Smart Networks and Services Joint Undertaking

Key orientations of SNS JU R&I WP 2025

Javier Albares, Head of Programs

On-line event, 23 May 2025

Introducing the **2025 SNS JU Call(s)** for Proposals

Coordinated Calls, One Deadline : 18 September

NEW

Open: **22 May**

Open: **18 June**

Closing:

18 September

Co-Designing the **2025 Annual Work Program**

Informed by latest developments, Aligned with EU Priorities

2024

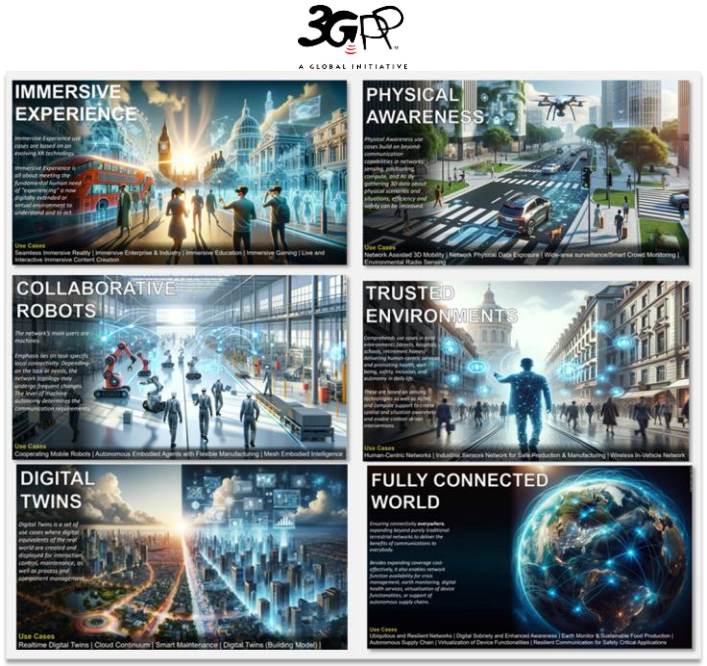
Non -exhaustive

Horizon Europe

Strategic Plan 2025-27

White Paper

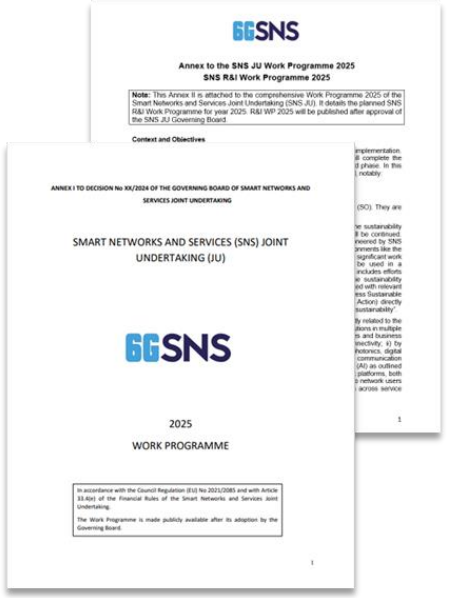
How to master Europe's digital infrastructure needs?



