

Welcome Address

in name of **Knowledge Society Agency (UMIC)**
and **Science and Technology Foundation (FCT)**

of Ministry of Science, Technology and Higher Education, Portugal
Annual Forum of EPT on Smart Systems and Integration (EPoSS)

IST, Lisboa, 8th October 2010

Luis Magalhães

President **Knowledge Society Agency**



UMIC
Knowledge Society
Agency

Knowledge Society Agency Mission

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

To promote emerging technologies such as ICT and Nanotechnology

To develop and fund e-Science



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Knowledge Society Agency in EU Groups

Represents Portugal next to DGINFSO:

- ❖ Digital Agenda HLG
- ❖ HLG on Internet Governance
- ❖ ICT National Research Directors Forum
- ❖ Future Internet Forum
- ❖ National ICT Directors WG on FET Flagships
- ❖ AAL Joint Program
- ❖ CIP ICT
- ❖ . . .



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Science and Technology Foundation Mission

Research Council and Research Funding Organization

To promote the development, funding and evaluation of institutions, networks, infrastructures, scientific equipment, programs, projects and human resources in all S&T areas

To promote international cooperation in S&T

The logo for FCT (Fundação para a Ciência e a Tecnologia) consists of the letters 'FCT' in a bold, dark teal, sans-serif font.

Fundação para a Ciência e a Tecnologia

MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

Knowledge Society Agency in EU Groups

Represents Portugal next to DGRTD:

- ❖ European Research Area Committee (ERAC)
- ❖ European Strategy Forum on Research Infrastructures (ESFRI)
- ❖ . . .

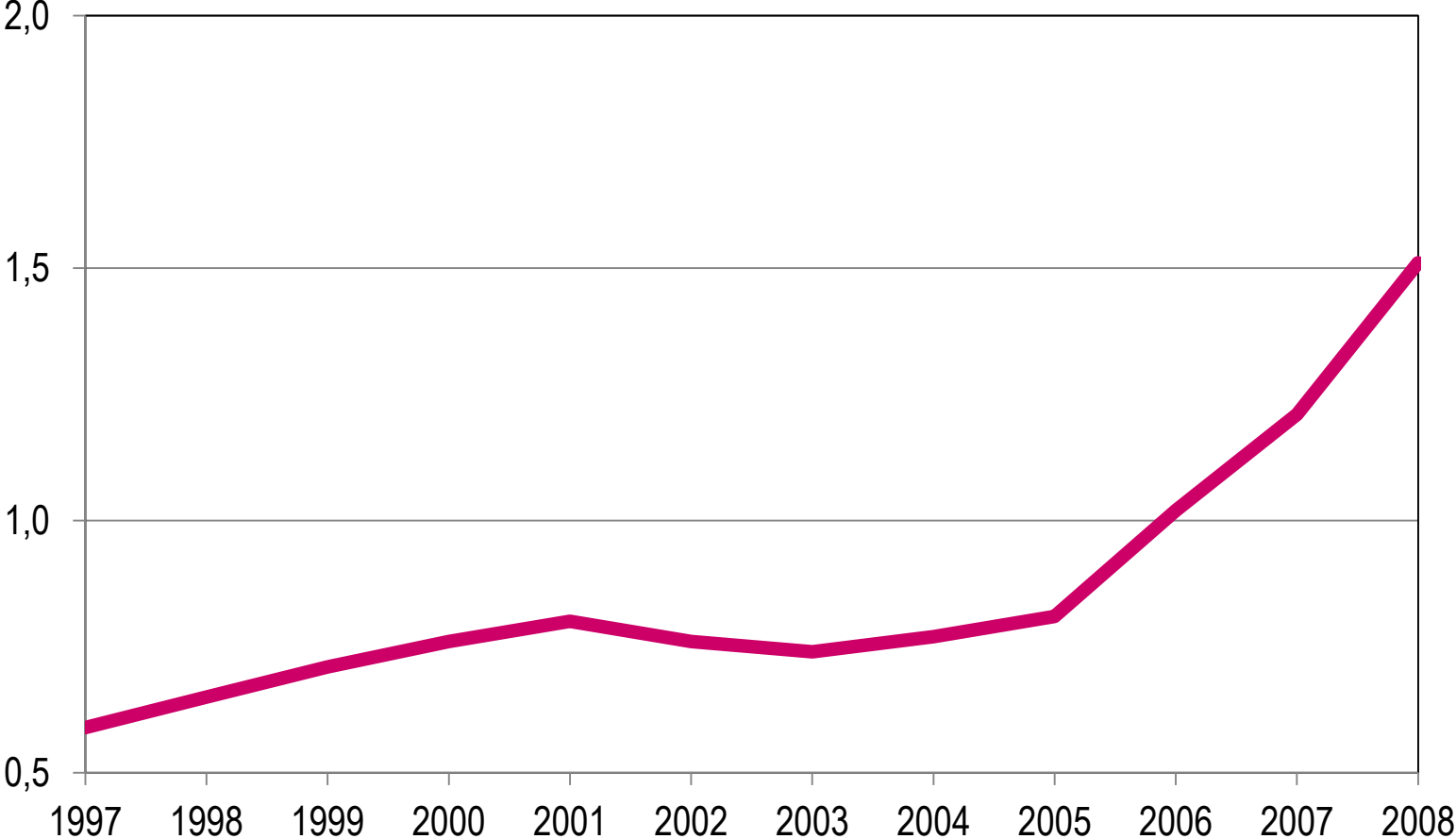
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MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

