FRENCH HIGHER EDUCATION:

I. HISTORICAL PERSPECTIVES

Sorbonne University

1793 – 2013 : death and revival of the French universities

- 1253 : creation of Sorbonne university
- 1793: independent faculties, and high education schools (polytechnic, central, mines)
- 1968: New law (Faure) redefines “comprehensive universities” as public institutions based on several principles including autonomy and multidisciplinarity
- 1984 : Savary law
- 2007 : LRU law
- 2013 : ESR law

1970 – 2005 :
A long way towards the revival of universities

- Context : huge increase of students (from 600 000 students in 1965 to 2.2 million today)
- Need to reinforce the centralization of administrative services and to set up university strategies, encouraged by a 4 year contract between the University and the State
- Organisation of Doctoral schools
- 2004 : Development of the Bologna Process in all universities, involvement in Erasmus and Erasmus Mundus programs

2005 – 2014 : Between Cooperation and Competition : to reinforce the autonomy

- Creation of :
  - The National Agency for Research (ANR)
  - The National Agency for University Evaluation (AERES)

- LRU : law on autonomy and accountability of the universities (august 2007) looks like a law of decentralization :
  - Statutory changes : governance
  - HR & financial autonomy
  - Funding increased by € 1 Billion per year during 5 years (in fact from 2008 to 2009, less in the following 3 years due to the crisis)

Clusters of HEIs

- 25 clusters of universities and other institutions created by the 2013 ESR law

- 2013 ESR law allows 3 kind of grouping to adress the challenge of simplification of the landscape of HEIs

- University merging

- creation of clusters of institutions (COMUE), regrouping *Grandes écoles and* universities,

- Supported by the Excellence Initiative which leads to the merging of HEIs

- More developed inter-institutions cooperation through structuring projects (mobility, research…)

Excellent initiatives PIA

Initiatives d'excellence PIA			
Name of University	Expanding etablishment	Attributed subsidy in 2012	Suites
Aix-Marseille excellent initiative : Interdisciplinarity for excellence of Aix-Marseille (A-M IDEX)	Aix Marseille : (PRES-EPCS then reunited university)	750 M€	2016 : Idex confirmed
Campus of Saclay (CPS)	Paris Saclay (FCS then Comue)	950 M€	2016 : renewed probationary period 2018 : renewed probationary period
Excellent initiative of Bordeaux	Bordeaux (PRES-EPCS then reunited university)	700 M€	2016 : Idex confirmed
Paris Sciences et Lettres étoile : Let us make possible the necessity (PSL*)	Paris Sciences et Letters (PRES-FCS et EPCS dedicated then Comue)	750 M€	2016 : renewed probationary period 2018 : renewed probationary period
Sorbonne Paris Cité then University of Paris		800 M€	2016 : Idex interrupted 2017 : Authorized to put down a new file 2018 : renewed probationary period
Sorbonne University of Paris for higher education an research (SUPER)	Sorbonne University :(PRES-FCS then Comue)	900 M€	2016 : renewed probationary period 2018 : Idex confirmée
Toulouse (UNITI)	Toulouse Midi Pyrénées : (PRES-EPCS then Comue)	750 M€	2016 : Idex interrupted 2017 : Authorized to put down a new file 2018 : Idex interrupted
Strasbourg : across international borders	Strasbourg (reunited university)	750 M€	2016 : Idex confirmed

Others excellent initiatives

Initiatives d'excellence PIA 2		
Name of university	Expanding etablishment	Attributed subsidy in 2017
Université Côte d'Azur Joint, Excellent and Dynamic Initiative (UCA^{JEDI})	Côte d'Azur University : (Comue)	500 M€
UGA	Grenoble Alpes University (Community of Universities)	800 M€
IDEX Lyon	Lyon University (Community of Universities)	800 M€

Initiatives Science-Innovation-Territoires-Économie		
Name of university	Expanding etablishment	Attributed subsidy in 2017
ISITE-BFC	Bourgogne France Comte (Comue)	330 M€
Lorraine Université d'Excellence (LUE)	Lorraine (reunited university)	330 M€
I-SITE ULNE	Lille (reunited university)	500 M€
CAP 2025	Clermont-Auvergne (reunited university)	330 M€
FUTURE	Paris Est (Comue)	280 M€
E2S	Pau et Pays de l'Adour	190 M€
MUSE	Montpellier (reunited university)	550 M€
NExT	Nantes	330 M€
Paris Seine Initiative	Cergy Pontoise	280 M€

Other challenges for up-coming years

French university in 2020

- University able to combine vocational system and LLL in all fields (opening on society) and promoting the pluri-disciplinarity
- Students mobility increased (From 10% to 20% then 50% outgoing mobility)
- Attractiveness reinforced
- Innovation in education, research & innovation strategies
- Reinforce the whole chain of research and innovation (from basic research…) for the economical development : toward an ecosystem of HE-R-I

