

The Bologna Process in Portugal

Sebastião Feyo de Azevedo
Portuguese Delegate to the Bologna Follow-up Group
sfeyo@dges.mctes.pt
<http://www.fe.up.pt/~sfeyo>

Seminar 'Russia-Portugal'
Fundação Mário Soares, Lisbon, 28 March 2007

1

To say what I am going to say...

The Bologna Process in Portugal

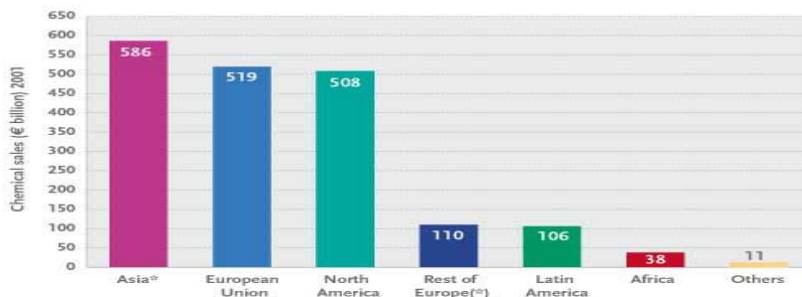
- ① Understanding the Bologna Process within the European Strategy for Development
- ② A major complementary document - The European Directive on Professional Recognition
- ③ Academic Degrees and Recognition of Professional Qualifications
- ④ The Bologna Process in Portugal

The European Strategy for Development

- ☞ Last quarter of the 20th Century - Intense search of new routes for Europe and for the World
- ☞ Culminated with the European Council of Heads of State and Governments, March 2000, Lisbon
 - ✓ The Lisbon Strategy for Growth and Jobs
 - ✓ Competitive positioning relatively to the other blocks of the World, in this globalised Planet
 - ✓ Stating of a strategic objective:

“By 2010, making Europe the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion” .

A simple example of World Competition Geographic breakdown of world chemicals production



World chemicals production in 2001 is estimated at € 1,878 billion.
The EU accounts for 28% of the total.

Sources: Cefic, NCF (National Chemical Federations), United Nations and ACC (American Chemistry Council)

Notes: * estimated
(**) Rest of Europe= Switzerland, Norway, Central & Eastern Europe, and Turkey
Asia: including Japan and China



The Bologna Process within the European Strategy for Development

☞ A strategy based on Knowledge and Transnational Cooperation, where we can recognize -

- ✓ The Economy Dimension -
 - Including the movement that converged in the creation of the EURO
- ✓ The Social Dimension -
 - In line with the European culture of humanism, reasoning, freedom and democracy
- ✓ The Knowledge Society Dimension -
 - Identified with the Bologna Process and the creation of the European Higher Education Area

Understanding the Bologna Process I - Initially an academic movement...

☞ Academic milestones

- ✓ The *Magna Carta Universitatum*, Bologna, 18 September 1988
- ✓ Several other academic meetings

☞ Quickly, the political taking over...

- ✓ The Sorbonne Joint Declaration, Paris, 25 May 1998, signed by 4 Ministers of Education
- ✓ The Bologna Declaration, on June 19, 1999, signed by 29 Ministers of Education of 29 European States

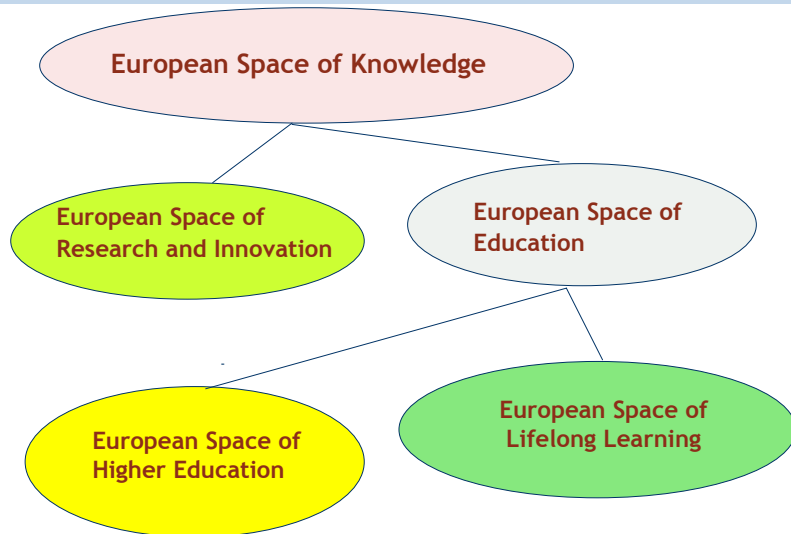
Understanding the Bologna Process II - Today, an integrated movement...