3GPP Standardisation

SA1 Workshop

Use Case Families



SNS JU

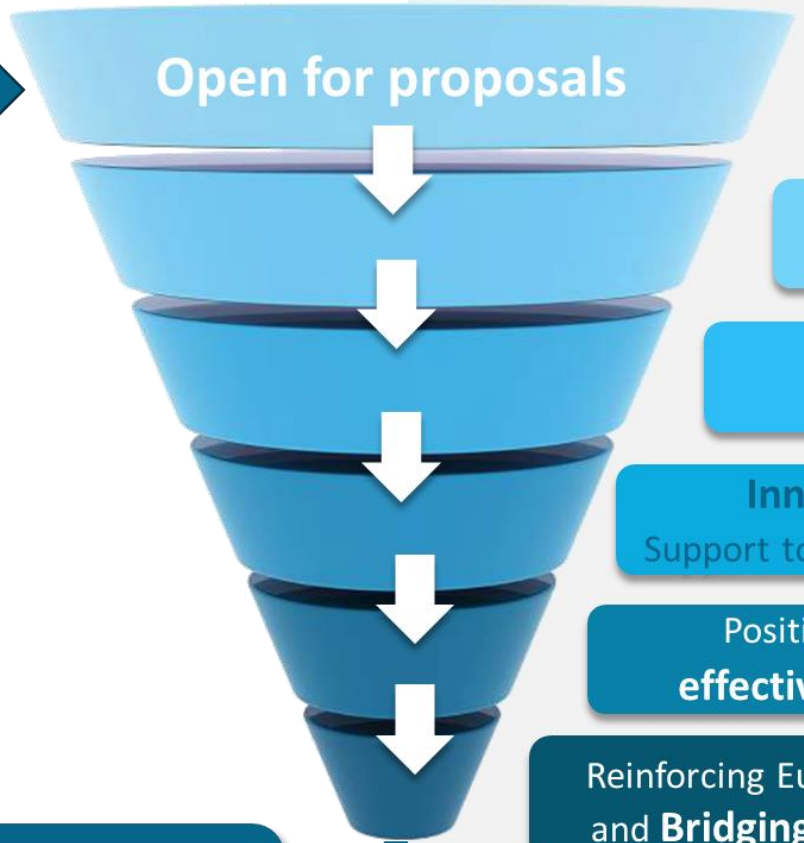
Annual Work Programme 2025

Strategic Objectives Behind the Programme

Driving Sovereignty, Sustainability and Competitiveness

>120 Proposals expected

Deadline **18 September 2025**



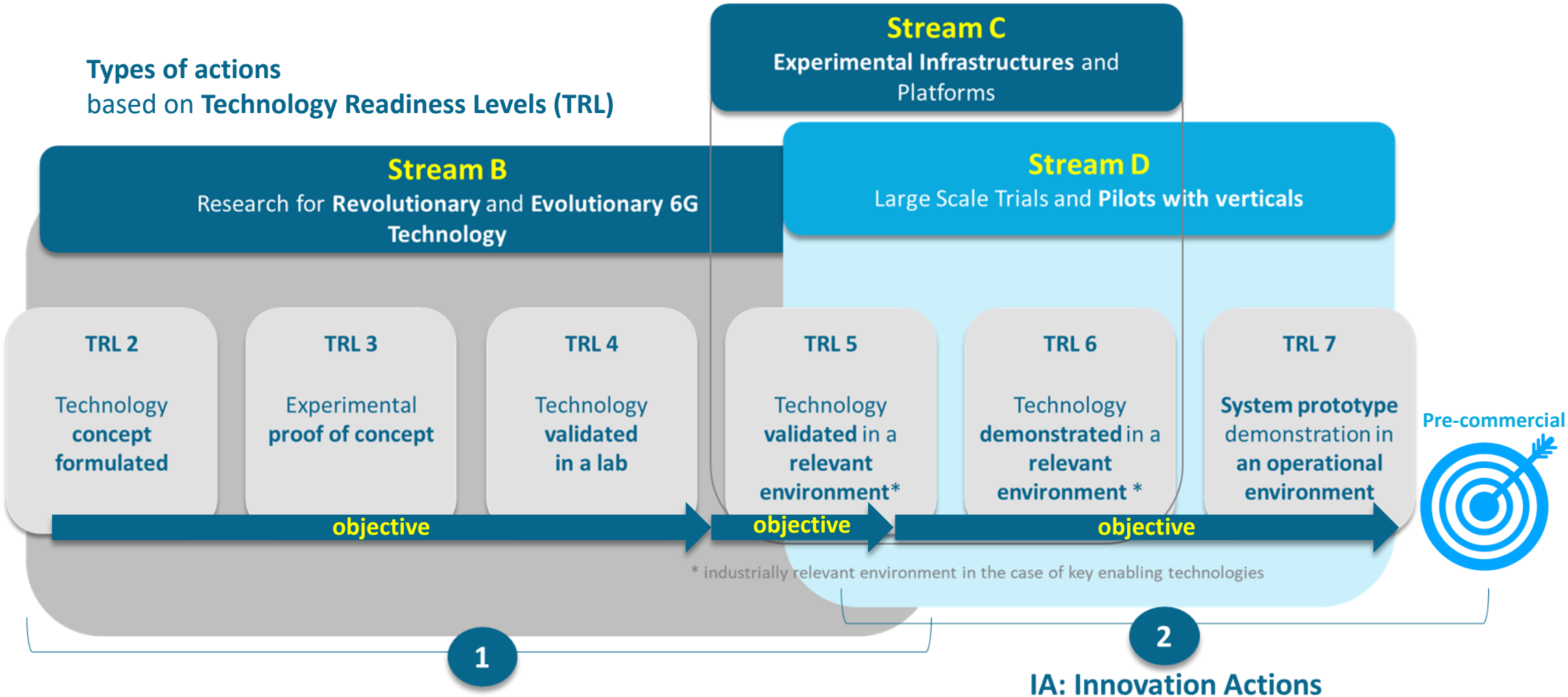
21 Selected Projects

- Build a Globally **Competitive EU ecosystem**
- Integration with **verticals** to support **specialized services**
- **Sustainability** contribution with significantly **lower energy** needs
- **Innovative business models** and Support to **disruptive high-value applications**