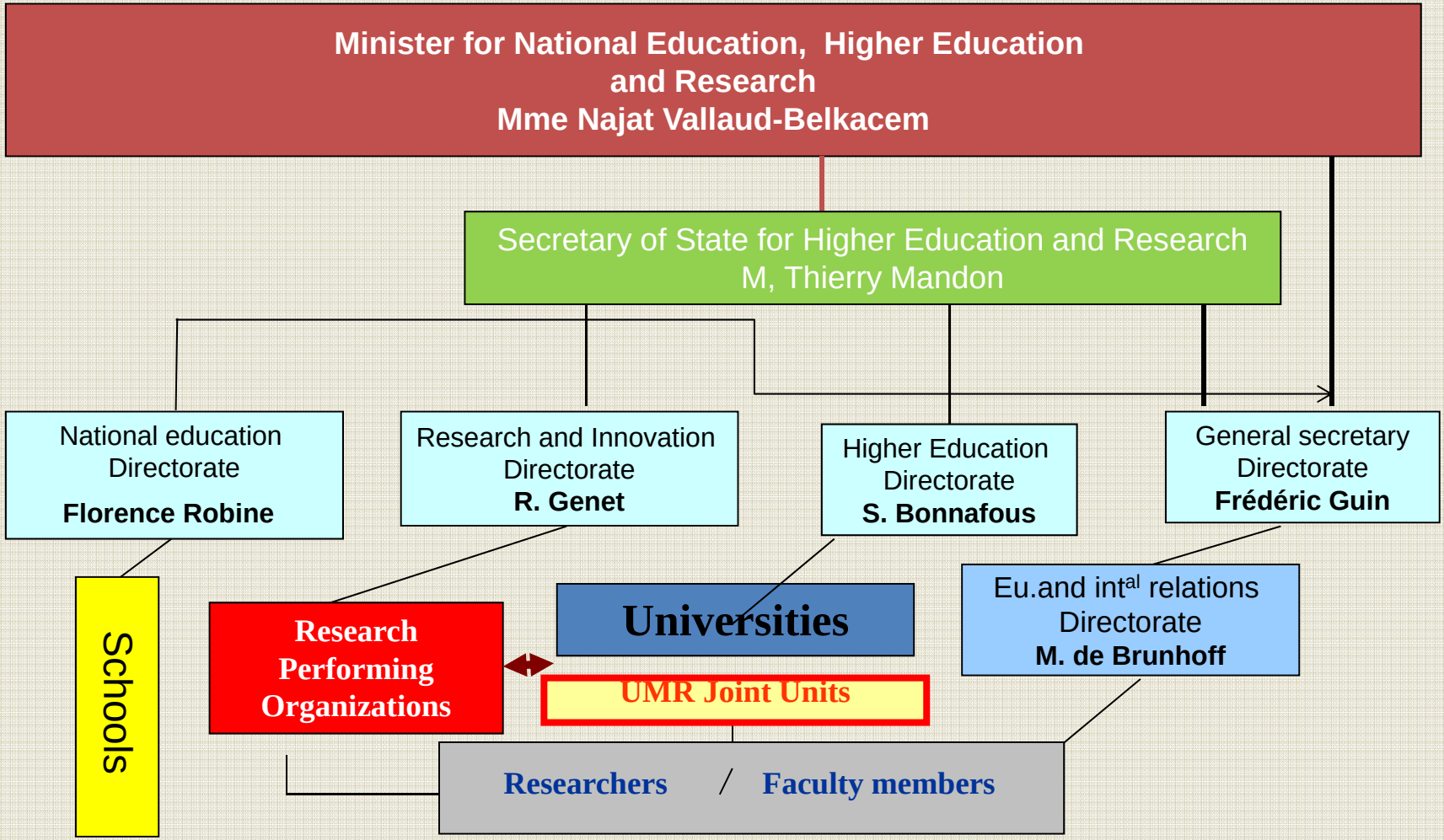
Other challenges for up-coming years

French landscape in 2020

- More developed inter-institutions cooperation through structuring projects (mobility, research…) and removal of barriers at the EHEA level
- « Grandes Ecoles » in the frame of universities
- Some merger of universities
- Europeanisation and internationalisation : More integrated networks at the European and international level (research, teaching : joint labs, joint degree)

II. GENERAL FRAMEWORK

French Ministry of National Education, Higher Education and Research



High Council of evaluation of research and higher education (HCERES)

- Governance :
  - Board of directors (representing assessment institutions instances)
  - Scientific Advisory Board

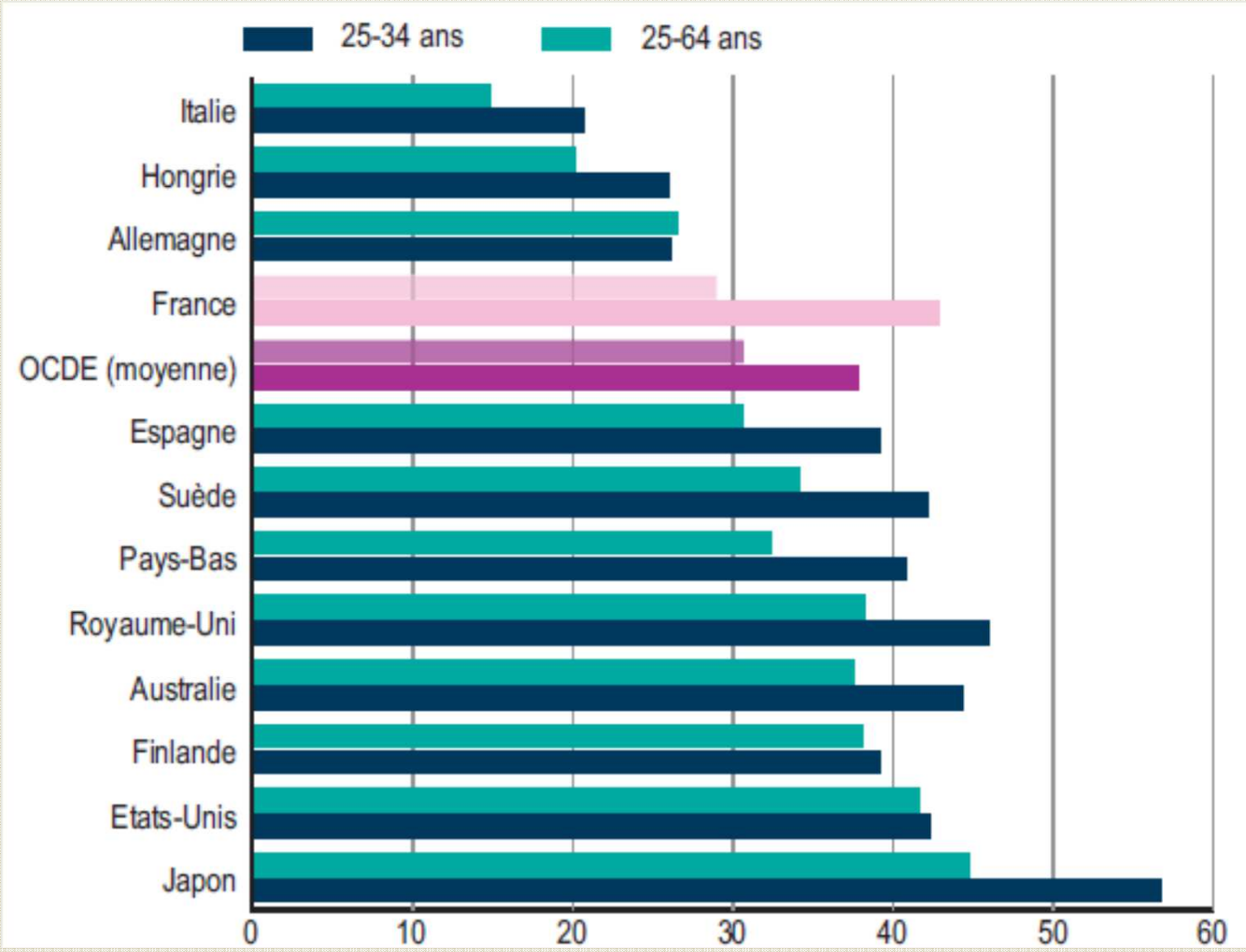
- Focus assessment on ESR institutions and consortia missions, research units, FCS and ANR relying as appropriate committee of other bodies which he has validated procedures

Universities and higher Education schools

More than 3 500 public or private establishment :

- 73 universities and linkened establishments (70 % of the students)
- 224 engineering schools (some are inside university)
- 120 schools of Art
- 220 Business schools and of management
- 20 schools of architecture
- 3000 other scholls and institutes

