

# ***Higher Education in the European Union***

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# The Bologna process

- The present features of the European HE systems are the outcomes of the implementation since 1999 in the remarkably different HE systems of the signatory countries of the Bologna process, i.e. the process of **coordination at the European level of national reforms of HE aimed at the creation of the European Higher Education Area**

# Yerevan Communiqué May 18<sup>o</sup> 2015

- voluntary convergence and coordinated reform of our higher education systems. This is based on public responsibility for higher education, academic freedom, institutional autonomy, and commitment to integrity. It relies on strong public funding, and is implemented through a common degree structure, a shared understanding of principles and processes for quality assurance and recognition, and a number of common tools

# The Open Method of Coordination- The tools of governance

- Definition of common targets (in Inter-Ministerial Conferences) and of a road-map.
- Instruments of soft-law (Reccomendations, Communications)
- Institutionalization of processes of monitoring and peer review.
- Promotion of processes of institutional learning.
- The responsibility of the design and the implementation of reforms is entirely at the m.s. level .The only sanctions for non-compliance are of symbolic nature (“naming and shaming”) : Score-boards emphasize lack of implementation at the domestic level .

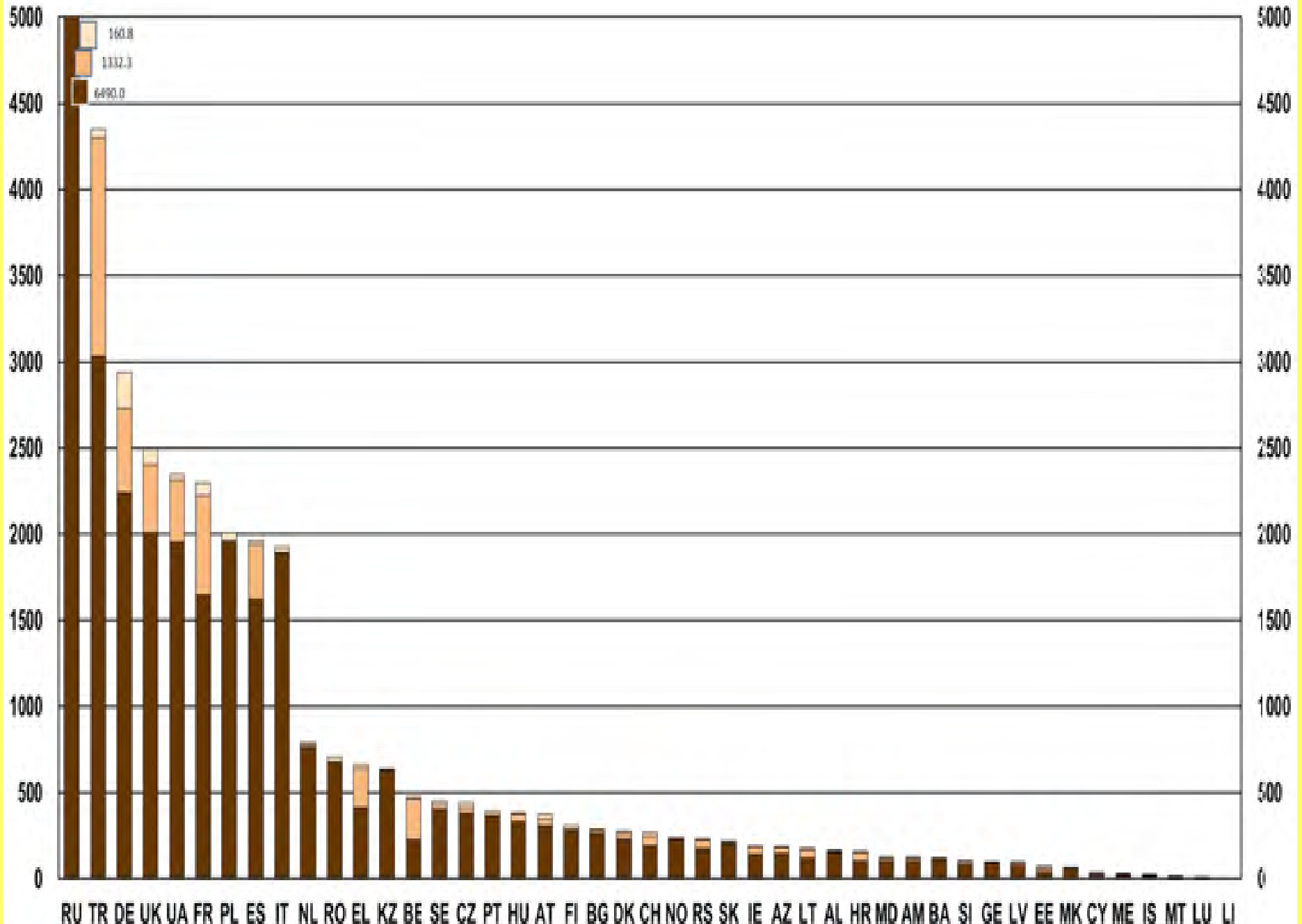
# MEMBERSHIP DEL PROCESSO DI BOLOGNA (2014)



