



Applied Higher Education in Europe

Polytechnics Canada Annual Showcase 2023

John Edwards PhD
Secretary General

www.eurashe.eu





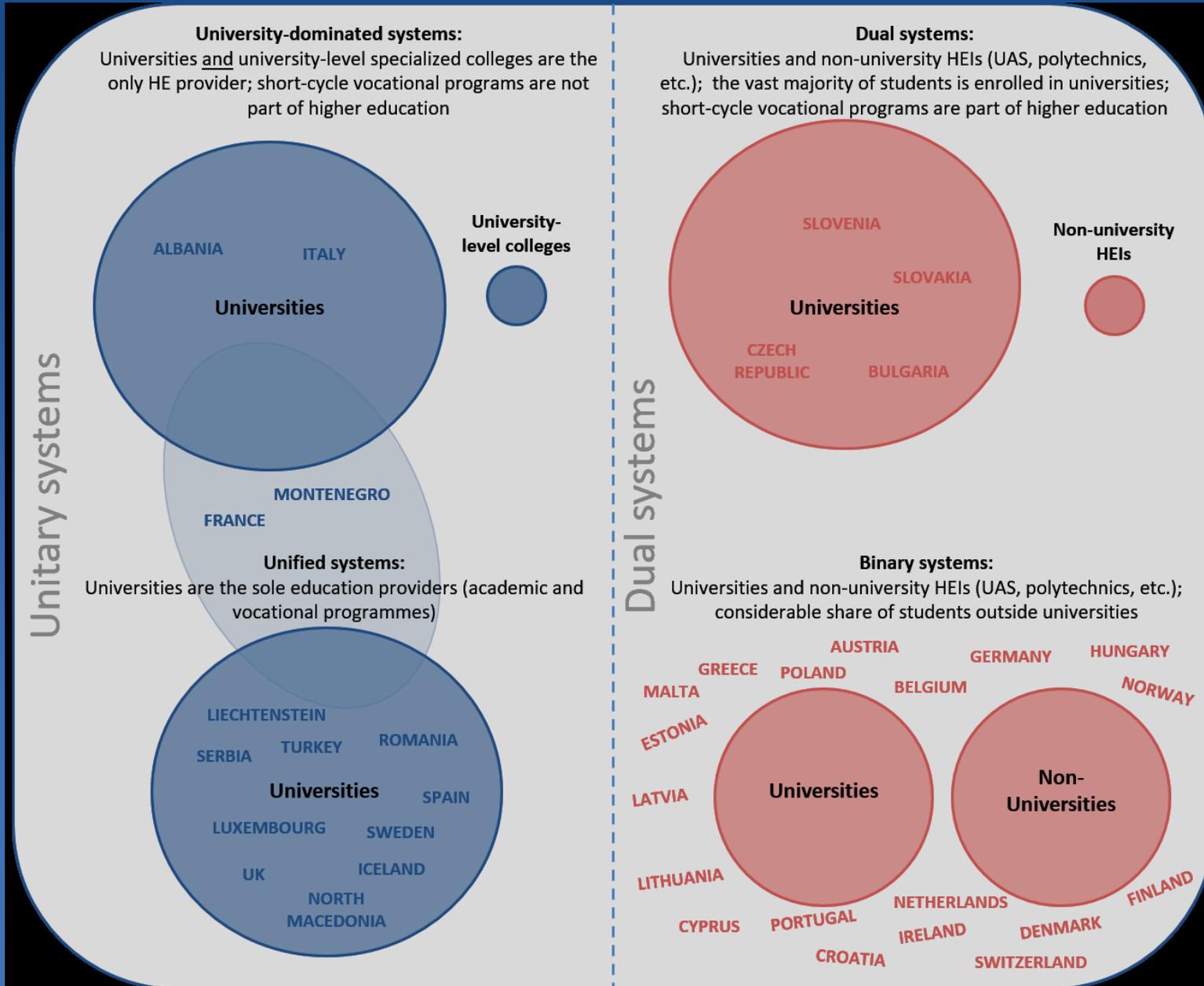
PROFESSIONAL HIGHER EDUCATION

Professional higher education is a form of higher education that offers a particularly intense integration with the world of work in all its aspects, including teaching, learning, research and governance, and at all levels of the overarching qualifications framework of the EHEA.

Its function is to diversify learning opportunities, enhance the employability of graduates, offer qualifications and stimulate innovation for the benefit of learners and society. The world of work includes all enterprises, civil society organisations and the public sector.

The intensity of integration with the world of work is manifested by a strong focus on the application of learning achievements. This approach involves combining phases of work and study, a concern for employability, cooperation with employers, the use of practice-relevant knowledge and use-inspired research.

Higher education systems in Europe



Source: ETER (2019) Dual vs. unitary systems in Higher Education.

Building a European Higher Education Area: The 'Bologna Process'

Original Aim:

Develop a European Higher Education Area by 2010

- Comparability and compatibility of degrees based on a three-cycle system
- Ensure the employability of graduates
- Promote student and staff mobility
- Develop a European dimension in higher education



Bologna Timeline

The Bologna Process: from Sorbonne, 1998 to Paris, 2018

Mobility of students and teachers	Mobility also for researchers and administrative staff	Social dimension of mobility	Portability of loans and grants	Attention to visa and work permits	Attention also to pension systems and recognition	Target: 20 % graduate mobility by 2020	Explore path to automatic recognition of academic qualifications		Student digital data exchange
A common two-cycle degree system	Easily readable and comparable degrees	Fair recognition Development of joint degrees	Inclusion of doctoral level as third cycle	QF-EHEA adopted National Qualifications Frameworks (NQFs) launched	NQFs by 2010	NQFs by 2012	Roadmaps for countries without NQF	Implementation of key commitments	Short cycle as a stand-alone qualification level Revised Diploma Supplement
		Social dimension	Equal access	Reinforcement of the social dimension	National action plans	National targets for the social dimension to be measured by 2020	Widening access and completion rates	Social inclusion	Inclusion of under-represented and vulnerable groups
		Lifelong learning (LLL)	Alignment of national LLL policies Recognition of Prior Learning (RPL)	Flexible learning paths	Partnerships to improve employability	LLL as a public responsibility Focus on employability	Enhance employability, LLL and entrepreneurial skills through cooperation with employers	Employability	Combine academic and work-based learning
Use of credits	A system of credits (ECTS)	ECTS and Diploma Supplement (DS)	ECTS for credit accumulation		Coherent use of tools and recognition practices	Implementation of Bologna tools	Ensure that Bologna tools are based on learning outcomes	Adoption of ECTS Users Guide	
	European cooperation in quality assurance (QA)	Cooperation between QA and recognition professionals	QA at institutional, national and European level	European Standards and Guidelines for quality assurance (ESG) adopted	Creation of the European Quality Assurance Register (EQAR)	Quality as an overarching focus for EHEA	Allow EQAR registered agencies to perform their activities across the EHEA	Adoption of revised ESG and European Approach to QA of joint programmes	Ensure compliance with ESG 2015 Promote European Approach for QA of joint programmes
Europe of Knowledge	European dimensions in higher education	Attractiveness of the EHEA	Links between higher education and research areas	International cooperation on the basis of values and sustainable development	Strategy to improve the global dimension of the Bologna Process adopted	Enhance global policy dialogue through Bologna Policy Fora	Evaluate implementation of 2007 global dimension strategy		Develop synergies between EHEA – ERA
								Learning and Teaching: Relevance and quality	Innovation and Inclusion in Learning and Teaching Digitalisation and digital skills
								Sustainable Development	Support to UNSDGs
1998 Sorbonne Declaration	1999 Bologna Declaration	2001 Prague Communiqué	2003 Berlin Communiqué	2005 Bergen Communiqué	2007 London Communiqué	2009 Leuven/ Louvain-la-Neuve Communiqué	2012 Bucharest Communiqué	2015 Yerevan Communiqué	2018 Paris Communiqué

European Higher Education Area (EHEA), 1999–Present



■ 1999:

Austria, Belgium, Bulgaria, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom.