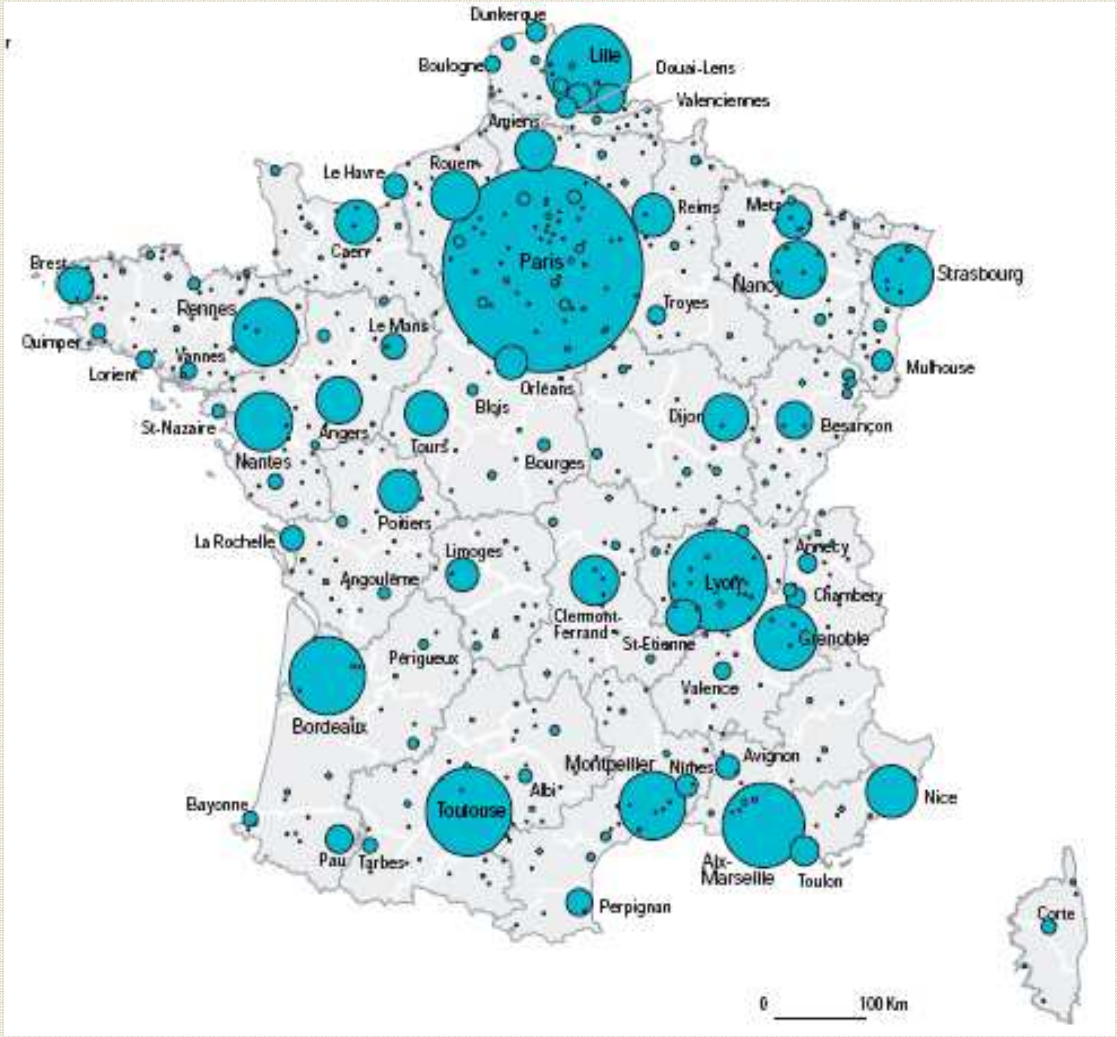
% of the population with a Higher Education Diplomas



2 422 900 students at back to school 2013

- ***2 422 900 students in 2013***
- ***62% in Universities***
- ***18% in private Universities or Schools***
- ***12% foreign students (75% in universities)***
- ***42% thesis are defended by foreign students***
- ***90% success in professional integration with a Master, 91% with a license, 93% with a MBA, 96% with a*** **engineer diploma**
- **13 K€/student (L&M), 110K€ /PhD, payed by citizens**

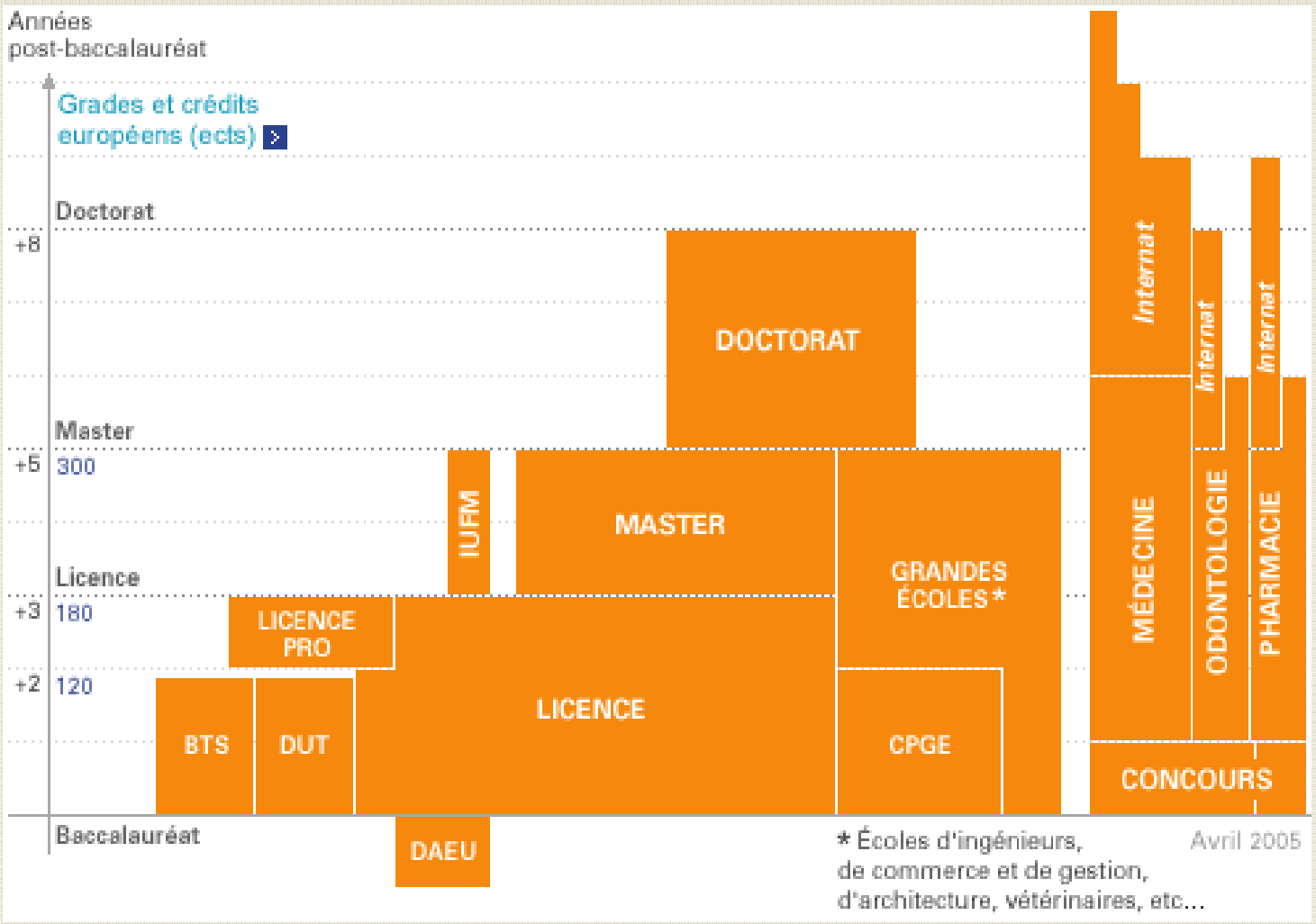
Students : 2.4 million (Paris : 26%)



