

# Services over Broadband for Education and Research

## Projects Panorama and Fore Coming Challenges in Portugal

Fostering Services over Broadband Workshop

14th July 2006

Taguspark, Oeiras, Portugal



**UMIC**

Knowledge Society Agency

## European Policy Priorities

- e-Europe and i2010 action Plan
- **Education** systems as key sector to boost Information and Knowledge Society

## Objective

- Bringing Schools to the Information and Knowledge Society

## How?

### - Taking advantage of ICT to boost Change

1. Infrastructures Deployment
2. ICT Services Development
3. Education Content Diffusion
4. e-Skills Dissemination

## Portuguese Key Initiatives

1. RCTS - The Portuguese NREN
2. Connecting Schools over Broadband
3. e-U - Virtual Campus
4. b-on - Online Knowledge Library

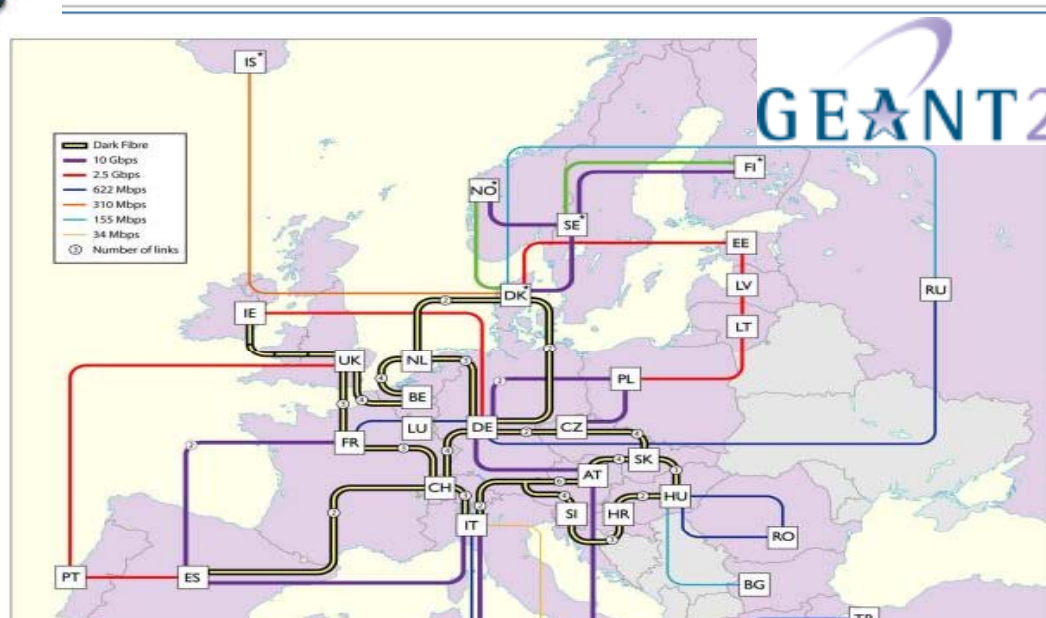
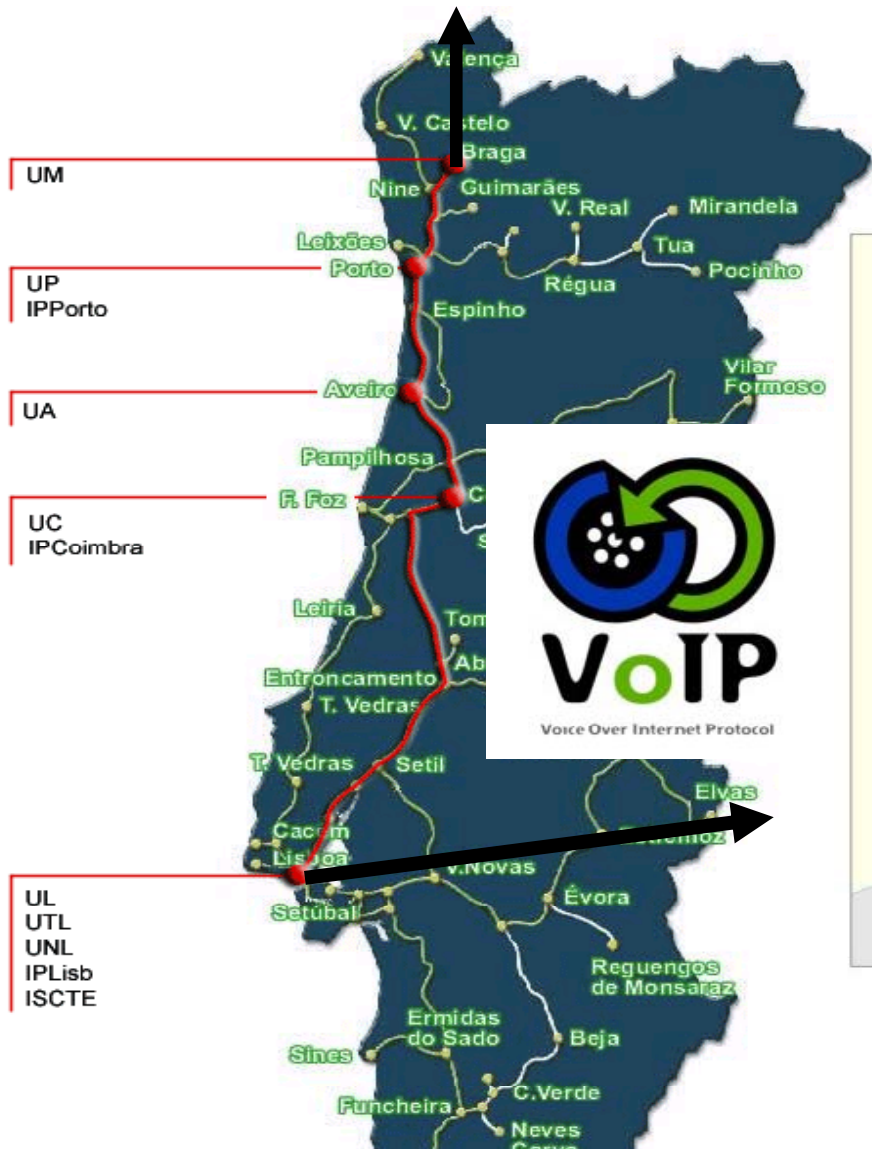


