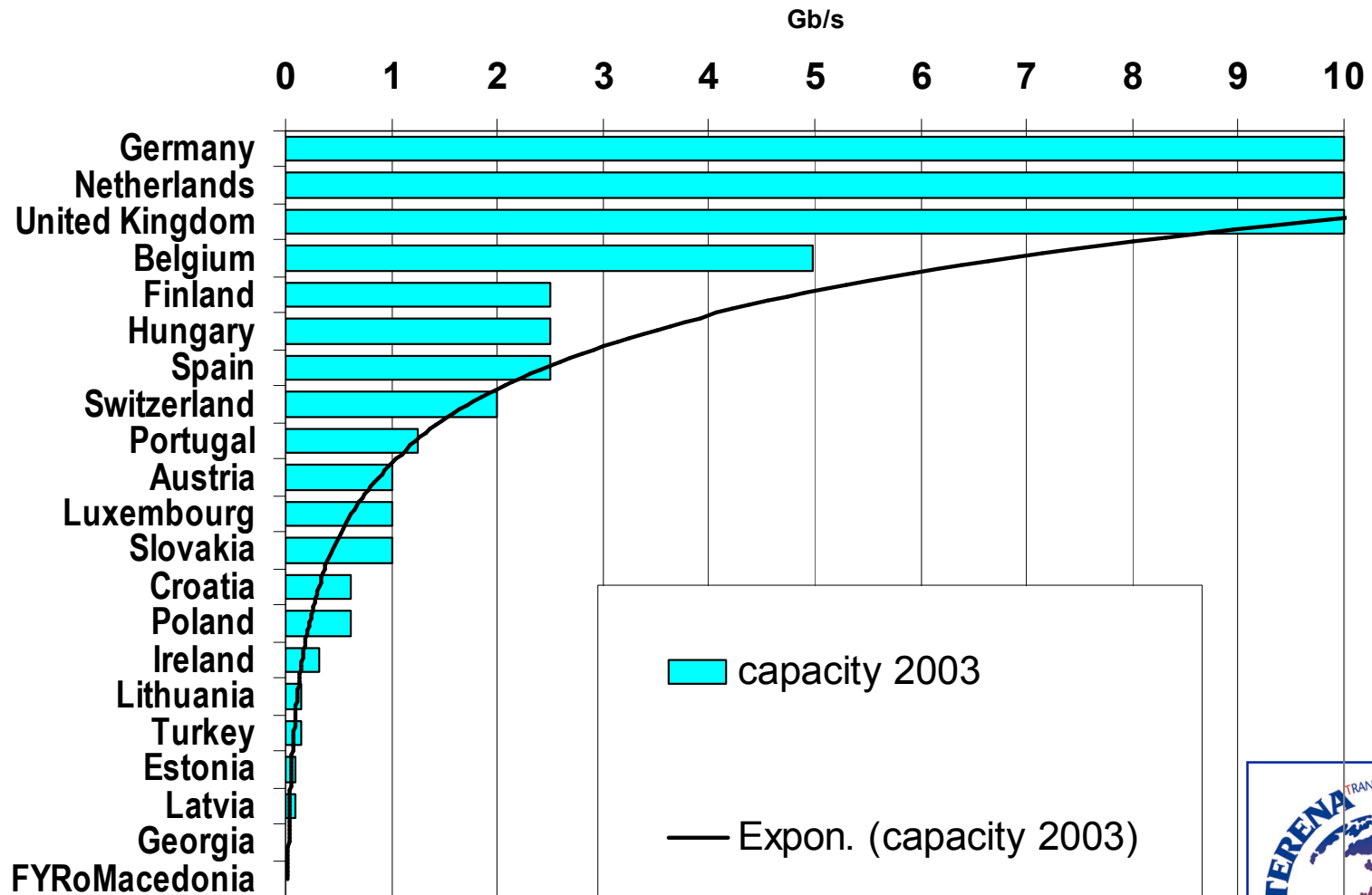
- early 2002: star topology with 155 Mb to all regional centres;
- 2003: backbone at 2.5 Gb.



