

EIT ICT Labs – Position Statement

The mission of EIT ICT Labs, an EIT KIC for the future information and communication society, is to turn Europe into a global leader in ICT innovation. It aims at the radical transformation of Europe towards a knowledge-based society and in turning ICT innovation into quality of life.

EIT ICT Labs will equip students, researchers, academics and business people with skills for creativity, risk taking spirit and entrepreneurial capacity, by re-aligning the existing activities thus leveraging existing regional, national and EU-level funding instruments.

EIT ICT Labs will build upon five nodes and their co-location sites – Berlin, Eindhoven, Helsinki, Paris, and Stockholm – and turn these already excellent regional clusters into world-class innovation hotspots. The nodes represent five leading European countries in ICT including global companies, leading research centres, and top universities. The cohesion across these nodes will be achieved by strong, CEO-type, management with clear IPR policies for open innovation.

EIT ICT Labs’ work program applies emerging innovation models for reinventing innovation in Europe. Combining excellence, agility, passion, and trust in a well managed, business minded process creates a local buzz, where innovations are generated at an accelerated pace and utilized more efficiently.

EIT ICT Labs will pursue a broad initiative in software technology and services, including communication, networks and applications, always open to new developments and areas where software and services will be the innovation drivers.

To deliver on the top-level objectives, the work of EIT ICT Labs will be largely focused on a limited number of *thematic areas*, selected on the basis of their potential for innovations, new business creation, and societal impact. Each thematic area targets a strategic application domain with a long-term impact objective both in terms of business and societal significance. Each Area has a designated “Driver” Node to ensure clear leadership.

Thematic areas	B	E	H	P	S
• Smart Spaces (Juha-Pekka Soininen - VTT) including service-centered home	P	P	D	P	P
• Smart Energy Systems (Udo Bub - DT) smart energy management, Green ICT	D	P	P	P	P
• Health & Well-Being (Stan Smits) including ambient assisted living, digital medicine	P	D	P	P	P
• Digital Cities of the Future (Khalidoun Al Agha) towards intelligent and sustainable digital cities	P	P	P	D	P
• Future Media and Content Delivery (Carl Gustaf Jansson, KTH) entertainment, education, accessing media	P	P	P	P	D
• Intelligent Transportation Systems (Tanja Kessel, EICT) novel forms of safer & sustainable traffic and transportation systems	D	P	P	P	P

A thematic area will typically include a thematically oriented M.Sc. program focusing on new products, services, and businesses; a share of the Doctoral School; joint test bed facilities for experimental research and development; innovation-oriented research activities funded by EIT; and related co-funded activities.

To build a basis of EIT ICT Labs' work along the thematic priorities, *competence fields* are horizontal technical or knowledge areas where EIT ICT Labs builds and maintains world-class skills by combining research, education, and innovation activities for driving innovation in the thematic areas. Thus, each competence field covers the disciplines and specialisations in ICT and multi-disciplinary areas critically needed by EIT ICT Labs to drive innovations.

At the present, the competence fields shown in the picture below have been identified as being critical for EIT ICT Labs' success. In the future, additional competence fields are likely to be included.

Competences
<ul style="list-style-type: none">• Cyber-Physical Systems including Internet of Things, smart objects and Ubiquitous computing
<ul style="list-style-type: none">• Enabling the Internet of the Future user-centric methods and tools for designing and creating compelling Internet-based services
<ul style="list-style-type: none">• Internet Technologies and Architectures optical communication, wireless & "last mile" networks, modeling, metrology and simulation, component & SoCs
<ul style="list-style-type: none">• Computing in the Cloud service technologies (IaaS, PaaS, SaaS), storage systems, testbeds, business models
<ul style="list-style-type: none">• Trust, Security & Privacy transversal to most other research areas
<ul style="list-style-type: none">• ICT-mediated Human Activity usability, social media experience, multimodal user interfaces, new search engines
<ul style="list-style-type: none">• Techno-Economics market exploration, forecasting techniques, mathematic models
<ul style="list-style-type: none">• Innovation and Entrepreneurship in ICT approaches, processes, tools, and models for world-class I & E

The actual work in thematic areas, competence fields, and co-locations will be executed as individual activities, each with a designated leader, a budget (possibly including a grant from EIT ICT Labs), work description, and activity-level Key Performance Indicators.

Future Internet, in all its breadth of themes, is fundamental for all of the lines of EIT ICT Labs' planned work. Thus, EIT ICT Labs and its partners plan to contribute decisively to the work of the Future Internet PPP initiative, especially the long-term perspective of the innovative usage areas covered by its thematic areas and the consequent requirements on the Internet technical platform. With this, we endeavour to complement the industry-driven efforts in the PPP.