

6G SNS

SNS JU

Smart Networks and Services Joint Undertaking

Annual Activity Report **2025**

In accordance with Article 26 of the Council Regulation (EU) 2021/2085 of 9 November 2021 and with Article 23 of the Financial Rules of the SNS JU, the consolidated Annual Activity Report will be made available after its approval by the Governing Board



EUROPEAN
PARTNERSHIP

Factsheet	4
Foreword	8
Executive Summary	10

1

Implementation of the Annual Work Programme 2025	16
---	-----------

1.1 Key objectives 2025, associated risks and corrective measures	18
1.2 Research & Innovation activities/achievements	20
1.3 Calls for proposals, grant information and other funded actions	23
1.4 Evaluation procedures and outcomes	33
1.5 Follow-up activities linked to past calls	35
1.6 Openness, cooperation, synergies and cross-cutting themes and activities	39
1.7 Progress against Key Impact Pathways and JU's Key Performance Indicators	42
1.7.1 Progress against Horizon 2020 legacy Key Performance Indicators	42
1.7.2 Progress against General Horizon Europe Key Impact Pathways Indicators (KIPs)	42
1.7.3 Progress against HE Common JUs Key Performance Indicators	51
1.7.4 Progress against JU-specific Key Performance Indicators	56

2

Support to Operations	70
------------------------------	-----------

2.1 Communication activities	71
2.2 Legal and financial framework	75
2.3 Budgetary and financial management	76
2.4 Financial and in-kind contributions from Members other than the Union	80
2.5 Administrative Procurement and contracts	82
2.6 IT and Logistics	84
2.7 Human Resources	85
2.7.1 HR Management	85
2.7.2 Efficiency gains and synergies	86
2.7.2.1 Strategic approach	86
2.7.2.2 Overview of Back Office Arrangements	86
2.7.2.2.1 BOA Accounting Services	86
2.7.2.2.2 BOA Human Resources	86
2.7.2.2.3 BOA Procurement	87
2.7.2.2.4 BOA ICT	87
2.7.2.2.5 Efficiency gains and outlook	87

3

Governance	88
-------------------	-----------

3.1 Major developments	89
3.2 Phasing-out plan monitoring	89
3.3 Governing Board	90
3.4 Executive Director	92
3.5 States Representatives Group	93
3.6 Stakeholders Group	94

4

Financial Management and Internal Control 96

4.1 Control Results	97
4.1.1 Effectiveness of controls	98
4.1.1.1 Legality and regularity of the financial transactions	99
4.1.1.2 Fraud prevention, detection and correction	100
4.1.1.3 Assets and information, reliability of reporting	100
4.1.2 Efficiency of controls ("Time to")	100
4.1.3 Economy of controls	101
4.1.4 Conclusion on the cost-effectiveness of controls	102
4.2 Audit observations and recommendations	103
4.2.1 Internal Audit	103
4.2.2 Audit of the European Court of Auditors (ECA)	103
4.2.3 Overall Conclusions	104
4.3 Assessment of the effectiveness of internal control (IC) systems	105
4.3.1 Methodology and sources of assurance	105
4.3.2 Implementation of internal control principles	105
4.3.2.1 Assessment of the Internal Control	105
4.3.2.2 Internal control observations	107
4.3.2.3 Follow-up of previous identified observations	107
4.3.2.4 Strengths and good practices	108
4.3.2.5 Overall conclusion	108
4.4 Conclusion on the assurance	108
4.5 Statement of Assurance	110
4.5.1 Assessment of the Annual Activity Report by the Governing Board	110
4.5.2 Declaration of assurance	110

5

Annexes 112

1. Organisational chart	112
2. Establishment plan and additional information on HR management	113
3. Publications from projects	114
4. Patents from projects	116
5. Scoreboard of Horizon Europe common Key Impact Pathway Indicators (KIPs)	117
6. Horizon Europe Partnership common Key Performance Indicators	124
7. Scoreboard of Key Performance Indicators specific to SNS JU	125
8. ICAA Report	127
9. Annual accounts	130
10. Materiality criteria	133
11. Specific annexes related to "financial management"	134
12. Reporting on the internal and external audits and assessing the effectiveness of internal control systems	136
13. SNS JU Portfolio	139
14. List of acronyms	142

Factsheet

Name of the JU

Smart Networks and Services Joint Undertaking (SNS JU)



Objectives

The European Smart Networks and Services Joint Undertaking (“SNS JU”) is a European Public-Private Partnership under Horizon Europe that aims to facilitate and develop industrial leadership in Europe in 5G and 6G networks and services. The SNS JU funds projects that shape a solid research and innovation (R&I) roadmap and deployment agenda by engaging a critical mass of European stakeholders and facilitating international cooperation on various 6G initiatives.

The SNS JU has two main missions:

- Fostering Europe’s technology sovereignty in 6G by implementing the related research and innovation (R&I) programme leading to the initial conception and standardisation. It encourages preparation for early market adoption of 6G technologies by the end of the decade. Mobilising a broad set of stakeholders is key to address strategic areas of the networks and services value chain. This ranges from edge- and cloud-based service provisioning to market opportunities in new components and devices beyond smartphones.
- Boosting 5G deployment in Europe in view of developing digital lead markets and enabling the digital and green transition of the economy and society.

In addition, the SNS JU has the following General Objectives:

- Foster Europe’s technological leadership in future smart networks and services by reinforcing current industrial strengths and by extending the scope from 5G connectivity to the broader strategic value chain including cloud-based service provisioning as well as components and devices.
- Align strategic roadmaps of a wider range of industrial players, including not only the telecommunication industry, but also actors from the Internet of Things, cloud, and components and devices.
- Advance European technological and scientific excellence to support European leadership to shape and master 6G systems by 2030.
- Strengthen the deployment of digital infrastructures and uptake of digital solutions in the European markets, in particular by ensuring a strategic coordination mechanism for the CEF2 Digital programme as well as synergies within CEF2, and with DEP and InvestEU as part of the scope and governance of the Smart Networks and Services Joint Undertaking.
- Prepare the European smart networks and services supply industry for the longer-term

opportunities emerging from the development of vertical markets for 5G and later 6G infrastructures and services in Europe.

- Facilitate digital innovation, by 2030, meeting European market needs and public policy requirements, including the most demanding requirements of vertical industries, as well as societal requirements in fields including security, energy efficiency and electromagnetic fields.
- Support the alignment of future smart networks and services with Union policy objectives including European Green Deal, network and information security, ethics and privacy, as well as a human-centric and sustainable internet.

The SNS JU has also the following Specific Objectives:

- Facilitate the development of technologies able to meet advanced communication requirements while supporting European excellence in smart networks and services technologies and architectures and their evolution towards 6G, including strong European positions on standards, essential patents, and key requirements such as requirements for spectrum bands needed for future advanced smart network technologies.
- Accelerate the development of energy-efficient network technologies with the aim of significantly reducing the energy and resource consumption of the whole digital infrastructure by 2030 and decreasing the energy consumption of key verticals industries supported by smart networks and services technologies.
- Accelerate the development and widespread deployment of 5G and later 6G infrastructure in Europe by, in particular, promoting the coordination and strategic support of 5G deployment for Connected and Automated Mobility along cross-border corridors, by using the CEF2 Digital programme and by promoting deployment under CEF2, DEP and InvestEU.
- Foster a sustainable and diverse supply and value chain in line with the 5G Cybersecurity toolbox.
- Strengthen the positioning of the Union's industry in the global smart network and services value chain by creating a critical mass of public and private actors, in particular by increasing the contribution from software and Internet of Things actors, leveraging national initiatives and supporting the emergence of new actors.
- Support alignment with ethical and security requirements, including them in the Strategic Research and Innovation Agendas and providing input to the Union's legislative process as appropriate.



Legal Basis

Article 187 of the [Treaty on the Functioning of the European Union](#) and [Council Regulation \(EU\) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe and repealing Regulations \(EC\) No 219/2007, \(EU\) No 557/2014, \(EU\) No 558/2014, \(EU\) No 559/2014, \(EU\) No 560/2014, \(EU\) No 561/2014 and \(EU\) No 642/2014](#) (the "Single Basic Act" or "SBA") .

**Executive
Director**

Erzsébet FITORI



Governing Board

Representatives of the 6G-IA

- **Colin Willcock** – Nokia (Vice Chair of the SNS JU Governing Board until December 2025, and Chair from December 2025)
- **David Lund** - Public Safety Communication Europe (PSCE), replaced by **Javier García Rodrigo**, Telefónica, from March 2026
- **David Kennedy** - Eurescom GmbH
- **Afif Osseiran** - Ericsson
- **Carles Antón-Haro** - Centre Tecnològic de Telecomunicacions de Catalunya (CTTC)

Representatives of the European Commission

- **Pearse O'Donohue**, Director DG CNECT.E Future Networks, replaced by **Thibaut Kleiner**, Director DG CNECT.E Future Networks, as of April 2025 (Chair of the SNS JU Governing Board until December, and Vice Chair from December 2025)
- **Agustín Díaz-Pines**, Deputy Head of Unit, DG CNECT E.1 – “Future Connectivity Systems”, replaced by **Miguel González-Sancho**, Head of Unit, DG CNECT E.1 – “Future Connectivity Systems”, from April 2025.



Other bodies

- [States Representatives Group](#)
- [Stakeholders Group](#)



Staff number in 2025

16 staff members, including the Executive Director, at the end of December 2025 (1 vacant position according to the Staff establishment Plan of 17 FTEs)



Total Budget 2025¹

Commitment appropriations: EUR 136 596 258²

Payment appropriations: EUR 126 348 905



Budget implementation/ execution

Commitment appropriations: total consumption: amount (in Euro-EUR and percentage spent on total)

Title 1 – EUR 2 417 596 (2% spent on total)

Title 2 – EUR 1 331 993 (1% spent on total)

Title 3 – EUR 128 699 203 (97% spent on total)

1. Total budget includes operational budget (used for funding selected projects) & administrative (used for funding Programme Office activities).
2. Voted commitment appropriations were EUR 132 596 258, subsequently amended to include the UK contribution for EUR 4 000 000.

Payment appropriations: amount (in Euro and percentage spent on total)

Title 1 – EUR 2 372 376 (11% spent on total)

Title 2 – EUR 968 631 (4% spent on total)

Title 3 – EUR 19 452 778 (85% spent on total)



Grants

79 grants signed as of 31 December 2025, for a total value of EUR 499 million³.

The grant number 16 under Call 3 was signed in 2025.



Strategic Research & Innovation Agenda

The Governing Board adopted the SNS JU's Strategic Research and Innovation Agenda (SRIA) 2021-2027 on 15 December 2021 and amended it on 13 November 2023 (GB Decision 20-2023) following a public consultation in November 2022.

[\(sns-ju-sria-2021-2027-second-edition-2023.pdf\)](#)



Call implementation

Number of calls launched in 2025: 2 (Call 4 and Call 5)

Number of proposals submitted: 175

Number of eligible proposals: 169

Number of proposals selected: 20

Number of global project portfolio (cumulative): 79 projects

(total of 99 projects expected with Call 4 and 5 projects to be signed in 2026)



Participation, including SMEs

Total number of beneficiaries in funded projects, including the 79 projects from Call 1, 2 and 3 as well as the 20 selected projects from Calls 4 & 5: 1553 (581 unique beneficiaries), of which:

26% of SMEs and 24% of EU funding received by those SMEs,

60% of Private for-profit entities (excluding Higher or Secondary Education Establishments) and 52% of EU funding received by those companies,

40.6% of non 6G-Industry Association (6G-IA) members' entities (unique beneficiaries),

29.4% of newcomer entities (60 out of 204 unique beneficiaries) in selected projects from Calls 4 & 5.

3. In addition, the SNS JU participates in a project managed by Europe's Rail Joint Undertaking whose grant was signed in 2024.

Foreword

As we reflect on the achievements of 2025, this has been a defining year for the Smart Networks and Services Joint Undertaking (SNS JU). Over the past twelve months, we have continued to transform Europe's ambition for next-generation connectivity into concrete, measurable progress, delivering on the mandate entrusted to us and reaffirming our role as a central pillar of Europe's digital future.

In today's geopolitical and economic context, the strategic importance of programmes such as the SNS JU has never been greater. Digital infrastructures are no longer simply enablers of innovation, they are the backbone of modern economies, underpinning critical sectors from industry and healthcare to transport and energy. As the digital economy continues to grow in scale and significance, Europe's ability to design, develop, and deploy its own advanced connectivity solutions becomes a matter of both competitiveness and sovereignty. In this regard, the SNS JU contributes directly to strengthening Europe's technological autonomy, while enhancing the resilience of its digital infrastructure in an increasingly complex and interdependent global environment.

From the outset, the SNS JU was designed not only as a funding instrument, but as a strategic platform to bring together industry, academia, and public stakeholders around a shared vision for 6G. In 2025, this vision has continued to take shape. Our growing portfolio, comprising 79 active projects at the end of year, demonstrates the scale of Europe's commitment and the strength of its collaborative ecosystem. The successful launch of the Call 3 projects marked an important step forward, reinforcing our capacity to coordinate complex research and innovation efforts across the full value chain.

As I have emphasised in several of our public engagements this year, Europe has a unique opportunity to shape the future of connectivity, not only by developing technologies, but by defining how these technologies serve society. This principle continues to guide our work. Through the SNS JU, we are ensuring that Europe's approach to 6G is not only technologically advanced, but also aligned with our values: openness, sustainability, security, and inclusiveness.

At the same time, 2025 has been a year of continuity and forward planning. With the launch of Calls 4 and 5 under the 2025 Work Programme, we have further strengthened the pipeline of innovation. These calls reflect a deliberate progression, from foundational research to system integration and real-world validation. As I have noted in our discussions at major industry fora, bridging the gap between research and deployment is essential if Europe is to remain competitive in the global digital landscape. Our focus on trials and pilots, particularly in key vertical sectors, is a direct response to this challenge.

Equally important has been our commitment to strong governance and effective programme management. The evaluation processes for Calls 4 and 5 have been conducted with rigour and transparency, ensuring that public investment is directed towards excellence and impact. This disciplined approach is fundamental

to maintaining the trust of our stakeholders and delivering results that meet the expectations of both policymakers and industry partners.

Beyond our core activities, the SNS JU has continued to play a leading role in shaping the broader European and global dialogue on future connectivity. Our presence at events such as Mobile World Congress, the EuCNC & 6G Summit and Techritory has highlighted Europe's strengths and fostered international collaboration. As I have often underlined, no single actor can build the networks of the future alone, collaboration is not an option, but a necessity. The SNS JU exists precisely to enable this collaboration at scale.

Looking ahead, the foundations we have built in 2025 position us strongly for the next phase of our journey. The onboarding of new projects from Calls 4 and 5 will further expand our portfolio, while ongoing work across all streams will continue to generate knowledge, innovation, and impact. At the same time, we remain focused on ensuring that our efforts contribute meaningfully to Europe's broader objectives, including digital sovereignty, industrial competitiveness, and the green transition.

I would like to express my sincere gratitude to all our partners: the members of the Governing Board, participating states, industry representatives, researchers, and the wider community, for their continued commitment and collaboration. The achievements of the SNS JU are a collective success, built on trust, shared purpose, and a common vision for Europe's digital future.

In closing, I remain confident that the SNS JU will continue to deliver on its mission. Together, we are not only advancing technology, but we are also shaping the future of connectivity in Europe and beyond.



Erzsébet Fitori

Executive Director

Smart Networks and Services
Joint Undertaking

Executive Summary

Delivering on Europe's Strategic Connectivity Ambition

In 2025, the Smart Networks and Services Joint Undertaking (SNS JU) consolidated its role as the European Union's central instrument for advancing next-generation connectivity. Operating at the intersection of policy, research, and industrial innovation, the SNS JU continued to deliver on the mandate entrusted to it to secure Europe's leadership in 6G development while maximising the impact of 5G deployment across strategic sectors of the economy.

Throughout the year, the SNS JU translated strategic objectives into tangible outcomes. It ensured continuity between long-term European ambitions for 6G and the operational realities of programme delivery, maintaining a clear trajectory from foundational research to system integration, trials, and future deployment pathways. This approach reflects a mature programme architecture, one that not only funds innovation, but actively structures it across successive phases to build cumulative capability at European level.

SNS JU's activities in 2025 demonstrate a strong alignment between policy direction and implementation. The programme has continued to evolve into a coherent European platform where public and private stakeholders collaborate to address technological challenges, shape global standards, and reinforce Europe's digital sovereignty.

SNS JU activities also contributed to reinforcing cybersecurity resilience and trusted European digital infrastructures, in line with broader Union objectives regarding secure and resilient strategic technologies.

Supporting Europe's 5G Deployment and Digital Transformation

Alongside its mission to strengthen Europe's leadership in 6G research and innovation, the SNS JU continued in 2025 to deliver on its second core mission: boosting the deployment and uptake of advanced 5G technologies across Europe.

Through its Trials and Pilots activities (Stream D), the SNS JU supports the validation and adoption of advanced 5G and emerging 6G solutions in real operational environments, helping to bridge the gap between research and market deployment. These activities focus on key vertical sectors including industry and manufacturing, transport and logistics, healthcare, media, and emergency and safety services, where advanced connectivity can generate significant economic and societal benefits.

In 2025, the SNS JU launched a dedicated €24 million call for advanced 5G/6G trials and pilots, designed to address concrete business challenges faced by vertical industries and to accelerate the development of viable deployment and business models. Building on earlier Trials and Pilots projects already active within the SNS portfolio, these initiatives validate advanced connectivity technologies, assess their impact in real-world conditions, and provide a structured feedback loop between technology developers and end users.

Beyond funding activities, the SNS JU continued to foster alignment between European, national and sectoral initiatives supporting advanced connectivity deployment, contributing to the broader objective of creating digital lead markets and enabling Europe's digital and green transitions. The publication of dedicated Trials and Pilots brochures and the growing portfolio of vertical experimentation projects further demonstrate the programme's commitment to transforming research results into deployable solutions that create tangible value for European citizens and industries.

Scaling the European 6G Innovation Portfolio: Launch of Call 3 Projects

A major milestone in 2025 was the successful operational launch of the projects selected under Call 3. Starting in January 2025, 16 new projects entered the SNS JU portfolio, marking a significant expansion of the programme's scope and ambition.

With the addition of Call 3 projects, the SNS JU portfolio reached 79 active projects, building on the 35 projects from Call 1 (operational since January 2023) and the 28 projects from Call 2 (operational since January 2024). The Call 3 projects cover the full breadth of 6G innovation, including:



Stream B

System architecture, wireless communication technologies, communication infrastructure, reliable services and smart security, international collaborations (EU-Japan; EU-Republic of Korea), sustainability lighthouse, and reliable AI for 6G.



Stream C

SNS Microelectronics Lighthouse, addressing Europe's competitiveness in the semiconductor and photonics domain.



Stream D

Large-scale trials and pilots with vertical sectors.

This progressive scaling is a key indicator of programme delivery: it reflects the SNS JU's capacity to sustain momentum across funding cycles while ensuring continuity of research priorities and technological development.

The Call 3 projects play a critical role in advancing Europe's 6G roadmap. They address key domains such as system architecture, advanced wireless technologies, AI-native networks, and sustainability.

Importantly, they also contribute to strengthening collaboration across the European research and innovation ecosystem, bringing together industry leaders, SMEs, research centres, and academia.

To introduce these new projects to the wider ecosystem, the SNS JU organised dedicated introduction webinars in February 2025, bringing together the research teams alongside existing project communities. A Brokerage Event on 29 January 2025 further facilitated cross-portfolio collaboration and partnership formation. These activities underscore the SNS JU's commitment to not simply funding projects in isolation but actively structuring them as part of a coherent and cumulative European programme.

The SNS JU Journal 2025 provides a comprehensive overview of all 79 projects and highlights the breadth and depth of the portfolio: collectively backed by over EUR 500 million in EU funding, these projects are pivotal to Europe's goal of becoming a global leader in 6G technology, while also advancing the rollout of 5G. With nearly 80% of the SNS JU projects embedding Artificial Intelligence and Machine Learning as core components, the portfolio reflects the central role of AI in intelligent, autonomous 6G network management.

The year 2025 signals the transition of the SNS JU into a fully operational programme at scale, capable of coordinating complex, interdependent activities and delivering results in line with its strategic objectives.

Advancing the Programme Pipeline: Calls 4 and 5

In parallel with the implementation of ongoing projects, the SNS JU continued to advance its funding pipeline through the preparation, launch, and evaluation of new calls under the 2025 Work Programme.

Call 4, launched in April 2025 with a budget of EUR 104 million, focused on Streams B and C, supporting both advanced research and system-level innovation in Beyond 5G and 6G technologies. This call was designed to deepen Europe's technological capabilities while reinforcing the integration of different layers of the network stack.

Call 5, launched shortly thereafter, targeted Stream D with EUR24 million dedicated to trials and pilots. Its objective is to accelerate the validation of technologies in real-world environments, particularly in key vertical sectors such as industry, transport, healthcare, media, and public safety. By linking technological development with application-driven experimentation, Call 5 strengthens the pathway from research to deployment.

The SNS JU ensured strong stakeholder engagement throughout this process, notably through the organisation of an Info Day and brokerage activities. These initiatives contributed to high-quality proposal submissions and broadened participation across the European ecosystem.

From a governance perspective, 2025 also marked an important phase in the evaluation cycle. The evaluation of Call 4 proposals was integrated into the programme's annual management framework, with results scheduled for approval by the Governing Board within the year. Meanwhile, both Calls 4 and 5 successfully closed in September 2025, setting the stage for the next wave of project onboarding.

This structured and timely progression from call launch to evaluation and implementation demonstrates the SNS JU's ability to manage a complex funding programme with rigour and predictability, key elements for maintaining trust among stakeholders and ensuring effective delivery of public investment.

Reinforcing Europe's Position Through Stakeholder Engagement and International Visibility

Beyond its core funding activities, the SNS JU continued to strengthen its role as a convening platform for Europe's connectivity ecosystem. In 2025, the programme maintained a strong presence at major international and European events, including Mobile World Congress the EuCNC & 6G Summit and Techritory.

These engagements provided opportunities to showcase European achievements, promote collaboration, and position the SNS JU as a key driver of global discussions on future connectivity. They also reinforced the importance of sustained investment, standardisation efforts, and cross-sector partnerships in ensuring Europe's competitiveness.

SNS JU's communication activities further supported this objective. Through regular updates on its website and LinkedIn channels, the programme highlighted project achievements, funding opportunities, and strategic developments. Publications such as the SNS Journal 2025 and thematic brochures on trials and pilots contributed to increasing transparency and visibility, while helping stakeholders navigate an increasingly complex portfolio.

These efforts are essential to ensuring that the SNS JU is not only delivering results, but also effectively communicating its impact, both within Europe and globally.

Strengthening Programme Impact

As the SNS JU portfolio grows, ensuring impact and coherence across projects becomes ever more important. In 2025, the SNS JU introduced significant new tools and processes to demonstrate, measure, and communicate the programme's outcomes.

In a landmark first for the programme, the SNS JU launched the **Key Achievements initiative**. From 188 Key Achievements submitted by 63 projects under Calls 1 and 2, a rigorous evaluation process identified the **Top 10 SNS Key Achievements**⁴, representing the most significant, innovative, and influential results across five categories: significant technology development, experimentation, vertical solutions and trials, standards contributions, and sustainability solutions. These achievements were showcased in a dedicated public webinar on 3 December 2025 and made accessible via a new online **SNS Key Achievements Repository**⁵.

4. Top 10 SNS Key Achievements 2025: <https://smart-networks.europa.eu/sns-ju-unveils-its-2025-top-10-key-achievements-leading-europes-6g-innovation/>

5. SNS Key Achievements Repository: <https://smart-networks.europa.eu/sns-ju-projects-key-achievements-2025/>



Over 1,000

contributions to international standardisation processes, including contributions to 3GPP (with Rel-20 study items initiated in 2025) and ITU-R.



98

patents registered by SNS JU-funded projects.



Nearly 80%

of projects integrate AI and Machine Learning as core components.



1,244

participating entities across the European research and innovation ecosystem, spanning major industry players (including Nokia and Ericsson), SMEs, research and technology organisations, and universities.

Through these activities, the SNS JU continued to strengthen Europe's capacity to shape future global connectivity standards and reinforce its technological leadership in next-generation communication systems.

Portfolio coherence was further reinforced through project clustering, inter-project working groups, cross-portfolio collaboration mechanisms, and dedicated thematic webinars, including events on 6G trustworthiness, AI-native networks, and vertical sector applications.

The SNS Tracker⁶, covering standards contributions, vertical engagement, and KPI radar, provides real-time visibility into the programme's cumulative performance, reinforcing transparency and accountability to the Governing Board and the wider stakeholder community.

At the same time, the SNS JU maintained a strong focus on linking research outcomes to broader policy objectives, including digital sovereignty, sustainability, and industrial competitiveness. By aligning technical work with policy priorities, the programme ensures that its outputs are relevant not only for the research community, but also for decision-makers and end-users.

6. The SNS JU Tracker: <https://sns-trackers.sns-ju.eu/>

Delivering on our Mandate

The activities carried out in 2025 confirm that the SNS JU is delivering effectively on the mandate provided by its Governing Board. The programme has managed a large and growing portfolio of 79 active projects, launched two new calls with an initial budget envelope of approximately EUR 128 million, conducted rigorous evaluations leading to the selection of 20 projects representing an estimated EU contribution of EUR 116 million, engaged a broad ecosystem of stakeholders, and produced measurable, transparent results, all while maintaining clear strategic direction..

As the programme now enters its next phase, the results achieved in 2025 provide a strong and compelling foundation:

- 1.** The 20 newly selected projects from Calls 4 and 5 (EUR 116 million) will begin operations, expanding the portfolio to 100 projects and cumulative EU funding to over EUR 600 million.
- 2.** The Work Programme 2026 has been published, allocating EUR 22 million for five additional projects to sustain momentum into Phase 3.
- 3.** Call 6 evaluation and the preparation of a landmark 2027 flagship call, mobilising over EUR 230 million to demonstrate system-level 6G integration and pre-commercial validation, are on the horizon.

The SNS JU is not only implementing a funding programme but also shaping Europe's future connectivity landscape. The results of 2025 reinforce the confidence of stakeholders, industry, policymakers, and citizens that the investment Europe is making in 6G will secure its digital sovereignty, industrial leadership, and competitiveness for the decade ahead.



1.

Implementation of the Annual Work Programme 2025

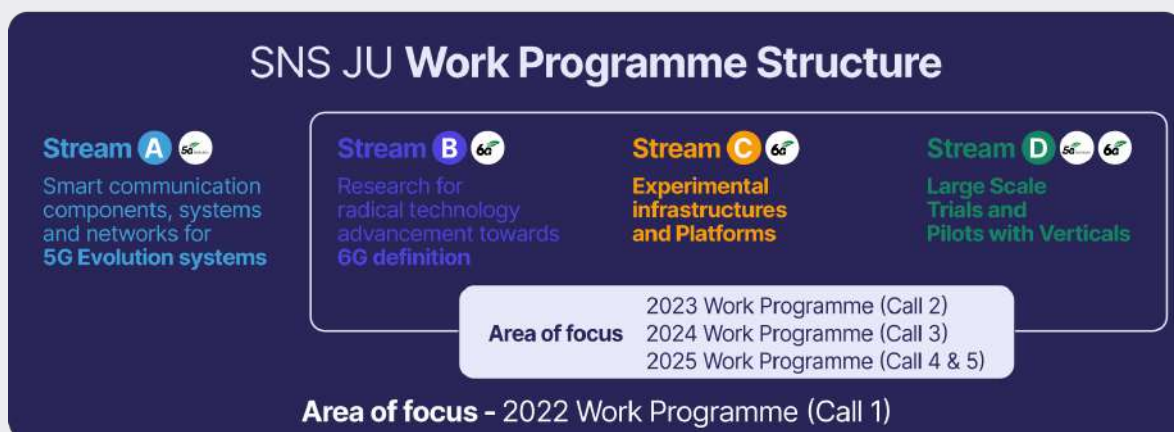
The Smart Networks and Services Joint Undertaking (the SNS JU) is a Public-Private Partnership established under Council Regulation (EU) 2021/2085 (Single Basic Act)⁷.

The main goal of the SNS JU is to define and implement the research and innovation roadmap and Work Programme that will enable Europe to lead in the creation of the next generation of smart network technologies and services. These will be designed and implemented in such a way that European values like security and privacy are safeguarded, and European technological sovereignty is further strengthened.

These objectives can be achieved by the successful implementation of the Annual Work Programme that intends to mobilise European stakeholders, establish cross-sector collaboration, and ensure that Europe is positioned as the centre of gravity for international collaboration on 6G technologies.

The focus of 6G R&I in the Work Programme 2025 (WP 2025) was to complement R&I on enabling technologies / technical enablers and Proof of Concepts (PoCs) with more system-oriented R&I and dedicated prototyping and experimentation, whilst considering long-term R&I on disruptive concepts. The SNS JU R&I Work Programme 2025⁸ included, therefore, three complementary streams:

- ▶ **Stream B:** it covered research for revolutionary and evolutionary technology advancements, in preparation for 6G and revolutionary and evolutionary advancements including IoT, devices and software. This Stream targeted both low-medium TRLs with the objective of delivering innovative solutions towards real-life networks in a short to medium-term period and also low TRL targeting forthcoming 6G / disruptive technologies in a long-term period.
- ▶ **Stream C:** it focused on SNS Enablers and Proof of Concepts (PoCs) used to further develop and consolidate experimental infrastructures, in support of the various phases of the SNS JU.
- ▶ **Stream D:** it targeted SNS Trials and Pilots with Verticals, including the required infrastructure. The aim was to explore and demonstrate technologies and advanced applications and services for the vertical domains.



7. Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe and repealing Regulations (EC) No 219/2007, (EU) No 557/2014, (EU) No 558/2014, (EU) No 559/2014, (EU) No 560/2014, (EU) No 561/2014 and (EU) No 642/2014 (the "Single Basic Act" or "SBA") <https://eur-lex.europa.eu/eli/reg/2021/2085/oj/eng>

8. <https://smart-networks.europa.eu/wp-content/uploads/2025/05/sns-ju-ri-wp-2025.pdf>

Key objectives 2025, associated risks and corrective measures

Overview of objectives and progress

In 2025, the SNS JU launched the fourth and fifth Horizon Europe calls for proposals (HORIZON-JU-SNS-2025-01 and HORIZON-JU-SNS-2025-02), under the covering the three complementary streams of the 2025 Work Programme (WP 2025).

HORIZON-JU-SNS-2025-01 included Topics under the following streams:

- ▶ **Stream B.** This Stream contained Topics dedicated to disruptive technologies for 6G (Advanced Architectures Systems and Technologies, Advanced IoT and Device Technologies), wireless communication and signal processing, communication infrastructure technologies and devices (composed of two core domains, Non-Terrestrial Networks (NTN) and optical networks/Photonics), and reliable services and smart security. A dedicated Topic on the design, development and testing of a Front-End Module (FEM) was also included.
- ▶ **Stream C.** Stream C developments in WP 2025 had a particular focus on 6G Telco Cloud and service platform, using Open-Source technologies and addressing longer term parts of the 3C Networks orientations.

HORIZON-JU-SNS-2025-02 included a Topic under the following stream:

- ▶ **Stream D.** This Topic targeted projects, which were expected to prioritize use cases for a limited number of verticals (considering the vertical priorities for Industry/Manufacturing, Media, Transportation/Logistics, Emergency and Safety Services and Health) to ensure that they engage key vertical stakeholders and provide solutions of high monetization prospects. SNS R&I WP 2025 Stream D projects were expected to rely on SNS Phase 1, and early Phase 2 technologies and especially the infrastructures being developed from Stream C projects. The Stream D projects were expected to use results from other Horizon Europe calls (e.g., Cluster 4) or results on 6G from national initiatives. From the societal point of view, Stream D highlighted sustainability evaluations across verticals, validating exploitation of 6G across different vertical sectors.

In total, the SNS JU selected 20 projects, for which the Grant Agreement preparation started in January 2026.

The estimated EU contribution foreseen under the two 2025 calls amounted to approximately EUR 128 million. Following the evaluation process, 20 projects were selected for funding, representing an estimated EU contribution of EUR 116 million.

Key risks identified in 2025 and mitigation measures

Building on previous years and the SNS JU risk register, several key operational risks were identified in 2025, including three risks classified as critical. These risks were monitored throughout the year and mitigation measures were implemented where appropriate.

A first risk relates to stakeholder mobilisation and alignment with programme objectives. There is a risk of insufficient participation or misalignment of key stakeholders, notably vertical sectors, cloud and edge actors, and microelectronics players, with the SNS JU strategic direction. While this risk has been partially mitigated, it remains relevant due to the increasing complexity of the 6G ecosystem. To address this, the SNS JU organised targeted information days and brokerage events, reinforced cooperation with Member States, and worked closely with the 6G Smart Networks and Services Industry Association (6G-IA), the private-side member of the SNS JU. This collaboration included the organisation of workshops and stakeholder engagement activities involving vertical industries and technology communities, helping to strengthen alignment between research priorities, industrial needs and market expectations. The SNS JU also continued to improve guidance materials, including FAQs and supporting documentation.

A second risk concerns increased complexity in the preparation and implementation of calls, driven by coordination requirements and evolving regulatory constraints. In particular, the implementation of Article 22(5) of the Horizon

Europe Regulation⁹ introduced additional procedural steps and dependencies on decisions taken at Commission level, including the definition of the scope of restrictions and the identification of eligible third countries. This context contributed to structuring the WP 2025 into two separate calls, thereby increasing the overall administrative workload related to call publication, evaluation and grant preparation.

Furthermore, the application of Article 22(5) entails additional validation steps, notably Ownership Control Assessments and, where relevant, the preparation and assessment of guarantees, involving the SNS JU, Commission services (including REA/CVS¹⁰) and national authorities. These elements increase the complexity of grant preparation processes and require enhanced coordination across multiple actors.

The implementation of these measures also reflects the broader Union policy context regarding the protection of strategic technologies, digital infrastructures and cybersecurity. In this regard, increasing emphasis at Union level has been placed on safeguarding Europe's strategic autonomy, resilience and technological sovereignty in critical digital domains, including future communication networks and services¹¹.

In addition, the operational sequencing of the 2025 calls, including the alignment of submission deadlines, resulted in a concentration of evaluation and grant preparation activities. As a consequence, the related grant agreement preparation phase, and its impact on Time-to-Grant indicators, will materialise in 2026.

While this risk was managed in 2025, it remains structural due to its dependence on external regulatory decisions and multi-level validation processes. Mitigation measures included strengthened coordination with the European Commission and stakeholders, anticipation of regulatory constraints in planning, and reinforced internal monitoring of grant preparation processes.

The implementation experience gained in 2025 also provided important operational lessons regarding the coordination of restricted calls, ownership control assessments and grant preparation workflows, which will support the progressive optimisation of future procedures and planning activities.

In parallel, the SNS JU continued to reinforce a preventive and risk-based control approach through enhanced monitoring, harmonised procedures and preparatory alignment with common Joint Undertaking control methodologies adopted at the end of 2025. A third risk relates to programme complexity and integration challenges. Ensuring coherence across Streams B, C and D and achieving effective integration of technologies across domains such as telecommunications, microelectronics and cloud or edge computing remains challenging. This risk is becoming more significant as projects progress towards higher Technology Readiness Levels and system-level validation. To mitigate this risk, the SNS JU promoted cross-project collaboration, supported clustering activities and relied on coordination and support actions to ensure alignment and knowledge sharing.

A fourth risk concerns delivery capacity in the context of increasing workload. The growing size and complexity of the project portfolio place pressure on administrative and operational resources. This risk remains persistent. Mitigation measures included the continued use of interim staff, optimisation of internal processes, prioritisation of activities and increased reliance on digital tools and standardised procedures.



9. Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation and laying down its rules for participation and dissemination, OJ L 170, 12.5.2021, pp. 1–68.

10. The REA Central Validation Service (CVS) conducts the Ownership and Control Assessment (OCA) to verify if EU/EEA funding applicants meet eligibility criteria restricting foreign controlling ownership in restricted calls (e.g., Horizon Europe, European Defence Fund). The REA CVS performs this assessment on behalf of the operational agencies managing the specific grants or tenders.

11. See European Parliament resolution of 29 April 2026 on discharge in respect of the implementation of the budget of the Joint Undertakings for the financial year 2024, in particular observations related to strategic autonomy, cybersecurity and protection of critical technologies: [https://oeil.europarl.europa.eu/oeil/en/procedure-file?reference=2025/2157\(DEC\)#gateway](https://oeil.europarl.europa.eu/oeil/en/procedure-file?reference=2025/2157(DEC)#gateway)

Research & Innovation activities/achievements

In 2025, the SNS Research & Innovation activities focused on:

1 **The implementation of the fourth and fifth SNS call of proposals (HORIZON-JU-SNS-2025-01 and HORIZON-JU-SNS-2025-02) and the actions for the selection of the retained proposals by the SNS JU Governing Board.** The 2025 calls for proposal were based on the SNS R&I Work Programme 2025 and its 2 amendments, that were adopted by the Governing Board on 11 April 2025 and 16 May 2025. The SNS JU selected 20 R&I projects in 2025, with a Grant Agreement preparation start date in January 2026 and expected start dates around summer 2026. At its meeting of 18 December 2025, the Governing Board approved the ranked lists and the selection of actions for funding for the SNS JU Calls 2025 except for topic HORIZON-JU-SNS-2025-01-STREAM-B-05, in view of recent policy and technology developments with high relevance to the objectives and scope of this topic, which were not reflected in the SNS Work Programme 2025. These developments notably included recent spectrum policy orientations (RSPG recommendation on the upper 6 GHz band), the need to support the EU Apply AI strategy and edge AI capacities and to establish a strong synergy with dedicated semiconductor and pilot-line initiatives under Chips JU Work Programme 2026.

2 **The management, control and monitoring of 79 projects coming from the first, second and third SNS calls of proposals (HORIZON-JU-SNS-2022, HORIZON-JU-SNS-2023 and HORIZON-JU-SNS-2024).**

In 2025, the SNS JU ensured the effective management, control and monitoring of 79 ongoing projects stemming from the first three SNS Calls for Proposals (HORIZON-JU-SNS-2022, HORIZON-JU-SNS-2023 and HORIZON-JU-SNS-2024). The 35 Call 1 projects progressed into their third year of implementation, while the 28 Call 2 projects advanced in their second year. In parallel, the 16 Call 3 projects, selected in 2024, successfully launched their activities in early 2025. It has to be noted that most of the 35 projects under Call 1 have ended their activities in 2025 (14 exceptional project extensions have been granted) and a number of final reviews and payments is planned within 2026.

Across all calls, projects continue to develop key building blocks for 6G smart communication components, systems and networks, following both an evolutionary path building on 5G Advanced technologies and a more disruptive path exploring novel technological enablers.

These projects are also delivering significant progress in technology validation, notably through the development and interconnection of SNS experimental infrastructures, including federated and large-scale platforms. A number of projects are advancing large-scale trials and pilots across a wide range of vertical sectors, including media, manufacturing, energy, automotive, eHealth, agriculture, smart cities and public services. In particular, Call 2 and Call 3 projects further strengthened efforts in European microelectronics, developing advanced components and systems for next-generation communication infrastructures, as well as in key areas such as Artificial Intelligence, cloud-native architectures and software-based networks.

The Call 1 Coordination and Support Action (CSA) projects SNS OPS and SNS ICE were successfully completed in 2025. Their activities have been continued under the Call 3 CSA project SNS CO-OP, which further strengthened the operational coordination of the SNS JU programme. In particular, SNS CO-OP ensured the continuity of structured dialogues with EU initiatives, including related partnerships and national programmes, as well as with peer partnerships such as HPC, KDT, AI, Data and Robotics, Photonics Europe and CCAM, and relevant industry associations (e.g. 5GAA, 5G-ACIA). In parallel, it reinforced international cooperation by promoting SNS JU results and achievements at a global level and contributing to alignment towards the development of global standards. These activities further contributed to reinforcing European value chains across connectivity, cloud-edge infrastructures, microelectronics, artificial intelligence and vertical applications. The Call 2 CSA 6G4SOCIETY entered its second year of implementation in 2025, continuing to provide concrete support for the integration of societal, ethical and sustainability considerations into 6G research and innovation activities, ensuring alignment with European values throughout the SNS JU portfolio.

3

The preparation of the SNS R&I Work Programme for 2026 and the 2026 SNS calls for proposals (HORIZON-JU-SNS-2026).

