

Hungary e-Gov Mission to Portugal

Mobilizing the Information and Knowledge Society

Knowledge Society Agency, 19 March 2010



Luis Magalhães

Knowledge Society Agency (UMIC)

Ministry of Science Technology and Higher Education, Portugal

Knowledge Society Agency Mission

To coordinate information society policies and its mobilization through research, qualification and awareness activities

Incubated eGov and developed transversal large scale projects

- ❖ Citizen's Portal (2004-2007)
- ❖ Enterprise Portal (2006-2007)
- ❖ Full Creation of Enterprises Online (2006)
- ❖ e-ID Citizen Card (2005-2007)
- ❖ Public Administration Interoperability Platform (2006-2007)

spinned off to AMA – Agency for Public Services Modernization, in 1st May 2007

Incubated the National e-Procurement Program

spinned off to National Agency of Public Procurement in the Ministry of Finance, in 9th May 2007

Now other major challenges:

- ➔ e-Science
- ➔ International partnerships in S&T with worldwide leading institutions
- ➔ Health and biomedical sciences information for citizens on the Web
- ➔ Emerging technologies such as sensor based networks and nanotechnology (including nanomedicine)

Connecting Portugal

Portuguese Information Society Action Plan 2005-2010

launched 29 July 2005

Overall objectives:

- To promote a modern citizenship for which ICT is a natural tool for access to information, education, cooperative work, public debate
- To guarantee a competitive national market of telecommunications
- To assure the transparency of the Public Administration and its simplicity and efficiency for citizens and companies
- To promote the increasing use of ICT by companies and the development of new technology based enterprises
- To foster technological and scientific development, launching R&D activities in international cooperation

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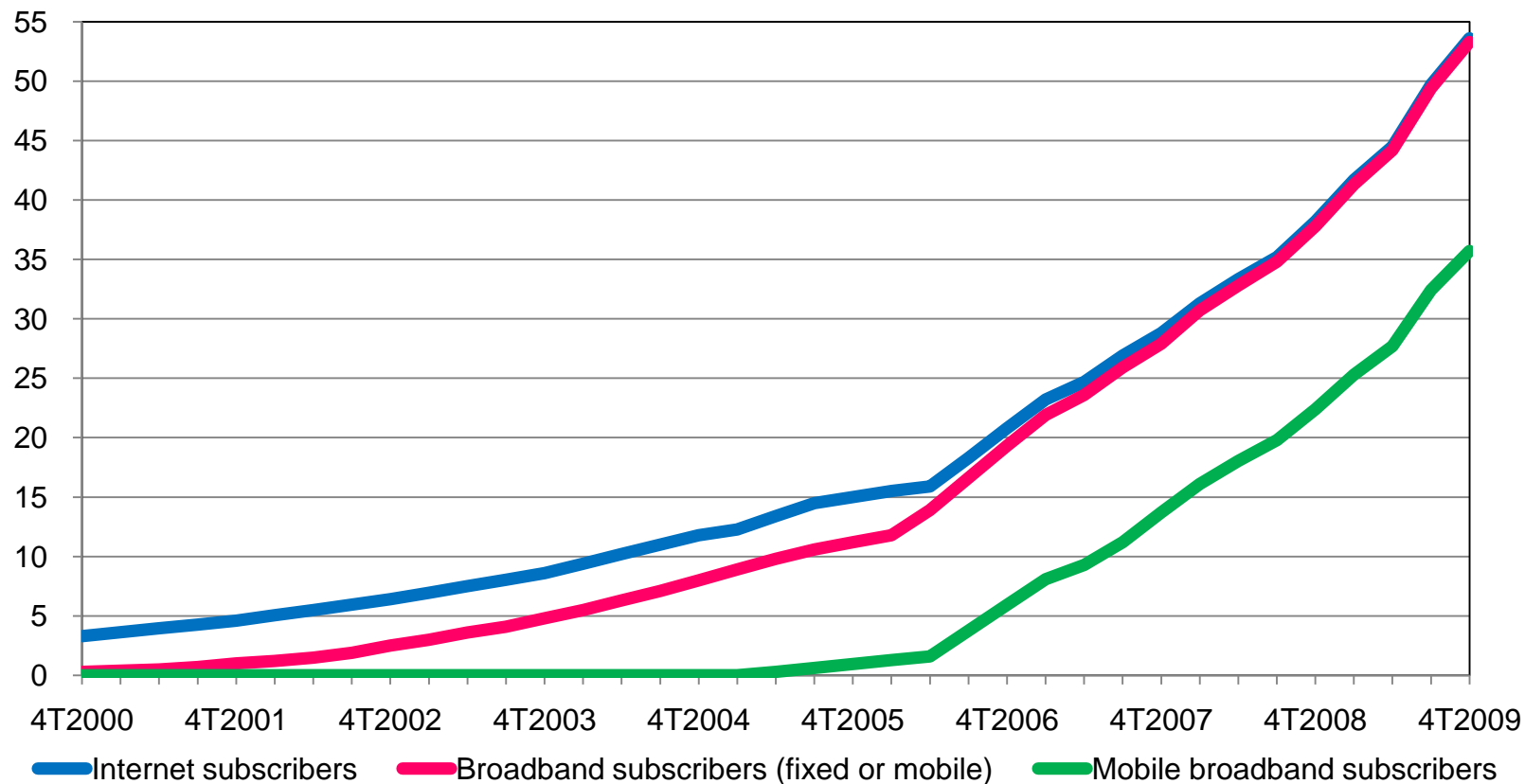
**broad
across all sectors
relatively long time span**



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Penetration of Internet and Broadband in the Population (% subscribers in total population, 3Q 2009)



