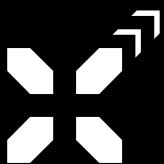


Faster. Further. Together



#ResearchLuxembourg



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# INTRODUCTION

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**Claude Meisch**

*Minister for Higher  
Education and Research*

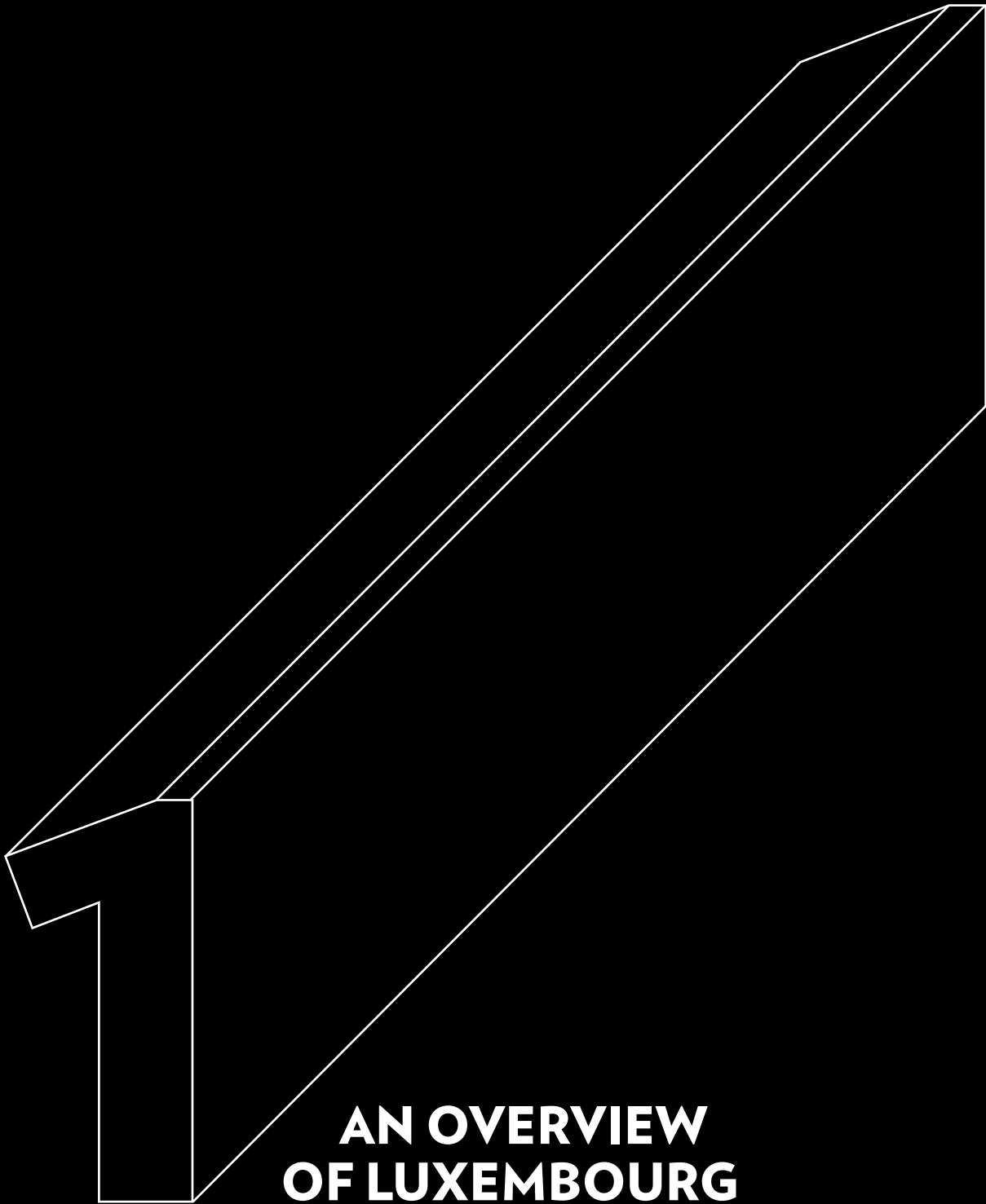
Public research in Luxembourg is a young and dynamic field and has progressed remarkably over the last two decades. Once a leading steel producer, later a global financial centre, Luxembourg started around the turn of the millennium to pave its way into the future, a future comprising a knowledge-based society with a broader and more diversified economic base.

Since then, an attractive and fertile research and innovation ecosystem has emerged and gained international recognition in a number of fields, such as ICT and data science, health and biomedicine, materials or education. The major goal, now, is to consolidate those achievements and to accompany research and innovation activities in such a way that they serve the implementation of the Luxembourg 2030 vision of a sustainable knowledge society and hence contribute to the future prosperity of the country.

To fulfil these ambitions, Luxembourg must resolutely invest in research and innovation, because the research ecosystem will be the main catalyst allowing the country to seize the arising opportunities in the context of climate change and digitalisation. Research will generate the innovations that can improve the quality of life of tomorrow and it is by initiating collaborations between the research ecosystem and the different societal stakeholders that we will be able to introduce those innovations into our daily life.

This booklet aims to give you a complete overview of the higher education and research landscape in Luxembourg. In the short term, this publication shows the national research system's framework conditions, its organisation, its diversity and openness, its main focus areas. It also emphasizes the considerable efforts made to date by all the field actors and the government to place the country on the world map of international research. So far, this goal has been achieved in a thoroughly successful manner.

Nevertheless, I am convinced that the best is yet to come.



**AN OVERVIEW  
OF LUXEMBOURG**

Located between Germany, Belgium and France, Luxembourg covers a 2,586 km<sup>2</sup> area. As a highly developed country with an advanced economy and high standards of living, Luxembourg stands out for its political stability and its safety. International at heart, the country has one of the world's most open economies and is one of the European Union's capitals, hosting many international institutions.

While the country excels as a global and European financial centre, Luxembourg is also an international research hub fostering interdisciplinarity and innovation.

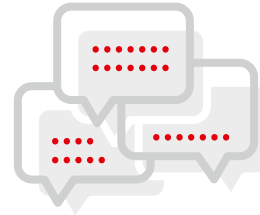


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# LUXEMBOURG AT A GLANCE

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More than  
**170**  
nationalities make up  
the 634,700 inhabitants.  
*(on January 1st, 2021)*



3 administrative languages:  
Luxembourgish, French and German.

---

**83%**

of people living in Luxembourg **speak**  
**3 or more** languages.



The **first country** in the world to offer  
**entirely free public transport**  
all over the country since March 2020.



**A founding member State**  
of the European Union.



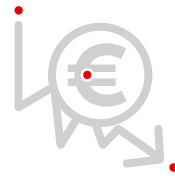
Among the **five highest** OECD  
and EU countries **on childcare**  
**provisions** according to UNICEF.





**Second greenest country** in the world according to the 2020 Environmental Performance Index (EPI).

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**Second lowest** public debt in EU.

---

**3<sup>RD</sup>**

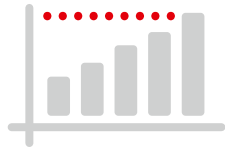
**most attractive city** in the world according to the AIRINC's Global 150 Cities Index.

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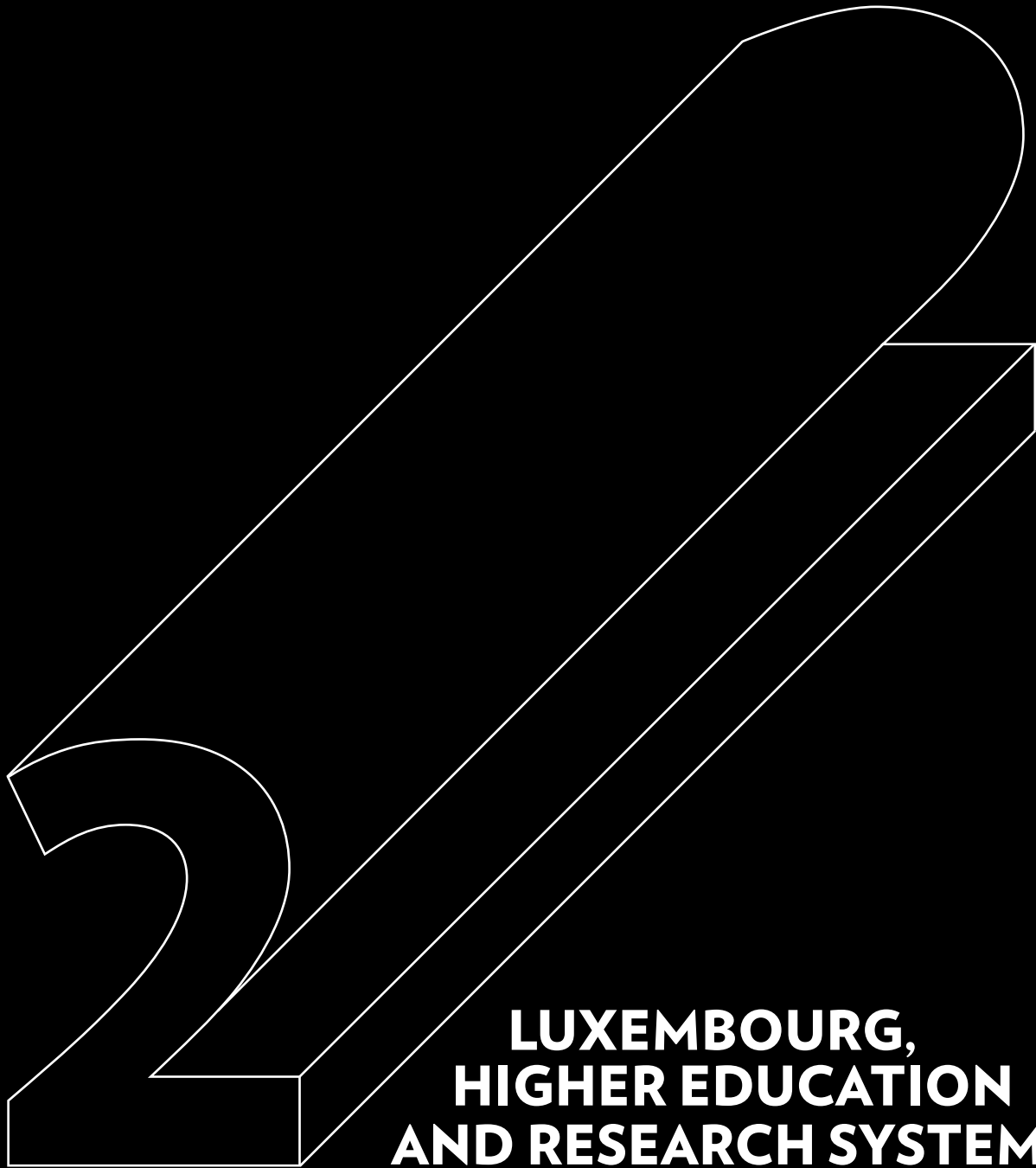