On 18 December 2025, the Governing Board adopted the SNS R&I Work Programme for 2026 (R&I WP 2026) with an earmarked public funding of EUR22 million. The R&I WP 2026 acts as a bridge between the previous SNS R&I Work Programmes and the final SNS Work Programme in 2027, facilitating a smooth transition from the second to the third and final phase of the SNS JU Programme. Preparatory work also started in 2025 for a possible amendment of the R&I WP 2026, which could include a Call addressing the critical need for European-designed microelectronics in Front End Module (FEM), with an indicative earmarking of EUR 14 million of EU funding for this key building block of advanced 6G radio systems, aiming at reducing dependency on non-European semiconductor technologies that underpin next-generation networks, subject to the relevant governance procedures and formal adoption. This amendment was envisaged following the cancellation of topic HORIZON-JU-SNS-2026-STREAM-B-05, enabling the reallocation of resources towards a strategic priority in support of European technological sovereignty in 6G microelectronics. These activities contribute more broadly to strengthening European capabilities in critical components and future communication infrastructure value chains.

The SNS JU R&I WP 2026 is designed to support (i) the completion of the SNS JU mandate, (ii) the early shaping of the Horizon Europe 2028–2034 programme in advanced connectivity, and (iii) the strengthening of Europe's global 6G standing at a decisive moment in international standardisation. By building on the foundations laid in 2025, (particularly in device integration, AI, experimentation, vertical engagement, international cooperation and microelectronics) the 2026 R&I Work Programme provides both continuity and strategic foresight.

The SNS R&I WP 2026 includes the following three streams:

Stream B: it covers research for revolutionary and evolutionary technology advancements. In preparation for 6G and more specifically in the AI domain, the SNS JU R&I WP 2026 Stream B targets a Topic with high-level TRL leveraging also previous SNS programmatic results with the objective of delivering innovative solutions towards real-life networks in a short-term period. The target is to further explore the role of AI in network platforms, as a tool for 6G network optimisation and by ensuring the availability, curation and validation of high-quality real and synthetic data sets needed to train AI models in AI-native 6G systems. Development of data sets for AI solutions for 6G services and applications for verticals (AlaaS) are also included. A Topic on the design, development and testing of a Front-End Module (FEM) is also included in the amended R&I WP 2026.

Stream C: it focuses on further development and consolidation of experimental infrastructure(s), in support of the various phases of the SNS JU. Stream C developments in WP 2026 have a particular focus on the availability of an evolvable experimental infrastructure to engage the 6G community to run experimentations, by continuing to offer EU-wide technology experimentation platforms to innovators (SMEs, start-ups, researchers, etc.) that can test and incorporate candidate 6G technologies in an E2E way for their further validation.

Stream CSA: The first CSA targets an operational and output-optimisation CSA to facilitate the activities of the European SNS JU community and undertake various activities to maximise the impact of the SNS JU programme. Furthermore, the second CSA will support EU deep bilateral cooperation with India, towards identification of potential synergies and alignment of European and Indian standardisation agendas. Lastly, a third CSA will continue the previous SNS developments on massive IoT and device integration, targeting a shared European roadmap and a strategy for a renewed European industrial capability around simplified, lower-cost 6G-enabled devices, and ultimately rebuild European industrial capabilities in this critical sector.

SNS JU SRIA update:

According to Article 17(2)(j) of the Single Basic Act establishing the Joint Undertakings under Horizon Europe, the Governing Board (GB) adopts the Strategic Research and Innovation Agenda (SRIA) at the beginning of the initiative and amends it throughout the duration of Horizon Europe, where necessary. The SRIA identifies the partnership's targeted impact, foreseen portfolio of activities, measurable expected outcomes, resources, deliverables, and milestones within a defined timeframe. It shall also identify the other European partnerships with which the SNS JU shall establish a formal and regular collaboration and the possibilities for synergies between the SNS JU's actions and national or regional initiatives and policies based on information received by the participating states or the States' Representatives Group (SRG) as well as synergies with other Union programmes.

The initial SNS JU SRIA was adopted by the SNS GB on 15 December 2021, and an updated version, developed in close collaboration between DG CNECT, the SNS JU and the 6G-IA, was adopted on 13 November 2023. During 2024, the SNS OPS CSA supported the development of the updated NetworkEurope SRIA. In 2025, this work was further consolidated with the publication in 2025 of the NetworkEurope SRIA 2024 **Technical Annex**, providing an extensive and up-to-date technical basis for European R&I priorities in next-generation communication systems. The SRIA update process benefited from inputs and results from ongoing SNS JU projects, as well as key research priorities identified during the preparation of the SNS R&I Work Programme 2025 and dedicated thematic workshops.

In parallel, NetworkEurope launched preparatory activities for the next SRIA evolution, including stakeholder engagement and strategic discussions contributing to the definition of future research priorities beyond 6G and in view of the next Framework Programme. These developments ensure continuity between current SNS JU activities and longer-term European research and innovation orientations. The updated NetworkEurope SRIA constitutes a key reference for the forthcoming revision of the SNS JU SRIA, ensuring alignment between the SNS JU strategic priorities, the evolving European research landscape, and global technological developments.

4

The SNS programme and its projects continued to make steady and substantial progress in 2025, delivering concrete impact, as regularly highlighted through SNS programme and project websites, as well as SNS news¹² & newsletters¹³. These achievements are reflected in the SNS programmatic KPIs (see Sections 1.7 and Annex). In 2025, the programme reached a peak level of activity, with 79 projects running in parallel, marking a transition towards higher maturity and increased focus on experimentation, trials and validation. The Steering Board (SB), Technology Board (TB), SNS Initiative Working Groups (WGs), and SB Task Forces (including Open Calls and Sustainability) operated at full capacity, enabling strong cross-project collaboration and alignment. This is further evidenced by numerous joint publications and White Papers, cross-project workshops, and active participation in major international events.

All 63 projects under Call 1 and Call 2 continued to actively contribute to SNS programmatic structures, while projects under Call 3 were fully operational in 2025, ensuring continuity and further strengthening the programme's collaborative dynamics. Overall, the SNS JU ecosystem demonstrated increasing maturity, with coordinated activities across governance bodies, technical domains and vertical engagement. More details on SB, TB and SNS Initiative WG achievements are provided in Section 1.5.

Furthermore, the Coordination and Support Action (CSA) activities evolved in 2025, building on the successful completion of SNS OPS and SNS ICE. Their functionalities were continued and further enhanced under the SNS CO-OP CSA, which maintained and developed key programme-level tools supporting monitoring, analysis and dissemination of SNS JU activities. In particular, the trackers suite¹⁴ — including the Vertical Engagement Tracker, the Standards Tracker and KPI monitoring tools — continued to provide a structured and comprehensive overview of SNS research activities, enabling the mapping of use cases, trials and pilots, standardisation contributions and programme-level KPIs.

The SNS JU trackers indicate significant progress in linking research activities to real-world validation and impact. The SNS JU portfolio addresses more than **450 use cases** and has generated over **2 000 standardisation contributions** since the start of the programme, alongside extensive dissemination activities, confirming its strong scientific and industrial relevance. In parallel, the **first SNS Trials and Pilots brochure**¹⁵ highlighted a set of high-impact demonstrations across key domains, including public protection and disaster relief, industrial cobots (Collaborative robots), emergency response, reconfigurable intelligent surfaces, robotic deconstruction, smart traffic management, next-generation gaming and training platforms, and energy-constrained critical infrastructure operations. These results illustrate the programme's increasing ability to translate research outcomes into tangible applications and societal value.

Area	Result
Use cases addressed by the SNS portfolio	450+
Replicable and reusable use cases for EDIHs	100
Standardisation contributions	2,000+
SNS Key Achievements	188 across 63 projects
Third-party projects funded through FSTP	250+
External stakeholders engaged through Open Calls	340+

In 2025, SNS JU projects reported a significant number of validated results since the programme start, with **188 Key Achievements**¹⁶ identified across the first **63 projects** (Calls 1 and 2), covering the full research and innovation spectrum. These achievements span advanced technology development, large-scale experimentation, vertical applications, contributions to standardisation, and sustainability-oriented solutions. Notable progress includes breakthroughs in energy-efficient and intelligent hardware (e.g. time-modulated arrays), high-capacity optical transport solutions, and battery-free IoT systems, as well as the deployment of innovative experimentation platforms such as Experimentation-as-a-Service toolkits and federated testbed infrastructures. Furthermore, key achievements demonstrate strong impact in vertical sectors through real-world trials (e.g. port operations, XR services), and significant contributions to standardisation, including architectural concepts feeding into 3GPP developments. Overall, these results illustrate the increasing maturity of the SNS JU portfolio and its effectiveness in bridging advanced research, industrial relevance and societal impact, paving the way towards future 6G deployment.

12. <https://smart-networks.europa.eu/news-overview>

13. <https://smart-networks.europa.eu/sns-newsflash-newsletters>

14. <https://sns-trackers.sns-ju.eu/>

15. https://smart-networks.europa.eu/wp-content/uploads/2025/06/sns_tps_brochure_may25_final.pdf

16. <https://smart-networks.europa.eu/sns-ju-projects-key-achievements-2025>

Illustrative examples of SNS Key Achievements:

Key Achievement Category	Illustrative Examples
Technology development	Time-modulated arrays, energy-efficient hardware, battery-free IoT systems
Experimentation platforms	Experimentation-as-a-Service toolkits, federated testbeds
Vertical applications and trials	Port operations, XR services, industrial and societal use cases
Standardisation contributions	Architectural concepts and technical contributions feeding into 3GPP
Sustainability solutions	Energy-efficient network and hardware solutions
External stakeholders engaged through Open Calls	340+

Within the SNS JU, Open Call projects¹⁷ implemented through the **Financial Support to Third Parties (FSTP)** mechanism continued to play a key role in expanding participation and accelerating innovation. These actions enabled external stakeholders, including SMEs, universities and research organisations, to contribute advanced solutions to the SNS ecosystem across key domains such as AI-driven networks, automation, security, joint communication and sensing, vertical applications and large-scale trials. Open Calls launched by Stream C and D projects further supported experimental validation through SNS testbeds and real-world environments. As reported in the Open Call results¹⁸ dedicated SNS JU page, by 2025, Open Calls demonstrated strong impact, with **more than 250 third-party projects funded** and over **340 external stakeholders engaged**, significantly expanding the SNS ecosystem and reinforcing collaboration across Europe. These activities contributed to strengthening the competitiveness and openness of European 6G research, ensuring broad participation and accelerating innovation across the value chain.

Overall, the 2025 R&I activities confirmed the SNS JU's central role in structuring Europe's 6G innovation ecosystem. The programme generated tangible technical results, strengthened links with vertical sectors, supported international cooperation and standardisation, and advanced Europe's strategic objectives for secure, sustainable, resilient and competitive next-generation connectivity.

1.3

Calls for proposals, grant information and other funded actions

Horizon-JU-SNS-2025-01 and Horizon-JU-SNS-2025-02

The fourth call for proposal (Horizon-JU-SNS-2025-01) was opened on 22 May 2025 and the fifth call for proposal (Horizon-JU-SNS-2025-02) was opened on 18 June 2025. Both calls closed on 18 September 2025.

The 2 calls included the following topics:

Horizon-JU-SNS-2025-01

- ▶ SNS-2025-STREAM-B-01-01/02
- ▶ SNS-2025-STREAM-B-02
- ▶ SNS-2025-STREAM-B-03-01/02
- ▶ SNS-2025-STREAM-B-04-01/02
- ▶ SNS-2025-STREAM-B-05
- ▶ SNS-2025-STREAM-C-01

Horizon-JU-SNS-2025-02

- ▶ SNS-2025-STREAM-D

The types of actions were HORIZON-JU-RIA and HORIZON-JU-IA.

17. <https://smart-networks.europa.eu/open-calls-from-sns-projects>

18. <https://smart-networks.europa.eu/sns-ju-projects-open-calls-results>

The number of proposals received in response to Horizon-JU-SNS-2025-01 call was 147. Out of the 147, two were found ineligible. The number of proposals received in response to Horizon-JU-SNS-2025-02 call was 28. Out of the 28, three were found ineligible and one was found inadmissible.

The scientific and ethics evaluations took place in October, November and December 2025. The evaluation results and the ranking list were presented to the Governing Board on 18 December 2025 and to the SRG on 7 February 2026. Following approval of the list of grants selected for funding by the Governing Board, the following projects were retained and will start in 2026:

Horizon-JU-SNS-2025-01

1 HORIZON-JU-SNS- Stream B - Research for revolutionary and evolutionary 6G Technology and system

The Stream targets a higher TRL range compared to the SNS JU Calls 2022 and 2023 and similar to the SNS Call 2024, aiming to bring more mature results, including PoCs, and to create a significant impact on standardisation activities and in addition low TRL to prepare 6G / disruptive technologies around and beyond 2030.

B-01-01: Advanced Architectures Systems and Technologies

1. **Agentic6G:** Autonomous multi-agent agentic AI system for 6G networks.

It will allow the MAS to autonomously compose, coordinate, and optimise B5G/6G and/or vertical business microservices across Edge-Cloud infrastructures, advancing the B5G cloud-native approach for autonomous service composition, deployment and management, by combining collective agentic AI's knowledge handling as an integral element through fast, efficient, and autonomous access to and application of knowledge with the support of Large Language Models, shared memories and tools.

2. **SIXG:** Serverless Infrastructure for neXt-Generation 6G networks.

Its vision is dual: enabling real-time serverless applications leveraging 6G features such as network slicing, NFV, cloud-network integration, and programmable data planes; and embedding serverless functions across user, control, and management planes to deliver agility, scalability, and responsiveness for mission-critical workloads.

3. **PROSPERO:** Programmable and Scalable Operations for Efficient, Resource-Aware Architecture in 6G.

It proposes a Uniform, Integrated and Simplified 6G architecture that unifies connectivity, intelligence and sustainability within a coherent framework. It is framed around three operator driven business cases: lowering Total Cost of Ownership, enabling new revenue sources, and reinforcing network resiliency.

4. **6G-OPTICON:** 6G Optimization and constrained intelligence for end-to-end network operations across heterogeneous segments.

It is a flagship initiative aimed at designing a next-generation, end-to-end orchestration framework tailored for the 6G era. At its core, 6G-OPTICON envisions an open, modular, and highly extensible orchestration fabric that unifies services and infrastructure across O-RAN, core, transport, and edge.

5. **MAGIC-6G:** Multi-Agent Goal-oriented networking for Interpretable, Secure, and sustainable 6G

It pioneers an innovative Goal-oriented Networking framework to redefine 6G communication systems by tightly integrating network intelligence with application goals through novel semantic representations and AI-native orchestration.

B-01-02: Advanced IoT and Device Technologies

6. **OPTIMUS-6G:** Optimized 6G-enabled IoT networks for unlicensed operations in the computing continuum.

It will develop a multi-domain network architectural framework that enhances multi-functional communication for IoT devices and applications in 6G unlicensed bands, addressing future use cases and optimising their performance.

7. **IoT-ZERO:** Secure Event-Driven TN-NTN Connectivity and Sensing for Near-Zero-Energy IoT.

It develops sensing and connectivity technologies and architectures to enable the advent of (close to) zero energy devices. By embedding NTN support into its (close to) zero energy framework, the project extends reach to underserved, rural, and mobile contexts while maintaining its primary focus on energy autonomy.

8. PIONEERS-6G: Platform and Device Innovations for Energy-Efficient, Resilient, and Secure 6G IoT Systems.

It pioneers resilient and autonomous connectivity that unifies terrestrial and non-terrestrial networks, ensuring service continuity even in harsh environments such as underground or underwater. It advances intelligent and energy-efficient devices through adaptive, multi-mode operation and energy harvesting, and enhances situational awareness via integrated sensing, positioning, and communication.

B-02: Wireless Communication Technologies and Signal Processing – Standardisation and Follow-up/PoCs

9. SHARC: Multi-Tenant, Disaggregated 6G RAN Over a Secure Hardware-Accelerated Compute Continuum.

It enables a multi-tenant, hardware-accelerated 6G RAN that dynamically orchestrates RAN workloads across heterogeneous compute platforms, while ensuring trust, security, and energy efficiency. At its core, it introduces an Intelligent Hardware Abstraction Layer (i-HAL) to seamlessly deploy and adapt RAN workloads on diverse accelerators, integrating confidential computing primitives for secure execution.

10. QUEST 6G: Integrating Quantum AI and Reconfigurable Intelligent Systems in 6G Networks.

It introduces a framework combining reconfigurable intelligent systems, XL antenna arrays, new transmission modes, and quantum technologies to realize a multi-band, multi-functional 6G vision. XL arrays extend near-field regions, enabling beam focusing with angular and range control for spatial multiplexing and interference management.

11. MULTIPLY-6G: Multidimensional wave and space - level optimization for energy efficient communications and sensing.

It aims to develop advanced multidimensional waveform technologies, low-complexity extreme large arrays, and advanced spectrum sharing techniques, in an Open RAN framework.

B-03-01: 6G NTN-TN Unification/Integration

12. 6G-NTN2 Nexus:

It researches, designs, assesses, and demonstrates novel system-level techniques and reinforced TN-NTN integration for 3GPP 6G NTN to enable: enhanced features, service capabilities, and performance for D2D and vertical markets, including PPDR, connectivity below 7.125 GHz; and broadband and additional service connectivity to vehicle/static-mounted devices for vertical markets, such as automotive, public safety, transportation, utilities, media/entertainment, backhauling, above 10 GHz.

B-03-02: Higher Speed Optical Access Networks and future end-to-end Packet Optical Network Architecture in 6G

13. 6G-CATS: AI-Powered 6G Networks: Secure, Energy-Efficient and High-Speed End-to-End Communication supporting Sensing and Mobility.

It will demonstrate an AI-powered, disaggregated and secure 6G optical infrastructure capable of supporting a wide range of end-user applications in a sustainable manner. It makes a concerted effort towards pairing high-speed optical access and metro technologies with real-time intelligence, end-to-end resiliency and native security.

B-04-01: Smart Security / Security Services

14. PAISES-6G: Pioneering AI-enhanced SEcure 6G Services framework.

It aims to seamlessly integrate advanced AI/ML technologies to enhance connectivity and efficiency within 6G networks. It is establishing a comprehensive framework that supports the deployment of innovative 6G functionalities, ensuring adaptability and scalability essential for future technological demands.

B-04-02: Reliable Services Operation

15. SHIELD-6G: Scalable, Hybrid, and Intelligent End-to-End Defence for 6G Networks.

It aims to ensure reliable and secure service operation in 6G networks by developing an advanced Cyber Threat Intelligence platform and AI-driven security framework. It addresses the increasing complexity, attack surface, and automation demands of future 6G infrastructures.

B-05: Microelectronic – Front-End Module (FEM)

After the GB meeting of 18 December 2025, the Chair proposed to approve the ranked list and selection of actions for all topics except Topic B-05 and to request further analysis and clarification on Topic B-05 before taking a final decision.

Upon further strategic considerations, the SNS JU Governing Board adopted by written procedure GB No 02/2026 of 10 March 2026 a decision not to select any proposal under Topic HORIZON-JU-SNS-2025-01-STREAM-B-05, to cancel this topic and to start preparations for a revised Call under the SNS JU Work Programme 2026–2027 (Research and Innovation Work Programme 2026) addressing the same general subject area.

As a consequence of the decision not to select any proposal under Topic HORIZON-JU-SNS-2025-01-STREAM-B-05, the corresponding operational budget initially earmarked for this topic will not be used under the 2025 calls. In line with the Governing Board decision and evolving strategic priorities of the SNS Programme, a higher amount of funds were allocated to this updated topic via amendment in the preparation of the SNS JU Research and Innovation Work Programme 2026, with the objective of ensuring continued support to European capabilities in critical microelectronics and Front-End Module (FEM) technologies relevant for future 6G systems.

The cancellation of Topic B-05 did not affect the implementation of the other selected projects under Calls 4 and 5, nor the overall continuity of the SNS JU programme. However, it contributed to an adjustment of the expected overall EU contribution for the projects retained under the 2025 calls, from the initially foreseen budget envelope of approximately EUR 128 million to an estimated EUR 116 million allocated to the 20 selected projects.

The SNS JU and its Governing Board considered that launching a revised topic under the subsequent Work Programme would provide a more appropriate framework to address recent technological, industrial and policy developments, while strengthening synergies with related European semiconductor and pilot-line initiatives.

2 HORIZON-JU-SNS- Stream C - Smart Network & Services experimental infrastructure

The Stream C work programme text is considering the forthcoming HE Cluster 4 activities related to Connected Collaborative Computing Networks (3C networks) and other ongoing European activities (e.g. IPCEI-CIS, the Cloud-Edge-IoT HE projects etc.) to ensure complementarity and avoid potential overlaps.

C-01: 6G Telco Cloud and Service Provision Enablers

16. SOVEREIGN-6G: Unified Service Platform Over multi-Vendor Telco Cloud Infrastructures, Exposing beyond Connectivity services in 6G networks.

It delivers the first 6G Telco Cloud in Europe, which will serve as the foundation of future-looking Digital Services aggregated and exposed by a groundbreaking Unified Service Platform.

Horizon-JU-SNS-2025-02

3 HORIZON-JU-SNS - Stream D – SNS Trials and Pilots (T&Ps) with Verticals

The objective is to validate 5G Advanced and 6G technologies in a user context to further enable successful take up by vertical sectors. The objective is to validate 5G Advanced and 6G technologies in real user environments and thereby facilitate their adoption by vertical sectors. While previous work programmes focused on assessing the broad applicability of these technologies across multiple vertical sectors within the same project, this work programme aims to support an in-depth analysis of the specific pain points that hinder the adoption of 5G Advanced and 6G solutions in individual vertical sectors. The ultimate goal is to develop solutions with a high potential for near-term uptake by the targeted vertical sectors..

D-01: SNS Trials and Pilots (T&Ps) with Verticals

17. PRIME-6G: Pilot for Resilient Industrial Manufacturing Environments with 6G Technologies.

It addresses the enablement of key 6G technologies in advance manufacturing vertical industries towards production batch one. It will develop and validate an integrated E2E Sustainable Platform Blueprint integrated 6G architecture based on a Cloud-Edge Continuum, enabling seamless and agile service provisioning.

18. 6G-CARE: 6G-enabled Connected and Autonomous Response for eHealth.

It will deploy six use cases across trial sites in Belgium, Greece, France, the UK, Luxembourg, and Spain, each addressing a distinct healthcare challenge while assessing performance, sustainability, and scalability under real-world conditions. It will integrate advanced 6G enablers into a modular, interoperable platform co-designed with medical stakeholders to ensure clinical relevance and practical impact.

19. 6G-HOLONET:

It envisions a transformative, cross-sector ecosystem that pioneers the use of 6G technologies to unlock the full potential of immersive and interactive media across three rapidly expanding verticals: agile volumetric media production, live sports and entertainment engagement, and cultural heritage preservation.

20. GENIUS: 6G connEcted eNvironments for logStics and mUltimodal tranSpOrtation.

It will integrate logistics, multimodal transport and automation within the 6G ecosystem to deliver transformative benefits across efficiency, sustainability, and resilience of supply chains.

Breakdown of Beneficiaries

The following table shows, for the **175 proposals received**, a detailed breakdown of the number of beneficiaries per call and per stream.

The following table shows, for the **20 projects retained across both evaluations**, a detailed breakdown of the number

HORIZON-JU-SNS-2025-01	N° of proposals	N° of Beneficiaries
Stream B	144	1 705
Stream C	3	81
Total	147	1 786

HORIZON-JU-SNS-2025-02		
Stream D	28	419
Total	28	419

of beneficiaries per call and per stream.

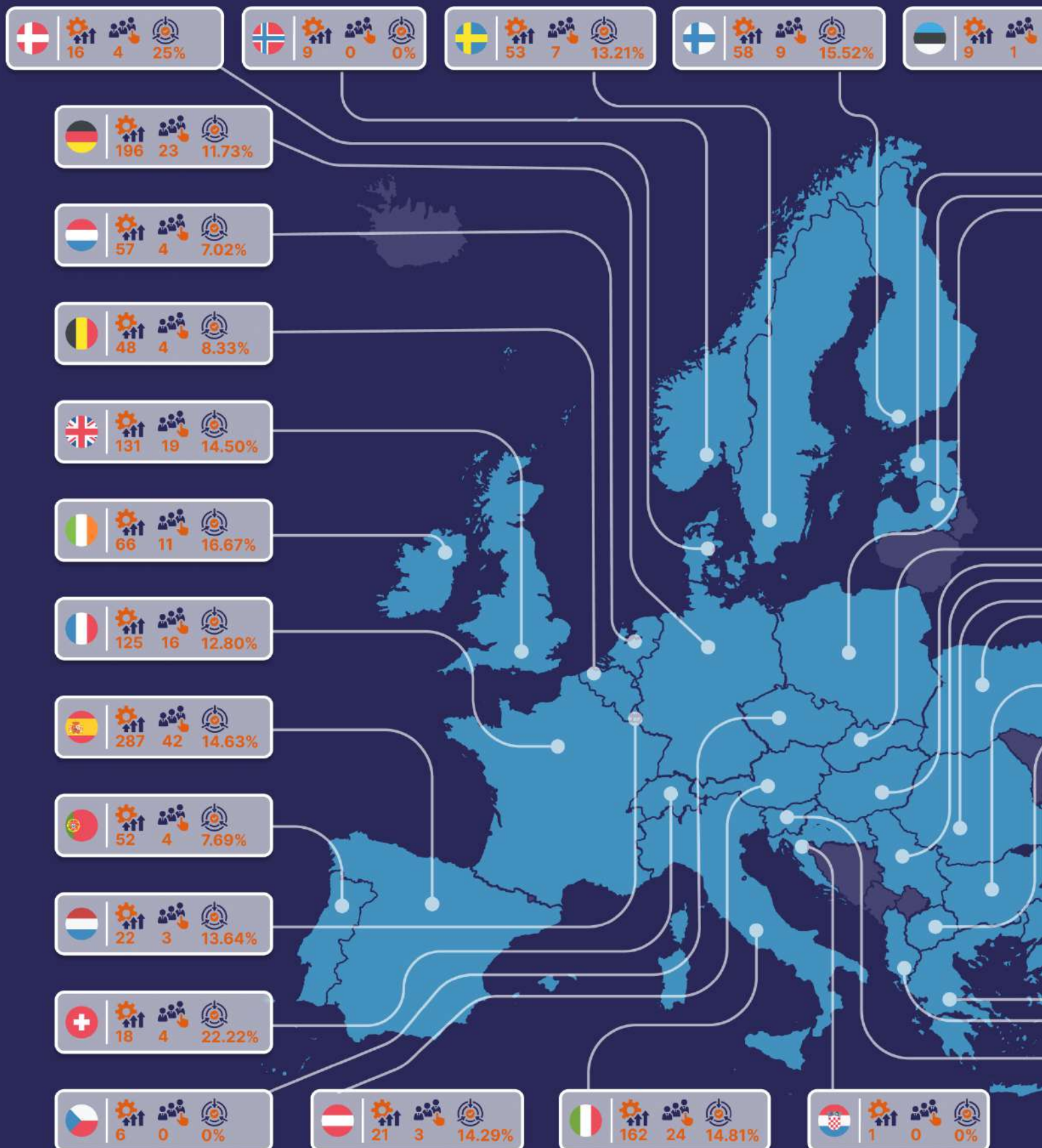
HORIZON-JU-SNS-2025-01	N° of proposals	N° of Beneficiaries
Stream B	15	190
Stream C	1	31
Total	16	221

HORIZON-JU-SNS-2025-02		
Stream D	4	64
Total	4	64

Breakdown per country

The following table provides, for the **169 eligible proposals** that have been evaluated and for the **20 retained projects overall**, an overview of the number of beneficiaries per country and per call.

Horizon-JU-SNS-2025-01

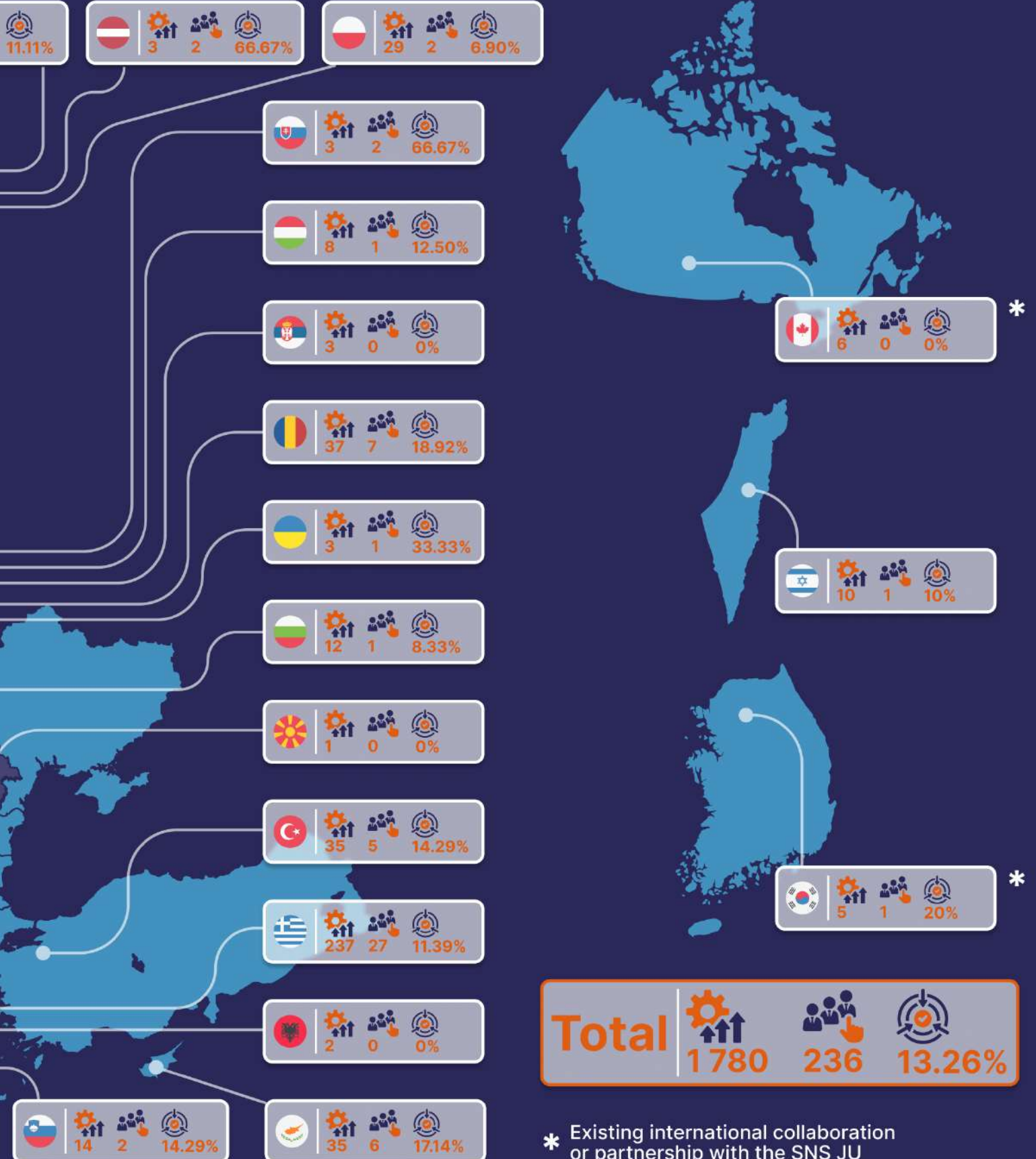


Legend

 N° of Beneficiaries
Proposals evaluated

 N° of Beneficiaries
Retained projects

 % Success Rate



HORIZON-JU-SNS-2025-02



Legend

 N° of Beneficiaries
Proposals evaluated

 N° of Beneficiaries
Retained projects

 % Success Rate




* Existing international collaboration or partnership with the SNS JU


Breakdown by participant type

The following tables give an overview of the participant type per call in the **175 submitted proposals** and in the **20 retained projects**.

In **Call Horizon SNS 2025 01**, among the 221 participants in the 16 retained projects, there are 60 different legal entities (unique beneficiaries). Moreover, 79% of the financial contribution is granted to the private beneficiaries and 21% to the public beneficiaries.

 Proposals Type of beneficiaries	N° of Beneficiaries Received Proposals	N° of Beneficiaries Retained Proposals	% Total Retained
PRIVATE	1 352	175	79%
Private for-profit entities (excluding Higher or Secondary Education Establishments)	1 049	143	65%
Higher or Secondary Education Establishments	60	5	2%
Research Organisations	226	26	12%
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)	0	0	0%
Other	17	1	<1%
PUBLIC	434	46	21%
Higher or Secondary Education Establishments	370	39	18%
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)	7	0	0%
Research Organisations	57	7	3%
TOTAL	1 786	221	100%

In **Call Horizon SNS 2025 02**, among the 64 participants in the 4 retained projects, there are 60 different legal entities (unique beneficiaries). Moreover, 84% of the financial contribution is granted to the private beneficiaries and 16% to the public beneficiaries.

 Proposals Type of beneficiaries	N° of Beneficiaries Received Proposals	N° of Beneficiaries Retained Proposals	% Total Retained
PRIVATE	347	54	84%
Private for-profit entities (excluding Higher or Secondary Education Establishments)	254	37	58%
Higher or Secondary Education Establishments	11	0	0%
Research Organisations	61	11	17%
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)	0	0	0%
Other	21	6	9%
PUBLIC	72	10	16%
Higher or Secondary Education Establishments	44	6	9%
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)	14	1	2%
Research Organisations	14	3	5%
TOTAL	419	64	100%

Evaluation procedures and outcomes

The evaluation of proposals for the 2 calls was carried out between 10 November and 28 November 2025, by the evaluation panel appointed by the responsible authorising officer, with the assistance of **136 external experts**. The evaluation panels were composed of external experts. The external experts were selected in a way to ensure a high level of skills, experience and knowledge in the areas of the call (*including project management, innovation, exploitation, dissemination and communication and financial aspects*). Special attention was given to achieve an appropriately balanced composition (*skills, experience, knowledge, geographical diversity, gender, and private-public sector balance*) and regular rotation. The experts were invited from a broader pool of experts registered in the European Commission expert database and matching the SNS JU evaluation needs. The final expert pool mobilised for the 2025 evaluations comprised 136 experts from 31 countries, including representatives from academia, research organisations, industry and SMEs.

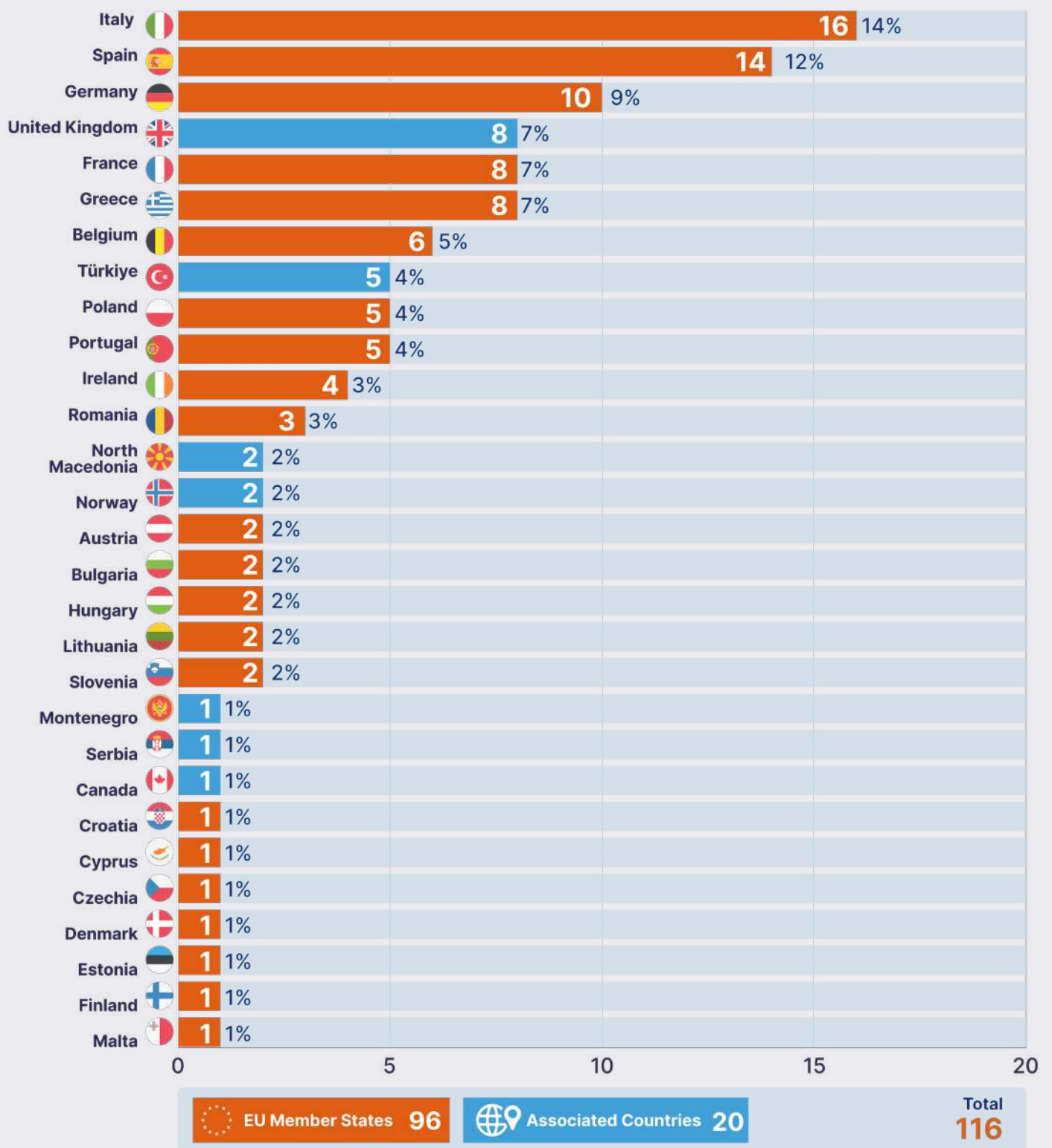
For an overview on gender, geographic origin, and affiliation of the experts, see below table.

As a result, out of the invited 136 experts:

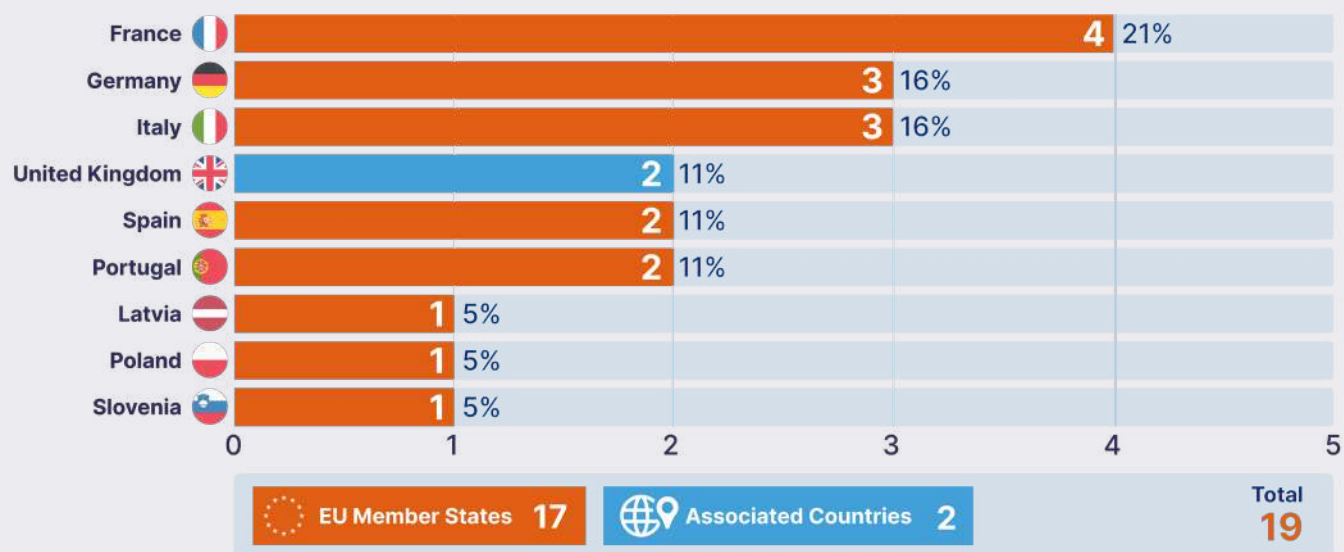
- ▶ In **Call Horizon-JU-SNS-2025-01** 43.93% were women, in **Call Horizon-JU-SNS-2025-02** 45.54% were **women**,
- ▶ In **Call Horizon-JU-SNS-2025-01** 64.15% came from **universities** and public or private research organisations, in **Call Horizon-JU-SNS-2025-02** 55.48% came from **universities** and public or private research organisations,
- ▶ In **Call Horizon-JU-SNS-2025-01** 26.71% were from **private commercial firms**, in **Call Horizon-JU-SNS-2025-02** 34.84% were from **private commercial firms**,
- ▶ In **Call Horizon-JU-SNS-2025-01** 25.90% were **new experts** (i.e., experts who have not participated in any evaluations over the last three calendar years), in **Call Horizon-JU-SNS-2025-02** 25% were **new experts**,
- ▶ In **Call Horizon-JU-SNS-2025-01** 17.38% were **brand new experts** (i.e., experts who have never participated in any EU evaluation), in **Call Horizon-JU-SNS-2025-02** 17% were **brand new experts**.