Fonte EUROSTAT

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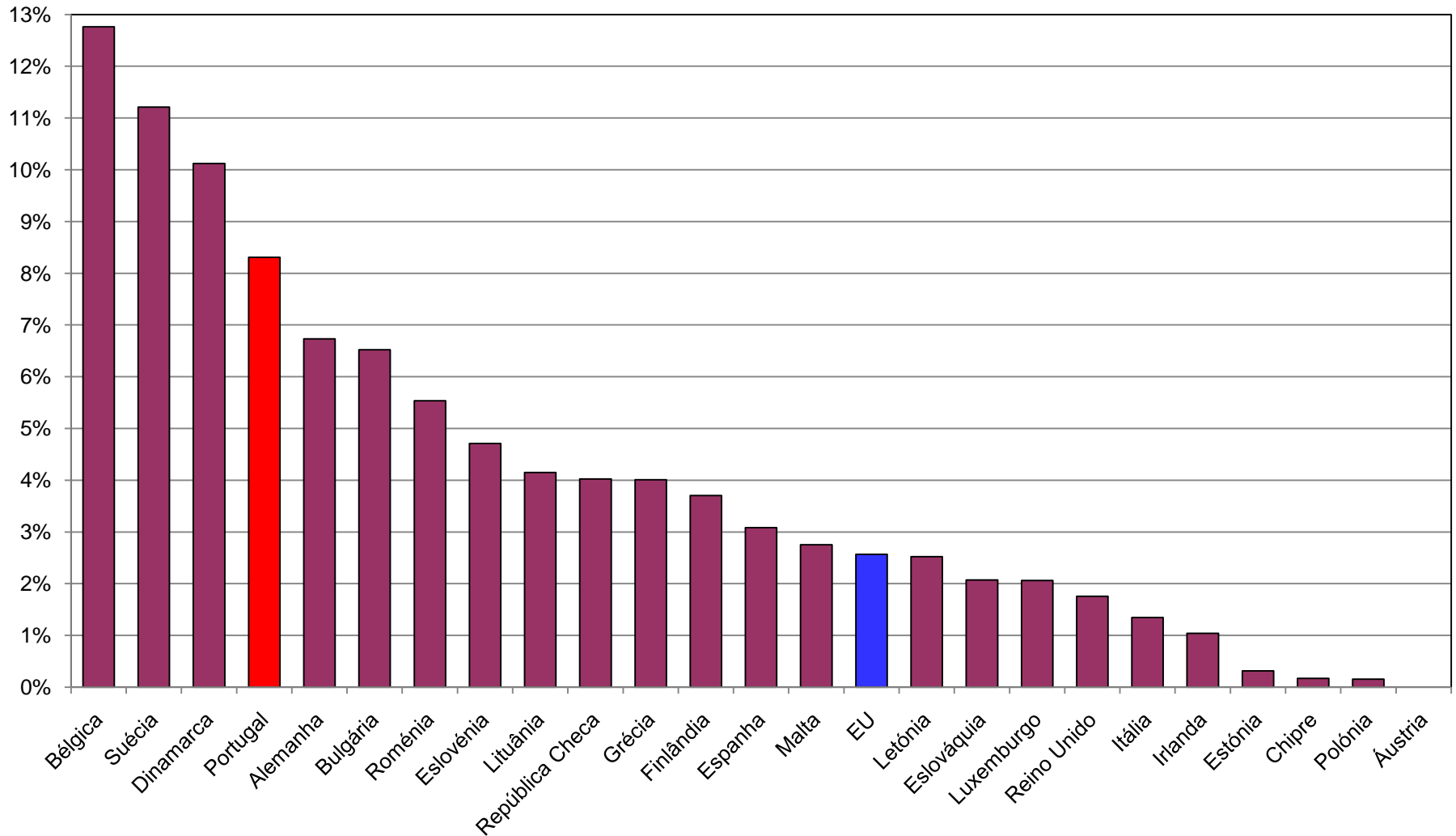


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Penetration of Fixed Broadband ≥ 10 Mbps

Portugal 4th in UE27, 1 Jul 2009



Note: Data not available for France, Netherlands and Hungary

Source: COCOM, DG INFSO European Commission, Nov 2009

5 General Practical Rules for Success in the Knowledge Society

- Develop human capital
- Foster partnerships and knowledge networks
- Aim at outcomes, establish clear targets and measure
- Leave room for bottom up creativity and flexible organizational adjustments
- Promote internationalization

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Decentralized Flexible Evolving Implementation Model

Overall coordination of Information Society Policies

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Ministry of Science Technology and Higher Education

Observation & Benchmarking
– **UMIC**

Public Administration

eEducation

Ministry of Education

eHealth

Ministry of Health

eSocial Security

Ministry of Labour and Social Solidarity

eCivil Protection

Ministry of Interior

eGovernment – AMA

Ministry of the Presidency

eProcurement – ANCP

Ministry of Finance

Academy

eScience – FCCN

eUniversity

International Partnerships – FCT

eJustice

Ministry of Justice

eTaxes

Ministry of Finance and Public Administration

Telecommunications

Ministry of Public Works and Communications

Enterprise

eBusiness

ICT Academies

New ICT Based Enterprises – AdI

Technology Platforms – AdI

Society

eInclusion

eAccessibility

ePrivacy and Security

eContent

Digital Cities & Regions

Community Networks (NGNs)



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eID – Citizen Card w/ electronic signature and 5 services, 2005-2007

Already supplied to 30% of the population

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Citizen Portal, 2004-. Enterprise Portal, 2006-

1st in EU in complete availability and sophistication of basic public services

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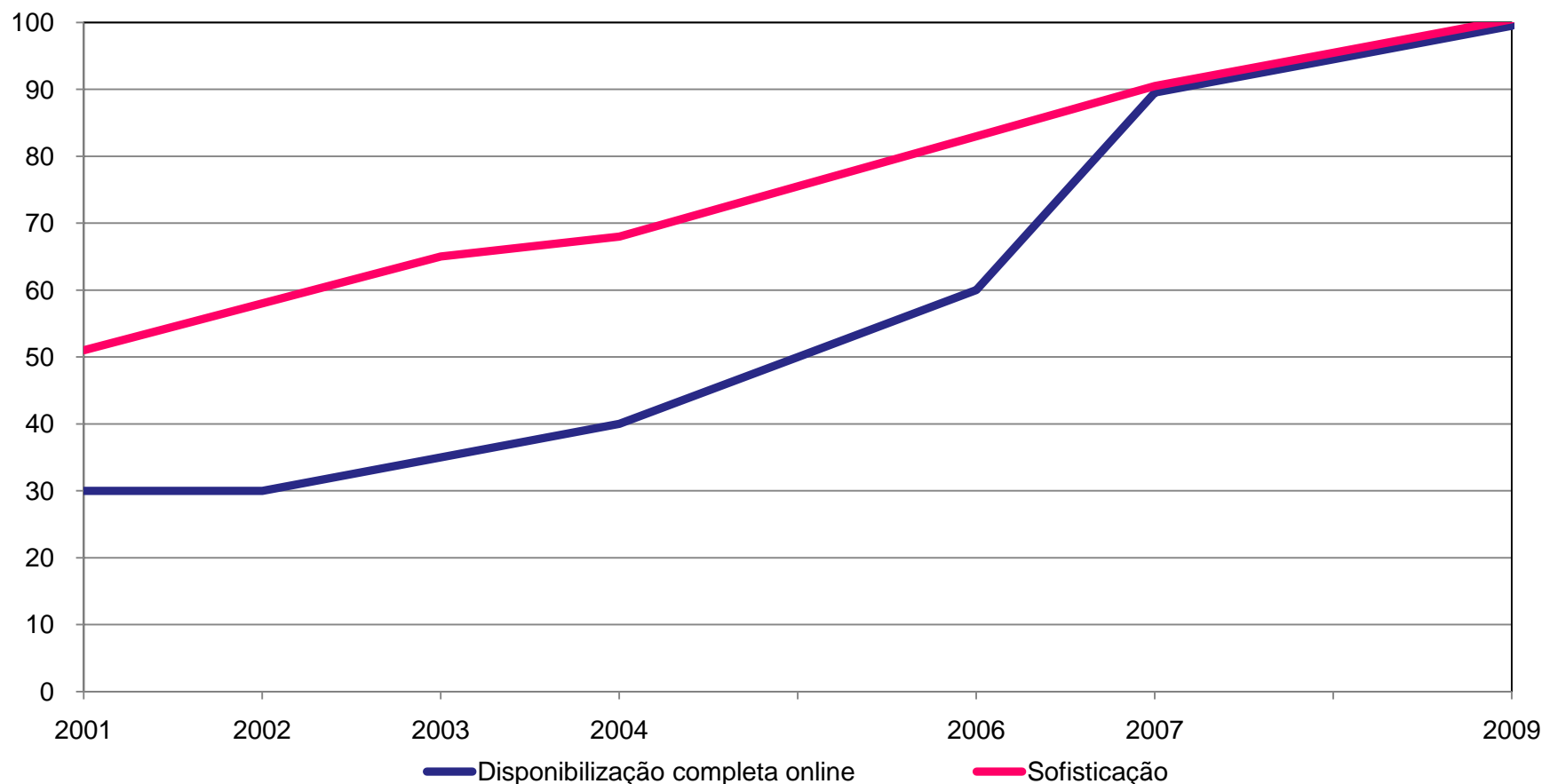