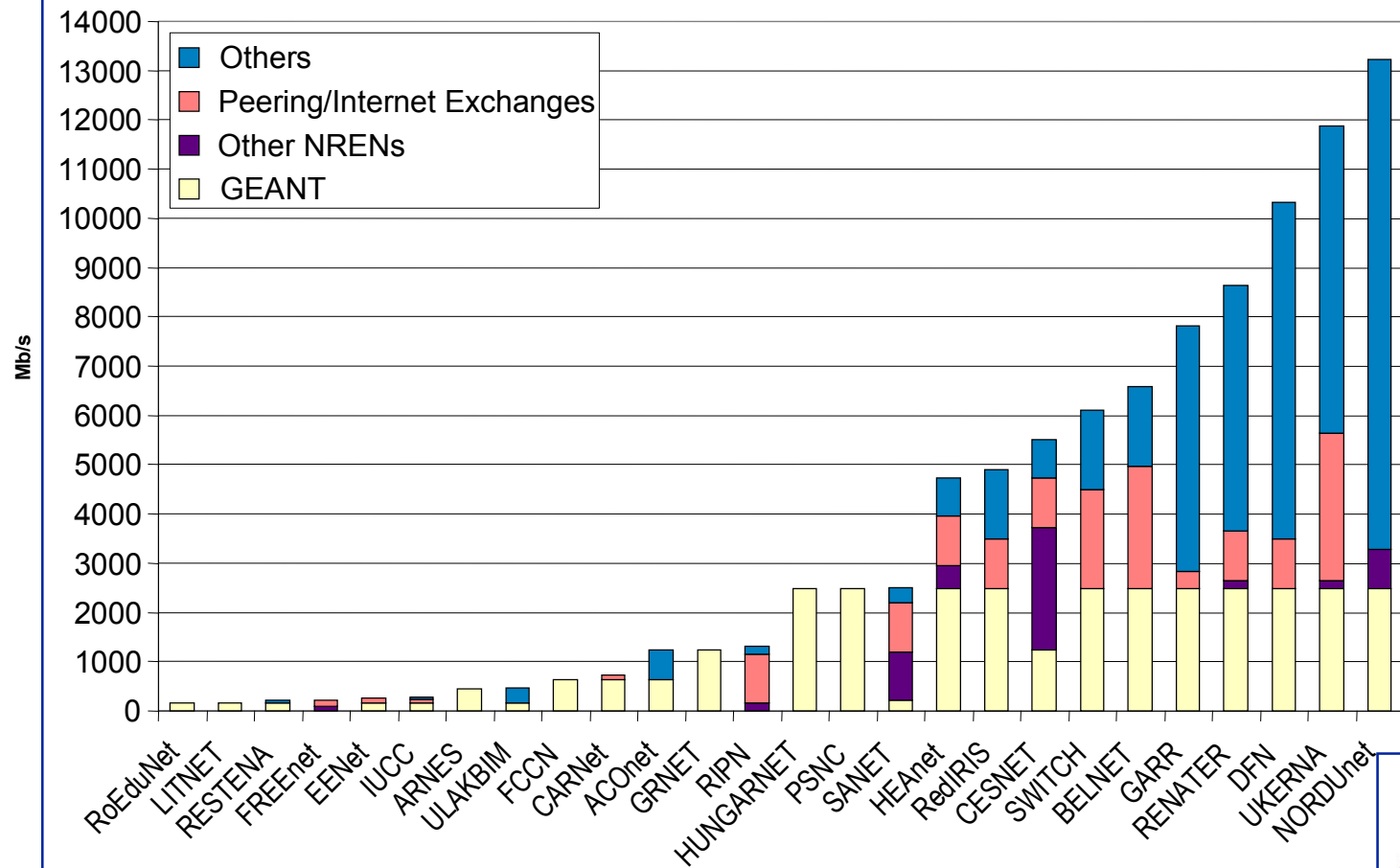
Core capacity, 2001 and 2002



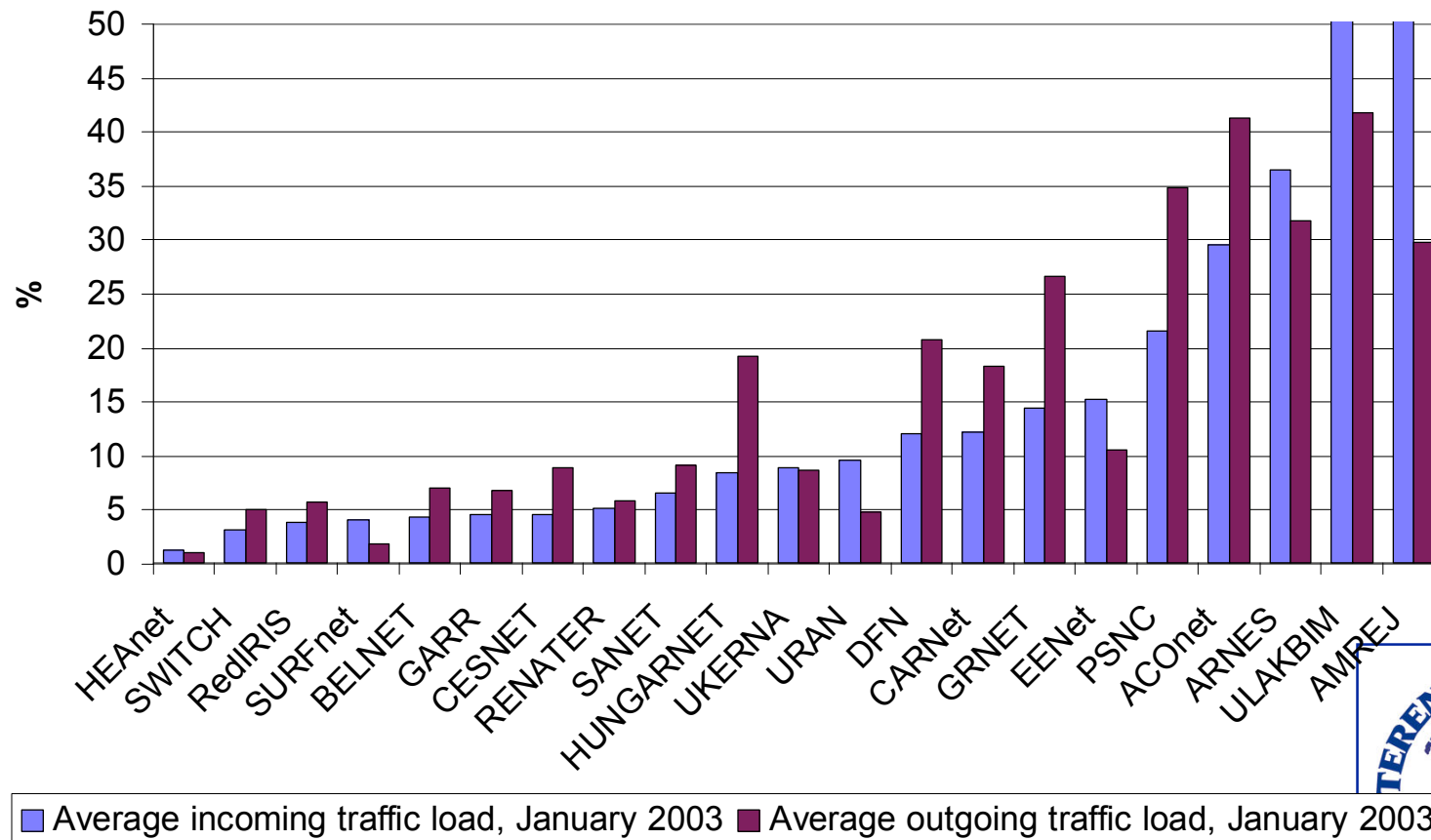
Core capacity on the network, 2003



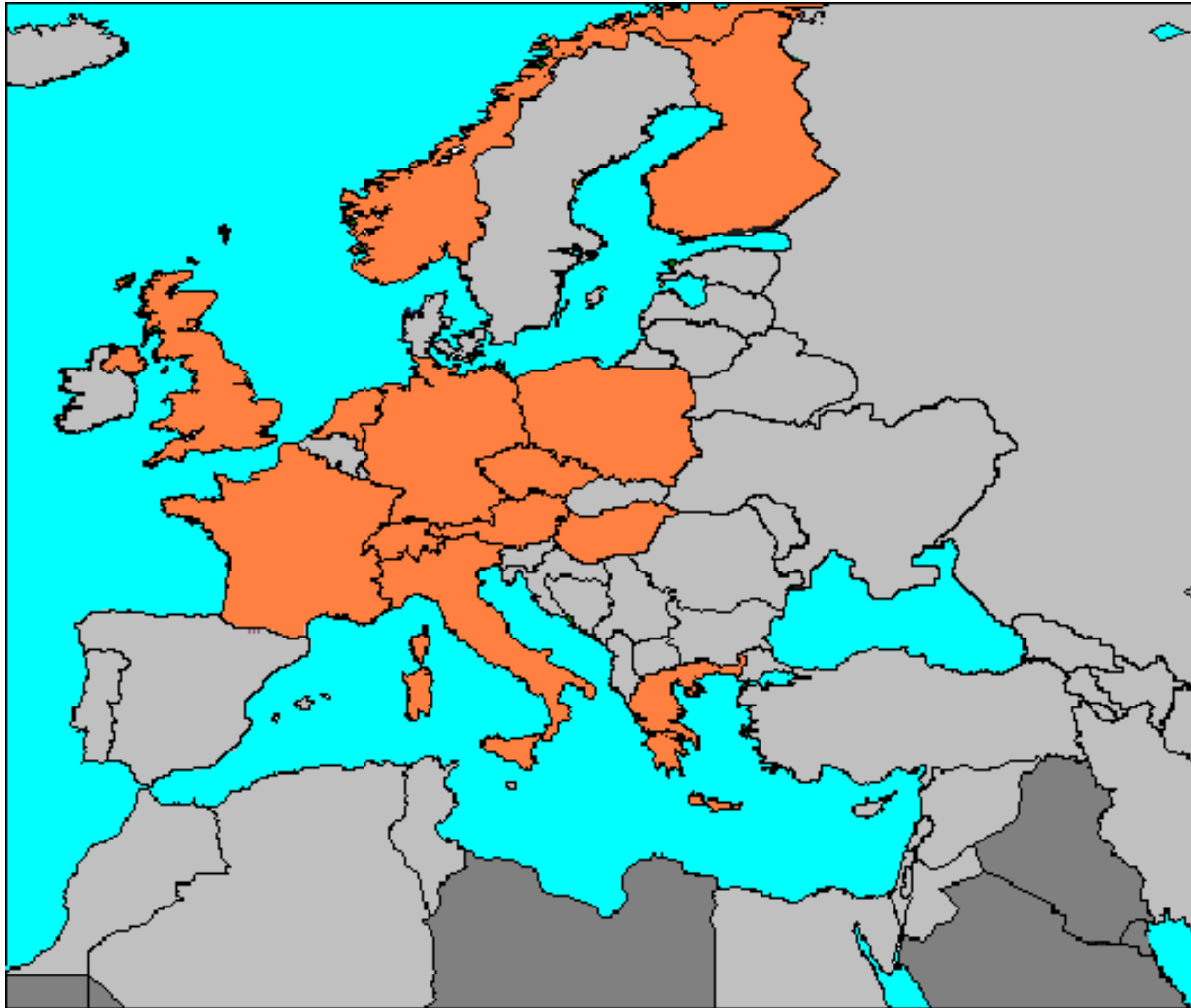