Context of High S&T Growth in Portugal

Investment in R&D

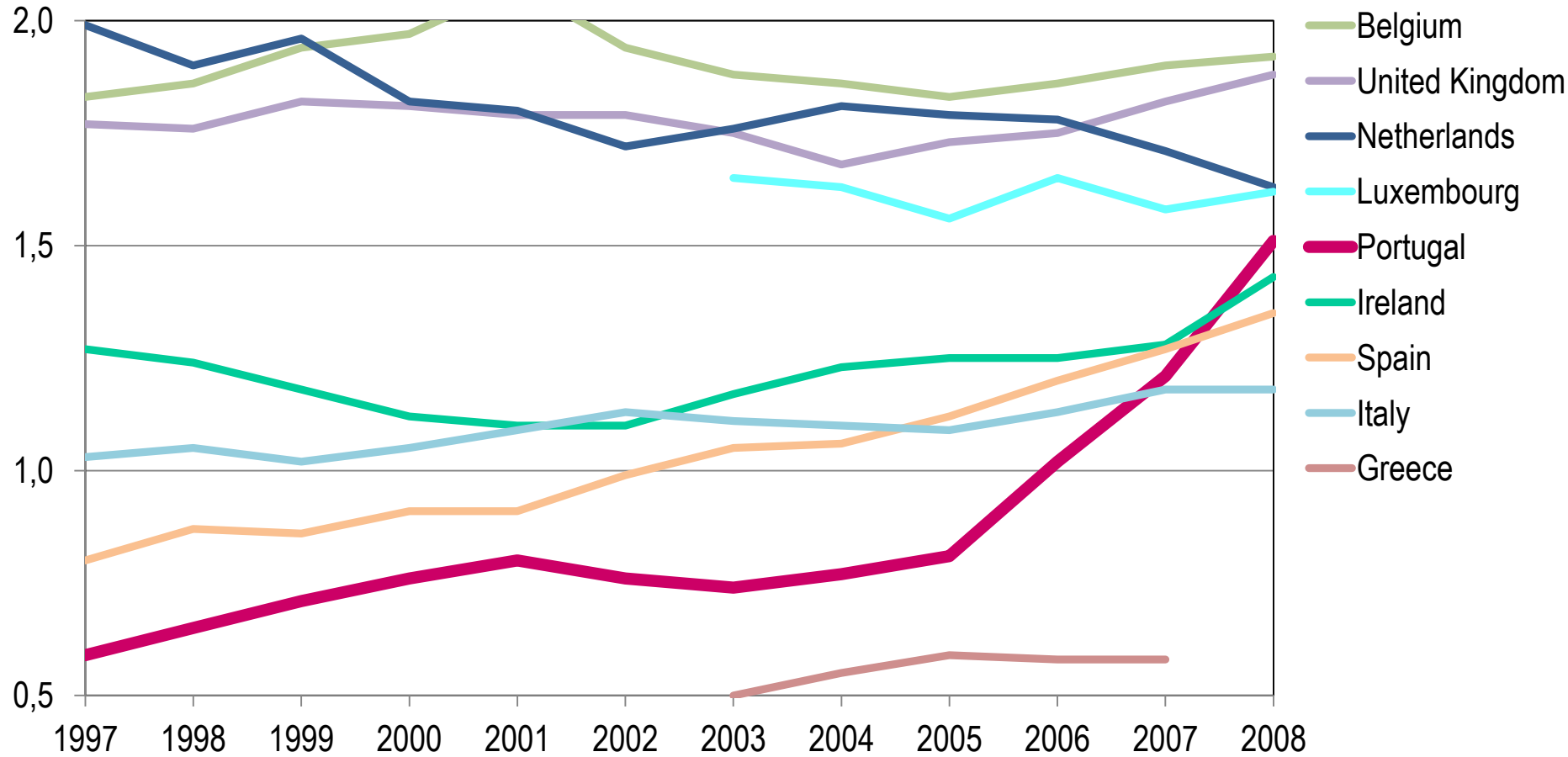
Evolution of R&D Expense in GNP (%), in Portugal