- Position Europe as a Leader in 6G with **effective impact in 6G Standardization**
- Reinforcing European **Technological Sovereignty** and **Bridging Research and Real-World Impact**

A **layered structure** to build impact

Horizon Europe: from Blue Sky Research to Real-World Deployments

Types of actions
based on **Technology Readiness Levels (TRL)**

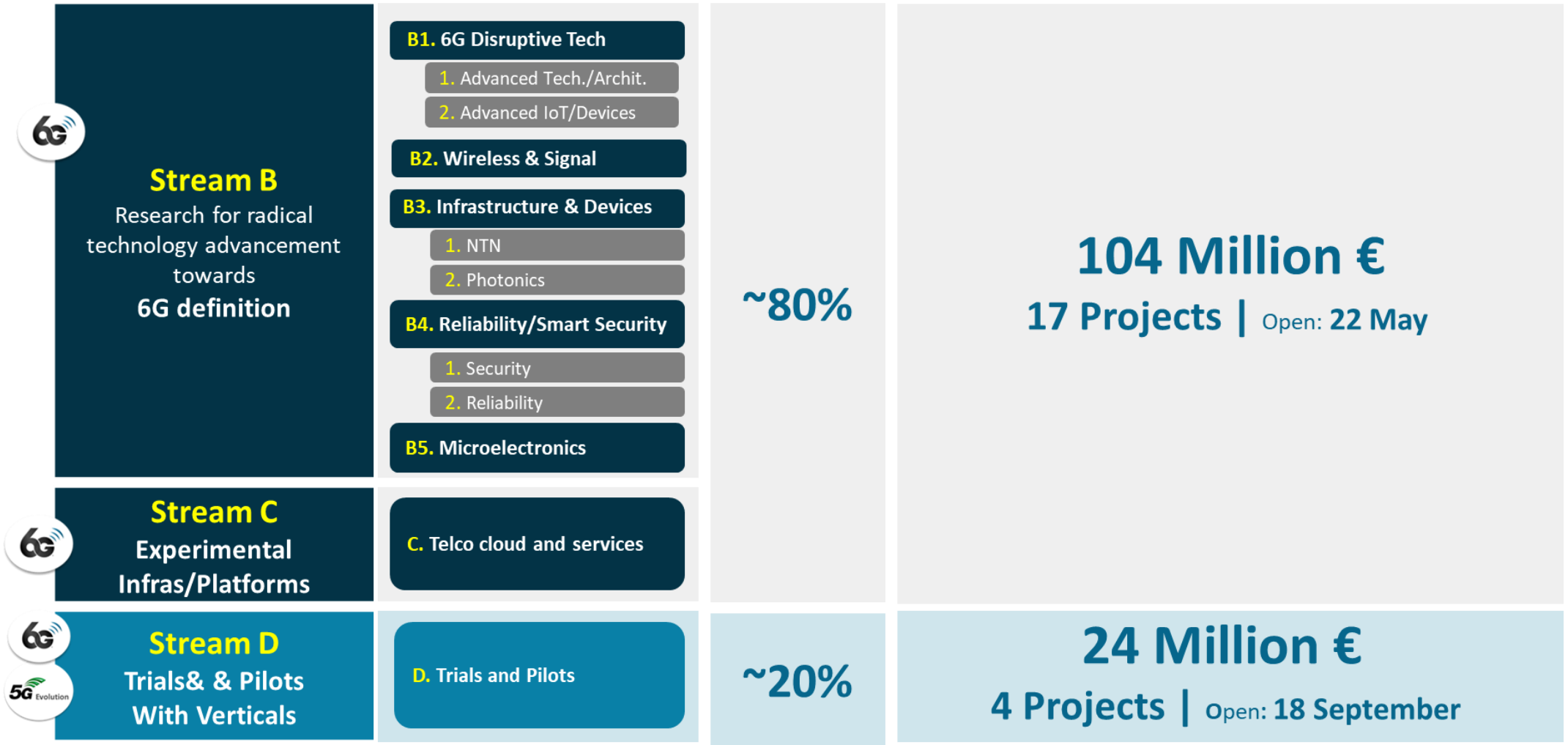


RIA: Research & Innovation Actions
Development and Validation

IA: Innovation Actions
Demonstration and Scale-up

Overview of our 2025 Annual Work Program

Politically and strategically **significant roadmap** to position **Europe at the forefront of 6G R&I**