The evaluation procedure was positively observed by one observer (i.e., independent external expert to advise on the conduct and fairness of the evaluation sessions, the application of the evaluation criteria and ways to improve the processes). The evaluation was made against the award criteria and evaluation rules as set out in the call conditions. The evaluation procedure followed the standard Horizon Europe approach with first an individual evaluation, followed by a consensus group and concluded with the Panel review. After the externalization of the results, no redress procedure related to the calls of 2025 was submitted in 2026.

Distribution of Experts per Country Call Horizon-JU-SNS-2025-01:



Distribution of Experts per Country Call Horizon-JU-SNS-2025-02



1.5

Follow-up activities linked to past calls

In 2025, SNS JU carried out all necessary activities for the management, control and monitoring of the full portfolio of ongoing projects stemming from the first three SNS Calls for Proposals: 35 Call 1 projects under HORIZON-JU-SNS-2022, 28 Call 2 projects under HORIZON-JU-SNS-2023, and 16 Call 3 projects under HORIZON-JU-SNS-2024, corresponding to 79 projects running in parallel. The Call 1 projects progressed towards their final stages of implementation, while Call 2 projects entered their second year and Call 3 projects were fully onboarded and started implementation during 2025.

Throughout the year, SNS JU ensured the continuous operational, technical and financial monitoring of these projects through 42 project reviews (and 17 reviews under preparation for early 2026), 43 reporting and payment workflows, and the processing of 112 consortia-initiated Grant Agreement amendments. These activities supported the effective implementation of the SNS JU portfolio, ensured compliance with Grant Agreement obligations, and contributed to the timely delivery of research and innovation results. The implementation of Article 22(5) of the Horizon Europe Regulation participation restrictions and related ownership control assessments highlighted the importance of early engagement with participants and close coordination with REA/CVS and the Commission services in order to mitigate potential impacts on grant preparation timelines.

More details on activities and achievements of the SNS JU programme are presented in Section 1.2.

Project Collaboration

During the 3rd year of implementation for the SNS JU projects, a set of actions have been taken in collaboration with 6G-IA to ensure the continuation and strengthening of collaborative activities and synergies among our portfolio of projects:

- ▶ Signature of the Collaboration Agreement (CoA) by all Call 3 projects,
- ▶ Continuation of the SNS-Initiative Steering Board (SB) in the frame of the CoA,
- ▶ Continuation of the SNS-Initiative Technology Board (TB) in the frame of the CoA,
- ▶ Continuation of the Communications Task Force in the frame of the CoA,
- ▶ Continuation or set-up of SNS JU project Working Groups (WGs),
- ▶ Contribution to SNS Industry Working Groups (6G-IA WGs), SNS Strategic Working Groups (SNS GB WGs) and NetworkEurope Working Groups.

Regarding the SNS Collaboration Agreement (CoA), participants of selected projects are requested to cooperate in the SNS programme for topics of common interests by signing a written agreement (called “collaboration agreement”) referred in the specific provisions of the Model Grant Agreement (Annex 5 of the MGA). This agreement sets a framework and covers areas where close cooperation and coordination is needed (e.g. sharing of information, management of outputs, common approaches towards standardisation, common communication and dissemination activities, links with regulatory and policy activities, contribution to the impact monitoring, access to results and background, etc.) and defines the rules for this cooperation (e.g. dispute settlement mechanisms, confidentiality arrangements, indemnification, etc).

This agreement must be signed by all beneficiaries and associated partners of the SNS JU funded actions and thus creates a partnership between all participants of closed and ongoing SNS JU funded actions, including actions funded under the same or different calls.

CoA has been prepared under the lead of the 6G-IA and was based on the earlier 5G PPP version, but significantly upgraded, to adapt it to the Model Grant Agreement of Horizon Europe (instead of H2020), and to clarify the benefits and obligations of all signatories to the collaborative bodies of the SNS initiative. Furthermore, the CoA has been revised in 2024 (following DG RTD consultation and SNS JU Governing Board decision) to apply to current and future SNS JU actions through specific provisions in the new Annex 5 of the MGA. The SNS CoA has been concluded between all Call 3 project unique parties by the end of February 2025, and all Call 3 16 projects have been formally onboarded to the SNS JU collaborative activities.

In the context of the collaboration agreement, the following collaborative structures operated in 2025 and provided significant programmatic results:

Steering Board (SB):

The SNS-Initiative Steering Board (SB) is the forum of the Project Coordinators of all running SNS JU projects, together with a representative from the SNS JU Office as well as the 6G-IA, and with further attendees in an observer role, including SNS JU Working Group Chairs and the Technology Board (TB) Chair. The SNS JU projects have their individual goals but are also collaborating in the SNS programme to ensure industrial leadership for Europe in 5G and 6G. The SB decides on common actions and initiatives.

In 2025, the SB expanded to include representatives from an additional 16 projects under SNS Call 3. These projects appointed their representatives to the SNS bodies and Working Groups (WGs). Most of the 35 SNS Call 1 projects that started in 2023 and the 28 SNS Call 2 projects that started in 2024 remained active during the year.

A total of six SB meetings were held in 2025, including three face-to-face meetings. The Task Force on Open Calls continued to serve as a forum to identify issues, recommend mitigation measures and maintain a knowledge base of best practices for projects offering financial support to third parties. The SB keeps the coordinators informed of WG status and engages the projects in relevant WG activities. In terms of SNS Project WGs, the Sustainability WG was formed during 2025, while the other WGs continued with their respective work on: 6G Architecture; Test, Measurement and KPI Validation; Reliable Software Network; and Hardware Technologies. Endorsed by 63 SNS JU projects, the SB has sent a letter to the Directorate-General for Research and Innovation (DG RTD) regarding open access fees for publications where the concern is that authors are faced with paying a mandatory repository license fee while this specific fee is not considered an eligible cost under Horizon Europe financial rules.

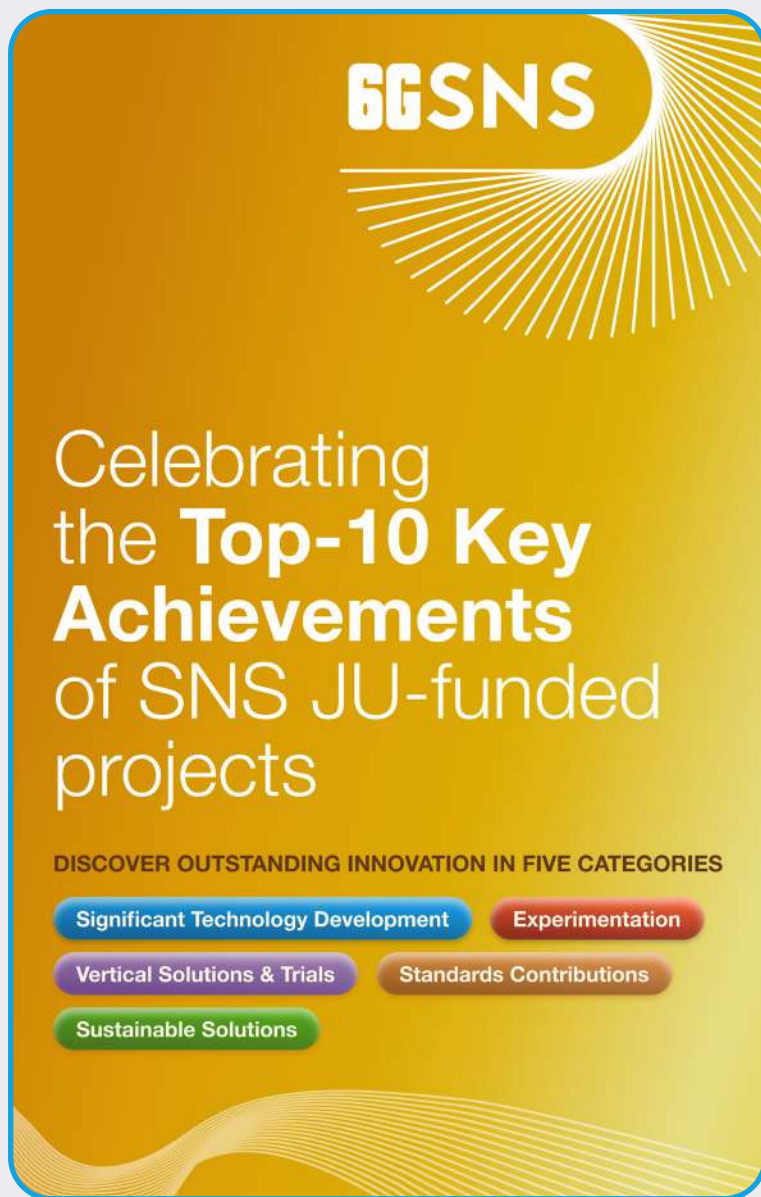
Technology Board (TB):

The SNS Technology Board is the collaborative body of the Technical Managers of all the active SNS JU projects, working on common technological issues, validating technologies and creating synergetic outcomes and insights based on the work taking place within the SNS JU. In 2025, the SNS JU TB reached its peak (in terms of size) as representatives from the **79 active Call 1, Call 2 and Call 3 SNS JU projects** participated in the TB activities and collaboratively worked on several technical items, cross-validating approaches, sharing insights via common events and publications and exchanging lessons learned.

Within 2025 the TB delivered the first ever edition of the **SNS JU Key Achievements**, by collecting, processing and evaluating 188 distinct achievements from the SNS JU projects and nominating the **TOP-10 Key Achievements for 2025** based on the most impactful outcomes. Moreover, the 3rd edition of the interactive **SNS Reference Figure**¹⁹

19. Interactive SNS JU Reference Figure: <https://smart-networks.europa.eu/interactive-map-of-sns-projects/>

was created and published, mapping the 79 active SNS JU projects to the key technological enablers and network domains investigated within each project. In 2025, the TB also produced the first edition of the **SNS JU Trials & Pilots (T&P) Brochure**, highlighting the advanced validation operations for mature solutions (TRL 5-6 and above) taking place within SNS JU. The 2025 T&Ps Brochure contained 8 Trials/Pilots from SNS JU projects conducted in the field in realistic conditions and yielding significant results.



A key activity that the TB led in 2025, as the project outcomes started to mature, was the leadership of **collaborative cross-project White Papers**²⁰, to highlight the SNS JU view and share cross-validated results and common community insights. The TB led the effort on the publication of 3 SNS JU White Papers in 2025, while another 4 papers were initiated in 2025 but will be published in 2026. A sustainability Task Force (TF) operated under the SNS TB until mid-2025, aggregating information regarding the sustainability targets, considerations and methodologies of the SNS JU projects. This extensive survey, comprising more than 60 questions, was performed in 2024 and its results were published in June 2025 in the White Paper "Sustainability in SNS JU Projects"²¹. Furthermore, 2 more White Papers were published: "AI/ML as a Key Enabler for 6G Networks: Methodology, Approach and AI-Mechanisms in the SNS JU"²², "6G for Media and Entertainment"²³.

Finally, the TB has worked on several additional items within 2025, strengthening the collaboration among projects, generating and facilitating synergies within the community, and supporting the update and upkeep of critical SNS JU Tools and statistics. Some highlights include:

- ▶ The SNS JU Vertical Engagement Tracker (VET) was updated with an additional 200 Use Cases (reaching a total of 458 UCs) thanks to the support from the TB,
- ▶ The SNS JU Standards Tracker was updated with new contributions and new interactive features, thanks to feedback from the TB,

- ▶ The SNS JU KPI Radar was updated with Technical KPIs through a collaboration of the TB with the SNS JU TMV working group,
- ▶ The TB coordinated the submission of 18 collaborative project proposals for workshops / special sessions in the 2025 EuCNC, out of which 15 were accepted,
- ▶ The TB implemented an initiative to assist SNS JU project to maximize their standardization impact, by providing tailored guidelines per major SDO, inviting experts and hosting relevant events.

Communications Task Force (Comms TF):

The Comms Task Force is the body where the Dissemination and Communication Managers of the SNS JU projects meet. The meetings are organised as monthly online meetings. SNS JU opens the meetings updating the participants about the SNS JU news and communication priorities and providing information on latest trends in communication.

20. <https://smart-networks.europa.eu/sns-publications/>

21. https://smart-networks.europa.eu/wp-content/uploads/2025/05/sns_ju_sustainabilitytf_whp_june2025_v1.0-1.pdf

22. https://smart-networks.europa.eu/wp-content/uploads/2025/02/ai_ml_white-paper-sns_tb_v1.0.pdf

23. <https://smart-networks.europa.eu/wp-content/uploads/2026/03/white-paper-6g-for-me-v1.0-final.pdf>

In the meetings, the Communication Managers report about planned or performed dissemination and communication activities of projects individually or of actions that are jointly organised together with other SNS JU projects. Besides reporting, the TF is also the forum where opportunities for joint dissemination and communication activities between projects can be identified and initiated. In the projects' corners, 3 projects are presented regularly to the community. Listening to experiences from other projects gives also the chance to identify best practices and improve each project's own ways of successfully performing these tasks, to maximise the impact of spreading news and creating awareness of SNS JU programme and project activities and results.

SNS JU Initiative Working Groups (WGs)²⁴:

A number of SNS JU initiative WGs have been setup in SNS JU to facilitate cross-project collaborations. In these WGs the activities of multiple SNS JU projects on the dedicated topic of the WG are discussed by the project representatives with the aim of exchange, to converge and to create synergies. The results of these activities are published regularly as white papers. SNS JU Initiative WGs originating from the SNS JU Projects that were active in 2025 include:

1. 6G Architecture WG,
2. Reliable Software Networking WG,
3. Test, Measurement and KPIs Validation WG,
4. Hardware Technologies WG,
5. Sustainability WG.

The **6G Architecture WG** has in 2025 been onboarding projects under Call 3 and running bi-weekly meetings with project presentations and TechTalks (short, yet deep technical insights from projects). A White Paper²⁵ was published, and the group has presented its achievements and ongoing work at several events, e.g. Berlin 6G, PIMRC, EIM-6G-IA. Looking ahead, the WG is planning joint events with Japan's XGMF and workshops at ICC 2026 and EUCNC 2026 and other renowned IEEE events. The WG is actively collaborating with most of the other WGs at SNS JU and 6G-IA level with a shared ambition for joint actions, e.g. workshops, panels, and special sessions, or white papers. In particular it has established detailed plans for collaboration with XGMF, through virtual meetings, and workshops at different events in 2026.

The **Reliable Software Networking WG** focuses on unifying and advancing software networking research across the SNS portfolio — spanning cloud-native design, network abstraction, APIs, AI/ML, DevSecOps, and the full network stack from infrastructure to edge and IoT. The vision is a modular, open, “lego-based” network model. The WG organised thematic mini-workshops, covering Network Openness & Vertical Industries, Security & Trust for Smart Networks, and AI & NDT Components. A white paper on the AI/ML landscape for smart networks²⁶ was produced in late 2025. A follow-on paper on AI/ML frameworks is in progress. The WG is actively engaging with ETSI Software Development Groups, with an ETSI observer invited to WG meetings. Strong project participation is noted across four ETSI open-source ecosystems (TeraFlowSDN, OpenSlice, OpenCAPIF, OpenOP). A special session was co-organised with ETSI at EuCNC 2025 in Poznań, and a follow-up session is proposed for EuCNC 2026 in Málaga.

The **Test, Measurement and KPI Validation WG** was wrapping up KPI and KVI results from closing projects under Call 1 and published two white papers in 2025, the “6G KPIs-Definition and Target values”²⁷ and the “6G KVIs-SNS Projects Initial Survey Results 2025”²⁸. The WG has been onboarding new SNS projects under Call 3 and is actively working on the revision of two published white papers with results of recent projects. A major achievement is the Metadata Repository System (MRS) which is operational, and in which projects can submit their dataset declarations. A discussion around MRS access governance has been ongoing. Currently access is restricted to SNS JU projects, and the debate is whether to open it up to finished projects, non-SNS members, or even the public. The WG identified that shared data is not automatically reusable without a thorough consideration of data quality and validation. The WG is investigating how an automated data validation pipeline could be integrated into the MRS declaration process.

24. SNS Initiative Working Groups (WGs) are collaborative structures established under the SNS Initiative Collaboration Agreement to support activities requiring the involvement of more than one SNS project. They operate under the direction of the SNS Initiative Steering Board and aim to facilitate coordination, exchanges, convergence and synergies across SNS projects on specific technical topics: <https://smart-networks.europa.eu/wp-content/uploads/2024/04/updated-sns-initiative-collaboration-agreement-april-2024-final.pdf>

25. <https://smart-networks.europa.eu/wp-content/uploads/2025/11/archwg-whitepaper-v1.3.1-final.pdf>

26. https://smart-networks.europa.eu/wp-content/uploads/2026/01/sns-ju-snwg_ai.ml-landscape_final.pdf

27. https://smart-networks.europa.eu/wp-content/uploads/2025/03/white-paper-kpis_7_3_2025_with-disclaimer.pdf

28. https://smart-networks.europa.eu/wp-content/uploads/2025/05/sns-ju-white-paper-6g-kvis-survey-2025_final-1.pdf

The **Hardware Technologies WG's** mission is to consolidate 6G hardware research findings across SNS projects, build industry consensus around a hardware roadmap, and foster collaboration with other WGs and technology communities. Its scope spans wireless hardware components, communication infrastructure, and chipsets - the latter with a specific focus on bridging with Chips JU. A key highlight was the May 2025 workshop on Telecommunications and Microelectronics, which revealed strong industry-research consensus around Front-End Modules (FEM) for 6G, particularly in the FR3 band (7–15 GHz). The workshop clarified a division of labour between SNS JU (design, integration, validation) and Chips JU (fabrication and pilot lines) and underlined the need for heterogeneous integration technologies. Pilot line initiatives (FAMES, APECS, WBG) were identified as critical enablers. Beyond FEM, emerging topics such as chiplet platforms, neuromorphic computing, free-space optics, and edge AI are also being explored.

Launched in October 2025, the **Sustainability WG** is consolidating SNS JU project's sustainability capabilities. Its three goals are to establish a shared body of knowledge (scope, terminology, methodologies), to co-develop tools to capture and visualise projects' sustainability impact, and to define a long-term impact strategy for the group. The WG has finalised its work plan, established its governance, and started its activities. The primary focus is on aligning terminology across projects and beginning to review existing sustainability assessment methodologies.

Besides the above SNS JU WGs, SNS JU projects participated and contributed to various Working Groups within the SNS Community: i) SNS Industry Working Groups (6G-IA WGs), established under a mandate from the 6G-IA, ii) SNS Strategic Working Groups (SNS GB WGs, participation by invitation only) established under the mandate of the SNS JU Governing Board (GB), iii) WGs under the mandate of NetworldEurope²⁹. In this context, within 2025, SNS JU projects significantly contributed to several reports and white papers, such as the 6G-IA Security WG White Paper on Innovative 6G Approaches³⁰, the 6G IA Security WG: 6G Security and Trust: Insights from European SNS Projects³¹ and the European SME Expertise in 5G & Beyond³².

1.6

Openness, cooperation, synergies and cross-cutting themes and activities

Call openness, participation of SMEs

To attract participants to the fourth and the fifth calls for proposal, information on the context of the SNS JU project proposals, on joining the 6G-IA and the most Frequently Asked Questions were made available on the website of the SNS JU.

Smart Networks and Services Joint Undertaking

6GSNS
Calls for Proposals 2025:
Info Day & Brokerage Event

23 May - 10:00 CET
Online Session

A dedicated Information Day and a dedicated brokerage event took place online on 25 May 2025, supported by dedicated communications. Furthermore, a Brokerage Platform was put at disposal online in order to help potential participants to present their profile, their interests and their project ideas and to identify possible collaboration for future proposals' submission.

It should be highlighted that one of the goals of the SNS programme is the increased participation of the SMEs. For this reason, the participation of SMEs in the RIA and IA activities at a level of 20% has been set as a KPI for the programme. In the fourth and fifth calls for proposal, 20 projects were retained for funding across both evaluations (16 projects under call 4 and 4 projects under call 5) with the participation of 204 unique beneficiaries in total, with SMEs representing 31% of those (11 % above the set KPI). Out of these beneficiaries, SMEs have requested 26.20 % of the overall EC contribution.

Since the SNS JU Call 1 and 2, the openness was reinforced in some topics through financial support to third parties

29. <https://www.networldeurope.eu>

30. https://6g-ia.eu/wp-content/uploads/2025/01/wg_sec_position_paper-23.pdf

31. https://6g-ia.eu/wp-content/uploads/2026/02/6g-ia_white-paper-sept25_v7.pdf

32. <https://bscw.sns-ju.eu/pub/bscw.cgi/d1105677/sme-brochure-2026.pdf>

(cascading grants), to incorporate specific actors, technologies and use cases on an ad-hoc basis as well as broadening the basis of innovation funding throughout Europe. Finally, 27% of the unique beneficiaries are not members of the 6G-IA, which also demonstrates the openness of this third call for proposal.

In line with Horizon Europe principles, most topics of the SNS Call 4 and 5 are open and the general eligibility criteria, as set out in Part B of the General Annexes of Horizon Europe Work Programme 2025, were applied. For a limited number of topics, specific participation restrictions were applied in accordance with the SNS JU programme objectives and governance framework. For topic “HORIZON-JU-SNS-2025-01-STREAM-B-05”, the call is restricted to the SNS JU members other than the Union and their constituent or affiliated entities, with up to half of the budget fully open. The reason is that long term commitment of partners and JU members including players from the microelectronics sector is needed. Furthermore, the activities are also supporting the IPCEI ME/CT and targets cooperation between SNS and Chips Joint Undertakings towards microelectronics for 6G. HORIZON-JU-SNS-2025-01-STREAM-C-01 has, as well up, to half of the budget fully open so to ensure long term commitment, including players from the cloud sector, and stability is needed to develop a long-term plan on telco cloud continuum and experimentation infrastructure spanning the programme lifetime. Finally, HORIZON-JU-SNS-2025-02-STREAM-D-01 has up to 30% of the budget fully open to ensure the take up of long-term commitments from the JU private member constituents.

Call openness is nevertheless limited to comply with the restrictions on participation in accordance with Article 22(5) of the Horizon Europe Regulation and the restrictions for the protection of European communication networks (“*High-Risk Suppliers*”).

Synergies with EU programmes, funding and collaboration with other EU partnerships

Since the initial set up of the SNS JU, it was agreed that cross-partnerships and international collaboration was needed to achieve the desired objectives of the programme. The SNS JU has identified several Horizon Europe partnerships that are also dealing with key enablers for 6G networks and services or are expected to make use of SNS JU results.

The SNS JU broadly promotes collaboration activities and synergies with other EU initiatives, partnerships, and vertical stakeholders to maximise the efficiency and effectiveness of public investments in Europe and to create positive multiplier effects. By fostering these collaborations, the SNS JU ensures that its research and innovation efforts contribute to a robust and globally competitive European telecommunications ecosystem.

The SNS JU actively seeks for synergies with other EU programmes and activities. This is demonstrated at different levels, from specific sections of the SNS JU Strategic Research and Innovation Agenda (SRIA), which includes topics for collaboration on microelectronics and photonics to broader EU Partnerships cooperation. In particular, the SNS JU has strengthened its collaboration with the Chips Joint Undertaking and Europe’s Rail Joint Undertaking in areas of common strategic interest, while also developing cooperation with external strategic partners such as the European Space Agency (ESA).

The SNS JU signed a memorandum of intent (MoI) in October 2025 with the European Space Agency (ESA). The main objectives of the MoI, endorsed by the SNS JU GB are to facilitate the in orbit and also on the ground facilities of the European Space Agency for our European research community and SNS JU projects, and to accelerate 6G innovation in particular in the area of integrating terrestrial and non-terrestrial connectivity.

The SNS JU identifies microelectronics as a priority area. Strengthening the existing collaboration with Chips JU is key to reinforcing the European ecosystem. Multiple actions have been designed in the past with synergies in mind and several projects funded by the SNS JU bring together the telecommunications and microelectronics communities, including the flagship Microelectronics Lighthouse (X-TREME 6G project) funded under the SNS WP 2024. These initiatives provide test and experimental platforms where solutions from both SNS JU and Chips JU can be validated for 6G network performance and applicability, with an objective to reach industrialisation stage through transfer towards the Chips JU Pilot lines. The synergies with the Chips JU was reinforced in 2025 with the inclusion in the Chips JU 2026 work programme, after discussion with SNS JU, of a Front-End Module topic, which could also address other markets beyond telecoms, for instance IoT, automotive. The SNS JU also continued its cooperation with the Photonics21 Association in areas where photonics technologies are key enablers for future communication networks. This cooperation enables synergies between photonics research and next-generation connectivity technologies, ensuring complementarity between the activities of the SNS JU and the broader European photonics ecosystem.

International collaborations are fundamental to SNS JU's strategic mission. Partnerships with leading global players help to promote European research priorities in the international context, fostering cross-border innovation, standardization, and creation of global ecosystems with economies of scale. In 2025, international cooperation has been addressed through dedicated international collaboration projects notably with the USA, Japan and the Republic of Korea. Furthermore, in the SNS JU R&I Work programme 2026, a new Coordination and Support Action focussing on EU-India cooperation in 6G technologies is foreseen. This project is expected to start at the beginning of 2027.

Supporting 5G Deployment Activities

In line with its second mission of boosting 5G deployment in Europe, the SNS JU continued in 2025 to support Strategic Deployment Agendas and stakeholder coordination activities aimed at facilitating the deployment of advanced connectivity solutions across Europe.

As foreseen in the Single Basic Act, the SNS JU ensures coordination and steers discussions around the Strategic Deployment Agendas for 5G, key documents that contribute to the CEF2 Digital EU programme strategic orientations. The 5G Strategic Deployment Agendas (SDA), linked to the 5G Corridors deployment across major EU pathways, address key European industry sectors like the automotive and the rail. In 2025, the 5G for Connected and automated mobility-Deployment Stream ("5G4CAM") Strategic Working Group, aiming at advancing Connected and Automated Mobility (CAM) in Europe continued meeting regularly and drafting position papers. The Working Group contributes to the implementation of the SNS JU's second mission of boosting 5G deployment in Europe by supporting stakeholder coordination and the development of strategic guidance for the deployment of advanced connectivity services along European transport corridors. Its activities support the identification of deployment priorities and challenges for Connected and Automated Mobility applications and contribute to the strategic orientations of the CEF2 Digital programme. Complementing its 2024 5G Strategic Deployment Agenda for CAM – Rail Chapter, the Working group issued a Road Chapter approved by the SNS JU Governing Board in November 2025.



SNS JU policy working groups

In addition to the Work Programme activities, the SNS JU has contributed to other strategic and policy initiatives in the field of 5G and 6G in 2025.

Following the Governing Board decision of November 2023 to set-up two SNS JU GB Strategic Working Groups, the SNS policy workstream increased throughout year 2024 and year 2025.

As foreseen in the Single Basic Act, the SNS JU ensures coordination and steers discussions around the Strategic Deployment Agendas for 5G, key documents that contributes to the CEF2 Digital EU programme strategic orientations. The 5G Strategic Deployment Agendas (SDA), linked to the 5G Corridors deployment across major EU pathways, address key European industry sectors like the automotive and the rail. In 2025, the 5G for

Connected and automated mobility-Deployment Stream ("5G4CAM") Strategic Working Group, aiming at advancing Connected and Automated Mobility (CAM) in Europe continued meeting regularly and drafting position papers. Complementing its 2024 5G Strategic Deployment Agenda for CAM – Rail Chapter, the Working Group issued a Road Chapter approved by the SNS JU Governing Board in November 2025.

The SNS JU Policy Working Group (WG) launched in 2024 with the aim to contribute to shaping European policies, including strategies, roadmaps and recommendations relating to Smart Networks & Services technological, societal and industrial competitiveness aspects continued its activities as well in 2025. It currently has two subgroups: the Connected Collaborative Computing ("3Cs") networks subgroup and the standardisation sub-group.

To that end, two sub-working groups were set up in 2024. The 3C subgroup was set up with the mandate to discuss policy, industrial and business developments relevant to the "3Cs (collaborative, connected, computing) network" vision, identify and discuss potential synergies and coordination between the SNS JU activities and other EU activities

and funding programmes (e.g. Horizon Europe Cluster 4, Digital Europe Programme, Connecting Europe Facility, IPCEI-CIS and other Joint Undertakings), and examine a potential coordination role for the SNS JU, including the possible need for amendments to the Single Basic Act creating the JU to give effect to such a role. The Standardisation subgroup was set up with the mandate to discuss standardisation and how to further streamline the priorities on use cases for 3GPP so as to maximise impact in standardisation.

The 3C networks subgroup discussed and prepared a strategic paper entitled “Towards a European 3C/Telco-Edge-Cloud Ecosystem”. The Standardisation subgroup adopted a second strategic paper entitled “Outline for a European Standardisation Strategy for Smart Networks and Services (SNS)”. The two strategic papers were endorsed by the SNS JU Governing Board in November 2025. In addition, the work of the Standardisation subgroup contributed to the preparation of the SNS Workshop on European Priorities for Day 1 6G Standardisation, which took place in January 2026 and brought together stakeholders from industry, research and public authorities to discuss strategic priorities for future standardisation activities.

1.7

Progress against Key Impact Pathways and JU’s Key Performance Indicators

In 2025, the programme entered a new phase, with the first projects reaching completion and delivering tangible results. The programme demonstrates meaningful progress, reflected in improvements across both the qualitative and quantitative monitored indicators. Progress towards the programme objectives continued through the coordinated implementation of research, innovation and deployment activities.

Within the reporting framework, both general Horizon Europe and specific JU objectives are monitored. These indicators serve as key tools to assess progress towards the programme’s long-term strategic objectives.

Certain KPI methodologies, monitoring tools and reporting approaches continued to evolve during 2025 in line with Horizon Europe partnership reporting practices, portfolio maturity and ongoing inter-JU harmonisation efforts.

1.7.1

Progress against Horizon 2020 legacy Key Performance Indicators

Not applicable, as the SNS JU was established under Horizon Europe and does not manage Horizon 2020 activities.

1.7.2

Progress against General Horizon Europe Key Impact Pathways Indicators (KIPs)

The monitoring of the programme’s progress towards its objectives is structured around the Key Impact Pathways (KIPs). These indicators reflect the three complementary impact dimensions of Horizon Europe research and innovation investments: scientific, societal, and technological and economic impact.

The SNS JU contributes across all three Horizon Europe impact dimensions. Scientific impact is reflected through the creation and dissemination of new knowledge (KIP1-KIP3), societal impact through contributions to policy priorities, sustainability and digital transformation (KIP4-KIP6), and technological and economic impact through innovation, industrial competitiveness and investment leverage (KIP7-KIP9). The following table provides an overview of the Horizon Europe Key Impact Pathways and their corresponding impact dimensions.

Scientific Impact	Societal Impact	Technological & Economic Impact
KIP 1 Creating high-quality new knowledge	KIP 4 Addressing EU policy priorities and global challenges	KIP 7 Generating innovation-based growth
KIP 2 Strengthening human capital in R&I	KIP 5 Delivering benefits through R&I missions	KIP 8 Creating more and better jobs
KIP 3 Fostering diffusion of knowledge and Open Science	KIP 6 Contributing to Sustainable Development Goals (SDGs) and uptake of R&I in society	KIP 9 Leveraging investments in R&I

The KIPs presented in this report are based on both quantitative and qualitative methodologies. The underlying data was collected through:

- ▶ the Continuous Reporting (CR) module for the 79 projects funded under Calls 1, 2 and 3, and
- ▶ the Periodic Reporting (PR) module for the 63 projects funded under Calls 1 and 2.

In addition, certain KIP-related information included in this report is based on surveys conducted with projects under Call 1, 2 and 3 by the SNS JU Coordination and Support Action (CSA) project SNS CO-OP.

Furthermore, for the first time in 2025, data from the Horizon KIPs Dashboard has been used as an additional source of monitoring information. The Horizon Europe Monitoring and Evaluation Framework, established under Articles 50 and 52 and Annex V of the Horizon Europe Regulation³³, supports the systematic monitoring and assessment of progress towards programme objectives.

Scientific Pathway Indicators

The SNS programme contributes to scientific impact by generating high-quality new knowledge (KIP 1), strengthening human capital in research and innovation (KIP 2), and promoting the diffusion of knowledge and open science (KIP 3).

The Horizon Europe monitoring framework is structured around nine Key Impact Pathways (KIPs), grouped into three impact dimensions: scientific impact, societal impact, and technological and economic impact. Each pathway is supported by a set of Key Performance Indicators (KPIs) used to monitor progress towards the programme's objectives. The general Horizon Europe KIPs are defined in Annex V of the Horizon Europe Regulation.

Within each of the three impact dimensions, three KIPs are defined, reflecting overarching programme and European Commission policy objectives. Each KIP is further structured around short-term, medium-term and long-term indicators.

Short-term KIPs focus primarily on project outputs generated during project implementation. These indicators are mainly based on data collected through Framework Programme and project reporting systems, complemented where relevant by external data sources used for validation purposes. Their availability depends on the timing of periodic reporting activities, generally at least one year after project start, or 18 months for longer-duration projects.

Medium-term KIPs focus on project results and outcomes generated following project completion. These indicators are primarily based on project reporting data, supplemented by quantitative methodologies and external data sources where appropriate. Depending on project duration, medium-term impacts generally become measurable approximately three years after project start.

Long-term KIPs assess broader systemic and large-scale impacts. They are based on reporting data enriched through external sources and combine qualitative assessments, statistical analysis and macroeconomic modelling approaches. These impacts typically become visible several years after project completion.

The overall objective is to progressively operationalise all 27 Horizon Europe KIP indicators in view of the final evaluation of Horizon Europe foreseen in 2031.

33. <https://eur-lex.europa.eu/eli/reg/2021/695/oj>

The SNS programme is delivering scientific impact by creating high-quality new knowledge (KIP1), strengthening human capital in R&I (KIP2) and fostering diffusion of knowledge and open science (KIP3).

KIP 1

Creating high-quality new knowledge

Based on SNS JU projects' data retrieved by periodic reporting via Horizon KIPs Dashboard for Call 1, Call 2 (and some **projects under Call 3** with periodic reports), SNS JU projects have reported **1 195 publications, of which 696 are peer-reviewed publications**. The figures are broken down as follows:

Share of Horizon Europe in Peer-Reviewed Publications (GRAPH 3)

This includes the number of peer-reviewed scientific publications resulting from the programme and it covers multiple types of publications, including:

2023	248	▶ Articles in academic journals,
2024	343	▶ Publications in conference proceedings/ workshop,
2025	105	▶ Books/monographs,
		▶ Chapters in books,
		▶ Thesis/dissertations.
Total	696	

Graph 3: Share of Horizon Europe Publications



These figures reflect a total of 63 projects with periodic reports, out of the total of 79 projects in SNS JU portfolio.

The number of HE peer-reviewed publications is based on periodic reporting data matched to Scopus. Differences between publication figures reflect the different methodologies, reporting sources and project coverage used for each indicator. The peer-reviewed publication data includes periodic reports only and does not include continuous reporting data. To facilitate the interpretation of the different publication indicators reported throughout this document, the table below provides an overview of the publication figures derived from the different monitoring tools and methodologies.

Publication indicator	Value	Source	Coverage
Total publications reported by SNS JU projects	2 934	SNS JU trackers / Continuous Reporting	79 projects
Publications reported through Horizon KIPs Dashboard	1 195	Horizon KIPs Dashboard	Projects with reporting data available
Peer-reviewed publications matched to Scopus	696	Horizon KIPs Dashboard / Scopus	Peer-reviewed publications only

This short-term indicator, peer-reviewed publications resulting from the programme consist mainly of articles and proceeding papers, but can also encompass books, chapters, reviews.

For the 2025 publications, datasets and software, the breakdown of Open Access output is:

For year 2025	Total	Open access	% Open access
 Publications	483	348	72%
 Datasets	14	11	79%
 Software	14	14	100%

Data source: Corda, Scopus, date of last Scopus load: 13 December 2025

The number of HE peer-reviewed publications is based on periodic data matched to Scopus.

Country/territory shows outputs on projects involving a participant from that country.

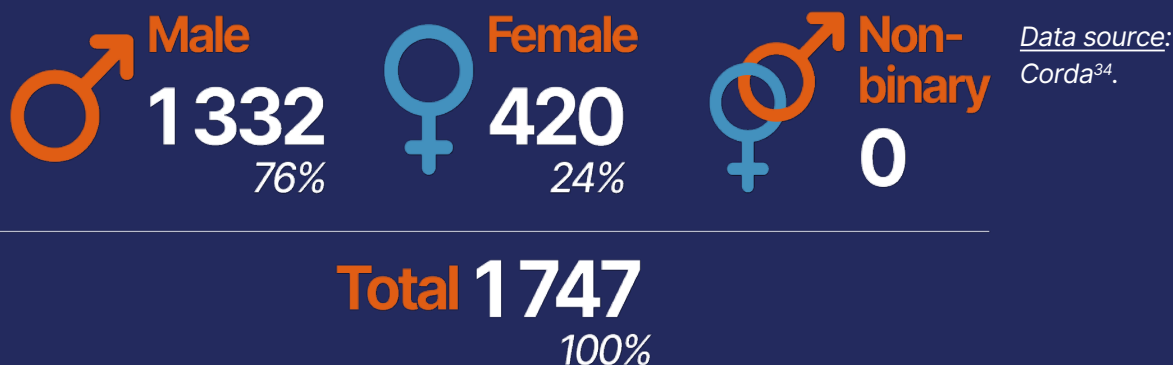
Organisation type shows Outputs of projects involving an organisation of that type.

KIP 2

Strengthening human capital in R&I

Based on SNS JU projects' data retrieved by periodic reporting via **Horizon KIPs Dashboard for Call 1, Call 2 and Call 3 projects**, the SNS JU programme has involved 3 829 Researchers of all categories (total of researchers of all categories involved in the projects). **1 747** are Researchers involved in upskilling activities (early career), cat. C & D only, involved in upskilling activities.

Graph 2.1:
Distribution of Researchers



In the context of Horizon Europe, researchers are categorised by seniority including Top grade researcher (Category A), Senior researcher (Category B), Recognised researcher (Category C), and First stage researcher (Category D).

KIP 3

Fostering diffusion of knowledge and open science

Based on SNS JU projects' data retrieved by periodic reporting via **Horizon KIPs Dashboard Call 1, projects under Call 2 and Call 3** have made available mainly open access publications, datasets and software.

This short-term indicator measures the share of research outputs generated under Horizon Europe, including publications, datasets and software, that are made available through open access and open knowledge-sharing infrastructures. In 2025, 68.65% of the research outputs reported by SNS JU projects were made available under open access conditions.

Graph 3.1:
Research outputs shared through open knowledge infrastructures

Type of Output	Number of contributions	Share (%)
 Open access publications	816	68.28%
 Open access datasets	55	80.88%
 Open access software	18	56.25%
TOTAL (Shared knowledge)	889	68.65%

Data Source: it is the share of all open access research outputs (publications, datasets, software) by the total of all publications (all foreground publications in CORDA), all datasets (in CORDA) and all software (in CORDA).

34. The same researchers may work on several projects.

Additionally, the survey of SNS CO-OP identified that all SNS JU funded projects from Calls 1, 2 and 3 have contributed with a total number of 197 contributions within 2025. Most of the open-source contributions were targeted to GitHub, ETSI TeraFlowSDN (TFS) and Zenodo.

