STOP WORRYING AND LOVE WORLD-CLASS 5G ADVANCED/6G

FINLAND | 6G BRIDGE Program Second RF Summit Finland – 12 March 2024

Pekka Rantala Head of 6G Bridge Program, +358 40 503 8808

Let's Get Connected – 6G Bridge News





"Connectivity as backbone of EU's Digital Ambitions"

"In this context I have to thank Finland for its essential contribution. **Your 6G bridge programme** is extremely important to reach the goals of our Joint Undertaking and plays a pivotal role for the competitiveness of the EU."

– Mr. Thierry Breton, European Commissioner for Internal Market
<u>6G Bridge Program Launch</u> (Helsinki, 6 February 2023)



3B People #People +60%







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3B P #Pec

3B People #People +60% AI APIs AR



Sustainability Efficiency 20–100x

3 Worlds Biz potential 10–100x



	3B People #People +60%	AI APIS AR
5	Sustainability Efficiency 20–100x	Chips Cloud Cybersecurity
	3 Worlds Biz potential 10–100x	

BUSINESS FTNI AND

	3B People #People +60%	AI APIS AR
5	Sustainability Efficiency 20–100x	Chips Cloud Cybersecurity
	3 Worlds Biz potential 10–100x	Regulation Spectrum Standardization