## Recent Development Domains

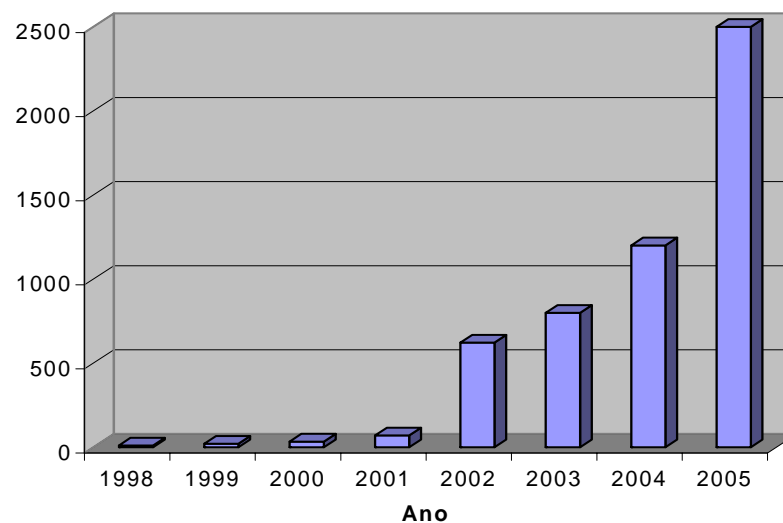
1. Grid Computing
2. VoIP



# RCTS – The PT NREN



Largura Banda (Mbps)