LA ROCHELLE UNIVERSITY

III. EUROPEAN SYSTEM LMD

Clarification of diplomas : The new European education system and European diploma and ERASMUS



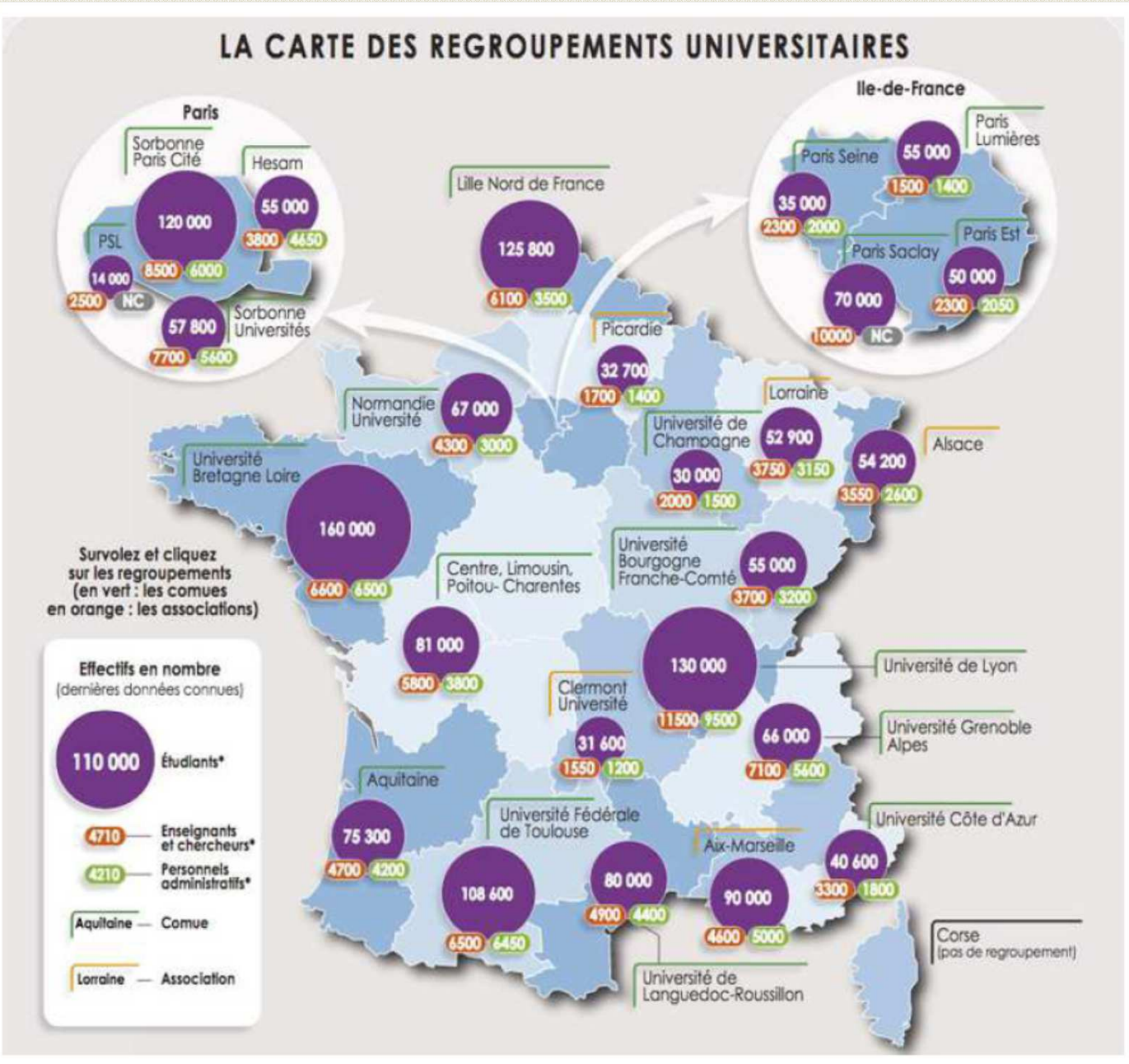
EUROPEAN CREDITS

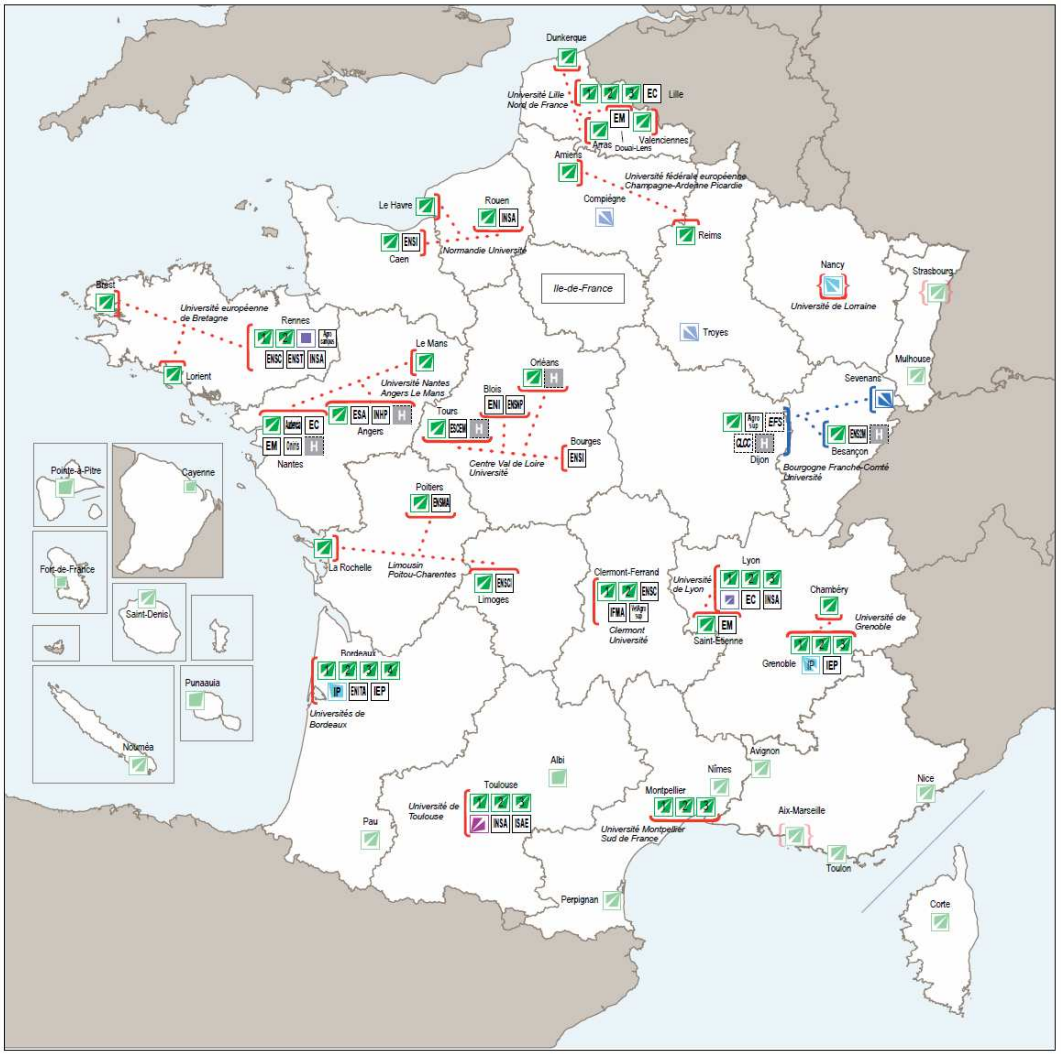
- One semester = 30 European Credit Transfer System (ECTS)
- 1 ECTS credit = 25-30 working hours per student
- One year = 60 ECTS = 1 500-1 800 working hours
- European System : L (B+3) : 180 ECTS / M (B+5) : 300 ECTS/ D (B+8)
- National accreditation in France and national diplomas