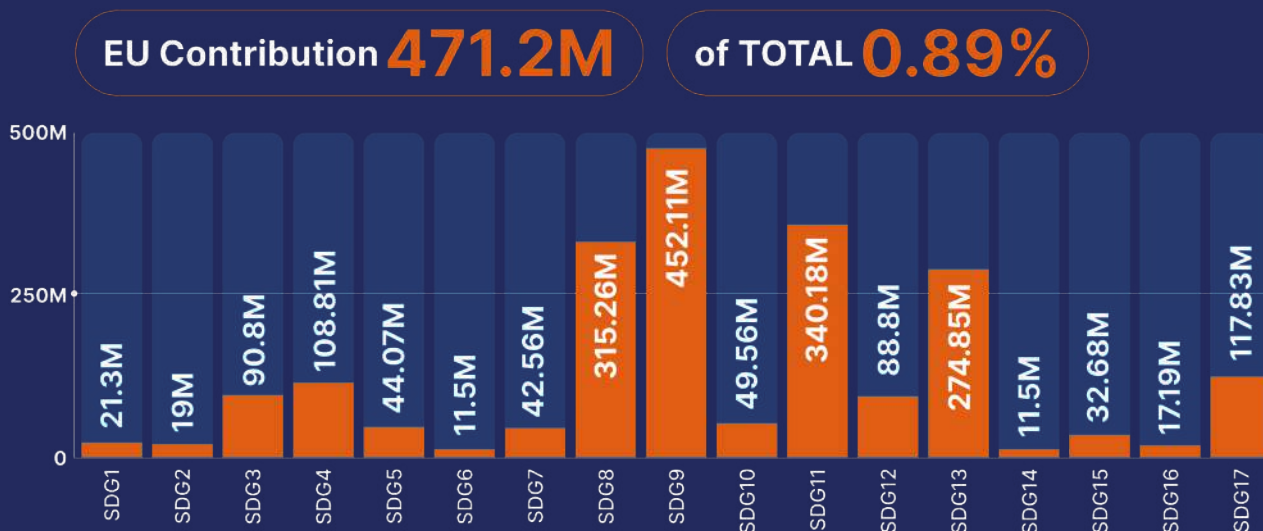
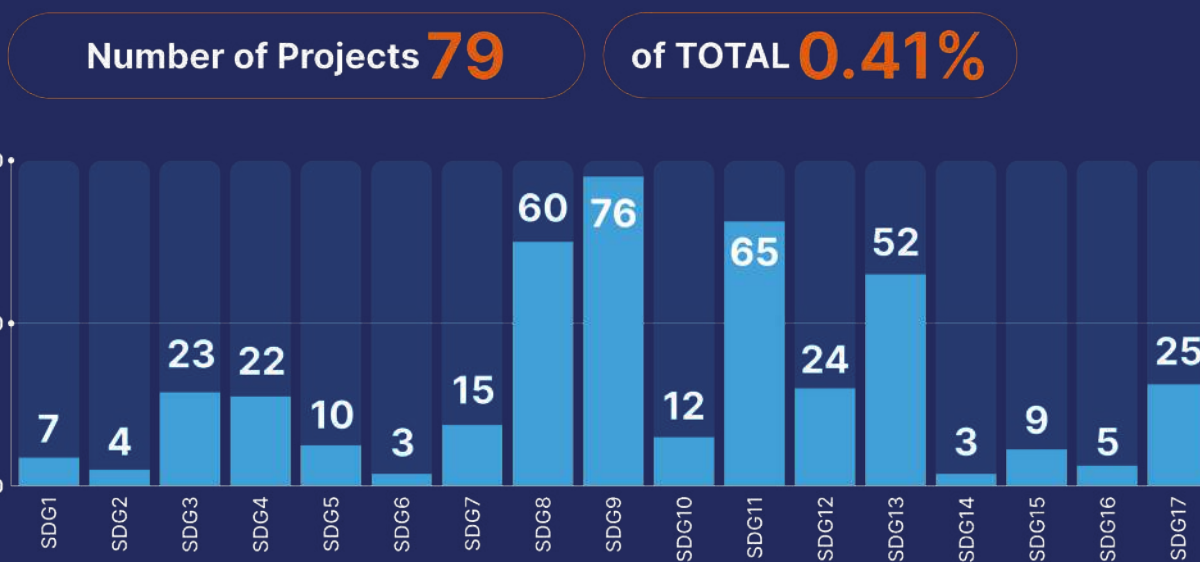
Additionally, on a technical level, SNS projects have used open-source solutions, notably for data management and analytics, Edge and IoT, Robotics and Computer vision as well as for energy efficiency and Green ICT.

KIP 4

Addressing Union policy priorities and global challenges through R&I

Results from SNS JU projects under Calls 1, 2 and 3 are addressing EU policy priorities and global challenges, including the UN Sustainable Development Goals (SDGs). Notably, SDG 8 related to Industry, Innovation and Infrastructure; SDG 11 Sustainable Cities and Communities; SDG 8 Decent Work and Economic Growth and SDG 13 Climate Action.

SNS JU projects under Call 1, 2 and 3 contribute to UN SDGs as shown in the graph below.



Notably, out of 79 SNS JU financed projects, 76 contribute to SDG 9: Industry, Innovation and Infrastructure, 65 of these projects contribute to SDG 11: Sustainable Cities and Communities, 60 contribute to SDG 8: Decent Work and Economic Growth and 52 to SDG 13: Climate Action.

KIP 5

Delivering benefits and impact through R&I

Not applicable to the SNS JU, as our mandate is not mission-driven.

KIP 6

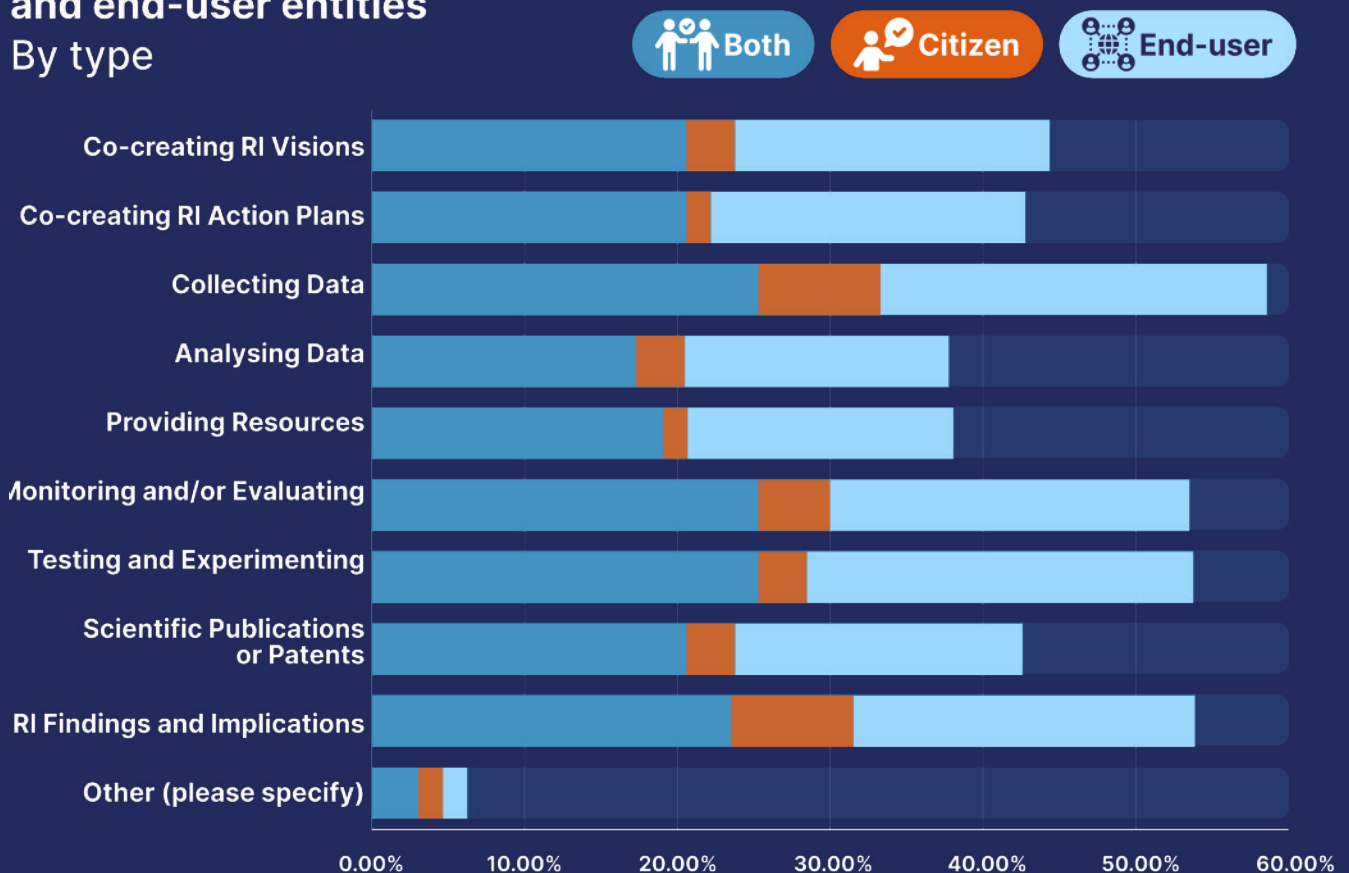
Strengthening the uptake of R&I in society

The SNS programme is actively promoting co-creation and co-design through the engagement of citizens and civil society. End-users (vertical industry stakeholders) can contribute through participation in Stream D activities and 6G-IA consultations. The SNS JU programme is use-case oriented and has a clear goal of co-creation by aligning market requirements with technology innovation.

Based on the Horizon KIPs Dashboard data gathered for projects under Call 1, 2 and 3, the engagement of citizens and end-user entities by type can be seen below.

Engagement of citizens and end-user entities

By type



Data source: HE Dashboard.

This short-term indicator reflects the number and share of Horizon Europe projects in which EU citizens and end-users contribute to the co-creation of R&I content.

The data reflects 63 out of the 79 projects, the ones which had reviews.

KIP 7

Generating innovation-based growth

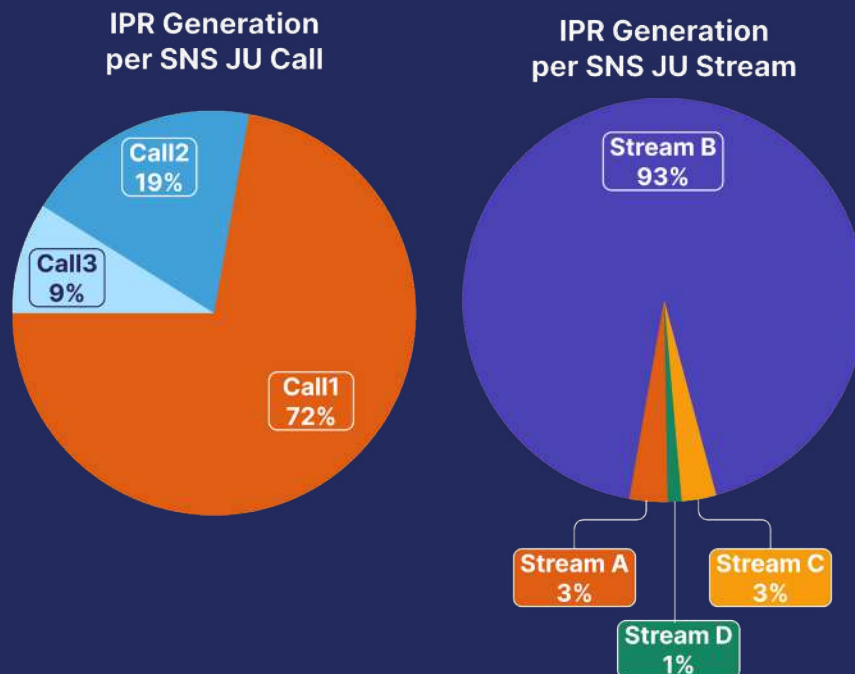
SNS JU projects have registered 170 patents, 121 of them are confidential patents.

Innovative outputs by type:

Based on the CO-OP project questionnaire survey the SNS JU projects generated within 2025 **119 IPR submissions**, 14 of which are already granted.

Q4. How many Patent or other IPR (Intellectual Property Rights) protection applications, GGSNS stemming directly from project related activities, have been submitted by project partners in 2025?

Call 1 & Call 2 & Call 3 Projects (79 Projects)



Key Insights

119 IPR Submissions within 2025

14 IPR submissions already granted

21 SNS JU Projects filed IPR

Highest # of submissions = 41

Lowest # of submissions = 1

Call 1 projects produced the most IPR (more mature)

Stream B projects produced the most IPR (Innovation driven)

IPR targeted technologies:

- Network Management and Optimization
- Machine Learning and AI
- Security and Privacy
- Radio and Wireless Technologies

KIP 8

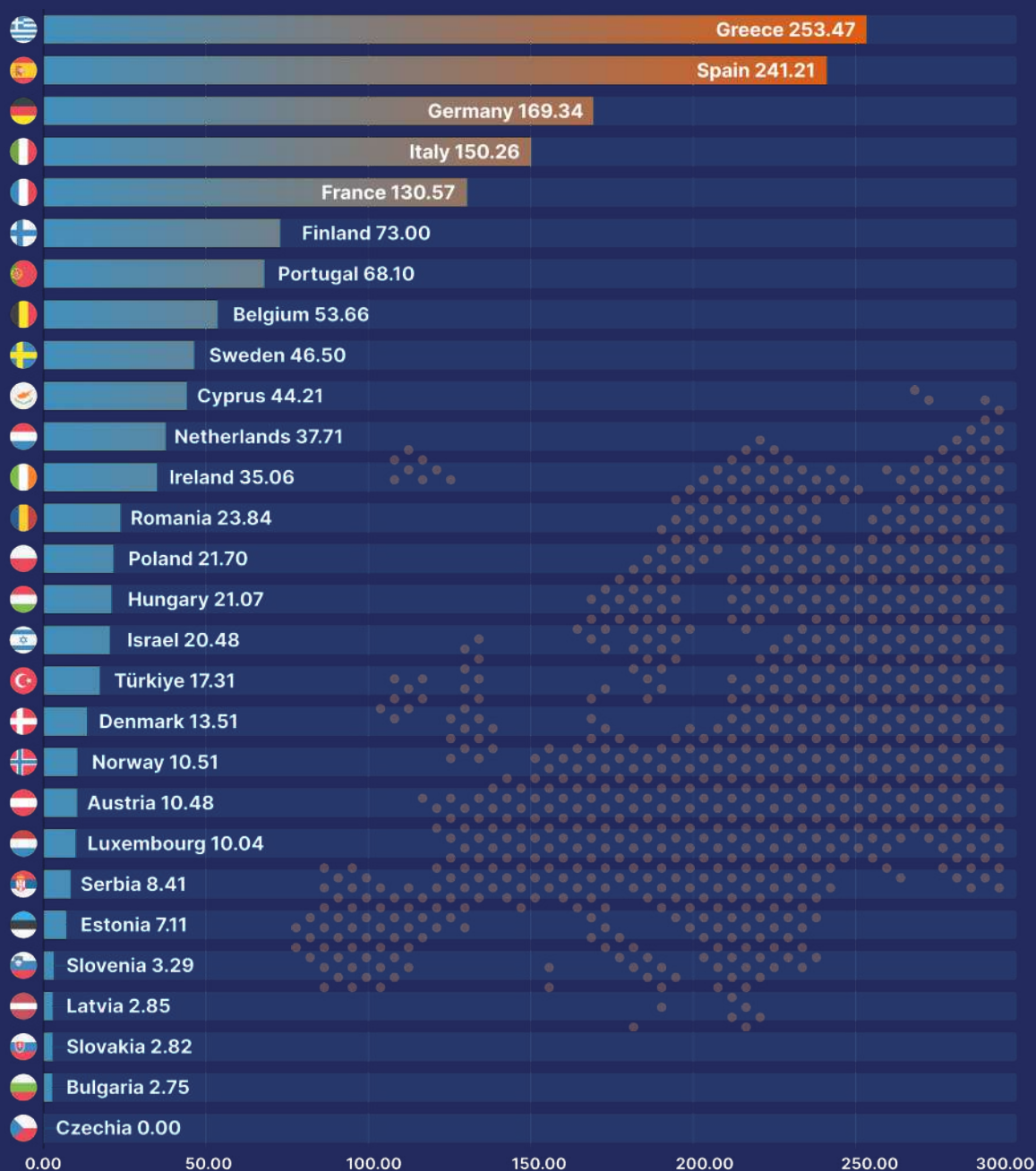
Creating more and better jobs

As reported at the Horizon KPI Dashboard for the 63 out of 79 projects under Call 1, 2 and 3, the indicator of number of full time equivalent (FTE) jobs created and jobs maintained in participating legal entities for the projects funded by the programme relies on data derived from the periodic reporting of the projects.

These SNS JU projects have created 1 478.48 FTE jobs. This number reflects the full-time equivalent (FTE) jobs created and maintained in the organisations funded.

It reflects a cumulative count of FTE jobs created and maintained.

This number of 1 478.48 FTEs is further broken down by country.



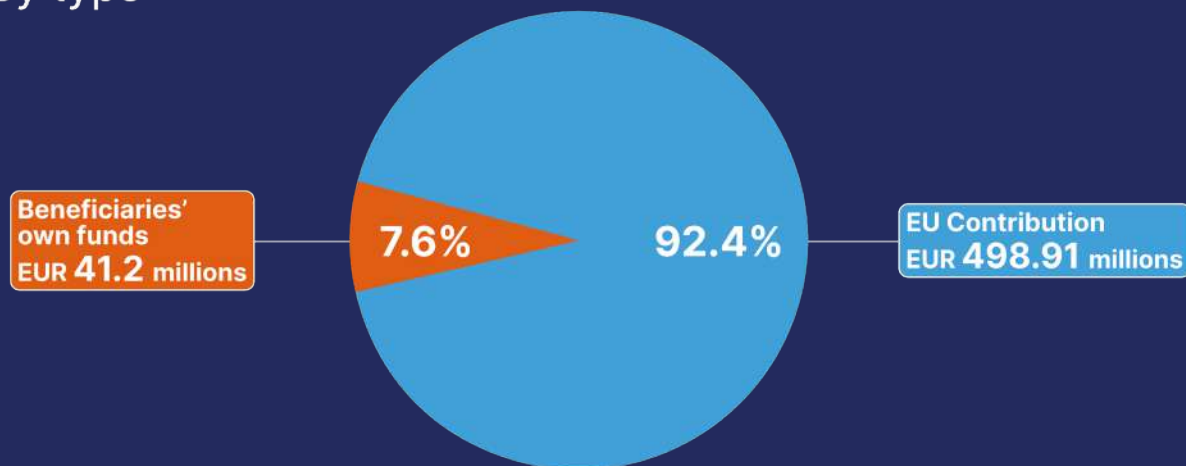
Data Source: HE Dashboard.

KIP 9

Leveraging investment in R&I

FP Investment

By type



The figures above reflect the funding structure of the SNS JU grants and therefore primarily capture the Union contribution and the beneficiaries' own contribution to the funded actions (IKOP). They do not reflect the broader private-side investments mobilised through the programme. In particular, the reporting of In-Kind Contributions to Additional Activities (IKAA) continued to progress strongly in 2025, with cumulative certified IKAA reaching EUR 489.2 million by the end of the year. In addition, the private members represented by the 6G-IA continued to contribute financially to the SNS Coordination and Support Actions supporting the programme implementation. These elements further demonstrate the leverage effect generated by the SNS JU beyond the direct grant funding.

1.7.3

Progress against HE Common JUs Key Performance Indicators

1. Directionality and Additionality

Indicator #1

Progress towards (financial and in-kind) contributions from partners other than the Union – i.e. committed vs. Actual contributions [direct leverage]

The total In Kind contributions for Additional Activities (IKAA) amount for 2025 sums up to EUR 151 945 767.52.

Subject to the successful completion of the certification and validation processes in 2026, the cumulative IKAA reported since the start of the programme is expected to amount to approximately EUR 489.2 million. This would represent around 57.55% of the overall EUR 850 million IKAA commitment foreseen for the entire SNS JU programme, demonstrating the strong mobilisation of the private-side members in support of the programme objectives. The final certified amount may however differ from this figure.

Indicator #2

Additional investments triggered by the EU Contribution, including the qualitative impacts related to additional activities

This indicator defines the amount of public and private investment mobilised with the initial investment of the programme. Participants of the projects funded by Horizon Europe that meet the set conditions are required to contribute with a certain share of their own funds to the projects. This represents a co-investment of public and private investment towards achieving the programme's objectives. The value of this indicator is calculated as the difference of the total cost of a specific project and the contribution of the SNS JU to the total cost of the project. The co-investment value of 2025 refers to projects that started implementation in 2025.

The multiannual (referring to the whole duration of the projects) total cost of the 16 projects (Call 3) is EUR 143 773 060. The multiannual total contribution of the SNS JU is EUR 126 860 352.

The multiannual private co-investment 2025 amounts to EUR 16 912 708.

The private co-investment includes the contributions from the 6G-IA members who meet the conditions and therefore report IKOP. The multiannual total IKOP amount to EUR 11 234 769.

The In-kind contributions for additional activities (IKAA) referred to activities of 2022-2024 amounts to EUR 337 302 670. The IKAA referred to activities 2025 amounts to EUR 151 945 767.52.

The total cost of the projects and the IKOP include the Associated Partners. The cumulative contributions reported at programme level demonstrate continued progress towards the commitments foreseen under the SNS JU. Further details on aggregated values are presented in the following section.

Indicator #3

Overall (public and private; in-kind and financial) investments mobilised into EU priorities.

See Section 2.2.

Indicator #4

International actors involved

In 2025, SNS JU actively engaged with Japan and the Republic of Korea, on topics related to AI and Radio Access Networks (RAN). In this context two new projects on EU-Japan (6G-MIRAI) and EU-Republic of Korea (6G-Arrow) cooperation started in 2025. Furthermore, in the context of EU-US collaboration in 6G technologies, an SNS JU project entitled 6G-XCEL (6G Trans-Continental Edge Learning) continued its operations in 2025. Furthermore, in the SNS JU R&I Work programme 2026, a new Coordination and Support Action focussing on EU-India cooperation in 6G technologies is foreseen. This project is expected to start at the beginning of 2027.

Additionally, a coordination and support action (SNS ICE) amplified SNS JU's global presence by promoting its perspectives, accomplishments, and results on the international stage until April 2025.

The overarching aim is to steer Europe's technological vision into the 6G standardization process, positioning the continent as a key player in shaping the future of telecommunications.

2. Transparency and Openness

Indicator #5

Share & type of stakeholders and countries invited/engaged

In the **first three SNS JU calls** a diverse set of stakeholders have been engaged in the projects.

More specifically, SNS JU project beneficiaries are:

 **60%**

Private for-profit entities

(excluding Higher or Secondary Education Establishments)

 **23%**

Higher or Secondary Education Establishments

(5% private and 18% public)

 **14%**

Research Organisations
(11% private and 3% public)

 **2%**

Other

The following table provides more detail:

	Number of beneficiaries	% in terms of number of beneficiaries	% R. EU contribution	% SME contribution
PRIVATE	990	78%	77%	23%
Private for-profit entities *	766	60%	50%	21%
Higher or Secondary Education Establishments	61	5%	6%	-
Research Organisations	140	11%	19%	1%
Other	23	2%	3%	2%
PUBLIC	282	22%	23%	-
Higher or Secondary Education Establishments	234	18%	19%	-
Research Organisations	42	3%	4%	-
Other public bodies	6	0%	-	-

* Private for-profit entities (excluding Higher or Secondary Education Establishments)

Indicator #6

Share of newcomer partners in partnerships, including geographical coverage

Newcomer partners are those organisations that are partners in the current partnership but have never been a partner in this partnership or its predecessor(s). The private members of the SNS JU (6G-IA) incorporated 63 newcomers to the Association in 2025, which consist of 14.6% of the total members of 6G-IA.

During 2025, one new country was added in the list of countries where 6G-IA members are based, as one entity from Canada joined 6G-IA, bringing the total number of countries where 6G-IA are based to 31.

Geographically, six countries represent 60.3% of the membership base: Greece, Germany, Spain, France, UK and Italy.

Number of 6G-IA members

Country	End of 2024	End of 2025	% Total Membership	Newcomers	Newcomers as % total
Greece	48	64	14.8%	16	25.0%
Germany	46	51	11.8%	5	9.8%
Spain	43	44	10.2%	1	2.3%
France	31	37	8.6%	6	16.2%
UK	29	34	7.9%	5	14.7%
Italy	24	30	7.0%	6	20.0%
Ireland	18	22	5.1%	4	18.2%
Finland	10	14	3.2%	4	28.6%

Country	End of 2024	End of 2025	% Total Membership	Newcomers	Newcomers as % total
Belgium	10	13	3.0%	3	23.1%
Netherlands	11	13	3.0%	2	15.4%
Portugal	9	12	2.8%	3	25.0%
Turkey	12	12	2.8%	0	0.0%
Sweden	9	10	2.3%	1	10.0%
Romania	7	9	2.1%	2	22.2%
Norway	7	8	1.9%	1	12.5%
Switzerland	9	8	1.9%	-1	-12.5%
Cyprus	6	7	1.6%	1	14.3%
Czech Republic	4	5	1.2%	1	20.0%
Israel	5	5	1.2%	0	0.0%
Luxembourg	5	5	1.2%	0	0.0%
Slovenia	4	5	1.2%	1	20.0%
Poland	4	4	0.9%	0	0.0%
Austria	3	3	0.7%	0	0.0%
Bulgaria	3	3	0.7%	0	0.0%
Estonia	5	3	0.7%	-2	-66.7%
Lithuania	1	3	0.7%	2	66.7%
Hungary	2	2	0.5%	0	0.0%
Latvia	1	2	0.5%	1	50.0%
Denmark	1	1	0.2%	0	0.0%
Slovakia	1	1	0.2%	0	0.0%
Canada	0	1	0.2%	1	100.0%
TOTAL	368	431	100.0%	65	15.1%

Both members and observers are mentioned on the above table of 6G-IA members.

Indicator #7

Number and types of newcomer organisations in supported projects

During the first two SNS R&I calls a remarkable number of newcomer organisations participated in the SNS JU projects. Out of the 409 unique beneficiaries, 199 unique newcomer organisations joined SNS JU projects of the first two calls (representing 48.7%).

While the SNS JU programme gradually reaches maturity, the trend of attracting newcomer organisations continued in call 3. More specifically for call 3, there are 84 unique newcomer organisations out of 516 unique beneficiaries who started SNS JU projects for the first time. In other words, newcomer organisations represent 16.3% of unique beneficiaries.

172 out of the 513 unique beneficiaries are SMEs and it is remarkable that SMEs count for one third (33%) of the newcomer organisations in the SNS JU projects.

3. Coherence and Synergies

Indicator #8

Share of budget dedicated to coordinated and joint activities with other European Partnerships

In 2024 and 2025, the SNS JU continued to support coordinated activities and synergies with other European

Partnerships and EU initiatives, notably the Europe's Rail Joint Undertaking and the Chips Joint Undertaking.

In particular, the SNS JU committed EUR1 million to activities linked to cooperation with Europe's Rail JU in the area of advanced rail connectivity and future communication systems, following a coordinated approach launched in 2024.

These activities mainly aimed at ensuring complementarities between research and innovation agendas rather than establishing fully co-funded joint calls with pooled governance structures.

Indicator #9

Number and type of coordinated and joint activities with other European Partnerships and with other R&I Initiatives at EU /national/regional/sectorial level.

In 2024 and 2025, the SNS JU continued to develop coordinated activities and synergies with several European Partnerships, EU initiatives and industrial ecosystems relevant to the development and deployment of 5G and 6G technologies.

These activities included:

- ▶ cooperation with the Chips Joint Undertaking on topics related to microelectronics, semiconductor technologies and Front-End Modules (FEM);
- ▶ collaboration with the Europe's Rail Joint Undertaking, including participation in a project managed by Europe's Rail JU, whose grant agreement was signed in 2024;
- ▶ signature of a Memorandum of Intent with the European Space Agency on 16 October 2025 to strengthen cooperation on the integration of terrestrial and non-terrestrial networks (TN/NTN) in the context of future 6G systems;
- ▶ coordination with initiatives related to cloud-edge infrastructures, AI, photonics, High Performance Computing (HPC), Connected and Automated Mobility (CAM) and smart connectivity ecosystems;
- ▶ exchanges and alignment activities linked to the preparation of the SNS JU Research and Innovation Work Programme 2025 and 2026;
- ▶ cooperation with deployment-oriented initiatives under CEF Digital, notably regarding 5G corridors and strategic deployment agendas.

These coordinated activities took different forms, including strategic exchanges, memoranda of understanding/intents, participation in joint events and workshops, contribution to cross-sector discussions, alignment of research priorities, and participation in collaborative projects with complementary European initiatives.

Indicator #10

Share of complementary and cumulative funding from other Union or national/ regional funds (national/regional, ERDF and other cohesion policy funds, RRF, CEF, DEP).

In 2025, there was no funding received from other Union/National/Regional funds.

4. International visibility and positioning

Indicator #11

Visibility of the partnership in national, European, international policy/industry cycles

The SNS JU has a prominent global visibility for 6G networks by:

- ▶ Being one of the key partners of the 6G Global events like EuCNC & 6G Summit and 5G Techritory.

- ▶ Establishing cooperation with like-minded countries at global level and dedicating resources to work together with USA, Republic of Korea and Japan. In this context 3 projects on EU-US, EU-Japan and EU-Republic of Korea cooperation are active focusing on 6G Research and Innovation.
- ▶ Actively supporting through the SNS JU R&I Work programme, the EU-US, EU-Japan, EU-Republic of Korea and EU-India cooperation in the context of the relevant Trade and Technology Councils' (TTC) and the established Digital Dialogues.
- ▶ Leveraging the SNS-ICE CSA project that acted like the SNS ambassador with the outside world.

1.7.4

Progress against JU-specific Key Performance Indicators

The monitoring of the KPIs that are specific to the SNS JU is based on data collected from the evaluation and grant agreement process, as well as from the Continuous Reporting tool in Compass (e.g. number of projects per topic, funding for low TRP topics, participation of SMEs, publications, standardisation contributions, patents, etc.)

For some of the KPIs data is sourced by the questionnaire of CSA project CO-OP.

The 6G KPIs/KVIs is an on-going process. In 2025, a first list of 6G KPIs/KVIs has been further elaborated during the lifecycle of SNS projects under Calls 1, 2 and 3. The activities continued in 2025 to have a first set of widely accepted 6G KPIs.

Resources (input), processes and activities KPIs: R1 to R10

R1: SME innovation & participation

The analysis from the first 3 Calls showed that the **SMEs received 23.16 % of the funding budget**. In addition to this, **nine** projects operated Financial Support to Third Parties (FSTP), which expands the number of SMEs involved in the SNS JU programme. More specifically, until end of 2025 259 Open Call projects have been funded in the scope of the Cascading Funding (FSTP) with 204 SMEs involved.

The number of SMEs participating in SNS JU projects represents **172 unique SMEs**, which represents **33.59% out of all participants** (516 stakeholders). (Data reflects the situation of May 2026)

In terms of calls 4 and 5 the 62 unique SMEs (out of the 204 unique beneficiaries), from the 20 selected proposals, will receive 26.2% of the funding budget. Projects under Calls 4 and 5 will be launched as of May 2026.

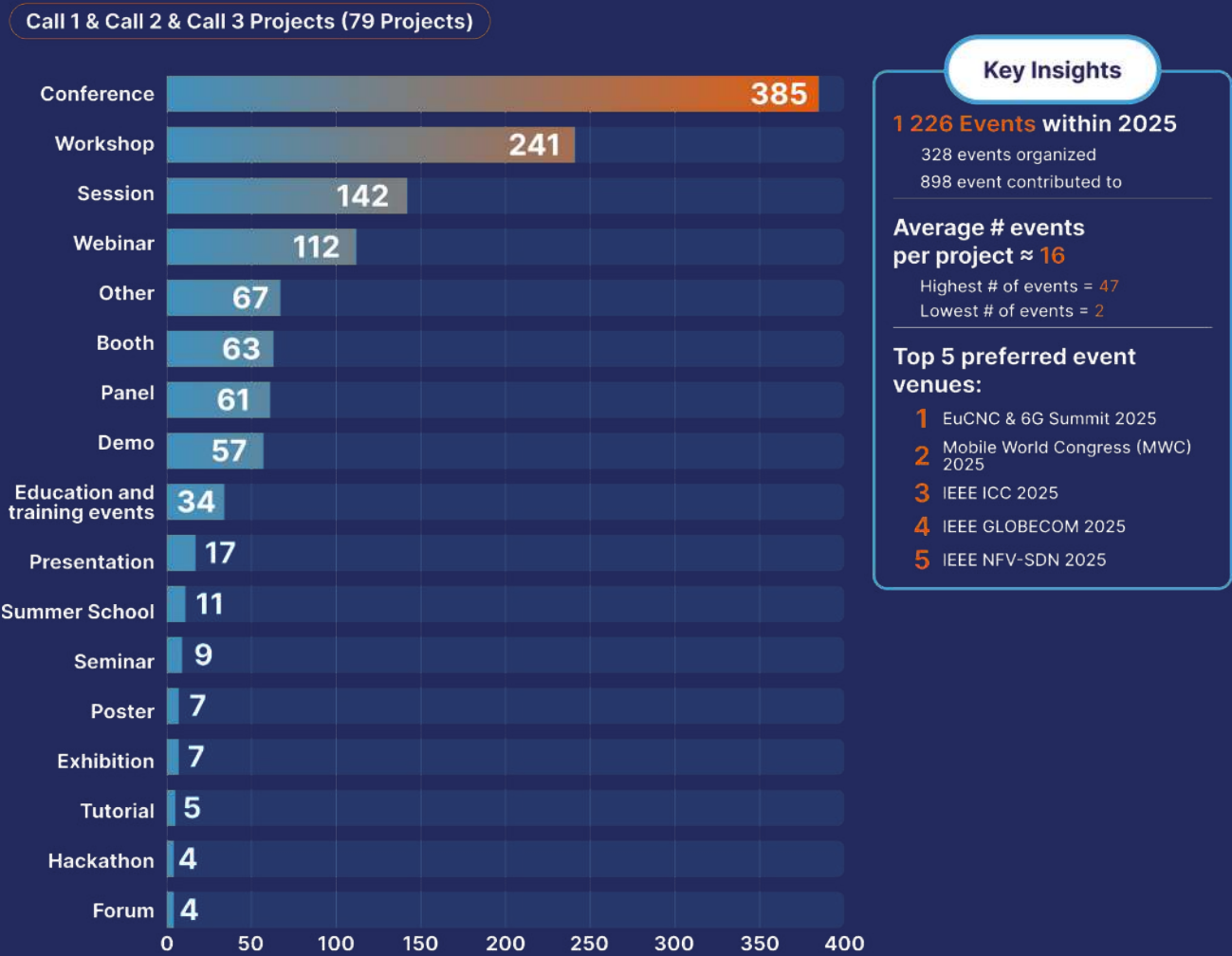
As a general comment, the ecosystem of the SNS JU is attracting an important number of applicant SMEs, with, as an illustration, for proposals received under Call 4 & 5: 307 unique applicant SMEs, out

of 821 unique applicants, which represent 37% of all applicants and 27% of all requested grants.

R2: Rapid diffusion

As per SNS JU project CO-OP questionnaire survey, the SNS JU projects (Calls 1, 2 and 3) have reported Rapid diffusion corresponding to 1 226 events; **organisation of 328 events** (mainly workshops and webinars) and **participation to 898 industry events** (workshops, webinars, exhibitions, etc.). These numbers demonstrate the increasing impact of SNS projects and the increasing dissemination of SNS project’s results to the scientific community and the industry worldwide.

Q1. How many events (webinars, workshops, sessions, panels, keynotes) has your project organised or contributed to in 2025?



R3: High risk research funding

Low TRL activities are considered as High risk. They represented **60%** of total funding, for projects under Call 1, 2 and 3. This figure represents the Stream B projects’ funding, as a percentage of the total funding. This figure represents the Stream B projects’ funding, as a percentage of the total funding.

As the activity of the SNS JU is progressing and looking at the evolution, we can conclude that Call 3 represents a reduction of High-Risk funding, due to increased funding on Stream C and D projects, which

engage higher TRLs (as the activity evolves closer to trials, technology demonstration and trials / pilots).

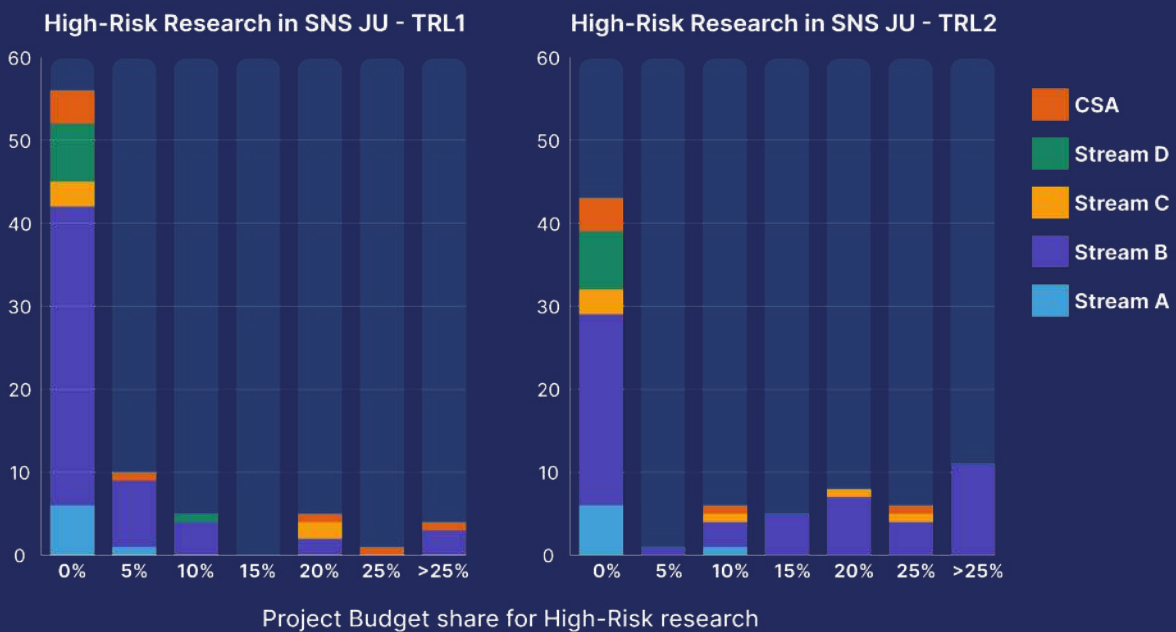
When looking into the number of projects involved into High-Risk research, there are 36 out of the 79 SNS JU projects which engage into High-Risk research, representing 45% of the projects number. In more detail, the way this figure is split into the different Calls is shown in the graphs below.

The pie charts below show percentages (in terms of number of projects) engaging into High-Risk research, in each one of the 3 Calls.

It is clear that 34% of projects under Call 1 and 38% of projects under Call 3 are involved with High-Risk research (TRLs 1-2), while Call 2 is leading in terms of High-Risk research, with 67% of the projects involved with it.

Q10. High-Risk Research: Please give your best approximation of what percentage, in terms of budget share, of activities in your project are at levels TRL 1 and 2, and therefore correspond to "High-Risk" research?

Call 1 & Call 2 & Call 3 Projects (79 Projects)



Key Insights

45% of SNS JU projects engage in High-Risk Research (HRR)

TRL2 slightly 'stronger' than TRL1

Per Call Analysis

Call 2 projects lead in HRR with 67%

Approx. 1/3 Call 1 & 3 projects engage with HRR

Per Stream Analysis

Stream B projects are leading in HRR with ≈ 60%

Stream C & D projects marginally engage with HRR

Main Trends in HRR

- ✦ AI-Native Everything
- 🌀 Convergence of Communication, Sensing, and Computing
- 🔗 Semantic & goal-oriented comms

Regarding TRLs 3 and 4 326 proofs of concept / lab tests were conducted within 2025 by 40 SNS JU projects.

R4: Standardisation contributions

According to SNS JU CO-OP questionnaire survey within 2025 the SNS projects have produced **920 contributions to standardisation activities** (e.g. contributions to new and revised standards, participation to committees and groups, etc.), which, added to the previous years' contributions, total to 2 013 contributions to standards.