**Eighth happiest country** in the world in the World Happiness Report 2021.

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**18th top labour market** across the globe for sourcing, hiring and retaining workforce skills according to the 2021 Total Workforce Index.™



**LUXEMBOURG,  
HIGHER EDUCATION  
AND RESEARCH SYSTEM**

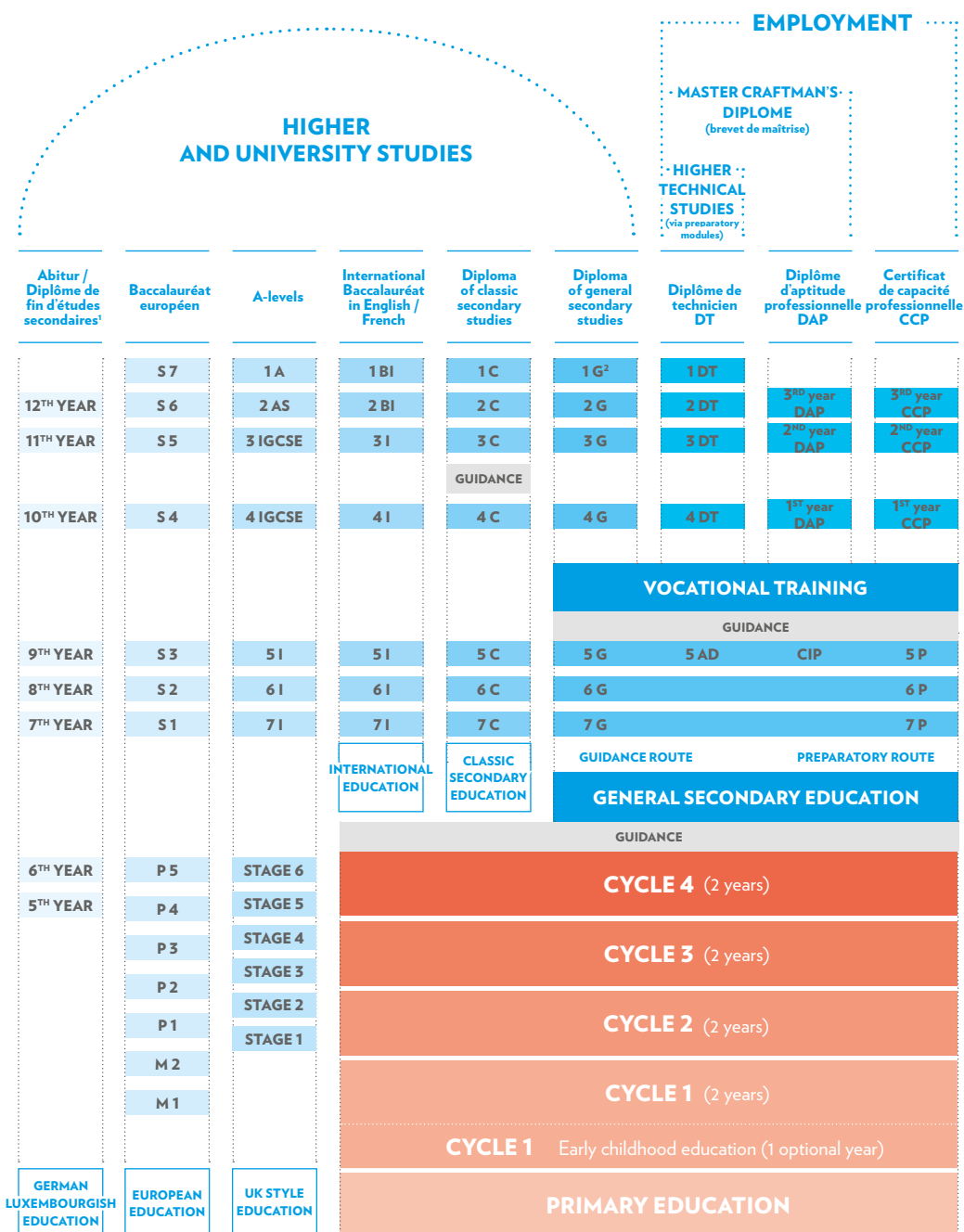
In addition to the importance given to language instruction in its education system and numerous international schools, Luxembourg is accustomed to successfully integrating foreign pupils, and being very open to the educational opportunities in nearby countries.

Education in Luxembourg is multilingual and consists of primary education, secondary education (including vocational training) and higher education.

Compulsory schooling starts with two years of pre-school education (for children aged 4 to 6); the language of tuition is Luxembourgish. In the national system children begin primary school at the age of six and this continues for six years during which time they are introduced to German for the first year and French the following year. After primary school, secondary education lasts between three and eight years, depending on the chosen orientation. Luxembourg also has a growing number of public international schools, which provide German-, French- or English-speaking classes.



## EDUCATION SYSTEM IN LUXEMBOURG



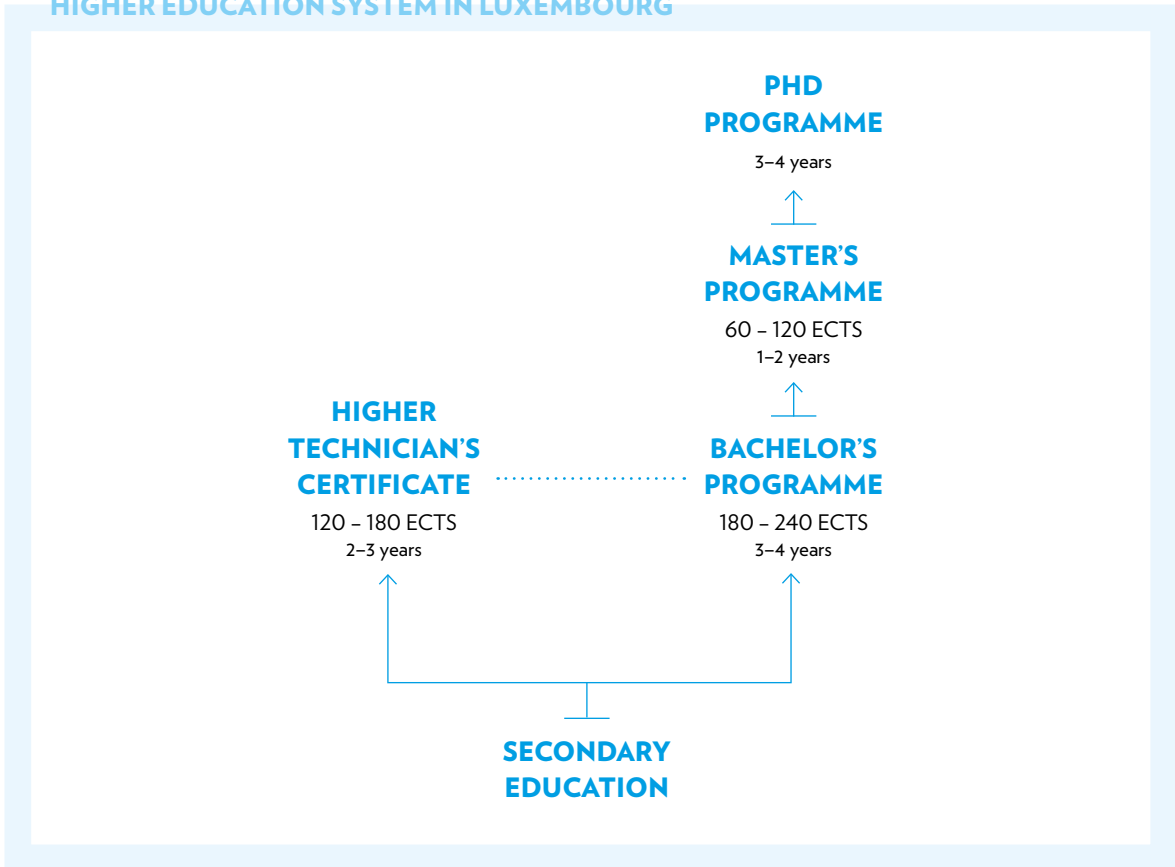
<sup>1</sup> Diploma of classic secondary studies and Diploma of general secondary studies

<sup>2</sup> Also a "1GED" class added to the subject area educator

Luxembourg schools also offer adults the possibility to take the DAES (diplôme d'accès aux études supérieures), which is equivalent to the Luxembourgish secondary school leaving diploma (Diplôme de fin d'études secondaires) and gives access to higher educations.

(Source: Living and working in Luxembourg, CCI brochure)

## HIGHER EDUCATION SYSTEM IN LUXEMBOURG



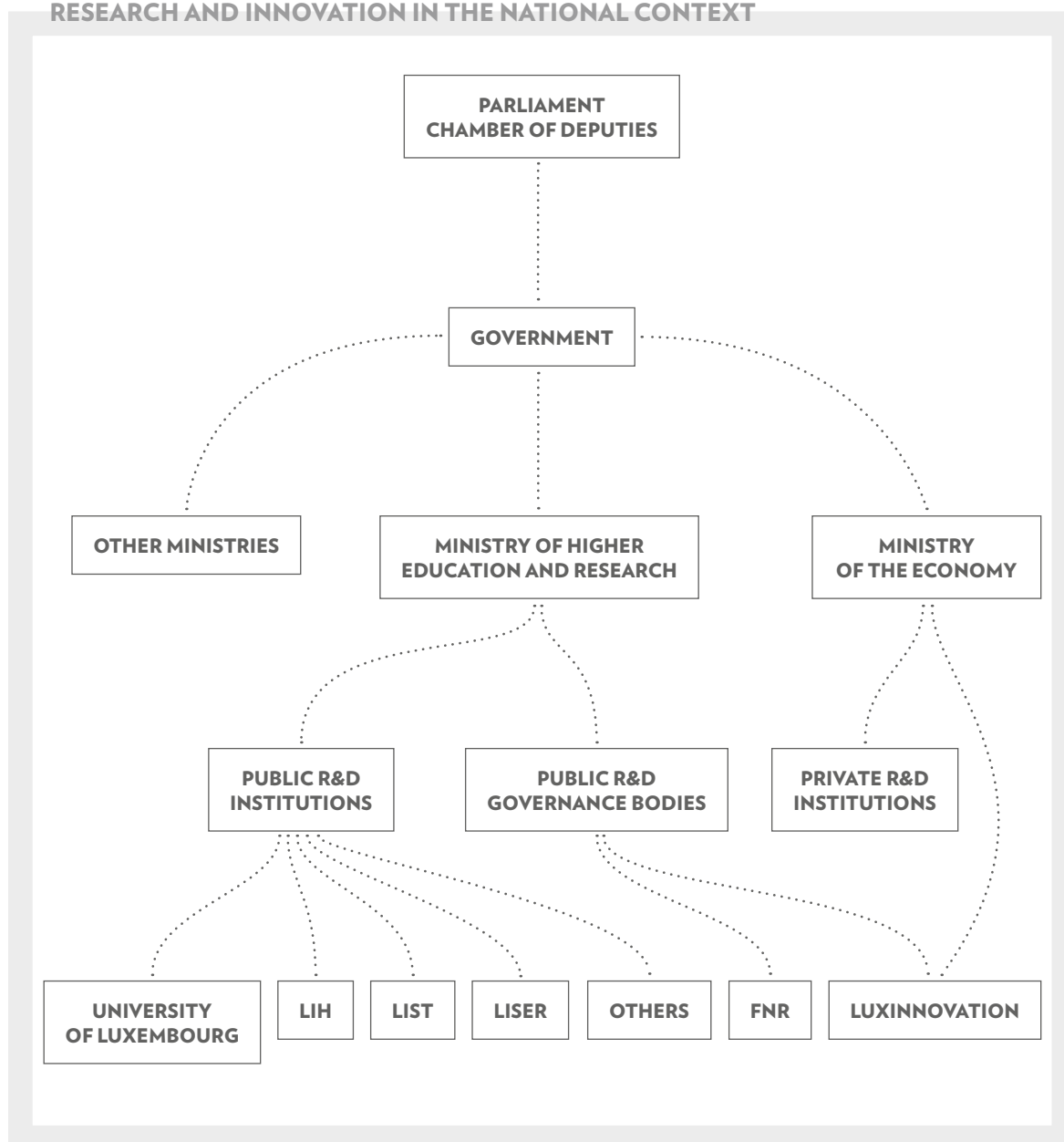
(Sources: *Work and Study, Luxembourg; ECTS user's guide, Directorate General for Education, Youth, Sport and Culture, European Commission*)