IV. TERRITORIAL ORGANISATION

COMUE

Communauté d'universités et d'établissements


LA CARTE DES REGROUPEMENTS UNIVERSITAIRES
Paris
Sorbonne Paris Cité
120 000
8500 6000
Hesam
55 000
3800 4650
PSL
14 000
2500 NC
57 800
7700 5600
Sorbonne Universités
Ile-de-France
Paris Seine
55 000
1500 1400
Paris Lumières
35 000
2300 2000
Paris Saclay
Paris Est
50 000
2300 2050
70 000
10000 NC
Lille Nord de France
125 800
6100 3500
Picardie
32 700
1700 1400
Normandie Université
67 000
4300 3000
Lorraine
Université de Champagne
52 900
3750 3150
30 000
2000 1500
Alsace
54 200
3550 2600
Université Bretagne Loire
160 000
6600 6500
Centre, Limousin, Poitou- Charentes
Université Bourgogne Franche-Comté
55 000
3700 3200
Survolez et cliquez sur les regroupements (en vert : les comues en orange : les associations)
81 000
5800 3800
Clermont Université
130 000
11500 9500
Université de Lyon
31 600
1550 1200
66 000
7100 5600
Université Grenoble Alpes
Effectifs en nombre
(dernières données connues)
110 000 Étudiants*
4710 Enseignants et chercheurs*
4210 Personnels administratifs*
Aquitaine Comue
Lorraine Association
Aquitaine
Université Fédérale de Toulouse
Université Côte d'Azur
75 300
4700 4200
Aix-Marseille
40 600
3300 1800
108 600
6500 6450
80 000
4900 4400
90 000
4600 5000
Corse
(pas de regroupement)
Université de Languedoc-Roussillon



Établissements d'enseignement supérieur

- Universités
- Universités autonomes
- Universités de technologie autonomes
- Instituts nationaux polytechniques autonomes
- Grands établissements
- Écoles normales supérieures - ENS
- Écoles normales supérieures autonomes
- Autres établissements d'enseignement supérieur

Etablissement issu d'une fusion { }

Pôles de recherche et d'enseignement supérieur (membres fondateurs)

- EPCS (établissement public de coopération scientifique)
- FCS (fondation de coopération scientifique)