■ 2001:

Croatia, Cyprus, Liechtenstein, Turkey

■ 2003:

Albania, Andorra, Bosnia and Herzegovina, Macedonia, Russia, Serbia, Vatican City

■ 2005:

Armenia, Azerbaijan, Georgia, Moldova, Ukraine

■ 2007–2015:

2007: Montenegro
2010: Kazakhstan
2015: Belarus

Assessing Bologna

+	-
Collaborative	Non-binding
Inter-governmental	Misunderstandings
Strong stakeholder involvement	Lack of implementation
Vision of borderless education	Overlooks important issues incl. employability & funding



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TOWARDS A EUROPEAN EDUCATION AREA BY 2025

#INTERNATIONALDAYOFEDUCATION



European
Commission



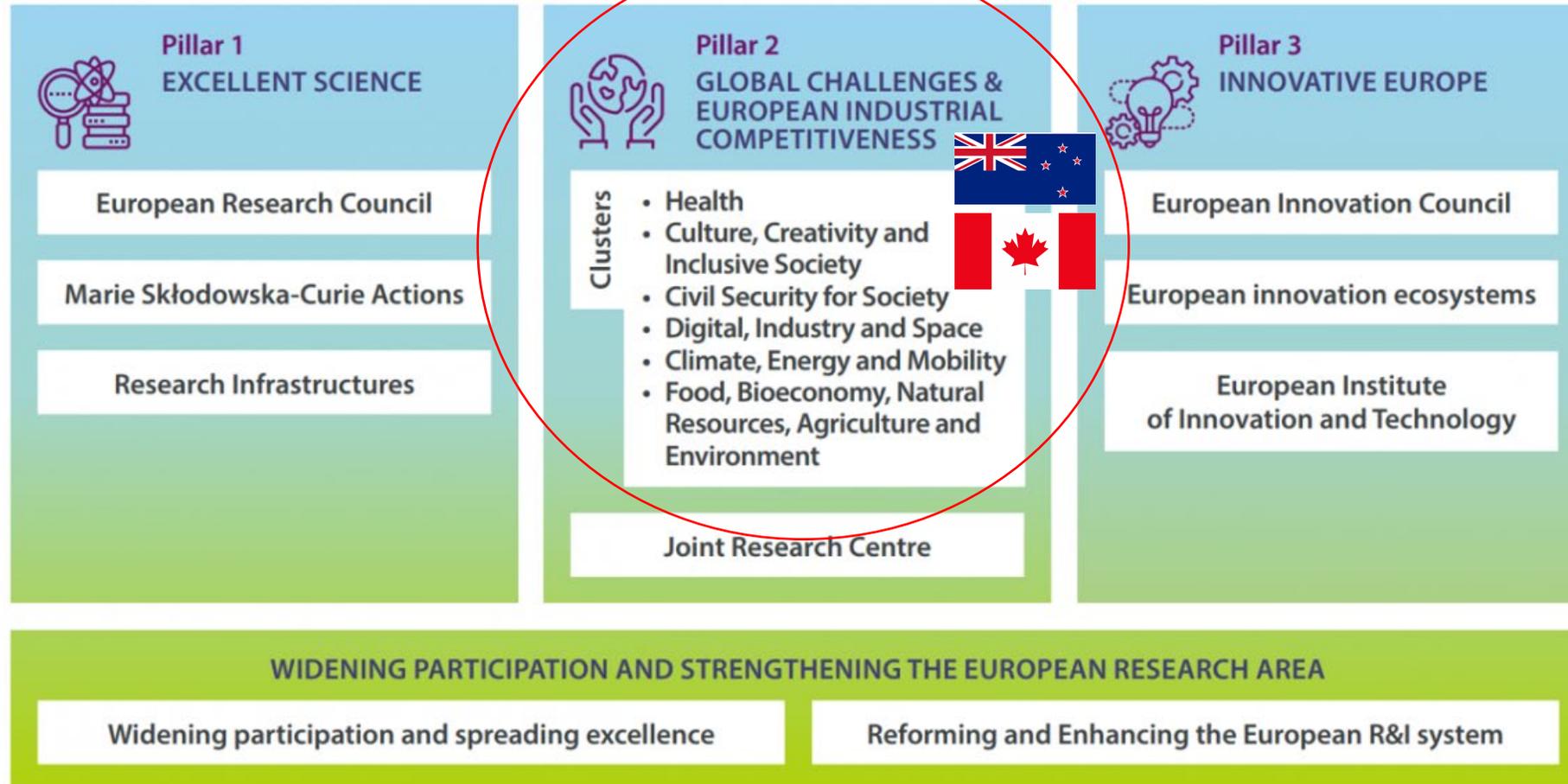
Deep level of
inter-university cooperation
with a joint long-term
strategy

Structural, systemic and
sustainable impact

EUROPEAN UNIVERSITIES

Structure of Horizon Europe

THREE PILLARS FOR IMPLEMENTATION



Erasmus+ Structure - 2021-2027

Key Action 1

Learning mobility of individuals

Student mobility

Staff mobility

Key Action 2

Cooperating among organisations and institutions

Partnerships for Cooperation

Partnerships for Innovation

Partnerships for Excellence

Key Action 3

Support to policy development and cooperation

Support for Public Policy Reform

Jean Monnet Actions

Modules

Chairs

Centre of excellence

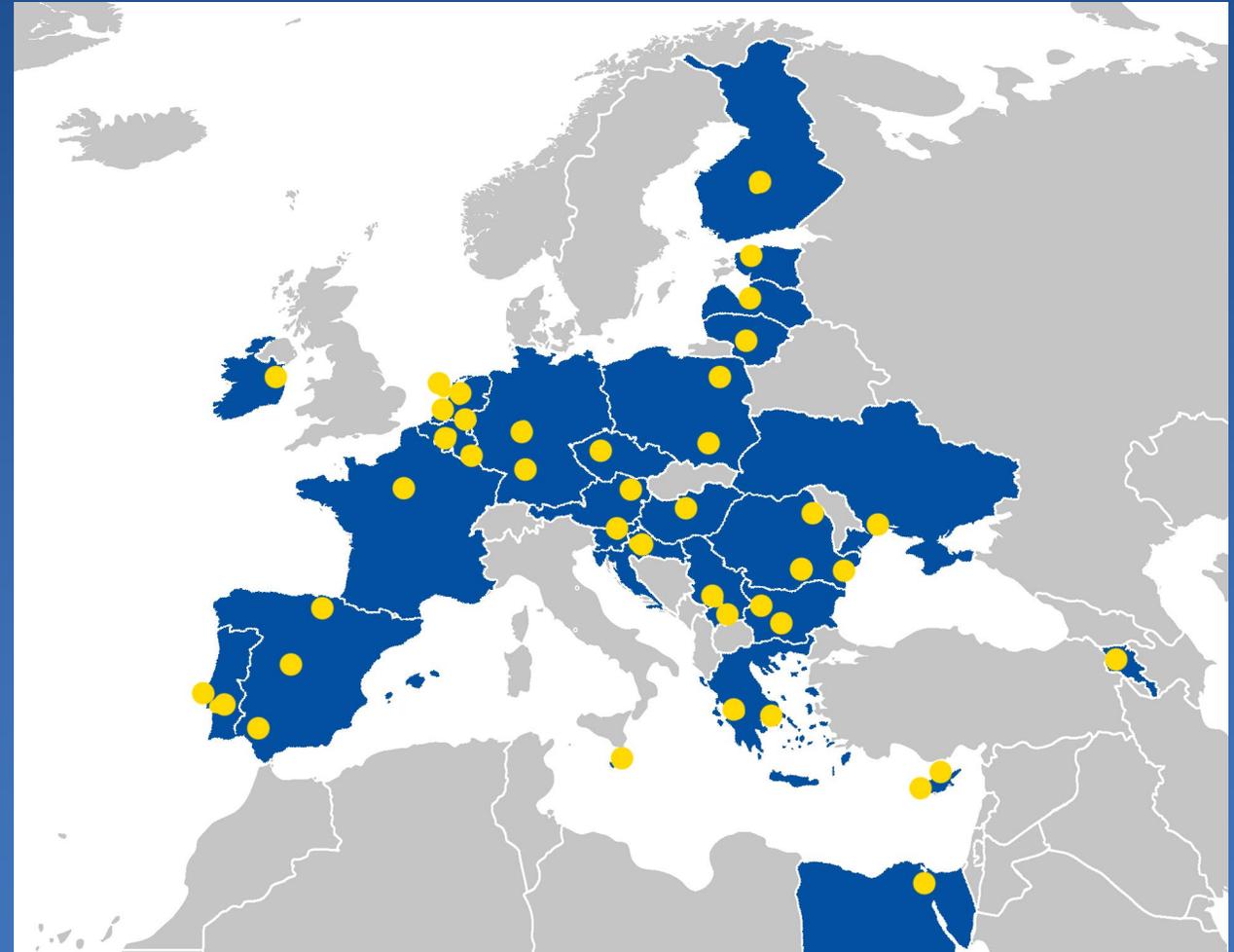
Networks



EURASHE Membership

EURASHE is the European Association for Applied Higher Education and Research

- Formed in 1991
- Membership covers c. 600 HEIs:
 - 52 full members: 12 national associations, 40 individual institutions
 - 14 affiliate members outside the European Higher Education Area
- **NEW SINCE FEBRUARY:** Non-HEIs can join EURASHE as associate members



EURASHE STRATEGY 2023-2025

Objective

“EURASHE becomes a reference point for a wide range of policy makers and higher education institutions, who seek to harness the power of Professional Higher Education (PHE) to address the green and digital transitions.”

Thematic Priorities

Skills for the Present and Future

Quality & Innovative PHE

Challenge Based Applied Research

Local and Regional Impact

Europeanisation &
Internationalisation

EURASHE Communities of Practice



Research

Launched April 2022 in Fulda (Germany)
Coleaders: Thomas Berger & Nijole Zinkevičienė
Secretariat: John Edwards
[Registration Form](#)



Quality Assurance

Launched October 2022 in Namur (Belgium)
Coleaders: Eltjo Bazen & Ana Tecilazic
Secretariat: Jakub Grodecki
[Registration Form](#)



Skills

Launched on 1 February 2023 in Bilbao (Spain)
Coleaders: Jon Altuna and Ulf Ehlers
Secretariat: Marta Rodrigues
[Registration Form](#)



Annual Conference



32 EURASHE
Annual Conference

SKILLS FOR EUROPE

Mobilising HE for the green and digital transitions

CALL FOR CONTRIBUTIONS

8 - 9 June 2023 | Bucharest, Romania

EURASHE  

SAVE THE DATE

22 - 23 May 2024

33rd EURASHE Annual Conference

Theme: International Cooperation

St. Pölten, Austria



EURASHE

European Association of Institutions
in Higher Education

Thank you for your attention!