- ☞ In the Bologna Declaration, the **TURNING POINT** of this movement of such a wide dimension.
 - ✓ For that reason, Today known as the Bologna Process,
- ☞ Regular political milestones of this movement can be identified -
 - ✓ The Prague Meeting, on May 19, 2001
 - ✓ The Berlin Meeting, on September 19, 2003
 - ✓ The Bergen Meeting, on May 20, 2005
- ☞ This is the European dimension of the *Bologna Process*:
 - ✓ 29 Countries in Bologna, 32 in Prague, 33 in Berlin, 45 in Bergen ...possibly 46 in London 2007
 - ✓ A dimension significantly wider than that of the European Union

Understanding the Bologna Process III - The European Higher Education Area

- ☞ Establishing till 2010, the European Higher Education Area, coherent, compatible, competitive and attractive for european students and for students from third countries
- ☞ A Space that promotes a new European awareness and dimension in higher education, research and innovation:
 - ✓ For what cultural interchange through the mobility of young (and not so young) people plays a major role.
- ☞ A Space that promotes European cohesion through knowledge, through mobility and employability of graduates

The European Higher Education Area within the European Space of Knowledge



Understanding the Bologna Process IV - Detailing academic objectives

☞ An evolution of the teaching and learning paradigms:

- ✓ adapting this learning process to the prevailing views and concepts of modern societies and to the available pedagogical means
- ✓ projecting in particular the education for the adult stages of life

☞ The re-structuring of the higher education system:

- ✓ in order to bring higher education nearer to the needs of Society and simultaneously to offer a wider choice to youngsters that may bring them more individual satisfaction

Understanding the Bologna Process

V - Economical and political issues

- ☞ To guarantee development and competitiveness through
 - ✓ The increment of transnational cooperation
- ☞ To promote European cohesion through
 - ✓ Mobility and cooperation at all levels, both among students and staff
- ☞ To Promote the external dimension of the European model, in order to
 - ✓ Attract people from other areas

Understanding the Bologna Process

VI - Keywords: Mobility; Cooperation; Trust; Accreditation

- ☞ **MOBILITY** and **COOPERATION** are the core of the Bologna Process;
 - ✓ They require academic and professional recognition
- ☞ Recognition requires **TRUST**
- ☞ **TRUST** requires transparency and readability of structures and qualifications
- ☞ Readability means to understand what is similar and what is different in educational profiles and professional levels
- ☞ Such is guaranteed through qualification and **ACCREDITATION** procedures

From Bologna ... To Bergen... And to London I - Progress and issues to tackle (I)

☞ Mobility

- ✓ System of credits established - including an accumulation system, to be applied consistently
- ✓ Recognition of degrees - adoption of a system of easily readable and comparable degrees, through descriptors of competences
- ✓ Instruments for mobility are available, BUT action is required to overcome barriers - mainly economical and political

☞ Degree structure

- ✓ Adopts the overarching framework for qualifications in the EHEA, comprising
 - Short cycles
 - First and second main cycles
 - Third cycle

From Bologna ... To Bergen... And to London II - Progress and issues to tackle (II)

☞ Recognition of degree and study periods

- ✓ Commitment to the recognition of foreign qualifications
- ✓ Improve recognition of prior learning, including non-formal learning

☞ Quality Assurance

- ✓ Adopts the standards and guidelines for quality assurance in the European Higher Education Area as proposed by ENQA.
 - Will introduce a model for peer review of quality assurance agencies on a national basis,
 - Welcomes the principle of a European register of quality assurance agencies based on national review.