External connections, January 2003



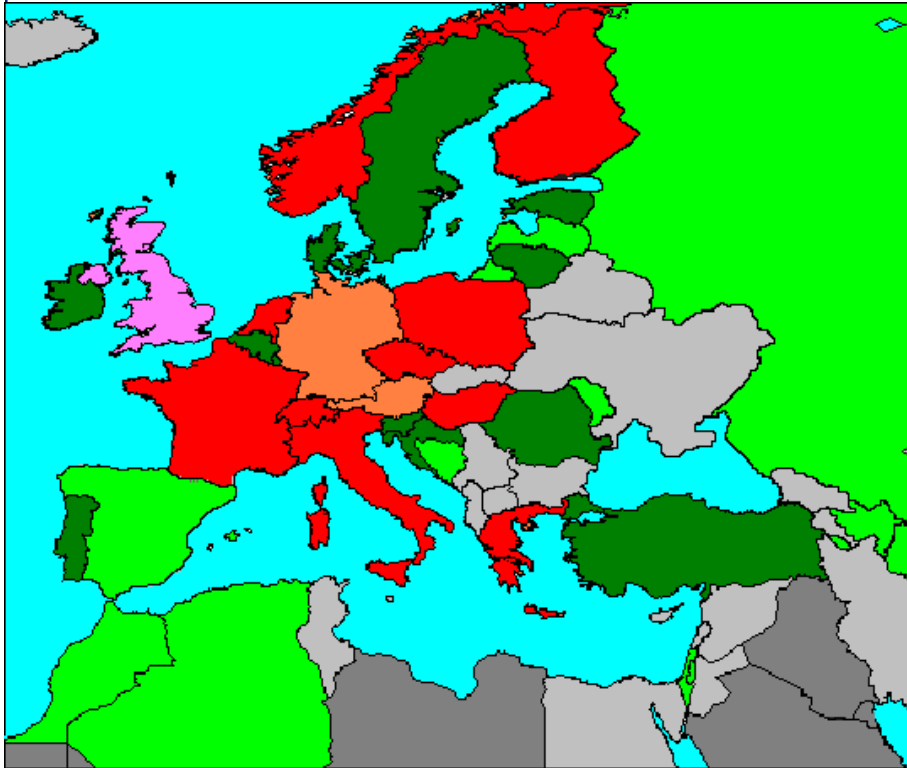
Average external traffic load, January 2003









IPv6: the 6net countries



IPv6: predicted implementation



-  **Between now and 2005**
-  **Later or undecided**
-  **Between now and 2005**
-  **Later or undecided**
-  **} No info provided**
-  **} No info provided**



Number of connected institutions (1)

FCCN Portugal: connects 8600 primary schools.