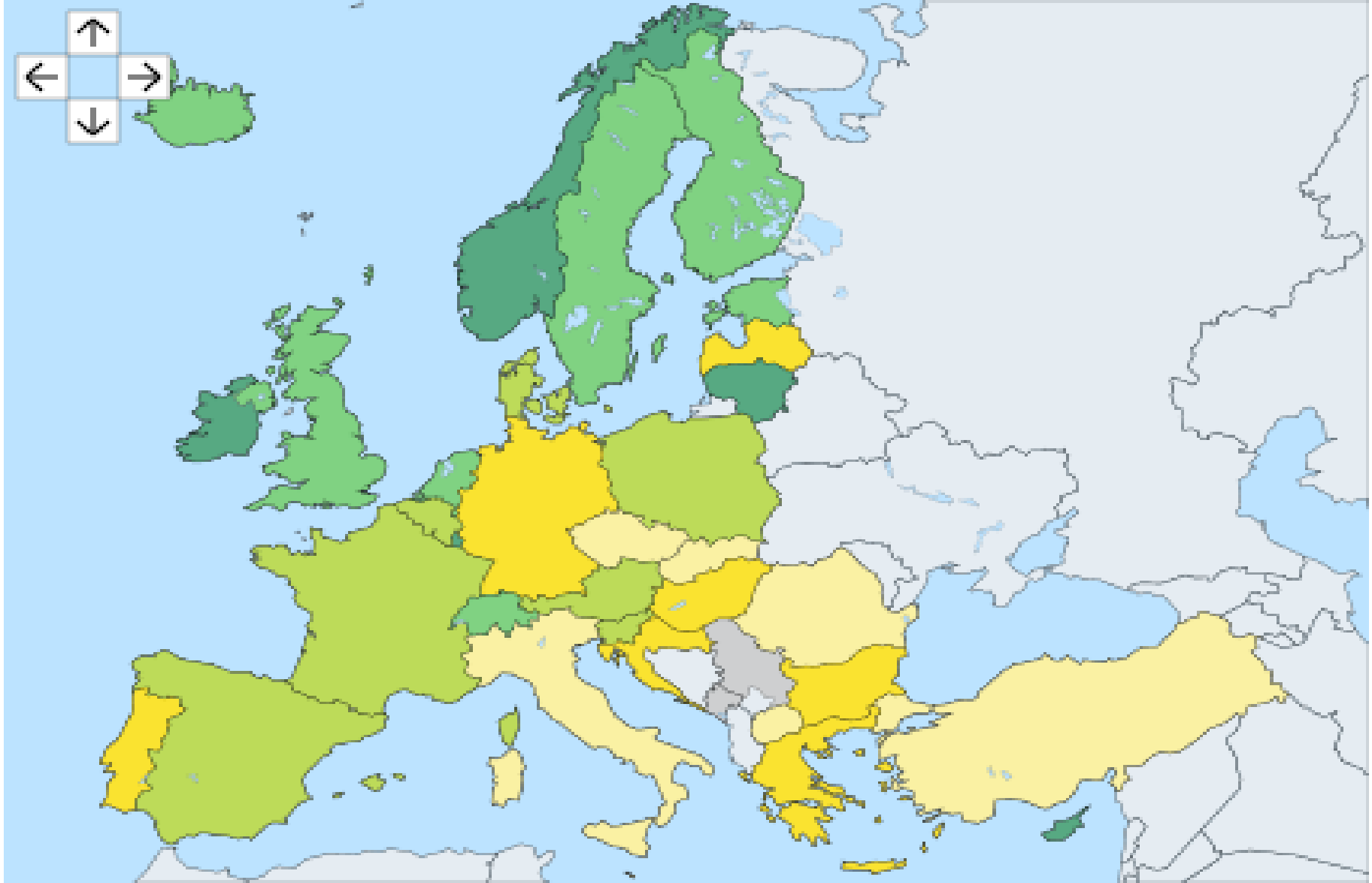
# Diversity of the Bologna countries' HE systems

- The Bologna process is implemented in very different HE contexts in terms of size, finances