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From Regional Technical Colleges to Technological Universities – An Evolutionary Process.

Dr. R. Neavyn, Special Advisor, Higher Education
Authority, Ireland.

The Irish Evolutionary Process

- Ireland has been radically transformed from being a **labour-exporting society** to one heavily dependent upon **FDI and highly skilled labour** and skilled-immigration.
- From being **heavily dependent on protectionist policies and agriculture**, Ireland now has one of the **most open economies in the world** and one of the best performing in the EU.
- The **big success has been massification**; for a country lacking natural resources, the objective has been to get more people well-educated.
- **Approx. 91% complete secondary school, of which ~70% participate in HE.**

Key Component of Massification and Regional Development was Creation of RTCs

Regional Technical Colleges (RTC) created with support of European Social Fund (ESF).

- 1970 onwards: 13 RTCs established **to educate students for craft/professional level jobs.** Colleges to play developmental role in their regions.
- 1992; 2007: All RTCs redesignated as Institutes of Technology (IoT) with **authority to develop applied research and offer some PhD programmes.**

Current some 40% of all HE registrations are in the Technological sector

Contribution of IoTs to Regional Development by Mission Area



Education: Graduate Talent Pipeline, Upskilling and Reskilling, Novel Pedagogical Approaches and Supports



R&I: Applied Research, Technology Transfer, Business Support, Start-Ups, Commercialisation



Service to Society: Societal Engagement, Regional Representation, Social Inclusion, Sport, Heritage, Culture etc.

Ireland – Key Developments

National Strategy for Higher Education 2011

Changing Landscape, TU Criteria & Legislation 2013-2018

System Performance Framework & Strategic Dialogue 2014 -

Mergers & Designation Process 2019-2022

Government Actions & Funding in Support of TUs 2019-

Establishment of Technological Universities In Ireland

- The creation of a technological university required the **consolidation/merger of at least two institutes of technology** (Performance and capacity driven requirement).
- Each consortium applying for designation was required to **meet the designated criteria** and achieve high standards across a range of areas before being designated as technological universities.
- These included standards relating to the **qualifications of staff**, the quality of **research output**, the proportion of **students engaged in lifelong learning**, amongst other areas.
- **New legislation** was created to establish these **new Universities** which outlined their future functions, designation criteria, operation, governance and management

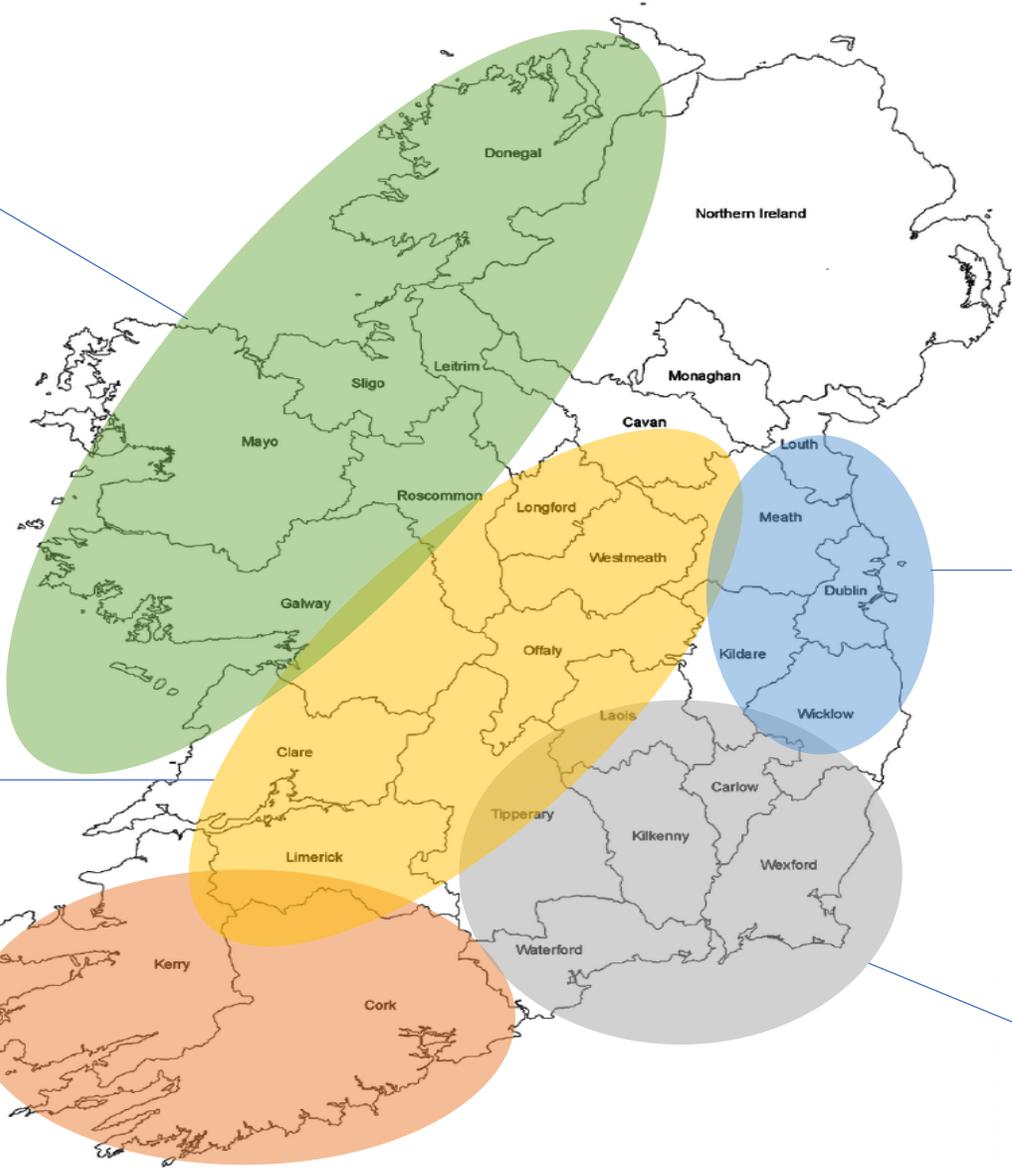
Mission and Functions of a Technological University

- The functions of a TU, will have particular regard to the **needs of the region** in which the campuses of the technological university are located
- TUs will **collaborate with business, enterprise, the professions, the community, local interests** and related stakeholders in the region in which the campuses of the technological university are located—
 - (i) to promote the **involvement of those stakeholders in the design and delivery of programmes** of education and training, and
 - (ii) to ensure that, innovation activity and **research undertaken by the technological university reflects the needs of those stakeholders** & includes research relevant at regional, national and international levels
- TUs will support **entrepreneurship, enterprise development and innovation** in business, enterprise and the professions



Ollscoil
Teicneolaíochta
an Atlantaigh

Atlantic
Technological
University



TU DUBLIN
 OLLSCOIL TEICNEOLAÍOCHTA
 BHAILE ÁTHA CLIATH
 TECHNOLOGICAL
 UNIVERSITY DUBLIN



TUS

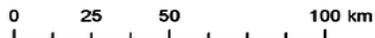
Ollscoil Teicneolaíochta na Sionainne:
Lár Tíre, An tIarthar Láir
Technological University of the Shannon:
Midlands Midwest

www.tus.ie



MTU

Ollscoil Teicneolaíochta na Mumhan
Munster Technological University



**SE
TU**

Ollscoil
Teicneolaíochta
an Oirdheiscirt
South East
Technological
University

Meeting
Regional and
National Skills
Needs Through
Partnerships
with Industry,
Business and
Society.

Each Region in Ireland has a **Regional Skills Fora** which brings together stakeholders from, industry, business providers and state agencies in the development of **strategies and programmes to meet regional skills needs**. Each region has a regional skills manager.



Regional Skills

Partnerships for Skills



Regional Skills

Partnerships for Skills

The Fora provide:

- A **single contact point** in each region to help employers connect with the range of services and supports available across the education and training system
- more **robust labour market information** and analysis of employer needs to inform programme development
- greater **collaboration and utilisation of resources** across the education and training system and enhancement of progression routes for learners
- a **structure for employers to become more involved** in promoting employment roles and opportunities for career progression in their sectors



Funded
Programmes
Required to
Deliver on Skills
Needs and
Advance
Lifelong Learning.

Higher Education Authority operates a **Skills and Engagement Unit** <https://hea.ie/skills-engagement> which evaluates, funds (€160m PA) and oversees a range of initiatives including:

- **Springboard** – upskilling and reskilling
- **Human Capital Initiative** - collaborative initiatives between providers and employers
- Dual Learning – **HE apprenticeships**
<https://apprenticeship.ie>



**NATIONAL
APPRENTICESHIP
OFFICE** GENERATION
APPRENTICESHIP



NATIONAL FORUM
FOR THE ENHANCEMENT OF TEACHING
AND LEARNING IN HIGHER EDUCATION



- The **National Forum for the Enhancement of Teaching and Learning in Higher Education** is the national body responsible for leading and advising on the **enhancement of teaching and learning in Irish higher education**.
- We work with those who teach, learn and shape policy and practice to **ensure a valued and informed teaching and learning culture** in Irish higher education.
- We focus on the **professional development of all those who teach**, teaching and learning in a digital world, teaching and learning within and across disciplines, and student success.