Founded in 2003, the University of Luxembourg is a top 300 university according to the Times Higher University Ranking 2022. It conducts cutting-edge research across multiple fields in its three faculties and three interdisciplinary research centres.

Several secondary schools also provide short-cycle programmes leading to a Higher Technician's Certificate, a professional higher education qualification (BTS, i.e. brevet de technicien supérieur). Programmes are currently provided in the study areas of health, commerce, industry, 'applied arts' (arts, manufacturing, construction and design) craft, and services.

The offer is completed by other institutions providing higher education, such as private higher education institutions.

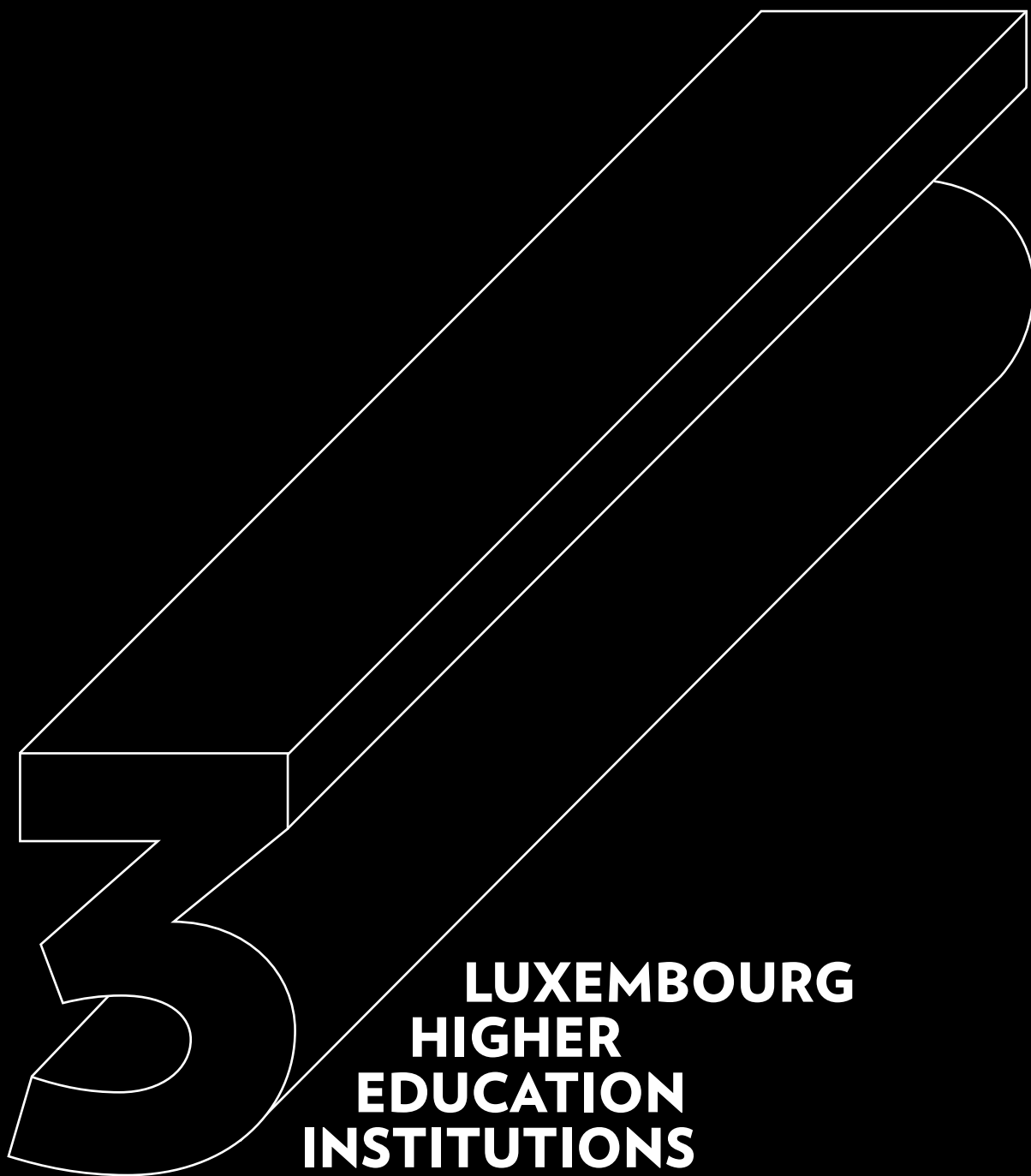
## RESEARCH AND INNOVATION IN THE NATIONAL CONTEXT



The current research and innovation strategy has been designed within the framework of the governmental programme 2018-2023, which aims at raising public investment in research and development to 1% of the gross domestic product (GDP) by 2023 for the public and private sector, while “maximising the efficiency of the investment and the action deployed”.

Research and development work is carried out by public research and private sector research in companies.





**LUXEMBOURG  
HIGHER  
EDUCATION  
INSTITUTIONS**



---

## 3.1 PUBLIC INSTITUTIONS

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### THE UNIVERSITY OF LUXEMBOURG



Founded in 2003, the university brings together about 7,000 students, including nearly 5,000 full-time students, who span some 130 different nationalities.

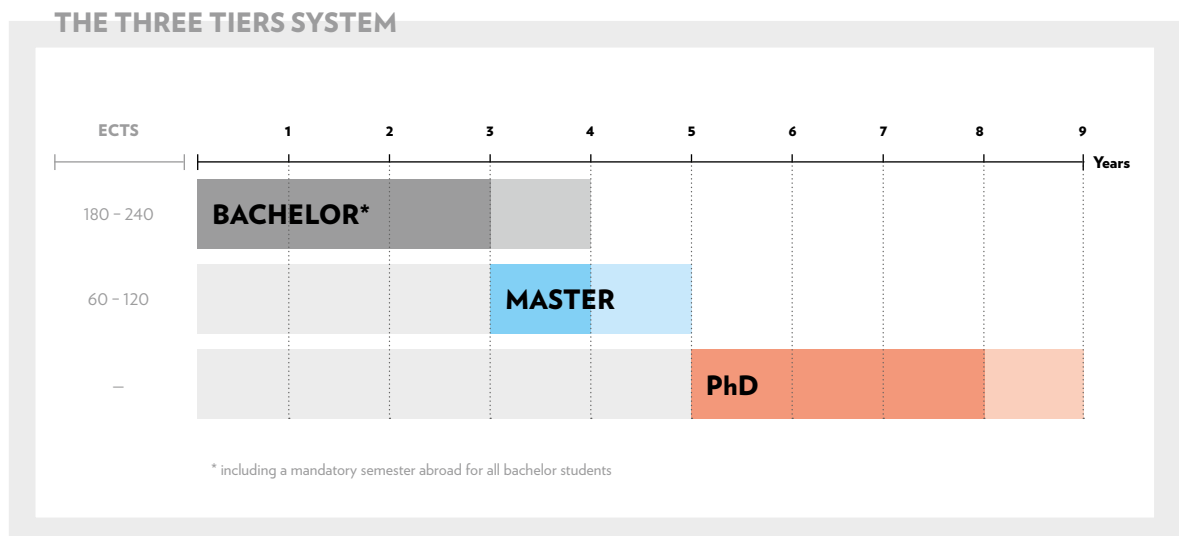
The University of Luxembourg has forged partnerships with numerous universities worldwide, and each bachelor student must spend at least one semester abroad. The university also offers several cross-border, i.e. trans-national bachelor's and master's courses.

The University is divided into three faculties:

- The Faculty of Science, Technology and Medicine (FSTM)  
[wwwen.uni.lu/fstm](http://wwwen.uni.lu/fstm)
- The Faculty of Law, Economics, and Finance (FDEF)  
[wwwen.uni.lu/fdef](http://wwwen.uni.lu/fdef)
- The Faculty of Humanities, Education and Social Sciences (FHSE)  
[wwwen.uni.lu/fhse/studies](http://wwwen.uni.lu/fhse/studies)

Its three faculties offer bachelor's, master's, and PhD degrees.

Courses are available in French, German and English and run from mid-September to July.



## DOCTORAL EDUCATION

More information:

[www.en.uni.lu/studies/doctoral\\_education](http://www.en.uni.lu/studies/doctoral_education)

Doctoral education — also commonly known as doctoral or PhD studies — is an important step in an academic career, leading to scientific research or to industry.

The University of Luxembourg has four Doctoral Schools within the three faculties:

- Doctoral School in Science and Engineering (DSSE) - within the FSTM - offers seven programmes
  - › Mathematics and Applications
  - › Physics and Materials Sciences
  - › Civil Engineering Sciences
  - › Mechanical/Electro and Communications Engineering
  - › Computer Science and Computer Engineering
  - › Systems and Molecular Biomedecine
  - › Computational Sciences
- Doctoral School of Law - within the FDEF - fosters an open-minded approach to legal analysis, going beyond the boundaries of national jurisdictions, to promote comparative cross-disciplinary research, within a multilingual environment (English, French and German) and an international academic team.
- Doctoral School in Economics and Finance (DSEF) - within the FDEF – focuses on two main topics:
  - › Economics (regional development, economic integration, environment policies, international economics, labour economics, macro finance, macroeconomic growth and dynamics)
  - › Finance (quantitative finance, risk management and financial governance, corporate finance, behavioral finance, law and finance, Islamic finance).
- Doctoral School in Humanities and Social Sciences (DSHSS) – within the FHSE – offers four research programmes in
  - › Humanities
  - › Education
  - › Social Sciences
  - › Psychology

## SHORT-CYCLE HIGHER EDUCATION

More information:

[www.mesr.public.lu/enssup/Accreditations/201021\\_list-of-recognised-higher-education-programmes.pdf](http://www.mesr.public.lu/enssup/Accreditations/201021_list-of-recognised-higher-education-programmes.pdf)

[www.bts.lu](http://www.bts.lu)

In Luxembourg, several secondary schools provide short-cycle programmes leading to a professional higher education qualification. The Higher Technician's Certificate (BTS; brevet de technicien supérieur) is a professionally oriented qualification, combining theory, practical training and internships.