Source: EUROSTAT

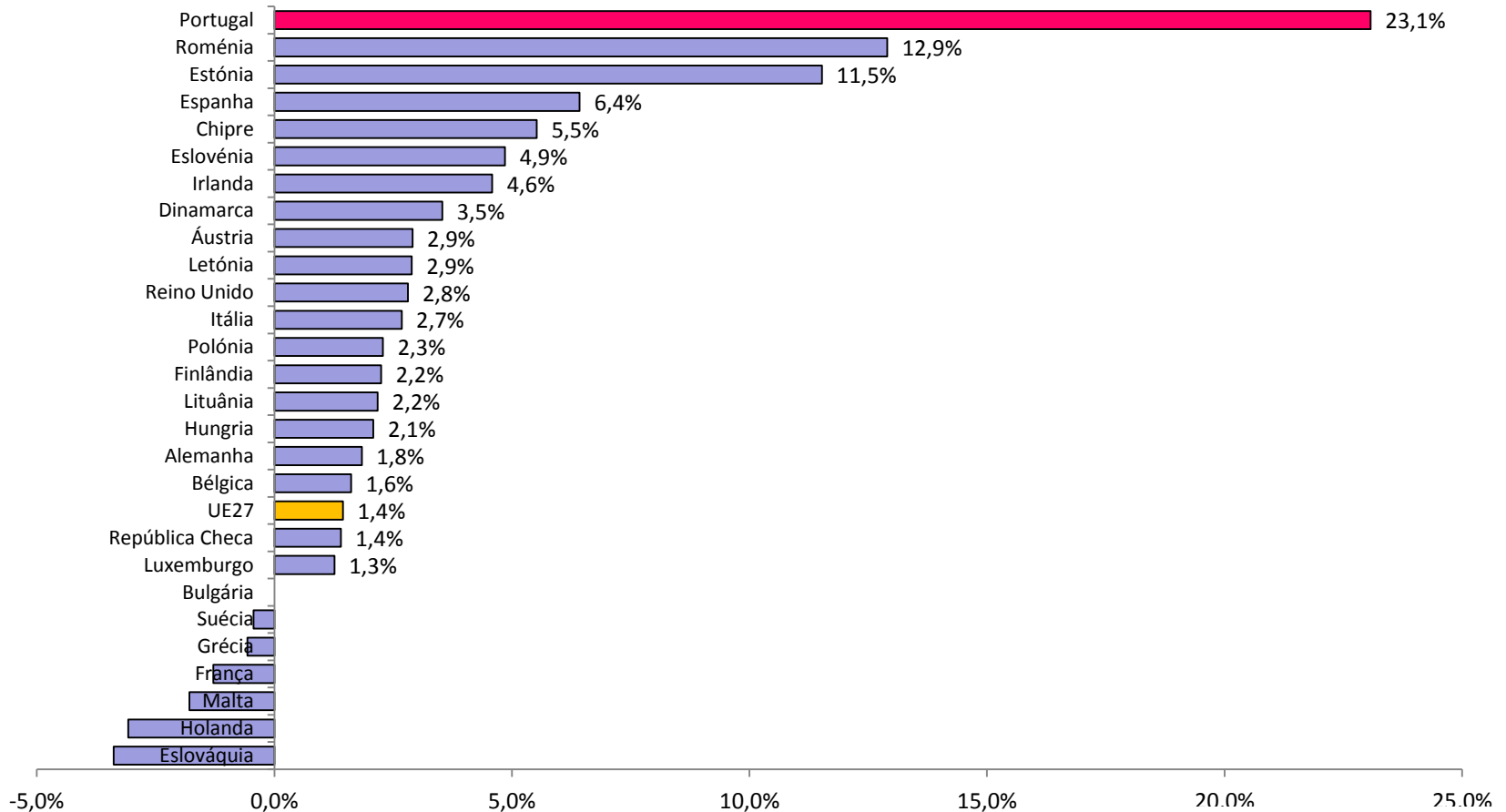
Evolution of R&D Expense in GNP (%), in Portugal