Autres établissements et organismes

H CHR, CHRU, CHU XXX Divers

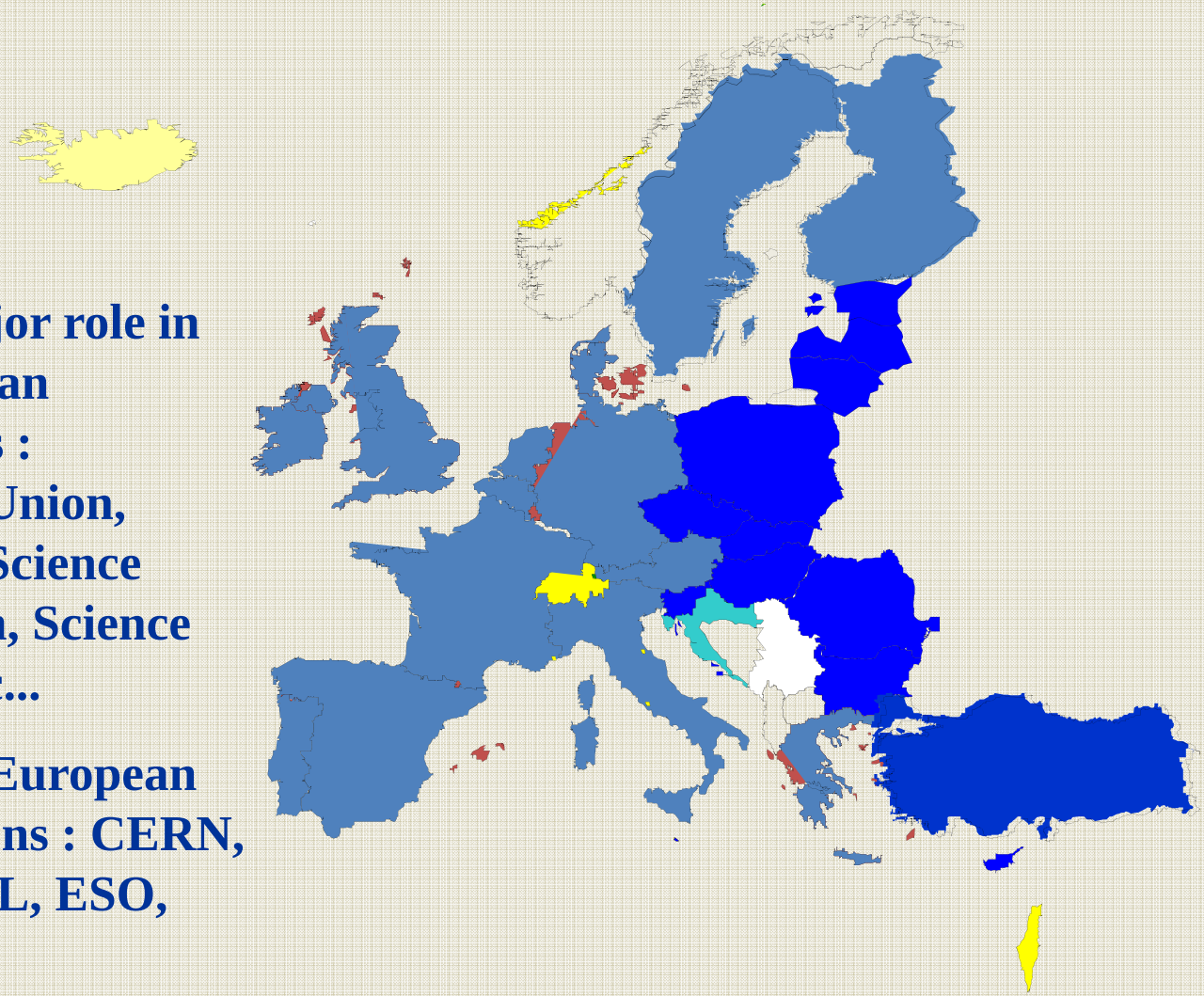
PERPIGNAN UNIVERSITY

V. RESEARCH ORGANISATION

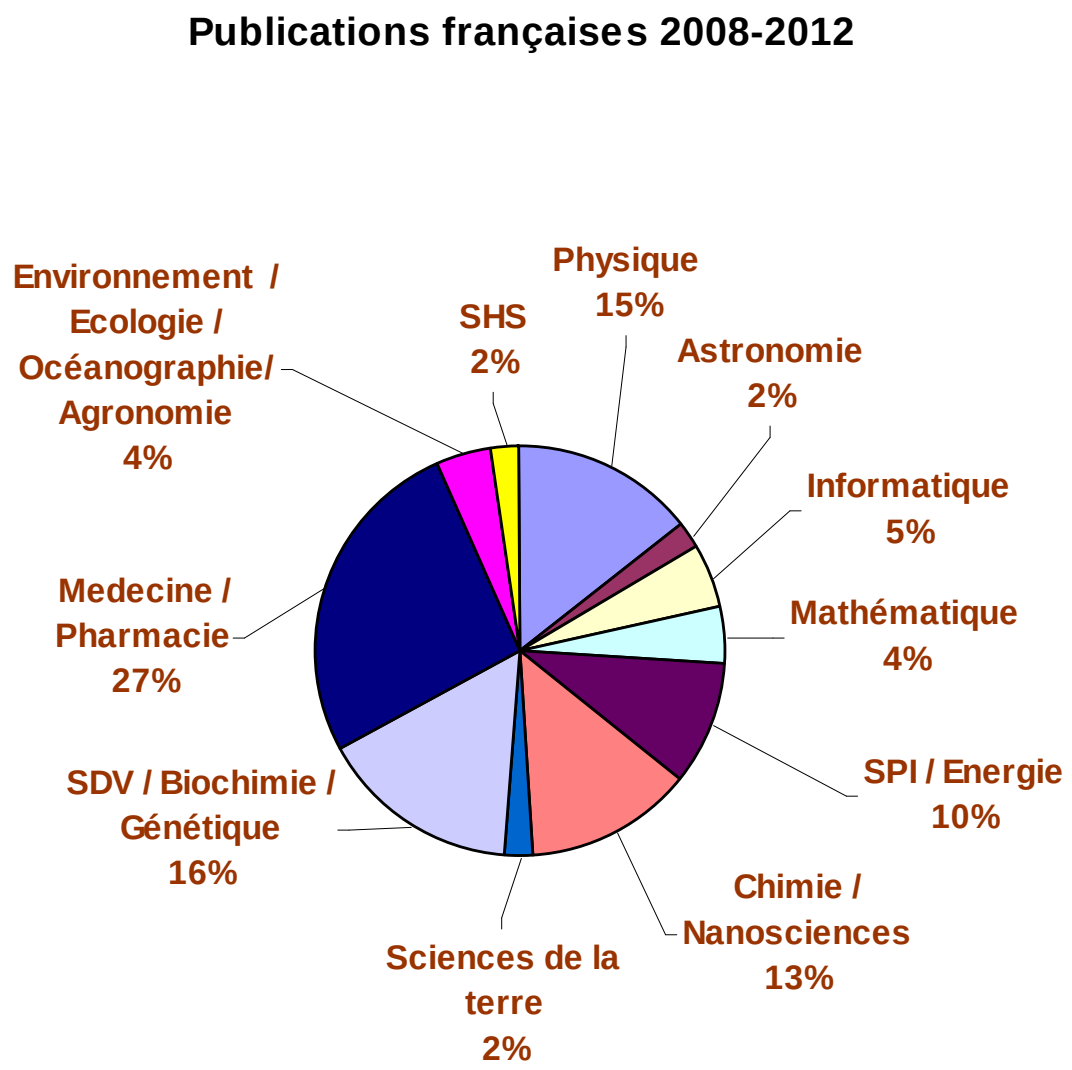
European Research Area

France plays a major role in the European Institutions : European Union, European Science Foundation, Science Europe, etc...

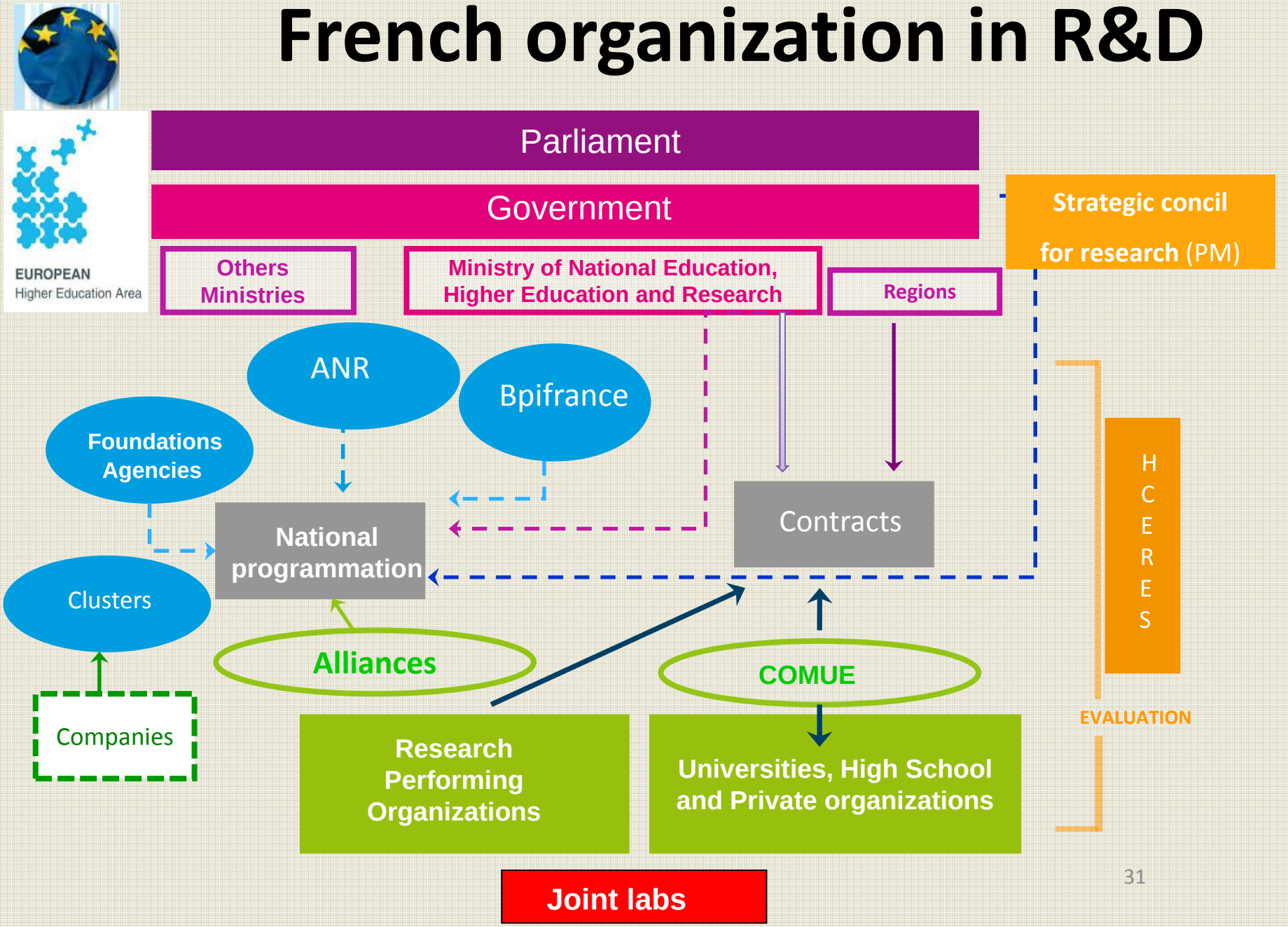
and in the European organizations : CERN, ESA, EMBL, ESO, etc…



