Online Event

5G Vertical User Workshop

WEBINAR

A 6G VISION Webinar – What will 6G offer to vertical industries & Future perspectives

European Initiatives for 5G/B5G/6G networks

Alexandros Kaloxylos: Executive Director – 6G-IA

Funded by the European Union

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Speakers Line-up

- *10:30 – 10:40:* ***Alexandros Kaloxylos*** – 6G-IA Executive Director
- *10:40 – 10:50:* ***Artur Hecker*** – Chair of 6G-IA Vision and Societal Challenges WG
- *10:50 – 11:00:* ***Håkon Lønsethagen*** – Co-chair of 6G-IA Vision and Societal Challenges WG
- *11:00 – 11:10:* ***Muslim Elkotob*** – Principal Solutions Architect at Vodafone
- *11:10 – 11:20:* ***Rahim Tafazolli*** – Regius Professor & Director of Institute for Communication Systems (ICS) and 5GIC (5G Innovation Centre) at University of Surrey
- *11:20 – 11:30:* ***David Boswarthick*** – Director of New Technologies at ETSI
- *11:35 – 12:15:* **Final RoundTable + Q/A Session from the audience**

Why this Webinar?

In this digital event, the speakers will dig into 6G high-profile themes, by tackling long-term challenges and priorities that can be summarized as follows:

1. *What may be the economic, societal, environmental and technological impact of 6G concept.*
2. *How business is going to evolve and keep up while moving from 5G to 6G.*
3. *6G business case(s) for 6G and/or Use Case(s) and what are the key drivers.*
4. *What advantages will 6G have over 5G and how quickly do we need it, and at what cost.*
5. *What 5G-related shortcomings 6G is expected to fix (or try to).*
6. *The Voice of EU (and International) R&I for next generation networks and services.*

Housekeeping

- The event will be recorded and will be made available on 5GPPP-EU website over the next week (*inclusive of the PPT presentations of each speaker*).
- Interactive chat is available by default.
  We do encourage you though to enter any question in the dedicated Q/A box placed in the lower toolbar.
  The speakers will be pleased to answer back your questions real-time & few ones will be picked up in the final session.

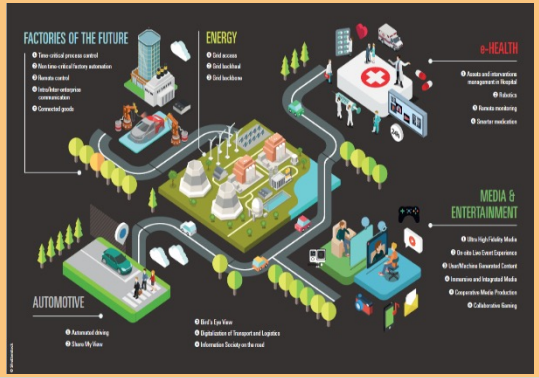
During the event we will share some Polls on the screen (very quick) that we do kindly ask you to provide your answers about, thanks a lot!

5G Research (5GPPP)

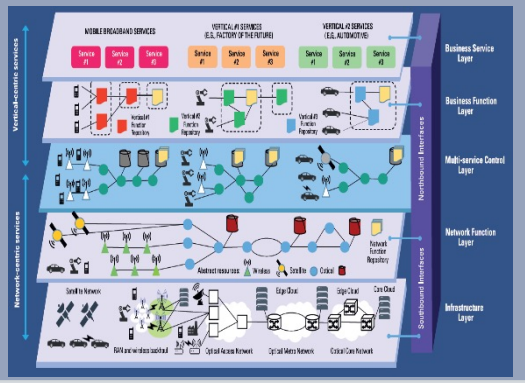
PHASE 1: 5G Core Research

- 5G system design & evaluation aspects
- 5G air interface innovations
- Network management & security innovations
- Virtualisation & service deployment innovations