# Number of students in Tertiary Education

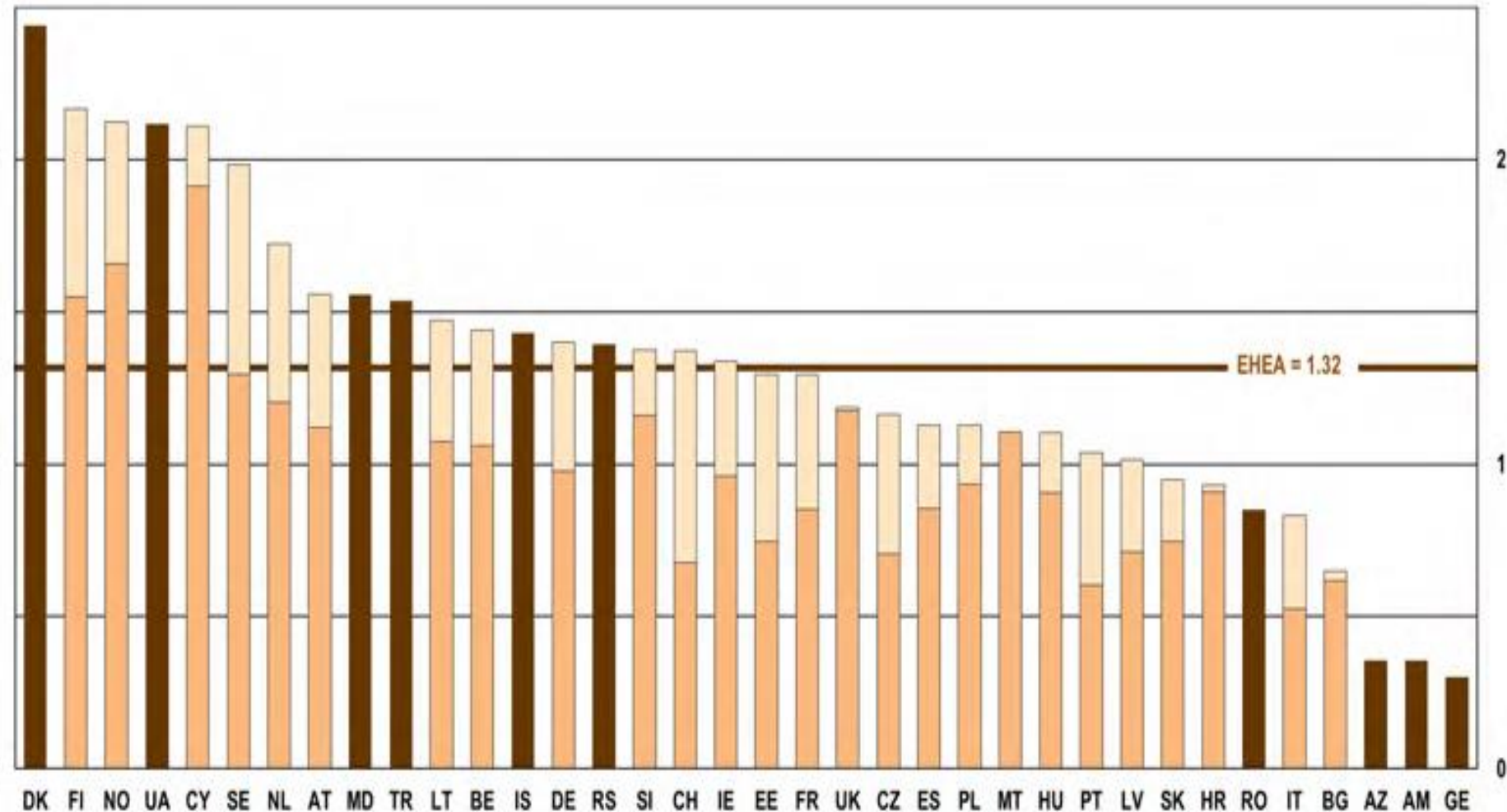


# Tertiary Education Attainment 30-34 (2014)





# Expenditure for tertiary education as a % of GDP



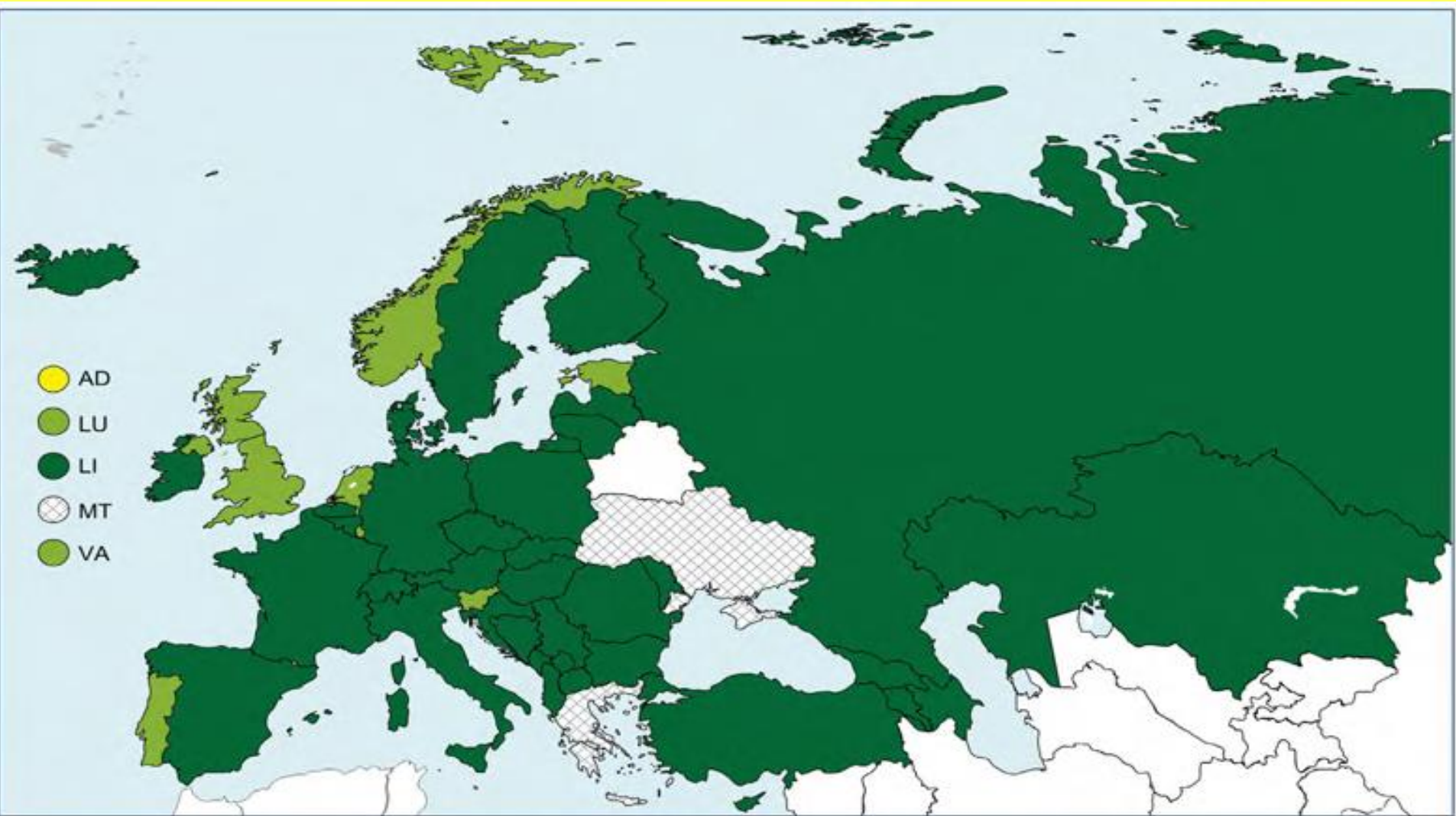
# *The three cycles system*

- Before 1999 diversity in HE education system: some BA-MA, other system long programmes (4-6 years) leading to a MA equivalent, other several levels.
- Bologna declaration: easy readable and comparable degrees,
- **two main cycles** : undergraduate –graduate ; access to the second after the completion of a first cycle lasting a minimum of 3 years.
- Berlin 2003 →third cycle, PhD added .
- Bologna tools -→ ECTS, Diploma Supplement, Qualification Framework

# Students enrolled in Bologna Type (2 cycles) programs 2013-14

>90%

70-80%



# Integrated long programmes

- Most countries have integrated long programs in fields that prepare for regulated professions or in case national or EU legislation (dir 2005/36/EC) require 6 years: medicine, dentistry, pharmacy, law, architecture, veterinary medicine etc.

# Degree programs : ECTS

- DEF: **ECTS** is a **learner centered** system for credit accumulation and transfer based on the transparency of learning outcomes and learning processes .
- It aims to facilitate planning , delivery, evaluation, recognition and validation of qualifications and units of learning as well as students' mobility .(European Commission, DG Education and Culture, *ECTS Users' guide*, Brussels 2009)

# ECTS – credit transfer and accumulation

- Experimented since 1989 for credit transfer for students' mobility (Erasmus)
- Mentioned in the Bologna declaration of 1999 as a tool to facilitate students' mobility
- The *Prague communiqué* recommends the use of ECTS (or ECTS compatible) credit system for credit accumulation and credit transfer
- Since 2004 ECTS credits allocated on the basis of learning outcomes and workload

# ECTS credits

- Based on the *workload* students need in order to achieve expected *learning outcomes* .
- **Students' Workload** : It's the **time** students typically need to complete all learning activities ( lectures, seminars, projects, practical work, individual study and examinations) required to achieve the expected learning outcomes

# Full academic year = 60 ECTS Credits

- The workload of a full time year of formal learning, and the associated learning outcomes, is **60 ECTS** credits.
- In most countries the time attached to 60 ECTS ranges from 1500 to 1800 hours , and the time attached to **one ECTS** credit ranges from **25 to 30** hours.