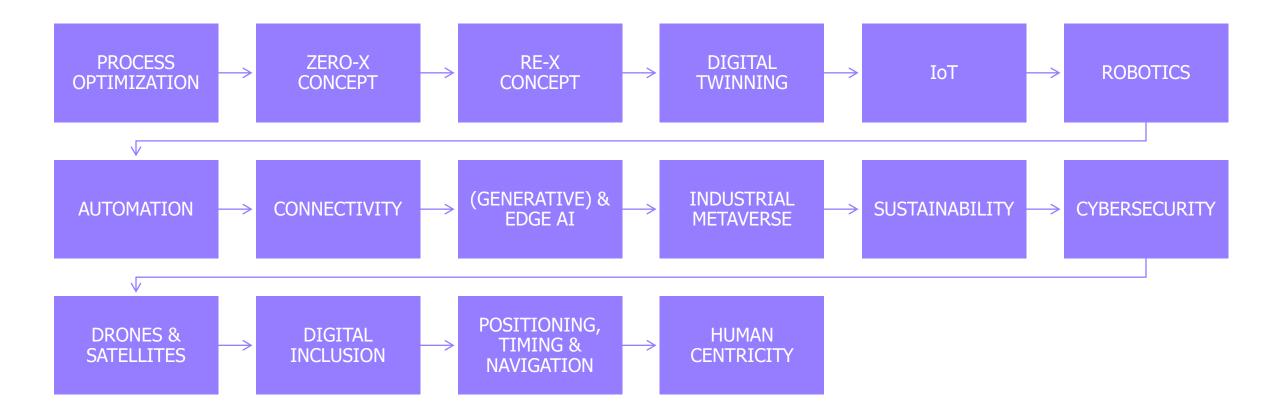
BUSINESS FTNI AND

From Processing to Predictions



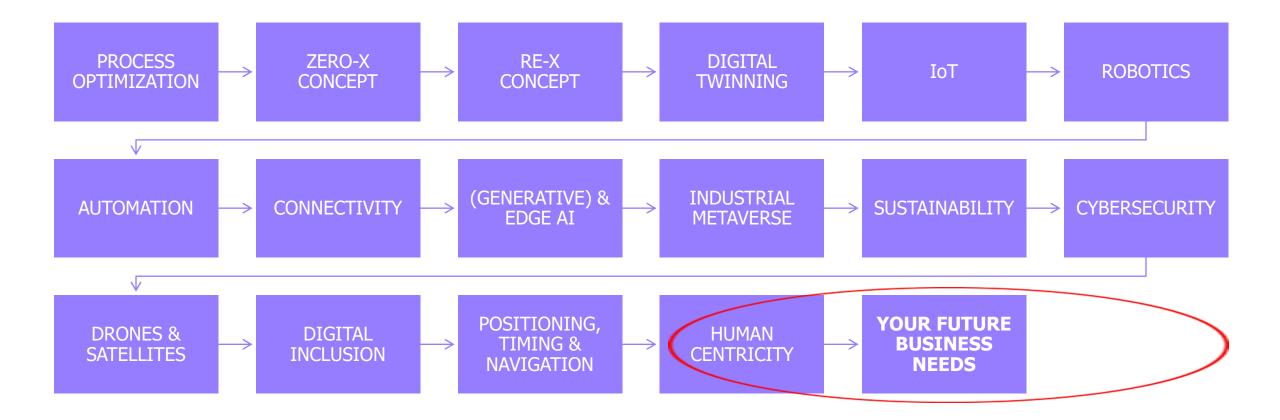


6G BRIDGE – Your Key to Twin-Transition





6G BRIDGE – Your Key to Twin-Transition



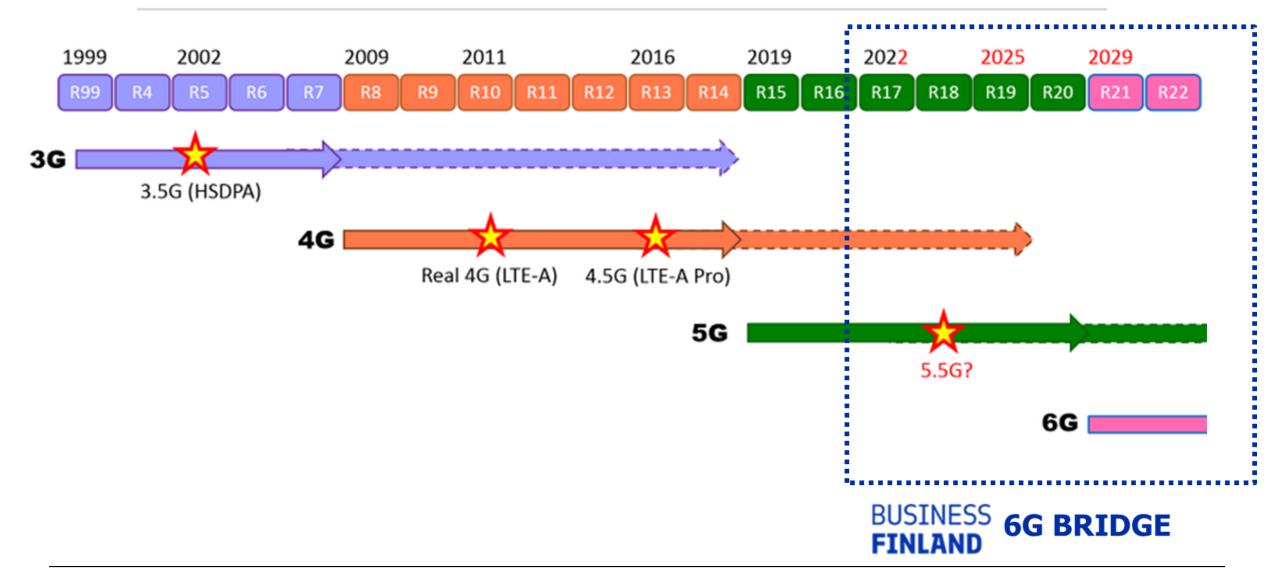




6G BRIDGE IN BRIEF

Unlocking New Value with 5G Advanced and 6G for Sustainable Industries and Societies.

3GPP Releases Timeline





6G BRIDGE's Goals In a Nutshell

Unlocking new value with 5GA and 6G for sustainable industries and societies, by

Increasing ecosystem-driven collaboration in research and innovation for 5GA/6G Building future business ecosystems in 5GA/6G and attracting international investments

Cultivating key capabilities in 5GA/6G Fostering testing and experimentation facilities in 6G



Key BF Funding Instruments

Co-Research (research organizations + academia engaged with companies) https://www.businessfinland.fi/en/for-finnish-customers/services/funding/cooperationbetween-companies-and-research-organizations/co-research

https://www.businessfinland.fi/en/whats-new/calls/2024/partnership-funding-call-6g-bridgeand-quantum-computing (NEW)

Co-Innovation (consortium: research organizations + companies)

https://www.businessfinland.fi/en/for-finnish-customers/services/funding/cooperationbetween-companies-and-research-organizations/co-innovation

R&D (company alone)

https://www.businessfinland.fi/en/for-finnish-customers/services/funding/research-anddevelopment



FI: SRIA & Key Ecosystems in 5GA/6G

- ✓ The national <u>Strategic Research and Innovation Agenda</u> (SRIA) defines the general framework for future research, development and innovation activities:
 - Utilizing existing 5G
 - Developing 5G Advanced
 - Developing and researching 6G
 - Contributing to future testing environment for **5G/6G** development
- ✓ Business Finland 6G Bridge & Leading Companies' Ecosystems (~1.5 BEUR, incl. Nokia)
 - https://www.businessfinland.fi/en/6gbridge
 - https://www.businessfinland.fi/en/for-finnish-customers/services/funding/funding-forleading-companies-and-ecosystems#roadmaps



6G Bridge Program Portfolio Highlights

Maritime	6G SW for massive networks of connected devices	Liquid IoT system architecture	Robustness of 6G via AL/ML	Integrated sensing and communications	6G networks with reflective intelligent surfaces
Local 6G	Next gen healthcare	Multi-band RF	QoS for heavy machines	Terahertz antennas	Radio channel aware ML based 6G design
RedCap over NTN	Digital twinning of PANs	Energy awareness & efficiency	Extreme machine communications for 6G	Neural Publish / Subcribe method	Network security in 6G
Custom silicon for 5GA/6G, edge AI	Energy vertical	Cloudify i.e. joint comms and computation	3D Model	Autonomous traffic	6G test network



"Talent hits a target no one else can hit; Genius hits a target no one else can see."

- Arthur Schopenhauer (1788-1860) -

Levi, Finland – 9-11, April 2024 :: In-Person & Online ::