PHASE 2: System development & application in vertical industries



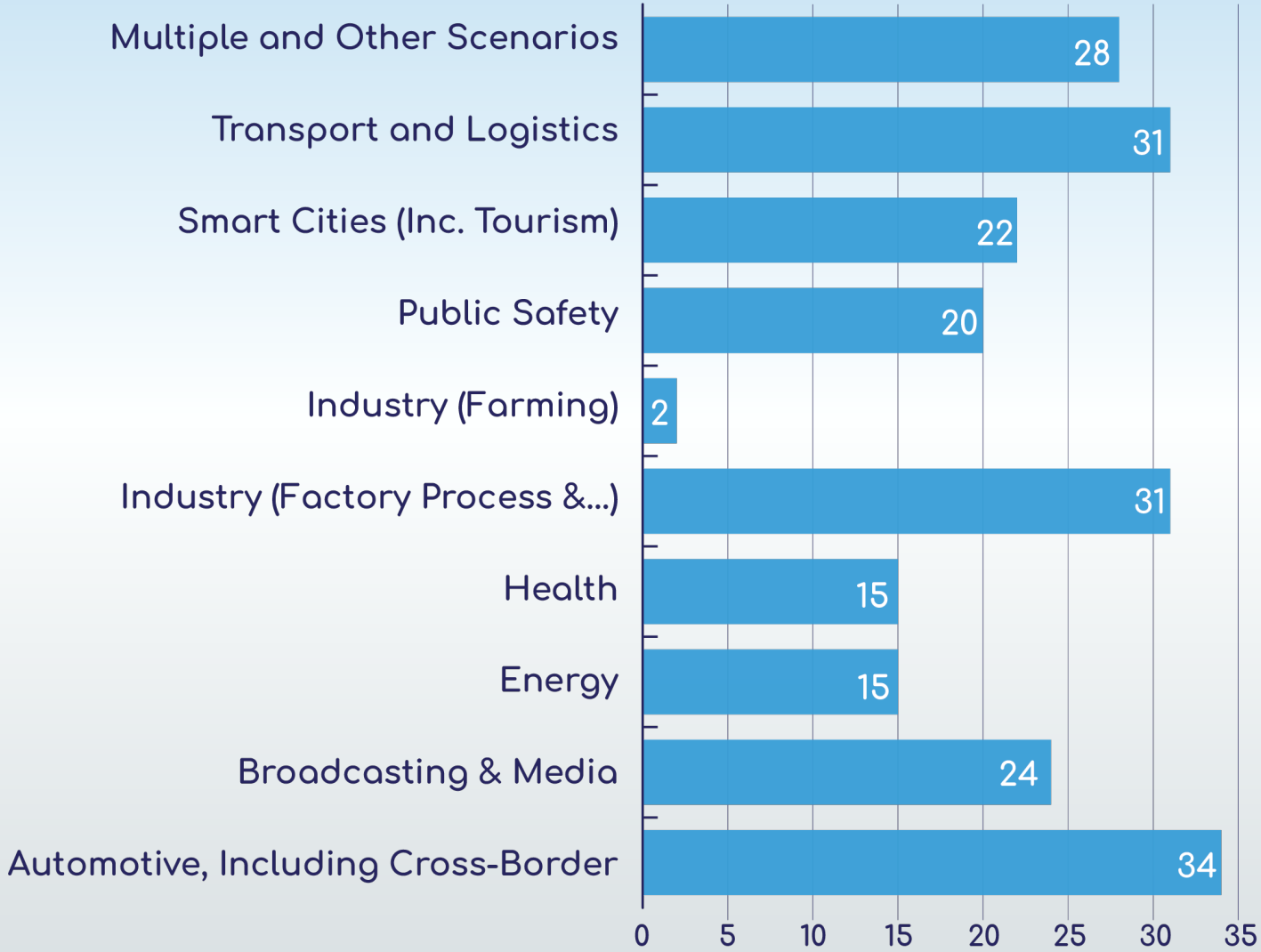
PHASE 3: Large scale trials and innovation infrastructures



2015 2016 2017 2018 2019 2020

- 92 R&I projects since the beginning of the Program
- Overall, 700 stakeholders participating in the projects
- 800+ contributions to standardization activities (Phase II and Phase III)
- Over 2000 scientific publications (Phase II and Phase III)
- 40 white papers
- 445 innovations in the Innovation Radar
- Design, evaluated, and validated multiple technological breakthroughs