# First cycle

- The **180 ECTS workload model** is the most widespread, with 58 % of programmes following it in comparison to the 37 % share of the 240 ECTS workload model.
- Belgium (Flemish Community), France, **Italy**, Liechtenstein and Switzerland have 180 ECTS first cycle programmes only. In addition, a strong predominance of the 180 ECTS model can be seen in Albania, Belgium (French Community), the Czech Republic, Luxembourg, Montenegro, Norway, Slovakia, Slovenia and Sweden.
- The **240 ECTS model** is the only model used in Cyprus, Georgia, Kazakhstan, Spain and Turkey, while in Azerbaijan, Armenia, Bulgaria, the former Yugoslav Republic of Macedonia, Russian Federation, Spain and the United Kingdom (Scotland) more than 75 % of programmes follow the 240 ECTS model. The 240 ECTS model also predominates in the Netherlands where, while the share of programmes of 240 ECTS programmes is 45 %, the share of students in this model reaches 70 %.

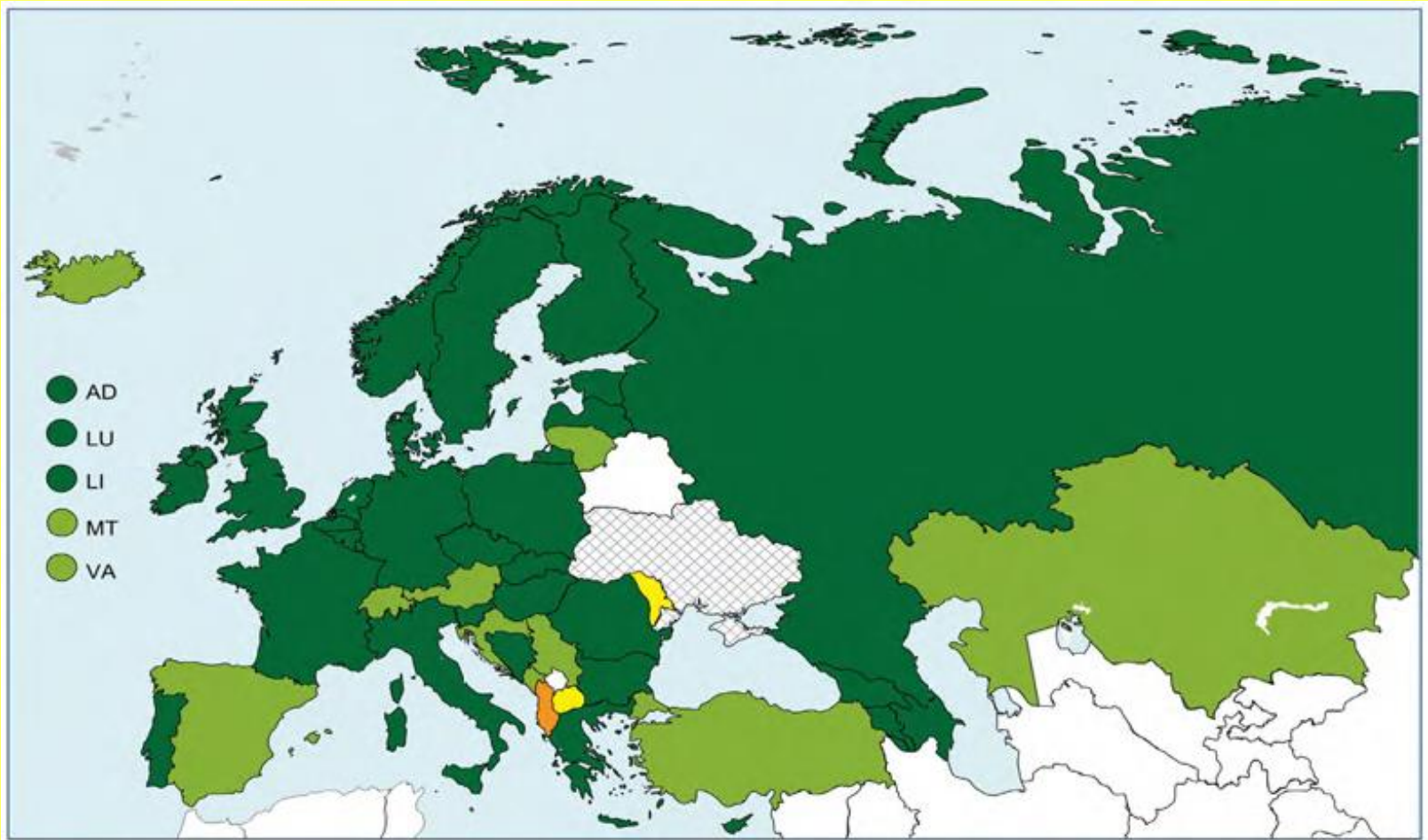
## Second cycle

- In the second cycle the **120 ECTS model** is by far the most widespread, being present in 43 higher education systems.
- The 120 ECTS credits is the sole model in Azerbaijan, France, Georgia, Italy, Liechtenstein and Luxembourg and is used in more than 75 % programmes in a further 22 systems. Since 2012, Albania, Armenia and Turkey have diversified their programme offer, after previously using only the 120 ECTS model in the second cycle.
- On average, in the EHEA **65 % of all second cycle programmes follow the 120 ECTS model.**
- The **60-75 ECTS** model is used for 16 % of programmes, while 13 % of all second cycle programmes follow **the 90 ECTS model**. 6 % of programmes have another duration. In the United Kingdom (England, Wales and Northern Ireland), although data is not available centrally, the most typical workload is 90 ECTS for taught Master degrees and 180 ECTS for taught Master of Philosophy (MPhil) qualifications.

# *Programs leading to regulated professions*

- Generally long programs for 300-360 credits (5-6 years) depending on the regulated profession in question
- In some countries (es. Be, Dk, NI, Fi) re-arranged in two cycles, with the second longer than usual (up to 180 ects)