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Public Services Online in Portugal

Evolution of complete availability and sophistication of basic services, 2001-2009



Note: Data of October of each year, except Apr 2006, May 2007, Nov 2009

Source: Capgemini reports prepared for DGINFSO of the European Commission

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eJustice, 2006-

1st in Europe according to Council of Europe 2009

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eTaxes, 2001-

Tax payments through ATM network, 1990s-

100% of VAT handled through the Internet, since 2006

80% of Income Tax declarations filled and sent through the Internet

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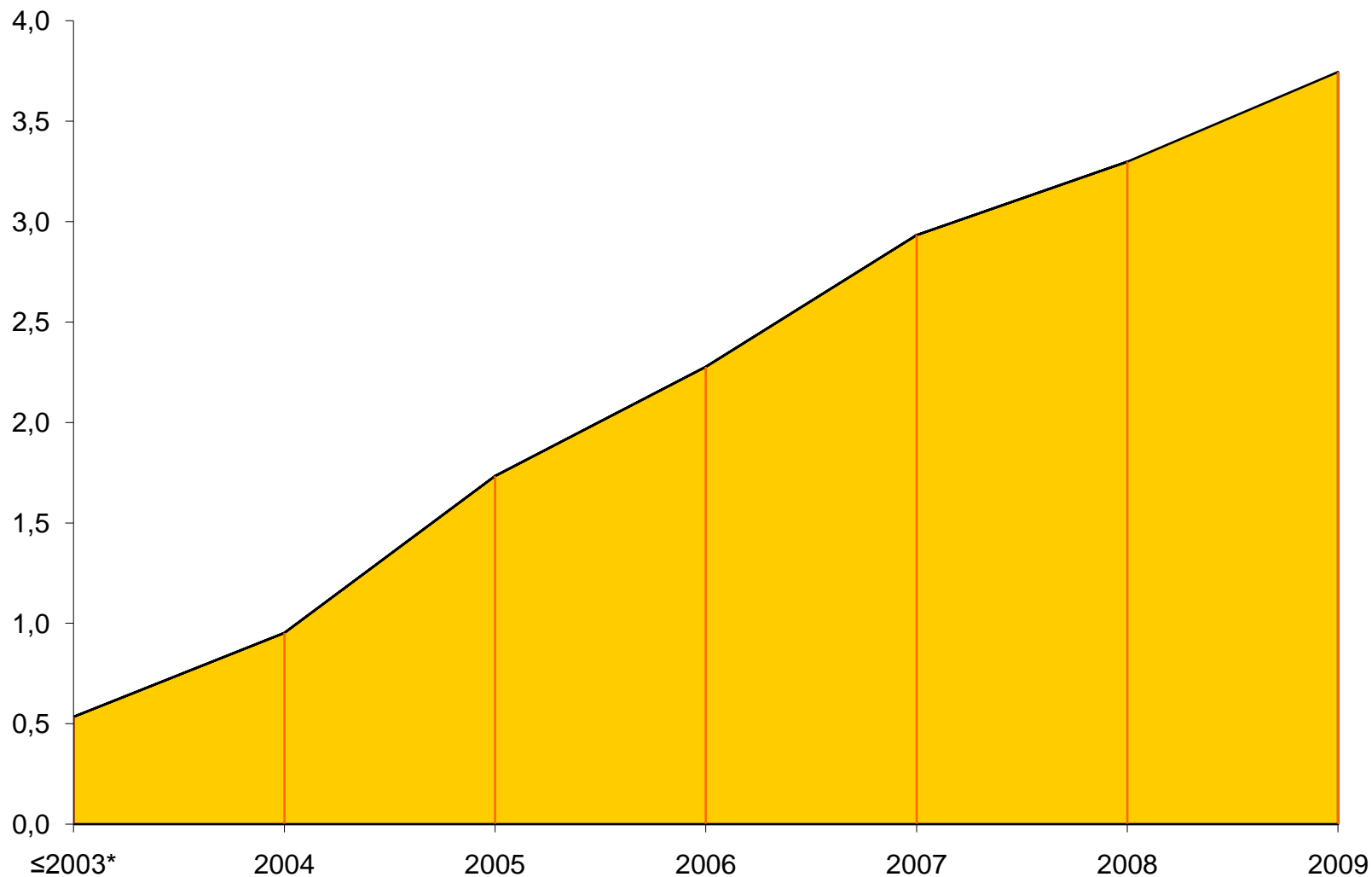
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IRS Declarations Submitted Through the Internet

millions of declarations (in 2009, 80% of total declarations)



*Accumulated value

Source: Ministry of Finance

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eBusiness, 2005-

5th in EU according to EC i2010 Report for 2008

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**Digital Cities & Regions, 1998- . Community Networks (NGNs), 2008- .
33 Digital Cities & Regions, 95% of territory. 4 Community Networks in rural areas, multi-operator open NGNs, 1,200 Km of fiber, operation at 10 Gbps**