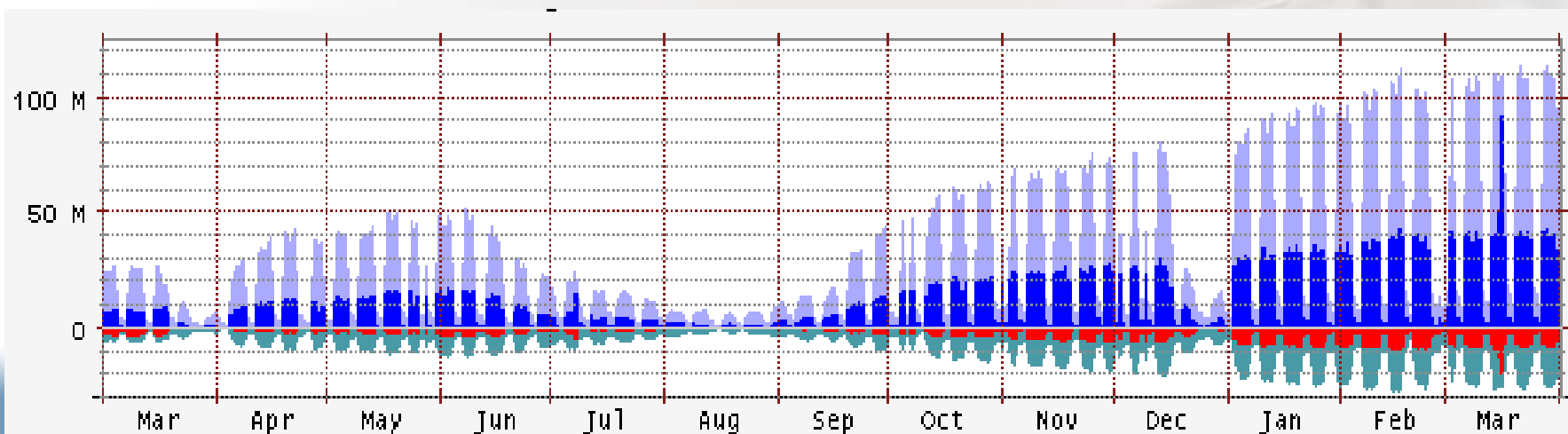


# Schools Over Broadband

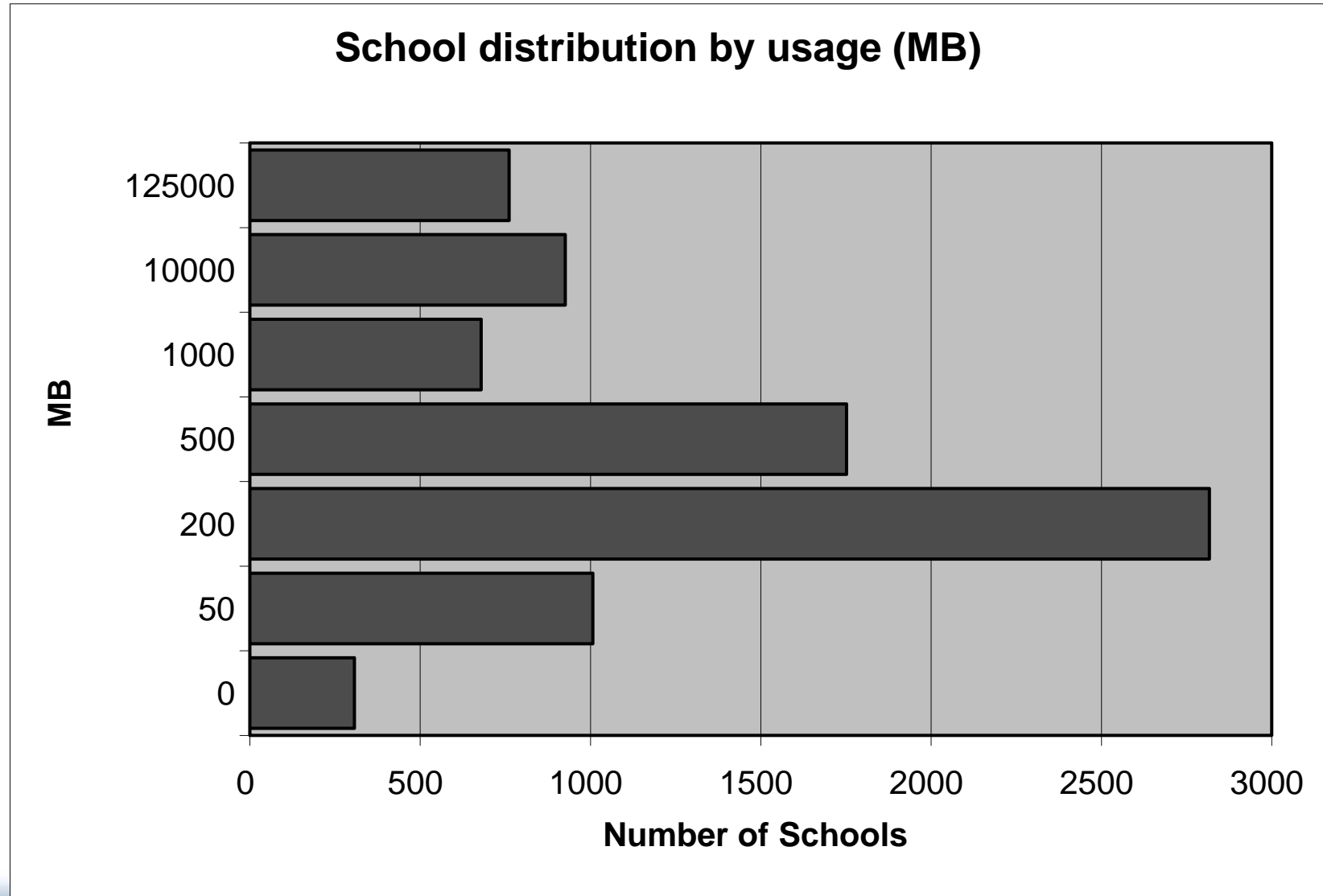
- ➔ All ~8.000 schools are connected
- ➔ IP VPN with broadband local loop
- ➔ Redundant connection to NREN

Technology	# of schools
aDSL 1024Kbps	1111
aDSL 512Kbps	6442
aDSL 256Kbps	385
ISDN 256Kbps	339

