Erzsébet Fitori

Executive Director,
SNS JU

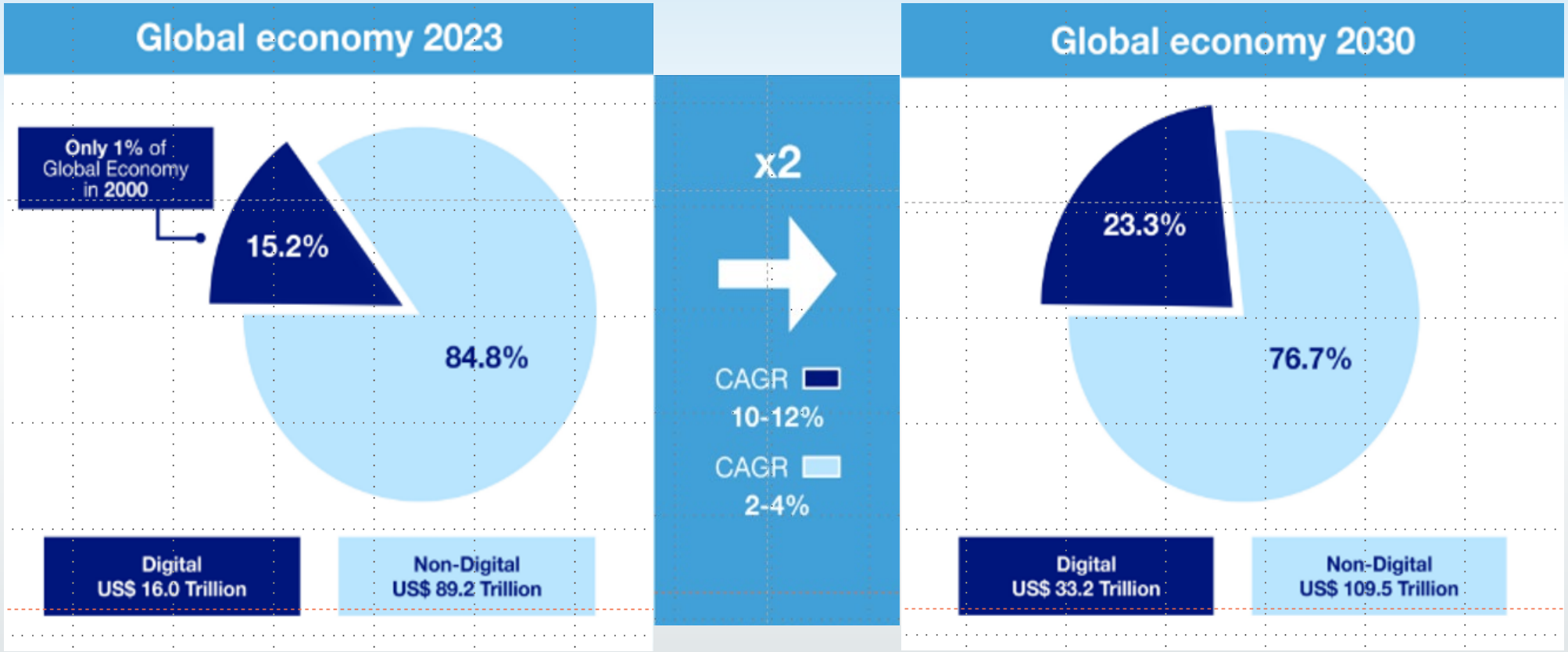
SNS JU and the European path to 6G

More than a technological upgrade

- The **Smart Networks and Services JU (SNS JU)** is a Joint Undertaking (Public-Private Partnership) established by the European Commission and 6G-IA.
- Our **ambition is to lead the global transition to 6G**, with Europe at the forefront, pioneering new capabilities and innovations that will shape our connected future.
  - funding research and innovation projects
  - participating in the 6G standardization roadmap
  - coordinating national deployment agendas (i.e. 5G corridors)
  - co-creating with vertical sectors to define a diverse set of applications
- Leadership in **6G is more than a technological achievement** . It's a commitment to digital sovereignty, economic growth, and societal advancement.