From Bologna ... To Bergen... And to London II - Progress and issues to tackle (III)

- ☞ **Qualifications framework**
 - ✓ Limited progress
- ☞ **Lifelong learning**
 - ✓ The Copenhagen Process for enhancing cooperation in Vocational Education and Training, launched in 2002
- ☞ **Doctorates and early stage researchers**
 - ✓ Reinforcing efforts to embed doctoral programmes in institutional strategies and to develop career paths and opportunities for doctoral candidates
- ☞ **Social dimension**
 - ✓ Efforts to widen participation at all levels on the basis of equal opportunity
- ☞ **Employability**
 - ✓ To sharpen the meaning of employability in relation to each cycle
- ☞ **External dimension**
 - ✓ Strengthening the attractiveness of the EHEA

From Bologna ... To Bergen... And to London III - A major issue of the present and for the future

- ☞ The objective is to increase the average level of knowledge of the Europeans
- ☞ The question is
 - ✓ Where to draw the line for promoting the enlarging of higher education? For mass education?
- ☞ For sure the line will be drawn below second cycles and this represents a major shift in education policies in several countries

To say what I am going to say...

- ① Understanding the Bologna Process within the European Strategy for Development
- ② **A major complementary document - The European Directive on Professional Recognition**
- ③ Academic Degrees and Recognition of Professional Qualifications
- ④ The Bologna Process in Portugal

An important piece in the European model for development The Directive for Recognition of Professional Qualifications (I)

- ☞ Approved by the European Parliament and by the European Commission on September 7, 2005
- ☞ Reaffirms previous Directive, accepting 7 professional areas with recognized specifications
 - ✓ Medical training Minimum education - 6 anos IT
 - ✓ Training of veterinary surgeons Minimum education - 5 anos IT
 - ✓ Basic dental training Minimum education - 5 anos IT
 - ✓ Training as pharmacists Minimum education - 5 anos IT
 - ✓ Training of nurses Minimum education - 3 anos IT
 - ✓ Training of midwives Minimum education - 3 anos IT
 - ✓ Training of architects Minimum education - 4 anos IT
 - ✓ Engineering and Law are out of this group
- ☞ Approves general qualifications for the other professional areas

An important piece in the European model for development The Directive for Recognition of Professional Qualifications (II)

- ☞ Article 11 - Five levels of qualification particularly relevant for professions that are out of the Annex
 - ✓ 2 levels requiring secondary education, general or vocational
 - ✓ 1 level, requiring short post-secondary education, not necessarily at higher education level, plus professional training
 - ✓ 2 levels of post-secondary education at higher education level, plus adequate professional training

An important piece in the European model for development The Directive for Recognition of Professional Qualifications (III)

- ☞ Art. 11, e)
 - ...completed a post-secondary course of at least four years' duration...at a university or establishment of higher education...and where appropriate completed professional training...
- ☞ Art. 11, d)
 - ...training at post-secondary level of at least three and not more than four years' duration...at a university or establishment of higher education...as well as the professional training that may be required...
- ☞ Art. 11, c)
 - ...training at post-secondary level other than that referred in d) and e) of a duration of at least one year...as well as the professional training which may be required in addition to that post-secondary course...

A striking coincidence or concerted action?

☞ **The Bergen Declaration and the Directive point out in the same direction**

- ✓ **Recognition of different qualification levels**
- ✓ **Recognition that qualifications are related to periods of studies**

☞ **Short Cycles ⇔ First level of qualification (Art 11°, c))**

☞ **First Cycles ⇔ Second level of qualifications (Art. 11°, d))**

☞ **Second Cycles ⇔ Third level of qualifications (Art. 11°, e))**

To say what I am going to say...

