

Luxembourg (LU)

Luxembourg's national initiative for digitising industry is *Digital4Industry - D4I*.¹ The initiative targets Luxembourg's manufacturing industry, SME's as well as large enterprises and is part of the European Platform for co-ordination of initiatives for digitising industry.

On a **national level** Luxembourg has 5 *Digital Innovation Hubs* (1 fully operational and 4 in preparation status) covering various market domains (agriculture, fishing, construction, manufacturing (food products, textiles, chemicals, basic and fabricated metal products, electrical and optical equipment, machinery, electrical equipment), transport, electricity, public administration, education) through a large spectrum of technology areas presented as follows:

- Additive manufacturing (3D printing)
- Advanced or High-performance computing
- Artificial Intelligence and cognitive systems
- Augmented and virtual reality, visualization
- Broadband and other communication networks (e.g. 5G)
- Cloud computing
- Cyber security (including biometrics)
- Data mining, big data, database management
- Gamification
- ICT management, logistics and business systems
- Interaction technologies (e.g. human-machine Interaction, motion recognition and language technologies)
- Internet of Things (e.g. connected devices, sensors and actuators networks)
- Internet services (e.g. web development, web production, design, networking, and e-commerce)
- Location based technologies (e.g. GPS, GIS, in-house localization)
- Micro and nano electronics, smart system integration
- New Media technologies
- Photonics, electronic and optical functional materials
- Organic and Large Area Electronics (OLAE)
- Robotics and autonomous systems
- Screens and display technologies
- Sensors, actuators, MEMS, NEMS, RF
- Simulation and modelling
- Software as a service and service architectures

On a **regional level**, each hub's activities seem to be aligned with the RIS3 strategies. A concise list of all hubs on national and regional level is presented as follows:

1. Fully operational DIHs

Hub name	City	NUTS2 region	Country	Smart Specialisation (SS)	Link to SS	AI	HPC	Cyber Security	Association to EU-funded project
Luxembourg Institute of	Esch-sur-Alzette	Luxembourg	Luxembourg	General innovation	Innovation in Services	X	X	-	-

¹ Digital4Industry - D4I, <http://digital4industry.lu/>

Science and Technology (LIST)									
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2. In preparation DIHs

Hub name	City	NUTS2 region	Country
Luxembourg House of Financial Technology Foundation, LHoFT Foundation	Luxembourg	Luxembourg	Luxembourg
Luxinnovation	Esch-sur-Alzette	Luxembourg	Luxembourg
Nyuko a.s.b.l.	Luxembourg	Luxembourg	Luxembourg
Technoport SA	Luxembourg	Luxembourg	Luxembourg

3. RTOs/universities that had a DIH role in an EU project²

None

4. Regions in Luxembourg that have no DIHs

None

² Data available in CORDIS (http://cordis.europa.eu/home_en.html) and in the European Commission databases.