Students attend courses held in secondary schools and complete a varying number of practical hours in the relevant professional field. In general, students have to acquire between 120 and 180 ECTS credits.

Areas of study include health, commerce, industry, 'applied arts' (arts, manufacturing, construction and design), craft and services. The standard study duration is between two and three years.

## LIFELONG LEARNING

More information:

[www.lifelong-learning.lu/Accueil/en](http://www.lifelong-learning.lu/Accueil/en)

In Luxembourg, individuals wishing to develop new skills have access to an extensive range of lifelong learning courses that form part of an ambitious continuing education policy. A number of centres provide a wide variety of solutions, including the University of Luxembourg; various professional chambers such as the Luxembourg Chamber of Commerce, the Chamber of Skilled Trades and Crafts, and the Chamber of Employees; and there are also many private training programmes. Overall, + 9,000 types of training are available in Luxembourg.



Find out more :

[www.competence.lu](http://www.competence.lu)

## THE UNIVERSITY OF LUXEMBOURG COMPETENCE CENTRE (ULCC)

Luxembourg aims to be among the frontrunners in the field of adult education and to develop consistent programmes to successfully take up upskilling and reskilling of the workforce.

As such, the University of Luxembourg Competence Centre is the major organisation for professional and continuing training at a higher education level. Located on Belval Campus, the Competence Centre develops and manages training programmes for adults that meet the needs of the labour market and support the major development axes of the Luxembourg economy. Its mission is to support the economic, social and cultural development as well as full employment, via partnerships with public and private institutions and regular interactions with the professional world.

The ULCC covers healthcare, law, finance, ICT and computing, as well as digital learning.

The ULCC also manages two bachelors addressed mainly to students coming from an advanced vocational training.

## LIFELONG LEARNING



Find out more : [www.inll.lu/en](http://www.inll.lu/en)

## INSTITUT NATIONAL DES LANGUES

As multilingualism is part of Luxembourg's DNA, Luxembourg sees adult language courses as part of lifelong learning, also known as 'adult education'. This type of education is characterised by the resumption of classes or training to acquire skills/qualifications that go beyond initial school or academic education. The Luxembourg National Institute of Languages (Institut National des Langues, INL) offers evening classes in eight languages, including the country's three official languages (French, German and Luxembourgish), as well as English, Chinese, Italian, Portuguese, and Spanish. In addition to the INL, several private schools also provide language classes covering an increasingly varied selection of languages.

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## 3.2 PRIVATE & INTERNATIONAL INSTITUTIONS

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Some private higher education institutions, accredited by the Ministry of Higher Education and Research, offer accredited higher education programmes.

The current list of accredited private higher education institutions and their accredited programmes can be found under the following link: [www.mesr.public.lu/enssup/Accreditations/201021\\_list-of-recognised-higher-education-programmes.pdf](http://www.mesr.public.lu/enssup/Accreditations/201021_list-of-recognised-higher-education-programmes.pdf)

The following foreign universities have implemented a campus in Luxembourg:

- Sacred Heart University, Jack Welch College of Business  
[www.sacredheart.edu](http://www.sacredheart.edu)
  
- Miami University, John E. Dolibois European Center  
[miamioh.edu/luxembourg](http://miamioh.edu/luxembourg)





**LUXEMBOURG  
RESEARCH  
INSTITUTIONS**

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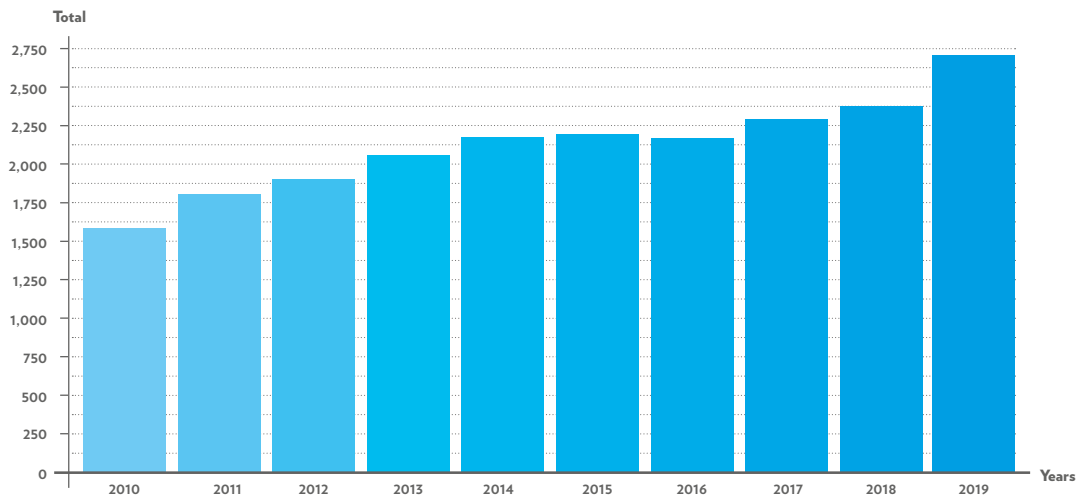
## 4.1 PUBLIC RESEARCH LANDSCAPE AT A GLANCE

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The Luxembourg government has made research, development and higher education one of the cornerstones of the nation's vision for the future. Home to 2,709 R&D staff in the public sector, Luxembourg research institutions have sustained funding growth.

### R&D STAFF IN FULL-TIME EQUIVALENT

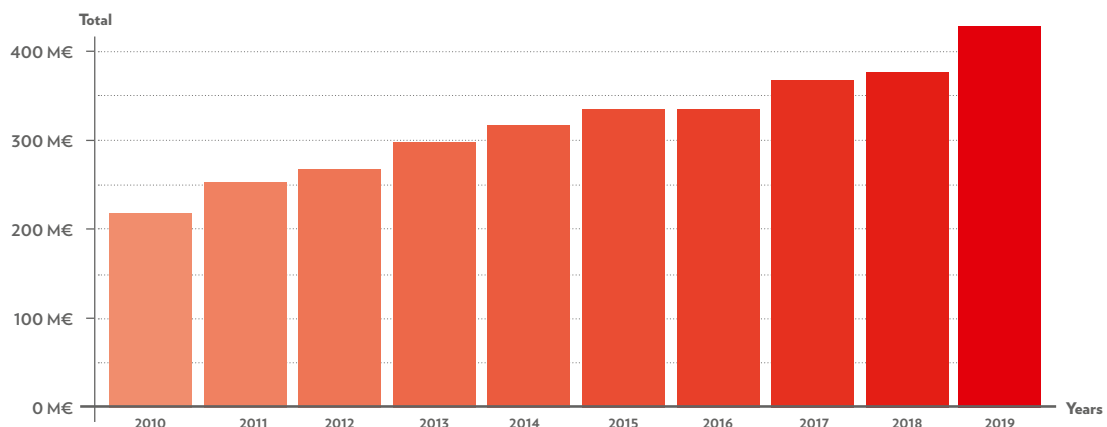
Only staff from government sector and higher education



(Source: Statec, <https://gd.lu/cj6QXN>)

### GOVERNMENT BUDGET APPROPRIATIONS OR OUTLAYS ON R&D

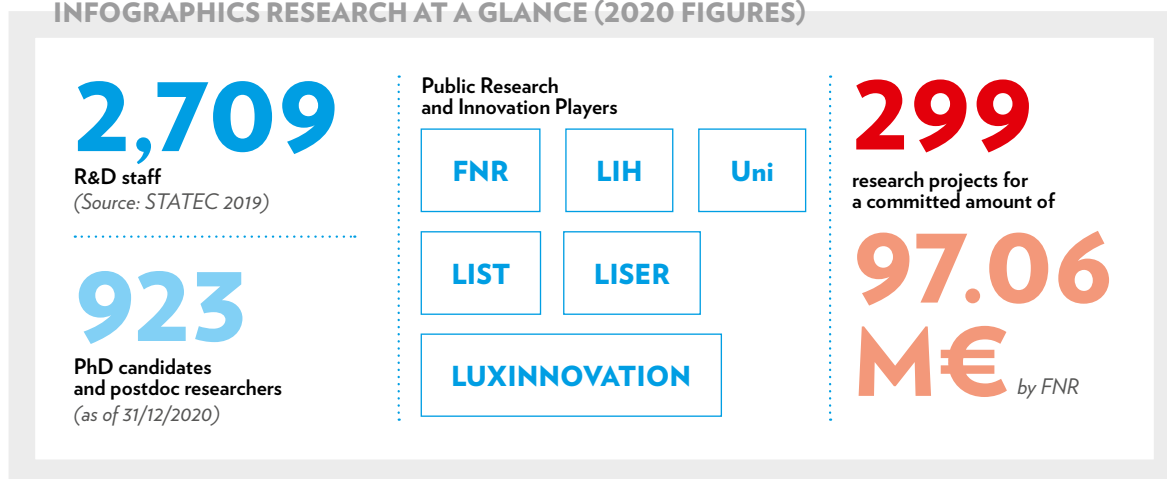
Total of all sectors



(Source: Statec, <https://gd.lu/46txqV>)

This support has built an attractive and fertile research landscape, gaining high international recognition in specific domains, e.g. materials science, health or ICT and data science.

### INFOGRAPHICS RESEARCH AT A GLANCE (2020 FIGURES)

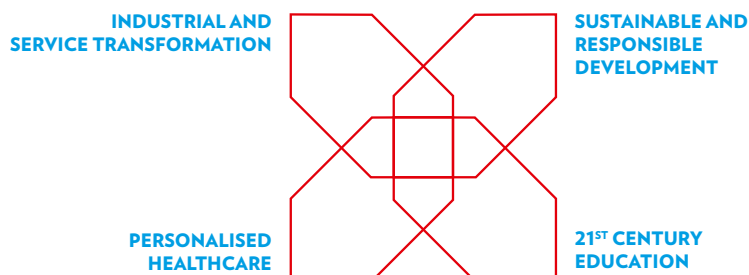


## 4.2 RESEARCH & INNOVATION POLICY AND STRATEGY

Luxembourg has drawn up a formal national research strategy defining how Luxembourg’s scientific ecosystem should develop over the next 10 years and in which areas investment should be concentrated.