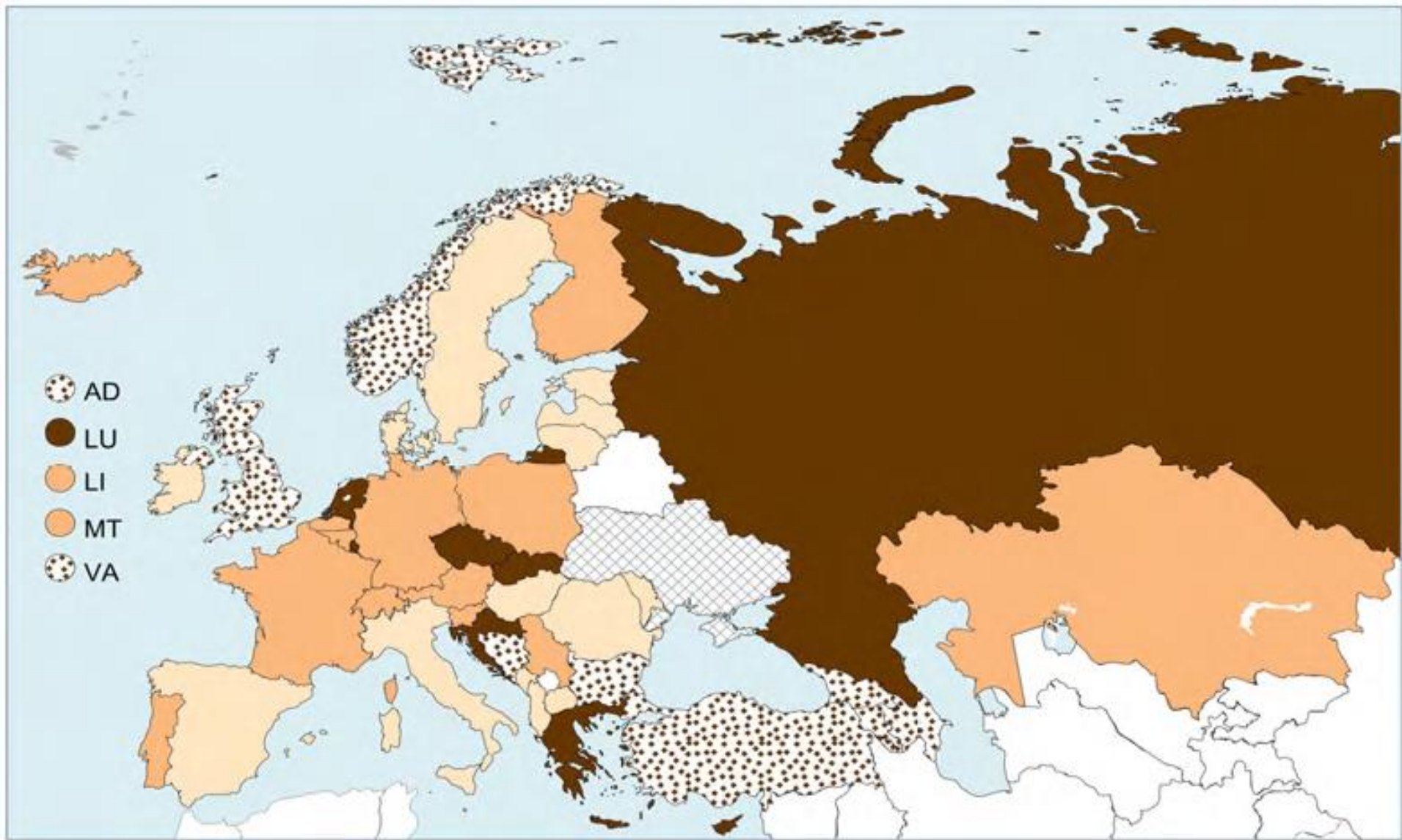
Access to II cycle-Almost universally granted with few exceptions (Macedonia, Moldavia and Albania)



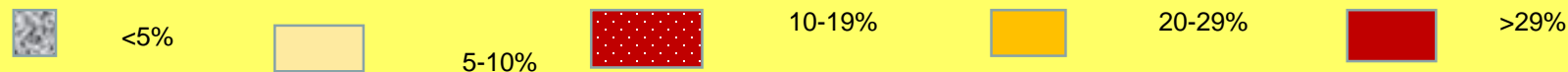
# Access to 2° cycle

- Theoretically access to 2° cycles granted almost universally to those who completed 1° cycle.
- In fact all or some holders of a first-cycle degree from a different HE institution seeking access to second-cycle studies have to sit additional exams or complete courses in 21 higher education systems (exceptions are Portugal, Ireland, Italy, France, Spain, Sweden and Finland) ; in the vast majority of countries, all or some holders of first-cycle degrees in a different field of study have to take additional examinations or to complete additional courses.