Digital Economy projected to double in size by 2030

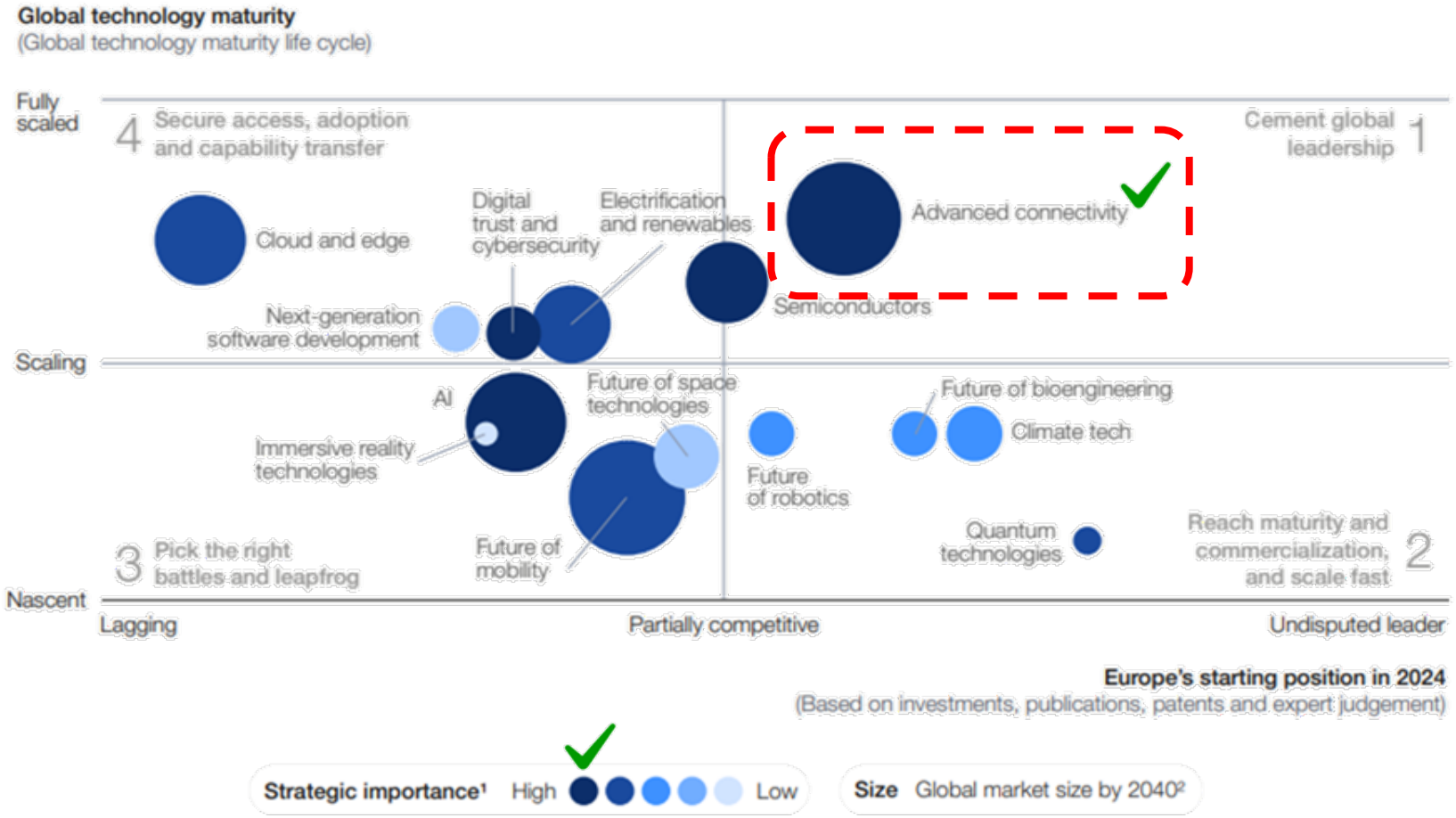
Due to technological advances and increasing digital adoption across sectors



Source: Mid-range projections based on World Economic Forum, OECD Digital Economy Outlook, McKinsey Global Institute, World Bank and IMF Reports

European position in 14 significant technology domains

Advanced connectivity is the most promising Technology area



1. Contribution to European sovereignty (based on analysis of import/export tariffs) 2. Market size by revenue based on estimates in MGI reports "The next big arenas of competition" (2024) and "Securing Europe's competitiveness" (2022)

Source: McKinsey, MGI, expert interviews

SNS JU Mission is fully aligned with Europe's Strategic Priorities

Strategic Priorities

EU-wide collective effort

Creating a human-centric digital world reflecting European values

Competitiveness

Seizing a fair share of the "Trillion €" opportunity in future network-based industrial sectors

Industrial leadership

Starting the 6G race with an **aspiration to leverage EU technological leadership**