## Traffic growth (past 12 months)

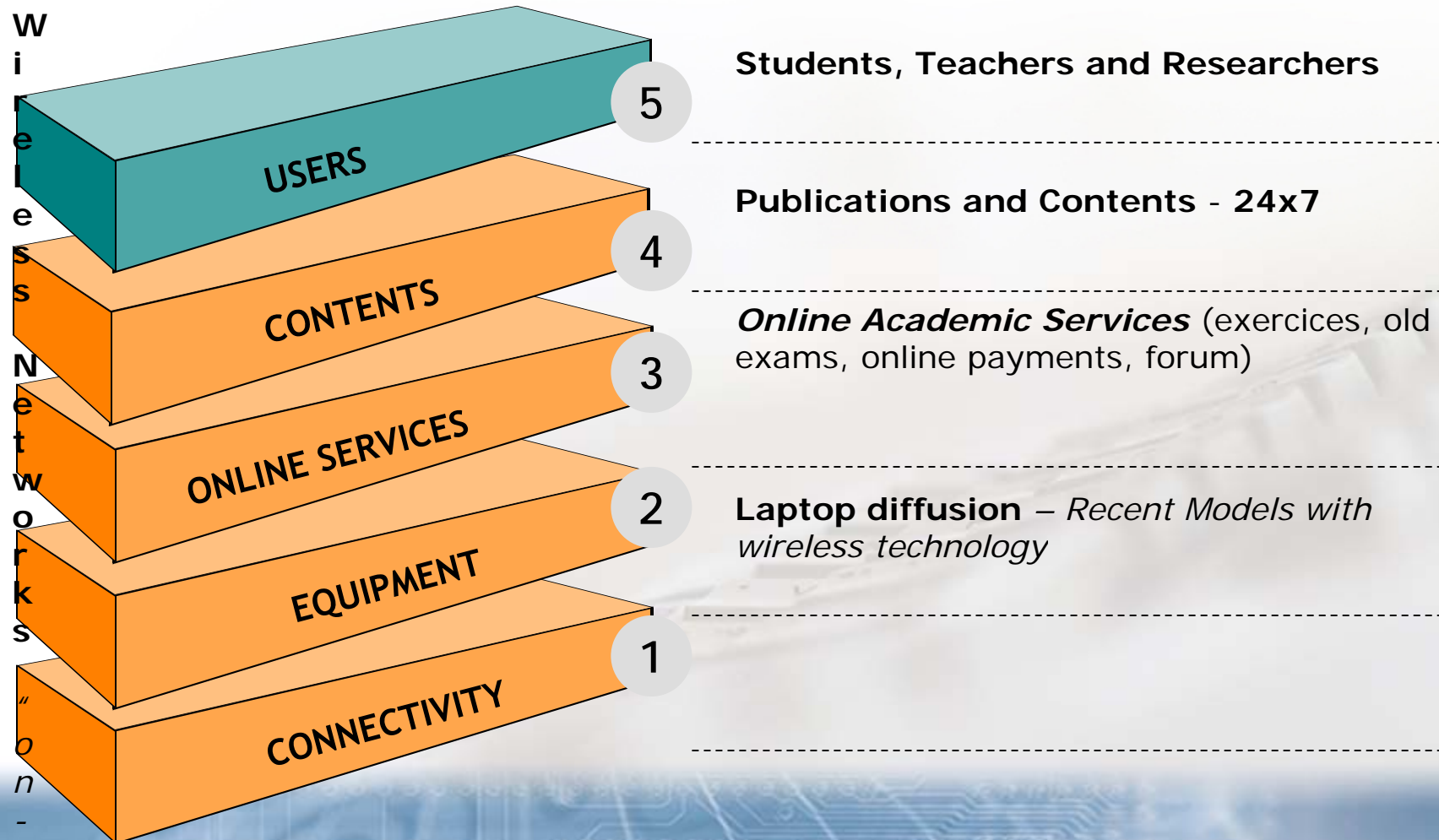


# Averaged Traffic over the last 3 months





## Concept: "Contaminate" the Portuguese Society Trough Higher Education





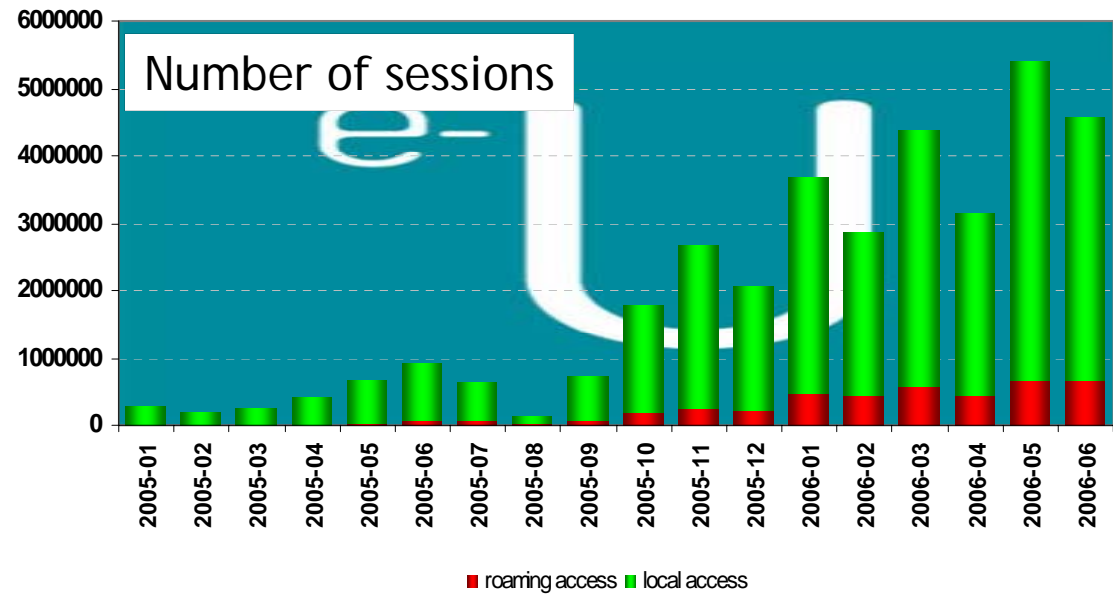
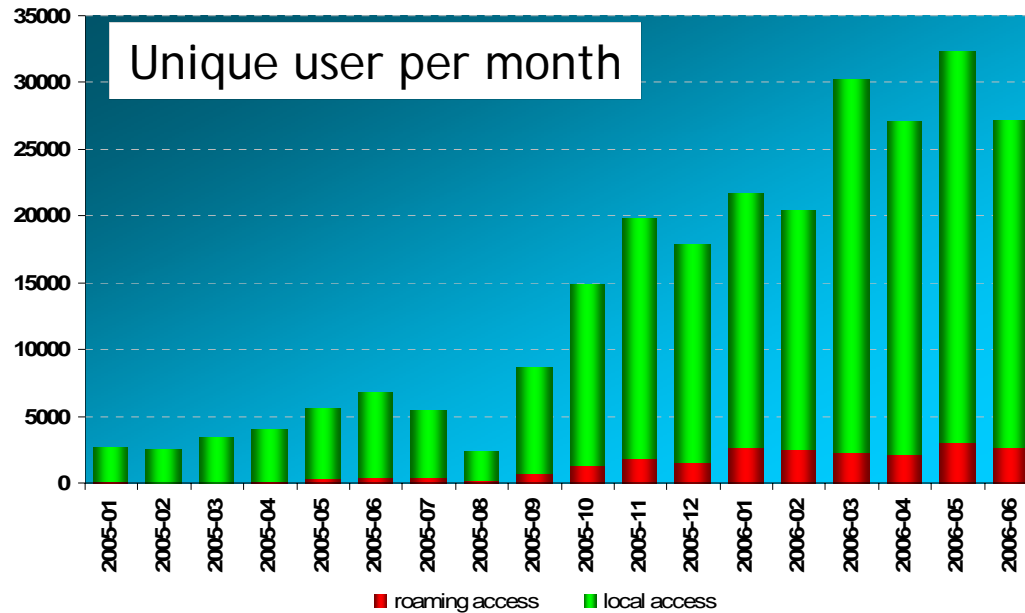
## Achievements

- 57 Higher Education Institutions integrate the project, representing 92% of the Portuguese Academic Community
- More than 300.000 students with e-U Wireless Networks Access by the end of 2006
- Until the end of 2006, all e-U institutions will have the 38 services available