170

GR
366



OSI-AF/Azerbaijan

UL Doh

BI

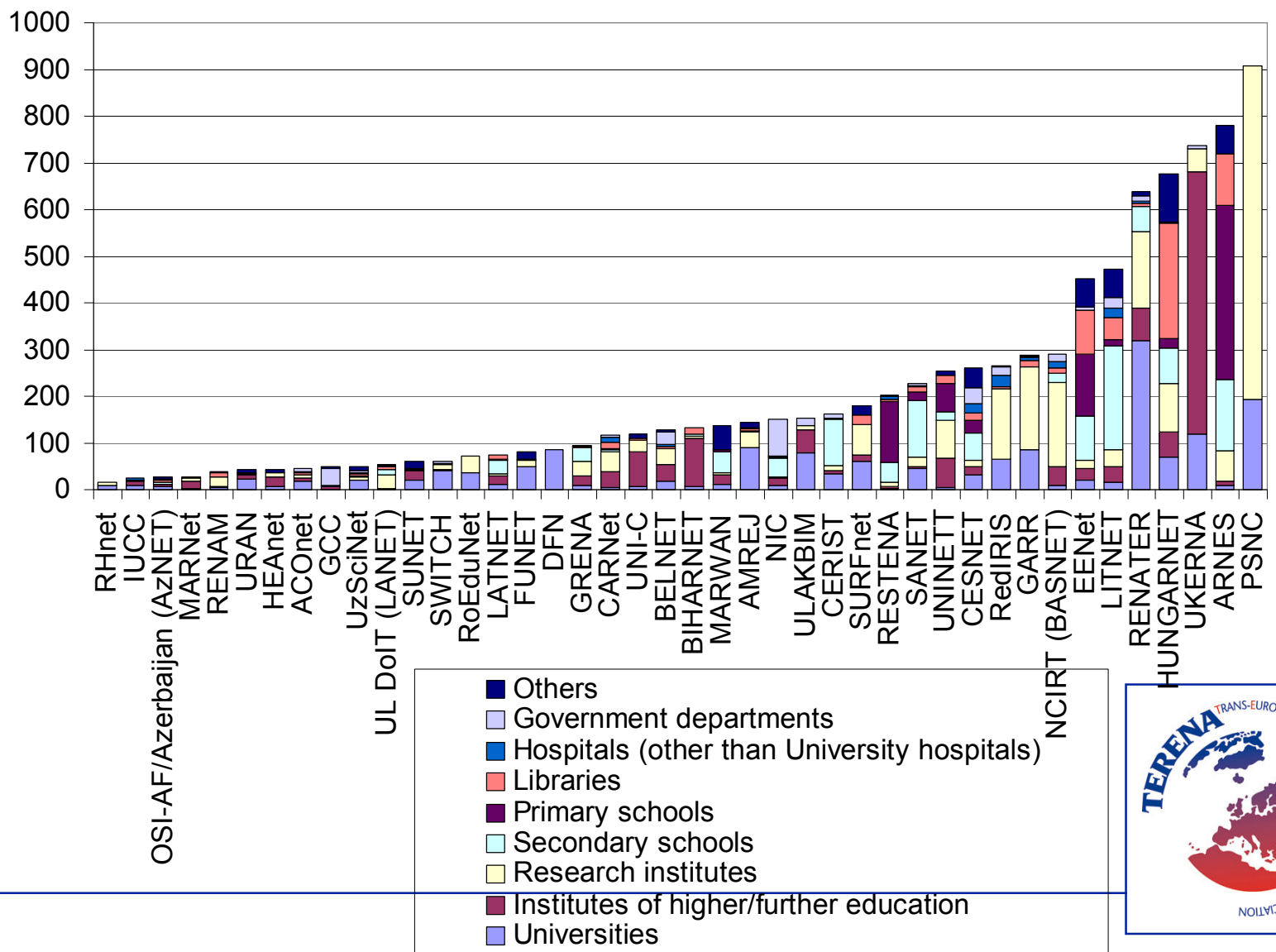
NCIRT

HUN

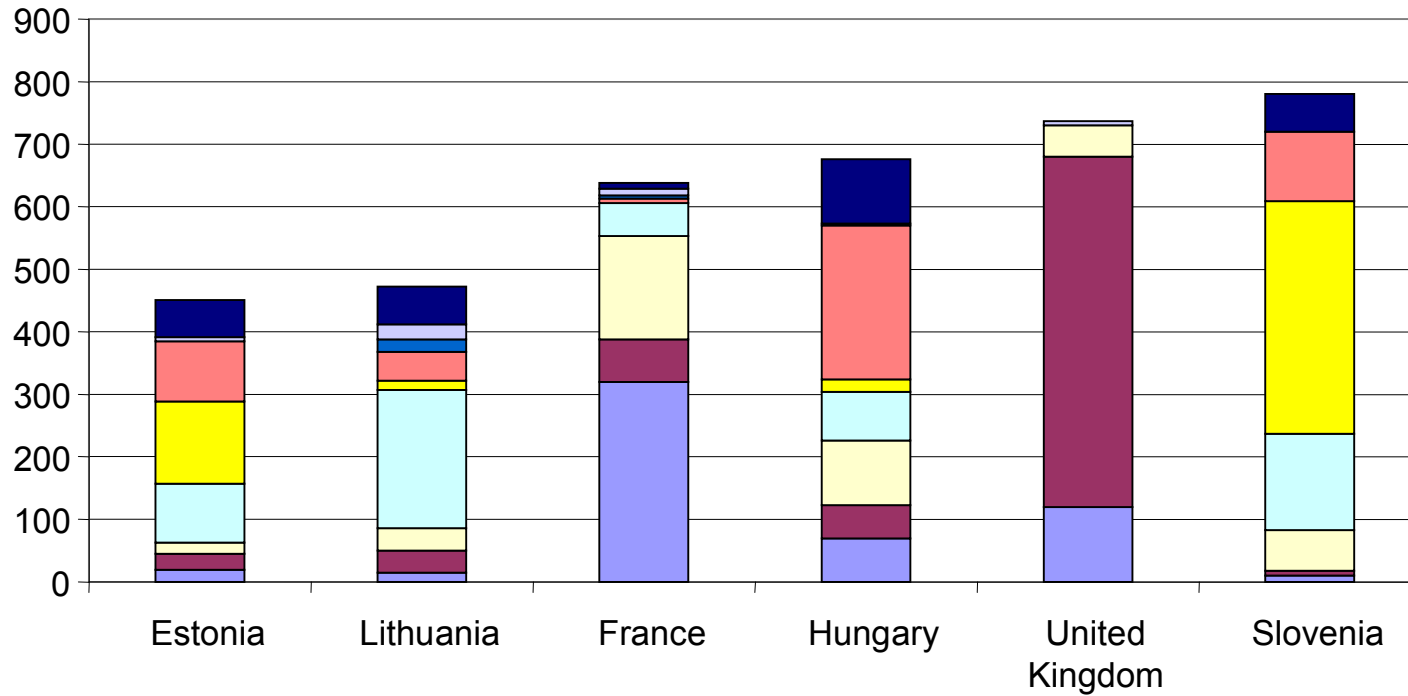
- | | |
|---|--|
| ■ Universities | ■ Institutes of higher/further education |
| ■ Research institutes | ■ Secondary schools |
| ■ Primary schools | ■ Libraries |
| ■ Hospitals (other than University hospitals) | ■ Government departments |
| ■ Others | |