Sustainable Development

Support EU Green Deal targets
Building on a **clear promise of Sustainability**

Societal Impact

Smart connectivity underpinning key societal issues such as **Safety, Inclusion and Trustworthiness**

Technological Sovereignty & Security

Value chain approach for a comprehensive EU supply capacity, from components to cloud services, in line with 5G cybersecurity toolbox and HE guidelines

Collaboration and Partnerships : Our response to the magnitude of the challenges

Our **Phased Approach**

SNS JU programme has the target to reach the **full 6G system by 2030**

We are here

2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030

Phase 1 | Phase 2 | Phase 3

Activities

Understand future societal & business needs
- Exploratory projects
- Preliminary Research

Unlock a healthy ecosystem
- Evolutionary 5G
- Key verticals
- 6G Exploration
- 6G Requirements
- 6G Concepts definition

Develop early Systems
- 6G Detail Design System
- Optimization
- Standardisation
- Pre-6G Platforms

Deliver on a multi-dimensional Promise
- Full 6G system
- Pre-commercial services
- Early 6G Trials

Focus Areas

Sustainability
Microelectronics
International cooperation

6G Specifications

SDOs

WRC23 | WRC27

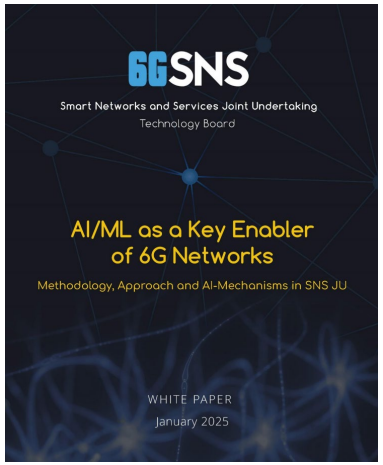
IMT-2030 tech | IMT-2030 Vision | IMT-2030 Req. | Initial 6G | IMT-2030 Rec.

R17 | R18 | R19 | R20 | R21 | R22 | R23

EC White Paper - How to master Europe's digital infrastructure needs?

6G-IA - European Vision for the 6G Network Ecosystem

SNS Portfolio and programmatic results



WHITE PAPER
NETWORK AND SERVICE MANAGEMENT ADVANCEMENTS
Key Frameworks and Interfaces towards Open, Intelligent and Reliable 6G networks

WHITE PAPER
TOWARDS 6G ARCHITECTURE: KEY CONCEPTS, CHALLENGES, AND BUILDING BLOCKS

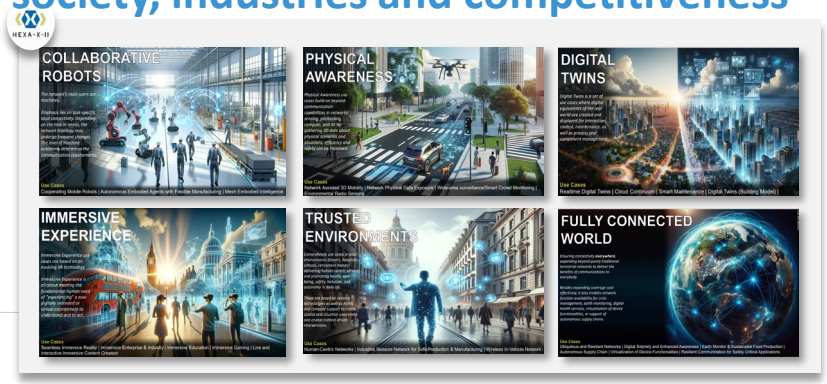
WHITE PAPER
6G KPIS –DEFINITIONS AND TARGET VALUES

[Project Portfolio - SNS JU] & [Interactive map of SNS projects - SNS JU]