Luxembourg aims to be a diverse and sustainable knowledge society by 2030, as well as a secure digital society. The mission of research and innovation should be to make a significant contribution to the realisation of the vision “Luxembourg 2030”. Artificial intelligence should play an important role in this process and Luxembourg should be used optimally as a living test laboratory because of its small size.

At the top level, the national research and innovation strategy defines four research priority areas, which have emerged to be of particular importance for the societal, ecological and economic development of the country.





→ **Industrial and Service Transformation**

- › Autonomous and intelligent systems and robotics for earth and space
- › Fintech/RegTech and transformative applications of distributed ledger technologies
- › Future computer & communication systems
- › Fundamental tools and data-driven modelling and simulation
- › Space telecommunications, earth observation and space resources
- › Trusted data-driven economy and critical systems
- › Integrative Materials science and technology

→ **Sustainable and Responsible Development**

- › Climate change: energy efficiency and smart energy management/resilient eco and agrosystems
- › Social: migration and social cohesion/cultural identities, cultural heritage and nationhood
- › Economic: green and sustainable finance/circular and shared economy
- › Responsible development: regulations and ethics for a data-driven society

→ **Personalised Healthcare**

- › Complex biomedical systems – data and models
- › Understanding, preventing, and treating the health-disease transition
- › Precision medicine, including environmental, lifestyle and socio-economic factors
- › Data-driven healthcare

→ **21st Century Education**

- › Innovative digitally enhanced learning and assessment environments
- › Equality of educational opportunity
- › Learning in a multilingual and diverse society
- › Adult education, up/re-skilling and lifelong learning

These areas are intertwined and sub-themes are all connected to each other.

The implementation of the research strategy implies focusing on interdisciplinary projects, recognising that each of the four main priority research areas will benefit from the results and projects of another area or areas. The four priority research areas will ensure that, beyond the development of its GDP, Luxembourg can guarantee a continuous and sustainable development of the well-being of its population, including health, environment and education factors.

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## 4.3 PUBLIC RESEARCH INSTITUTIONS

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### THE UNIVERSITY OF LUXEMBOURG



UNIVERSITÉ DU LUXEMBOURG

[www.uni.lu](http://www.uni.lu)

The University of Luxembourg is strongly research-oriented. It has a distinctly international outlook and its ambition is to produce top class research output, addressing society's challenges. It conducts cutting-edge research across multiple fields in its three faculties and three interdisciplinary research centres.

The University counts about 7,000 students as well as 1,700 researchers working in three faculties and three interdisciplinary centres.

The research focus lies on six pillars of excellence:

- Computer Science & ICT Security
- Materials Science
- European and International Law
- Finance and Financial Innovation
- Educational Sciences
- Contemporary and Digital History

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### Three interdisciplinary research centres: SnT, LCSB, C<sup>2</sup>DH

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### INTERDISCIPLINARY CENTRE FOR SECURITY, RELIABILITY AND TRUST (SNT)



[www.uni.lu/snt](http://www.uni.lu/snt)

The Interdisciplinary Centre for Security, Reliability and Trust (SnT) conducts internationally competitive research in information and communication technology (ICT) with high relevance creating socio-economic impact. In addition to long-term, high-risk research, SnT engages in demand driven collaborative projects with industry and the public sector.

SnT has undergone rapid development since its launch in 2009; recruiting top scientists, launching 111 EU and ESA projects, creating a technology transfer office (TTO), protecting and licencing IP, launching five spin-off companies, and creating a dynamic interdisciplinary research environment with some 365 people.

SnT's Strategic Research Priorities include:

- FinTech
- Space Systems
- Secure and Compliant Data Management
- Cybersecurity
- Autonomous Vehicles
- Internet of Things

## LUXEMBOURG CENTRE FOR SYSTEMS BIOMEDICINE (LCSB)



[www.uni.lu/lcsb](http://www.uni.lu/lcsb)

The Luxembourg Centre for Systems Biomedicine develops and applies systems-level approaches to gain insight into the molecular and cellular mechanisms of human diseases. Experimental and computational approaches are combined to analyse the complexity of biological systems underlying disease pathogenesis. The LCSB is pioneering the way for a predictive, preventive and personalised medicine. Neurodegenerative diseases, especially Parkinson's disease are major targets within LCSB's research activities.

Research units include:

- Bioinformatics Core (R. Schneider Group)
- Biomedical Data Science (Glaab Group)
- Computational Biology (Del Sol Group)
- Developmental & Cellular Biology (Schwamborn Group)
- Digital Medicine (Klucken Group)
- Environmental Cheminformatics (Schymanski Group)
- Enzymology & Metabolism (Linster Group)
- Gene Expression & Metabolism (Williams Group)
- Immunology & Genetics (Brenner Group)
- Integrative Cell Signalling (Skupin Group)
- Interventional Neuroscience (Hertel Group)
- Medical Translational Research (J. Schneider Group)
- Molecular & Functional Neurobiology (Grünewald Group)
- Neuropathology (Mittelbronn Group)
- Systems Ecology (Wilmes Group)
- Systems Control (Goncalves Group)
- Translational Neuroscience (Krüger Group)

## LUXEMBOURG CENTRE FOR CONTEMPORARY AND DIGITAL HISTORY (C<sup>2</sup>DH)



[www.c2dh.uni.lu](http://www.c2dh.uni.lu)

The Luxembourg Centre for Contemporary and Digital History (C<sup>2</sup>DH) is a research centre of the highest academic excellence for the study, analysis and public dissemination of contemporary Luxembourgish and European history. It promotes an interdisciplinary approach with a particular focus on new digital methods and tools for historical research and teaching.

Research activities at the C<sup>2</sup>DH focus on three thematic areas which are explored from a transnational and interdisciplinary perspective:

- Contemporary history of Luxembourg
- European history
- Digital historiography

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## THREE FACULTIES WITH DIFFERENT DEPARTMENTS

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### THE FACULTY OF SCIENCE, TECHNOLOGY AND MEDICINE (FSTM)



FACULTY OF SCIENCE,  
TECHNOLOGY AND  
MEDICINE

[www.en.uni.lu/fstm/research](http://www.en.uni.lu/fstm/research)

The Faculty of Science, Technology and Medicine (FSTM) contributes to multidisciplinary expertise in the fields:

- Mathematics
- Physics
- Engineering
- Computer science
- Life sciences
- Medicine

With eight Bachelor's and 17 Master's programmes, one doctoral school in science and engineering and lifelong learning programmes, the FSTM offers opportunities with multilingual and small - group courses, early involvement in research projects and close connections with institutions and industry. Its five departments undertake cutting-edge science and innovation in collaboration with local and international partners.

**2,178**

Students

**630**

Publications in 2020

**561**

Staff

### THE FACULTY OF LAW, ECONOMICS, AND FINANCE (FDEF)



FACULTY OF LAW,  
ECONOMICS  
AND FINANCE

[www.en.uni.lu/fdef](http://www.en.uni.lu/fdef)

The Faculty of Law, Economics, and Finance (FDEF) features three departments:

- The Department of Law
- The Department of Finance
- The Department of Economics and Management, including the Luxembourg Centre for Logistics and Supply Chain Management (LCL).

A common thread is a resolutely European and international outlook that is rooted in the Luxembourg context through a number of strong institutional and industry partnerships.

FDEF offers four Bachelor's and 12 Master's programmes as well as lifelong learning/vocational programmes. It aims to shape critical thinkers who are able to provide solutions to the challenges of today and tomorrow in Luxembourg and beyond.

**2,333**

Students

**269**

Publications in 2020

**223**

Staff

## THE FACULTY OF HUMANITIES, EDUCATION AND SOCIAL SCIENCES (FHSE)



FACULTY OF HUMANITIES,  
EDUCATION AND SOCIAL  
SCIENCES

[www.uni.lu/fhse/research](http://www.uni.lu/fhse/research)

The Faculty of Humanities, Education and Social Sciences (FHSE) covers a wide range of fields:

- Behavioural and cognitive sciences
- Education and social work
- Geography and spatial planning
- Humanities and social sciences

The faculty's research and teaching focuses on social, economic, political and educational issues with the common goal of contributing to an inclusive, open and resourceful society.

The FHSE offers five Bachelor's and 17 Master's programmes and a doctoral school, providing students with the necessary knowledge and high-qualified skills to succeed in their future career.

**2,196**

Students

**609**

Publications in 2020

**478**

Staff

## LUXEMBOURG INSTITUTE OF HEALTH (LIH)



[www.lih.lu](http://www.lih.lu)

The Luxembourg Institute of Health (LIH) is a public biomedical research organisation focused on precision health and invested in becoming a leading reference in Europe for the translation of scientific excellence into meaningful benefits for patients.

LIH places the patient at the heart of all its activities, driven by a collective obligation towards society to use knowledge and technology arising from research on patient derived-data to have a direct impact on people's health. Its dedicated teams of multidisciplinary researchers strive for excellence, generating relevant knowledge linked to immune-related diseases and cancer. The institute embraces collaborations, disruptive technology and process innovation as unique opportunities to improve the application of diagnostics and therapeutics, with the long-term goal of preventing disease.

LIH has four research departments:

### INFECTON AND IMMUNITY

The Department of Infection and Immunity aims to understand the complex mechanisms of infectious and inflammatory disease processes in order to enable new ways to diagnose, prevent or cure human diseases. Such a strategy requires the existence of a highly interdisciplinary research environment with intensive collaboration of basic and clinical immunologists, engineers, biochemists, computational and systems biologists, public health specialists and clinician scientists.

## ONCOLOGY

The Department of Oncology's vision is to perform world-class cancer research within certain priority areas based on strong intradepartmental scientific track records, and to provide research expertise covering the most common cancer types representing a health burden in Luxembourg. The department also provides a state-of-the art training ground for next generation cancer researchers in Luxembourg, and act as a reference point for cancer research at the national level.

## POPULATION HEALTH

The Department of Population Health is an interdisciplinary research centre with a strong digital dimension, focusing on epidemiology and public health research across a wide range of areas including cardio-metabolic conditions, sports medicine, human bio-monitoring, health economics and clinical investigations. By the evidence they generate, they aim at tackling the major causes of morbidity and mortality, improving quality of life and informing clinical and public health guidelines in the country.

## TRANSLATIONAL MEDICINE OPERATIONS HUB

The operational units of the LIH (CPMO, CIEC, CCMS, IBBL) and its collaborative platforms (LCTR, DMSP, LuxGen, RPP) have been consolidated in the Translational Medicine Operations Hub (TMOH), in order to integrate and optimise their accessibility, workflows and project/portfolio oversight.



## LUXEMBOURG INSTITUTE OF SOCIO-ECONOMIC RESEARCH (LISER)



[www.liser.lu](http://www.liser.lu)

The Luxembourg Institute of Socio-Economic Research (LISER) is devoted to the advancement of knowledge in economic, social and spatial sciences. In the particular context of Luxembourg and in the heart of Europe, it is committed to contribute in a proactive and targeted manner to the sustainable and inclusive development of societies at the national and international level.