Number of connected institutions (2)



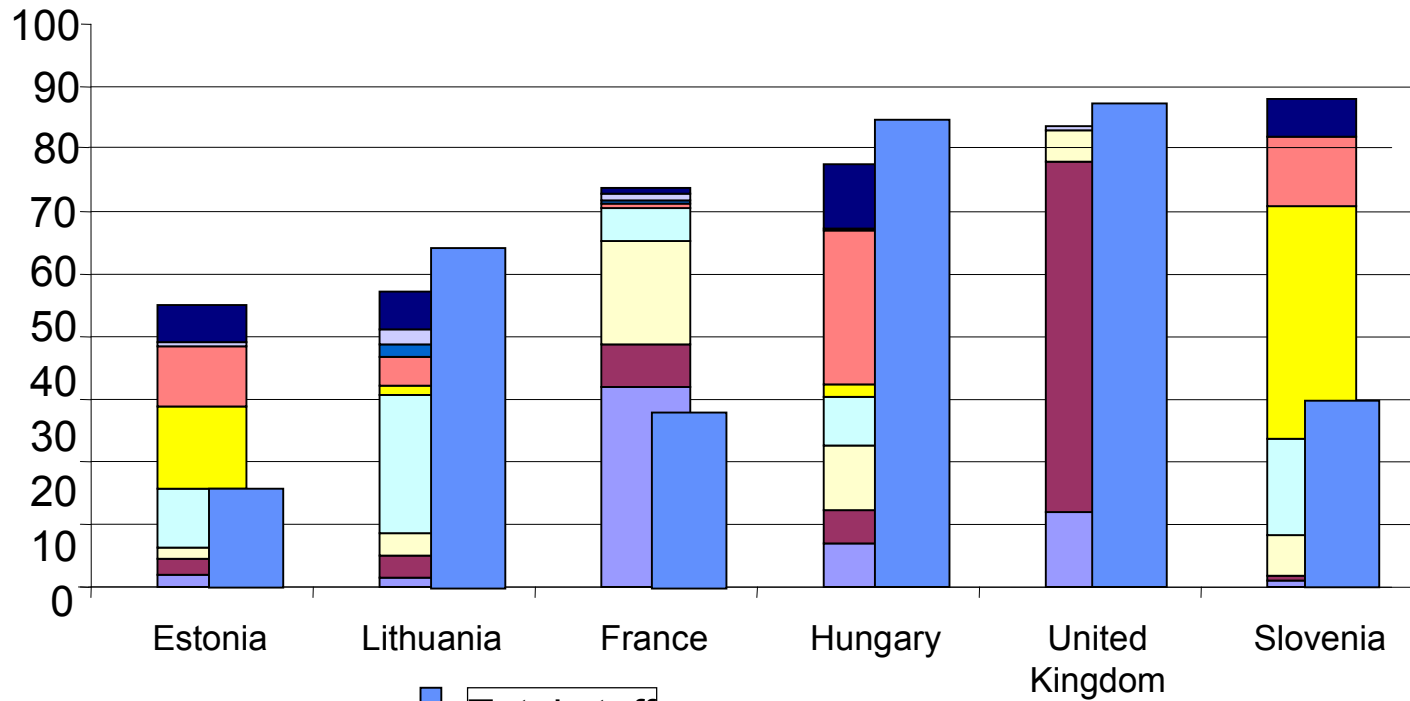
Number of connected institutions (3)



- Universities
- Research institutes
- Primary schools
- Hospitals (other than University hospitals)
- Others
- Institutes of higher/further education
- Secondary schools
- Libraries
- Government departments



Connected institutions and staff



- Universities
- Research institutes
- Primary schools
- Hospitals (other than University hospitals)
- Others
- Institutes of higher/further education
- Secondary schools
- Libraries
- Government departments



So, what explains it? Perhaps...

Level	Percentage of network levels paid through the NREN budget	
	RENATER	UKERNA
External connections	100	100
NREN backbone	100	100
Access network		95
Metropolitan or regional networks		85
Campus LAN		n/a



Bandwidth for Universities (1)

ISDN or lower:

± the EU *

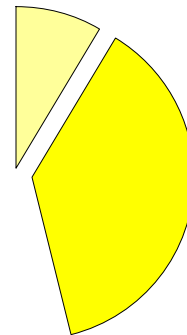
0%

up to 2 Mb/s:

30%

Accession States

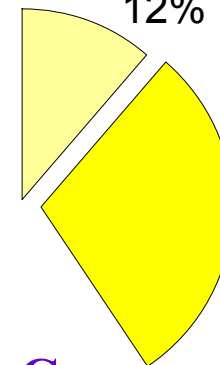
9%



37%

Other countries

12%



28%

EU plus Norway and Switzerland, but minus Germany



Bandwidth for Universities (2)

> 2 Mb, ≤ 10 Mb:

± the EU

> 10 Mb, ≤ 100 Mb :