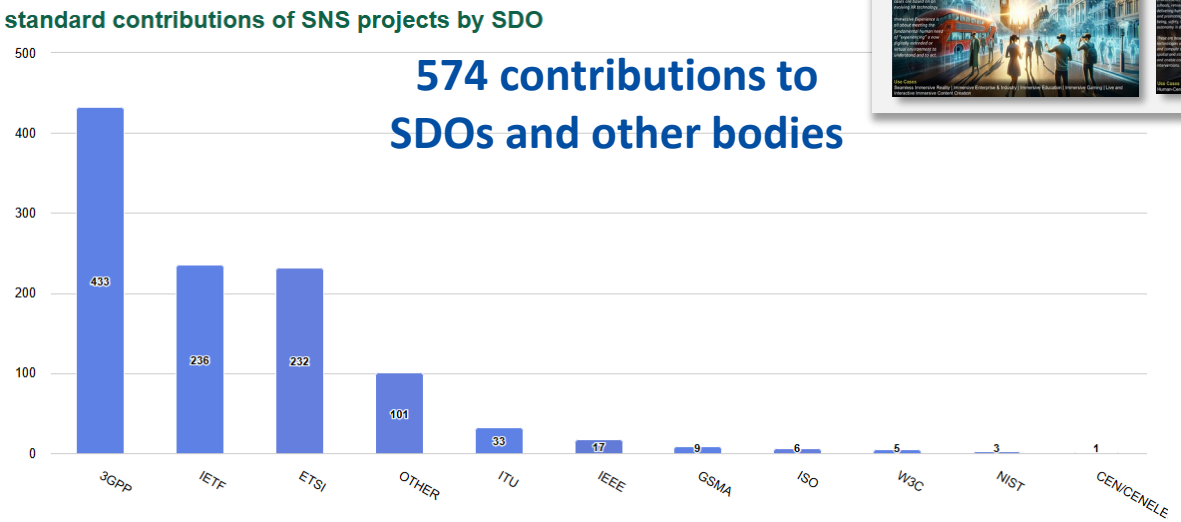
SNS publications : [SNS Publications - SNS JU]
6G-IA publications: [Plans & Papers – 6G IA]

Contributions to 6G standards and patents

6 families of use cases that will transform society, industries and competitiveness

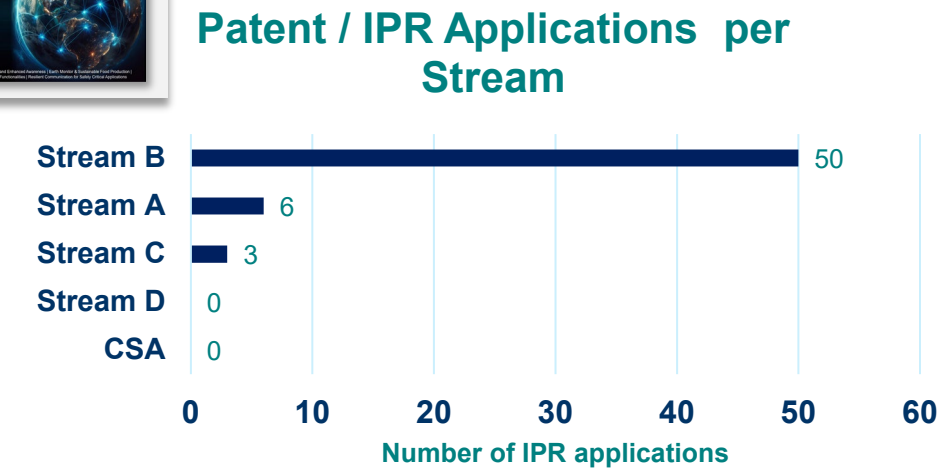


Targeted SDOs by SNS JU projects



574 contributions to SDOs and other bodies

Vibrant SNS IPR ecosystem



Source: SNS-OPS 2025 Questionnaire on SNS projects, April 2025

Ultimate goal: provide opportunities to European stakeholders in industry, research and academia to achieve a leading position in the standardization process, securing a leading position for Europe in the global ICT market.