5G PPP: Phase 3 Vertical Trials



MULTIPLE TRIALS IN 10 DIFFERENT VERTICAL AREAS

Future European 6G Research

6G SNS

Know more here

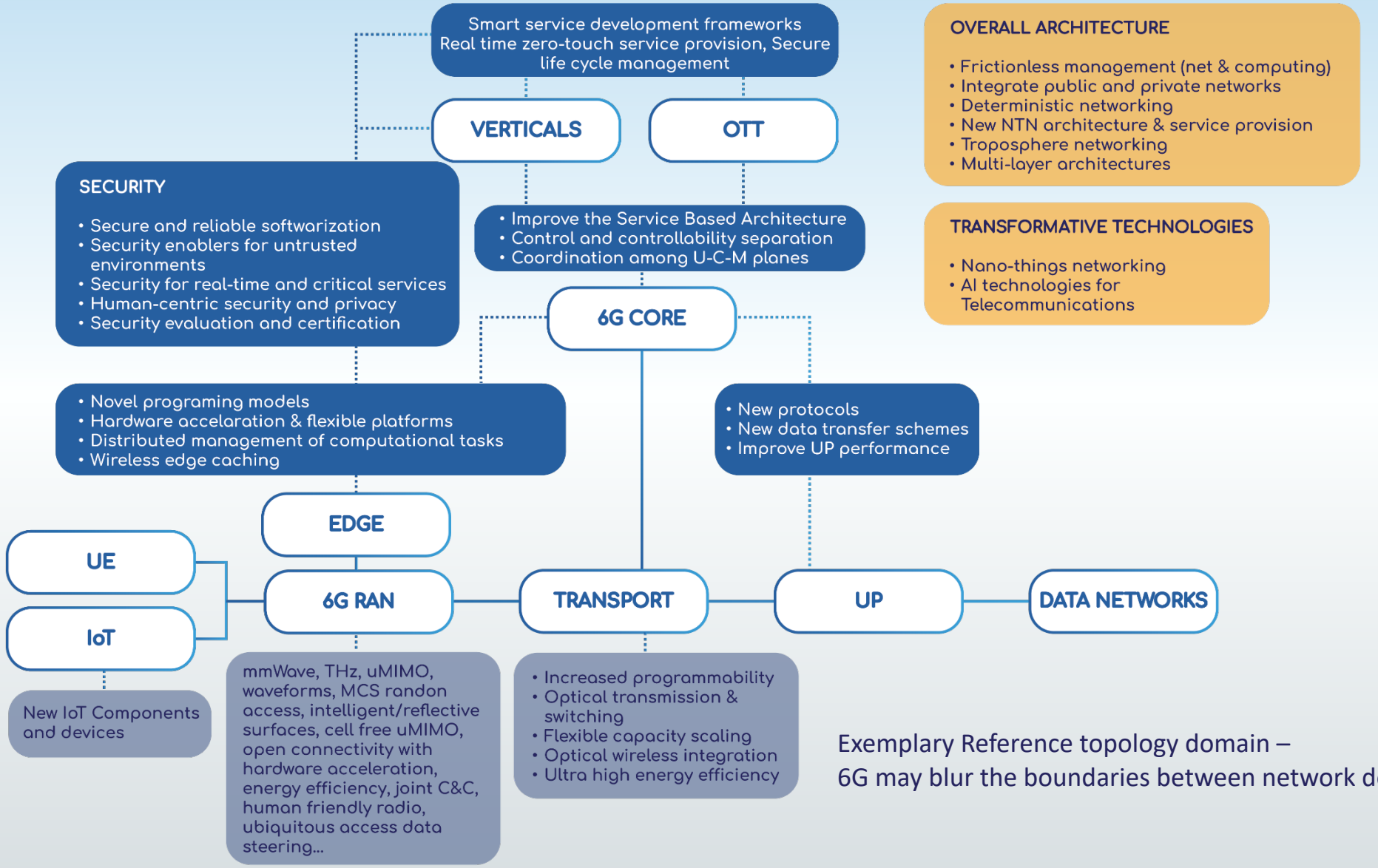
- The Smart Networks and Services Joint Undertaking has started
- 900 Million Euro publicly funded research program for Next generation networks and equal resources from the private side
- First group of projects started in 2023
- Second call for projects has opened in January 2023 – submission deadline on 25.04.23
- Third call for projects being prepared (target to open the call late October 2023 with a deadline of late April 2024)