Accession States

18%

18%

Other countries

22%

23%

23%

14%



Bandwidth for Universities (3)

> 100 Mb, < 1 Gb: 15%

≥ 1 Gb:

± the EU

10%

12%

6%

Accession States

13%

Other countries



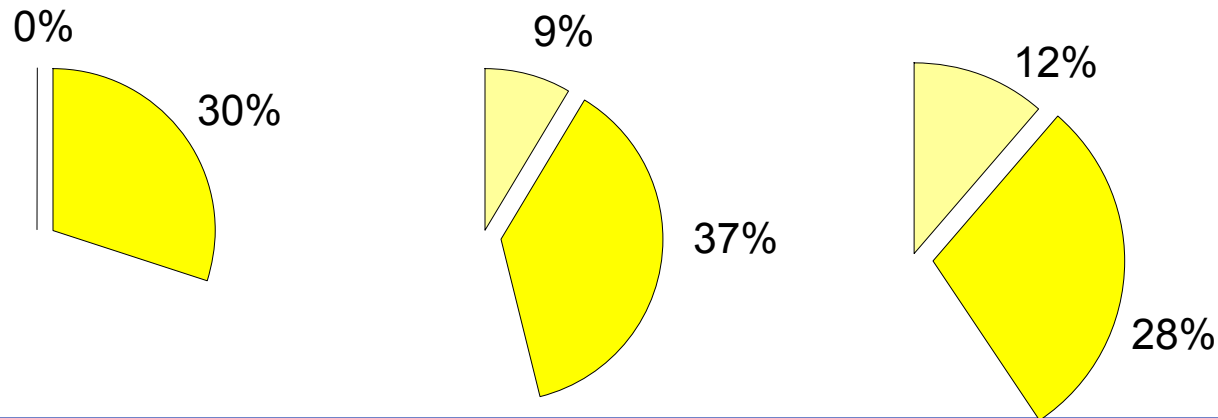
Caveats and questions...

- W
- H
- H
- ..



So, where is the 'digital divide'?

**It is certainly between countries....
but just as much within countries!**



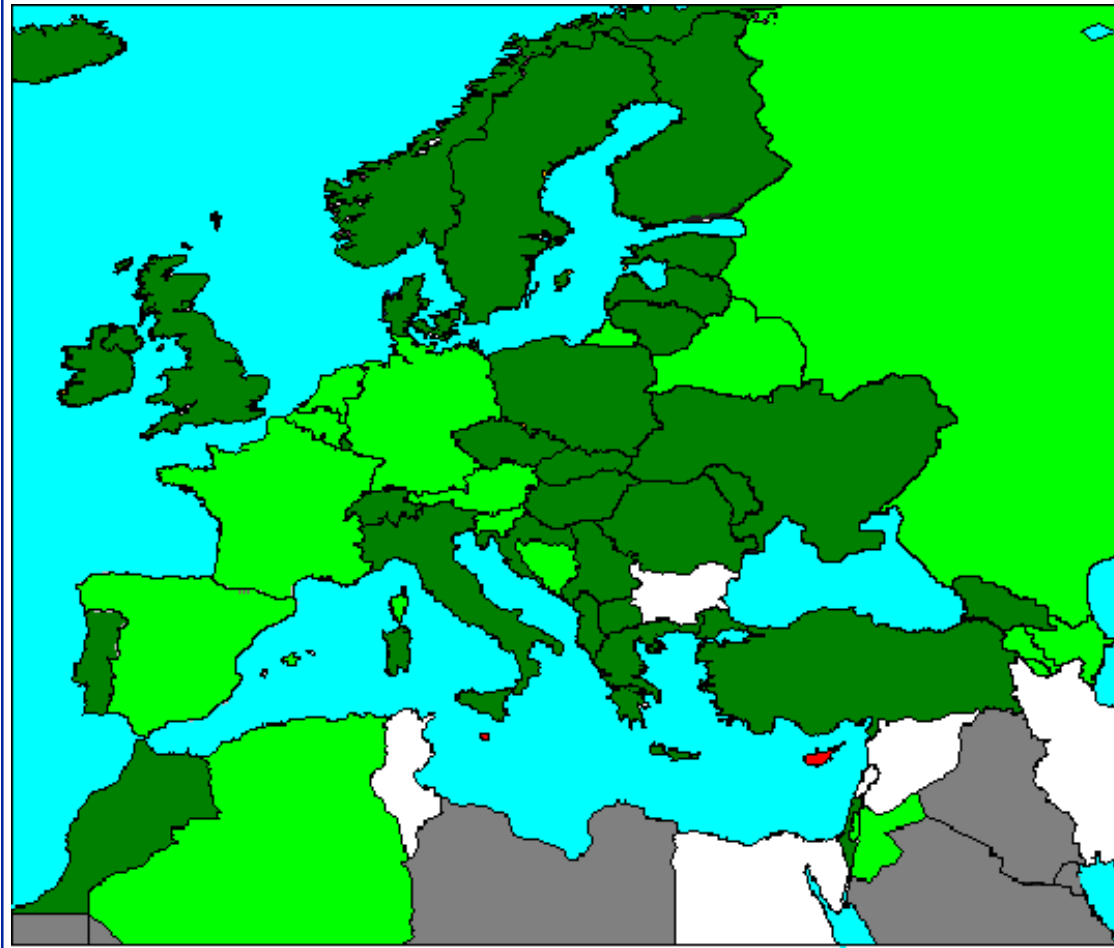
Questionnaire mongering: It's fun to send questionnaires!