Highest average growth (23%) of UE27 (total=1,4%) in 2005-2008



Source: EUROSTAT

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



Source: EUROSTAT

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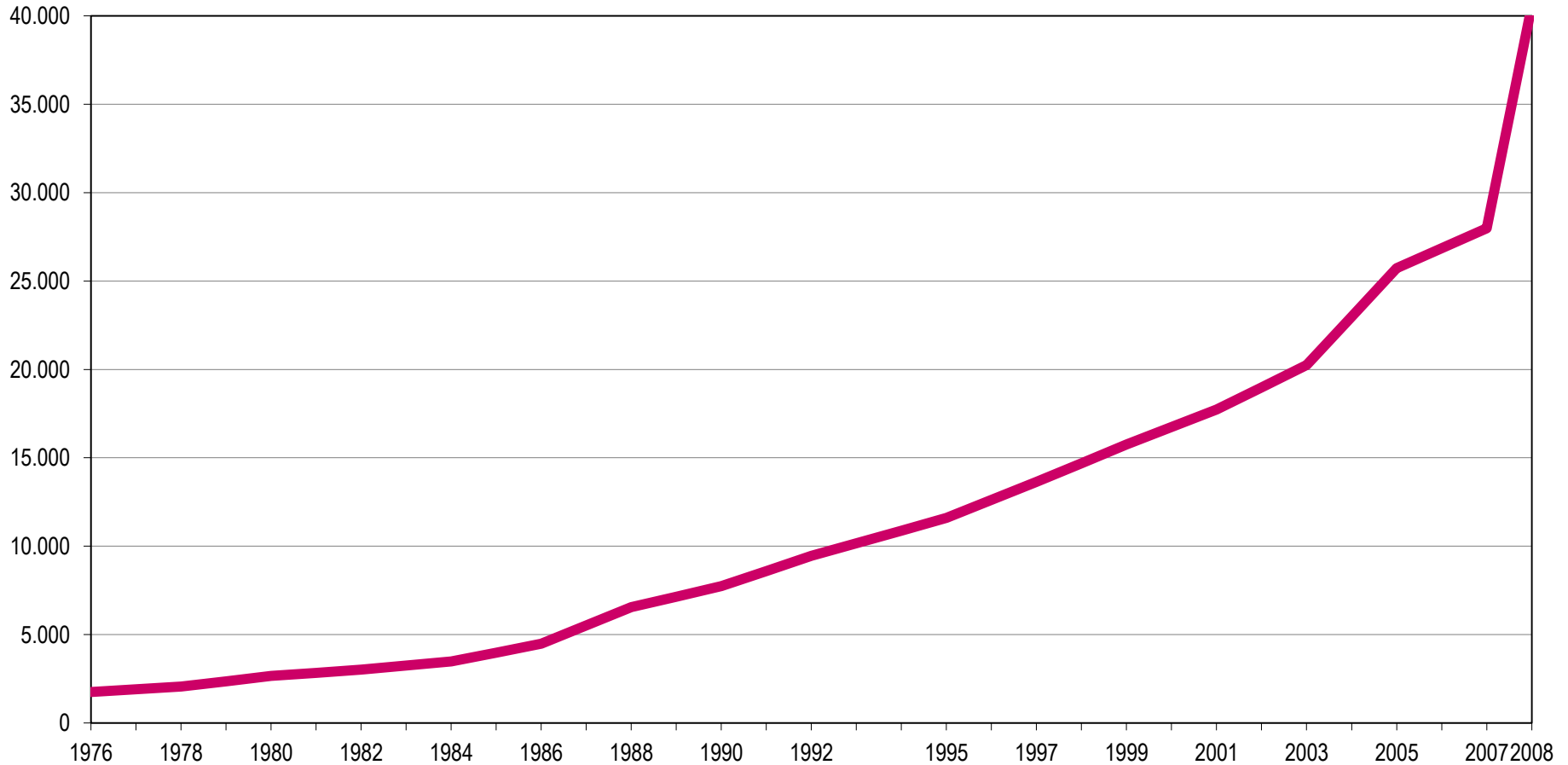
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Context of High S&T Growth in Portugal