LISER contributes to the advancement of scientific knowledge in social and economic matters across the activities of its three research departments:

## LIVING CONDITIONS

The mission of the department is to produce scientifically high-level and socially relevant research on 'Public Policies, Welfare and Socio-economic Inequalities'.

The department's objective is to contribute via analysis of policy-relevant questions to a better understanding of the drivers of inequality, poverty and

social cohesion, both in the short and long term, and of the role, efficiency and sustainability of social policies and the welfare state.

## **LABOUR MARKET**

The main mission of the department is to produce research that is both excellent and impactful, and more specifically, to analyse the effects of public policies and societal changes on employment and on the workplace.

The department's key themes revolve around:

- The impact of public policies on employment in a context of high cross border mobility and;
- How current socioeconomic challenges (such as digital transformations, diversity and ageing of the workforce) in the workplace impact firms' modes of organisation and performance, employees' skills and behaviour, and labour relations. These issues are timely and relevant for Luxembourg as well as for the European Union.

## **URBAN DEVELOPEMENT AND MOBILITY**

The department's objective is to play a prominent role in academic and societal interdisciplinary and intersectoral research, internationally and nationally. The aim is to provide an understanding of urban life and the functioning of urban areas, the implications for the sustainability of cities as well as the quality of life of their inhabitants and visitors, and in identifying effective pathways at the individual and urban level to stimulate urban vitality and liveability.

The institute follows national and European priorities and promotes interdisciplinarity by focusing its research on three priority research programmes:

- **CROSSING BORDER.** The cross-departmental research programme aims to promote and coordinate studies on cross-border mobility at LISER, in order to advance scientific knowledge and provide sound policy advices on its causes as well as on its societal and economic implications.
- **DIGITAL TRANSFORMATION.** This transversal cross-departmental research programmes seeks to extend the use of mathematical modelling and optimisation to complex socio-economic systems so as to obtain descriptive and prescriptive models able to define/assess socio-economic policies as well as to predict their impact.
- **HEALTH AND HEALTH SYSTEMS.** This cross-departmental research programme seeks to coordinate, develop and contribute to the health-related work carried out within and across any of the three departments of LISER. The work focuses on primarily quantitative, social, economic and environmental aspects of health, by harnessing the expertise and infrastructure throughout LISER.

LISER hosts two complementary infrastructures, key drivers of its research development and excellence:

- **THE DATA CENTRE**, which consists of two pillars, the data collection capability (direct and indirect data collection), and the data archiving and data management capability.
- **THE BEHAVIOURAL AND EXPERIMENTAL ECONOMICS** dedicated to investigating human decision-making by means of experiments performed in controlled environments. Its experimental approach contributes to improving the understanding of human behaviour in a large variety of socioeconomic contexts.

**172**

Staff

**20**

PhD students  
hosted in 2020

**275**

Publications in 2020

**15**

Collaborative  
research projects

## LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY (LIST)



[www.list.lu](http://www.list.lu)

The Luxembourg Institute of Science and Technology (LIST) is a mission-driven Research and Technology Organisation (RTO) that develops competitive and market-oriented product/service prototypes for public and private stakeholders. Its mission consists of pushing the frontiers in research for high-impact innovation.

With its 650 employees, 76% of whom are researchers or innovation experts from all around the world, LIST is active in the fields of informatics, materials and environment and works across the entire innovation chain: fundamental/applied research, incubation and transfer of technologies.

By transforming scientific knowledge into technologies, smart data and tools, LIST empowers citizens in their choices, public authorities in their decisions and businesses in their strategies. LIST's vision is to be a reference in research and innovation for a digitalised, resilient and sustainable society.

LIST is active in four domains:

### MATERIALS RESEARCH AND TECHNOLOGY

Through its research into advanced materials and processes, the Materials Research and Technology (MRT) department, with its more than 200 researchers and engineers, contributes to the emergence of enabling technologies that underpin the innovation processes of local and international industry.

MRT's activities hinge on five thematic pillars:

- Nanomaterials,
- Nanotechnologies,



- Scientific instrumentation and process technology,
- Structural composites,
- Functional polymers.

The department also includes three high-tech platforms:

- Composites Manufacturing
- Testing & Prototype Engineering
- Advanced Characterisation

These platforms serve both LIST research staff, and other stakeholders in Luxembourg.

## **ENVIRONMENT RESEARCH AND INNOVATION**

The Environmental Research and Innovation (ERIN) department, made up of more than 200 life science, environmental science and information technology researchers and engineers, provides the interdisciplinary knowledge, expertise and technologies to lead solutions including the major environmental challenges facing society, such as climate change mitigation, ecosystem resilience, sustainable energy systems, efficient use of renewable resources, and environmental pollution prevention and control.

The GreenTech Innovation Centre: a one-stop-shop for the complete development of bio-based products and processes.

The department relies on two cutting-edge platforms:

- Biotechnologies and Environmental Analytics
- Observatory for the Climate and Environment & Biodiversity

## **IT FOR INNOVATIVE SERVICES**

The IT for Innovative Services (ITIS) department, with its 100 researchers and engineers, focuses on research and innovation activities in computer and data science topics applied, in particular, to the design, engineering and assessment of novel approaches to information systems and services.

ITIS expertise relates to:

- Trusted Distributed and Optimised Systems: Optimised operations and services enabled by private and secure distributed information system architectures based on multi-channel communication and (big) data sources
- Data Science and Explainable Analytics: Data sciences and interactive technologies to support problem solving and decision-making in an explainable manner.

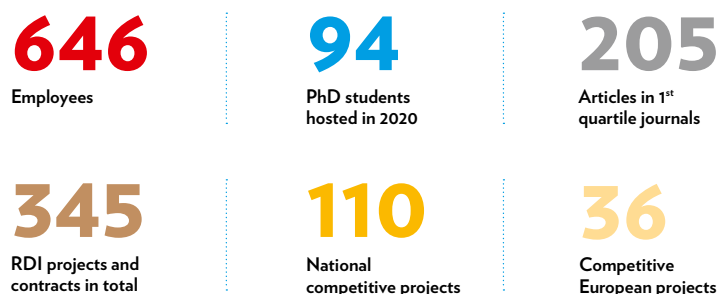
The department relies on the Data Analytics Platform: a hybrid infrastructure covering the entire range of data analytics activities. The platform is based on three pillars: a cognitive analytics pillar, an interactive visualisation wall (Viswall) and an access to a high-performance computing (HPC) infrastructure.

## SPACE RESOURCES

Unique of its kind, the European Space Resources Innovation Centre (ESRIC) aims to become the internationally recognised centre of expertise for scientific, technical, business and economic aspects related to the use of space resources for human and robotic exploration, as well as for a future in-space economy. ESRIC partners with public and private international players in this field in order to create a hub of excellence for space resources in Europe.

ESRIC's activities are based on four main pillars:

- Space resources research and development
- Support for economic activities
- Knowledge management
- Community management.



## MAX PLANCK INSTITUTE LUXEMBOURG FOR PROCEDURAL LAW



Max Planck Institute  
LUXEMBOURG  
for Procedural Law

[www.mpi.lu](http://www.mpi.lu)

The Max Planck Institute (MPI) Luxembourg for Procedural Law is a dynamic research institution undertaking interdisciplinary and collaborative research in the fields of international, European, and regulatory procedural law. Since its establishment, the Institute has developed its unique focus on a challenging field of legal research, namely the procedures underlying dispute settlement and decision-making processes, with the aim of identifying and analysing emerging trends in dispute resolution and decision-making across Europe and beyond.

Ever since its inception in 2012, the MPI Luxembourg has established a continuous and productive dialogue with European and international courts and institutions. It organises lecture series, international conferences, and summer academies.

The Institute is structured around two Research Departments and an International Research School. These are complemented by two Research Groups.

## INTERNATIONAL LAW AND DISPUTE RESOLUTION

The Department of International Law and Dispute Resolution investigates the mechanisms and techniques of international dispute settlement, and all forms of decision-making processes. It focuses on their underlying principles, and explores the related theoretical and historical schools of thought in international law.

## EUROPEAN AND COMPARATIVE PROCEDURAL LAW

The Department of European and Comparative Procedural Law addresses the whole range of judicial and extrajudicial settlement of civil and commercial disputes. Special attention is given to the development of European procedural law.

## INTERNATIONAL MAX PLANCK RESEARCH SCHOOL FOR SUCCESSFUL DISPUTE RESOLUTION (IMPRS-SDR)

The Research School analyses the dynamics of different mechanisms solving international disputes. In doing so, the IMPRS-SDR programme researches the institutional and procedural conditions that lead to successful international dispute resolution.

**83**

Staff

**29**

PhD students  
hosted in 2020

**4**

Monographs over  
the past two years

**13**

Edited books over  
the past two years

**87**

Articles over the  
past two years

**78**

Book chapters over  
the past two years

**47**

Entries in encyclopedias  
over the past two years

## NATIONAL HEALTH LABORATORY (LNS)



[lns.lu](http://lns.lu)

The LNS is a public institution, operating under the supervision of the Ministry of Health in Luxembourg, organised as a multidisciplinary institute. Its four scientific departments and two diagnostic centres include services and units related to the fields of anatomic and molecular pathology, genetics, medical biology, microbiology, forensic medicine and health protection.

The LNS develops research activities in collaboration with ad hoc partners in Luxembourg and abroad and regularly produces research results in its fields of competence with internationally recognised excellence.

Research at the LNS is based on competent teams working with public authorities, the Luxembourg National Research Fund (FNR), public research centers and the University of Luxembourg as well as with international academic and research institutions.



**RESEARCH  
AND THE PRIVATE  
SECTOR**

The private sector is an important actor of R&D in Luxembourg. In 2019, the private sector employed more than 3,000 R&D staff, representing more than half of all R&D jobs in the country.

With an annual budget of approx. 382 million euros, R&D expenditure by the private sector represents 0,6% of GDP (2019).

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## 5.1 LUXEMBOURG, AN INNOVATION LEADER

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Luxembourg is ranked 12th most innovative country in the world according to the IMD World Competitiveness Ranking 2021 and is a strong innovator according to the European Innovation Scoreboard 2021, standing out in attractive research systems, human resources and intellectual assets indicators.

These rankings highlight the considerable development of Luxembourg's research and innovation ecosystem, and are an important recognition of the country's ongoing efforts to develop a world-class R&D landscape.

### >> WHY LUXEMBOURG

In order to encourage the emergence of innovative projects, the country offers many public and private grants to finance R&D activities. Many financial incentives and other support measures to assist companies are available.

### >> SUPPORT AND PROGRAMMES FOR STARTUPS

The Luxembourg startup ecosystem includes a mix of public and private players that are working alongside entrepreneurs to help them during their startup journey.

Initiatives cover a wide variety of fields, from hands-on advice on the practical aspects of creating a company provided by the House of Entrepreneurship to the coaching and seed funding offered by acceleration programme Fit 4 Start managed by Luxinnovation and assistance with reaching international markets through Catapult or Gener8tor.

Many of Luxembourg's incubators do not only offer premises to startups but also support programmes and advice.