- ① **Understanding the Bologna Process within the European Strategy for Development**
- ② **A major complementary document - The European Directive on Professional Recognition**
- ③ **Academic Degrees and Recognition of Professional Qualifications**
- ④ **The Bologna Process in Portugal**

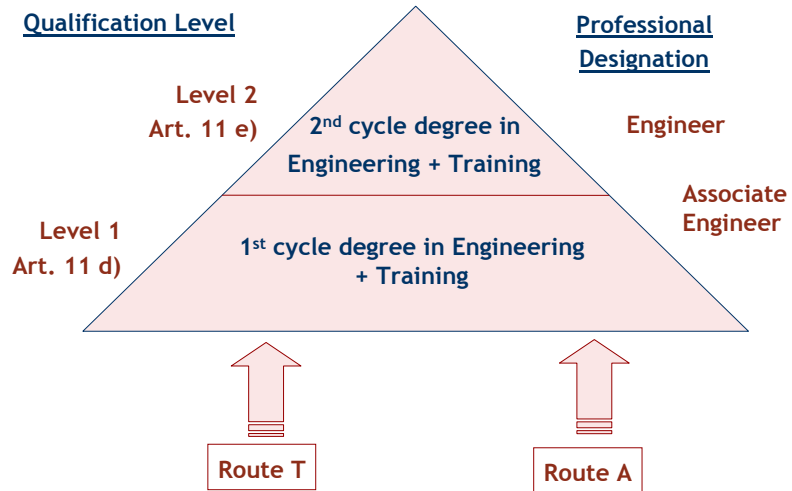
Academic Degrees and Recognition of Professional Qualifications I - Concerning LEVELS of qualification - (II) - Art. 11, d) and e)

- ☞ In most areas we can recognize two levels of qualifications associated to those levels approved in the Directive
- ☞ Example in Engineering
 - ✓ LEVEL 1 - Art. 11, d): (3-4)U + Professional Training \geq Y, with Y=?
 - First Cycle Degrees are the basis for achieving the qualification of Associate Engineer, or equivalent European designation
 - ✓ LEVEL 2 - Art. 11, e): \geq 4U + Professional Training \geq X, with X=?
 - Second Cycle Degrees are the basis for achieving the qualification of Engineer, or equivalent European designation

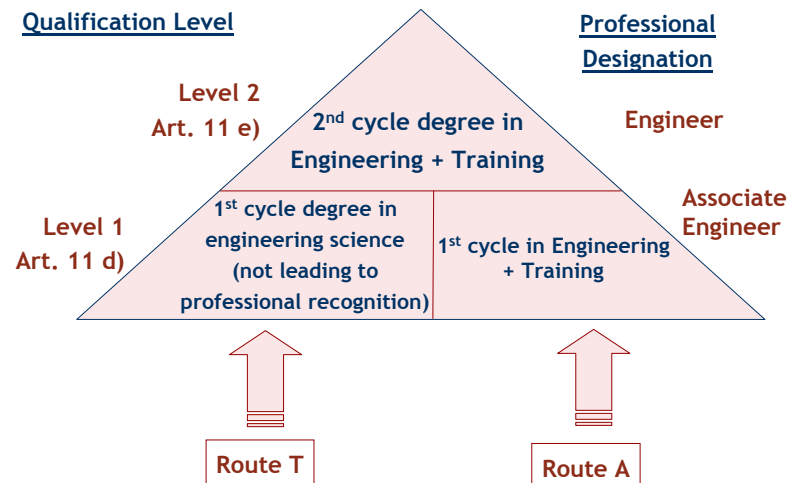
Academic Degrees and Recognition of Professional Qualifications II - Concerning PROFILES

- ☞ Also, in several areas we can recognize two main profiles
 - More Theoretically oriented
 - ✓ Programmes with a stronger emphasis on basic sciences in the first years
 - ✓ Generally linked to Second Cycle degrees
 - More Applications oriented
 - ✓ Designed to qualify after First Cycle, independently of pursuit of studies through Second Cycles, be it directly or through bridging programmes