European contributions to standardisation offer several substantial benefits for the EU key players, stakeholders and consumers, including enhancing interoperability, market efficiency, innovation, global leadership, consumer protection, regulatory compliance, trade facilitation and security, driving technology progress, economic growth and societal benefits.

SNS JU projects demonstrated significant progress in standardisation activities.

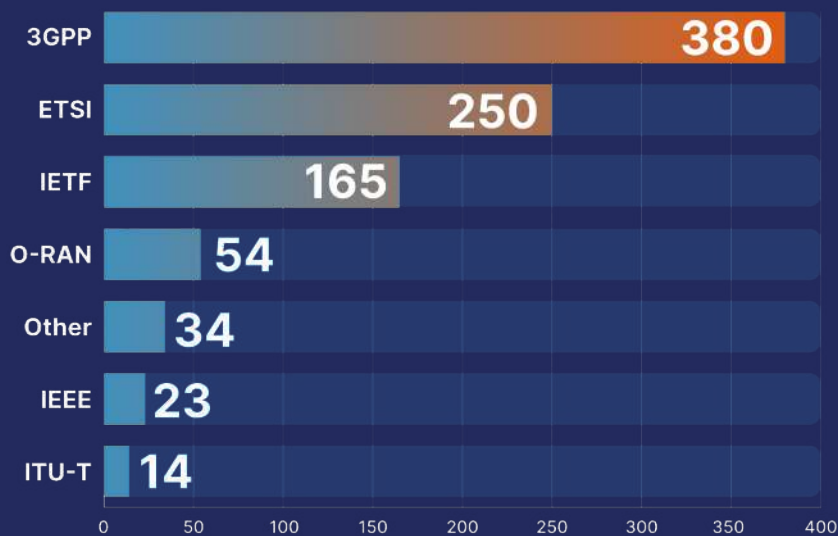
Since the launch of initial 6G-related activities in 3GPP during 2025, the SNS JU project portfolio has demonstrated a strong impact on global standardisation, with more than 380 contributions submitted to 3GPP by SNS-supported projects, reinforcing Europe's influence in shaping the future 6G standards and ensuring strong alignment between SNS JU research priorities and global standardisation activities.

SNS JU contributions to (pre)Standards Organisations and Bodies are shown in the chart:

Q3. How many contributions to standards organizations (SDOs) have been submitted by project partners in 2025, stemming directly from project related activities?

Call 1 & Call 2 & Call 3 Projects (79 Projects)

Contributions to (pre)Standards Organizations & Bodies



Key Insights

920 Standards contrib. within 2025

Average # contrib. per project ≈ 15

Highest # of contrib. = 101
Lowest # of contrib. = 1

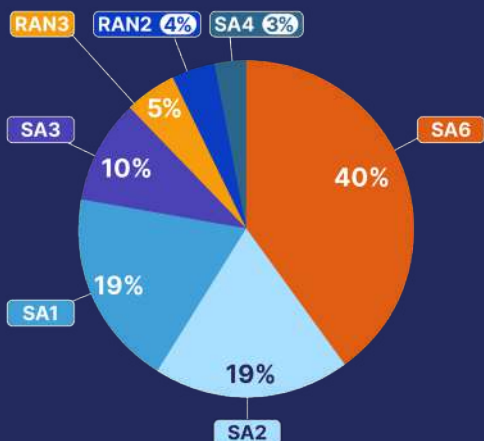
Preferred WGs in 3GPP:

- 1 SA6
- 2 SA1
- 3 SA2

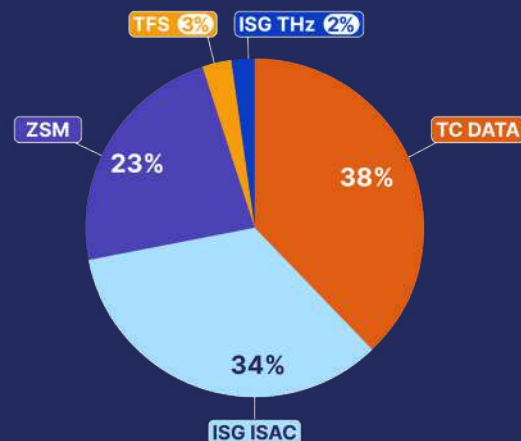
Preferred WGs in ETSI:

- 1 TC Data
- 2 ISG ISAC
- 3 ISG ZSM

3GPP Contributions



ETSI Contributions



R5: Share of family patents

According to the questionnaire survey of project CO-OP SNS under Calls 1, 2 and 3 have filled in total 178 applications so far. Only in 2025 there have been 119 patent submissions, out of which 14 are already granted.

The IPR targeted technology areas are:

- ▶ Network management and optimisation,
- ▶ Machine learning and AI,
- ▶ Security and Privacy,
- ▶ Radio and Wireless Technologies,
- ▶ Internet of Things,
- ▶ Emerging Network Technologies.

There is a percentage of 17% declared 5G patent families by Nokia and Ericsson.

R6: Scientific excellence

According to Continuous Reporting, until the end of 2025, SNS projects produced and disseminated quality knowledge through **2 934 publications**, including **2 455 peer-reviewed publications** in high impact journals and conferences. These figures are way above the target of 400 publications by the end of 2025. It should be well noted that 298 publications in 2025 are the result of cross project collaboration.

R7: Reach an appropriate balance between research, innovation and deployment

In 2025, the SNS JU project portfolio was enlarged by the **16 new projects under Call 3**.

In total the SNS JU selected from all 3 Calls and signed Grant Agreements with 79 projects (67 RIA, 8 IA and 4 CSA).

As per Horizon KIP Dashboard data, if we focus more specifically on the split between RIA and IA projects, SNS R&I WP continued to focus mostly on research activities during initial phases, while later on the balance moved towards large scale trials. In the current SNS JU project portfolio (Projects under Call 1, 2 and 3 projects) **79% of the funding** (or EUR 385 111 313.33) **was allocated to RIA and 21% to IA** (EUR 104 039 070.64).

In 2025 SNS JU Phase 1 project portfolio was enlarged by the projects under Call 3. In total the SNS JU selected and signed 79 projects' Grant Agreements, split in 67 RIA, 8 IA and 4 CSA projects.

SNS R&I WP was designed to focus mostly on research activities during initial phases and rebalancing towards large scale trials in the final ones. In current SNS JU projects' portfolio (Calls 1, 2 and 3) 76% of funding was allocated to RIA and 22% to IA.

R8: Accelerate the development of energy efficient networks

In 2025, **22** projects experimented with Energy Efficiency (EE) solutions. EE solutions were targeting the following topics:

- ▶ Energy-aware resource allocation and orchestration (Cloud-Edge-RAN continuum),
- ▶ Energy-efficient communication and radio/network design (sleep modes, DTX, muting, PA blanking),
- ▶ Energy-efficient AI / computing / device-level optimization (FPGA vs CPU/GPU, battery-less, etc.).

The information is based on CO-OP survey, and it is split as follows among the 3 Calls:

- ▶ Call 1: 9 projects,
- ▶ Call 2: 10 projects,
- ▶ Call 3: 3 projects.

Stream B projects engaged the most with **Energy efficiency experimentation**, as shown on the graph below:

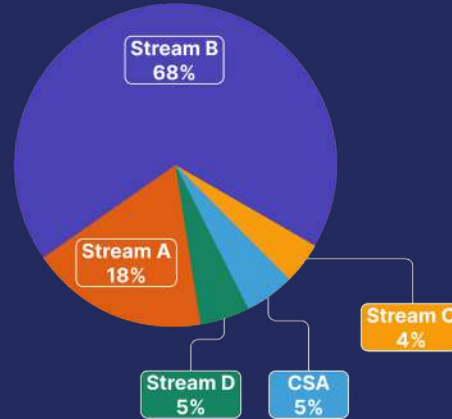
Q9. Has your project experimented with Energy Efficiency (EE) solutions in 2025?

Call 1 & Call 2 & Call 3 Projects (79 Projects)

Energy Efficiency experimentation per SNS JU Call



Energy Efficiency experimentation per Stream



Key Insights

22 SNS JU projects experimented with Energy Efficiency Solutions in 2025

Call 1 & 2 projects were more heavily engaged with EE than Call 3

Stream B projects engaged the most with EE experimentation

Investigated EE solutions include:

- Energy-aware resource allocation & orchestration (Cloud-Edge-RAN continuum)
- Energy-efficient communication & radio/network design (sleep modes, DTX, muting, PA blanking)
- Energy-efficient AI / computing / device-level optimization (FPGA vs CPU/GPU, battery-less, etc.)

R9: Ensure research on secure future digital services

28 projects under Call 1, 2 and 3 are addressing to a certain degree security related issues.

Furthermore, two projects under Call 4, which will start in 2026, will be fully dedicated on Security aspects, which will be covering smart security, security services and reliable services operation..

R10: Collaboration and synergies with other partnerships

In 2025, the SNS JU continued to strengthen its collaboration with Chips Joint Undertaking, Europe’s Rail Joint Undertaking and Photonics21. A key outcome of this cooperation is the FP2-MORANE-2 project, co-funded by the SNS JU and Europe’s Rail JU with a total EU contribution of EUR 13.5 million, which commenced in December 2024. The project stems from the joint EU-RAIL–SNS synergy call on “Digital and Automated Testing and Operational Validation of the Next EU Rail Communication System” and aims to develop a highly mature product ecosystem for the Future Railway Mobile Communication System (FRMCS).

Synergies with the Chips JU and the Photonics PPP were further operationalised through the SNS R&I Work Programme 2025, which includes dedicated topics on (i) the design, development and testing of Front-End Modules (FEM), and (ii) the integration of photonic systems and optical networks into the 6G architecture. These complementarities are expected to be reinforced in future work programmes, including through potential technology transfer towards Chips JU pilot lines. In particular, the FEM activities are conceived as a coordinated multiannual roadmap across the SNS JU and Chips JU, with an initial FEM topic in the SNS JU Work Programme 2025, a complementary focus topic planned under the Chips JU Work Programme 2026, and further SNS JU activities envisaged in 2027, with the objective of developing European Front-End Module capabilities and strengthening Europe’s technological sovereignty in 6G microelectronics.

Collaboration with national initiatives was also enhanced through the States Representatives Group and the activities of the SNS CO-OP project, which facilitated a structured and continuous dialogue between the SNS JU and European national 6G R&I initiatives.

Outcomes : O1 to O4

O1: Development of energy efficient networks

This KPI cannot be evaluated yet as the relevant projects (see KPI R#8) have started in 2023 and there is no tangible outcome yet. It is worth mentioning that according to the reference figure of the SNS project portfolio prepared by the SNS JU Technology Board, 44% of the SNS Research & Innovation actions are working on energy-efficient technologies for B5G and 6G.

Nevertheless, a first White Paper was published by the SNS JU in June 2025 as a result of the work of the Sustainability Task Force, outlining the current sustainability posture of a set of SNS JU research projects and identifying a strategic pathway towards embedding sustainability further in the European SNS ecosystem and future networks.

Sustainability is understood through three interconnected pillars: environmental, economic, and social considerations. This white paper (WP) presents a comprehensive analysis of how 27 projects funded by the SNS JU address sustainability in their work on next-generation (6G) communication technologies.

The analysis was based on detailed questionnaire responses and follow-up interviews, spanning four core themes: (i) sustainability targets, (ii) methodologies, (iii) trade-offs, and (iv) implementation considerations. The findings provide a valuable baseline for monitoring future progress towards more sustainable and energy-efficient B5G and 6G networks.

O2: Technological solutions consensus building

In 2025, collaboration among SNS JU projects intensified significantly, fostering strong alignment and consensus-building on key technological solutions for 6G. Within this framework, the SNS JU Project Working Groups (WGs) delivered a series of impactful white papers.

In addition to the White Papers produced by the SNS JU Project Working Groups, knowledge dissemination was further supported through major collaborative publications such as the book "Towards Sustainable and Trustworthy 6G: Challenges, Enablers and Architectural Design"³⁵, developed in the context of the European flagship projects Hexa-X and Hexa-X-II and drawing on expertise from across the European 6G research community.

The WG on 6G Architecture advanced the development of a comprehensive white paper outlining the architectural approaches and design considerations currently explored across SNS JU projects. In parallel, the Test, Measurement and KPIs Validation WG (TMV WG) published a white paper focused on the formalisation and validation — to the greatest extent possible — of 6G Key Performance Indicators (KPIs)³⁶ and Key Value Indicators (KVI)s³⁷, contributing to a coherent and unified European vision for 6G networks.

Moreover, the SNS JU Technology Board (TB) issued a white paper highlighting the role of Artificial Intelligence and Machine Learning (AI/ML) as key enablers of 6G systems³⁸. Complementing this work, the SNS Technology Board Sustainability Task Force produced a dedicated white paper providing a comprehensive analysis of how 27 SNS JU-funded projects address sustainability challenges in the context of 6G. This white paper contributes to technology consensus in various aspects of sustainability targets.

O3: Advanced 6G solutions for verticals

75 projects under Call 1, 2 and 3 are implementing use cases involving vertical industries.

These 469 in total Use Cases are covering a large set of vertical sectors, including Industry 4.0, Media/xR, Security/PPDR and Automotive/Transport/Logistics, Smart Energy.

Vertical sectors addressed are shown on the graph:

35. <https://www.ericsson.com/en/reports-and-papers/books/6g-sustainable-trustworthy>

36. https://smart-networks.europa.eu/wp-content/uploads/2025/03/white-paper-kpis_7_3_2025_with-disclaimer.pdf

37. https://smart-networks.europa.eu/wp-content/uploads/2025/05/sns-ju-white-paper-6g-kvis-survey-2025_final-1.pdf

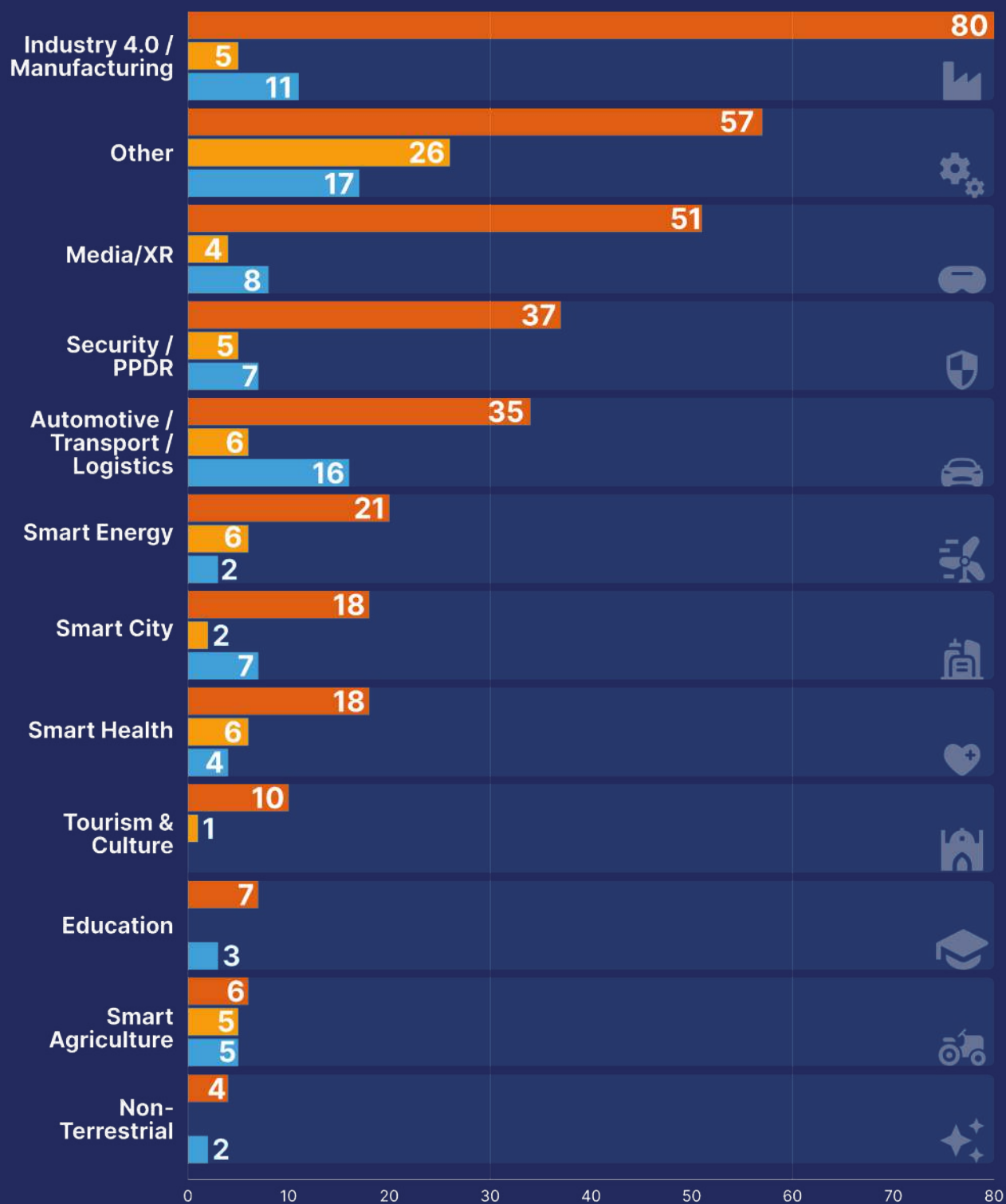
38. https://smart-networks.europa.eu/wp-content/uploads/2025/02/ai_ml_white-paper-sns_tb_v1.0.pdf

Call 1, 2 and 3 Vertical Sectors

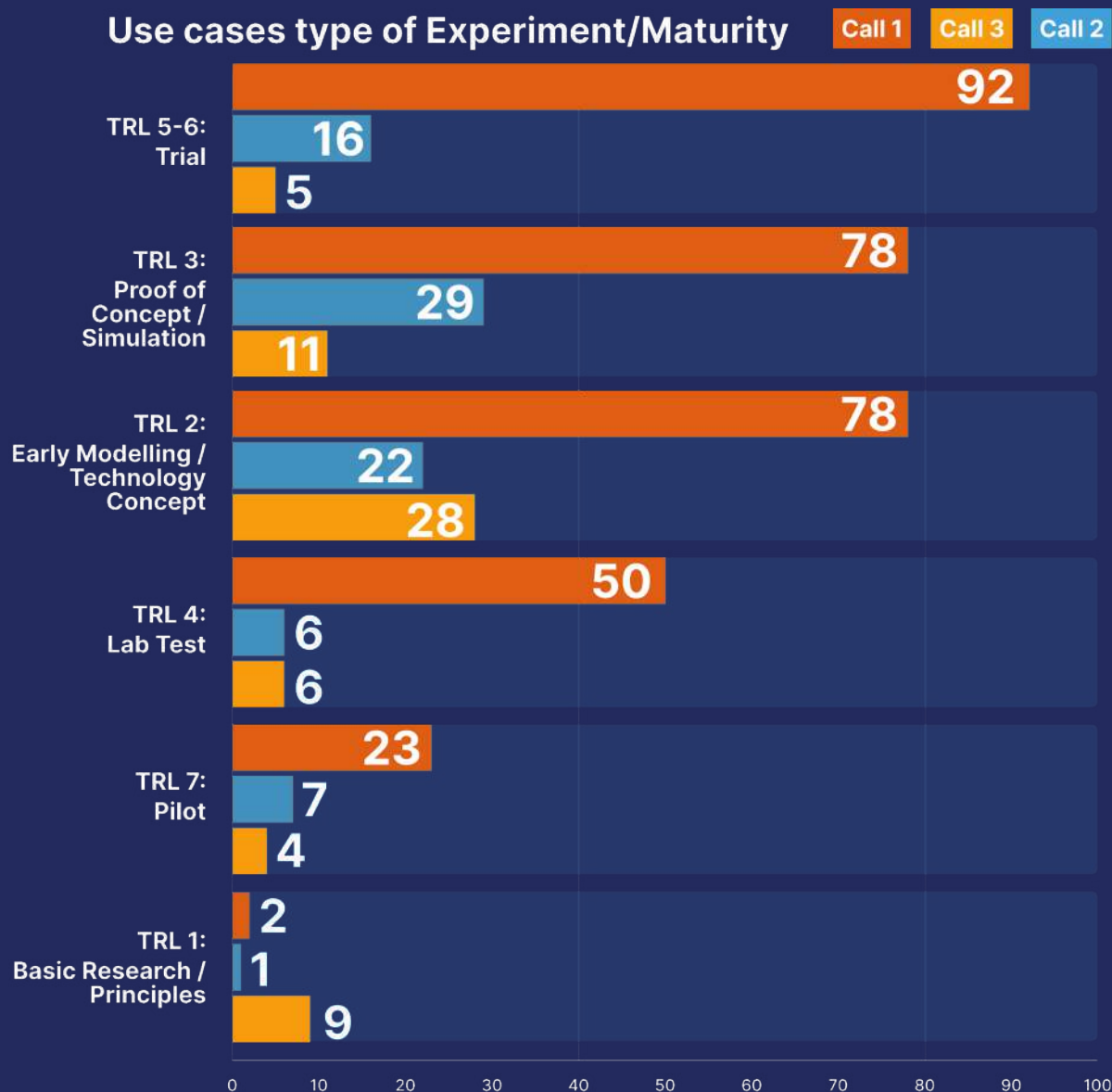
Call 1

Call 3

Call 2



The type of experiment, as well as the maturity are shown on the graph below, for these use cases which cover the whole range of TRLs, from 1 to 7, with data corresponding to each one of the 3 SNS JU Calls.



O4: Foster emergence of new actors in the 6G supply chain

The SNS JU continued in 2025 to foster the emergence of new actors across the European 6G supply chain by supporting a broad and diversified innovation ecosystem extending beyond traditional telecom stakeholders. Besides the high number of newcomers participating in SNS JU 2025 Calls and projects, reflecting the openness and accessibility of the SNS programme, the associated open-call mechanisms (Financial Support to Third Parties – FSTP) enabled the participation of 347 external stakeholders and supported 259 third-party projects by the end of 2025, with a strong representation of SMEs, start-ups, universities and research organisations.

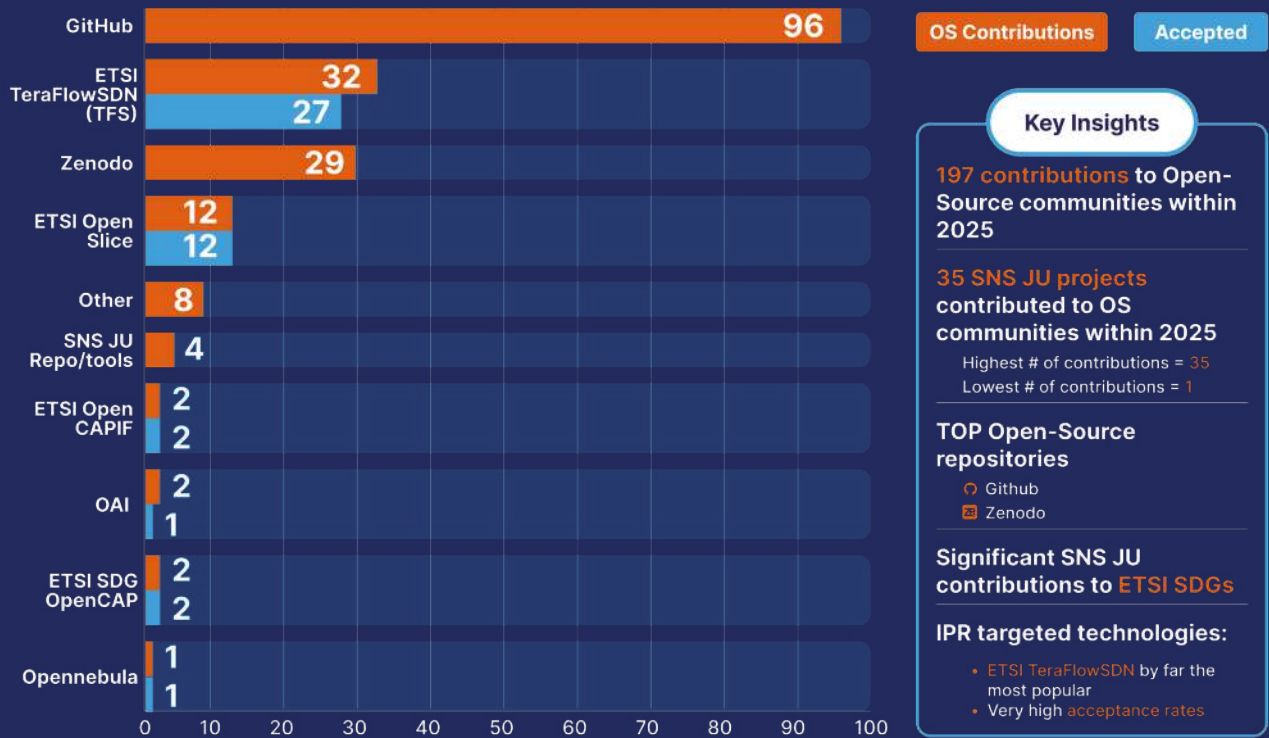
The SNS JU programme also attracted actors from adjacent industrial domains including AI, cloud-edge computing, photonics, microelectronics, robotics, industrial automation and cybersecurity, contributing to the diversification of the future 6G ecosystem. SNS JU projects also strengthened the involvement of vertical sectors such as manufacturing, transport, media, energy and public safety through large-scale trials and pilots. Open-source activities and open platform approaches in the SNS JU further lowered barriers to entry for software-centric innovators and smaller technology providers. In parallel, the SNS JU projects generated more than 2000 standardisation contributions since programme launch, enabling new European actors to gain visibility and influence in global 6G standardisation activities.

Synergies with initiatives such as Chips JU, Europe’s Rail JU and Photonics21 partnership further reinforced cross-sector integration and helped connect emerging suppliers to broader European industrial value chains.

As an example of the programme’s support to software-centric innovators and smaller technology providers, according to information collected through the SNS CO-OP questionnaire survey, SNS JU projects from Calls 1, 2 and 3 reported a total of **197 contributions to relevant open-source communities** in 2025. The details are presented in the graph below.

Q8. How many open-source contributions has your project generated & submitted and how many were accepted in the relevant communities in 2025?

Call 1 & Call 2 & Call 3 Projects (79 Projects) **SNS JU Contributions to Open Source communities**



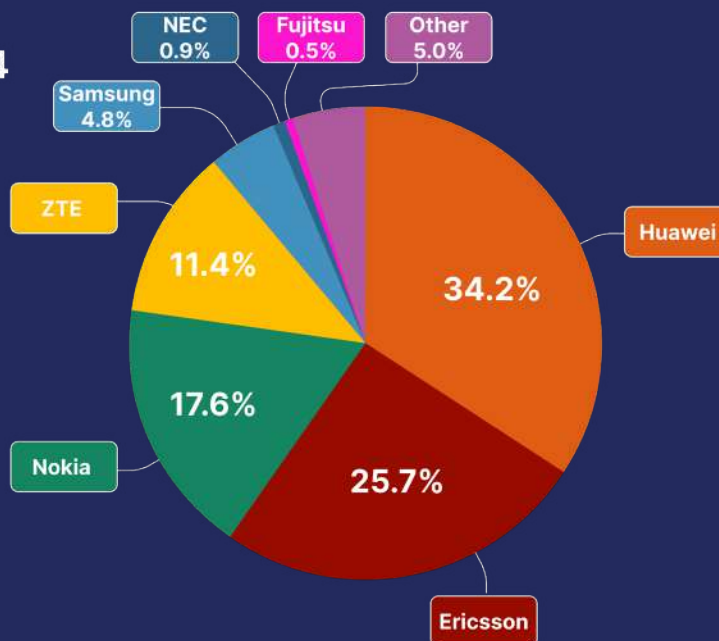
Impacts: I1 to I4

I1: A competitive data economy

Based on data from Dell'Oro report³⁹, Nokia and Ericsson together captured roughly 27% of the global market. Nokia held ~14% and Ericsson ~13% on a worldwide basis. In absolute terms, Nokia reported full-year net sales of €19.9bn (~US\$22bn) with 3% reported growth, while Ericsson posted SEK 236.7bn (~US\$24bn) with 2% organic growth. In the topic that matters most to European industrial and sovereignty interests, the RAN market excluding China, Ericsson (~26%) and Nokia (~22%) remain the two dominant suppliers, but face increasing competition from other players.

Looking specifically at the Radio Access Network (RAN) market, Omdia estimates that Huawei remained the global market leader in 2024 with a market share of 34.2%, followed by Ericsson (25.7%), Nokia (17.6%) and ZTE (11.4%). However, this picture changes significantly when excluding the Chinese market. For the full year 2024, Ericsson was the leading RAN supplier outside China with a market share of 36.0%, followed by Nokia (24.7%), Huawei (20.9%), Samsung (6.9%) and ZTE (2.9%).

RAN revenue market share, 2024



Source: Omdia

These figures indicate that European vendors maintain a strong competitive position in international RAN markets outside China. The combined market share of Ericsson and Nokia outside China exceeded 60%, remaining above the SNS JU baseline of 40%, noting that this baseline was established with a particular focus on the RAN segment rather than on the broader telecom equipment market.

I2: Reach programme level consensus on 6G KPIs

The IMT-2030 KPIs are acknowledged as the starting point for SNS work towards a common vision on 6G KPIs. At the same time the SNS community has already started building upon the results of the 5G PP; the Test, Measurement and KPIs Validation Working Group (TMVWG) continued its activities in 2025, focusing on the formalisation and validation to the greatest possible extent, of 6G KPI & KVI (societal key value indicators) to ensure a unique European vision on 6G networks.

Based also on activities and input of SNS JU projects and Test Measurement and KPIs Validation (TMV) Working Group, 6G-IA Spectrum Working Group has provided in 2025 minimum requirements related to technical performance for IMT 2030 radio interfaces.

The IMT-2030 KPIs are acknowledged as the starting point for SNS work towards a common vision on 6G KPIs (key performance indicators). Furthermore, the Test, Measurement and KPIs Validation WGs (TMV WG) published in 2025 a white paper focussing on the formalisation and validation to the greatest possible extent, of 6G KPI & KVI (societal key value indicators) to ensure a unique European vision on 6G networks.

In addition, the Hexa-X-II project was responsible until 2025 for the definition of KPIs and KVIS for the main 6G use cases, while the SNS-OPS initially and currently SNS CO-OP projects were monitoring and analysing all SNS JU project KPIs and KVIS in 2025 through a dedicated questionnaire, which will be addressed to all SNS projects on an annual basis.

39. https://www.delloro.com/cloud-providers-boost-total-telecom-in-2025/?utm_source=chatgpt.com

I3: Uptake of digital solutions within verticals

Two new projects funded under Call 3 were added to the previous projects' portfolio, bringing the total number of projects fully dedicated to vertical trials and pilots to eight.

Four new stream D projects were selected under Call 5 and will start in 2026, also fully dedicated to vertical sectors, like health, transportation, manufacturing and media.

According to the SNS JU Verticals Cartography Tool, 469 use cases involving vertical sectors (including FSTP projects) have been recorded since the start of the programme. Of these, 224 trials and pilots at TRL 5 and above were conducted in 2025.

As foreseen in the programme design, the maturity of SNS JU activities is expected to increase progressively over the lifetime of the programme. In this context, the 2027 Work Programme is expected to include a stronger focus on high-TRL activities, including large-scale validation, trials and pilots in vertical sectors, supporting the uptake of advanced SNS technologies across the European economy.

I4: Energy efficiency of telecommunication networks

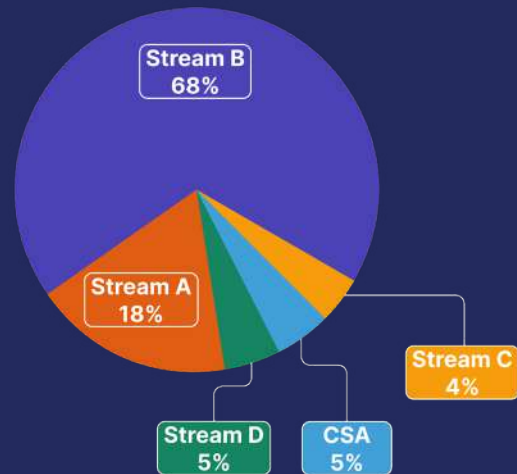
While in 2024 17 projects were working on energy efficiency related technologies, this number increased to 22 projects in 2025, out of the 79 projects funded under Calls 1, 2 and 3. These projects contributed to reducing overall energy consumption and improving energy efficiency. The Sustainability Task force has now evolved into a Sustainability Working Group and has produced a White Paper in June 2025.

Call 1 & Call 2 & Call 3 Projects (79 Projects)

Energy Efficiency experimentation per SNS JU Call



Energy Efficiency experimentation per Stream



Graph: Energy efficiency

As shown in the graph above, projects under Calls 1 and 2 are more heavily engaged into energy efficiency, compared to projects under Call 3. Stream B projects have also engaged the most, compared with other Streams.

Investigated solutions include:

- ▶ energy aware resource allocation and orchestration,
- ▶ energy-efficient communications and radio/network design, as well as
- ▶ energy efficient AI / computing device-level optimisation.

In June 2025 the SNS JU Sustainability Task Force published a Sustainability White Paper.

The White Paper on "Sustainability in SNS JU Projects Targets, Methodologies, Trade-offs and Implementation Considerations Towards 6G Systems"⁴⁰ presents a comprehensive analysis of how 27 SNS JU-funded projects address sustainability in their work on next-generation (6G) communication technologies.

The analysis spanned four core themes:

1. sustainability targets,
2. methodologies,
3. trade-offs, and
4. implementation considerations.

40. https://smart-networks.europa.eu/wp-content/uploads/2025/05/sns_ju_sustainabilitytf_whp_june2025_v1.0-1.pdf

The insights reflected the diversity of approaches, opportunities, challenges, and emerging trends across projects operating primarily at low to mid Technology Readiness Levels (TRLs). The participating projects focused predominantly on environmental sustainability, with energy efficiency as the primary concern. Techniques such as AI-driven resource management, dynamic power scaling, and network optimisation were widely adopted. Broader environmental concerns such as greenhouse gas (“GHG”) emissions, circularity, and electromagnetic field (“EMF”) exposure were less addressed.

Other SNS JU projects have worked in parallel on broader sustainability dimensions. The EU flagship Hexa-X-II project positions environmental sustainability as a core design principle for 6G. The project extends the original Hexa-X approach by embedding sustainability into the end-to-end system blueprint, network management, use cases, and evaluation methodologies. Key aspects of the work include “Sustainable 6G” and “6G for Sustainability” dual approach, energy-efficient and decarbonised network design, circularity and resource efficiency, and sustainability-driven use cases.

A major Hexa-X-II contribution is advancing the concept of Key Values Indicators (KVI), complementing classical telecom KPIs. Beyond environmental sustainability, they include social sustainability (e.g. safety, inclusion, privacy, accessibility, etc) and economic sustainability (productivity, automation gains, reduced OPEX, new business models).

Other projects have produced White Papers e.g. BeGreen on Energy Efficient RAN and 6G4Society on KVI ontology.

1.8

Dissemination and information about project results

The SNS JU continued to promote the results generated by the funded projects through a range of targeted dissemination and communication activities aimed at increasing the visibility and accessibility of project outcomes and key results across the European connectivity ecosystem.

Dissemination activities were initiated with the organisation of the **Call for Proposals 2025 - Info Day & Brokerage Event**, which generated strong interest from the community, gathering a high number of participants and project pitches.

Other actions included the promotion of SNS JU projects working groups **White Papers** and other key outputs through SNS JU social media channels, as well as dedicated articles in the **SNS JU LinkedIn Newsletter** highlighting technological advances, emerging use cases and the contribution of project results to industry digitalisation and innovation.



In June 2025, the Smart Networks and Services Joint Undertaking promoted the first **SNS Trials and Pilots (T&Ps) Brochure**, presenting eight selected trials and pilot activities developed within SNS JU-funded projects (Stream D) and illustrating the practical application of research results in real-world environments. In addition, a dedicated webinar and social media campaign were organised to present the programme's **Top-10 Key Achievements for 2025**, providing a platform for project representatives to highlight major technological outcomes and engage with stakeholders. The publication of the **SNS Journal 2025** further contributed to consolidating programme results in a structured and accessible format, including dedicated project fiches presenting key results and innovations.

Dissemination and visibility were also reinforced through the active participation of the SNS JU and its funded projects in major European and international conferences, exhibitions, workshops and stakeholder events. In particular, the SNS JU and its projects showcased research results and technological achievements at flagship events such as the EuCNC & 6G Summit 2025, Mobile World Congress (MWC) Barcelona 2025, dedicated SNS JU webinars and workshops, as well as various standardisation and industry fora. These events provided valuable opportunities to present project results, foster collaboration with stakeholders and increase the visibility of European leadership in 5G and 6G technologies.



To further expand the visibility of SNS JU activities beyond the **European research and innovation landscape**, articles highlighting the SNS JU programme and its societal vision for future connectivity were also published in external outlets such as Horizon Magazine⁴¹ (with a focus on our 6G4Society project) and 6G Waves Magazine⁴² with an in-depth look at our SuperIOT project). In parallel, the SNS JU issued a press release on the Top-10 Key Achievements⁴³, which contributed to generating additional coverage in specialised technology and connectivity media.

These initiatives were complemented by the continuous promotion of project results through the **SNS JU website, social media channels and stakeholder engagement activities**, contributing to strengthening awareness of the technological outcomes generated by SNS JU-funded projects and supporting the broader visibility of Europe's research and innovation efforts in next-generation connectivity.

SNS JU unveils its 2025 Top-10 Key Achievements:

6GSNS

Leading Europe's 6G Innovation

Explore the 188 Key Achievements for these categories:

CATEGORY 1
**Significant
Technology
Development**

CATEGORY 2
Experimentation

CATEGORY 3
**Vertical
Solution &
Trials**

CATEGORY 4
**Impactful
Standards
Contribution**

CATEGORY 5
**Sustainability
Solution**

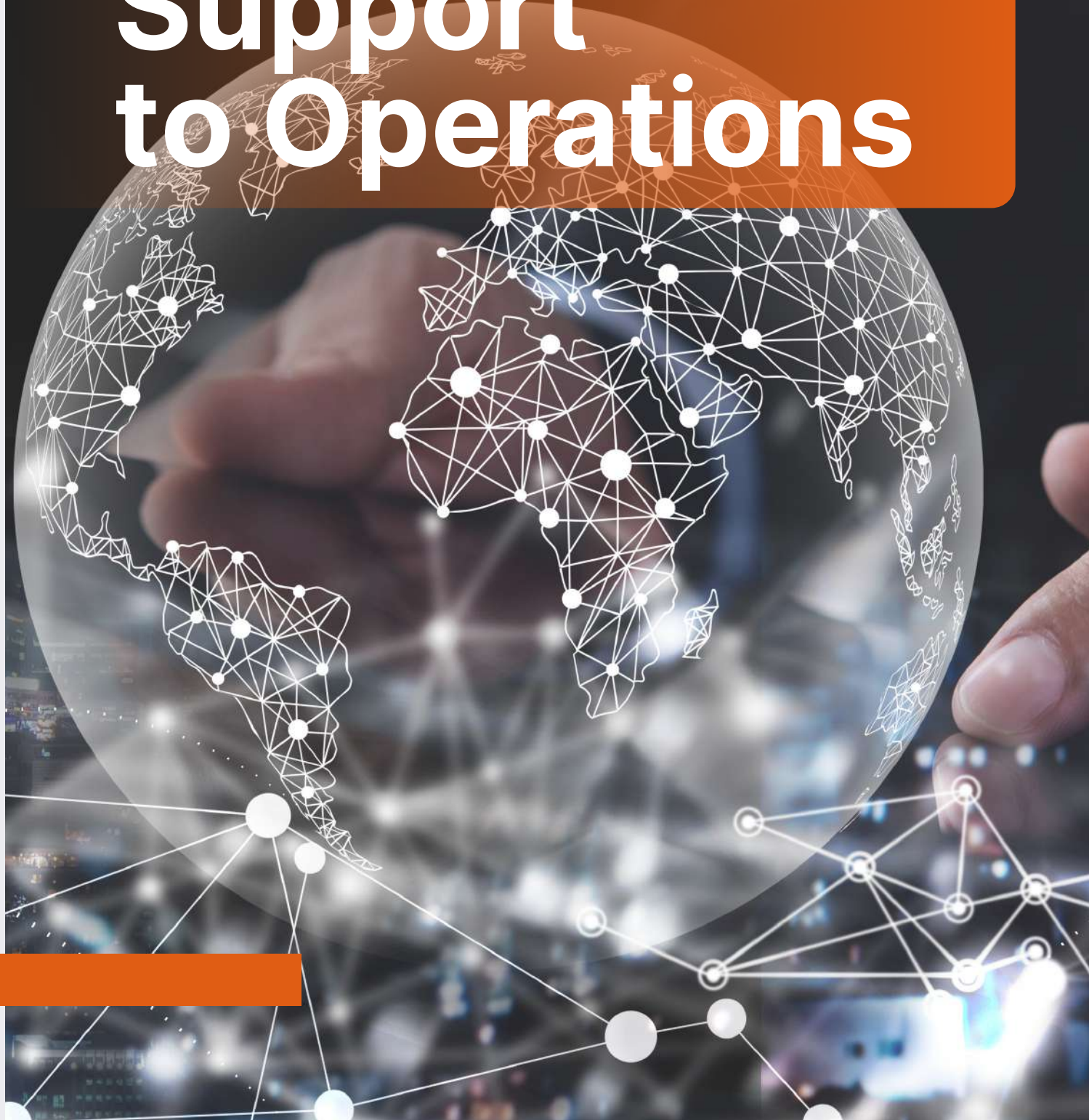
41. <https://projects.research-and-innovation.ec.europa.eu/en/horizon-magazine/putting-people-first-europes-6g-push-connectivity-serves-society>

42. <https://oulurepo.oulu.fi/bitstream/handle/10024/59464/nbnfioulu-202511216857.pdf?sequence=1&isAllowed=y>

43. <https://smart-networks.europa.eu/sns-ju-unveils-its-2025-top-10-key-achievements-leading-europes-6g-innovation/>

2.