21 new projects to shape the future
Aligned Topics for a Cohesive R&I Agenda

Stream B
Research for radical technology advancement towards
6G definition

B1. 6G Disruptive Tech 1. Advanced Tech./Archit. 2. Advanced IoT/Devices	**5 projects:** Forward looking topics on **advance architectures** (low TRL) **3 projects : Advanced IoT topics** (low TRL)
B2. Wireless & Signal	**3 projects: MIMO, AI/ML, Spectrum sharing, Open RAN**
B3. Infrastructure & Devices 1. NTN 2. Photonics	**1 project: NTN- TN unification/integration** **1 project: Optical networks and Photonics** (synergy with Photonics PPP)
B4. Reliability/Smart Security 1. Security 2. Reliability	**1 project: Smart security/security services** **1 project: Reliable services operations**
B5. Microelectronics	**1 project: Microelectronics-Front End Module** (identified synergies with Chips JU)

Stream C
Experimental Infras/Platforms

C. Telco cloud and services	**1 project: Telco cloud** and service provision enablers

Stream D
Large Scale Trials With Verticals

D. Trials and Pilots with verticals	**4 projects**: focus on **key verticals** such as - (1) Industry/Manufacturing (including robotics), (2) Media (including gaming, broadcasting…), (3) Transportation/Logistics, (4) Emergency and Safety Services and/or (5) Health)

Evaluation Criteria

Max: 70 pages

Technological Excellence

- Demonstrate **clear advancement beyond the current state-of-the-art**.
- **Integrate novel enablers**: AI-native, Joint communication-computation-control architectures, Photonic or microelectronic components critical to 6G, Non-terrestrial networks,…
- Emphasize **openness, modularity, and standard compatibility**

Impact and Relevance

- Highlight project **contribution to EU policy goals and potential synergies**
- Provide **measurable KPIs to evaluate and maximise impact** (scale and significance)
- Include **Key Value Indicators (KVIs)** such as energy consumption or spectrum efficiency

Strong Partners

- Build **strong consortia** that bridge Industry (including SMEs), academia, and **Vertical sectors** (e.g., health, manufacturing, mobility, emergency response).
- Consider capacity of each individual participants & consortium as a whole
- Where appropriate, foster **international collaboration** (e.g., EU-US under TTC framework)

Feasibility and Execution

- Present a **robust, risk-mitigated implementation plan** with clear work packages, milestones, and resource allocation
- Set **realistic timelines** and scalability strategies
- Address potential bottlenecks (e.g., standardization, deployment constraints, regulatory challenges).

Future Exploitation

- Articulate a **clear exploitation path from Day** 1: include IP, Industrial take-up and commercialization roadmaps. Clarify ownership of results (IP) early.
- Plan your contributions to open-source initiatives and standardization bodies
- Include dissemination strategies targeting: Policy makers, SDOs and end-users (demand)