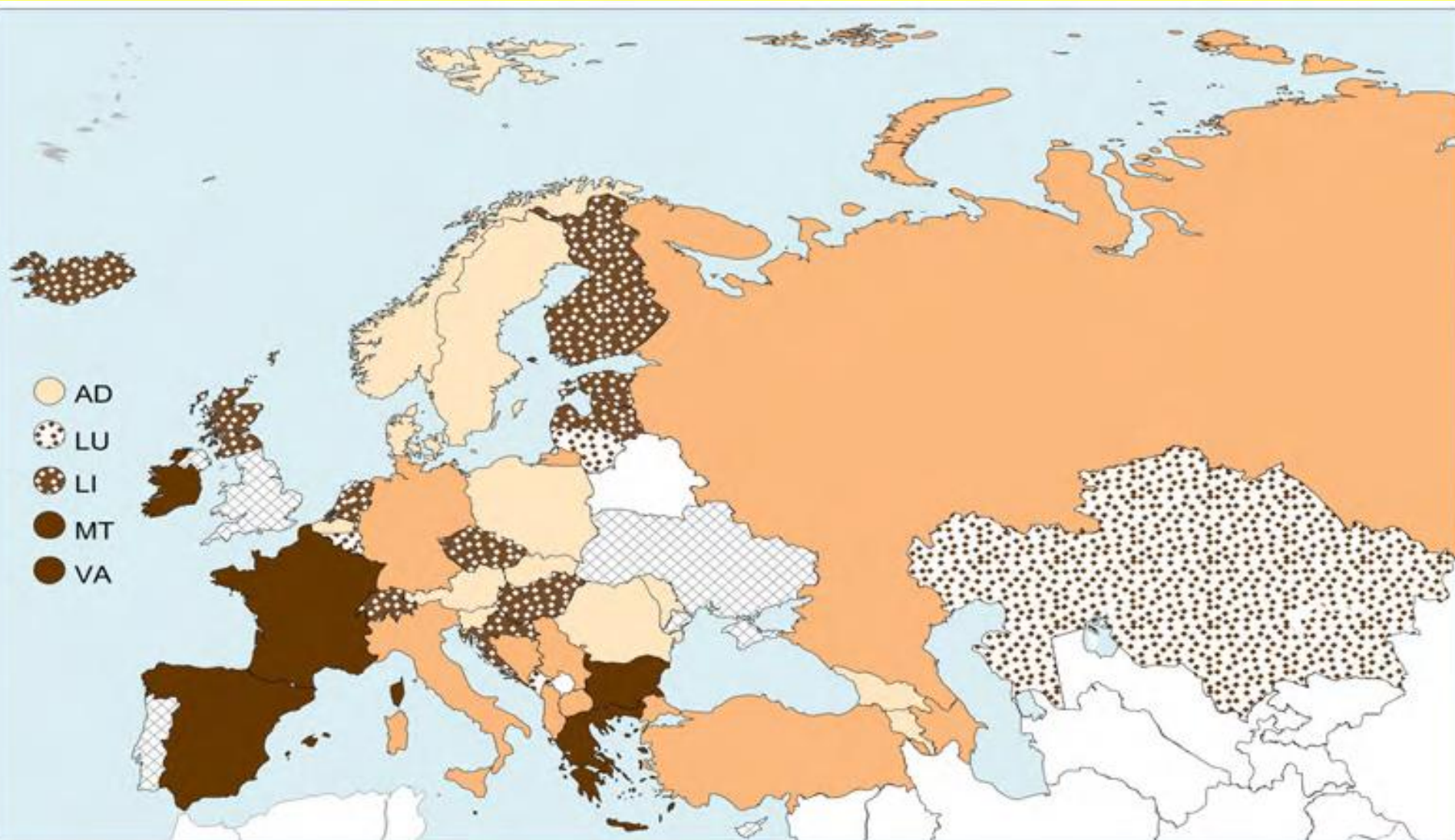
# I cycle graduates entering II cycle



# II cycle graduates entering III cycle programs



- AD
- LU
- LI
- MT
- VA



# 3° cycle : still heterogeneous

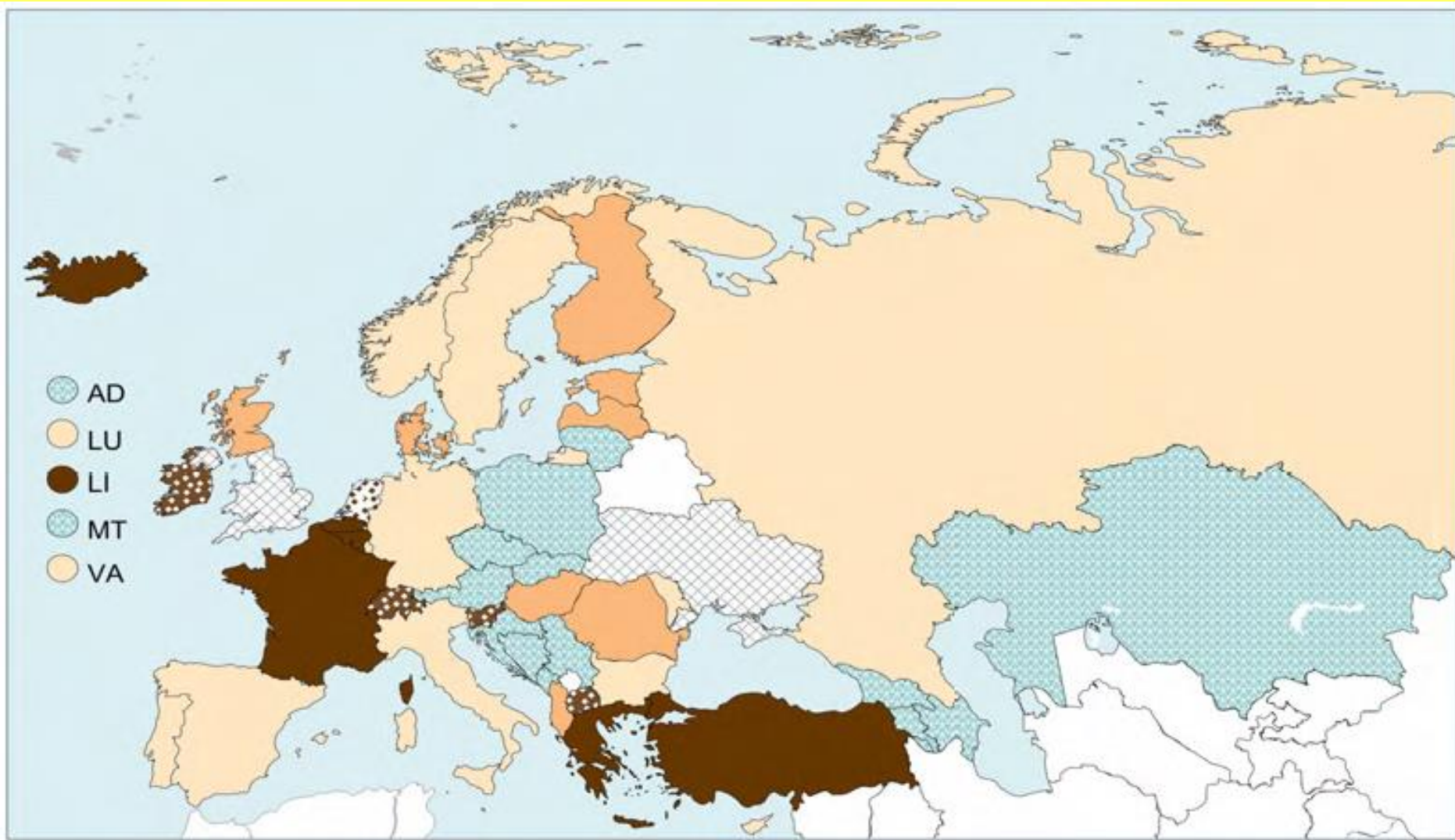
- The percentage of 2° cycle graduates entering PhD programs is in most countries 5-10% or 10-15% : Higher percentage (20% or more for Austria, France , Switzerland)
- The **duration of doctoral studies** is different:
  - 3 yrs :Italy, France, Scotland, Austria, Czech Rep., Slovenia, Denmark, Norway
  - 3-4 yrs:Spain, Germany, Romania, Poland, Greece
  - 4 yrs: the Netherlands, Sweden, Turkey
  - Not regulated: UK, Por, Ireland, Finland
  - In fact in Italy very often PhD students are granted 12 months of postponement for the completion of PhD, but without scholarship