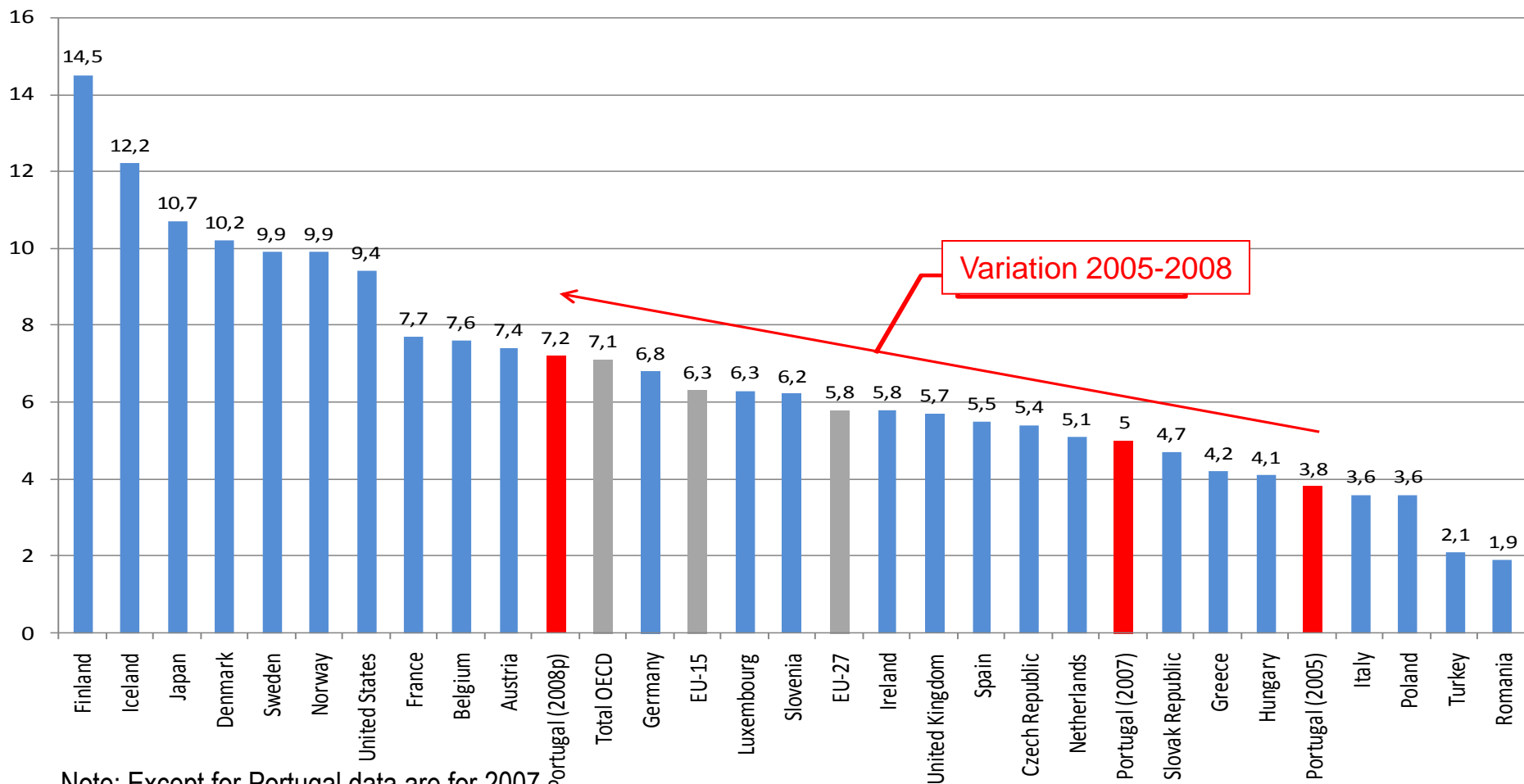
Investment in People

High Growth in Researchers (FTE)



Source: EUROSTAT

High Growth in Researchers (% labor force)



Note: Except for Portugal data are for 2007

Source: OECD

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In this Context of High S&T Growth

National e-Science Strategy

Infrastructure

Content

Distributed Computing

Cooperative Work at a Distance

National e-Science Strategy

- **National Research and Education Network** as a public NGN, presently with fiber owned by the NREN to 85% of Higher Education System, at 10 Gbps and scalable
- **b-on: Knowledge Library Online** planned in 1999, with 17,100 scientific journals, 18,200 e-books, 12,400 proceedings and transactions titles, 10 referential data bases, free access in all Higher Education and Scientific Institutions, “big deal” at national scale
- **e-U: Virtual Campus** wireless access integrating all Higher Education *campi*
- **RCAAP: Scientific Open Access Repository of Portugal**, presently with 29 institutions, incl. all 14 public universities, and >46,600 documents, protocol w/ Brazil
- **INGRID: National GRID Initiative** (1,800 CPUs, 1 PetaByte of disc memory, 2 PetaBytes of magnetic tape robot memory), integrated w/ Spanish GRID (IBERGRID), and part of EGI – European grid Initiative
- **IBERCIVIS: Voluntary Computing at the service of science** jointly w/ Spain
- **Tools for collaborative work at a distance**
HD Videoconferencing and immersive rooms • VoIP for all Higher Education and Scientific System, allowing simple collaborative video- and tele- conferencing • National platform for scientific and educational digital content being developed for Medicine and Future Internet, to be further extended.

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MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

International Knowledge Networks
Priority to ICT, particularly Future Internet

International Partnerships

Building Ambitious International Knowledge Networks

involving research, industry and university

MIT – Portugal Program (beginning 11 Oct 2006)

Engineering Systems: Sustainable energy and transportation systems • Advanced engineering design and manufacturing in electric car and mobile medical applications

Carnegie Mellon – Portugal Program (beginning 27 Oct 2006)

Future Internet Technologies: Next Generation Networks and trusted high-quality services • Critical infrastructures security and trust • Cyber-physical systems for ambient intelligence • Human-centric computing • Software engineering for large-scale dependable systems

UTexas Austin – Portugal Program (beginning 2 Mar 2007)

Interactive Digital Content, High Performance Computing

Fraunhofer – Portugal Program (beginning May 2008)

Ambient Assisted Living. The 1st Fraunhofer Institute outside Germany

International Partnerships

Building Ambitious International Knowledge Networks

INL – International Iberian Nanotechnology Laboratory

International research organization (1st in Iberian Peninsula in any area, 1st in World dedicated to nanotechnology). **Created jointly by Portugal and Spain in Nov 2005. Building inaugurated in Jul 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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