SNS JU – Strategic Objectives

ENSURE EUROPEAN LEADERSHIP FOR 6G SMART NETWORKS AND SERVICES	IMPROVE DIGITAL INDUSTRIES OPERATION	ADDRESS SOCIETAL NEEDS AND POLICY OBJECTIVE
Advanced applications & services	**Identify needs and provide solutions**	**Identify and meet relevant Sustainable Development Goals (SDG)**
Competitive connectivity solutions	**Advanced infrastructures**	**Support EU Green Deal targets**
Full value chain approach	**Create a fertile business ecosystem**	**Safeguard security and privacy**

- **Mobilize the European stakeholders**
- **Enable cross-sector collaboration**
- **Make Europe the center of gravity for international collaboration and global consensus**

Research Areas



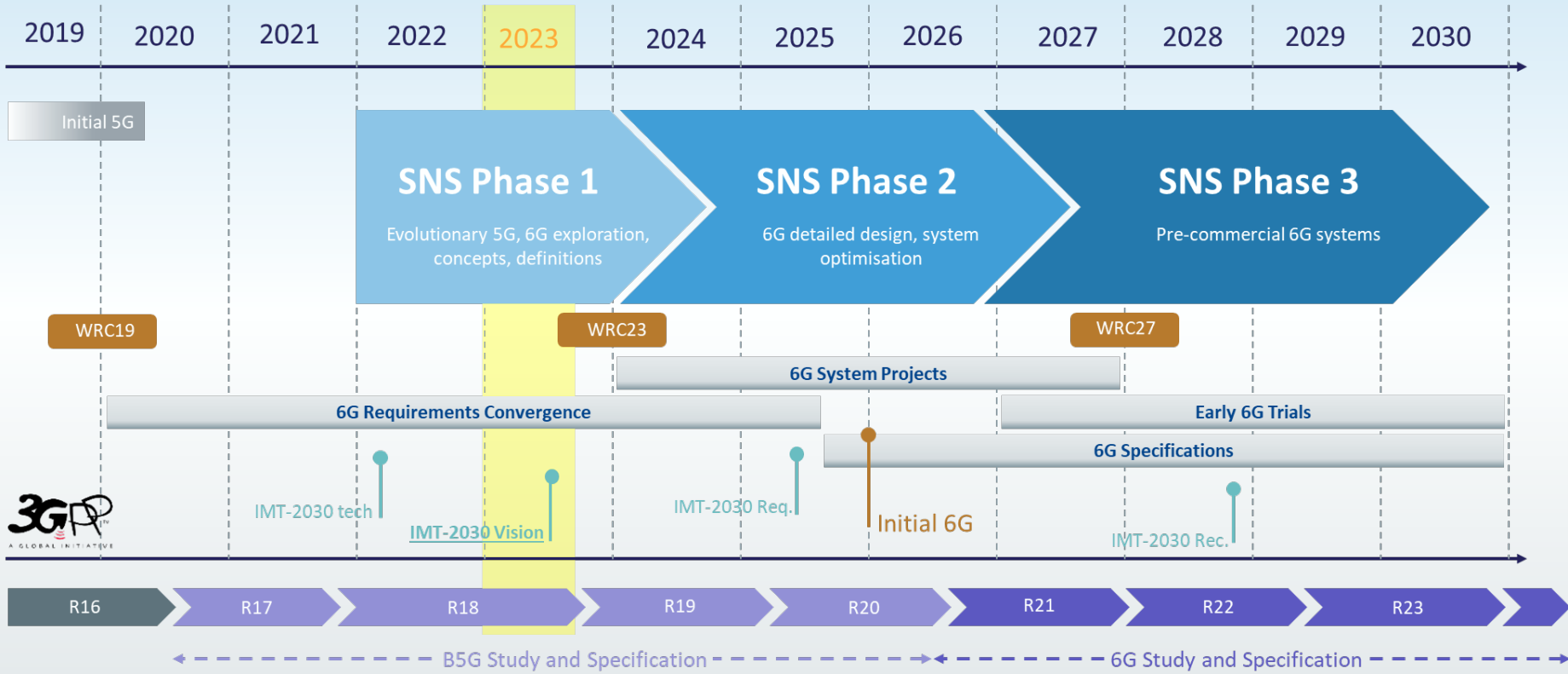
Exemplary Reference topology domain –
6G may blur the boundaries between network domains