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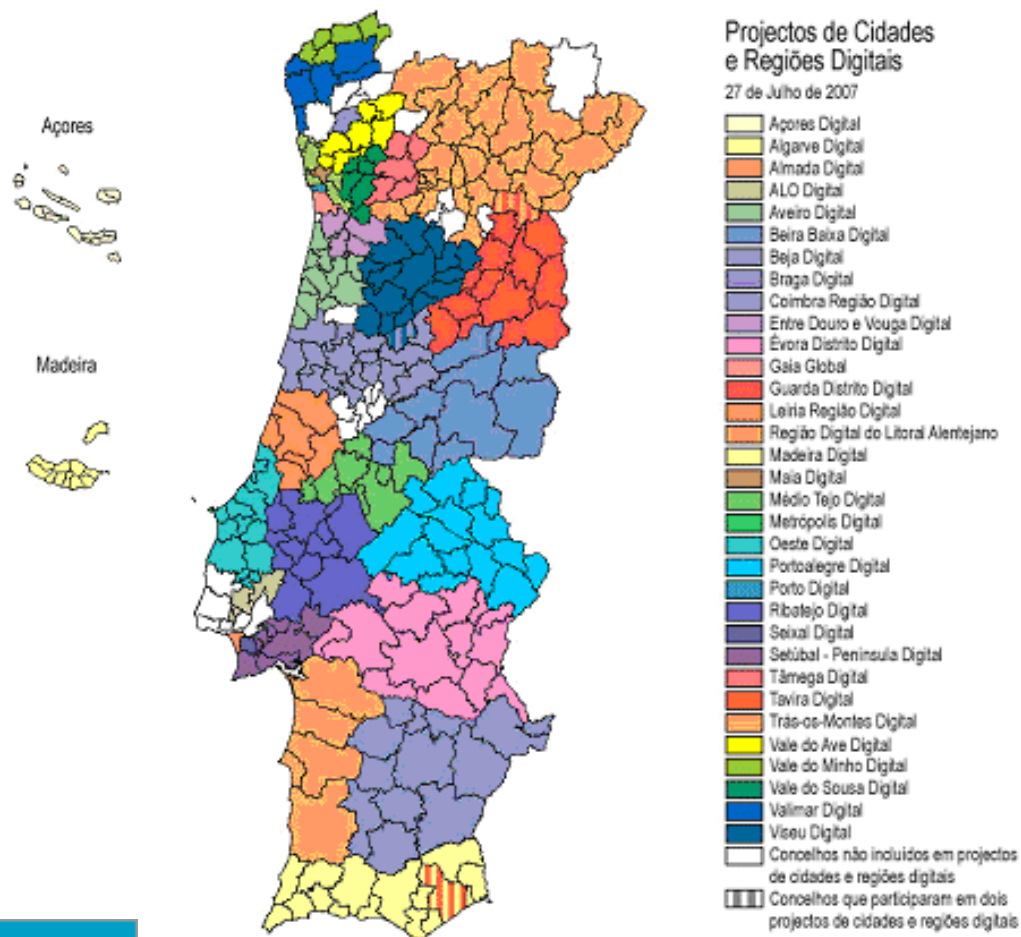


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33 Digital Cities and Regions

MAPA DE LOCALIZAÇÃO DOS PROJECTOS DE CIDADES E REGIÕES DIGITAIS



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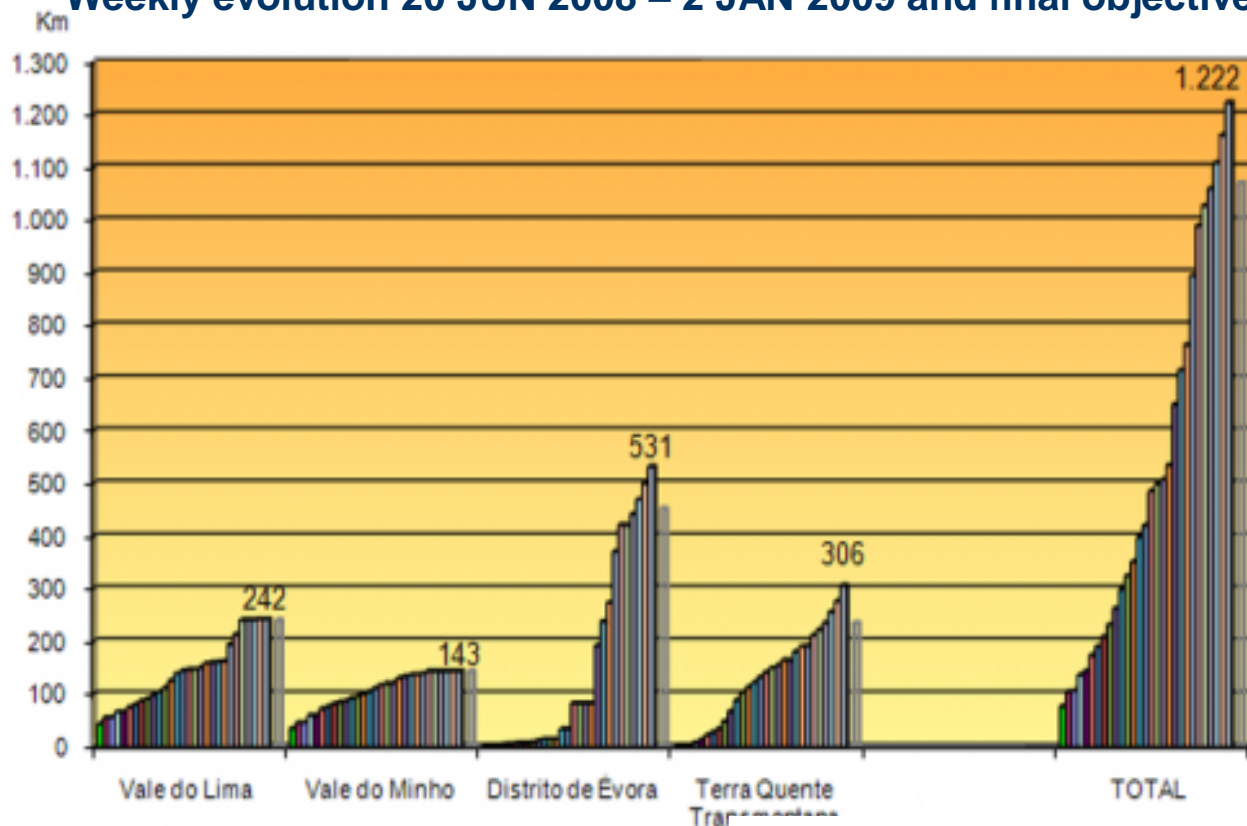
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4 Next Generation Community Networks, 2008



Length of ducts for optical fibre cables
Weekly evolution 20 JUN 2008 – 2 JAN 2009 and final objectives



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Internet Spaces Network, 2006-

1,170 PIAPs w/ free access to Internet and computers with the help dedicated staff, and organized in a collaborative platform

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eAccessibility, 1999-

Web Content Accessibility, Solidarity Network, Technical Aids Catalogue

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All schools connected in broadband, 2005-Jan2006

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Number of Students per Computer with Internet Connection in School



For public schools 5th-12th grade = 4,4

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Lap tops and mobile broadband for 5th-12th grade students, Sep2007-
375,888 lap tops delivered, 30% of all students

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Lap tops (computer Magalhães) for 1st-4th grade students, Jul2008-
407,700 lap tops delivered, 80% of all students