Academic Degrees and Recognition of Professional Qualifications III - Routes for the different qualification levels (II)



Academic Degrees and Recognition of Professional Qualifications III - Routes for the different qualification levels (II)



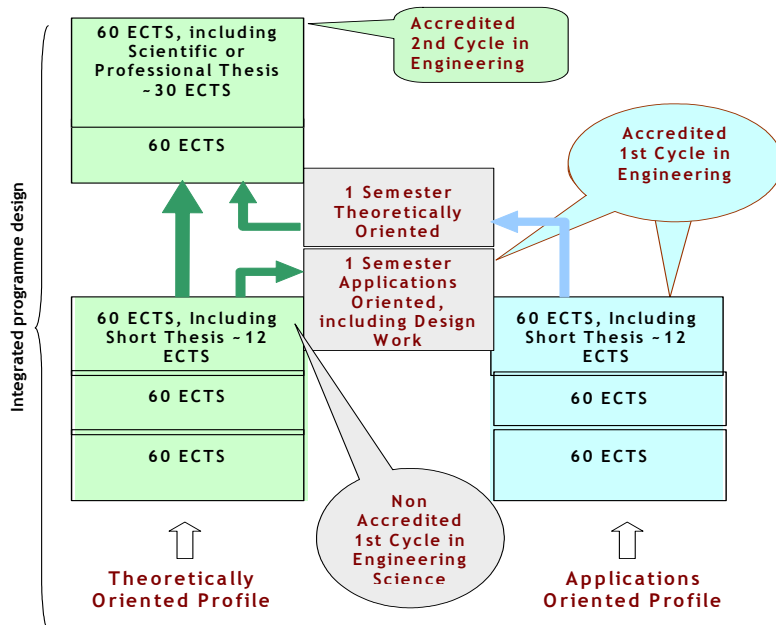
Academic Degrees and Recognition of Professional Qualifications IV - Offer of Programmes

What in all is most relevant, and not so much spoken

Increase the attractiveness of the offer in order to bring into the system students with different backgrounds and interests

- Providing bridging programs
- Implementing the concept of 'accumulated credits'
- Creating a true offer for lifelong learning through complementary modules of (advanced) specializations courses

A good example is the Swedish structure for engineering education



Academic Degrees and Recognition of Professional Qualifications V - Competences, Expectations from Companies

- ☞ New structures and programmes seem to answer more adequately the requirements of the Society, particularly in the differentiation (of competences) offered
- ☞ With new, more flexible paths, it is expected that more diverse profiles of students are developed (more research oriented, more innovation oriented, with a higher entrepreneurial spirit, etc.)
- ☞ New competences and skills, particularly soft skill, will bring young candidates more ready for the job market than before
- ☞ Accreditation procedures should play a major role in required harmonization for improving mobility and cooperation

Academic Degrees and Recognition of Professional Qualifications VI - Programme Outcomes for Accreditation (I)

- ☞ Programme outcomes for accreditation should always be related to potential professional recognition of qualifications
- ☞ As such:
 - ☞ There should be only one set of programme outcomes for accreditation of Second Cycle Degrees
 - ☞ (Whatever the profile and programme)
 - ☞ There should be only one set of programme outcomes for accreditation of First Cycle Degrees

Academic Degrees and Recognition of Professional Qualifications VII - An example of European Cooperation - The EUR-ACE Project (I)

- ☞ **European Project of significant relevance, that aimed at establishing an European System for Accreditation of Engineering Education programmes**
 - ✓ **14 European Institutions, among them the Portuguese Institution of Engineers and the Russian Association for Engineering Education**
 - **FEANI, SEFI, CESAER, EUROCADRES, ENQHEEI, ASIIN, CTI, IEI, CoPI, UNIFI, OE UAICR, RAEE, EC-UK**
- ☞ **The EUR-ACE Project was concluded in 2005 and has established:**
 - ✓ **Standards for Second Cycle degrees, viewed in an integrated perspective**
 - ✓ **Standards for First Cycles**