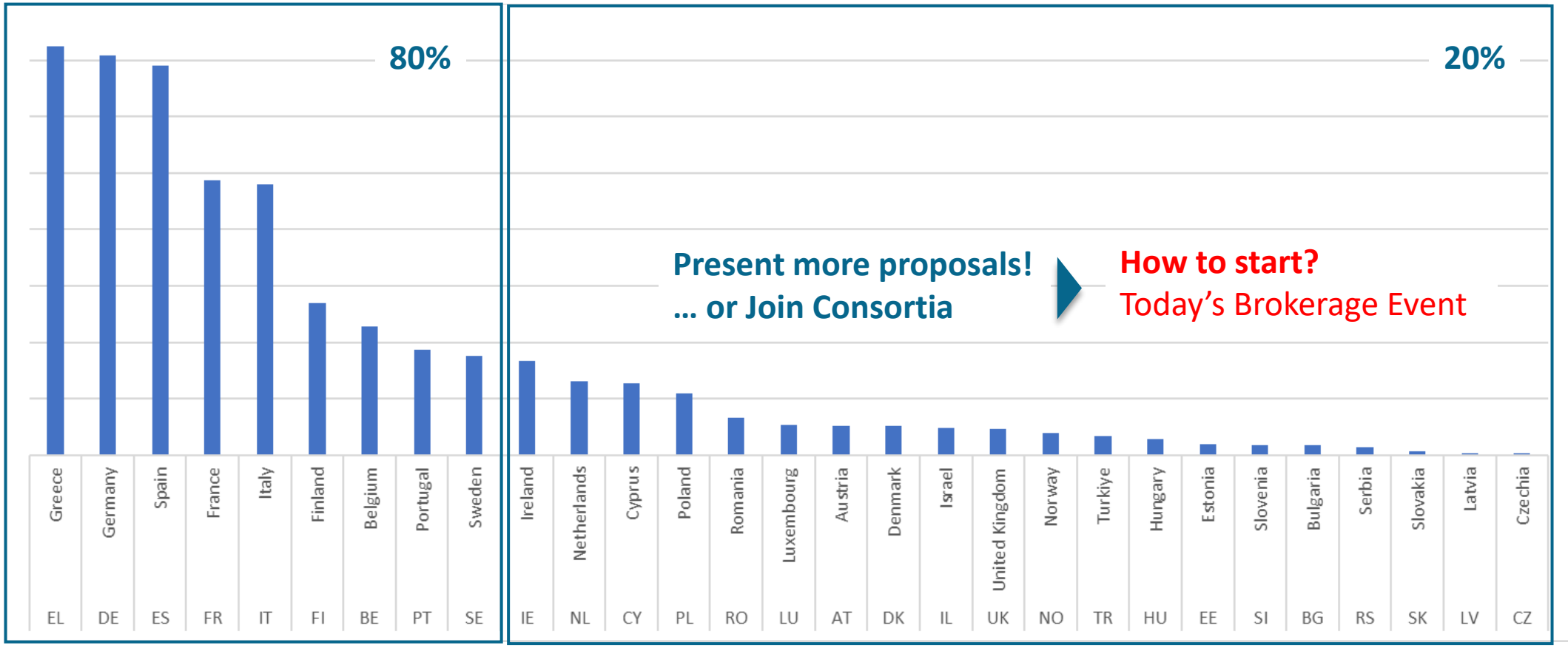
\+ **IKOP**

- Non-reimbursed portion of eligible (In-Kind activities) **costs contributed by 6G-IA members**
- The level of IKOP contribution is considered during proposal evaluation, especially **in cases where proposals have equal scores**