Supporting Business and Industry

- Multiple approaches and areas of cooperation at a regional and national level
- Work in partnership with key national agencies including, Science Foundation Ireland (SFI), Industrial Development Agency (IDA) and Enterprise Ireland (EI)
- Will focus on Enterprise Ireland collaborative initiatives

 **TECHNOLOGY GATEWAYS**
delivering solutions for industry
an **Enterprise Ireland** network



 **NEW
FRONTIERS**
entrepreneur development
an **Enterprise Ireland** programme

TECHNOLOGY GATEWAYS

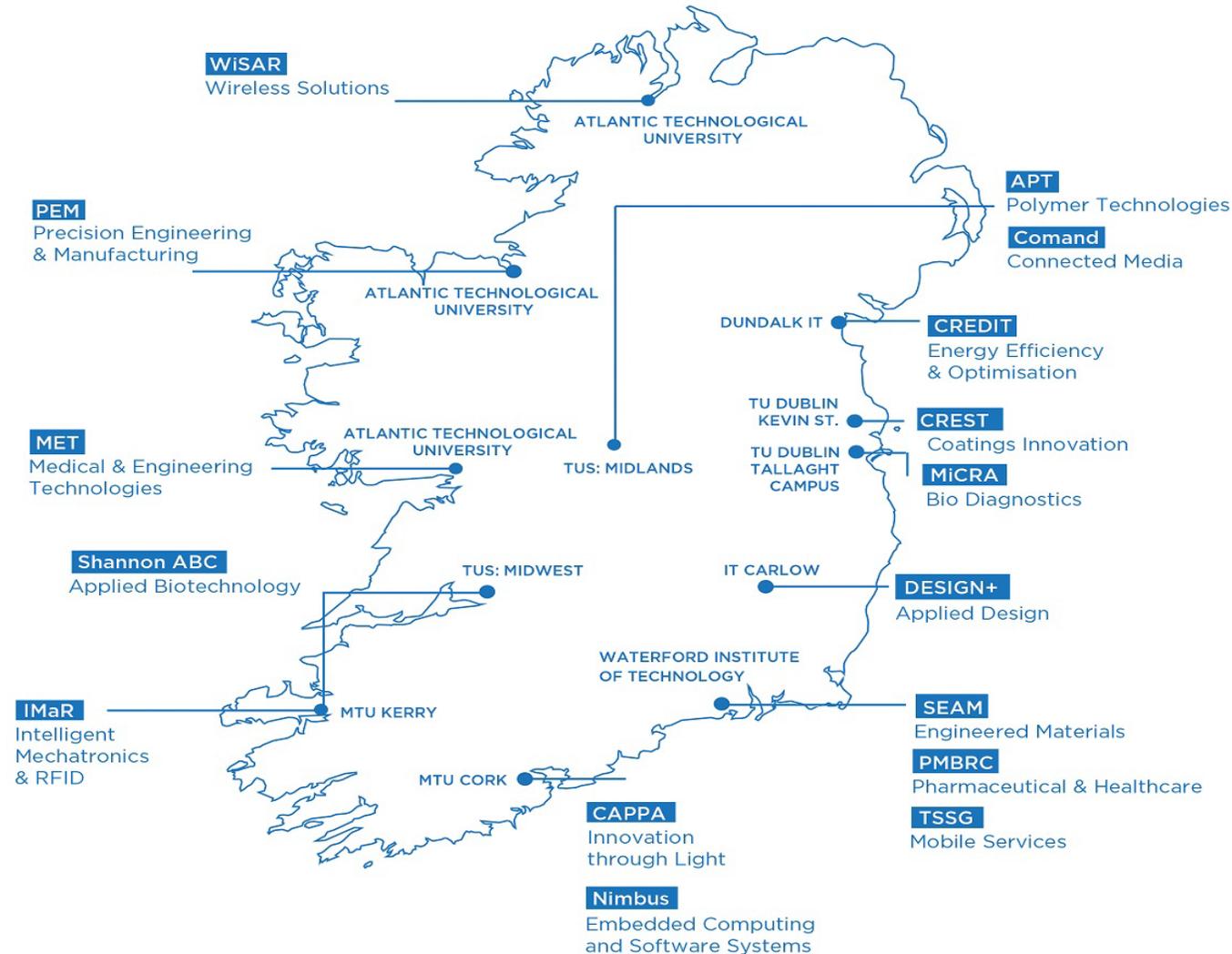
delivering solutions for industry

an Enterprise Ireland network

thea

Technological Higher
Education Association
IRELAND

**IRISH
UNIVERSITIES
ASSOCIATION**



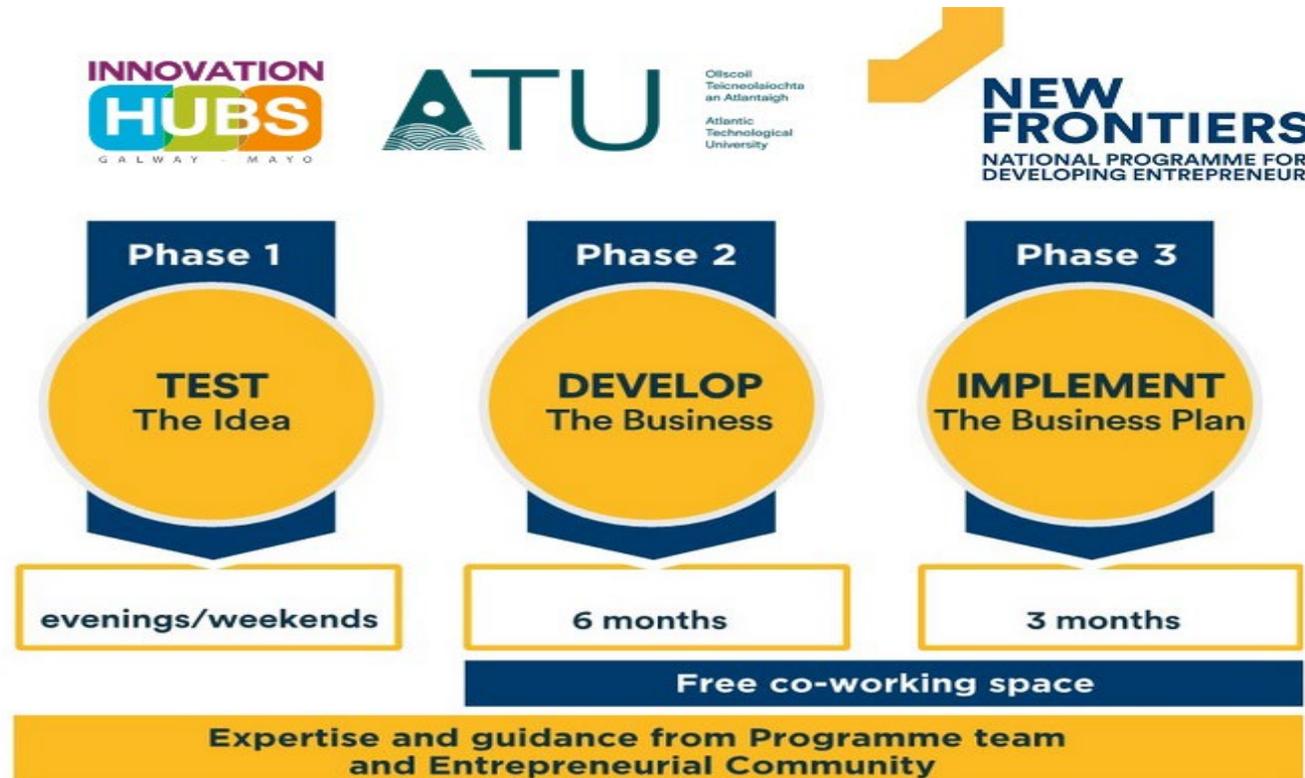
Facilitating Co-Operation with Other Companies

- **Technology Centers:** The investment in Technology Centers is a joint initiative between Enterprise Ireland and IDA Ireland allowing Irish companies and multinationals to work together on research projects in collaboration with research institutions. Technology Centers are collaborative entities established and led by industry.
- The **8 Technology Centers** in the programme are resourced by highly-qualified researchers who provide a unique ecosystem for collaboration in areas identified, by industry, as being strategically important.