Support to Operations



2.1

Communication activities

In **2025**, the Smart Networks and Services Joint Undertaking (SNS JU) further strengthened its communication activities to support the programme's strategic objectives and reinforce its role as a central reference point for information and funding on **5G implementation and 6G research and innovation in Europe**.

2025 communication efforts focused on increasing the visibility of SNS JU-funded projects, highlighting programme achievements, and fostering engagement with stakeholders across the European and international research, innovation and industry ecosystem.

The Communication Team continued to expand its outreach capacity through structured communication campaigns, enhanced digital engagement, and targeted participation in key European and global events. The SNS JU website and social media channels remained essential platforms to disseminate programme updates, showcase project results, and engage with industry, academia, policymakers, and the wider public.

Throughout the year, communication activities also supported the promotion of the **SNS JU Research and Innovation Work Programme**, the dissemination of project results, and increased visibility of the programme's contribution to Europe's technological leadership, competitiveness, resilient digital infrastructures and future connectivity objectives.

Strategic Communication Developments

- ▶ **SNS JU Communication Policy and Implementation:** Building on the **Communication Policy and the Communication Plan** adopted in 2024, the SNS JU continued in 2025 to implement a structured and strategic communication approach. This included reinforcing key programme messages, increasing stakeholder engagement, and ensuring coherent visibility across communication channels. Communication activities supported major programme milestones, including the promotion of new funding opportunities (Call 4 and Call 5), the dissemination of project achievements, and the visibility and relevance of the SNS JU within the European research and innovation landscape.
- ▶ **SNS JU Research and Innovation Work Programme 2025:** Dedicated communication actions were implemented to promote the SNS JU R&I Work Programme 2025 and related calls for proposals. These included targeted website content, social media campaigns, stakeholder outreach, and participation in industry events to ensure broad awareness across the European research and innovation community.
- ▶ **Consolidated Annual Activity Report:** In 2025, the SNS JU published its **Consolidated Annual Activity Report (CAAR) 2024**, presenting key achievements of the programme and outlining the progress made in implementing the SNS JU mission. The report highlighted the growing portfolio of SNS projects, the programme's contribution to European policy priorities, and its role in strengthening collaboration across the European connectivity ecosystem.
- ▶ The **SNS JU** also launched a **Call for Experts** to expand its pool of independent evaluators for EU-funded research and innovation projects. A targeted communication campaign was implemented to broaden participation across EU Member States and associated countries, with particular emphasis on enhancing geographical diversity and ensuring a more balanced

gender representation among experts. This initiative contributed to strengthening the inclusiveness, transparency and diversity of the project evaluation process. Outreach activities were also carried out through the States Representative Group (SRG), leveraging multiplier effects to ensure more focused engagement in underrepresented countries and regions.

- ▶ The **SNS JU** contributed to activities supporting the development of 5G deployment along major European transport corridors, notably through initiatives addressing both **road and rail connectivity (5G Strategic Deployment Agenda (SDA) for Rail and 5G SDA Road)**. These actions aim to facilitate the coordinated rollout of advanced connectivity infrastructures across borders, enabling use cases related to connected and automated mobility, as well as digitalised rail operations. They also support alignment between stakeholders, promote best practices and contribute to the broader objectives of seamless connectivity and service continuity across the Trans-European Transport Network.
- ▶ **R&I Work Programme 2026**: In December 2025, the Smart Networks and Services Joint Undertaking published its Research and Innovation Work Programme 2026, as part of the biennial 2026–2027 programme. The Communications Team was responsible for publishing the documentation on the SNS JU website, coordinating with the European Commission to release the official communication across all channels.
- ▶ **Stakeholders Group**: In late 2025, the SNS JU initiated the preparation of the renewed Stakeholders Group for 2026. While stakeholder participation mechanisms already existed within the SNS JU governance framework, the Governing Board considered that the growing strategic importance of advanced connectivity and 6G called for a more open, transparent and representative approach. This reflection was supported by the high-level Roundtable on Advanced Connectivity and Industrial Value Creation organised in Brussels on 2 October 2025, which gathered representatives from industry, research organisations, vertical sectors and EU institutions to discuss Europe's 5G-to-6G transition and technological sovereignty. In this context, the SNS JU launched outreach activities, including a communication campaign and an online survey to collect expressions of interest, laying the foundations for a new Call for Expressions of Interest in 2026 aimed at strengthening the openness and representativity of the Stakeholders Group.

Event Participation and Management

- ▶ **Mobile World Congress (MWC25)**: The SNS JU participated actively in Mobile World Congress 2025 in Barcelona, organising a dedicated session focused on the future of European connectivity and the role of SNS JU in shaping the next generation of digital infrastructures. The Communication Team oversaw the preparation of the event, serving as the primary contact with speakers and the MWC25 organizers, oversaw event logistics, and implemented a comprehensive communications campaign for the event, including social media coverage, interviews, articles, and stakeholder engagement activities during and after the event.



- ▶ **EuCNC & 6G Summit 2025:** The Smart Networks and Services Joint Undertaking played a central role in the EuCNC & 6G Summit 2025 in Poznań, one of Europe’s leading conferences on telecommunications research and innovation. A dedicated social media campaign was implemented to promote SNS JU’s presence at the event, including the active participation of its representatives in moderating workshops and contributing to high-level sessions and keynote speeches. Communication activities also supported the preparation of the SNS JU booth, the finalisation of the SNS Journal 2025 edition, and on-site media coverage across SNS JU channels. Printed copies of the SNS Journal 2025 were distributed during the event, further enhancing the visibility of SNS-JU funded projects.
- ▶ **European Parliament Event on Impact of European Joint Undertakings:** In 2025, the SNS JU also participated in the event “**The Role of European Partnerships and EU Joint Undertakings in Advancing Research and Innovation for Europe’s Future**”, organised at the European Parliament, supported by Christian Ehler, Member of the EU Parliament and rapporteur for Horizon Europe 2028-2034, together with other Joint Undertakings. Our team actively participated in the creation of the event, in drafting the speech given by our Executive Director, representing all the JUs present, and managing from media coverage to logistics, in full coordination with the other JUs.



6G SNS

Transforming Barcelona Port through 5G: A Blueprint for Smart Maritime Infrastructure
with Catalina Grimalt Falcó

Deputy GM at Port of Barcelona,
Director at Barcelona Port
Innovation Foundation

SNS JU INSIGHTS




► **Techrity 2025:** Given the importance of this event as an innovation regional hub, the SNS JU actively participated in **Techrity Forum 2025**, held in Riga on 22–23 October 2025. The event gathered policymakers, industry leaders and researchers to discuss strategic technologies including 6G, AI, quantum technologies and secure digital infrastructures. The SNS JU **Communication Team** contributed to several sessions and co-creation activities with its community, including keynote speech, dedicated social media campaign and video of our Executive Director for the Women in Technology (WiTar) Session, promotion of the video of our Chair of the Governing Board, Thibaut Kleiner, and preparation of web articles.



► **Stakeholders Roundtable:** Given the challenges experienced by industry to properly monetise 5G, the SNS JU convened 20+ industry stakeholders into the **Industry Roundtable** entitled “**Monetisation of 5G and 6G Technology and Services: Lessons learnt and future prospects**”, bringing together representatives from the telecom and technology sectors, vertical industries, the European Commission, and the broader SNS ecosystem. The Communications Team handled the entire event, from the planning stage to the implementation phase. It also handled follow-up with participants.

6G SNS
IA

Online Webinar

3 December | 14:00-15:30 CET

From Research to Impact:
Exploring the Top-10 SNS JU Key Achievements

REGISTER NOW

► **Strategic cooperation with the European Space Agency:** On 16 October 2025, the Smart Networks and Services Joint Undertaking and the European Space Agency signed a Memorandum of Intent (MoI) to strengthen cooperation on the integration of terrestrial and non-terrestrial networks in future connectivity infrastructures. The Communications Team was responsible for organizing the event for the signing of the MoI, and releasing a joint communication campaign and press release with ESA.

► **SNS JU Key Achievements and Programme Results:** In 2025, the Smart Networks and Services Joint Undertaking launched the SNS JU Key Achievements initiative⁴⁴, highlighting the most significant technological and innovation outcomes produced by projects funded under the programme. A dedicated online repository and communication

materials, including a brochure summarising 188 Key Achievements (KA) across 63 projects, were published to enhance the visibility of the programme’s results and demonstrate the impact of EU-funded research in advancing Europe’s 6G innovation ecosystem. The Communications Team collaborated with the CSA SNS CO-OP, turning the 188 KAs into communication ready material, creating and coordinating the communications campaign and organising the well-attended Key Achievement 2025 webinar.

Other Strategic Events

► The SNS JU representatives contributed to several other events and conferences throughout the year, including high-level discussions on **6G research, security, sustainability, and cross-sector collaboration**, further reinforcing the programme’s role in shaping Europe’s advanced connectivity landscape.

Reaching out beyond traditional R&I stakeholders

The **SNS JU** also implemented targeted communication actions to reach audiences beyond traditional research and innovation stakeholders. These included **citizen-oriented campaigns** aimed at increasing awareness and understanding of 6G technologies and their societal implications, notably through the promotion of the **6G4Society survey** and videos based on results produced by the SNS JU Coordination and Support Action on societal aspects of 6G.

44. <https://smart-networks.europa.eu/sns-ju-projects-key-achievements-2025/>

SNS JU further expanded its reach to the general public by disseminating outreach materials at high-visibility events such as **Mobile World Congress 2025** and **Techrity 2025**, as well as through the publication of accessible communication materials and articles in broader-audience media. Additional initiatives, including WiTaR-related activities and joint events at the **European Parliament** organised with other **Joint Undertakings**, contributed to engaging policymakers, citizens and non-specialist audiences, thereby strengthening awareness of the societal relevance of next-generation connectivity.

Strengthened Digital Communication

In 2025, the SNS JU continued to expand its digital communication activities to reach a wider audience and ensure continuous engagement with stakeholders.

The **SNS JU LinkedIn page** remained the primary social media channel, providing regular updates on programme developments, project achievements, and participation in key events. Content included event coverage, project highlights, policy developments and stakeholder engagement initiatives.

To reach an even wider audience, not directly involved in our activities, we have launched a **LinkedIn Newsletter** featuring interviews with key players in the development of 5G and research in 6G, from industry and European institutions. The Newsletter also serves as a hub for promoting the results of our projects through a narrative that is more accessible to the general public.

The SNS JU also continued to strengthen its presence on **YouTube**, where videos, interviews, and recordings of events contribute to documenting the programme's activities and sharing knowledge with the broader community.

The **SNS JU website** remained the main information hub for the programme, regularly updated with information on funding opportunities, project results, events, and strategic initiatives.

The SNS JU also continued exploring complementary digital channels, including **Bluesky**, as part of a broader effort to diversify outreach and ensure visibility across different online communities.

Cross-JU Collaboration: Throughout 2025, the SNS JU continued to strengthen cooperation with other European partnerships and Joint Undertakings. This materialised for instance through joint communication campaigns at the occasion of the Joint Undertakings Event at the European Parliament or regular communication sharing meetings amongst JUs communication best practices.

In particular, the SNS JU contributed to the mobilisation of regional ecosystems through participation in targeted innovation initiatives and conferences. Engagement with regional hubs, including the **Bavarian** innovation ecosystem (**Thinknet 6G Summit**), enabled direct interaction with local industry players, research centres and public authorities, fostering synergies between European and regional priorities⁴⁵.

2.2

Legal and financial framework

In 2025, no changes occurred to the overarching legal framework governing the Smart Networks and Services Joint Undertaking (SNS JU). In particular, the Single Basic Act⁴⁶ (Council Regulation (EU) 2021/2085), the Horizon Europe Regulation⁴⁷ and Model Grant Agreement⁴⁸, as well as the EU Financial Regulation⁴⁹ and the SNS JU Financial Rules⁵⁰, remained unchanged.

Certain developments nevertheless affected the operational implementation framework of the SNS JU during the reporting year. The SNS JU Annual Work Programme 2025 introduced participation restrictions under Article 22(5) of the Horizon Europe Regulation for specific topics, in order to safeguard the Union's security interests in the area of communication networks. These provisions were implemented through the conditions set out in the Research and Innovation Work Programme 2025 annexed to the Annual Work Programme.

In addition, the Governing Board adopted measures aimed at strengthening the administrative and transparency framework of the Joint Undertaking. In particular, it adopted a decision implementing Regulation (EC) No 1049/2001

45. <https://bit.ly/3NyMKo5>

46. See full reference and link under footnote 7.

47. See full reference and link under footnote 9.

48. https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/agr-contr/general-mga_horizon-euratom_en.pdf

49. <https://op.europa.eu/en/publication-detail/-/publication/990fe2a6-8f52-11ef-a130-01aa75ed71a1/language-en>

50. https://smart-networks.europa.eu/wp-content/uploads/2022/10/022021_sns_gb_decision_financial_rules_final_3aify9euoppqy7vavsua7uyefo_82057.pdf

regarding public access to documents and decided to apply by analogy the Commission guidelines concerning missions and authorised travel.

Finally, preparatory work was initiated in 2025 in view of the transition to the Commission's corporate accounting system SUMMA, planned for January 2026. These preparatory activities were undertaken to ensure continuity and readiness of the SNS JU financial management and reporting processes in the context of the upcoming system migration.

2.3

Budgetary and financial management

Statement of revenue

The revenue implementation rate of 2025 is 100%. In October 2023 the European Union, represented by the European Commission and the SNS Joint Undertaking signed the Financial Framework Partnership Agreement (FFPA) which defines the budget implementation tasks that are entrusted to the Joint Undertaking under the Single Basic Act and funded from Horizon Europe. The Agreement establishes the rules for the implementation and for the payment of the Union's contribution and defines the relations between the Joint Undertaking and the European Commission. In July 2024, a new version of the FFPA (amendment) was signed by the European Commission and the SNS Joint Undertaking, mainly to introduce the provisions related to synergy calls.

In May 2025 the Commission and the SNS Joint Undertaking signed the Contribution Agreement for 2025. Within the frame of the FFPA and the Contribution Agreement, the SNS JU requested a provisional pre-financing for a total EUR 124 233 789 in accordance with article 19 of the FFPA. The amount is composed of an administrative component of EUR 2 090 017 and an operational component of EUR 122 143 772. The total amount was cashed in 2025. The amount requested differs from the voted payment appropriations 2025 by EUR 350 000. This is the budget allocated to the expert evaluators 2025 of SNS JU that was managed by REA in accordance with its mandate.

In March 2025, the 6G-IA and the SNS JU signed the annual contribution agreement for EUR 779 382 to cover part of the administrative expenditure of the joint undertaking. The amount was cashed in by September 2025.

Statement of Revenue 2025	Adopted Budget 2025 before amendment		Adopted Budget 2025 after amendment	
	Commitment appropriations (in EUR)	Payment appropriations (in EUR)	Commitment appropriations (in EUR)	Payment appropriations (in EUR)
EU contribution (excl. EFTA)	121 836 972	121 249 430	121 836 972	121 249 430
of which Administrative	2 034 080	2 034 080	2 034 080	2 034 080
of which Operational	119 802 892	119 215 350	119 802 892	119 215 350
Third countries contribution (incl. EFTA)	3 350 517	3 334 359	7 350 517	3 334 359
of which Administrative	55 937	55 937	55 937	55 937
of which Administrative third countries excluding EFTA				
of which Operational	3 294 580	3 278 422	3 294 580	3 278 422
of which Operational third countries excluding EFTA			4 000 000	
Industry financial contribution: 6G-IA	779 382	779 382	779 382	779 382
of which Administrative	779 382	779 382	779 382	779 382
of which Operational				
Other revenue			p.m.	p.m.
SUB-TOTAL REVENUES	125 966 871	125 363 171	129 966 871	125 363 171

Statement of Revenue 2025	Adopted Budget 2025 before amendment		Adopted Budget 2025 after amendment	
Reactivation of unused appropriations from administrative expenditure	985 734	985 734	985 734	985 734
Of which from 2021				
Of which from 2022				
Of which from 2023	985 734	985 734	985 734	985 734
Reactivation of unused appropriations from operational expenditure	5 643 653		5 643 653	
Of which from 2021				
Of which from 2022	5 643 653		5 643 653	
Of which from 2023				
TOTAL	132 596 258	126 348 906	136 596 258	126 348 905

Statement of expenditure

The expenditure implementation rate of 2025 is 97% on commitment appropriations and 18% on payment appropriations.

Statement of Expenditure 2025	Commitment appropriations			Payment appropriations		
	Total budget	Implemented	%	Total budget	Implemented	%
Title 1 Staff	2 418 045	2 417 596	100%	2 404 493	2 372 376	99%
Title 2 Infrastructure and operating	1 437 088	1 331 993	93%	1 450 640	968 631	67%
<i>Administrative</i>	3 855 133	3 749 589	97%	3 855 133	3 341 007	87%
Title 3 Operations (Horizon Europe)	132 741 125	128 699 203	97%	122 493 772	19 452 778	16%
TOTAL	136 596 258	132 448 792	97%	126 348 905	22 793 785	18%

Title 1

Staff expenditure

The implementation rate of Title 1 is 100% in commitment appropriations and 99% in payment appropriations. This is explained mainly by the salaries and allowances paid to the staff members. The team of 17 was complete for 8 months. One vacancy was opened in September and was filled in February 2026. The team was supported by interim experts in several fields that were contracted with EC framework contracts.

Title 2

Infrastructure and operating expenditure

The implementation rate of Title 2 is 93% in commitment appropriations and 67% in payment appropriations. The rental of building and associated costs cover all costs related to the White Atrium building. These costs relate to the rental of the office space, the rental of the parking spaces, the charges and other minor costs. The legal frame is the usufruct agreement 2025-2031.

The costs related to ICT are mainly explained by the payment of the SUMMA onboarding fees to DG BUDG for EUR 200 000 and the expenditure related to the global SLA with DIGIT on IT procurement and services for EUR 118 502. Other costs relate to external services within the frame of the BOA ICT which amounted to EUR 113 142. The use of EC tools ABAC and HR amounted to EUR 70 222 and the purchase of ICT equipment and software licenses amount for EUR 34 808.

The current administrative expense is mainly explained by the procurement of audit and legal services and the agreements with other joint undertakings and with the Commission on the provision of services such as accounting or

treasury. Initially, it was planned to contract the services of external experts under Title 2 to reinforce some areas, but this was considerably reduced because of the late signature of the framework contracts leading to lower expenditure.

In December the contract for the office refurbishment was signed for EUR 350 236 within the frame of the usufruct agreement and the facility management contract of the White Atrium. The high workload and time-consuming of the dossier impeded signing the contract earlier and therefore payments will be made in 2026. If the payments would have been made in 2025, the implementation rate of Title 2 would have been 91%.

The unused (or lapsing) appropriations, EUR 105 095 and EUR 482 009, commitment and payment appropriations respectively, will be re-activated in subsequent years according to the financial rules.

Title 3 Operational costs

The implementation rate of Title 3 is 97% in commitment appropriations and 16% in payment appropriations. The total commitments made under Title 3 amounted to EUR 128 699 203, composed of EUR 128 143 653 on grants/projects and EUR 555 550 on evaluators and reviewer experts. The total payments amount to EUR 19 452 778 are composed of EUR 18 918 548 grants/projects and EUR 534 230 evaluators and reviewer experts. The operational expense is entirely funded by the contributions of the EU and the EFTA.

The unused appropriations EUR 4 041 922 and EUR 103 040 994, commitment and payment appropriations respectively, will be used in subsequent years according to the financial rules.

Statement of Expenditure 2025	Budget 2025 AWP	Amended budget 2025 after transfers	Executed budget 2025	%	Carry over to 2026	Available for future use (N+3 rule)
(Commitment appropriations)						
Title 1 - Staff expenditure	2 404 493	2 418 045	2 417 596	100%	0	449
Salaries & allowances	2 022 493	2 049 401	2 049 401	100%	0	0
Expenditure relating to staff recruitment					0	0
Mission expenses	50 000	30 297	30 297	100%	0	0
Socio-medical infrastructure	10 000	802	802	100%	0	0
Training	10 000	11 883	11 883	100%	0	0
External services	224 000	246 726	246 276	100%	0	449
Receptions, events and representation	5 000	2 632	2 632	100%	0	0
Social welfare	70 000	60 084	60 084	100%	0	0
Other staff-related expenditure	13 000	16 221	16 221	100%	0	0
Title 2 - Infrastructure and operating expenditure	1 450 640	1 437 088	1 331 993	93%	0	105 095
Rental of buildings and associated costs	175 000	195 698	195 698	100%	0	0
Information, communication technology and data processing	540 000	537 287	525 247	98%	0	12 040
Movable property and associated costs	75 000				0	0
Current administrative expenditure	390 000	223 329	171 000	77%	0	52 329
Postage / Telecommunications	8 000	8 000		0%	0	8 000
Expenditure on formal meetings	10 000	11 215	2 417	22%	0	8 798
Running costs in connection with operational activities	100 000	89 402	65 474	73%	0	23 928
Information and publishing				-		
Studies					0	0

Statement of Expenditure 2025	Budget 2025 AWP	Amended budget 2025 after transfers	Executed budget 2025	%	Carry over to 2026	Available for future use (N+3 rule)
Other infrastructure and operating expenditure	152 640	372 157	372 157	100%	0	0
Title 3 - Operational expenditure	128 741 125	132 741 125	128 699 203	97%	0	4 041 922
Previous years' Calls/other funded actions				0%	0	0
Current year's Calls/other funded actions	128 741 125	132 181 125	128 143 653	97%	0	4 037 472
Experts evaluators		350 000	350 000	100%	0	0
Expert reviewers		210 000	205 550	98%	0	4 450
Other operational expenditure				0%		
TOTAL	132 596 258	136 596 258	132 448 792	97%	0	4 147 466

Statement of Expenditure 2025	Budget 2025 AWP	Amended budget 2025 after transfers	Executed budget 2025	%	Carry over to 2026	Available for future use (N+3 rule)
(Payment appropriations)						
Title 1 - Staff expenditure	2 404 493	2 404 493	2 372 376	99%	0	32 117
Salaries & allowances	2 022 493	2 051 248	2 049 401	100%	0	1 848
Expenditure relating to staff recruitment					0	0
Mission expenses	50 000	40 844	30 297	74%	0	10 547
Socio-medical infrastructure	10 000	802	802	100%	0	0
Training	10 000	11 883	10 508	88%	0	1 375
External services	224 000	218 838	200 491	92%	0	18 347
Receptions, events and representation	5 000	2 632	2 632	100%	0	0
Social welfare	70 000	60 084	60 084	100%	0	0
Other staff-related expenditure	13 000	18 162	18 162	100%	0	0
Title 2 - Infrastructure and operating expenditure	1 450 640	1 450 640	968 631	67%	0	482 009
Rental of buildings and associated costs	175 000	204 820	204 820	100%	0	0
Information, communication technology and data processing	540 000	553 364	553 364	100%	0	0
Movable property and associated costs	75 000	75 000		0%	0	75 000
Current administrative expenditure	390 000	378 140	151 982	40%	0	226 158
Postage / Telecommunications	8 000	8 000		0%	0	8 000
Expenditure on formal meetings	10 000	10 000	2 417	24%	0	7 583
Running costs in connection with operational activities	100 000	70 180	34 234	49%	0	35 946

Statement of Expenditure 2025	Budget 2025 AWP	Amended budget 2025 after transfers	Executed budget 2025	%	Carry over to 2026	Available for future use (N+3 rule)
Information and publishing Studies						
Other infrastructure and operating expenditure	152 640	151 137	21 814	14%	0	129 323
Title 3 - Operational expenditure	122 493 772	122 493 772	19 452 778	16%	0	103 040 994
Previous years' Calls/other funded actions				0%	0	0
Current year's Calls/other funded actions	122 493 772	121 938 222	18 918 548	16%	0	103 019 674
Experts evaluators		350 000	350 000	100%	0	0
Expert reviewers		205 550	184 230	90%	0	21 320
Other operational expenditure				0%	0	0
TOTAL	126 348 906	126 348 905	22 793 785	18%	0	103 550 120

2.4

Financial and in-kind contributions from Members other than the Union

In line with to Article 11 of the Single Basic Act- SBA the contributions of 6G-IA, the Private Member of the SNS JU, shall consist of financial contributions, in-kind contributions to operational activities-IKOP and in-kind contributions to additional activities-IKAA (subject to their approval by the Governing Board). Article 163 of the Single Basic Act provides that the 6G-IA shall make or arrange for their constituent or affiliated entities:

- ▶ to make a total contribution of at least EUR 900 000 000 over the MFF 2021-2027 period, ending on 31 December 2031;
- ▶ to make an annual financial contribution to the administrative costs of the SNS JU of at least 20% of the total administrative costs and to endeavour to increase this contribution to 50% over the lifetime of the SNS JU, taking due account of their constituent and affiliated entities that are SMEs.

In case of SNS JU, the private members of the industry association 6G-IA will contribute with in-kind contributions to the activities of the Joint Undertaking. There are two types of in-kind contributions: in-kind contributions to operational activities (IKOP) and in-kind contributions to additional activities (IKAA). The IKOP comprises contributions from private members consisting of the eligible costs incurred by them in implementing specific indirect actions (funded projects) less the contribution of the Joint Undertaking to those costs. The IKOP reported will be validated and accepted by the Joint Undertaking according to the legal requirements established. The target for 2025 at programme level is a minimum of 6%. The IKAA are associated to the implementation of additional activities by the private members that contribute to the objectives of the Joint Undertaking but are not directly linked to the legal entity of the Joint Undertaking nor under its control. In the 6G-IA commitment letter the plan is that 6G-IA will contribute around EUR 50 000 000 in IKOP and EUR 850 000 000 on IKAA.

Contributions from JU Members other than the Union in 2025	
Nature	Amount (in EUR)
Financial contributions (FC) reported	779 382
In-Kind to Operational Activities (IKOP) reported	26 531 633
In-Kind to Additional Activities (IKAA) reported	151 945 768
In-Kind to Additional Activities (IKAA) reported and certified	151 945 768

Contributions from JU Members other than the Union in 2025	
Nature	Amount (in EUR)
TOTAL all contributions reported	179 256 783
TOTAL all contributions reported, including certified IKAA	179 256 783

Values of IKOP - Evolution (in EUR) (or graph-Optional)				
Reference of the Project-Call	Total amount of IKOP planned for the project	Amount of IKOP reported <u>before</u> 2025	Amount of IKOP reported in 2025	Total Amount of IKOP certified until 2025
Call 1 (2022)	28 325 912	11 056 699	8 967 672	1 450 449
Call 2 (2023)	14 817 630		5 056 813	
Call 3 (2024)	11 234 769			
Synergy call (2024)	3 179 079			
Calls 4 & 5 (2025) <i>estimated</i>	9 638 148			
	67 194 538	11 056 699	14 024 485	1 450 449

Values of certified IKAA – Evolution (in EUR)	
Year	Amount of certified IKAA
2021	/
2022	85 727 939
2023	116 182 773
2024	135 391 958
2025	151 945 768
TOTAL	489 248 438

By the end of 2025, the cumulative certified IKAA amounted to EUR 489.2 million, representing approximately 57.5% of the overall EUR 850 million IKAA commitment foreseen for the entire SNS JU programme. This cumulative amount may increase in future reporting exercises, as additional eligible activities relating to previous reporting years may still be declared and certified.

The certified IKAA reported during the 2025 reporting exercise (EUR 151.9 million) exceeded the initially planned amount (EUR 80.5 million), reflecting a strong level of mobilisation and engagement from the European SNS private-side ecosystem in support of the SNS JU objectives.

The increase is mainly linked to additional research and innovation activities, standardisation activities and technology scale-up efforts carried out within the approved IKAA framework. It also reflects contributions to demonstrators, ecosystem development and dissemination activities supporting the SNS JU objectives. In particular, certified contributions covered activities related to the evolution of 5G and the development of future 6G systems, as well as contributions to international standardisation bodies and fora, including 3GPP, ETSI, ITU-R and O-RAN Alliance. Together with the associated technical preparatory work, these activities help strengthen Europe's position in future smart networks and services technologies, standards and related innovation ecosystems.

According to the confirmation provided by the SNS JU Private member (6G-IA), all reported activities remain within the agreed SNS JU scope and are subject to the established reporting, certification and verification process.

The difference between the planned and certified IKAA figures is also explained by the cautious estimation approach followed during the first years of the SNS JU programme. As the reporting and certification process was being implemented for the first time under the SNS JU framework, participating entities initially applied conservative planning assumptions while progressively consolidating their reporting and audit practices. As a result, the final certified contributions exceeded the initial estimates as the programme and reporting framework matured.

Overall, the reported IKAA demonstrates the strong mobilisation capacity of the European SNS ecosystem and its ability to support additional industrial and research efforts contributing to Europe's strategic objectives in smart networks and services technologies.

2.5

Administrative Procurement and contracts

The Joint Undertaking launched some procurement procedures in 2025 to cover administrative needs. The purpose was mainly the contracting of external services by very low value negotiated procedures and by order forms and specific contracts of inter-institutional framework contracts. The SNS JU participated in joint inter-Joint Undertakings procurement procedures within the frame of the Back Office Arrangement (BOA) on Procurement in accordance with the Single Basic Act and with the purpose of creating synergies, gaining efficiency and reducing costs. Procurement is associated only to the administrative budget.

Subject of the Contract	Type of Contract	Contractor	Legal Basis / Procedure	Signature Date	Amount (EUR)
SNS Office refurbishment contract	Purchase order	Codabel Management	Facility Management	19 December 2025	350 236
Amendment: financial and accounting system SUMMA	Service agreement	DG BUDG	Non applicable	19 December 2025	200 000
Assistance for thematic communication services	Services contract	Cronos Europa	FWC CBE/2025/OP/0001	31 October 2025	74 400
Interim on Information&Technology	Purchase orders	AIB/AGO Jobs&HR	FWC HR/2024/OP/0095	2025	74 113
IT managed services 2025	Services contract	Inetum	FWC/JUS-CAJU.2022.OP.02	20 December 2024	61 933
Interim on Project management	Purchase orders	AIB/AGO Jobs&HR	FWC HR/2024/OP/0095	2025	54 776
Interim on Communications	Purchase orders	Randstad	FWC HR/2024/OP/0095	2025	44 092
Interim on Procurement	Purchase order	Randstad	FWC HR/2024/OP/0095	07 August 2025	40 574
6G panel event at the Mobile World Congress 2025	Services contract	GSMA	Negotiated procedure	26 February 2025	33 000
Event support to high level roundtables	Services contract	WMH Project	FWC S3JU/LC/030-CTR	09 September 2025	31 240
Interim on Stakeholders management	Purchase order	Randstad	FWC HR/2024/OP/0095	23 July 2025	26 711
Provision of audit services - Annual accounts 2025	Services contract	Baker Tilly	FWC EU-RAIL.OP.02.22/LOT1/01	09 October 2025	21 844
BOA ICT Annual Work Programme 2025	Order form	Various	Inter-Joint Undertakings	13 February 2025	20 000
Microsoft licenses 2025/2026	Order form	Insight	FWC DIGIT DI/08090	05 June 2025	13 898
Audio-video facilities for common rooms 1st floor	Order form	SCIC	Inter-Joint Undertakings	15 July 2025	12 230
Amendment 5: Appendix A-7 EU Sign	Service agreement	DIGIT	Non applicable	15 July 2025	7 000
Language courses	Purchase orders	CLL Centre de langues	FWC HR/2020/OP/0014-LOT 4	2025	6 959
BOA ICT Running costs	Order form	Various	Inter-Joint Undertakings	13 February 2025	6 500
EU Data protection online central register services 2025/2026	Services contract	Privanot	FWC EU-RAIL-NP-24-01-DP register	03 September 2025	3 500
Standard laptop	Order form	Bechtle	FWC DIGIT DI/08080	14 April 2025	3 050

Subject of the Contract	Type of Contract	Contractor	Legal Basis / Procedure	Signature Date	Amount (EUR)
Refurbishment common meeting rooms 1st floor	Purchase order	Codabel Management	Facility Management	08 October 2025	2 944
EPKI solution for departmentsign 2 pro certificates 3 years	Order form	NTT Data	FWC DIGIT DI/07890	11 June 2025	2 575
Common training on SUMMA for joint undertakings	Services contract	Deloitte	FWC BUDG/2024/OP/0002	04 August 2025	2 297
Catering for events	Purchase order	Cibacco	FWC JUS-CAJU. OP.2023.01-01	2025	1 706
Common coffee services and supplies	Order form	Julius Meinl	FWC.JUs-CAJU.2023.NP.01	16 April 2025	1 503
Confidential counsellor training joint undertakings	Purchase order	Abilways	FWC HR/R3/PO/2015/00	20 November 2025	1 502
Joint event at the European Parliament-Catering and graphic design services	Purchase orders	Eurest Compass/ Gilles Lenoble	Negotiated procedures	25 April 2025	1 297
Inter-JU event: Catering and rental of lobby (White Atrium)	Purchase order/ Agreement	Cibacco/Codabel Management	FWC JUS-CAJU. OP.2023.01-01/Facility Management	10 September 2025	925
Hybrid laptops	Order form	Econocom	FWC DIGIT DI/08070	16 April 2025	881
Standard laptops	Order form	Bechtle	FWC DIGIT DI/08081	14 April 2025	782
iPads	Order form	Econocom	FWC DIGIT DI/08100	02 May 2025	634
IT peripheral and accessories	Order form	Bechtle	FWC DIGIT DI/08120	15 April 2025	335
Adobe licenses	Order form	Bechtle	DIGIT DI/08031-SIDE III-OF 104918	29 October 2025	315
Training for External Authorisations Manager	Services contract	Deloitte	Inter-Joint Undertakings	16 April 2025	229
Common maintenance and upgrade IT services 2025/2026	Order form	NTT Data	FWC DIGIT DI/07501	31 October 2025	186
Laptop accessories	Order form	Canon	FWC DIGIT DI/08221	14 April 2025	60
IT accessories	Order form	Bechtle	FWC DIGIT DI/08220	16 April 2025	41
Provision of grant evaluation services	Service agreement	REA	Non applicable	25 November 2025	n.a.
EU contribution to the European School	Service agreement	DG HR	Non applicable	28 March 2025	12 357
CERT-EU	Service agreement	DG DIGIT	Non applicable	16 April 2025	16 504

IT and logistics

Corporate SNS JU IT

In 2025 the JU ensured a stable and secure IT system, provided IT support to staff in the use of IT applications and equipment and cooperated with the Commission to ensure synergy and efficient use of resources. The JU also ensured expansion and relevant upgrades of the IT system in order to respond to the needs of the organisation. In particular, the JU followed up and monitored the implementation of the service delivery plan ensuring maintenance and upgrades are done as necessary. Most part of the activities above were carried out through the efficient implementation of the Service Level Agreement with DG DIGIT which covers the Digital Workplace services as well as other key services like IT procurement. As part of the BOA ICT, the SNS JU benefitted from the synergies on IT generated by the collaboration and common procurement of external services led by other joint undertakings on AWP and IAAS.

The IT function is embedded within the Administration and Finance Unit and is ensured by the team, on top of their core responsibilities, with the support of an interim staff member providing short-term technical assistance. This arrangement reflects the absence of a dedicated IT officer position in the establishment plan, which limits the JU's capacity to further develop and consolidate its IT environment at the desired pace.

European Commission IT tools

In 2025, the SNS JU continued to engage with the European Commission and other Joint Undertakings to support the adaptation and smooth functioning of Horizon Europe IT tools. These exchanges contributed to addressing operational constraints and preparing upcoming system developments.

A key milestone was the preparation, under the coordination of DG BUDG, of the onboarding of the SUMMA financial system. The SNS JU staff actively contributed to this process throughout 2025, with the system becoming operational in January 2026.

In parallel, several updates to service level agreements were concluded or prepared. In April 2025, the SNS JU and European Commission Directorate-General for Informatics signed Amendment No 4 to Service Level Agreement 074-00 (Appendix A-6), covering CERT-EU IT security services. Under this amendment, DIGIT provides IT security support in line with CERT-EU's mandate as defined in the Cybersecurity Regulation.

Furthermore, preparatory work was launched in 2025 for an additional amendment to the SLA with DIGIT covering e-invoicing and e-procurement services. This amendment is expected to be signed and implemented in 2026. In this context, contractors established in Belgium will be required to submit invoices via the PEPPOL network as of 1 January 2026, with direct interfacing into the SUMMA system.

Overall, these developments contribute to the progressive integration of the SNS JU into the European Commission's IT ecosystem and support the digitalisation and efficiency of its financial and administrative processes.

IT Autonomy

In 2025, the SNS JU continued to take steps towards achieving greater IT autonomy, although this objective has not yet been fully reached.

Key measures implemented during the year include the deployment of new SNS laptops and the creation of EU Login and email accounts for all users, ensuring a standardised and functional IT environment. Microsoft licences were renewed, and cloud-based telephony solutions were introduced via MS Teams, enhancing internal communication capabilities.

In parallel, essential software licences, such as Adobe Acrobat, were acquired, and targeted consultancy services were engaged to support improvements in information security. Furthermore, several framework contracts from European Commission Directorate-General for Informatics were onboarded, enabling access to additional IT services and supporting the progressive strengthening of the JU's IT capacity.

While these actions represent tangible progress, the achievement of full IT autonomy remains constrained by structural limitations, notably the absence of a dedicated IT officer function within the SNS JU's establishment plan. This limits the internal capacity to coordinate, implement and sustain IT developments at the required pace and contributes to

delays in the consolidation of IT services and security arrangements.

Further efforts will therefore be required to strengthen the IT function, in particular through the establishment of appropriate internal capacity and governance arrangements to support the continued development of the JU's IT environment.

Logistics

The SNS JU is located in the White Atrium Building following the signature in 2025 of a new usufruct agreement concluded through a joint procurement procedure conducted together with eight Joint Undertakings. This agreement grants the JUs a right of usufruct over the building for a defined period starting in February 2025 until January 2032.

This location is strategic, as the White Atrium Building hosts multiple Joint Undertakings, facilitating cooperation, synergies and the sharing of services and resources.

At the end of 2025, the contract for the refurbishment of the SNS JU office space was signed. This refurbishment is essential to ensure that the premises meet the operational needs of the JU and provide an appropriate working environment for staff. The works started in January 2026.

At the same time, the SNS JU continues to operate with a limited logistical set-up, with office equipment and infrastructure largely inherited from the previous occupant of the premises and supplemented by materials temporarily made available by other Joint Undertakings. This reflects the transitional phase of the JU and reinforces the need for the progressive consolidation of its logistical capacity alongside the ongoing refurbishment.

2.7

Human Resources

2.7.1

HR Management

The SNS JU HR activities in 2025 focused on ensuring operational continuity, with recruitment efforts carried out mainly via external procedures. Despite a staff turnover rate of 18%, the occupancy rate remained high.