As part of its efforts to strengthen the competitiveness of the Luxembourg economy, the government also offers several types of R&D and innovation support measures. Support is available, for instance, for research and development projects or programmes and for process and organisational innovation in services. Growing startups that manage to raise private capital can also apply for aid for young innovative enterprises

## >> SUPPORT AND PROGRAMMES FOR COMPANIES

All State aid for research, development or innovation is granted within the framework of the amended law of 17 May 2017 on the promotion of research, development and innovation. This law is a transposition of the European Regulation 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty.

- **Aid for technical feasibility studies:** Businesses and private research institutes which carry out a technical feasibility study prior to a research and development (R&D) project or programme may benefit from financial aid in the form of a subsidy or repayable advance. The aid can cover a percentage of the eligible costs which may vary depending on the size of the business.
- **Financial aid for research and development projects (R&D):** Financial aid in the form of a subsidy is available for companies and private sector research organisations that carry out research and development (R&D) projects and innovation initiatives. The aid can cover a percentage of the eligible costs, depending on the size of the company and the type of project or programme.
- **Aid for process and organisational innovation:** Businesses and private research institutes owning projects related to process innovation or organisational innovation may benefit from financial aid in the form of subsidies or repayable advances. The aid can cover a percentage of the eligible costs, depending on the size of the company and the type of project or initiative.
- **Investment aid for research infrastructures:** Research infrastructures engaging in economic activities may be eligible for financial aid for construction or modernisation in the form of subsidies, repayable advances, interest relief, guarantees or loans.

Applications for financial aids are to be submitted to the Ministry of the Economy's Research and Innovation Directorate. Luxinnovation can provide help to set up the projects.

The National Research and Innovation Strategy aims to encourage companies to undertake R&D and innovation activities. To this end, the government aims to promote entrepreneurship and define and implement support instruments and funding schemes.

In order to make research a driver for economic diversification and for innovation in industry, the government encourages the development of public-private partnership programmes

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## 5.2 ENCOURAGING PPPs

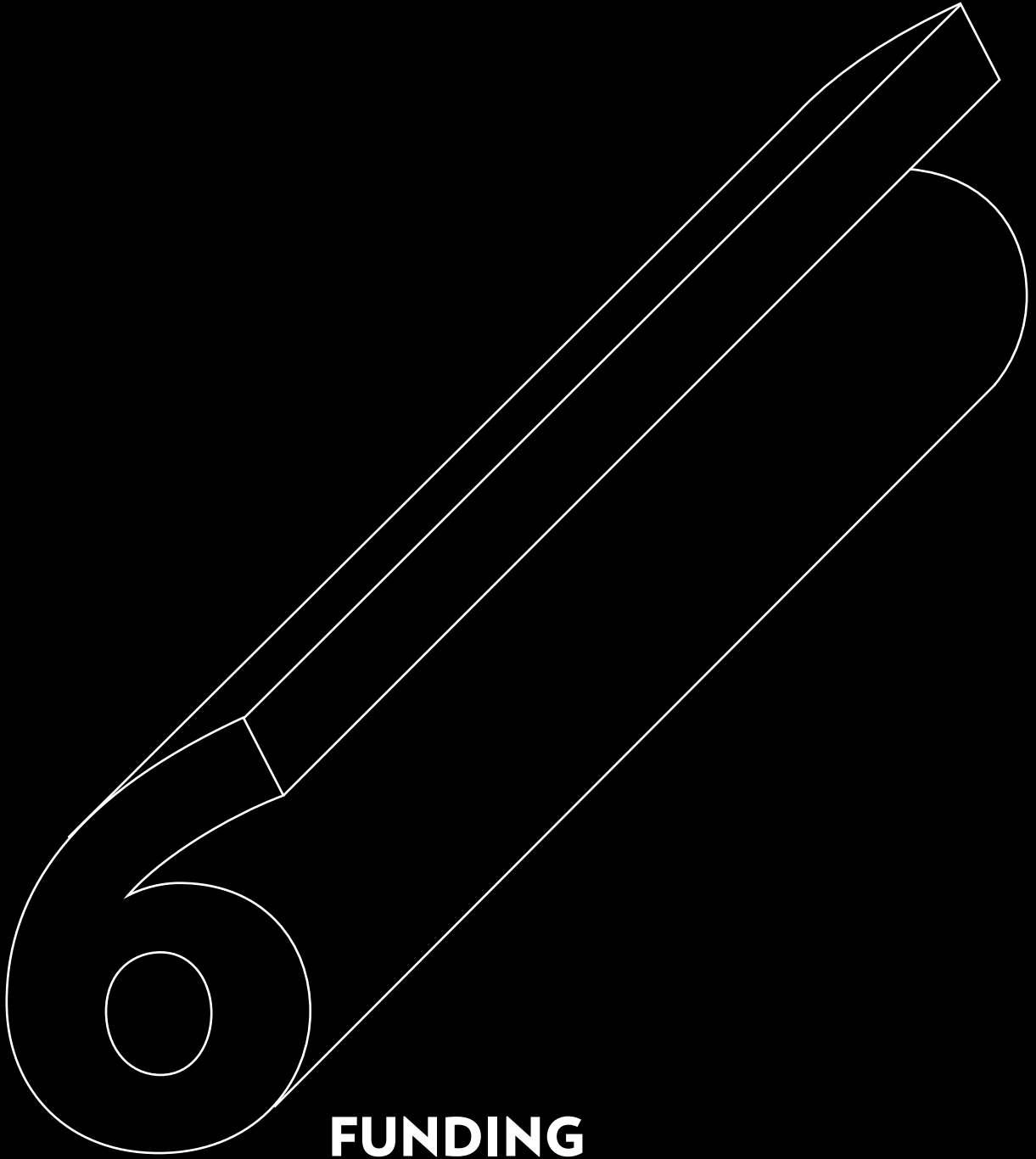
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### RESEARCH COLLABORATION

[www.research-collaboration.lu](http://www.research-collaboration.lu)

A dedicated digital platform, [www.research-collaboration.lu](http://www.research-collaboration.lu), has been set up by Luxinnovation, in collaboration with the Luxembourg National Research Fund and the Ministry of the Economy. Its objective is to facilitate the emergence of collaborative research projects. Companies, public research organisations, hospitals and healthcare providers are invited to submit project ideas. Luxinnovation's role is to follow up on the ideas, in particular by bringing together public and private partners interested in participating.





**FUNDING**



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## 6.1 FUNDING RESEARCH

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There are three main types of research funding available in Luxembourg: national funding, European funding, and funding from other external sources.

All the funding programmes available in Luxembourg can be read on Research Luxembourg's website: [researchluxembourg.lu/funding-programmes](https://researchluxembourg.lu/funding-programmes)

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### PUBLIC FUNDING

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**FNR**



Luxembourg National  
Research Fund

The Luxembourg National Research Fund (FNR) is the main funder of research activities in Luxembourg. The FNR has put into place several research programmes and aid schemes.

In 2020, 299 projects were funded by the FNR for a total amount of 97.06 million euros.

Its vision is to establish Luxembourg as a leading knowledge-based society through science, research and innovation, thereby contributing to the country's economic diversification, societal development and future prosperity.

It aims to set up a sustainable world-class research system in Luxembourg that will generate societal and economic impact in key strategic areas. To this end, the FNR invests public funds into research projects in various branches of science and humanities, with an emphasis on core strategic areas, and as part of a dedicated internationalisation strategy.

The FNR has committed 813 million euros to 4,170 projects between 2000 and 2020.

Furthermore, the FNR supports and coordinates activities to strengthen the link between science and society, and to raise public awareness for research. It also advises the Luxembourg Government on research policy and strategy.

**LUXINNOVATION**



**LUXINNOVATION**  
#MakingInnovationHappen

Luxinnovation, the national innovation agency, contributes to the economic development of Luxembourg by fostering innovation, fuelling international growth and attracting foreign direct investment. The agency helps companies to find efficient solutions for their innovative business development projects in line with the objectives of the Government to develop Luxembourg's economy in a sustainable manner through innovation and research.

Luxinnovation's multidisciplinary advisors have in-depth knowledge of national and European funding programmes. They can thus, accompany companies, whatever their size or activity, in the structuring of their projects and help them analyse their needs in order to orient them towards the appropriate financing formula. They can then assist companies in preparing their grant applications to the Ministry of the Economy or to European institutions.

Set up as an Economic Interest Group, Luxinnovation is supported by the Ministry of the Economy, the Ministry for Higher Education and Research, the Luxembourg Chamber of Commerce, the Luxembourg Chamber of Skilled Crafts and FEDIL – The Voice of Luxembourg's Industry

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## PROGRAMMES

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The FNR offers a wide variety of funding instruments aiming to attain scientific leadership in key areas, turn public research into a competitive advantage for the country and anchor science and research in society:

- **CORE** is aimed at researchers performing their research in one of the Luxembourg public research institutions, and projects must fit into the country's research priorities presented in the National & Innovation Strategy for Luxembourg. The **OPEN** programme provides funding for a limited number of high-quality research projects in emerging research areas in Luxembourg. The **INITIATE** programme supports the initiation and development of strategic research and innovation project ideas that will help make Luxembourg internationally competitive in priority domains. The **NCER** programme provides a structuring framework and funding instrument to bundle research excellence around a mission of significant societal relevance by encouraging high-level transdisciplinary research and intersectoral collaboration.
- The **AFR individual** grant scheme awards PhD grants for Luxembourg nationals in Luxembourg or abroad, and for researchers of any nationality providing the project takes place in Luxembourg. Within the **PRIDE** scheme, the **FNR** also awards PhD grants collectively.
- In terms of international collaboration and mobility, **INTER** is the main funding instrument to foster international collaboration by enabling the **FNR** to initiate bi or multilateral arrangements for project calls, in conjunction with other national or international funding bodies. **INTER MOBILITY** promotes the exchange between research groups from public research institutions in Luxembourg, and leading research groups abroad.
- In general, **FNR** programmes are based on competitive funding and are used to finance projects linked to research activities in Luxembourg.

Additional support exists for outstanding researchers coming to Luxembourg to set up a research group, through the **ATTRACT** programme at junior level and the **PEARL** programme at senior level. The **KITS** programme provides competitive funding to public research institutions in Luxembourg to attract and integrate highly skilled professionals in the area of knowledge transfer.

- The **FNR** encourages and financially supports public-private collaboration for research at all career stages with its Industrial Fellowships, **Industrial Partnership Block Grant (IPBG)** and **BRIDGES** programmes. Through the **JUMP** instrument, a programme opened to all research domains, the **FNR** helps bridge the technical and funding gap between research-driven discoveries and their commercialisation/utilisation, thereby enhancing the impact of Luxembourg's research on economy and society.
- Finally, the **FNR** offers a range of programmes to promote scientific culture and to raise public awareness for research and science. **RESCOM** supports communication between researchers to promote scientific outcomes. The **OPEN ACCESS FUND** promotes the free access to research results from **FNR**-(co)funded projects. **Promoting Science to the Public scheme (PSP)** aims to strengthen the exchange between science and society. The programme supports projects that allow the target audience to come into contact with science and research in an interactive way.