SNS synergies at EU and Global level

International Cooperation

6GXCEL

3 million EURO

6G Trans-Continental Edge Learning

未来 6G-Mirai

3 million EURO

AI-Native RAN Integrated 6G RAN-Core

6GARROW

3 million EURO

AI-Native RAN Integrated RAN-Device approach

SNS and National Initiatives

6GEM

6G-RIC Research and Innovation Cluster

6G-life

FRANCE 2030 PROGRAMME DE RECHERCHE COLLABORATION NUMÉRIQUE

Open6GHub

6G Platform Germany

UNICO I+D

6G BRIDGE 6G

6G FLAGSHIP

CONNECT

Avancerad Digitalisering

FUTURE 6G NETWORK SERVICES

RESTART

Synergies with verticals

MORONE 2

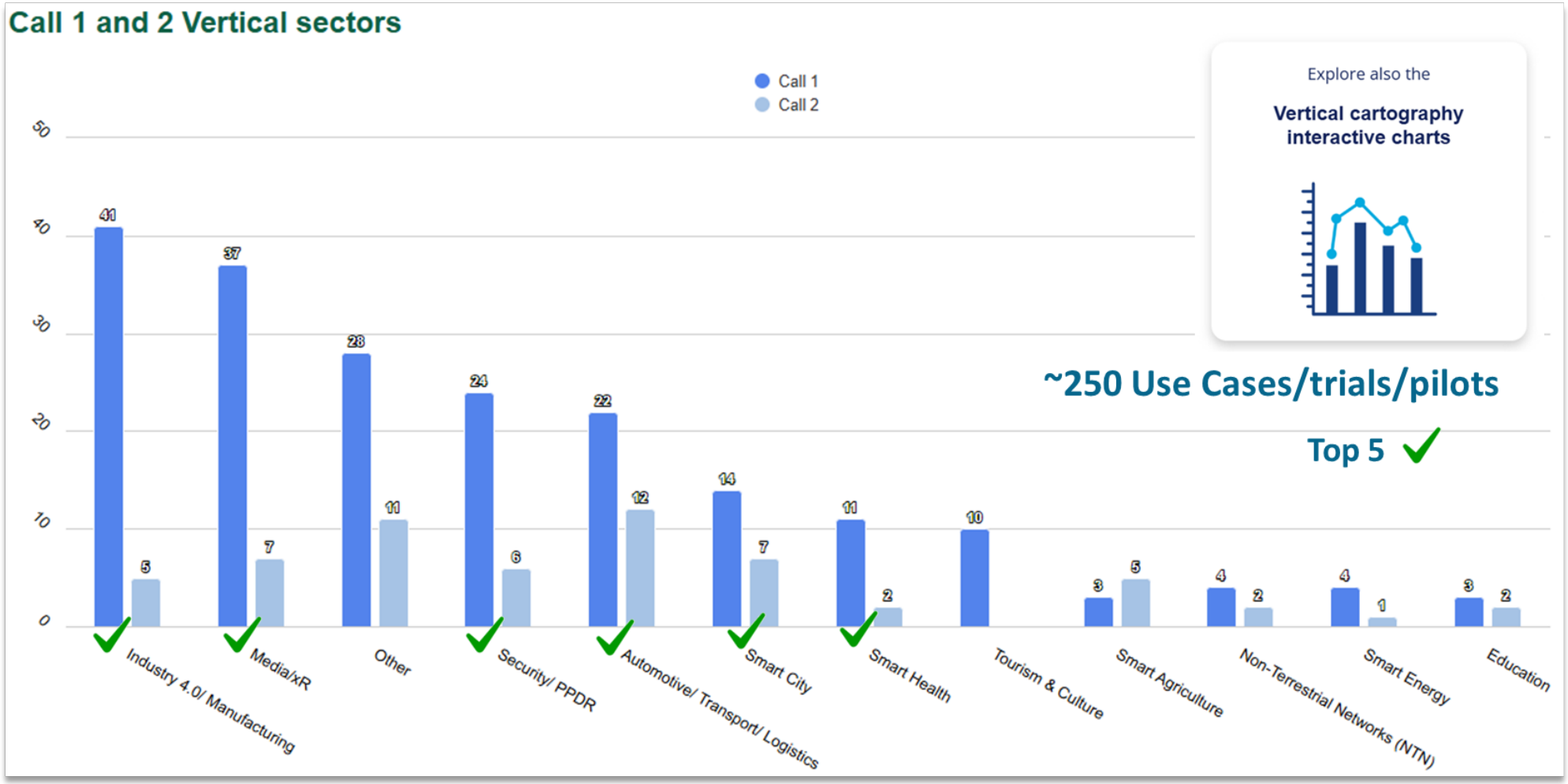
1 million EURO (SNS funding)

FRMS

Europe's Rail

Collaboration and Partnerships is a Strategic priority for the SNS program

Engagement of the Vertical industries

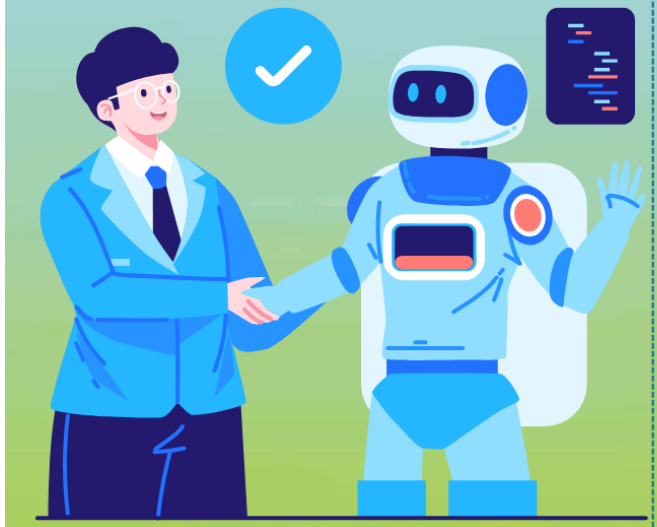


Verticals Cartography | 6G SNS Tracker

SNS JU new Call for Proposals has just been published!