SNS JU Overview & Roadmap

6G SNS

- 6G SNS is planned in 3 phases, funding R&I projects under 4 different Streams in a programme of ~1.8€ Billion (more info here)

- First projects of phase 1 started on 01/01/2023



SNS R&I Work Programme 2021-22

STREAM A (RIA): Smart communication components, systems and networks for 5G mid-term Evolution systems

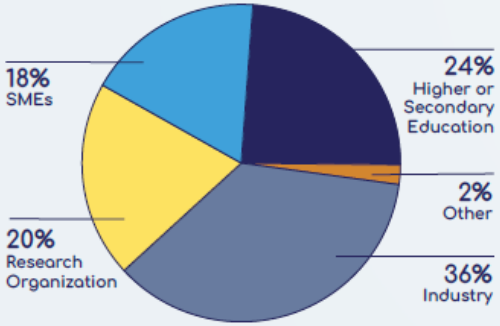
STREAM D (IA): Large Scale SNS Trials and Pilots with Verticals

STREAM B (RIA): Research for Revolutionary 6G Technology and systems

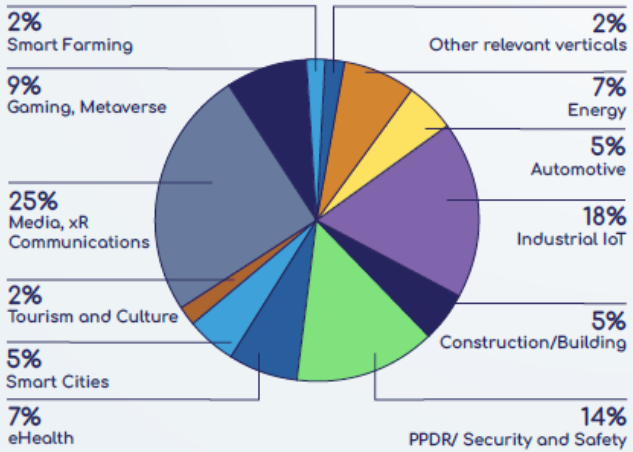
STREAM C (RIA): SNS experimental infrastructures

PHASE 1 PROJECTS TO START 1/1/2023

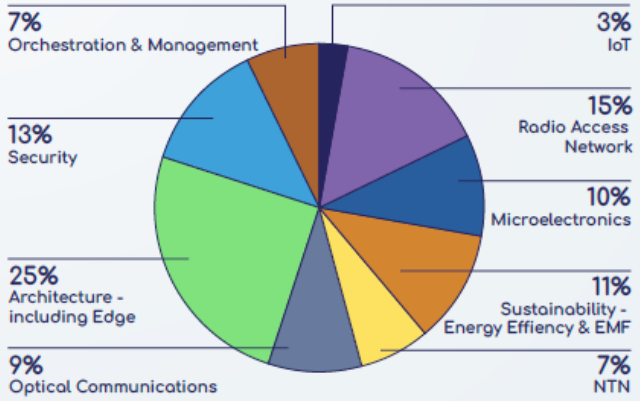
35 R&I Projects, 9 Key Technological Areas, 250 M€ Investments



BENEFICIARIES DISTRIBUTION



PHASE 1 SNS VERTICALS COVERAGE



PHASE 1 SNS TOPICS COVERAGE

- 288 unique beneficiaries
- ~30% not 6G-IA members
- Covering 10+ different Vertical Industries