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Digital Inclusion in Portugal

% Internet user per educational attainment
population 16-74 years old, 2009 (1st Quarter)

→ 93% of people with higher education

average UE27 2009 = 91%

→ 87% of people with secondary education and without higher education

average UE27 2009= 71%

digital divide

→ 30% of people who did not complete secondary education

average UE27 2009= 43%

In 2009:

age 55-74 (2.0 millions)	7%
age 25-54 (3.2 millions)	34%
age 16-24 (0.7 millions)	82%

In 2005 it was:

2%
15%
59%

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eSecurity&Privacy, 2006- 3 CERTs, Safe Internet project

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eUniversity, 2005- National Virtual Campus integrating all HE, wireless access everywhere, educational content, PCs for HE students

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Roaming between *campi*



1 week 2006

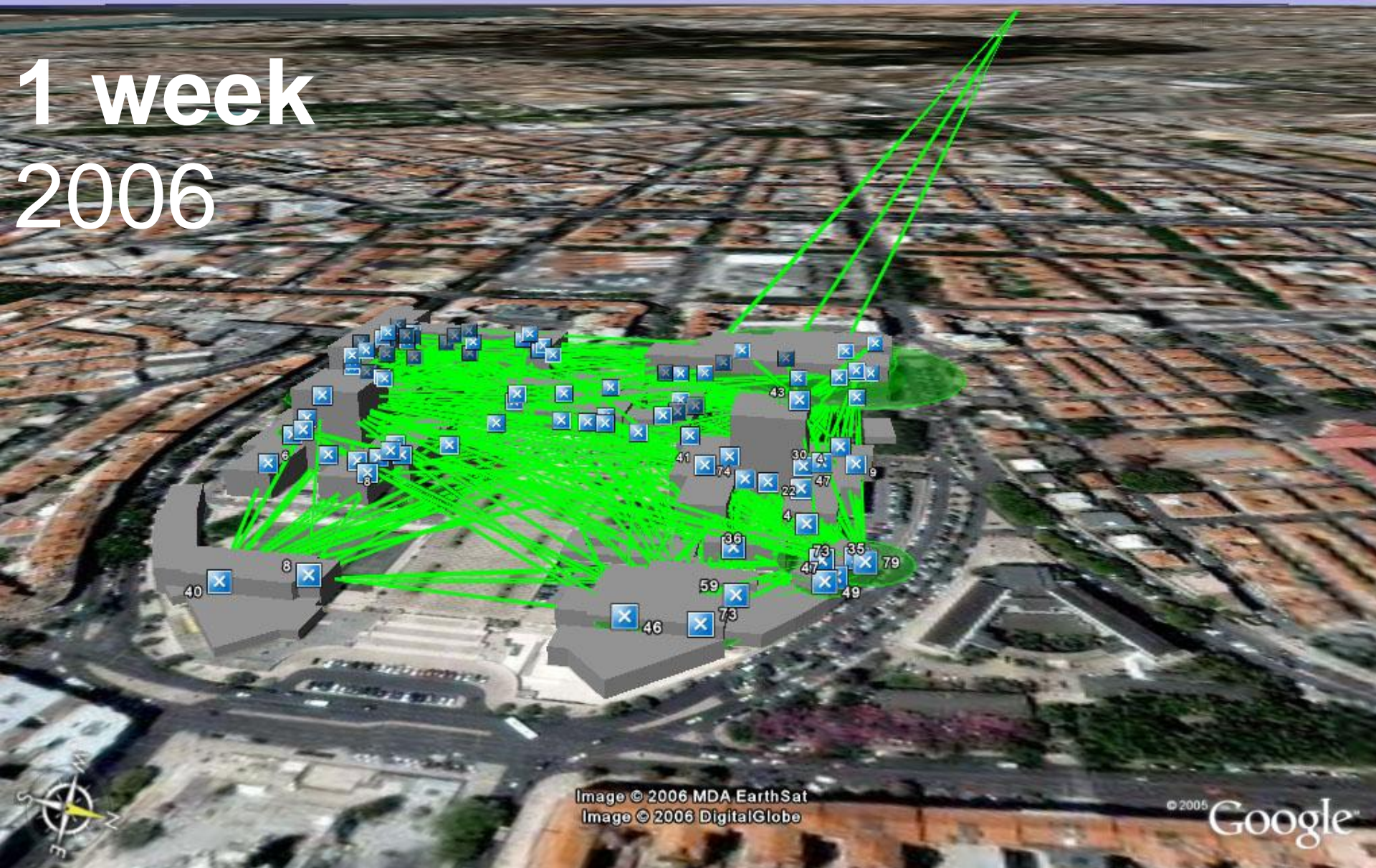


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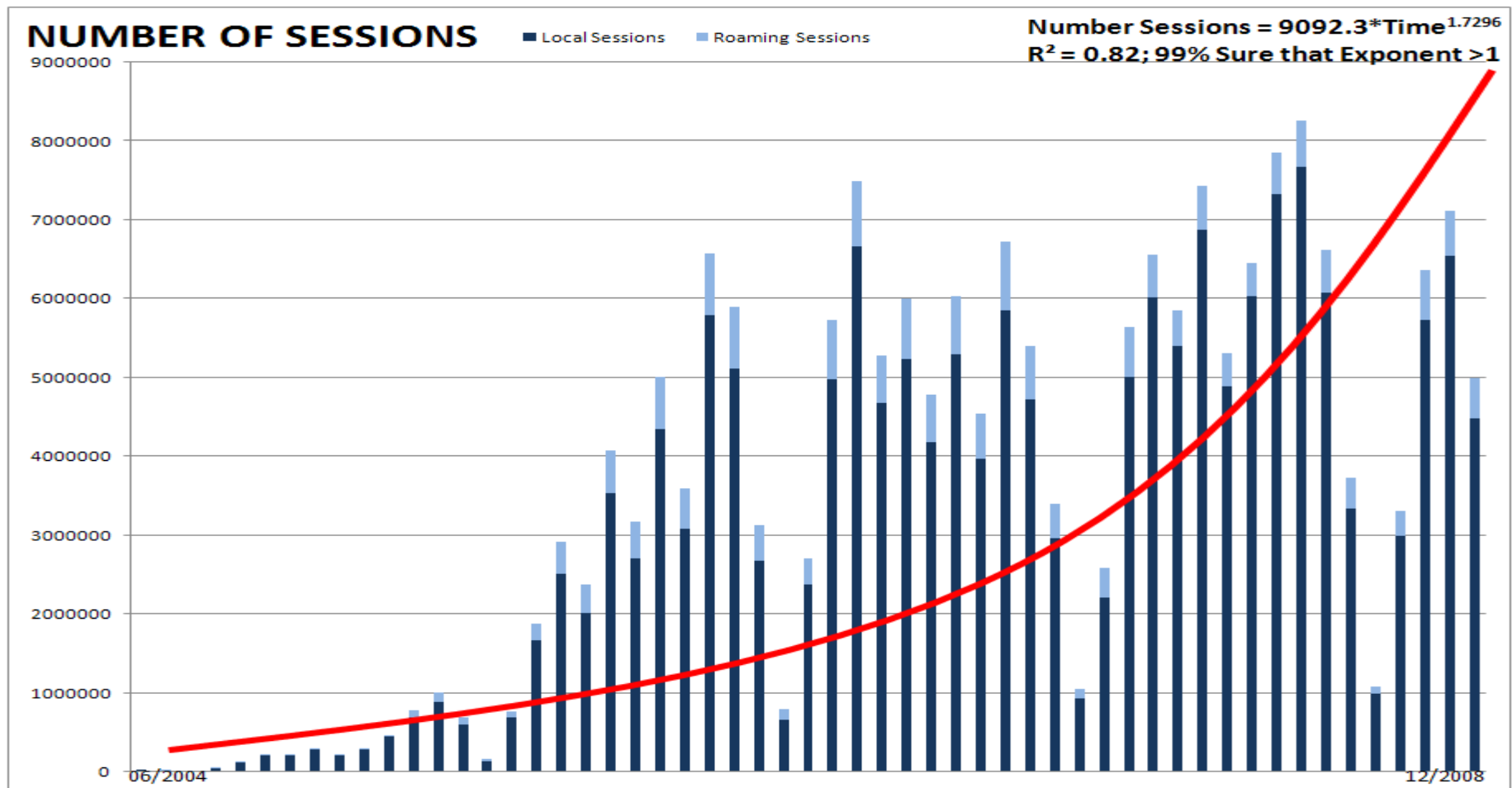
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Pointer 38°44'21.66" N 9°08'25.41" W