Launch of the

SNS JU Fourth Call for Proposals 2025



Opening: 22 May 2025
Deadline: 18 September 2025

6GSNS

€104M EU funding for **6G research** and **innovation** in 2025

Focus on:

- Disruptive R&I on advanced architectures
- IoT & Device Technologies
- Wireless Communication Technologies
- Non-Terrestrial Networks
- Optical Networks and integration of Photonics
- Security & Reliable Services
- Microelectronics
- Telco Cloud and Service Provision experimental infrastructure

Check out the R&I Work Programme 2025 at:
https://smart-networks.europa.eu/

Follow us on:

- linkedin.com/company/sns-ju
- https://eupolicy.social/@6G_SNS
- https://x.com/6G_SNS

Be part of our community and support Europe's competitiveness

6GSNS

Ideas for the future of SNS

Further evolution of network technologies is a continuous process

** Non-exhaustive ideas*

Native-AI networks

- AI for networks
- Networks to natively support AI driven use cases and applications

+

Ubiquitous coverage

- intensify R&I on TN/NTN to ensure meeting requirements of key vertical sectors

+

Cloud-edge continuum

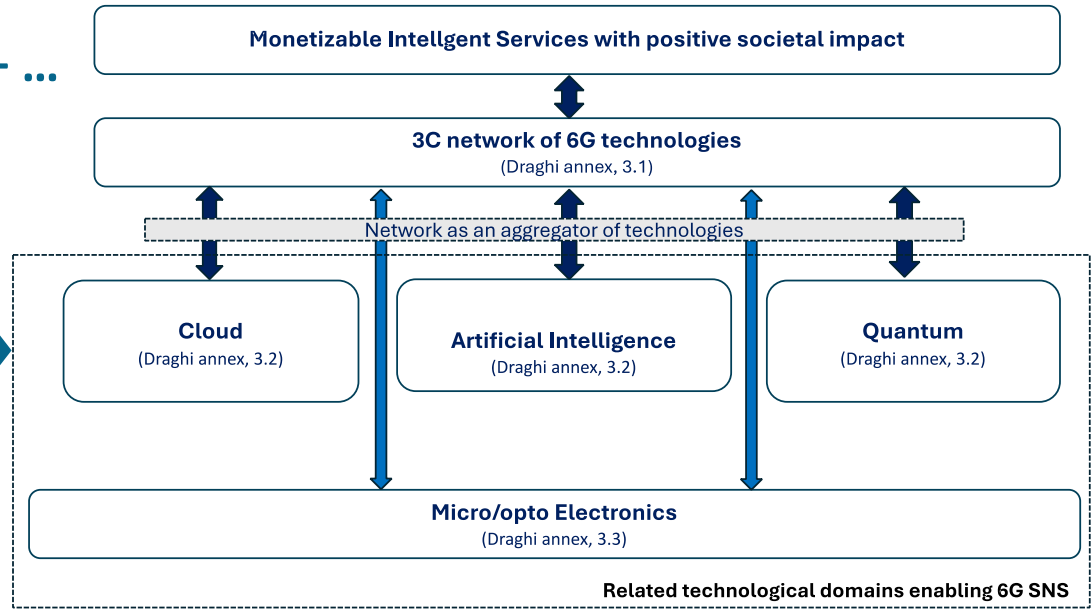
- New architectures for EU services
- Cloud AI convergence
- Cloud for Networks
- Open Networks

+

Ecosystem Extension

- Large-scale pilots with promising Vertical industries
- More cross-cutting activities (e.g. quantum, photonics, microelectronics)
- Business & monetization

+ ...



Our challenge: Strengthen synergies between R&D Activities, Experimental infrastructures and pre-deployment activities, driving network monetization and 6G applications uptake

6GSNS

SMART NETWORKS AND SERVICES
JOINT UNDERTAKING

THANK YOU FOR YOUR ATTENTION

Contact us: smart-networks.europa.eu