HR management activities were ensured within the Administration and Finance Unit. In the absence of a dedicated full-time HR officer position, HR-related tasks were carried out through the existing administrative structure, alongside other administrative responsibilities, ensuring continuity of operations and support to staff.

In 2025, HR processes were maintained without major changes to HR policies or Staff Implementing Rules (SIR). The geographical balance was preserved. Further details are provided in Annex 2 of this CAAR.

Indicator	2025
Temporary Agent (TA-AD) posts occupied	7 out of 7 authorised posts (100%)
Management posts occupied (TA-AD)	3 out of 3 authorised posts (100%)
Contract Agent (CA) posts occupied	9 out of 10 authorised posts (90%)
Overall staff occupancy rate	99%
Total staff foreseen in establishment plan	17
Gender balance (overall staff)	59% men, 41% women
Gender balance (management positions)	67% men, 33% women
Staff turnover rate	18%
Geographical balance (staff nationality)	Belgium 6%, Cyprus 6%, Germany 6%, Spain 18%, France 12%, Greece 12%, Hungary 12%, Italy 24%, Romania 6%
Geographical balance	6%BE, 6%CY, 6%DE, 18%ES, 12%FR, 12%GR, 12%HU, 24%IT, 6%RO

2.7.2

Efficiency gains and synergies

2.7.2.1 ● Strategic approach

In line with the strategy set out in the Annual Work Programme, the SNS JU continued in 2025 to pursue efficiency gains through process optimisation, enhanced inter-JU cooperation and the systematic use of Back Office Arrangements (BOAs) established pursuant to Article 13 of the Single Basic Act.

Given the limited size of the SNS JU administration (17 FTEs in the establishment plan), these inter-JU arrangements remain essential to ensure operational continuity, appropriate segregation of duties and access to specialised expertise. They allow the JU to streamline administrative processes and focus internal resources on programme implementation and operational priorities.

The increasing operational complexity associated with the growing project portfolio, together with additional regulatory, monitoring and coordination requirements, continued to place pressure on the JU's limited administrative and operational resources. Mitigation measures included prioritisation, process optimisation, interim support and reinforced cooperation with common support services.

2.7.2.2 ● Overview of Back Office Arrangements

In 2025, the SNS JU participated in four Back Office Arrangements (BOAs), each governed by a Service Level Agreement (SLA) signed among the participating Joint Undertakings:

- ▶ BOA for Accounting Services (Lead JU: EU-RAIL JU)
- ▶ BOA for Human Resources (Lead JU: CBE JU)
- ▶ BOA for Procurement (Lead JU: Clean Aviation JU)
- ▶ BOA for ICT Services (Co-leads: Clean Hydrogen JU and IHI JU)

These arrangements provide shared administrative services and enable the pooling of expertise across the ten Horizon Europe Joint Undertakings.

2.7.2.2.1 ○ BOA Accounting Services

The BOA for Accounting Services remained fully operational in 2025. Led by EU-RAIL JU, it provides shared accounting services to ten Joint Undertakings through a team composed of three Accounting Officers supported by accounting assistants and external accounting support.

The BOA ensures the preparation of provisional and final annual accounts, support to audit activities, follow-up of accounts receivable, VAT reporting and validation of accounting systems. The arrangement also supports financial systems and process improvements across the JUs.

2.7.2.2.2 ○ BOA Human Resources

The HR BOA, coordinated by CBE JU, continued to strengthen cooperation and harmonisation among the JUs' HR functions. In 2025, the JUs further aligned recruitment and selection practices, shared reserve lists to reduce time-to-recruit and organised common training activities.

The HR network also analysed the inter-JU competency framework, which will be further developed in 2026, and reinforced collaboration through dedicated HR meetings and inter-JU initiatives. An amendment to the HR BOA SLA was launched to strengthen governance by enlarging the Steering Committee to all Heads of Administration and Finance of the participating JUs.

2.7.2.2.3 ○ BOA Procurement

The Procurement BOA continued to generate synergies through joint procurement procedures and the pooling of expertise across JUs. In 2025, Clean Aviation JU launched an open call for communication services on behalf of nine JUs, demonstrating the benefits of aggregated procurement in terms of market visibility and competition.

The arrangement also facilitated the mobilisation of procurement expertise across JUs and explored the use of Commission corporate e-procurement tools to support joint procurement procedures.

2.7.2.2.4 ○ BOA ICT

The BOA ICT, co-led by Clean Hydrogen JU and IHI JU, formally started its activities on 1 January 2025 following the signature of the relevant SLAs by ten Joint Undertakings.

ICT activities were implemented in accordance with the common ICT Annual Work Plan and Budget 2025, covering areas such as inter-JU IT governance, shared ICT infrastructure, workplace services and cybersecurity compliance. Particular emphasis was placed on implementing the cybersecurity framework in line with Regulation (EU) 2023/2841⁵¹ Efficiency gains and outlook.

2.7.2.2.5 ○ Efficiency gains and outlook

Overall, the BOAs continued in 2025 to generate important efficiency gains by pooling specialised expertise, reducing duplication of administrative tasks and ensuring appropriate segregation of duties in key functions such as accounting, procurement and ICT governance.

For the SNS JU in particular, these arrangements are instrumental in maintaining robust administrative, financial and IT support structures despite the limited size of its internal administrative team. They enable the JU to benefit from the experience and operational capacity of more mature Joint Undertakings while allowing staff resources to be prioritised for programme implementation and operational activities.

Further developments are expected in 2026, including the continued strengthening of inter-JU cooperation and the preparation for the transition to the Commission's SUMMA financial system.



51. Regulation (EU, Euratom) 2023/2841 of the European Parliament and of the Council of 13 December 2023 laying down measures for a high common level of cybersecurity at the institutions, bodies, offices and agencies of the Union, OJ L, 2023/2841, 18.12.2023.

A nighttime cityscape featuring a prominent highway interchange with vibrant, multi-colored light trails (cyan, blue, purple) from moving vehicles. In the background, several skyscrapers are illuminated against a dark, cloudy sky. A semi-transparent teal banner is overlaid across the middle of the image, containing the section title.

3.

Governance



3.1

Major developments

There were no major developments related to governance aspects in 2025.

3.2

Phasing-out plan monitoring

In April 2025, the Governing Board adopted a revised version of the phasing-out plan (Governing Board Decision No 03/2025). The original version of the document was adopted under Governing Board Decision No 22/2023 of 22 December 2023, in compliance with Article 17(2)(a1) of the Single Basic Act (Council Regulation (EU) 2021/2085). This provision requires the Governing Board to adopt, by the end of 2023, a plan for the phasing-out of the Joint Undertaking from Horizon Europe funding upon recommendation of the Executive Director.

The SNS JU achieved financial autonomy in October 2023 and is progressing towards IT autonomy. The Phasing-out Plan document set out options for the potential continuation of activities currently performed by the SNS JU beyond its current time frame. Several scenarios have been identified, and work will continue to develop these options further. Alternatively, the SNS JU has also developed a plan to wind down all activities at the end of 2031, ensuring a full completion to all projects in our portfolio.

3.3

Governing Board

The Governing Board of the SNS JU is composed of representatives of the two members of the Joint Undertaking:

- ▶ the European Commission, representing the Union, and
- ▶ the private member, the 6G Smart Networks and Services Industry Association (6G-IA).

The Governing Board is responsible for the strategic orientation and key decisions of the Joint Undertaking, including the adoption of the work programmes, the budget and major policy or governance decisions.

In 2025, the European Commission was represented in the Governing Board by:



Thibaut Kleiner

*CNECT.E – “Future Networks”,
DG CNECT (Vice-Chair of the
SNS Governing Board)*



Miguel González-Sancho

*Head of Unit, DG CNECT E1 – “Future
Connectivity Systems”.*

The private member was represented by the 6G-IA members:



Colin Willcock

*Nokia (Vice-Chair of the
SNS Governing Board),*



David Lund

*Public Safety
Communication Europe
(PSCE) Forum*



David Kennedy

Eurescom GmbH



Afif Osseiran

Ericsson



Antón-Haro Carles

*Centre Tecnològic de
Telecomunicacions de
Catalunya (CTTC)*

The representatives for The European Commission, DG CNECT, are:



Pearse O'Donohue

*Director DG CNECT.E
Future Networks*



Agustín Díaz-Pines

*Deputy Head of Unit, DG CNECT
E.1 – “Future Connectivity
Systems”*

- ▶ In April 2025, Mr. Thibaut Kleiner joined the SNS JU Governing Board as the new European Commission representative, replacing Mr. Pearse O'Donohue. His appointment was confirmed during the 14th Governing Board meeting held on 24 April 2025, during which he was elected Chair of the Governing Board until November 2025. In November 2025, the Governing Board elected Mr. Colin Willcock as Chair and Mr. Thibaut Kleiner as Vice-Chair.

Observers regularly participating in the Governing Board meetings include representatives of the States' Representatives Group (SRG Chair and Vice Chair), as well as representatives of the SNS JU Programme Office and the European Commission services.

The SNS JU Governing Board met four times in 2025:

- ▶ **24 April 2025 (14th meeting – extraordinary):** Key topics discussed included the confirmation of the new Commission representatives in the Governing Board and the election of the Chair of the SNS JU Governing Board. The Board also reviewed the implementation and timeline of the SNS JU Annual Work Programme (AWP) 2025, including preparations for Call 4, and discussed the preparation of the AWP 2026–2027 and options to mitigate delays. In addition, the Governing Board discussed the updated SNS JU Phasing-Out Plan and agreed to defer the Stream D call pending clarification on the list of associated countries.
- ▶ **16 June 2025 (15th meeting):** Key topics discussed included updates on operational, financial and administrative activities, including the launch of Calls 4 and 5 under the WP 2025 and the preparation of the AWP 2026 and future calls. The Governing Board also reviewed the 2024 final accounts and adopted the Consolidated Annual Activity Report 2024. In addition, the Board discussed the proposed Memorandum of Intent with the European Space Agency (ESA), the renewal of the SNS JU Stakeholders Group, and potential cooperation with the Chips Joint Undertaking.
- ▶ **27 November 2025 (16th meeting – ad hoc):** Key topics discussed included strategic policy developments related to the creation of a European 3C (Telco–Edge–Cloud) ecosystem and the outline of a European standardisation strategy for SNS. The Governing Board endorsed the 3C ecosystem document and agreed to further refine the standardisation strategy following additional consultations and a dedicated workshop planned for 2026.
- ▶ **18 December 2025 (17th meeting):** Key topics discussed included updates on operational, financial, administrative and audit-related activities, as well as the results of the SNS JU Calls 2025. The Governing Board adopted the SNS JU Bi-Annual Work Programme 2026–2027, approved the list of actions selected for funding from the SNS JU Calls 2025, adopted the Road Chapter of the 5G Strategic Deployment Agenda for Connected and Automated Mobility, and approved the launch of the Call for Expression of Interest for the renewal of the SNS JU Stakeholders Group. Additionally, in accordance with Article 10 of the Rules of Procedure of the SNS JU Governing Board, seven written procedures were initiated to obtain the GB's approval on several key topics.

Decisions taken by the SNS JU Governing Board in 2025

Number	Date	Subject
01/2025	13 January 2025	Renewal of the mandate of the SNS Policy Working Group and the 5G4CAM Working Group and approval of updated lists of experts
02/2025	11 April 2025	Amendment No 1 to the SNS JU Annual Work Programme and Budget 2025 (R&I Work Programme update)
03/2025	17 April 2025	Adoption of the updated SNS JU Phasing-out Plan
04/2025	16 May 2025	Amendment No 2 to the SNS JU Annual Work Programme and Budget 2025
05/2025	16 June 2025	Opinion on the Final Annual Accounts for the Financial Year 2024
06/2025	16 June 2025	Approval of the Consolidated Annual Activity Report 2024
07/2025	16 June 2025	Renewal of the Stakeholders Group
08/2025	22 September 2025	Amendment No 3 to the SNS JU Annual Work Programme and Budget 2025
09/2025	29 September 2025	Implementation of Regulation (EC) No 1049/2001 regarding public access to documents
10/2025	29 September 2025	Application by analogy of Commission guidelines regarding missions and authorised travel
11/2025	29 September 2025	Endorsement of the Memorandum of Intent between SNS JU and ESA
12/2025	18 December 2025	Adoption of the SNS JU's Work Programme and Budget for the year 2026–2027
13/2025	18 December 2025	Approval of actions selected for funding from Calls HORIZON-JU-SNS-2025-01 and 2025-02
14/2025	18 December 2025	Adoption of the 5G Strategic Deployment Agenda for Connected and Automated Mobility (CAM) – Road Chapter
15/2025	18 December 2025	Approval of the selection criteria and procedure for renewal of the Stakeholders Group
16/2025	11 December 2025	Amendment No 4 to the SNS JU Annual Work Programme and Budget 2025

3.4

Executive Director

Mrs. Erzsébet Fitori was appointed Executive Director of the Smart Networks and Services Joint Undertaking (the SNS JU) by the Governing Board on 25 May 2023 (GB Decision 11/2023). She took up her duties on 1 October 2023 for a four-year mandate running until September 2027, with the possibility of a single renewal for an additional period of up to three years.

As Executive Director, Mrs. Fitori is responsible for the day-to-day management of the SNS JU and acts as its legal representative. She ensures the implementation of the Joint Undertaking's Annual Work Programme and the delivery of its research and innovation portfolio in line with the objectives set out in the founding regulation. In this capacity, she prepares and submits to the Governing Board the documents necessary for its decision-making, including the Annual Work Programme and Budget, the draft establishment plan and other governance-related proposals, and ensures the implementation of the decisions adopted by the Governing Board.

Following the acquisition of financial autonomy by the SNS JU on 24 October 2023, Mrs. Fitori also assumed the role of Authorising Officer. In this capacity, she is responsible for implementing the budget in accordance with the SNS JU Financial Rules and for ensuring sound financial management and effective internal control. She authorises commitments and payments and signs administrative and operational legal commitments on behalf of the Joint Undertaking.

During 2025, the Executive Director continued to oversee the implementation of the SNS JU programme and the progress of the Joint Undertaking's portfolio of research and innovation actions addressing the development of next-generation communication networks and services. She ensured coordination with the European Commission services and the members of the Governing Board in order to align the activities of the Joint Undertaking with the Union's strategic objectives in the area of advanced connectivity and the development of 6G technologies.

In the framework of her responsibilities as Authorising Officer, the Executive Director also oversaw the functioning of the internal control system and the monitoring of risks related to the implementation of the programme and the budget, ensuring that appropriate governance, risk management and control mechanisms were in place in line with the SNS JU Financial Rules and the Internal Control Framework (ICF) applicable to Union bodies.



The Executive Director also represented the SNS JU in meetings with institutional stakeholders and at European and international conferences related to future connectivity technologies. In particular, she contributed to discussions on the development of next-generation communication networks and services at major sector events such as the EUCNC & 6G Summit and supported outreach activities related to the SNS Calls for proposals, including programme information sessions and brokerage events aimed at facilitating the participation of stakeholders from industry, SMEs, research organisations and universities.

In addition, the Executive Director ensured the accountability of the Joint Undertaking

through the preparation of governance and reporting documents, including the Consolidated Annual Activity Report and the annual accounts, and maintained cooperation with the European Court of Auditors and the external auditor in the context of the audit of the annual accounts.

3.5

States Representatives Group



The States Representatives Group (SRG), an advisory body established in 2021, comprises representatives from each EU Member State and Associated Country participating in Horizon Europe. The SRG provides strategic guidance on all key issues and relevant activities of the partnership, particularly regarding research and innovation (R&I) priorities under Horizon Europe and deployment activities under CEF2 Digital. Switzerland formally joined the SRG and appointed a representative in December 2025.

In 2025, the SRG convened several **regular meetings**, to fulfil its mandate as outlined in the Single Basic Act. The 12th SRG meeting was held on the margins of the EuCNC & 6G Summit 2025 in Poznań, Poland, in June 2025. During this meeting, SRG members received a briefing on the European Commission’s initial reflections on the future of the programme in light of the upcoming update to the EU research and innovation framework. As a follow-up, SRG approved the consolidated Annual Activity Report 2024 (CAAR 2024). The SRG meeting was followed by a workshop on sustainability, where members engaged in discussions with representatives from SNS Joint Undertaking (JU) projects and the European Commission. Topics included the role and objectives of the SNS Technology Board’s Sustainability Task Force, as well as key sustainability achievements within major SNS JU projects. The 13th SRG meeting took place online in November 2025 and was mostly devoted to discussing the transitioning of the SNS JU program to its last phase under the current MFF (phase 3). Additionally, an SNS JU SRG online information session was organised in July 2025 to discuss 6G Industry Association (6GIA) perspectives on the 10th Framework Programme (Horizon Europe 2028-2034).

During the year, in line with its mandate to provide **strategic guidance on work programmes and funding decisions**, the SRG approved the SNS JU Biennial Work Programme for 2026–2027, including the Research and Innovation (R&I) Work Programme for 2026.

Furthermore, throughout 2025, the SRG continued its **strategic engagement**, aiming to align the Joint Undertaking’s activities with national and regional policies and initiatives. In December 2025, the SRG endorsed its second report on national 6G initiatives across EU Member States (a collaboration between SNS ICE and the SRG), as required under the Single Basic Act. This report—covering progress in national 6G research and innovation activities, strategies, and funding—will be updated annually.

Finally, the SRG also actively participated in the **SNS JU policy working groups**, co-chaired by the European Commission and the industry association 6GIA. SRG members provided valuable input on two key strategic documents prepared by the SNS JU Policy WG on 3C networks and on Standardisation (“*Outline for a European Standardisation Strategy for Smart Networks and Services (SNS)*” and “*Towards a European 3C/Telco-Edge-Cloud Ecosystem*”). Both documents were endorsed by the Governing Board (GB) in December 2025. Additionally, in September 2025, the SRG endorsed the 5G Strategic Deployment Agenda (SDA) for Connected and Automated Mobility (CAM) – Road Chapter.

3.6

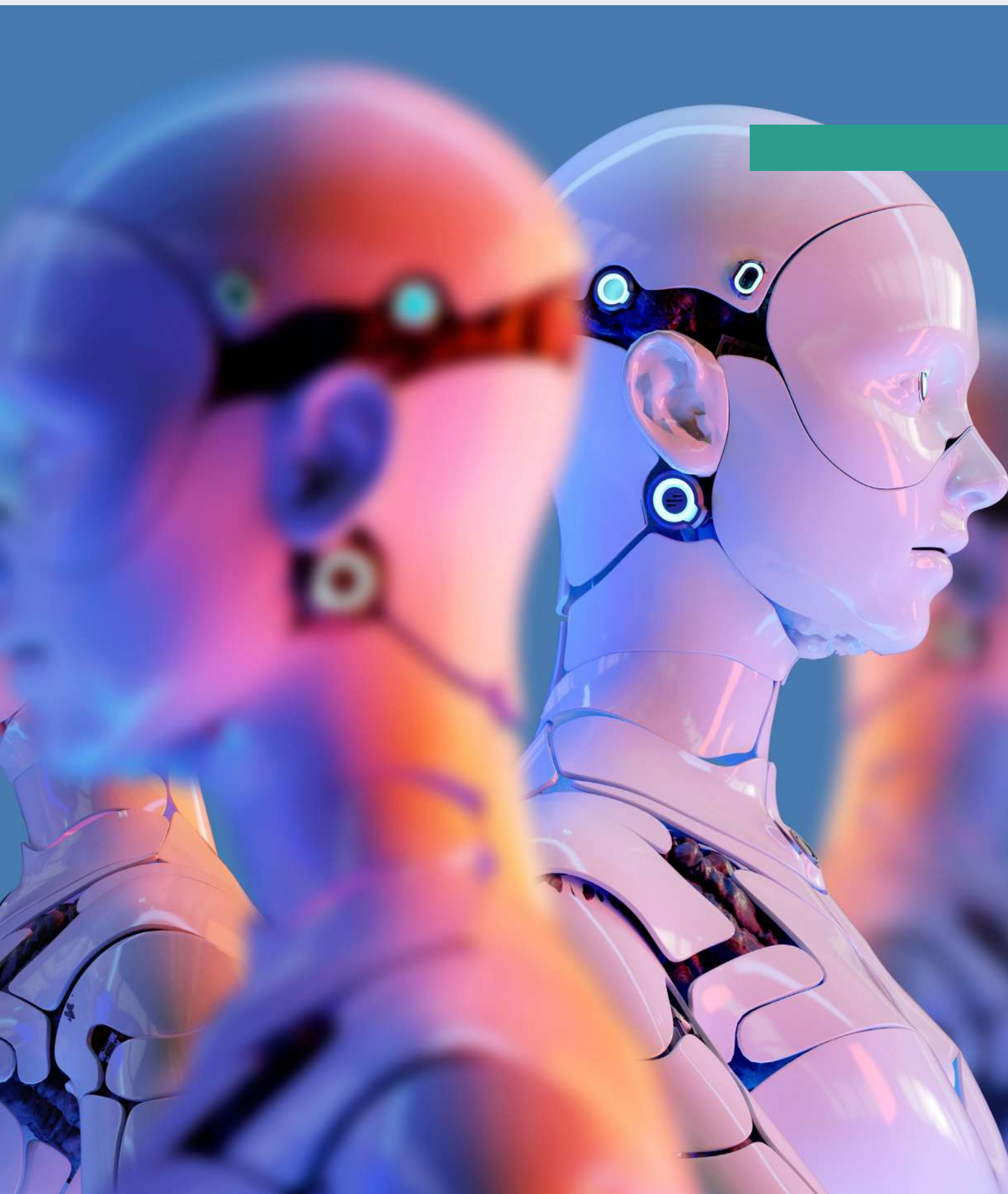
Stakeholders Group

Since 2021, a number of organisations have engaged with the SNS JU in this context including NetworldEurope, the Alliance for Internet of Things Innovation (AIOTI), the Networked European software and services initiative (NESSI), the Public Safety Communications Europe Forum (PSCE), the 5G Automotive Association (5GAA), the 5G Alliance for Connected Industries and Automation (5G-ACIA), the European Telecommunication Standards Institute (ETSI), the European Cybersecurity Organisation (ECISO), the Association for European Nano Electronics Activities (AENEAS) and Photonics 21. These organisations have been supporting the SNS JU programmatic work in various ways, including, contributing to the Strategic Research and Innovation Agenda 2021-27 (SRIA) and participating to events and thematic workshops to prepare the 2026 Work Programme and define R&I priorities for the next years.

In late 2025, the SNS JU initiated the renewal and further development of its Stakeholders Group in line with the Single Basic Act Regulation, with the objective of strengthening the openness, transparency and representativity of stakeholder engagement beyond the existing partnership structure. This reflection was notably supported by the high-level Roundtable on Advanced Connectivity and Industrial Value Creation organised by the SNS JU in Brussels on 2 October 2025, which gathered representatives from industry, research organisations, vertical sectors and EU institutions to discuss Europe's transition from 5G to 6G and the strategic role of advanced connectivity for Europe's technological sovereignty.

Following a decision of the SNS JU Governing Board, a **call for expression of interest** (with deadline April 2026) was launched for the formal establishment of the SNS JU Stakeholders Group (SG) in line with the Single Basic Act regulation. The SG is being established as an advisory body bringing together public and private stakeholders in the field of the SNS JU. It is open to relevant stakeholders, including organised groups, active in the field of the SNS JU, international interest groups from Member States, associated countries or other countries. The SG will be regularly informed of the activities of the joint undertaking, can be invited to provide comments on the joint undertaking's planned initiatives and may be consulted on specific questions, at the request of the Executive Director, to advise the JU's Governing Board. In this context, the SNS JU Stakeholders Group is expected to provide an important forum for exchanges contributing to the Strategic Research and Innovation Agenda and the SNS Annual Work Programmes, but also the very priorities underpinning the EU's future research framework (2028–2034).





4.

Financial Management and Internal Control



During the reporting year, audit activities carried out by the European Court of Auditors (ECA) and the Commission services provided additional evidence supporting the assessment of the internal control system. Further details are provided in the sections below and in Annex 12.

The SNS JU applies an internal control framework aligned with the Commission Internal Control Framework, based on internationally recognised standards and adapted to the size, governance structure and operational characteristics of the Joint Undertaking.

- ▶ The control system is designed to provide reasonable assurance regarding;
- ▶ the legality and regularity of transactions;
- ▶ the achievement of sound financial management objectives;
- ▶ the prevention, detection, correction and follow-up of irregularities and fraud;
- ▶ the reliability of reporting;
- ▶ the safeguarding of assets and information.

The SNS JU relies primarily on systematic ex-ante controls complemented, where applicable, by risk-based Ex-post controls, audits and management monitoring activities.

4.1

Control Results

The Year 2025 represented the fifth year of implementation of the Horizon Europe Framework Programme for the SNS JU. At this stage of programme implementation, the Ex-post audit coverage remains limited, as the Horizon Europe Ex-post audit exercise only started progressively once a sufficient volume of payments became available for audit. Consequently, no representative programme-level error rate is available for 2025.

At Horizon Europe Framework Programme (HE) level, the Ex-post audit campaign is conducted on the basis of a Common Representative Sample (CRS) covering the Horizon Europe expenditure managed by the Research and Innovation family bodies, including the Joint Undertakings. As of 31 December 2025, one CRS had been selected. Based on 59 completed audit results, the cumulative representative detected error rate amounted to 4.38%, while the cumulative residual error rate amounted to 4.05%.

Due to the still relatively limited number of completed audits and technical reviews, these results remain sensitive to individual audit findings and should be interpreted in the context of the multiannual Horizon Europe control strategy. The implementation of audit results and the extension of findings over time are expected to further refine these estimates.

Given that the Horizon Europe cumulative residual error rate remained above the 2% materiality threshold at the end of 2025, DG Research and Innovation included a reservation related to the Horizon Europe residual error rate in its 2025 Annual Activity Report.

The SNS JU notes, however, that these error rates are derived from the common Horizon Europe CRS and do not constitute a statistically representative error rate specific to the SNS JU population. Given the very limited number of completed audits concerning SNS JU-funded actions at this stage of programme implementation, no statistically representative SNS JU-specific error rate was available as of 31 December 2025.

4.1.1

Effectiveness of controls

To ensure sound financial management and the legality and regularity of transactions, the SNS JU has established an internal control system embedded in its organisational structure and aligned with the Commission Internal Control Framework (ICF). The control strategy combines systematic ex-ante controls applied to all transactions with Ex-post controls carried out at programme level. It is implemented in conjunction with the JU risk management framework and the internal control system described in Section 4.3.

Control type	Ex-ante controls	Ex-post controls
Timing	Before authorisation of the transaction	After execution of the transaction
Frequency	Systematic for all transactions	Performed on a sample basis
Methodology	Desk review of supporting documents and verification of compliance with grant agreements and financial rules	Financial audits carried out by the Commission's Common Audit Service (CAS)
Impact	Errors are corrected before the transaction is authorised	Unduly paid amounts are recovered or offset where necessary
Assurance level	Primary assurance mechanism	Secondary assurance mechanism

Ex-ante controls

Ex-ante controls constitute the primary assurance mechanism.

All financial operations (commitments, payments and recoveries) are subject to prior verification by operational and financial services before authorisation by the Authorising Officer.

For operational expenditure, controls are embedded in Horizon Europe corporate systems (COMPASS and SyGMA), including automated checks and workflow validations.

For administrative expenditure, controls are performed through internal procedures and the Commission accounting system (ABAC until end of 2025/SUMMA from 2026).

These controls ensure that:

- ▶ expenditure complies with the applicable legal framework,
- ▶ supporting documentation is complete and valid,
- ▶ sound financial management principles are respected,

Given their systematic application, ex-ante controls provide the main source of assurance.

Ex-post controls

Ex-post controls provide complementary assurance and aim to:

- ▶ verify the legality and regularity of expenditure declared by beneficiaries,
- ▶ assess the effectiveness of ex-ante controls,
- ▶ enable financial corrections where necessary.

The SNS JU relies on ex-post controls implemented through ex-post audits. For Horizon Europe grants, these audits are carried out centrally by the Commission's Common Audit Service (CAS).

CAS audit results

In 2025, CAS finalised two risk-based audits covering two participations, with audited costs of EUR 309 141.94.

No financial corrections reducing eligible costs were identified.

Given the very limited number of audits and their non-representative nature, these results:

- ▶ do not allow conclusions at the level of the SNS JU population,
- ▶ do not constitute a statistically representative error rate.

Audit coverage remains limited due to the early stage of programme implementation.

The SNS JU therefore relies primarily on the effective functioning of its ex-ante controls, complemented by available Ex-post audit results, audit observations and other management information, to obtain assurance on the legality and regularity of underlying transactions.

The Horizon Europe Common Representative Sampling (CRS) exercise has started to generate results at Framework Programme level. However, given the still limited number of completed audits, the resulting error rates remain sensitive to individual audit findings and should be interpreted in a multiannual perspective. As additional audits are completed and findings implemented, the robustness of these estimates is expected to increase.

4.1.1.1 ● Legality and regularity of the financial transactions

Legality and regularity of the financial transactions are ensured through a combination of ex-ante controls embedded in the financial circuits and Ex-post audits carried out under the Horizon Europe control framework.

Ex-ante controls are systematically applied to all transactions at all stages of the authorisation process (initiation, verification and authorisation). These controls are implemented in accordance with the SNS JU financial procedures and are supported by the segregation of duties and the formal designation of financial actors. Monitoring and reporting on ex-ante controls are regularly performed by the financial team.

While ex-ante controls apply to the full population of transactions, their scope and intensity are adapted in practice to the nature and level of risks associated with the underlying operations. This includes consideration of factors such as the type of action, the characteristics of beneficiaries, the financial volume and the stage of implementation.

Ex-post audits are performed by the Common Audit Service (CAS) of the European Commission, in line with the Horizon Europe audit strategy. In 2025, several audits were initiated, of which two risk-based audits were closed during the reporting year. These audits did not identify substantial findings affecting the internal control system of the SNS JU. Additional audits are ongoing or scheduled and will contribute to strengthening the audit evidence base in the coming years.

The European Court of Auditors (ECA) conducts annual audit work on the accounts of the Joint Undertakings and on the legality and regularity of the underlying transactions. In 2025, the ECA carried out audit procedures relating to SNS JU activities, including the review of selected transactions. At the time of drafting this report, the final conclusions of these audit procedures had not yet been formally confirmed.

Given the relatively early stage of implementation of Horizon Europe actions managed by the SNS JU, the number of completed Ex-post audits remains limited. Consequently, the current level of assurance is derived primarily from the effective implementation of ex-ante controls, complemented by the available audit results and ongoing monitoring activities.

For Horizon Europe expenditure, no statistically representative error rate is available for the reporting year, due to the early stage of programme implementation and the limited number of completed Ex-post audits. This situation is consistent with the multiannual nature of the control strategy at the beginning of the programme lifecycle. In this context, and in line with the common approach of the Directorate-General for Research and Innovation for the Research and Innovation family, the assessment of legality and regularity is based on the effective functioning of ex-ante controls, the available audit results and other relevant management information. The control objective for Horizon Europe, set at a residual error rate not exceeding 2%, is used as a benchmark for the assessment, without constituting a statistically measured error rate.

At the level of the Research and Innovation family, the assessment of error rates is evolving in line with the progressive availability of audit results under the multiannual control strategy.

Based on the controls performed and the information available, the SNS JU considers that the financial transactions underlying the accounts are, in all material respects, legal and regular. No material weaknesses affecting the overall functioning of the internal control system were identified for the reporting year.

The SNS JU will continue to monitor the progressive availability of representative audit data under the Horizon Europe multiannual control strategy, including the results of the Common Representative Sampling (CRS) exercise and Common Audit Service (CAS) audits. In line with the evolving common approaches applicable to the Research and Innovation family and Joint Undertakings, SNS JU will progressively assess the conditions for developing more robust quantified indicators related to error-rate estimation in future reporting cycles.

4.1.1.2 ● Fraud prevention, detection and correction

The SNS JU has implemented a framework to prevent, detect and correct fraud and irregularities, in line with its internal control system, applicable financial rules and the anti-fraud policy of its parent Directorate-General.

Preventive and detective controls are embedded in operational and financial processes, including:

- ▶ segregation of duties within financial circuits,
- ▶ formal designation of financial actors,
- ▶ systematic ex-ante verification of transactions,
- ▶ ethics and conflict-of-interest checks,
- ▶ risk-based monitoring of grant implementation.

These controls are complemented by monitoring and reporting mechanisms, including the maintenance and regular monitoring of an exception and non-compliance register.

In 2025, the control environment was further strengthened through the adoption of key internal control instruments, notably:

- ▶ the SNS JU Control Strategy,
- ▶ Internal Control Guidelines,
- ▶ Internal Control Monitoring Criteria.

No fraud cases were identified during the reporting period. Non-compliance events were limited, non-systemic and did not indicate material weaknesses in the control framework.

Based on the controls in place and the results of monitoring activities, no indications were identified that would suggest deficiencies in the fraud prevention and detection framework.

In parallel, the SNS JU initiated the preparation of its entity-specific Anti-Fraud Strategy, aligned with the Commission framework and the Common Audit Service guidance. This strategy is expected to further strengthen the coherence, visibility and monitoring of anti-fraud measures within the JU.

Based on the controls in place and the results of monitoring activities, there is reasonable assurance that the objective of preventing, detecting and correcting fraud and irregularities has been achieved.

4.1.1.3 ● Assets and information, reliability of reporting

Controls related to the safeguarding of assets and the reliability of reporting were implemented and operated effectively during the reporting year.

The Accounting Officer carried out the annual evaluation of the local financial management systems. The assessment did not identify any weaknesses that would materially affect the reliability of financial reporting.

The annual review of access rights to financial systems confirmed proper alignment with roles and responsibilities and adequate segregation of duties.

The SNS JU continued to rely on Commission corporate IT systems (ABAC, COMPASS, SYGMA, ARES, SYSPER). Preparations for the migration to SUMMA were carried out during 2025 without affecting the reliability of financial information.

No significant IT incidents affecting data integrity or availability were reported. Business continuity arrangements remained in place.

Overall, there is reasonable assurance regarding the safeguarding of assets and the reliability of reporting.

4.1.2

Efficiency of controls (“Time to”)

The efficiency of controls in the SNS JU is monitored through key performance indicators (KPIs) related to grant management processes and financial implementation, notably Time-to-Inform (TTI), Time-to-Grant (TTG) and Time-to-Pay (TTP), in line with the applicable regulatory framework.

For Call 3 launched in 2024 (16 projects), the average Time-to-Inform (TTI) was 98 days, remaining within the applicable deadline of 153 days. The average Time-to-Grant (TTG) was 229 days, also within the applicable legal deadline of 245 days.

For Calls 4 and 5 launched in 2025 (20 projects selected in total), the average TTI was 130 days, remaining within the applicable deadline. At the time of reporting, the TTG and TTP indicators for these calls are not yet available, as the grant agreement preparation, signature processes and related payments are ongoing and will be finalised in 2026.

The timing of the grant preparation phase for the 2025 calls is influenced by several factors. In particular, the selection of projects by the Governing Board took place in December 2025, resulting in the signature of grant agreements and the related pre-financing payments being implemented in early 2026. In addition, specific requirements related to Article 22(5) of the Horizon Europe Regulation, including Ownership Control Assessments (OCA), introduced additional validation and coordination steps during the grant preparation phase.

These elements reflect the regulatory and procedural context of Horizon Europe implementation and illustrate the integration of additional compliance and risk-related checks within the grant management process.

The monitoring of “time-to” indicators confirms that control activities are implemented in a manner that remains proportionate to operational constraints and regulatory requirements, while ensuring compliance with applicable regulatory deadlines.

Overall, the SNS JU considers that the efficiency of controls is satisfactory. The control framework allows for the timely implementation of grant management processes, while integrating additional control and validation requirements linked to the evolving Horizon Europe environment.

Time-to-pay indicators are monitored in line with the applicable deadlines (30 or 60 days depending on the type of payment). At the time of reporting, consolidated data for 2025 is not yet available.

Indicator	2024	2025	Benchmark
Average time-to-pay (days)	Not available	Not available	30 days
% payments executed within deadline	Not available	Not available	100%
Average time-to-inform (days)	98	130	153 days
Average time-to-grant (days)	229	Not available	245 days

4.1.3

Economy of controls

The economy of controls in the SNS JU is assessed by analysing the relationship between the resources devoted to control activities and the financial volume and risk profile of the operations managed.

The internal control system is designed to ensure that control activities are proportionate to the risks identified and implemented in a cost-effective manner, taking into account the size of the organisation and the nature of its operations.

Ex-ante controls are performed within the financial circuits by staff carrying out operational and financial initiation and verification roles across the Operational Unit and the Administration and Finance Unit. These controls cover the main financial transactions, including the preparation and signature of grant agreements, the processing of grant amendments and the verification of payments.

In 2025, the human resources allocated to ex-ante control activities are estimated at 1.37 full-time equivalents (FTE), compared to 1.21 FTE in 2024. This estimate is based on the time devoted by the actors involved in the financial circuits, calculated using standard time assumptions per type of transaction and average staff costs.

Control activities are implemented across a wide range of transactions. In 2025, a total of 639 transactions were processed, including 305 administrative transactions and 334 operational transactions. While administrative transactions represent the majority in terms of volume, operational transactions account for significantly higher financial amounts and require more extensive verification.

Operational control efforts in 2025 focused primarily on interim payments under Call 2, final payments under Call 1 and grant agreement amendments. Final payments typically require more detailed checks, resulting in a higher time investment per transaction. Administrative transactions, including contracts and payments related to experts, involve lower amounts and a lower level of control intensity.

The preparation and signature of grant agreements and the related pre-financing payments for the 2025 calls were carried out in early 2026, following the selection of projects by the Governing Board in December 2025. As a result, a significant part of the operational control workload linked to these transactions will materialise in 2026. Based on internal estimates, this additional workload would correspond to approximately 0.90 FTE for operational control activities.

The cost of ex-ante controls is estimated at EUR 148 368 for 2025. When compared to the total budget implemented (commitments), this represents approximately 0.11%, indicating that control activities remain proportionate to the financial volume managed.

Overall, the allocation of resources to control activities reflects a balanced approach, ensuring an appropriate level of assurance while limiting administrative burden. The control framework allows the SNS JU to focus more intensive verification efforts on higher-risk and higher-value transactions, while maintaining proportionate controls for lower-risk operations.

Indicator	Value
Administrative expenditure related to control activities	EUR 148 368
Total budget implemented	EUR 132 448 792
Estimated cost of controls (% of budget managed)	0.11%

When compared to the total payments executed during the year, the cost of controls represents approximately 0.65%, reflecting the relatively low level of payments at this stage of programme implementation and the multiannual nature of Horizon Europe actions.

4.1.4

Conclusion on the cost-effectiveness of controls

The assessment of the cost-effectiveness of controls is based on the analysis of control results, audit findings, resource allocation and key performance indicators related to grant management and financial implementation.

The internal control system of the SNS JU is designed to ensure that control activities are proportionate to the risks identified and implemented in a cost-effective manner. Ex-ante controls are systematically applied across all transactions, with their scope and intensity adapted in practice to the nature and level of risk, allowing control resources to be focused on higher-risk and higher-value operations.

The cost of control activities remains limited in relation to the financial volume managed. Based on the estimates for 2025, the cost of ex-ante controls represents approximately 0.11% of the total budget implemented (commitments), confirming that the control framework operates in a cost-efficient manner. When compared to the total payments executed during the year, this ratio amounts to approximately 0.65%, reflecting the relatively low level of payments at this stage of programme implementation and the multiannual nature of Horizon Europe actions.

Control effectiveness is further supported by the results of ex-ante controls and the available ex-post audits. At the same time, the number of completed ex-post audits remains limited, and the audit evidence base is still developing. As a result, the assurance is derived from a combination of control activities, monitoring mechanisms and available audit results, taking into account the multiannual nature of the Horizon Europe control framework.

Overall, the SNS JU considers that the internal control system provides an appropriate level of assurance while remaining proportionate in terms of cost and administrative burden. Further improvements are ongoing to strengthen the formalisation, documentation and systematisation of control processes, as well as the structured integration of ex-post audit results into risk-based control activities, including through the implementation of the common JU methodology.

4.2

Audit observations and recommendations

During 2025, audit work carried out by the Internal Audit Service (IAS), the European Court of Auditors (ECA) and the Commission services provided independent assurance on the functioning of the internal control system.

The main observations and recommendations arising from these audits, together with their state of implementation and their impact on the assurance, are presented below.

4.2.1

Internal Audit

In 2025, the IAS carried out a limited review on the implementation of the Internal Control Framework (ICF) in the SNS JU. The audit was finalised in February 2026.