This is the focus now



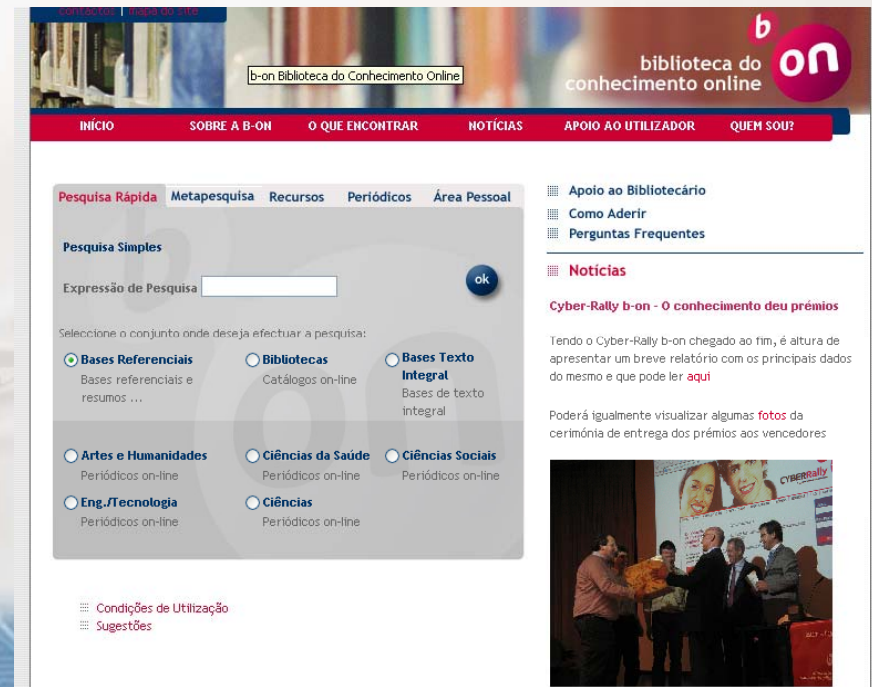


## Concept

- ➔ Provide the National Community online access to the main international sources of scientific content.

## Achievements

- ➔ Full Text Online Access to 16.750 Publications from 16 International Publishers + Ref databases
- ➔ 70 Institutions involved: universities, Polytechnic Institutes, hospitals, Public R&D Labs



The screenshot displays the b-on website interface. At the top, there is a navigation bar with links: INÍCIO, SOBRE A B-ON, O QUE ENCONTRAR, NOTÍCIAS, APOIO AO UTILIZADOR, and QUEM SOU?. Below this is a search section titled 'Pesquisa Rápida' with tabs for 'Pesquisa Rápida', 'Metapesquisa', 'Recursos', 'Periódicos', and 'Área Pessoal'. The 'Pesquisa Rápida' section includes a search box labeled 'Expressão de Pesquisa' and an 'ok' button. Below the search box, there are radio buttons for selecting search categories: 'Bases Referenciais' (selected), 'Bibliotecas', 'Bases Texto Integral', 'Artes e Humanidades', 'Ciências da Saúde', 'Ciências Sociais', 'Eng./Tecnologia', and 'Ciências'. To the right of the search section, there is a 'Notícias' section with a sub-heading 'Cyber-Rally b-on - O conhecimento deu prémios' and a small image showing a group of people at an award ceremony.

Desc.	Prof/Med/Inv	Alunos	%
Universidades	15997	182329	64,42%
Politécnicos	8.230	100.216	25,33%
Laboratórios e Centros de investigação	1.531	0	3,02%
Organismos Administração	803	0	1,59%
Organismos sem fins lucrativos	242	0	0,48%
Hospitais	2620	0	5,17%
<b>Total</b>	<b>29.423</b>	<b>282.545</b>	

## 3.5 million full text downloads/views in 2005

- 11.2 full text downloads/views per user, including students
- Considering only 10% of the students it gives 60 full text downloads/views per user

## “Million Dollar Questions”

- Which new initiatives should be done in Portugal to boost ICT usage in the National Education and Research Networks?
- Which new priorities should be handled?
- How to involve all the interested actors (public and private) in National ICT Education Goals, including the management level?
- How to make the process All-inclusive?

And last, but not least...

- How and which international experiences can (should) be mobilized to the Portuguese ICT panorama?

Thank You!