# Organization of Doctoral Programs

- The European tradition --→ Doctorate as independent research under the supervision of one professor, with little emphasis on taught courses
- Increasingly questioned on grounds of the need to make PhD graduates more competitive internationally.
- Focus on introducing structured programs and on the creation of graduate or research schools
- 2 approaches
- 1. An **individual study programme** → “apprenticeship model with no structured coursework
- 2. A **structured programme** organised within research groups or research/graduate/doctoral schools with two phases: a taught phase (mandatory and voluntary courses or modules) and a research phase.
- In 9 countries all or most doctoral programmes are structured, while 14 countries characterise their situation as a mixture of structured programmes and traditional supervision-based independent research (often depends on disciplines with humanities often adopting model 1) . The traditional model dominates in a further 11 systems. In the French Community of Belgium, doctoral studies include 60 ECTS of research training sanctioned by a research certificate in addition to supervised research, while in the United Kingdom (Scotland) one of the options for students is to develop the doctoral programme after a one-year taught Master course.
- Doctoral schools now exist in 30 higher education systems. They may be organized at the institutional level (mono-disciplinary or multi-disciplinary) or developed under the umbrella of the Ministry of Education (Finland, France) or in cooperation with research institutions (Max Planck or Deutsche Forschungsgemeinschaft Germany)

# Percentage of PhD students in doctoral schools



# ECTS for PhD programs

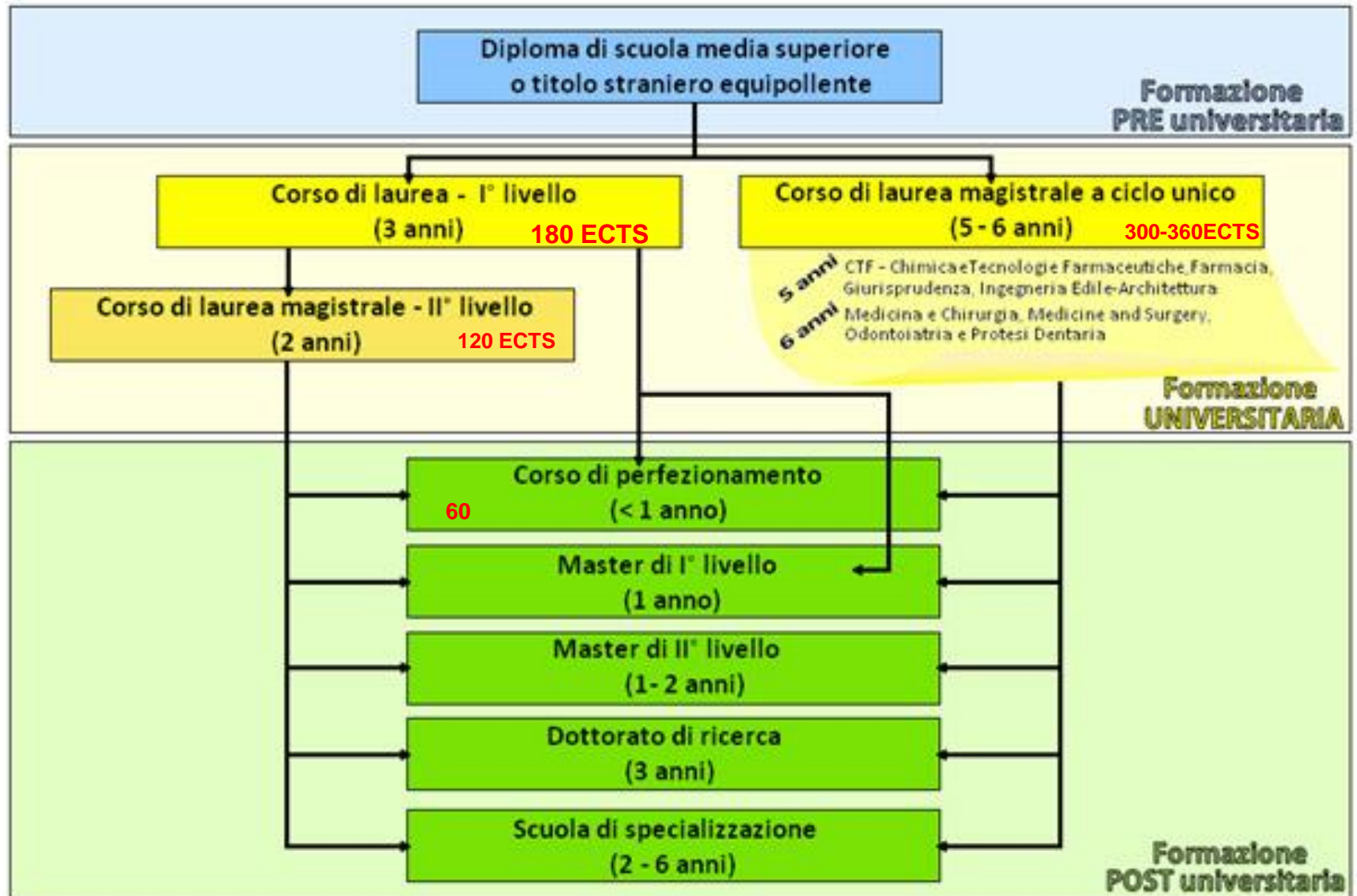
- Use of ECTS facilitates mobility and transparency of PhD programs
- ECTS are used for all PhD activities in 18 countries including Belgium (FI), Denmark, Sweden, Portugal, Austria
- ECTS are used for the taught part of the PhD program in 10 countries including Germany, UK, Ireland, Switzerland, Lithuania
- ECTS are not required for PhD programs in 18 countries including Spain, France, Italy, Finland, Poland.
- Pavia → implementing

# The implementation of the Bologna model in Italy

- Italy was one of the initiators of the Bologna Process in 1998 when the Minister in charge for higher education, together with his German, French, and British Ministers counterparts, celebrating in Paris the 800<sup>th</sup> anniversary of the Sorbonne, put forward a declaration (*Déclaration de la Sorbonne*) on the harmonization of the European higher education systems, based on common principles regarding degree structure and comparability of degrees
- Indeed Italy was the first country in which the Bologna model based on two-cycles and the use of ECTS credits were introduced by law, passed in parallel with the Bologna declaration, and intended to be implemented in few months
- Since 1999 several reforms have been introduced in a cycle of de-centralization and re-centralization of HE policies

- The **Ministry of Education, University and Research (MIUR)** shapes the regulatory framework of the Italian higher education system supported by some advisory bodies such as the National University Council (CUN), the National Agency for the Evaluation-ANVUR), the Conference of Italian University Rectors (CRUI), and the University Student National Council (CNSU).