Support and Funding for Irish Start-Ups

New Frontiers is the **national entrepreneurial development programme** for **ambitious early-stage entrepreneurs** with **innovative business ideas** which have the **potential to scale** and provide employment. It provides the **skills, support, and confidence** needed to make the leap to starting a successful business



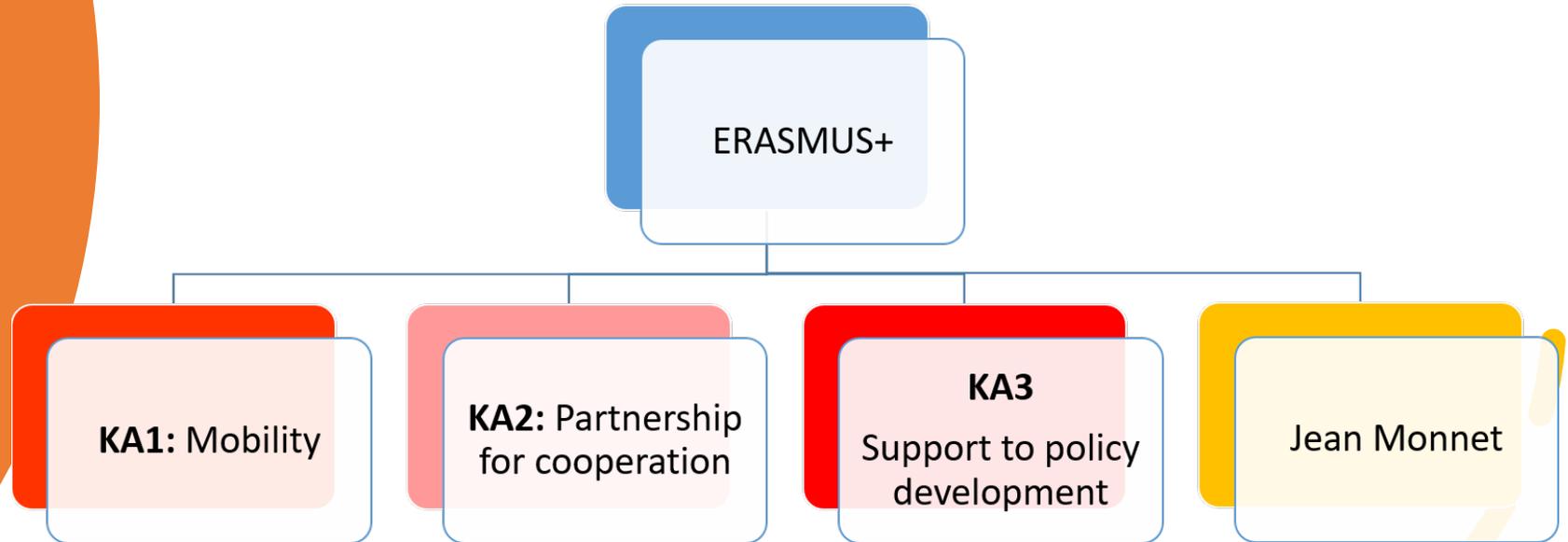
Cooperation with Canada

- Collaborative, **mutually beneficial approach** required – **joint initiatives**
- Mobility – students and staff
- Programme development – undergraduate and postgraduate
- Teaching and Learning Practice
- RDI activities supporting regional development
- Policy development activities



Erasmus+

Erasmus + Programme Structure



EU Programmes



European
Commission

***EUROPEAN
UNIVERSITIES***
*A key pillar of
the European
education area*



**EUROPEAN
UNIVERSITIES**

Erasmus+



HORIZON EUROPE

EURATOM

SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

Exclusive focus on defence research & development

Research actions

Development actions

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT*

Exclusive focus on civil applications



Pillar I EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie

Research Infrastructures



Pillar II GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Clusters

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre



Pillar III INNOVATIVE EUROPE

European Innovation Council

European innovation ecosystems

European Institute of Innovation & Technology*

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

Fusion

Fission

Joint Research Center

**“Ní neart go cur le chéile -
There is no strength without unity”**



P O R
T U
A G
L _

PORTUGAL POLYTECHNICS

Top choice
for higher education

Study and Research in Portugal (Polytechnic Universities)

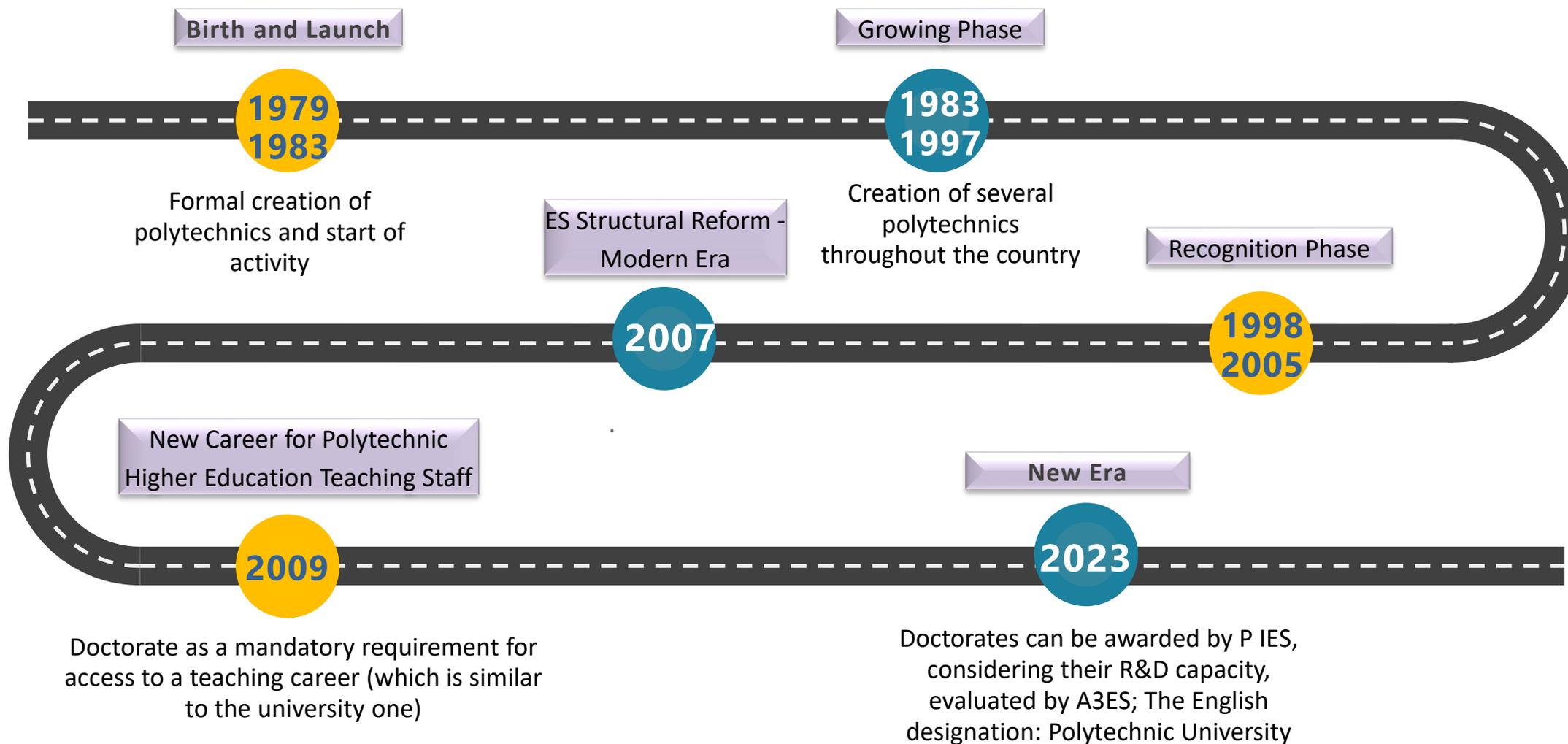
Armando Pires

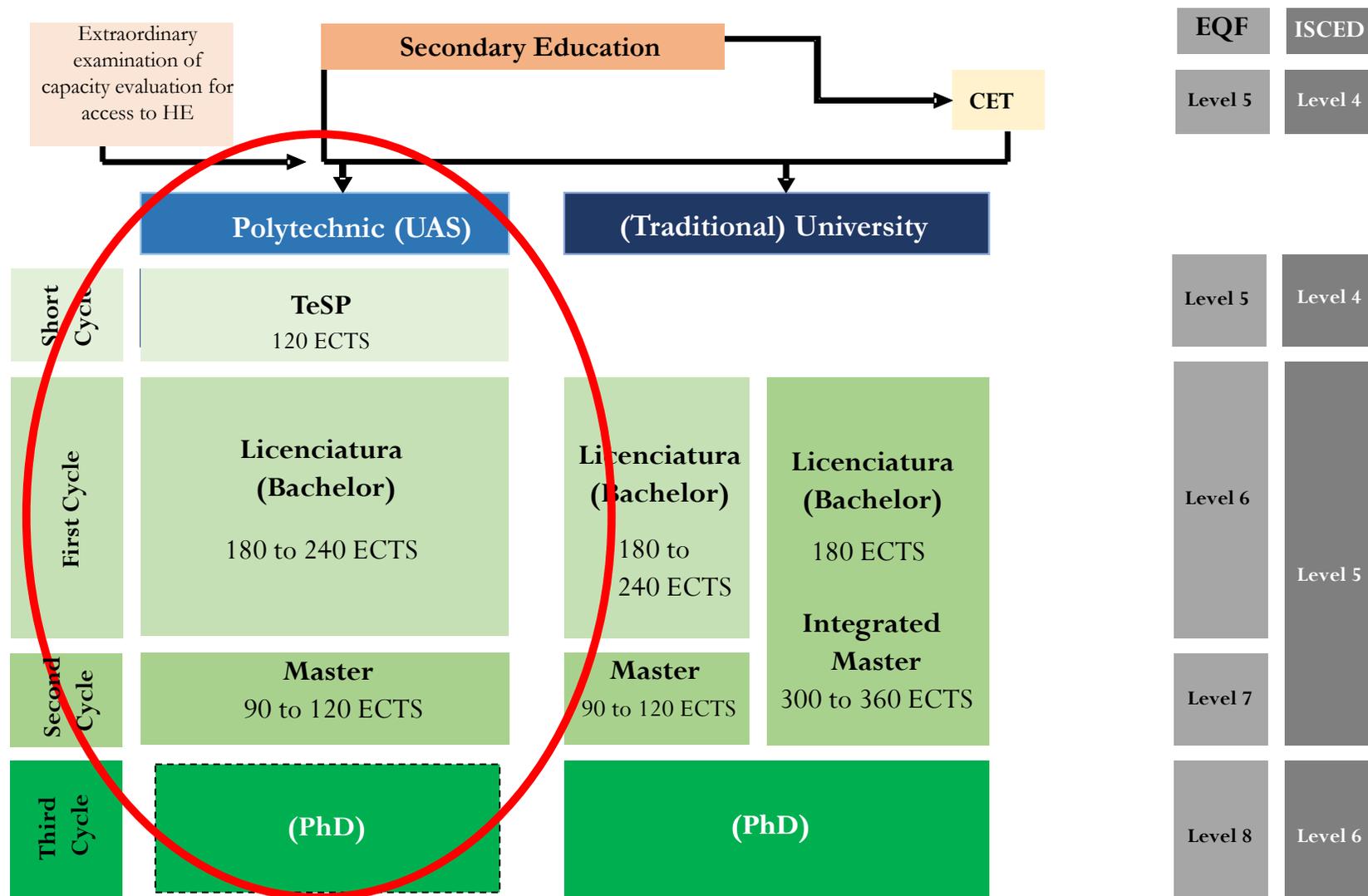
(EURASHE - President;
CCISP - Head International Affairs;
Setúbal Pol. University - Full Professor)