Academic Degrees and Recognition of Professional Qualifications VII - The EUR-ACE Project (II)

- ☞ **The EUR-ACE project has lead to the creation in February 2006 of an European Association**
 - ✓ **The ENAEE - European Network for Accreditation of Engineering Education**
- ☞ **The ENAEE is responsible for maintaining and awarding the EUR-ACE label**
- ☞ **6 European Agencies are currently accredited for awarding the EUR-ACE Label**
 - ✓ **The Institution of Engineers is one such Agency and is now preparing its accreditations**

To say what I am going to say...

- ① Understanding the Bologna Process within the European Strategy for Development
- ② A major complementary document - The European Directive on Professional Recognition
- ③ Academic Degrees and Recognition of Professional Qualifications
- ④ **The Bologna Process in Portugal**

The Bologna Process in Portugal

I - System dimension

(iv) Number of university and polytechnic institutions, 2006

	University education		Polytechnic education	
	Universities	University schools not integrated in universities	Polytechnic institutes	Polytechnic schools not integrated in polytechnic institutes
Public	14	5	15	15
Private	14	33	2	54
TOTAL	28	38	17	69

(v) Number and percentage of students enrolled (2005-2006)

Public higher education	275 961	75%
University education	171 575	47%
Polytechnic education	104 386	28%
Private higher education	91 973	25%
University education	61 754	17%
Polytechnic education	30 219	8%
TOTAL	367 934	-

The Bologna Process in Portugal

II - The Challenge of Changing Paradigms

- ☞ Higher Education Institutions face the challenge of these changing paradigms of living
 - ✓ Face the pressure for curricular reforms
 - ✓ Face the requirements to adapt internally to new degrees and new public
 - ✓ Face changing concepts of social responsibility in answering societal needs in a shorter term than they were used to
 - ✓ Face changing concepts of accountability
 - ✓ Face new challenges in management
- ☞ They are reacting and responding well to the challenge

The Bologna Process in Portugal

III - Main legislation is in place...

- ☞ New laws were approved in 2005 and 2006
 - ✓ Regulating the instruments for mobility
 - ✓ Regulating the degree system
 - ✓ Specifically regulating the short courses and related professional qualifications programmes (Level IV)
 - ✓ Regulating the access to higher education of new publics
- ☞ Laws are about to be approved
 - ✓ Concerning the quality assurance system
 - ✓ Governance
 - ✓ Academic career
 - ✓ Recognition of foreign diplomas

The Bologna Process in Portugal IV - Instruments for mobility

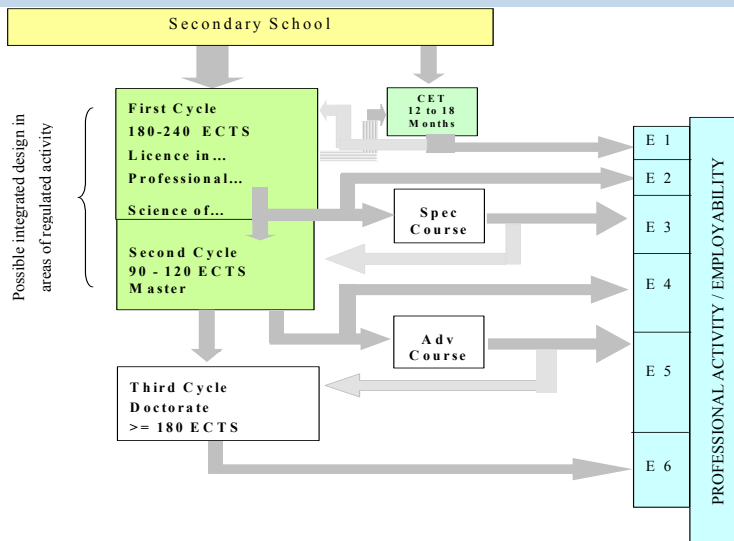
☞ In 2007, the ECTS system, including the credit system and the Diploma Supplement will be active in