All FNR's funding programmes are available on FNR's website: [www.fnr.lu/funding](http://www.fnr.lu/funding)

### FNR BENEFICIARIES

	Public institutions performing research	Non-profit associations, societal impact companies (SIS), and foundations engaged in research*	PhD candidates	Public institutions abroad with a research mission	Companies engaged in research in Luxembourg**	Individuals pursuing activities of a scientific nature, including researchers, scientists, teachers and students (except PSP-Flagship)	Existing FNR beneficiaries (who received positive funding decisions after 1 January 2017)
CORE							
INTER/INTER MOBILITY							
ATTRACT							
PEARL							
JUMP							
PRIDE							
RESCOM							
AFR PhD							
Industrial Fellowships							
BRIDGES							
Science in Society activities, including PSP-Classic and PSP-Flagship							
OPEN ACCESS FUND							

\*To be eligible for FNR support, non-profit associations, societal impact companies (SIS) and foundations must be accredited by the Ministry in charge of public sector research. To obtain an accreditation, associations or foundations have to introduce a formal request at the Ministry of Higher Education and Research (except PSP-Classic and PSP-Flagship).

\*\* To be eligible for support in the framework of a public-private partnership under AFR (Industrial Fellowships), the condition is a collaboration with a company accredited by the Ministry of Economic Affairs. Both, the public institution or the company, can be the host institution, i.e. issue the work contract.

For specific information, please visit [www.fnr.lu/fnr-beneficiaries](http://www.fnr.lu/fnr-beneficiaries)

## FUNDING BY CARRER STAGE

		PHD	POSTDOC & JUNIOR	ESTABLISHED	LEADING
PROJECT FUNDING	Multi-annual thematic project funding		CORE Junior	CORE	
	Multi-annual project funding			OPEN	
	Funding for international research collaborations			INTER	
PEOPLE FUNDING	Grants to establish research groups in Luxembourg		ATTRACT Starting	ATTRACT Consolidator	
	Grants to establish research groups in Luxembourg				PEARL
	Research stays in Luxembourg & abroad			INTER MOBILITY	
PHD GRANTS	PhD grants in Luxembourg & abroad	AFR Individual & Bilateral			
	Block PhD grants	PRIDE			
INNOVATION & KNOWLEDGE TRANSFER SUPPORT	PhD & Postdoc grants for collaborations with industry	INDUSTRIAL FELLOWSHIPS			
	Block PhD & Postdoc grants for research collaborations with industry	IPBG			
	Public-private research collaborations		BRIDGES		
	Support for commercialisation of research results		JUMP (Pathfinder & Proof of Concept)		
	Support for knowledge & innovation transfer			KITS	
	Support for open access publishing of research results	OPEN ACCESS FUND			
SCIENCE & RESEARCH COMMUNICATION SUPPORT	Support for research communication			RESCOM	
	Support for promoting science to the public	PSP (Classic & Flagship)			

For specific information, please visit [www.fnrlu/funding](http://www.fnrlu/funding)

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## 6.2 BILATERAL & MULTILATERAL FUNDING OPPORTUNITIES

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### PRIVATE SECTOR FUNDING

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Companies can also receive funding for their RDI activities.

#### THE MINISTRY OF THE ECONOMY



THE GOVERNMENT  
OF THE GRAND DUCHY OF LUXEMBOURG  
Ministry of Higher Education and Research

The Ministry of the Economy, through the Research, Development and Innovation law, offers a range of specific support schemes, including support for experimental development, industrial research and fundamental research in private sector organisations.

More information on [guichet.lu: guichet.public.lu/en/entreprises/financement-aides/coronavirus/aides-investissement.html](http://guichet.public.lu/en/entreprises/financement-aides/coronavirus/aides-investissement.html)

#### LUXINNOVATION



**LUXINNOVATION**  
#MakingInnovationHappen

Luxinnovation, Luxembourg's national innovation agency, encourages and supports companies that are looking to innovate and grow whilst facilitating their collaboration with public research players. A wide range of financial aid packages are available to support R&D

More information on [Luxinnovation.lu: www.luxinnovation.lu/innovate-in-luxembourg/funding/research-development-projects](http://www.luxinnovation.lu/innovate-in-luxembourg/funding/research-development-projects)

The **FNR** also supports PhD and post-doctoral researchers for projects carried out in collaboration with a company (the Industrial Fellowship scheme for individual grants and the Industrial Partnership Block Grant (IPBG) scheme). Through the BRIDGES and JUMP programmes, the FNR supports joint projects linking public research with industry. The INTER MOBILITY programme may also contribute to bridging the gap between the research communities in the public sector and in business and industry – exchanges with foreign companies are highly welcome.

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## EU FUNDING AND OTHER OPPORTUNITIES

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### HORIZON EUROPE



Horizon Europe is the European Union's Research & Innovation Investment Programme for 7 years (2021 to 2027), also referred to as the 9th Framework Programme (FP 9). It is the EU's flagship programme to support research and innovation (R&I) all the way from fundamental concept to market uptake.

Luxinnovation is the contact point for Horizon Europe in Luxembourg.

More information: [www.luxinnovation.lu/innovate-in-luxembourg/funding/horizon-europe-luxembourg/understanding-horizon-europe](http://www.luxinnovation.lu/innovate-in-luxembourg/funding/horizon-europe-luxembourg/understanding-horizon-europe)

### MSCA – THE MARIE SKŁODOWSKA-CURIE ACTIONS PROGRAMME



The MSCA programme encourages transnational, intersectoral and interdisciplinary mobility. It enables research-focused organisations (both public and private) to host talented foreign researchers and to create strategic partnerships with leading institutions worldwide.

The programme aims to equip researchers with the necessary skills and international experience for a successful career, either in the public or the private sector. It is open to all areas of research and innovation, from fundamental research to market take-up and innovation services.

Luxinnovation is the contact point for Marie Skłodowska-Curie actions: [www.luxinnovation.lu/marie-curie-actions](http://www.luxinnovation.lu/marie-curie-actions)

### EUREKA



Eureka is an international network established in 1985 as an agreement between 18 countries to foster European competitiveness and integration and to encourage R&D cooperation. Since then, it has expanded to include over 45 countries in Europe and beyond who share the same goals and have national funding available to organisations who apply through its programmes. Luxinnovation is the contact point for the Eureka programme in Luxembourg.

Luxinnovation is the contact point for the Eureka programme in Luxembourg: [www.luxinnovation.lu/innovate-in-luxembourg/funding/research-collaborations](http://www.luxinnovation.lu/innovate-in-luxembourg/funding/research-collaborations)

## IRASME



IraSME is a network of funding programmes from different countries/regions that share the same goal: Supporting small businesses in their innovation efforts.

Luxinnovation is the contact point for the IraSME programme in Luxembourg:  
[www.luxinnovation.lu/innovate-in-luxembourg/funding/research-collaborations](http://www.luxinnovation.lu/innovate-in-luxembourg/funding/research-collaborations)

## ECSEL (ELECTRONIC COMPONENTS AND SYSTEMS FOR EUROPEAN LEADERSHIP)



The ECSEL Joint Undertaking - the Public-Private Partnership for Electronic Components and Systems – funds Research, Development and Innovation projects for world-class expertise in these key enabling technologies, essential for Europe's competitive leadership in the era of the digital economy. Luxembourg's Ministry of the Economy supports ECSEL through Luxinnovation.

[www.luxinnovation.lu/innovate-in-luxembourg/funding/research-collaborations](http://www.luxinnovation.lu/innovate-in-luxembourg/funding/research-collaborations)





**BELVAL,  
THE INNOVATION  
CAMPUS**



In the South of Luxembourg, the former industrial zone of Belval has given way to a new urban district, which began to emerge in 2005. A real reconversion challenge, with the aim of becoming the most important education and research pole in Luxembourg, the site has gradually grown to welcome private businesses, public institutions, living accommodation and shops.

Fonds Belval is a public organisation established pursuant to the Law of 25 July 2002 for the development of the “Cité des Sciences, de la Recherche et de l’Innovation” (City of Science, Research and Innovation) and is the contractor for the construction of government projects on the industrial zone in Belval.

Its mission is to develop the projects, from the preparation of the construction programme to the commissioning of facilities. Unlike private sector contractors, Fonds Belval is required to submit a bill for approval for each of these building projects. Its main duties are to produce detailed construction programmes and feasibility studies, to establish prerequisites for studies, to organise architectural design competitions, to oversee and guide studies, to undertake financial management and accounting.

In the interests of promoting quality architecture, most of the “Cité des Sciences” (City of Science) projects – the National Archives building, the Business Incubator, the first government administration building, the Belval-Secondary School, as well as the first four buildings for the University of Luxembourg and the Public Research Centres – were selected through international architectural design competitions, involving a number of participants selected by a jury based on the applications received.

The urban concept for the location of the “Maisons des Sciences de la Vie and des Matériaux” (Houses of Life Sciences and Materials) is based, for its part, on the results of an ideas competition.

Since 24 November 2015, Fonds Belval has a new legal basis, which also entrusts it with the management of the infrastructure it builds, including maintenance and operation, as well as the transformation, the adaptation according to needs and the modernisation of these buildings.

The convergence of researchers, students and companies in one place constantly provides new food for thought.

## ABOUT RESEARCH LUXEMBOURG

**Research Luxembourg is a unified agile team of thought leaders working to learn, explore and make an impact to shape a better future.**

By connecting all players in Luxembourg and abroad, Research Luxembourg aims to become a leader in research and innovation focusing on four research priority areas:

- Industrial And Service Transformation
- Personalised Healthcare
- Sustainable and Responsible Development
- 21st century education

Research Luxembourg is a joint initiative of the main actors in Luxembourg public research, including

- Luxembourg Institute of Health (LIH)
- Luxembourg Institute of Socio-Economic Research (LISER)
- Luxembourg Institute of Science and Technology (LIST)
- Luxembourg National Research Fund (FNR)
- Luxinnovation
- Ministry of Higher Education and Research

[researchluxembourg.lu](http://researchluxembourg.lu)

This and a lot of other Research Luxembourg information is available at: [researchluxembourg.lu](http://researchluxembourg.lu)

For more information about Research Luxembourg, please visit our website: [researchluxembourg.lu](http://researchluxembourg.lu) and read our news: [researchluxembourg.lu/news](http://researchluxembourg.lu/news)

We hope that our brochure will offer you guidance if you are looking to pursue a career in the Luxembourg research sector.

To get more information about career opportunities in Research Luxembourg, read the Euraxess Luxembourg guide : [cdn1.euraxess.org/sites/default/files/domains/lu/08903\\_euraxess\\_brochure\\_web.pdf](http://cdn1.euraxess.org/sites/default/files/domains/lu/08903_euraxess_brochure_web.pdf)



## IMPRINT

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