Streaming 100%

Eye alt 184 m

Number of Sessions in the e-U Wireless Network



ConnectingPortugal



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MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

Connecting Portugal

Decentralized Flexible Evolving Implementation Model

eScience, 2005-

80% of HE connected in NREN fiber at 10 Gbps,

GRID Computing, nationally subscribed Scientific Digital Library,

Open Access Scientific Repository of Portugal, Zappiens, VoIP for all public HE

Public Administration

**UMIC/Min. Science,
Technology &
Higher Education**

**FCT/Min. Science,
Technology &
Higher Education**

AMA/Min. Presidency

Min. Finance & Public
Administration

Min. Education

Min. Health

Min. Labour and Social
Solidarity

Min. Economy and Innovation

Min. Interior

Min. Justice

Min. Public Works &
Communications

Municipalities

Academy

**FCCN/NREN
National Labs
Associate Labs
Research Centers
Universities
Polytechnics**

MIT

Harvard Medical School

Carnegie Mellon U.

U. Texas Austin

Fraunhofer Gesellschaft

Enterprise

Adl – Innovation Agency

Telcos: Portugal Telecom

TMN

Optimus

Vodafone

Software: Microsoft

Autodesk

Novabase

Nokia-Siemens

PC Man.: Toshiba

Fujitsu-Siemens

HP

JP Sá Couto

Integrator: Prologica

Microelectronics: Intel

Automotive: Autoeuropa

Energy: Galp Energia

EDP

SIBS/Multibanco – ATMs

Santander

CGD

BES

PBI

BIGonline

SMEs

Society

ACEPI

Aliança Digital

Attorneys Association

Public Notaries

Public libraries

Social solidarity institutions

Cyberclubs

Solidarity Network (240 NGOs)



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Science Technology and Society Network (RCTS)

>1,000 Km of optical fiber cable of NREN (2005-2009)