- ✓ ~70% of public universities
- ✓ ~60% of public polytechnic schools
- ✓ ~99% of private universities
- ✓ ~70% of private polytechnics

☞ Portugal has ratified the Lisbon Convention in 2001

- ✓ Legislation is in place for recognition of foreign studies

The Bologna Process in Portugal V -The new degree system



The Bologna Process in Portugal

VI - Adapting to the new degree system

- ☞ In 2006-2007 about 38% of 1st and 2nd cycle study programmes were offered according to the new degree system
- ☞ About 50% will be ready for 2007-2008
- ☞ Some 12% to be reorganized in 2008-2009
- ☞ 3rd cycle studies are now being organized

The Bologna Process in Portugal

VII - Expanding Research

Distribution of researchers per type of institution in Portugal, 2003

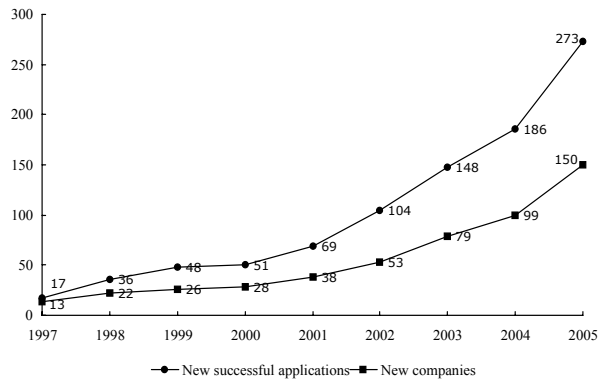
	Companies	Government	Higher Education	Private, non-profit	Total
Researchers					
Head count	6 102	5 027	19 906	4 820	35 855
FTE	3 793.9	3 439.6	10 062.4	2 946.1	20 242.0
% (FTE)	21	19	57	17	100
FTE/Work force (0/00)	0.7	0.6	1.9	0.5	3.7
Total I&D personnel					
Head count	9 882	7 273	21 488	5 393	44 036
FTE	6 123.7	4 917.0	11 146.9	3 341.9	25 529.4
% (FTE)	27	21	49	15	100
FTE/Work force (0/00)	1.1	0.9	2.1	0.6	4.7

Source, OCES, IPCTN 2003

The Bologna Process in Portugal

VIII - Bringing Doctors and Masters into Companies

Number of successful applications and of new companies in the programme «Doctors and masters in Companies and Technological Centres»



The Bologna Process in Portugal

IX - Challenges for the near future (I)

👉 Curricular reform

- ✓ **Teaching / Learning Paradigms**
 - Competence based learning
 - Flexible learning paths
- ✓ **Quality Assurance**
 - Making sure that we are competitive
- ✓ **Recognition of degrees and study periods**
 - Recognition of foreign qualifications
 - Recognition of prior learning
 - Recognition of credit accumulation

The Bologna Process in Portugal IX - Challenges for the near future (II)

- ☞ **Funding Reform -**
 - ✓ Different sources of income,
 - ✓ Public Schools less dependent from State

- ☞ **Governance Reform -**
 - ✓ **Autonomy and Accountability**
 - ✓ **Adapting, re-sizing the network**

- ☞ **The need to be attractive**
 - ✓ **For third countries**
 - ✓ **For strategic partnerships in Europe**

Not to forget...

- ☞ **Transnational cooperation and professional mobility are the 'name of the game' and require TRUST**
 - ☞ **The mechanisms to build and consolidate such TRUST have names**
 - ✓ **Transparency**
 - ✓ **Quality**
 - ☞ **They are indeed slowly, but steadily, being implemented in The Portuguese Higher Education Institutions... as they are all over Europe**
- ☞ **Within the diversity of our cultures and traditions, and with the corresponding healthy difficulties, the common future of Europeans is being built...**