

TRAFICOM

Finnish Transport and Communications Agency

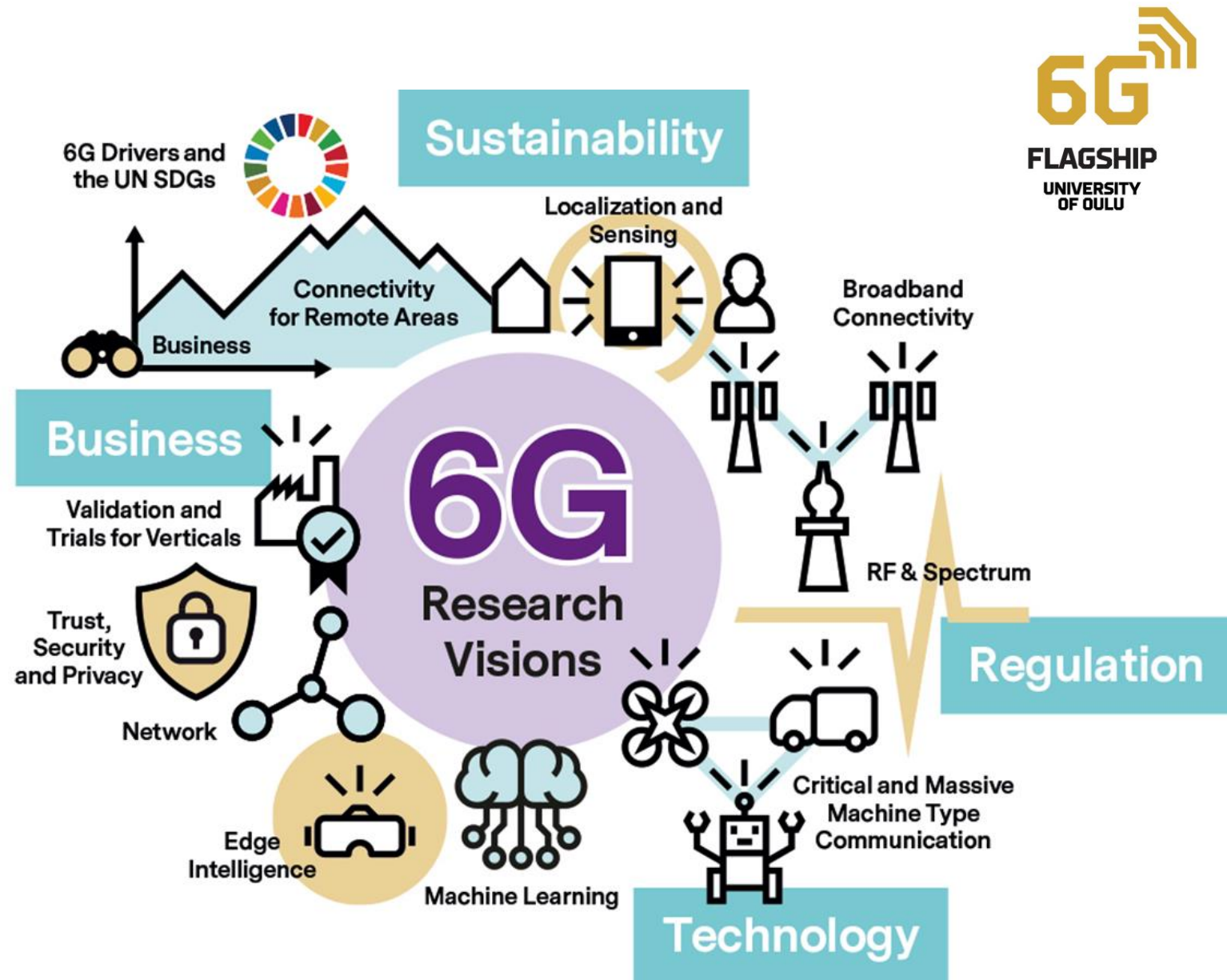
Finland towards 6G

Beyond 5G International
Conference 2022, Japan



Finnish 6G Flagship (2018-2026) started global 6G Vision building

- 6G Flagship's joint 6G vision building via 6G Summits and 13 multi-disciplinary White Papers since 2018
 - 300 experts from 100 organisations in 30 countries
- Multi-stakeholder collaboration: academia, industry, and public sector
- New: From non-public private 5G networks towards local 6G connectivity



≡ 6G Finland objectives

6G Finland

What?

6G Finland is an independent network of 6G excellence of key organizations.

Why?

6G Finland builds nations' innovation, competitiveness and international standing.

How?