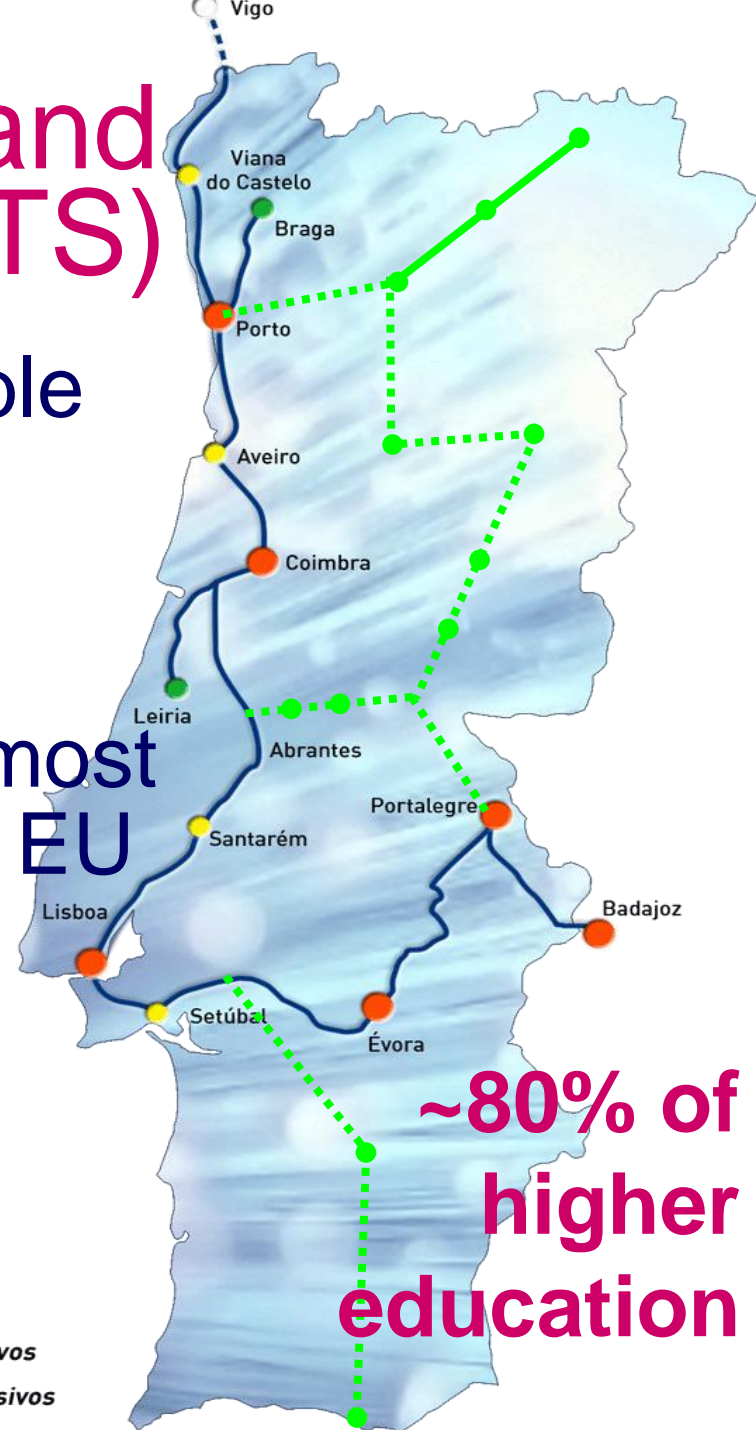
Operation at 10 Gbps

One of the densest and with most advanced services NRENs in EU

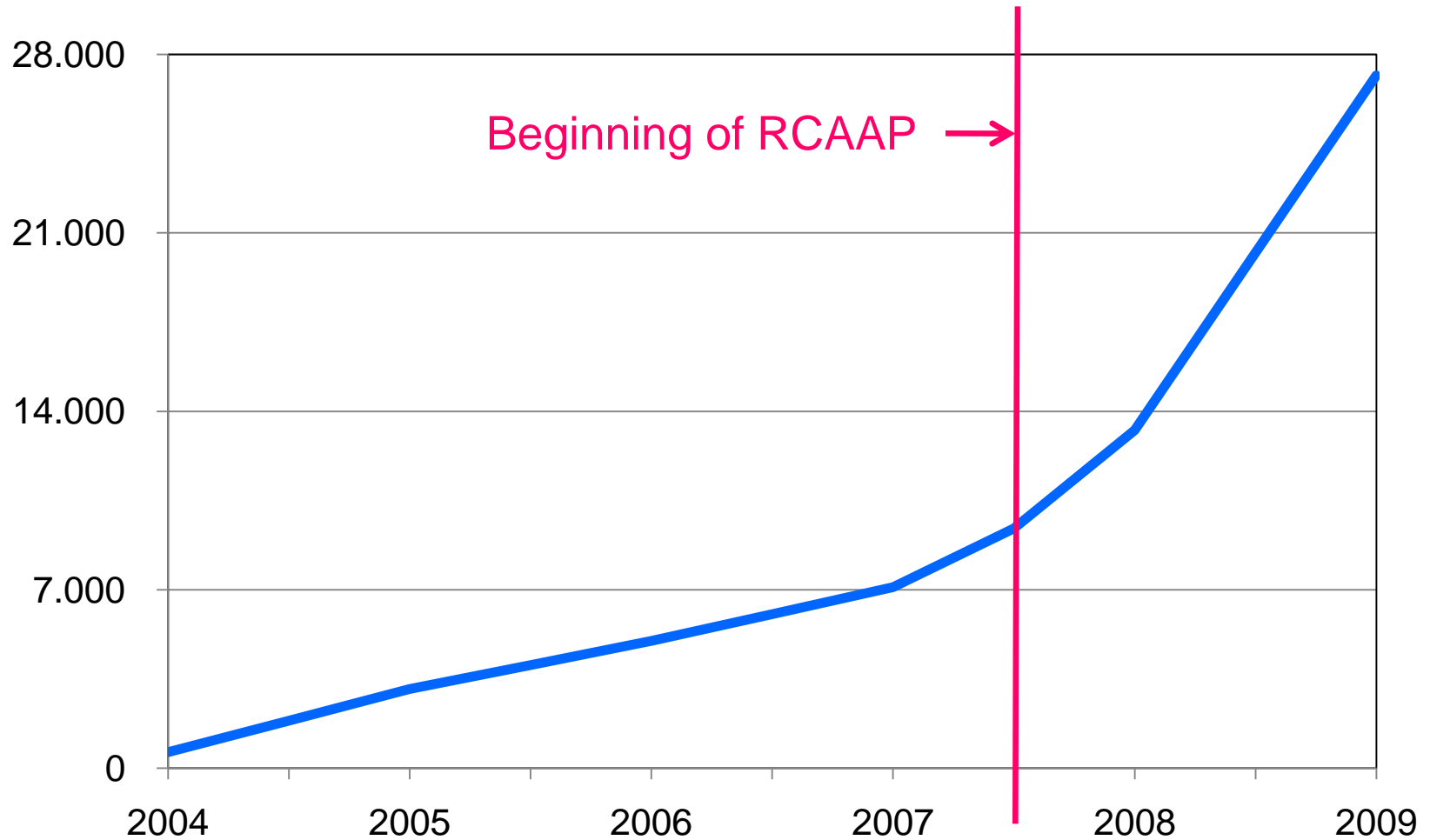
Planned extension to all District Capitals

ConnectingPortugal

- *Nós principais*
- *Nós secundários activos*
- *Nós secundários passivos*



N. of Documents in Open Access Scientific Repositories



Connecting Portugal

Decentralized Flexible Evolving Implementation Model

International Partnerships for ICT Research and Innovation, 2006-
 Future Internet, ICT for energy sustainability, Cultural–Digital Media Industry,
 Ambient Assisted Living, health care and research information on the Web

Public Administration

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 Technology &
 Higher Education**
**FCT/Min. Science,
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Carnegie Mellon U.
U. Texas Austin
Fraunhofer Gesellschaft

Enterprise

Adl – Innovation Agency
Telcos: Portugal Telecom
TMN
 Optimus
 Vodafone
 Software: Microsoft
 Autodesk
Novabase
Nokia-Siemens
 PC Man.: Toshiba
 Fujitsu-Siemens
 HP
 JP Sá Couto
 Integrator: Prológica
 Microelectronics: Intel
Automotive: Autoeuropa
Energy: Galp Energia
EDP
 SIBS/Multibanco – ATMs
 Santander
 CGD
 BES
 PBI
 BIGonline
SMEs