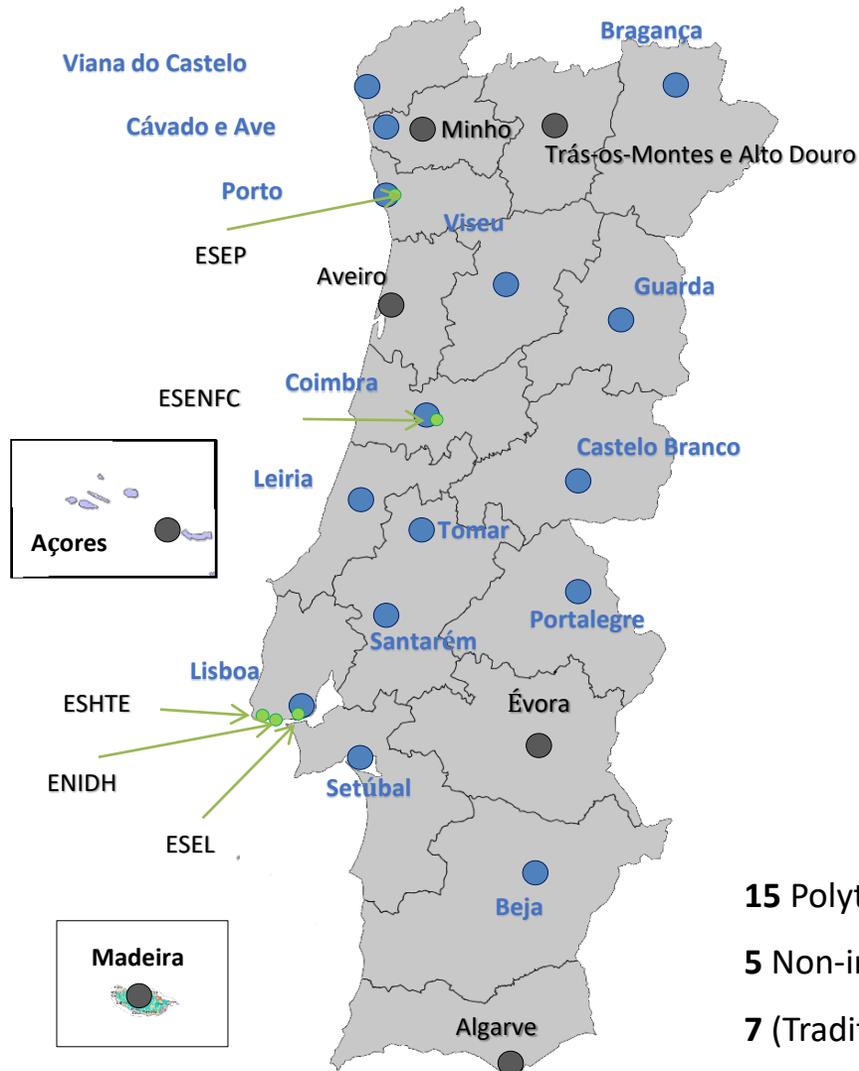


2023 Polytechnic Showcase,
Calgary, Canada, 2023, May 18

PHE/UAS in Portugal – an overview



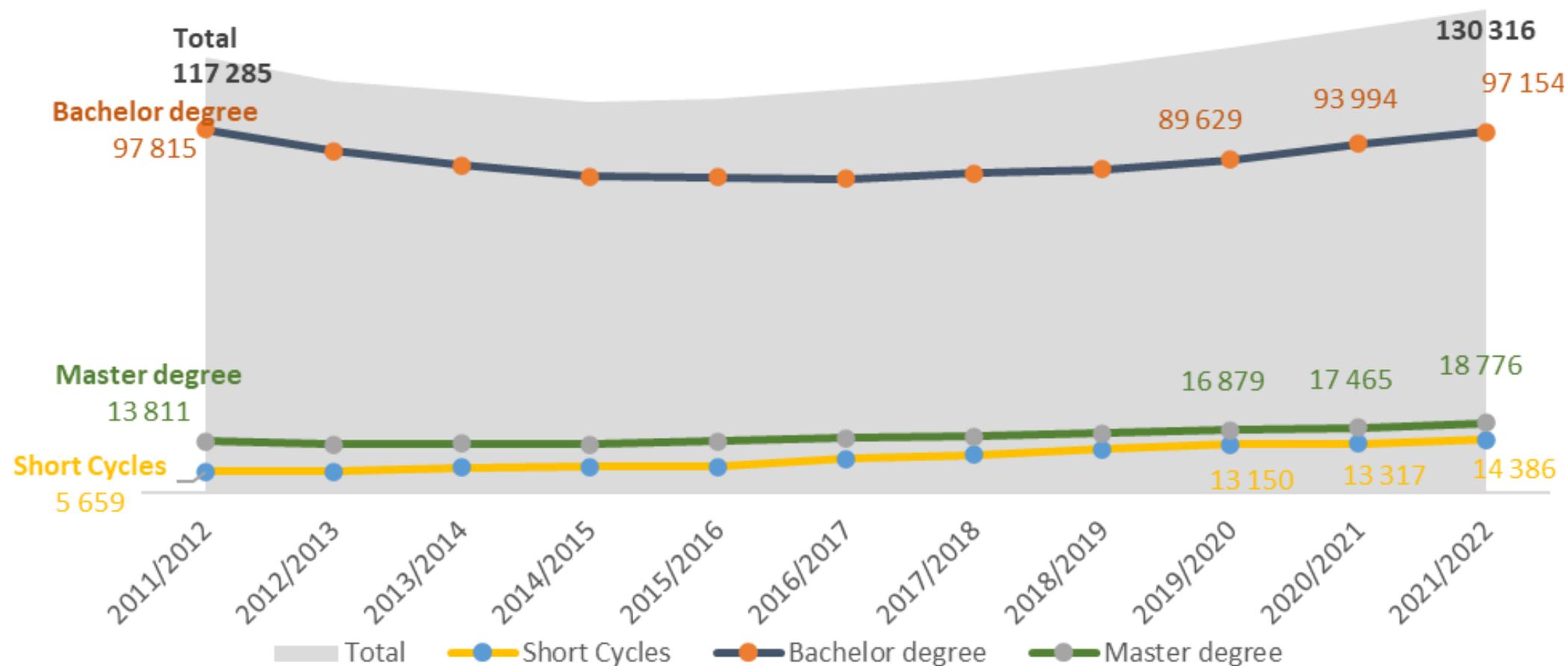




- 15 Polytechnics (UAS) ●
- 5 Non-integrated Schools ●
- 7 (Traditional) Universities with Polytechnic Schools ●