We create visions, priorities, and actions for 6G

6G ROADMAPS FOR TECHNOLOGY, BUSINESS AND SOCIETY

- Leadership and priority issues, projects and activities

6G EDUCATION, TECHNOLOGY AND BUSINESS

- Development of a strong know-how, IPR position and monetization of expertise

6G ALLIANCES AND PARTNERSHIPS

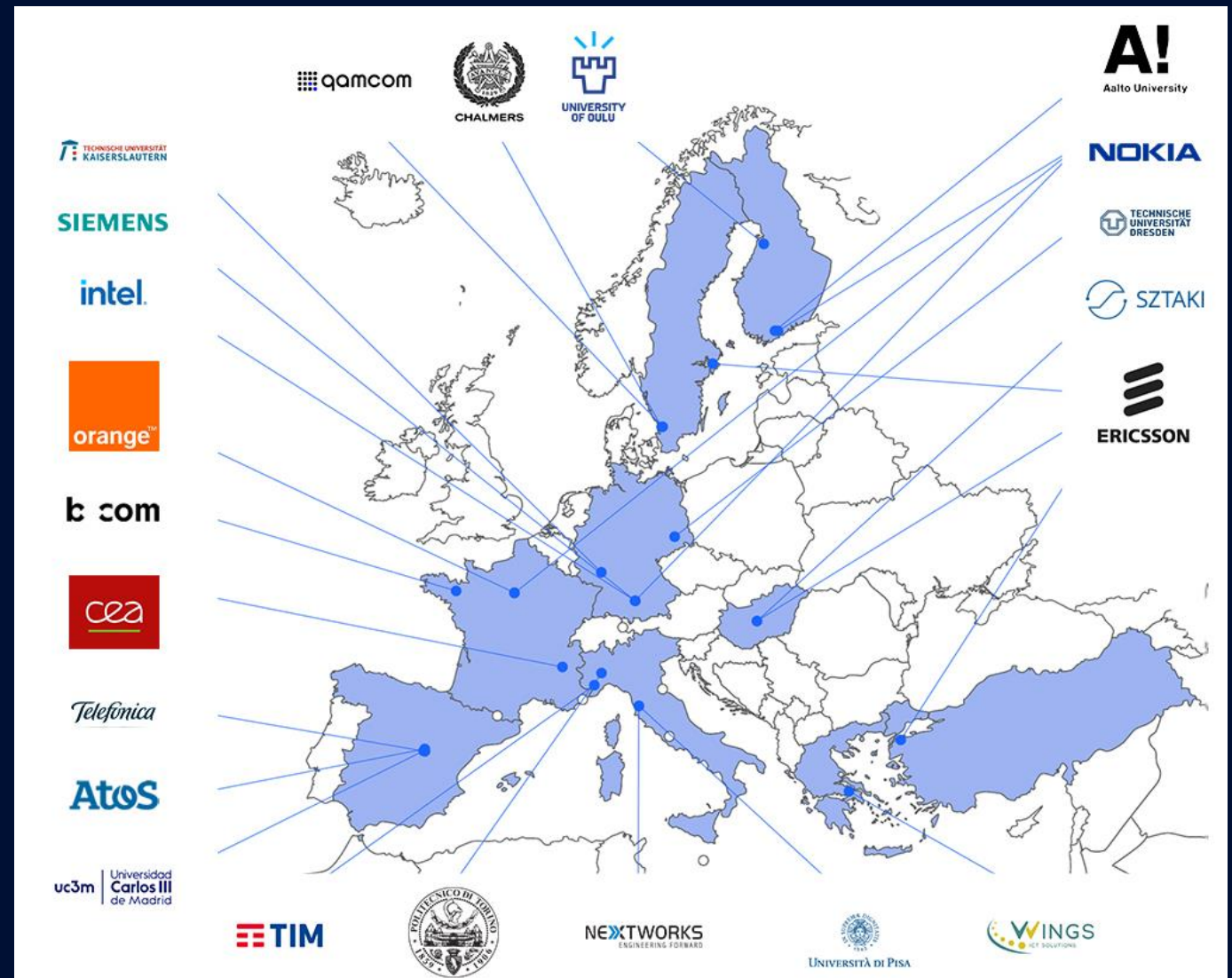
- Domestic and international partnerships and co-creation with key public and private entities