- For IPv6
- For SERENATE
- For ... ?

**But trying to get answers is a
different story!**



Compendium 2003: responses received (*deadline: 7 March*)



-  **By 15 March**
-  **By 15 April**
-  **Too late**
-  **No response (still trying!)**
-  **No contact**



NRNs Feedback



- Request sent on 16th December 2002
- 11 of 28 NRNs have replied to our questionnaire
- From the remaining:
 - 4 NRNs present in today
 - 13 NRNs with no answer
 -

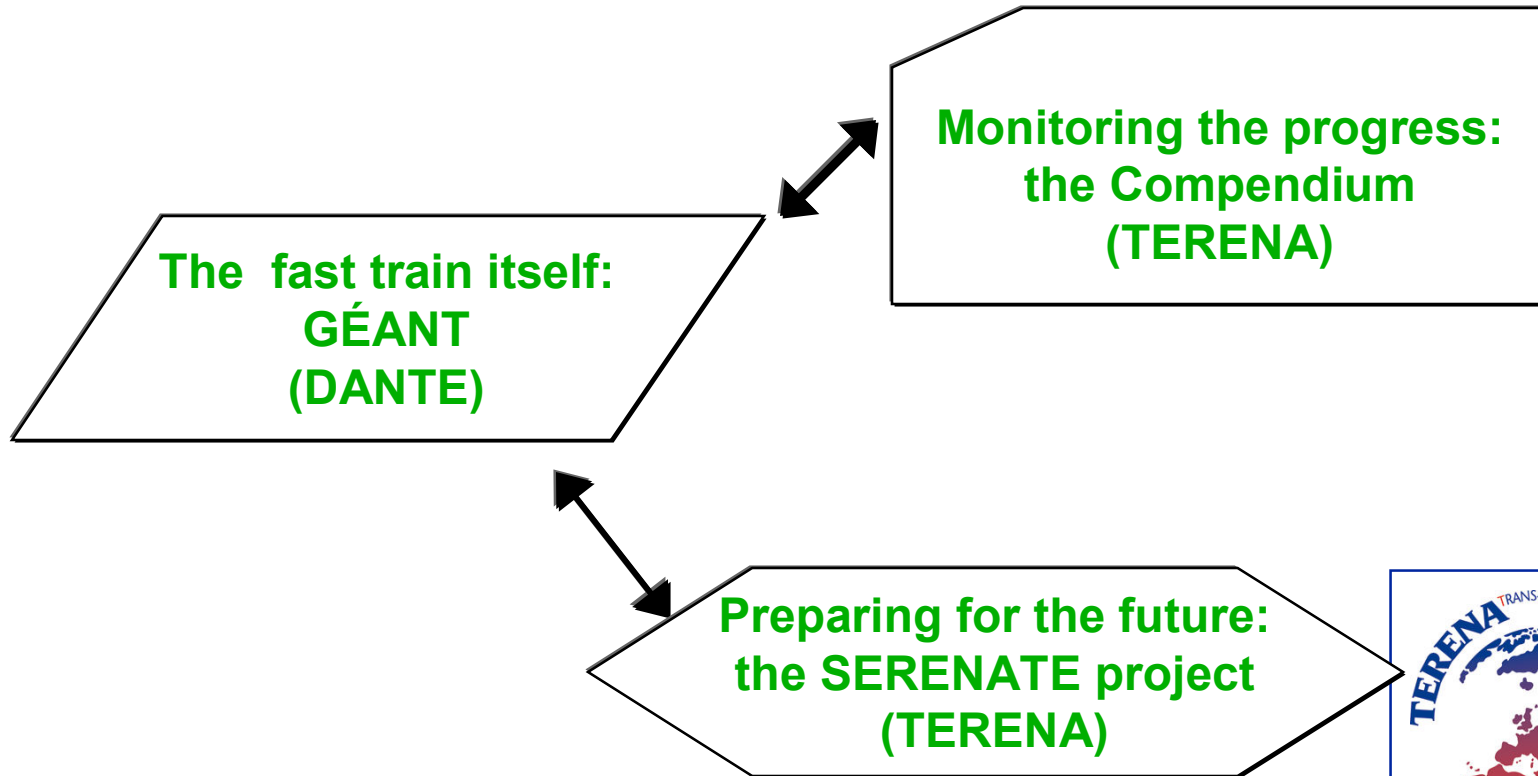


Why don't we...

- try to make the Compendium questionnaire shorter;
- but make it the ONE questionnaire that everybody answers;
- and tries to answer completely;
- work more closely with other projects, so that more people get more answers but with fewer questionnaires!



Role of the Compendium



Developing the argument...

Dany Vandromme, RENATER:

“As example, I would mention the Compendium (...), which turned [out] to be extremely useful to RENATER, to provide my national authorities with (...)”