Students enrolled by course type | 2011/12 to 2021/22

CCISP members only

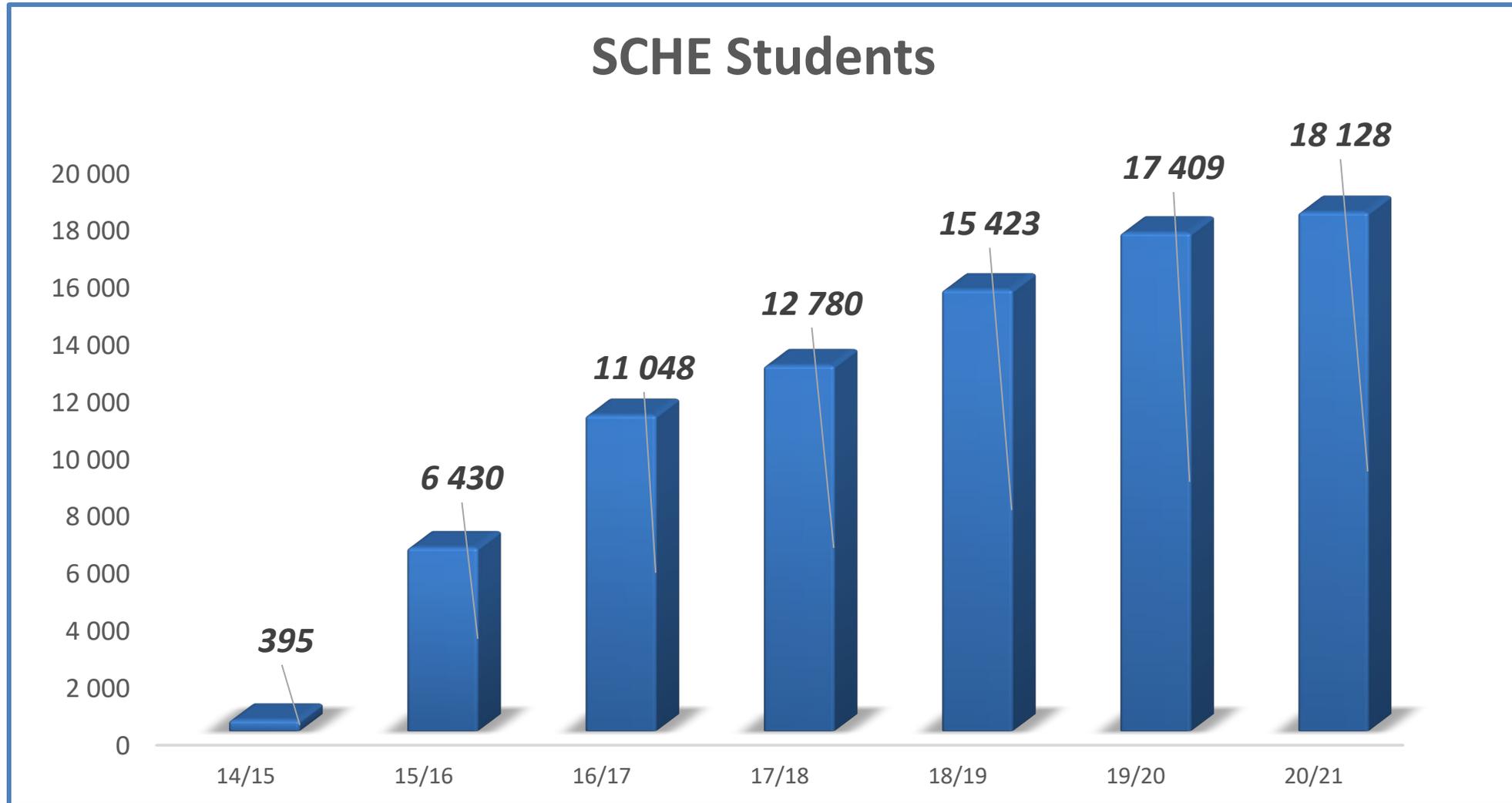


Source: DGEEC

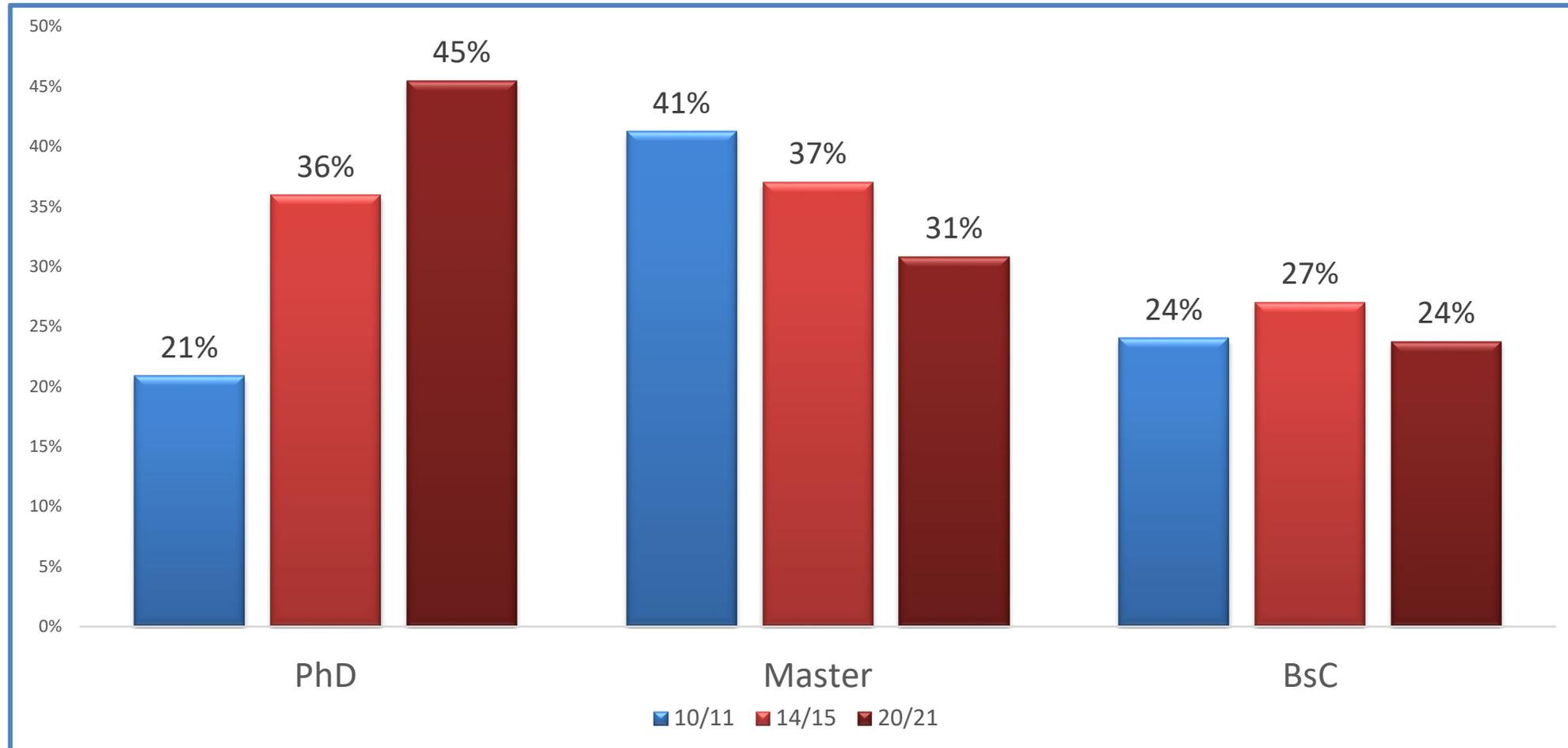
PHE/UAS in Portugal – an overview



Source: DGEEC



Academic Staff Qualifications



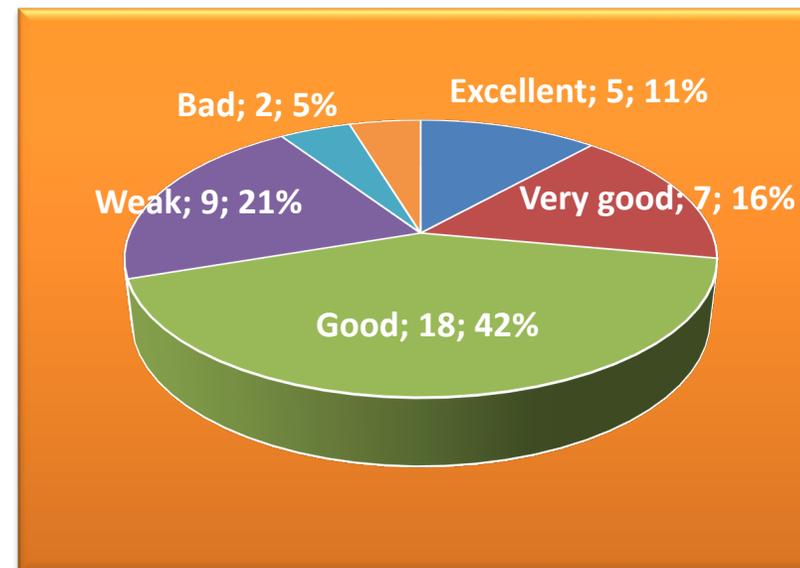
RDI

- More than **450 projects** in cooperation with companies, municipalities and other organizations (2014-2018), (more than **110 million €**)
- **102** applied research **projects** approved and funded by National Foundation for Science and Technology (specific call for PHE/UAS) (almost **15 million €**)