# Structure Italian HE



# Credits

- Students' workload 1 ECTS=25 hours
- at least 50% individual work
- No more than 6 h of formal teaching

# Accreditation of degree programs – Minimum requirements- Teaching staff

<b>B.A.(first cycle)</b>	9 teaching staff ; at least 5 professors ; 5 of compulsory disciplines
<b>M.A.</b>	6 teaching staff ; 4 professors , 4 of compulsory disciplines
<b>Long Cycle (5-6)</b>	15-18 teaching staff; 8-10 professors;10-12 compulsory disciplines

Each teaching staff unit in a Department is counted for the accreditation of **one single degree program**, even if he/she can teach courses in more degree programs



## Accreditation of degree programs –Minimum requirements-Structure

- Adequate structures :
  - Class rooms,
  - Study rooms,
  - Libraries
  - Laboratory
- 
- Declared by the Universities and verified in on site inspections

# Accreditation of degree programs –Minimum requirements. Exams and credits

- Maximum number of exams

<b>B.A.</b>	20
<b>M.A.</b>	12
Single cycle 5 (Law)	30
Single cycle 6 (Medicine)	26

Compulsory courses : not less than 6 ECTS Credits .

Other courses or activities also less (motivated)

## Accreditation of degree programs –Minimum requirements. Differentiation

- 2 degree programs are authorized in the same area only if they differ in at least
- 40 credits (BA)
- 20 credits (MA)

# Regulation of curricula

Laws adopted at the national level prescribe for every class of degrees

- Learning outcomes defined at national level
- program contents with a minimum of required credits in a range of disciplines considered as :
  - *Basic contents*
  - *Contents characterizing the program*

# Credits in Compulsory contents for 1° cycle degrees

Degree	ECTS Basic contents	ECTS Charact.contents	Total ECTS	Centrally determinated %
Philosophy	42	48	90	50%
Engeneering(b uilding environment)	36	45	81	45%
Humanities	42	48	90	50%
Biology	48	42	90 +20 (lab)	61,1%
Economics/ma nagement	28	62	90	50%
Mathematics	45	30	75	41,6
Politics and IR	40	50*	90	50%
Industrial Engeneering	36	45	81	45%
Foreign languages	24	66	90	50%

# Politics and IR

Basic	40
Characterizing :	50
	90/180
Among characterizing :	10
History	
Economics	10
Sociology	10
Politics	10
Law	10

# Compulsory contents for II cycle degrees

- Vary between 40 and 48 /120 that to say 33 to 40% of ECTS credits.
- No basic , only characterizing contents so universities can choose among a larger range of disciplines to define programs.

# Quality Assurance

- The guidelines are based on the principle of quality assurance elaborated for the EHEA



# Quality assurance

- For the **accreditation of the HEI**, this must clearly state and pursue measures to assure the implementation of its vision of quality. The statement must include :
  - A clear formulation of goals compatible with the institution's resources , both clearly and systematically illustrated.
  - Learning outcomes must be clearly formulated together with the general students requirements to verify the acquisition of learning outcomes and verify the consistence of learning outcomes'with graduates' employability I
  - . A plan of students' recruitment and teaching activities related with their characteristics (part time students, non residents, international etc.);
  - . A detailed report on the available resources (teaching and administrative staff, infrastructures, relationship between teaching and research, etc.)
  - Regular self monitoring activities (Rapporti di Riesame) of processes and outcomes

# Quality assurance

- Each institution and each degree program must implement quality assurance mechanism.
- A Quality Assurance Unit must exist in every institution
- For every degree program the evaluations of students and graduates regarding teaching activities and services must be monitored, using questionnaires and methodologies put forward by the National Agency for Quality Evaluation (ANVUR)
- Every program must present every year a Form regarding the program performance
- Self monitoring- Every program must produce every year a Report for self-monitoring (Rapporto di Riesame)

# Quality unit –Institutional level

## Pavia : Presidio per la qualità di Ateneo

- *In the Administrative department for Teaching and Planning*
- Must promote a culture of quality, implement quality policy, monitor QA at institutional level, make proposals on common tools for QA, increase the quality of teaching and services, monitor the procedures of QA .
- **14** Members both teachers representing different areas and top administrators and two quality experts
- There are further 5 Quality units for the following areas :
- **Engineering,**
- **Sciences**
- **Medicine**
- **Law, Economics and Political Sciences**
- **Humanities**

# Evaluation Unit (NUCLEO di VALUTAZIONE)

- QA started in the Unipv rather early. Questionnaires for evaluating students' satisfaction are used since the late Eighties.
- The Evaluation Unit is first body for QA, created in the 90s.
- 7 members (4 from other institutions) experts in evaluation
- 3 students representatives participate to the meetings
- Chaired by a professor of Unipv nominated by the Rector is directly connected with the Rector

# Pavia –Structure –Departments

- The University has 18 Departments
- Departments are structures responsible both for teaching and research.
- They have a Council of Department (all professor, representatives of administrative staffs, reserchers on temporary contracts, students alla level)
- The Dep. Council elects its President, approves the Dep. Regulation and the Degree Programs regulations . There's a Dep. Board chosen by the Director assisting him or her
- Degree program councils can be also installed (optional)

# Pavia –Structure

- The University of Pavia has instituted in 2013 two Faculties
- Medicine
- Engeneering
- The Faculties are structures of coordination of the teaching activities and management of the services related to different degree programs planned and offered by Departments

## Degree programs' design and implementation

- Degree programs are designed at the Department level, according to the blueprint determined by national laws.
- Each program is described in a degree program regulation
- Program regulations are approved by the Council of Department (absolute majority) .
- Before the approval of a new program by the governing bodies of the University , stakeholders must be consulted .
- The program proposed by the Department is deliberated by the Board of Administrators and the Senate , after consultation of the Evaluation Unit.
- They must be approved by the Ministry of Education
- They are finally inaugurated with a Rector's decree which states the dates for their implementation

## Degree programs' design and implementation

- Program design (and revision) takes place at Dep. level.
- Normally proposals are elaborated in committees of professors installed by the Director, that consult the Committee for teaching (equal representation of students and teachers) and are assisted by the *Service for the Planning of teaching activities* .



# Degree program regulations

## *Must include:*

- learning outcomes
- Internal curricula (if present).
- Requirements for admission of students
- Courses and other activities and credits for each course and activity
- The presence of courses in foreign languages
- Final exam
- Modes of assessment

# Degree programs Pavia

- 46 first cycle programs
- 51 second cycle programs