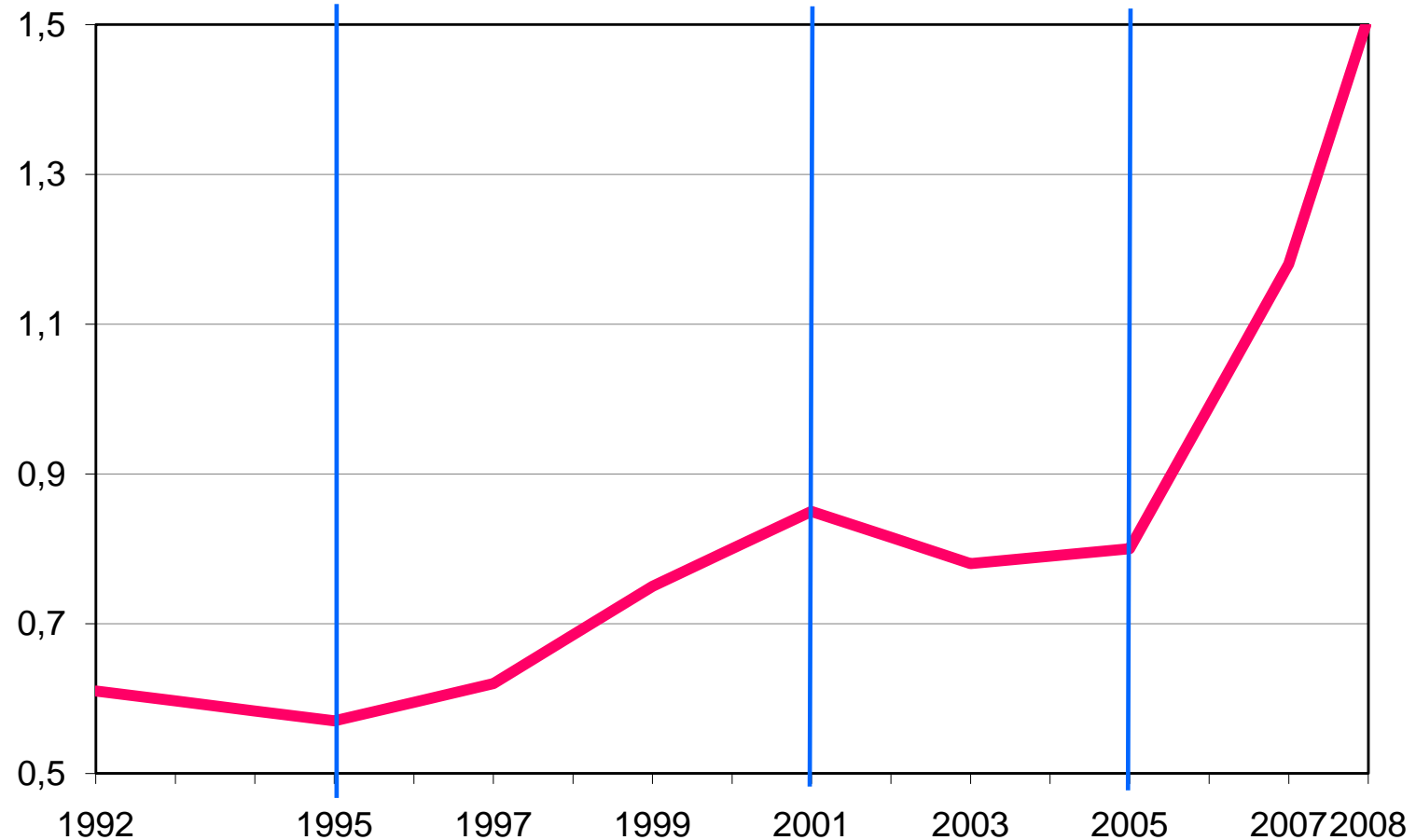
Society

ACEPI
 Aliança Digital
 Attorneys Association
 Public Notaries
 Public libraries
 Social solidarity institutions
 Cyberclubs
 Solidarity Network (240 NGOs)



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Evolution of R&D Expense in GNP (%)



Fonte: EUROSTAT

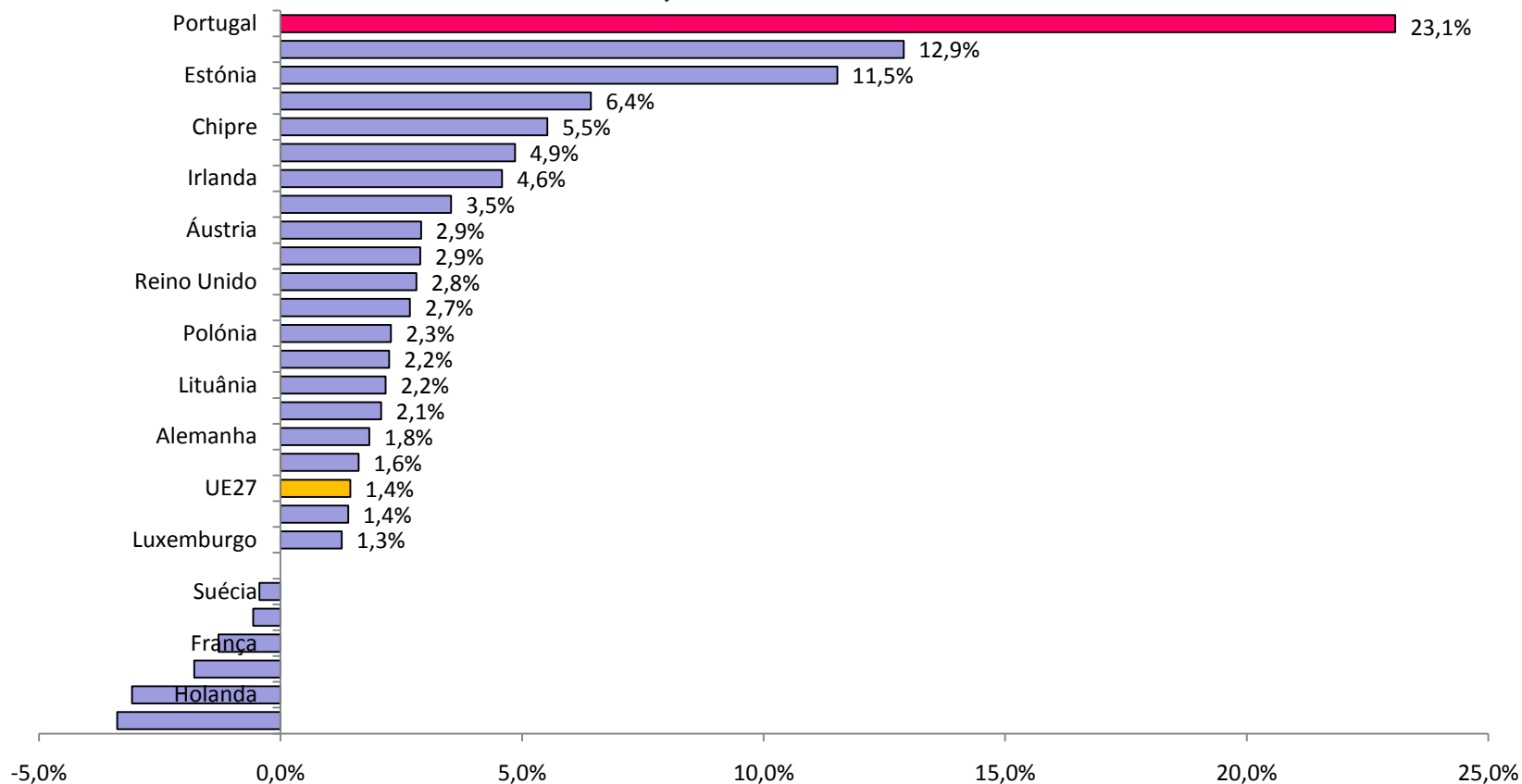
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Annual Average Growth of % of R&D Expense in GNP, 2005-2008



Fonte: EUROSTAT

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Critical Factors of Success

- Clear and mobilizing plan
- Well defined quantitative targets
- Regular observation and benchmarking
- Flexibility for evolving, variable geometry and decentralized implementation with appropriate partnerships for each project
- High visibility in the public policy agenda
One of the axis of the Technological Plan (with Science, Innovation, Education). Strong commitment of Government, including Prime-Minister.