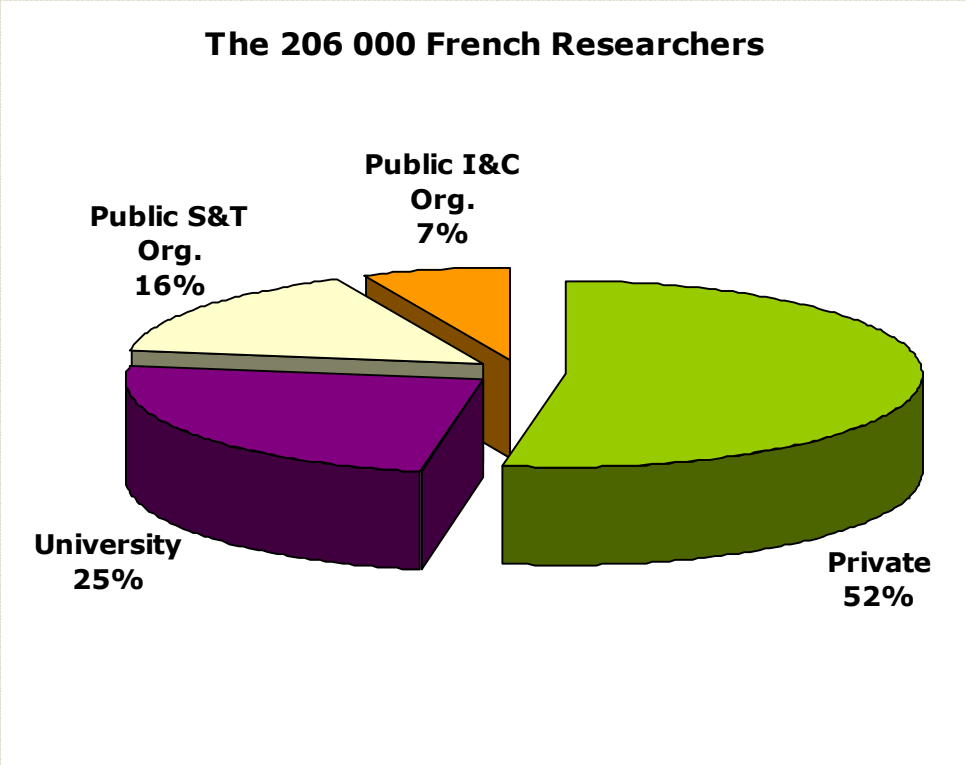
French Publications 2008-2012



French organization in R&D



Research Performing Organizations



Public S&T Organizations (9)

CNRS – general
INRA – CIRAD - agriculture
INSERM - health
INRIA – informatics
IRD – development

Public I&C Organizations (15)

CEA - nuclear
CNES - space
BRGM - mining/geol.

Nonprofit institutions

Pasteur Inst. - health

Higher education institutions

74 universities – housing most public research laboratories
~ 200 «grandes ecoles» - highly selective - research effort limited

Horizon 2020

- Initial Commission proposal for a €80 billion research and innovation funding programme (2014-2020); now €79 billion
- A core part of Europe 2020, Innovation Union & European Research Area:
  - Responding to the economic crisis to invest in future jobs and growth
  - Addressing people's concerns about their livelihoods, safety and environment
  - Strengthening the EU's global position in research, innovation and technology

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Human Ressources

Total: 402 300 persons (Equivalent Full Time) :

- 238,000 persons working for research in private labs (including 100 800 scientists).

- 163,400 persons working for public research including
  - 51 185 faculty in universities
  - 45 743 scientists in public research institutes

- 12 000 new doctors (PhD) every year (8,000 in natural sciences and 4,000 in humanities and social sciences).

VI.
FRENCH CONFERENCE OF RECTORS

History

- Created on February 2, 1971
- Confirmed by a law on January 26, 1984
- By a joint declaration of the minister and CPU on July 1998, CPU becomes the main negotiator to the government in the field of higher education policy.

Development is the consequence of crowing autonomy of the member institutions

Mission of CPU

- Building up a collectif identity within the members
- Voice of Universities in higher education policy on national and international level
- Foster the public debate
- Modernize the Universities' management by the exchange of good experince

The main bodies of CPU

- The president: the minister
- The plenary assembly, CPU
- The bureau (three elected presidents)
- The permanent commission, CP2U
- The commissions

The general assembly members:

- 75 Universities
- 3 Universities of technology
- 2 « Instituts Nationaux Polytechniques »
- 4 « Écoles Normales Supérieures »
- 3 « Instituts Nationaux des Sciences Appliquées »
- 14 « Grands établissements »

  (IEP, CNAM, INALCO, Observatoire de Paris, EHESS, Institut de physique du Globe de Paris, ENSAM, EPHE, Ecole Centrale Paris)

The general assembly function:

- Meetings every 3rd Thursday of each month
- Election of the first vice-president, the bureau and all bodies every two years
- Resolutions on propositions, projets, motions and documents prepared by the permanent commission or the sectional commissions