R&D units funded by FCT

15 PHE/UAS applications in 2014

42 PHE/UAS applications in 2018

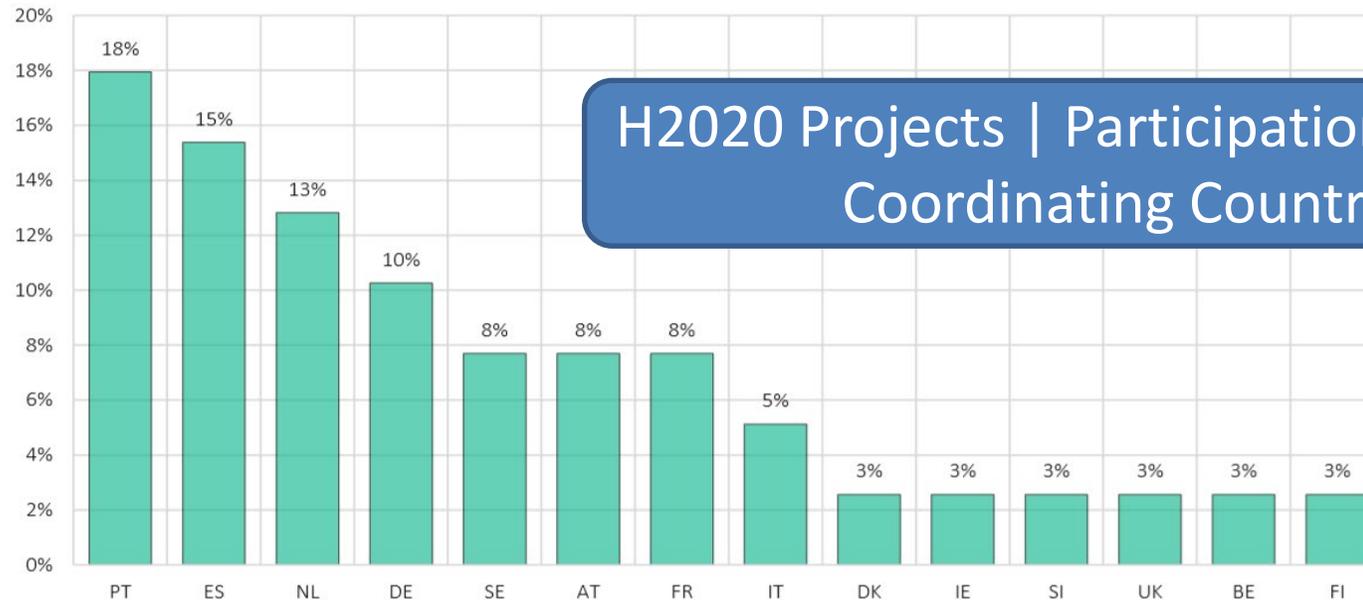




Projects	2014	2015	2016	2017	2018
H2020 ¹	8	5	9	5	12
EUREKA ²	1	1	3	3	6

¹ Grants for projects of Research and Innovation to establish an economy based on knowledge and innovation

² European network developing cooperation between SMEs, research centres and universities for industrial innovation



	Beja	Bragança	Castelo Branco	Cávado e Ave	Guarda	Leiria	Portalegre	Santarém	Setúbal	Tomar	Viana do Castelo	Viseu
Total economic impact (M€)	18.604	64.647	39.302	32.682	35.741	129.477	17.277	44.962	58.363	18.009	33.484	44.800
Regional GDP weight (%)	3,28%	10,56%	5,28%	2,20%	4,54%	4,18%	3,68%	4,47%	1,77%	2,08%	1,93%	2,56%
Economic Activity (€ generated in the regional economy per each € received from State Budget)	1,71	3,34	2,2	5,61	3,19	4,68	1,84	3,26	3,15	1,76	2,48	2,64
Position in the ranking of largest employers in the region	3	3	3	6	4	2	3	4	2	3	5	4



www.portugalpolytechnics.com

TOP CHOICE FOR
HIGHER EDUCATION

FIND COURSES →

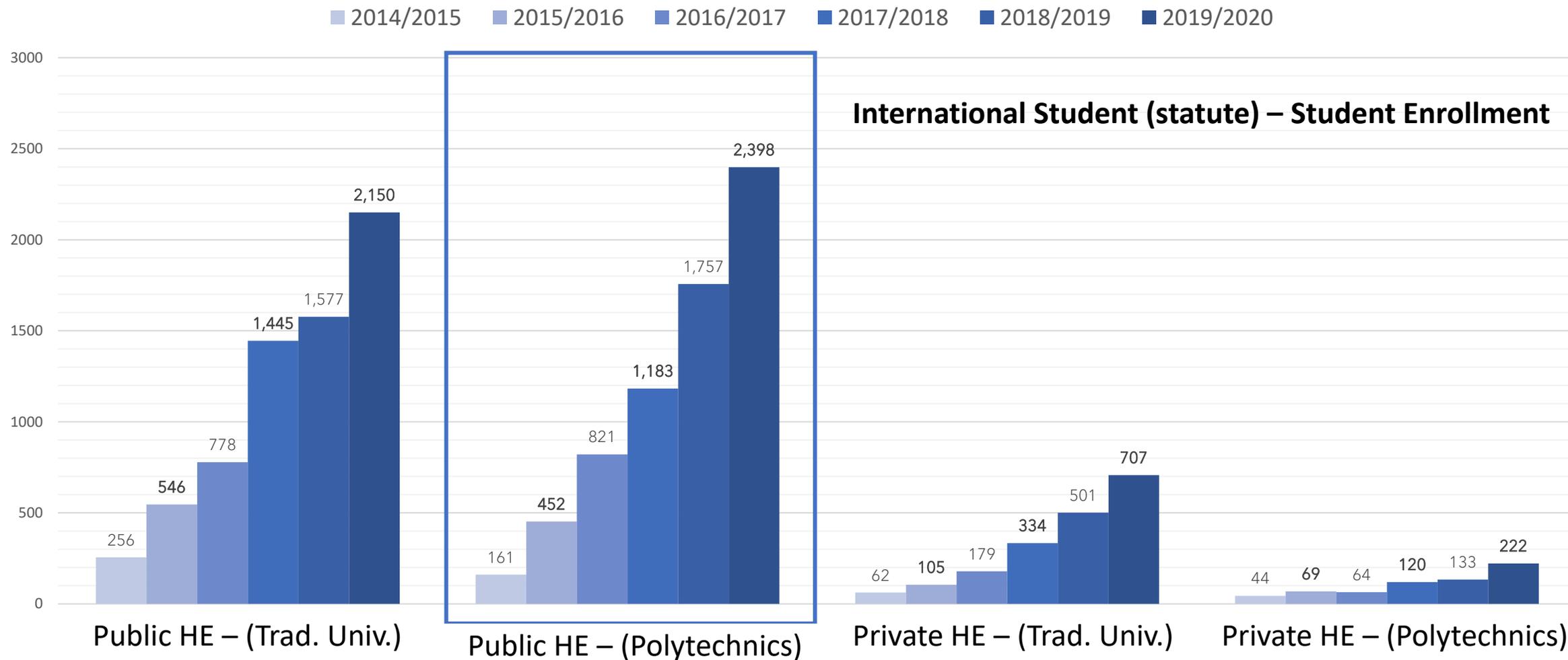
TOP CHOICE FOR
STUDY IN EUROPE

WHY PORTUGAL →

TOP CHOICE FOR
A LIFETIME EXPERIENCE

Experience life in the country with the oldest borders in Europe, where the sun shines almost throughout the whole year and it is possible to travel along a coastline of more than 900 km.

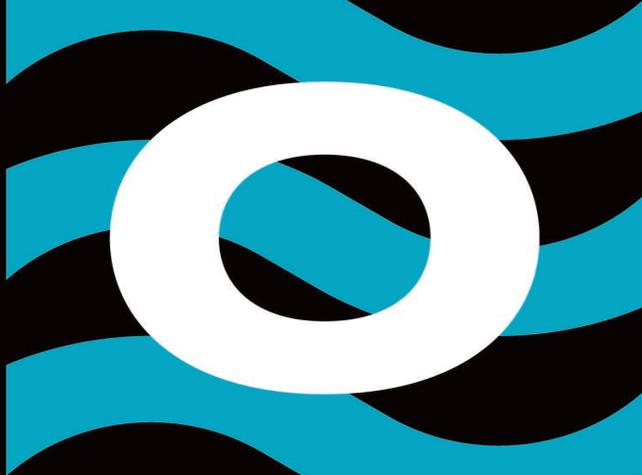
LIFE IN PORTUGAL →



Cooperation between Portuguese Polytechnic Universities and Canadian Polytechnics :

- Students and staff mobility with the support of public or private institutions (also for internships)
- Double degrees
- Research projects (also with other partners)

P



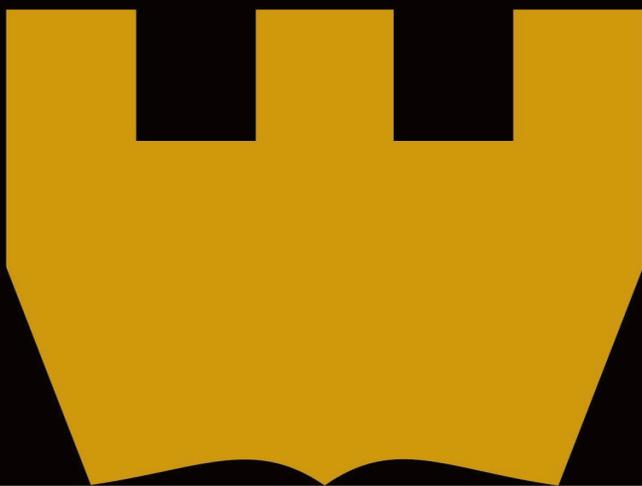
**PORTUGAL
POLYTECHNICS**

Top choice
for higher education

R

T

Thank You!



G

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