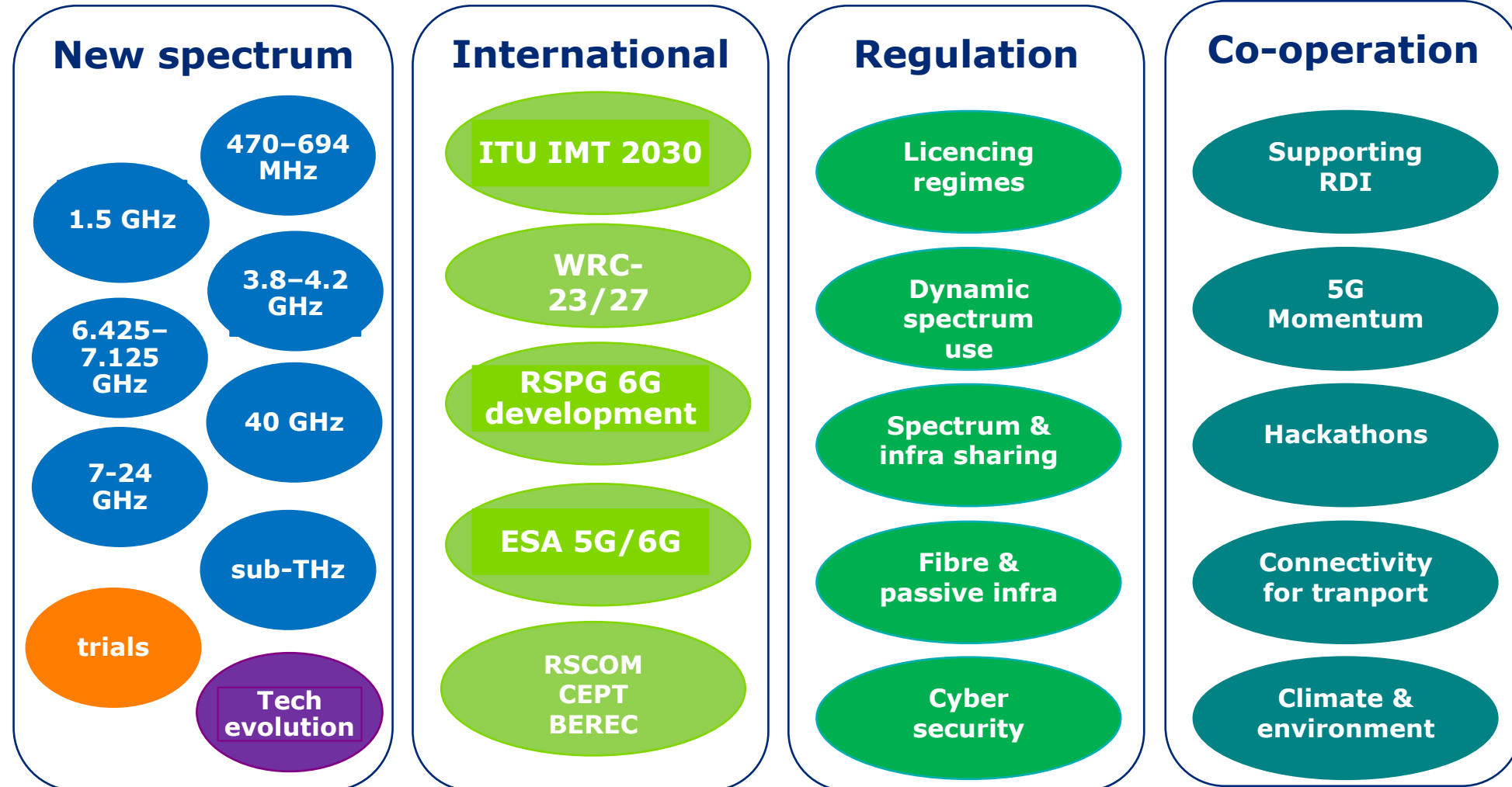
Hexa-X: the European flagship research initiative to develop the foundation and contribute to industry consensus leading to 6G




- The focus is on structuring, framing, and developing technology for connectivity needs in the 2030 timeframe
- 25 partners with funding from EU
 - NW vendors, operators, industry, SMEs, academia
- Nokia is overall leader
- Ericsson is technical manager



Actions by Traficom towards 6G



ITU-R Development of IMT for 2030 and beyond

Goals and expected impact	Users	Use cases and usage scenarios	Technological enablers	Capabilities
<p><i>Why are we developing IMT towards 2030 and beyond?</i></p>	<p><i>Whom are we developing IMT towards 2030 and beyond for?</i></p>	<p><i>How are the users using IMT towards 2030 and beyond?</i></p>	<p><i>How do we make IMT towards 2030 and beyond function?</i></p>	<p><i>How is IMT towards 2030 and beyond measured?</i></p>
<p>Human-centricity and inclusivity</p> <p>Social, environmental and economic sustainability</p> <p>Resilience and sovereignty</p> <p>6G Drivers and the UN SDGs </p>	<p>Humans</p> <p>Machines</p> <p>Organizations (public & private)</p> <p>Communities</p>	<p>[Add use cases and usage scenarios when they are agreed]</p>	<p>Emerging technology trends and enablers</p> <p>Technologies to enhance radio interface</p> <p>Technology enablers to enhance radio network</p>	<p>Key performance indicators (KPIs)</p> <p>Key value indicators (KVIs)</p>

Increased need for co-operation

- ▶ Broader national cooperation: Increase R&D cooperation, accelerate all companies' readiness and enthusiasm to utilize 5G/6G
- ▶ Internationally: Building and strengthening cooperation with like-minded partners. 6G enables tailored solutions. More cooperation between companies, beyond research. 5G/6G are, together with other emerging technologies, at the center of current geopolitics.
 - ▶ For example, Finland and Japan share a number of special topics of interest, such as Smart Cities and taking care of an aging population. The dialogue between the players in those fields and the telecom sector should be increased significantly, so that the telecom side knows how to solve exactly the challenges that are the most urgent and necessary.

Thank you!

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Digital Connections

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