The board

Composition

President : Gilles Roussel

Vice-Presidente: Christine Gangloff-Ziegler

Vice-President : Olivier Laboux

Function

- decides political guidelines and agenda setting within CPU
- Represents the French Universities in all aspects (education, research etc.) on national and international level

The permanent commission CP2U

- Formed by the 3 Vice-Presidents, the 6 presidents of sectoral commissions, 8 elected members of CPU and the Delegate General
- Elaborates the issues before the deliberation in the plenary sessions
- Takes decisions on topics that are not subject to a vote in plenary session
- Follow-up of the decisions taken of CPU

The commissions and comettees

Three committees :

1. Sustainable Development
2. Quality
3. Numeric

Six standing commissions

1. Education
2. Research
3. Finances and personnel
4. Student affairs
5. International Relations
6. Law and regulation

Function

Prepare the issues for the discussion in the general assembly

The permanent team

- The General Delegate is consulting the bureau and coordinates the work of the permanent team
- The principal secretary to the bureau (“chef de cabinet”)
- Heads of missions: preparing the issues, conducting surveys and studies, doing the follow-up of the deliberations in the commissions
- Administrative collaborators

The CPU has two sites :
the main site in Paris and a permanent representation in Brussels

CPU is a major actor by

- organizing conferences
- initiating various working groups
- meeting regularly the main partners in research, education, administration and international relations

CPU is working on a better understanding of the role of universities on a national, european and international level.

Missions of CPU

- elaborate common positions
- raise new issues

- discussion
- exchange
- representation

- Information platform
- Service (esp. Amue)
- Representation in Brussels

Répartition disciplinaire des programmes en anglais

Business et Management : 409 formations

Sciences de l'ingénieur : 224 formations

Sciences environnement et santé : 154 formations

Droit économie : 101 formations

SHS : 81 formations

Art Design : 62 formations

Mathématiques : 33 formations

Tourisme : 23 formations mais elles peuvent être mixtes en Business et Tourisme

Agriculture – agro industrie : 20 formations

Formations en anglais dans les écoles doctorales

Il y a 283 écoles doctorales, et approximativement la moitié de ces écoles acceptent ou permettent la rédaction d'une thèse en anglais avec un résumé en français. Elles ont donc des formations internes qui ne sont pas comptabilisées, car ne correspondant pas à un diplôme.

Il nous faut rappeler qu'il y a 42 % de doctorants étrangers. En terme de mobilité sur 26 000 doctorants, on compte :

9 000 étudiants originaires d'Algérie, du Maroc, de Tunisie et Afrique de l'Ouest

7 800 venant d'Asie-Océanie

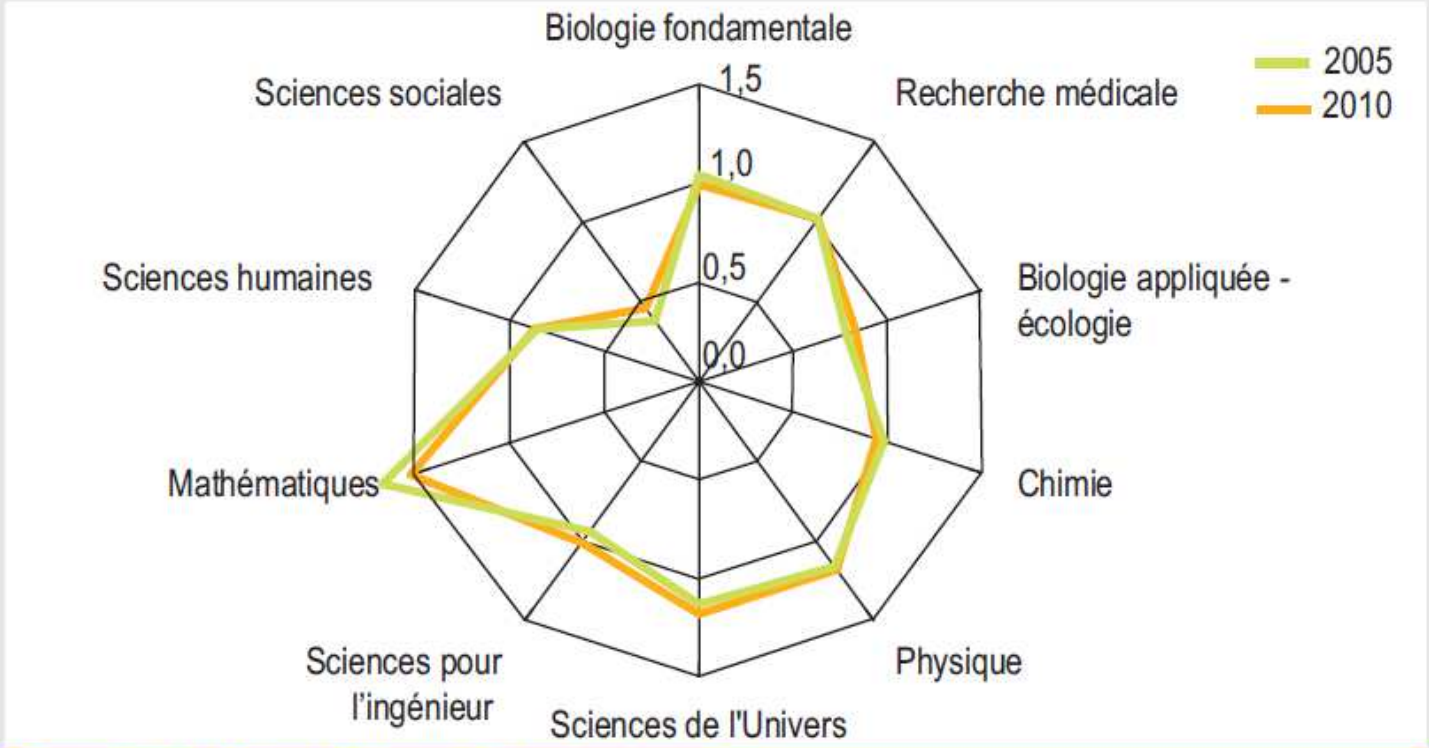
4 600 pour l'Union européenne

2 800 d'Amérique

1 000 Europe hors union européenne

Impact of French Publications

02 Indice de spécialisation, par discipline scientifique, pour la France (2005 et 2010)



Source : OST-2012 (données Thomson Reuters, traitements OST).

VII. NOBEL PRICE AND FIELD MEDAILS

France: A major contributor to scientific achievement

Famous French scientists : 65 Nobel Prizes, 12 Fields Medals

High quality research facilities

Successful technologies

1 NOBEL PRICE

- Serge Haroche prix Nobel de physique 2012
- Jean Tirole, prix Nobel d'économie 2014 (prix des banques de suède)

At least:

- 13 prix Nobel de médecine,
- 13 prix Nobel de physique,
- 8 prix Nobel de chimie,
- 3 prix Nobel d'économie.

2. FIELD MEDAILS

2010: Cédric Villani

2014: Congrès international de mathématiques à Séoul : Arthur Avila

At least:

11 field medails for French laureats on 44