Building High-Impact Consortia

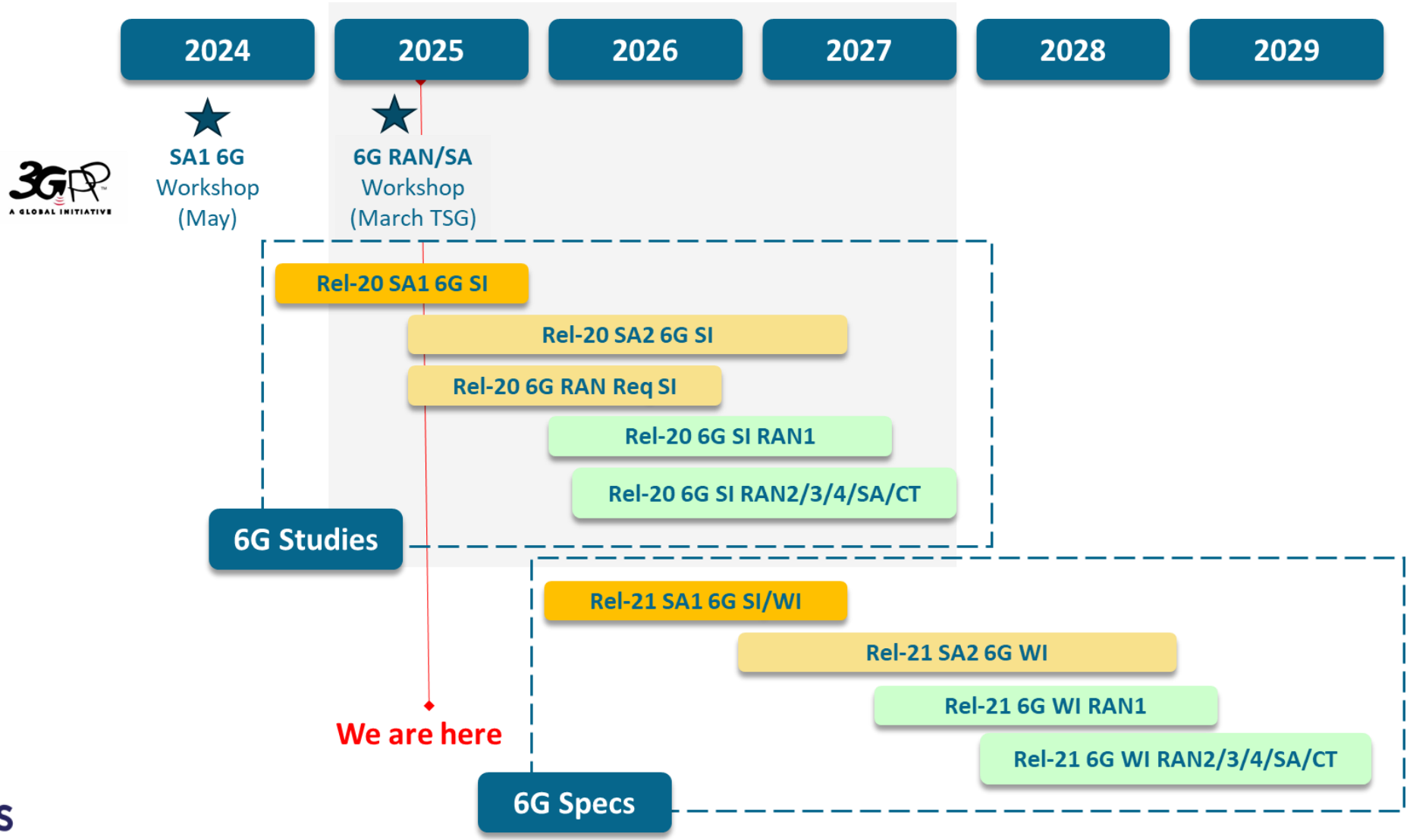
Diversity, Expertise, and Strategic Balance Matter

~500 Million € allocated to **79 projects (Call 1, 2 & 3)**



High correlation between #proposals and #projects selected

6G Standardisation is underway



Europe is already shaping 6G

Global and cross-sector participation reaches new heights with most **diverse contributor base**

219
Cross-sectoral contributions

Traditional Contributors

5G & 6G

New Contributors

6G

First 3GPP TSG-wide 6G Workshop. 10-11 March 2025, Incheon, South Korea
1676 registrations and 748 in-person attendees

Deutsche Telekom, ERICSSON, Fraunhofer, kpn, NOKIA, orange, Telefónica, vodafone

8

AIRBUS, BBC, BMW, BOSCH, bouygues, BT, Capgemini, Department for Science, Innovation & Technology, esa, EURECOM, eutelsat GROUP, EUTC, FiberCop, GSOA, hispasat, SAINT EXUPÉRY, LEONARDO, NOVAMINT, PHILIPS, ROHDE&SCHWARZ, SATELIOT, SES, SIEMENS, SNT, THALES, TNO, VW

29

37 Contributors 3.6x

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RoW 84 Contributors 1.8x

Source: APEX Standards. 6G Standardization and Research: Key Insights from 3GPP's Inaugural Workshop

What Success Should Look Like

Turning Research into Sovereignty and Competitiveness

Technological Leadership

- EU-developed 6G components integrated into global standards and pilot deployments.

Sovereignty & Resilience

- European vendors and cloud platforms scaled up, reducing dependencies on third countries.

Innovation & Industrial Uptake

- Strong participation of SMEs/startups in projects
- Deployment of 6G use cases across verticals.

Sustainability

- Demonstrated energy savings in 6G pilots
- Green-by-design network architectures.

Global Influence

- Increased EU leadership in international 6G fora (e.g. 3GPP, ITU)

Societal Value

- Use cases that support European values (e.g. emergency services, health, sustainability).

Your projects should improve Europe's capacity to transform R&D into industrial strength, global impact, and digital leadership.

Best of luck with your proposals!

6GSNS

SMART NETWORKS AND SERVICES
JOINT UNDERTAKING

THANK YOU FOR YOUR ATTENTION

Contact us: smart-networks.europa.eu