The objective of the audit was to assess whether the Authorising Officer had performed an adequate overall assessment of the presence and functioning of the internal control principles and components, and whether the results of this assessment were appropriately reported in the Consolidated Annual Activity Report (CAAR).



The IAS concluded that the SNS JU has put in place appropriate processes to assess the adequacy and functioning of its internal control system, while identifying areas where improvements could further strengthen the reporting and documentation of the internal control assessment process.

The engagement resulted in two recommendations, both classified as important and accepted by the SNS JU. These recommendations relate to:

- ▶ improving the reporting of the internal control assessment results in the CAAR, and
- ▶ strengthening the documentation and audit trail of the annual risk assessment exercise

No IAS recommendations classified as critical or very important IAS recommendations are reported in the table below.

Further details are provided in Annex 12.

Reported	Audit Title	Accepted Recommendation (critical or very important)	State of play in 2025	Impact on the assurance for 2025
2025	IAS limited review on Internal Control Framework	None		

4.2.2

Audit of the European Court of Auditors (ECA)

In 2025, the European Court of Auditors (ECA) issued an unqualified opinion on the SNS JU accounts and on the legality and regularity of the underlying transactions for the financial year 2024.

In its observations on internal control and governance, the ECA noted that certain elements of the ICF were not yet fully implemented at the end of 2024, in particular the risk-based control framework for Horizon Europe expenditure. This observation remained open during the reporting period and is being addressed through the ongoing implementation of the control strategy and related measures.

In addition, in the context of the audit of the financial year 2024 (Mission 2), the ECA issued a clearing letter containing a very important recommendation concerning the risk-based Horizon Europe audit strategy, which was not yet

implemented in a fully systematic and centralised manner. The SNS JU acknowledged this finding and is taking steps to further strengthen and formalise the framework.

As part of its audit activities related to the financial year 2025, the ECA carried out audit work on several transactions relating to SNS JU beneficiaries. However, at the time of reporting, only one audit had been finalised and resulted in a clearing letter issued in 2025. This audit identified a quantified error related to personnel costs, resulting from an incorrect application of the applicable rules by the beneficiary. The error was subsequently corrected.

The remaining transaction audits carried out by the ECA in 2025 were finalised after the reporting period, with clearing letters issued in 2026. These results are therefore not taken into account for the 2025 assurance.

Given the limited number of audit results available within the reporting period and the non-representative nature of the sample, these elements provide limited evidence and do not allow conclusions to be drawn at the level of the SNS JU population.

Furthermore, in December 2025, the ECA launched an audit of the budget revenue for the financial year 2025, with fieldwork carried out in early 2026. At the time of reporting, this audit was ongoing and no observations or recommendations had been issued.

Reported	Audit Title	Recommendation	State of play in 2025	Impact
2025	ECA DAS audit (CL-74807)	None		
2025	ECA DAS audits of transactions (others)	N/A		
2025	ECA audit of budget revenue	None		
2024	ECA Annual audit (FY2024)	Very important		
2025	ECA Clearing letter (Mission 2 – FY2024)	Very important		

4.2.3

Overall Conclusions

The audit results available for the reporting period did not identify any critical deficiencies affecting the functioning of the internal control system.

The findings reported by auditors relate primarily to the ongoing strengthening and formalisation of the ICF. Corrective actions have been defined, and their implementation is ongoing and subject to regular monitoring.

Based on the available audit evidence, together with the results of internal control monitoring and management assessment, no indications of systemic weaknesses were identified.

However, given the limited number of audits finalised during the reporting year and the non-representative nature of the available samples, the audit evidence remains limited and does not allow conclusions to be drawn at the level of the overall SNS JU population.

Taking into account all available information, including ex-ante controls, audit results and internal monitoring mechanisms, the internal control system is considered to be in place and functioning.

While the control framework and monitoring mechanisms in place provided reasonable assurance during 2025, some elements of the SNS JU control and monitoring environment remain in a consolidation phase, notably regarding the further structuring of risk assessment documentation, harmonisation of KPI methodologies, and the progressive implementation of the common inter-JU Horizon Europe control approach. These elements did not result in material weaknesses affecting the overall assurance conclusion.

4.3

Assessment of the effectiveness of internal control (IC) systems

The Commission has adopted an ICF based on internationally recognised standards, namely the Committee of Sponsoring Organizations of the Treadway Commission (COSO) Internal Control Integrated Framework.

The SNS JU has adapted this framework to its specific characteristics and organisational structure. Its internal control system is designed to support the achievement of its policy and operational objectives, in line with the internal control principles, taking into account the risks associated with its operating environment.

4.3.1

Methodology and sources of assurance

The assessment of the effectiveness of the internal control system is based on a structured self-assessment covering all internal control components and the 17 underlying principles.

This assessment aims to provide reasonable assurance that internal control principles are adequately designed and effectively implemented, that identified weaknesses are followed up, and that corrective actions are implemented and reported in a timely manner.

The assessment is supported by multiple sources of assurance, including:

- ▶ the annual internal control self-assessment exercise;
- ▶ the register of exceptions and non-compliance events;
- ▶ the analysis of identified internal control weaknesses;
- ▶ the annual risk assessment process;
- ▶ audit results from IAS and the ECA;
- ▶ the follow-up of audit recommendations;
- ▶ other relevant supervisory information.

Where relevant, audit results from IAS and the ECA were taken into account with particular attention in the identification and assessment of control weaknesses.

Further details on the methodology and supporting evidence are provided in Annex 12.

4.3.2

Implementation of internal control principles

4.3.2.1 ● Assessment of the Internal Control

Overall, the internal control principles were assessed as being adequately implemented and functioning.

The control environment is supported by clearly defined roles and responsibilities, formalised procedures and the use of Commission corporate systems. Preventive controls are systematically applied to all transactions and constitute a key element of the assurance framework.

Risk management processes are in place and integrated into the internal control system. Monitoring activities, including the use of registers and follow-up mechanisms, support the identification and correction of weaknesses.

No internal control principle was assessed as not implemented or not functioning. However, certain areas were identified where further improvements are required to strengthen the robustness and documentation of the control framework.

These areas correspond to internal control principles assessed as “present and functioning, with improvements needed” (category 2) in the 2025 internal control self-assessment. This assessment level reflects that the principles are in place and operational, but that improvements are required to enhance their robustness, documentation or consistency.

These relate in particular to:

- ▶ **internal control principles 6 and 7 (risk assessment)**, where improvements are needed in the documentation and audit trail of the annual risk assessment exercise;
- ▶ **internal control principle 12 (control activities)**, where further structuring of the risk-based control and audit approach is required;
- ▶ **internal control principle 16 (monitoring)**, where improvements are needed in the formalisation and reporting of the internal control assessment process.

Corrective actions have been defined and are being implemented, with follow-up ensured through the relevant monitoring mechanisms.

The table below provides a structured overview of the assessment of the main internal control principles and components for 2025, including the main observations, mitigation measures and sources of assurance. The full coverage of all internal control principles is reflected in the self-assessment and detailed in Annex 12.

The assessment of internal control principles is based on the following scale:

- 1** Present and functioning: the control principle is adequately designed and effectively implemented, with no significant weaknesses identified;
- 2** Present and functioning, with improvements needed: the control principle is implemented and operational, but improvements are required to strengthen its robustness, documentation or consistency.

ICF Component	Internal Control Principle	Assessment (2025)	Key observations	Mitigation / follow-up actions	Source of evidence
Control Environment	Ethics, integrity, governance arrangements	1	Governance framework established (GB decisions, Code of Conduct, Col procedures). No conflicts identified.	Continued monitoring and periodic update of governance framework. monitoring and periodic update of governance framework.	Self-assessment report 2025; ICMC 2025; Col declarations; GB decisions
	Roles, responsibilities and organisational structure	1	Clear allocation of roles and responsibilities; formal designation of financial actors; segregation of duties ensured.	Maintain clarity of roles and update designations where necessary.	Self-assessment report 2025; ED decisions on financial actors; ICMC 2025
Risk Assessment	Risk identification and analysis	2	Risk assessment exercise carried out; however, documentation and audit trail still to be fully structured.	IAS Action Plan (Rec. 2): implementation of centralised filing structure and strengthened documentation (2026).	Self-assessment report 2025 (risk section); Risk register; IAS audit (2025–2026)
Control Activities	Fraud risk assessment	1	Fraud risks assessed; no fraud cases identified; anti-fraud controls embedded.	Continued implementation of Anti-Fraud Strategy and monitoring.	Self-assessment report 2025; Anti-Fraud framework; ICMC 2025
	Ex-ante and ex-post controls (legality and regularity)	1	Ex-ante controls applied to all transactions; CAS audits show no significant findings; no material weaknesses identified.	Maintain risk-based control strategy; adjust as audit coverage increases.	Self-assessment report 2025 (control results); CAS audit results; ECA audit work
	Operational controls and business continuity	1	Control procedures and business continuity arrangements in place; progressively strengthened since 2024.	Continued refinement and formalisation of procedures where needed.	Self-assessment report 2025; internal procedures; BCP documentation

ICF Component	Internal Control Principle	Assessment (2025)	Key observations	Mitigation / follow-up actions	Source of evidence
Information & Communication	Reliability of reporting and IT systems	1	Reliable financial and operational reporting ensured; ABAC/SUMMA systems; no material weaknesses identified.	Continued monitoring, including post-SUMMA transition.	Self-assessment report 2025 (reporting section); Accounting Officer evaluation; IT systems (ABAC/SUMMA)
	Internal communication and documentation	2	Need for clearer structuring and presentation of internal control information, including CAAR reporting.	IAS Action Plan (Rec. 1): enhanced presentation of internal control assessment in CAAR (2025 cycle).	Self-assessment report 2025; IAS limited review (2025–2026)
Monitoring Activities	Ongoing and periodic monitoring	1	Monitoring based on ICMC, management oversight and control indicators; system generally effective.	Maintain and further refine monitoring indicators where needed.	Self-assessment report 2025; ICMC 2025; management reporting
	Follow-up of audits and recommendations	1	IAS and ECA recommendations followed; no major deficiencies; action plan in place.	Continued follow-up under IAS procedures and reporting in CAAR.	Self-assessment report 2025; IAS audit report; ECA results; action plan

The assessment of internal control effectiveness takes into account the audit observations and recommendations presented in section 4.2, including their impact on the relevant internal control principles.

4.3.2.2 ● Internal control observations

No major deficiencies were identified that would indicate that internal control principles are not implemented or not functioning as intended.

Audit results did not reveal systemic weaknesses affecting the overall effectiveness of the internal control system. The findings identified are limited in scope and relate to areas for improvement rather than deficiencies affecting the overall functioning of controls.

In particular:

- ▶ IAS recommendations issued during the reporting period are classified as important and relate to improvements in reporting and documentation;
- ▶ the ECA recommendation concerning the risk-based audit strategy is being addressed through an ongoing action plan.

These elements do not have a significant impact on the assurance for 2025.

4.3.2.3 ● Follow-up of previous identified observations

The SNS JU has continued to implement measures to address control weaknesses identified in the previous reporting period and audit exercises. In particular, progress has been made in strengthening the ICF through:

- ▶ the adoption of the Control Strategy;
- ▶ the development of Internal Control Guidelines;
- ▶ the establishment of Internal Control Monitoring Criteria.

These measures contribute to a more structured, risk-based and coherent control environment and address observations related to the formalisation of the internal control system.

4.3.2.4 ● Strengths and good practices

The internal control system of the SNS JU benefits from several strengths, including:

- ▶ the systematic application of ex-ante controls to all transactions;
- ▶ the use of Commission corporate IT systems ensuring consistency and reliability of processes;
- ▶ the centralised execution of ex-post audits by the CAS;
- ▶ the integration of risk management and monitoring mechanisms within the control framework;
- ▶ the structured follow-up of exceptions and non-compliance events.

These elements support the reliability of the control system and contribute to the achievement of internal control objectives.

4.3.2.5 ● Overall conclusion

The SNS JU has assessed its internal control system during 2025 and has concluded that it is effective and the components and principles are present and functioning well overall, but some improvements are needed as minor deficiencies were identified related to the formalisation and documentation of control processes and the further structuring of the risk-based control framework.

4.4

Conclusion on the assurance

The assessments presented in Sections 4.1, 4.2 and 4.3 indicate that the internal control system of the SNS JU provides reasonable assurance on the achievement of the internal control objectives.

Control results (Section 4.1) show that ex-ante controls are systematically applied to all transactions and constitute the primary source of assurance. Ex-post audits performed by the Common Audit Service and audit work carried out by the European Court of Auditors provide complementary evidence. While audit coverage remains limited and not statistically representative at this stage of Horizon Europe implementation, the controls performed and the information available identified no material weaknesses affecting the overall functioning of the internal control system.

Audit observations (Section 4.2) did not identify any critical deficiencies affecting this IC system. The recommendations issued relate to the further strengthening and formalisation of the control framework. Corrective actions are in progress and are subject to monitoring. These elements do not have a significant impact on the assurance for the reporting year.

The IC self-assessment (Section 4.3) confirms that the IC principles are present and functioning overall. Areas for improvement concern the further formalisation and documentation of control processes and the progressive strengthening of the risk-based control approach.

This conclusion is supported by the annual IC self-assessment report and the results of ongoing monitoring activities.

On this basis, management has reasonable assurance that:

- ▶ the accounts give a true and fair view of the financial position;
- ▶ resources have been used for their intended purpose;
- ▶ the principles of sound financial management have been respected;
- ▶ the underlying transactions are legal and regular;
- ▶ no significant information has been omitted.

In addition, reasonable assurance is obtained with regard to the safeguarding of assets and information, and to the prevention, detection and correction of fraud and irregularities.

The assessment of legality and regularity also took into account the cumulative residual error rate established at Horizon Europe Framework Programme level on the basis of the Common Representative Sample (CRS) covering the Research and Innovation family bodies. While this residual error rate exceeded the 2% materiality threshold at the end of 2025 and led DG Research and Innovation to introduce a reservation in its Annual Activity Report, no statistically

representative SNS JU-specific residual error rate was available as of 31 December 2025. Given the limited number of completed audits concerning SNS JU-funded actions, SNS JU is not in a position to determine whether the Framework Programme residual error rate is representative of its own population.

In forming the overall assurance conclusion, management considered all available sources of assurance, including ex ante controls, internal control assessments, audit results available for SNS JU-funded actions and the Horizon Europe Common Representative Sample (CRS) exercise.

While the CRS residual error rate provides relevant information at Horizon Europe Framework Programme level, it is derived from a representative sample covering expenditure managed across the Framework Programme and does not constitute a statistically representative measure of the SNS JU expenditure population. Consequently, it cannot be directly attributed to the Joint Undertaking.

While no statistically representative SNS JU-specific residual error rate was available as of 31 December 2025, management assessed the available assurance evidence specific to the Joint Undertaking in order to determine whether the conditions for introducing a reservation were met.

The available assurance evidence did not identify material weaknesses affecting the legality and regularity of the expenditure managed by the Joint Undertaking. This assessment takes into account, in particular, the results of ex ante controls systematically applied to all transactions, the audit results available for SNS JU-funded actions, the internal control self-assessment and the overall effectiveness of the internal control framework.

Based on the totality of the available assurance evidence and management judgement, management concluded that there were insufficient grounds to establish a reservation affecting SNS JU expenditure.

Reservations

The assessment of potential reservations was carried out in line with the applicable materiality criteria, taking into account the nature, scope and potential financial and reputational impact of identified issues.

Although the Horizon Europe Framework Programme residual error rate exceeded the materiality threshold and resulted in a reservation in the DG RTD Annual Activity Report, no statistically representative SNS JU-specific residual error rate was available and the available audit results concerning SNS JU-funded actions did not identify systemic or material errors affecting the legality and regularity of the expenditure managed by the Joint Undertaking.

No material weaknesses with a financial or reputational impact that would justify the introduction of a reservation were identified in Sections 4.1, 4.2 and 4.3. In particular:

- ▶ no internal control principle was assessed as not implemented or not functioning effectively;
- ▶ no IAS recommendations classified as critical or very important remain open;
- ▶ no material deficiencies affecting the overall assurance on legality and regularity were identified;
- ▶ no significant reputational events impacting the assurance were recorded.

The recommendation issued by the ECA concerning the risk-based control approach is being addressed through an ongoing action plan and does not affect the assurance for the reporting year.

No reservations were reported in Year N-1 and therefore no follow-up is required.

Recapitulative table of reservations

Reservation	Title	Financial Impact (in m EUR)	Residual error rate Year 2025	Evolution
N/A	No reservations reported in 2024 and 2025	N/A	N/A	N/A

In conclusion, based on the elements reported above, management has reasonable assurance that, overall, the internal control system is in place and functioning, that risks are being appropriately monitored and mitigated, and that necessary improvements are being progressively implemented.

Taking into account all available assurance sources, including **ex ante controls, audit results available for SNS JU-funded actions, internal control assessments** and the Horizon Europe Framework Programme control results (see Section 4.1), management concluded that the conditions for introducing a reservation at SNS JU level were not met.

The Executive Director, in her capacity as Authorising Officer by Delegation, has signed the Declaration of Assurance without reservation.

4.5

Statement of Assurance

4.5.1

Assessment of the Annual Activity Report by the Governing Board

The Governing Board is of the opinion that the Consolidated Annual Activity Report accurately reflects the implementation of the 2025 activities of the Joint Undertaking from both an operational and administrative point of view.

In light of the above, on 15 June 2026, the Governing Board approved the SNS JU Consolidated Annual Activity Report for the year 2025, including the corresponding expenditure and the declaration of the Executive Director on reasonable assurance.

4.5.2

Declaration of assurance

I, the undersigned,

Executive Director of the Smart Networks and Services Joint Undertaking (the SNS JU),

In my capacity as authorising officer by delegation:

- ▶ *Declare that the information contained in this report gives a true and fair view.*
- ▶ *State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.*

This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the work of the internal audit capability, the observations of the Internal Audit Service and the lessons learnt from the reports of the Court of Auditors for years prior to the year of this declaration.

- ▶ *Confirm that I am not aware of anything not reported here which could harm the interests of the Joint Undertaking.*

Brussels, 15 June 2026



Erzsébet Fitori

Executive Director

Smart Networks and Services
Joint Undertaking



5.

Annexes

1.

Organisational chart



2.

Establishment plan and additional information on HR management

Function group and grade	YEAR 2024				YEAR 2025			
	Authorised		Actually filled as of 31/12		Authorised		Actually filled as of 31/12	
	Perm. posts	Perm. posts	Perm. posts	Perm. posts	Perm. posts	Perm. posts	Perm. posts	Perm. posts
AD 16								
AD 15								
AD 14		1		1		1		1
AD 13								
AD 12		1		1		1		1
AD 11								
AD 10								
AD 9								
AD 8		5		1		5		3
AD 7				4				2
TOTAL AD		7		7		7		7
TOTAL AST								
TOTAL AST/SC								
GRAND TOTAL		7		7		7		7

Contract Agents	Authorized	Actually filled as of 31 December 2025
Function Group IV	7	6
Function Group III	2	2
Function Group II	1	1
Function Group I		
TOTAL	10	9

Seconded National Experts	Authorized	Actually filled as of 31 December 2025

3.

Publications from projects

Project Acronym	N° of publications	N° of Peer reviewed
ADROIT6G	50	50
6G-SHINE	58	58
Hexa-X-II	217	184
SNS OPS	9	2
SNS ICE	10	0
TrialsNet	41	32
PREDICT-6G	52	12
RIGOUROUS	50	43
SUPERIOT	54	53
VERGE	63	56
PRIVATEER	35	12
SEASON	163	125
FIDAL	17	4
6GTandem	18	18
TIMES	33	33
6G-SANDBOX	66	61
HORSE	34	33
CENTRIC	50	34
CONFIDENTIAL6G	47	42
IMAGINE-B5G	39	36
NANCY	84	84
DESIRE6G	70	59
6G-NTN	20	15
DETERMINISTIC6G	24	22
ETHER	89	89
5G-STARDUST	21	21
TARGET-X	29	27
6G-XR	27	25
FLEX-SCALE	35	17
6Green	30	26
TERA6G	31	19
6G-BRICKS	40	34
BeGREEN	35	22
TERRAMETA	165	139
ACROSS	32	8
6G-TWIN	21	16
SAFE-6G	35	8
ENVELOPE	19	15
ELASTIC	24	17

Project Acronym	N° of publications	N° of Peer reviewed
ROBUST-6G	56	37
6G4Society	7	7
6G-CLOUD	21	20
TeraGreen	4	4
EXIGENCE	7	5
6G-DISAC	71	67
ECO-eNET	33	33
PROTEUS-6G	21	11
6G-REFERENCE	17	16
INSTINCT	55	52
FirstTo6G	5	5
6G-PATH	41	41
6G-MUSICAL	32	31
6G-EWOC	33	20
6G-XCEL	21	20
iTrust6G	25	25
6G-GOALS	104	98
SUNRISE-6G	52	51
6G-INTENSE	25	25
ORIGAMI	52	52
6G-SENSES	43	36
NATWORK	38	30
iSEE-6G	30	30
Opti-6G	14	13
MARE	4	4
SUSTAIN-6G	22	16
SNS CO-OP	4	2
AMAZING-6G	3	3
6G-LEADER	7	6
AMBIENT-6G	24	24
6GARROW	21	20
6G-MIRAI	0	0
FLECON-6G	14	14
MultiX	18	17
6G-VERSUS	8	8
UNITY-6G	35	35
X-TREME 6G	0	0
XTRUST-6G	17	16
6G-DALI	7	7
NexaSphere	6	3
Total	2 934	2 455

Data based on Continuous Reporting.

4.

Patents from projects

Project Acronym	N° of Patents	N° of Confidential Patents
TERRAMETA	2	0
TERA6G	2	0
SUPERIOT	4	0
SUNRISE-6G	0	5
SAFE-6G	0	5
RIGOUROUS	0	12
PREDICT-6G	0	6
ORIGAMI	0	5
Opti-6G	1	0
NANCY	2	1
MultiX	0	5
INSTINCT	0	1
Hexa-X-II	21	19
FLECON-6G	0	2
ETHER	0	1
ELASTIC	1	0
DESIRE6G	0	11
CENTRIC	6	18
ADROIT6G	0	2
ACROSS	0	4
6G-XR	2	0
6G-SHINE	7	3
6G-SANDBOX	0	1
6Green	0	1
6G-INTENSE	0	3
6G-GOALS	0	2
6G-DISAC	0	10
6GARROW	0	3
5G-STARDUST	1	1
Total	49	121

Data based on Continuous Reporting⁵².

In 2025 there were 49 patents and 212 Confidential patents submissions in total, out of which 14 are already granted.

52. Some patent applications and other IPR submissions may not yet be reflected in this table due to periodic reporting constraints.

5.

Scoreboard of Horizon Europe common Key Impact Pathway Indicators (KIPs)⁵³

Key Impact Pathway ⁵⁴	Short-term	Medium-term	Longer-term	Detail per action or globally for 2025
Towards scientific impact				
1-Creating high-quality new knowledge	Publications -Number of peer-reviewed scientific publications resulting from the Programme	Citations -Field-Weighted Citation Index of peer-reviewed Publications resulting from the Programme	World-class science -Number and share of peer-reviewed publications resulting from the projects funded by the Programme that are core contribution to scientific fields	105 peer-reviewed publications in 2025 resulting from the SNS JU projects
2-Strengthening human capital in R&I	Skills -Number of researchers involved in upskilling (training, mentoring/coaching, mobility and access to R&I infrastructures) activities in projects funded by the Programme	Careers -Number and share of upskilled researchers involved in the Programme with increased individual impact in their R&I field	Working conditions -Number and share of upskilled researchers involved in the Programme with improved working conditions, including researchers' salaries	Researchers in upskilling (Early career) 1 747 involved in SNS JU projects 24% women 76% men
3-Fostering diffusion of knowledge and open science	Shared knowledge Share of research outputs (open data/publication/software etc.) resulting from the Programme shared through open knowledge infrastructures	Knowledge diffusion -Share of open access research outputs resulting from the Programme actively used/cited	New collaborations -Share of Programme beneficiaries which have developed new transdisciplinary/trans-sectoral collaborations with users of their open access research outputs resulting from the Programme	Research outputs shared through open knowledge infrastructures: 68.65% shared knowledge In detail: OA publications 62.28% Share of OA publications, related to 1 195 publications in total OA datasets: 80.88% Share related to OA datasets, 68 datasets in total OA software: 56.25% Share of OA software, out of 32 applications in total

53. Key Impact Pathways Indicators (based on Annex V to Regulation 2021/695/EU)

54. NB: For some of those KIPs the data will not be available in the short or even medium term.

Key Impact Pathway	Short-term	Medium-term	Longer-term	Detail per action or globally for 2025
Towards scientific impact				
4-Addressing Union policy priorities and global challenges through R&I	Results -Number and share of results aimed at addressing identified Union policy priorities and global challenges (including SDGs) (multidimensional: for each identified priority)	Solutions -Number and share of innovations and research outcomes addressing identified Union policy priorities and global challenges (including SDGs) (multidimensional: for each identified priority)Including: Number and share of climate-relevant innovations and research outcomes delivering on Union's commitment under the Paris Agreement	Benefits -Aggregated estimated effects from use/exploitation of results funded by the Programme on tackling identified Union policy priorities and global challenges (including SDGs), including contribution to the policy and law-making cycle (such as norms and standards) (multidimensional: for each identified priority) Including: Aggregated estimated effects from use/ exploitation of climate-relevant results funded by the Programme on delivering on the Union's commitment under the Paris Agreement including contribution to the policy and law-making cycle (such as norms and standards)	
5-Delivering benefits and impact through R&I missions	R&I mission results -Results in specific R&I missions (multidimensional: for each identified mission)	R&I mission outcomes - Outcomes in specific R&I missions (multidimensional: for each identified mission)	R&I mission targets met -Targets achieved in specific R&I missions (multidimensional: for each identified mission)	Not applicable for the JUs
6-Strengthening the uptake of R&I in society	Co-creation -Number and share of projects funded by the Programme where Union citizens and end-users contribute to the co-creation of R&I content	Engagement -Number and share of participating legal entities which have citizen and end-users engagement mechanisms in place after the end of projects funded by the Programme	Societal R&I uptake -Uptake and outreach of co-created scientific results and innovative solutions generated under the Programme	28 projects (44.44%) reflect signed grants with an engagement activity (of citizens or end-users) 10 projects (15.87%) reflect signed grants with citizens engagement activities 28 projects (44.44%) reflect signed grants with end-user engagement activities Number of innovative products, processes and methods: 170 IPR applications (non-confidential): 2 IPR applications by type: 50% patent 50% other

Key Impact Pathway	Short-term	Medium-term	Longer-term	Detail per action or globally for 2025
Towards technological / economic impact				
7-Generating innovation-based growth	Innovative results -Number of innovative products, processes or methods resulting from the Programme (by type of innovation) & Intellectual Property Rights (IPR) applications	Innovations -Number of innovations resulting from the projects funded by the Programme (by type of innovation) including from awarded IPRs	Economic growth -Creation, growth & market shares of companies having developed innovations in the Programme	Number of innovative products, processes and methods: 170
8-Creating more and better jobs	Supported employment -Number of full time equivalent (FTE) jobs created, and jobs maintained in participating legal entities for the project funded by the Programme (by type of job)	Sustained employment -Increase of FTE jobs in participating legal entities following the project funded by the Programme (by type of job)	Total employment -Number of direct & indirect jobs created or maintained due to diffusion of results from the Programme (by type of job)	Total number of FTE jobs created and maintained in organisations funded by the SNS programme: 1 478.48 full-time equivalent jobs
9- Leveraging investments in R&I	Co-investment -Amount of public & private investment mobilised with the initial investment from the Programme	Scaling-up -Amount of public & private investment mobilised to exploit or scale-up results from the Programme (including foreign direct investments)	Contribution to '3 % target' - Union progress towards 3 % GDP target due to the Programme	Total co-investment EUR 41.2million . This is the amount (EUR) of public and private investment mobilised with the initial investment from the programme (co-investment) The split per Call (or signature year): Call 1(2022): EUR 19.42m Call 2 (2023): EUR 10.45m Call 3 (2024): EUR 11.12m The split is as follows: 92.4% EU contribution 7.6% beneficiaries' own funds

KIP1:

Publications and peer reviewed publications per SNS JU projects (Calls 1 and 2)

Project Number	Project Acronym	Number of Publications	Number of Peer-reviewed Publications
101095363	ADROIT6G	24	22
101095738	6G-SHINE	19	13
101095759	Hexa-X-II	30	29
101095811	SNS OPS	8	2
101095841	SNS ICE	10	0
101095871	TrialsNet	12	12
101095890	PREDICT-6G	54	14
101095933	RIGOUROUS	24	22
101096021	SUPERIOT	12	10
101096034	VERGE	17	14
101096110	PRIVATEER	6	5
101096120	SEASON	22	19
101096146	FIDAL	5	1
101096302	6GTandem	16	14
101096307	TIMES	19	16
101096328	6G-SANDBOX	26	19
101096342	HORSE	12	12
101096379	CENTRIC	21	12
101096435	CONFIDENTIAL6G	20	18
101096452	IMAGINE-B5G	6	5
101096456	NANCY	46	43
101096466	DESIRE6G	27	18
101096479	6G-NTN	11	7
101096504	DETERMINISTIC6G	4	2
101096526	ETHER	33	29
101096573	5G-STARDUST	9	2
101096614	TARGET-X	0	0
101096838	6G-XR	10	6
101096909	FLEX-SCALE	26	9
101096925	6Green	13	12
101096949	TERA6G	34	4
101096954	6G-BRICKS	7	6
101097083	BeGREEN	12	7
101097101	TERRAMETA	56	47
101097122	ACROSS	10	1
101136314	6G-TWIN	15	0
101139031	SAFE-6G	27	5
101139048	ENVELOPE	13	2
101139067	ELASTIC	21	1
101139068	ROBUST-6G	25	19
101139070	6G4Society	2	0

Project Number	Project Acronym	Number of Publications	Number of Peer-reviewed Publications
101139073	6G-CLOUD	7	1
101139117	TeraGreen	0	0
101139120	EXIGENCE	7	2
101139130	6G-DISAC	38	32
101139133	ECO-eNET	27	14
101139134	PROTEUS-6G	4	0
101139155	6G-REFERENCE	3	0
101139161	INSTINCT	41	34
101139167	FirstTo6G	0	0
101139172	6G-PATH	41	26
101139176	6G-MUSICAL	32	0
101139182	6G-EWOC	16	0
101139194	6G-XCEL	16	12
101139198	iTrust6G	7	4
101139232	6G-GOALS	55	42
101139257	SUNRISE-6G	38	10
101139266	6G-INTENSE	17	13
101139270	ORIGAMI	43	6
101139282	6G-SENSES	20	13
101139285	NATWORK	35	14
101139291	iSEE-6G	30	21
101139292	Opti-6G	8	6
Total (*)		1 195	696

* The total is lower than the sum of all listed figures, as some publications correspond to more than one project.

NB: Projects of Call 3 are not yet included, as no periodic reviews are performed yet for these projects

Data source: Corda, Scopus. Date of the last Scopus load: 13 December 2025

The number of HE peer-reviewed publications is based on periodic reporting data matched to Scopus.

Note: Differences may occur between the publications data displayed on the KIP Dashboard and those reported by the ERC. These stem from differing methodological and update timelines. For instance, for the KIPs featured in this dashboard, and in particular KIP 1, we base our data on periodic reports only, and do not include the continuous reporting data.

"Country/territory" filter shows "Outputs of projects involving a participant from that country".

"Organisation type" filter shows "Outputs of projects involving an organisation of that type".

KIP2: Number of researchers involved in the SNS JU projects⁵⁵

Project Number	Project Acronym	Total Upskilled Researchers	MALE	FEMALE
101095363	ADROIT6G	28	18	10
101095738	6G-SHINE	36	31	5
101095759	Hexa-X-II	121	100	21
101095811	SNS OPS	11	4	7
101095841	SNS ICE	3	1	2
101095871	TrialsNet	51	37	14
101095890	PREDICT-6G	39	31	8
101095933	RIGOUROUS	17	15	2
101096021	SUPERIOT	36	31	5
101096034	VERGE	32	29	3
101096110	PRIVATEER	23	18	5
101096120	SEASON	18	15	3
101096146	FIDAL	42	32	10
101096302	6GTandem	21	12	9
101096307	TIMES	29	24	5
101096328	6G-SANDBOX	39	36	3
101096342	HORSE	8	6	2
101096379	CENTRIC	13	9	4
101096435	CONFIDENTIAL6G	28	22	6
101096452	IMAGINE-B5G	7	5	2
101096456	NANCY	34	27	7
101096466	DESIRE6G	40	35	5
101096479	6G-NTN	7	7	0
101096504	DETERMINISTIC6G	35	27	8
101096526	ETHER	38	32	6
101096573	5G-STARDUST	13	9	4
101096614	TARGET-X	63	48	15
101096838	6G-XR	37	37	0
101096909	FLEX-SCALE	18	15	3
101096925	6Green	28	20	8
101096949	TERA6G	14	12	2
101096954	6G-BRICKS	44	31	13
101097083	BeGREEN	24	18	6
101097101	TERRAMETA	45	39	6
101097122	ACROSS	28	20	8
101136314	6G-TWIN	18	15	3
101139031	SAFE-6G	31	22	9
101139048	ENVELOPE	42	35	7
101139067	ELASTIC	35	26	9
101139068	ROBUST-6G	33	24	9
101139070	6G4Society	9	3	6

55. NOTE: some of the totals do not match, as some of the researchers are reported on more than one projects.

Project Number	Project Acronym	Total Upskilled Researchers	MALE	FEMALE
101139073	6G-CLOUD	8	5	3
101139117	TeraGreen	14	8	6
101139120	EXIGENCE	13	7	6
101139130	6G-DISAC	16	13	3
101139133	ECO-eNET	16	13	3
101139134	PROTEUS-6G	11	10	1
101139155	6G-REFERENCE	10	8	2
101139161	INSTINCT	17	13	4
101139167	FirstTo6G	9	9	0
101139172	6G-PATH	46	28	18
101139176	6G-MUSICAL	4	3	1
101139182	6G-EWOC	28	21	7
101139194	6G-XCEL	43	32	11
101139198	iTrust6G	21	17	4
101139232	6G-GOALS	11	7	4
101139257	SUNRISE-6G	59	45	14
101139266	6G-INTENSE	23	13	10
101139270	ORIGAMI	13	12	1
101139282	6G-SENSES	12	9	3
101139285	NATWORK	43	29	14
101139291	iSEE-6G	16	11	5
101139292	Opti-6G	5	4	1
101191436	MARE	19	12	7
101191936	SUSTAIN-6G	23	14	9
101192000	SNS CO-OP	29	12	17
101192035	AMAZING-6G	27	22	5
101192080	6G-LEADER	11	7	4
101192113	AMBIENT-6G	12	10	2
101192194	6GARROW	7	6	1
101192369	6G-MIRAI	4	2	2
101192462	FLECON-6G	43	30	13
101192521	MultiX	21	16	5
101192633	6G-VERSUS	50	31	19
101192650	UNITY-6G	28	20	8
101192681	X-TREME 6G	26	21	5
101192749	XTRUST-6G	33	21	12
101192750	6G-DALI	33	19	14
101192912	NexaSphere	14	13	1
Totals		2 056	1 551	505

6.

Horizon Europe Partnership common Key Performance Indicators⁵⁶

Based on information available from CO-OP project questionnaire in 2025 there were 119 IPR Submissions in total, out of which 14 are already granted.

21 of the SNS JU projects filed IPR, most of them from Call 1 projects. Most IPR were produced by Stream B projects. Most IPR targeted technologies are: Network Management and Optimisation, Machine Learning and AI, Security and Privacy, as well as Radio and Wireless Technologies.

N°	Criterion addressed	Proposed common indicators	Baseline	Results for 2025	Target 2025
1	Additionality	Progress towards (financial and in-kind) contributions from partners other than the Union, i.e. committed vs. actual	EUR 116 182 773 (2024)	EUR 127 525 436	Continued achievement of committed contributions under the SNS JU framework
2	Additionality / Synergies	Additional investments triggered by the EU contribution, including qualitative impacts related to additional activities	EUR 28 109 604 (2024)	EUR 16 912 708 ⁵⁷	Increased leverage effect and additional investments mobilised
3	Directionality	Overall (public and private, in-kind and cash) investments mobilised towards EU priorities	N/A	See figures reported in Chapter 2.2	Continued mobilisation of investments supporting EU digital and technological priorities
4	International visibility and positioning	International actors involved	N/A		Reinforced international visibility and cooperation
5	Transparency and openness	% & type of stakeholders and countries invited/ engaged	N/A	See Section 1.7.3 Indicator #6	
6	Transparency and openness	Share and type of stakeholders and countries invited/ engaged	N/A	Stakeholder participation profile based on available 2025 data: 60% private for-profit entities (excluding higher or secondary education establishments); 23% higher or secondary education establishments (public and private); 14% research organisations (public and private);	Continued broad stakeholder participation and geographical outreach

56.(based on an interim report published on 21 June 2021 (Commission Experts' report, Section 5 and Appendix 1 <https://op.europa.eu/en/publication-detail/-/publication/6b63295f-d305-11eb-ac72-01aa75ed71a1/language-en/format-PDF/source-215872593>)

57. additional private co-investment mobilised through funded activities. Contributions to Additional Activities [IKAA] are reported separately under Indicator #1

N°	Criterion addressed	Proposed common indicators	Baseline	Results for 2025	Target 2025
7	Transparency and openness	Number and types of newcomer members in partnerships and their countries of origin (geographical coverage)	N/A	N/A See Section 1.7.3, Indicator #6	
8	Coherence and Synergies	Number and types of newcomer members in partnerships and their countries of origin (geographical coverage)	4		
9	Coherence and Synergies	Number and type of coordinated and joint activities with other R&I Initiatives at EU / national/regional/ sectorial level	N/A	See section 1.7.3	
10	Coherence and Synergies	Complementary and cumulative funding from other Union funds (Horizon Europe, ERDF, RRF, Other cohesion policy funds, CEF, DEP, LIFE, other) and national funding	N/A	See section 1.7.3	
11	International visibility and positioning	Visibility of the partnership in national, European, international policy/industry cycles	N/A	See Section 1.7.3 Indicator #4	

Scoreboard of Key Performance Indicators specific to the SNS JU

Category	KPI code	KPI name	Unit of measurement	Results for 2025	Target
Resources (R)	R1	SME innovation and participation	% of SMEs participation	33.59% of participants are SMEs and 23.16% of funding is received by SMEs	Maintain strong SME participation and access to EU funding (Target: 20%)
	R2	Rapid diffusion	Number of workshops and webinars	241 workshops and 112 webinars	Continued increase of stakeholder outreach activities
	R3	High-risk research funding	% of total funding	60%	Maintain substantial support to high-risk research activities
	R4	Standardisation contributions	Contributions to SDOs (annual)	920 contributions in 2025	Continued increase of contributions to standardisation activities
	R5	Patent portfolio maturity	Patent grant rate (%)	17%	Increased patent portfolio maturity and exploitation potential
	R6	Scientific excellence	Number of publications (cumulative)	2 934 publications	Continued increase in scientific output and excellence
Resources (R)	R7	Research-to-innovation balance	% RIA / % IA	79% RIA / 21% IA	Maintain balanced portfolio between research and innovation actions
	R8	Energy-efficient networks	Number of projects	22 projects	Continued support to energy-efficient network solutions
	R9	Secure future digital services	Number of projects	28 projects	Continued support to secure and trustworthy digital services
	R10	Synergies with partnerships	Number/type of collaborations	Cooperation with Chips JU, Europe's Rail JU and Photonics21	Strengthen cross-partnership cooperation and complementarities
Outcomes (O)	O1	Sustainable network solutions	% of projects addressing sustainability objectives	Projects initiated in 2023; outcome assessment premature due to project maturity level	Increased uptake of sustainable network solutions
	O2	Consensus on 6G technologies and KPIs/KVIs	Qualitative indicator	Continued development of common 6G architecture, use cases and KPIs/KVIs across the SNS portfolio	Wider convergence across the European 6G ecosystem
	O3	Advanced 6G solutions for verticals	Number of use cases and trials/pilots	469 use cases involving vertical sectors and 224 trials/pilots (TRL 5+) conducted across priority vertical domains	Increased validation of advanced connectivity solutions in operational environments
	O4	Emergence of new actors in the European 6G supply chain	Number of third-party projects and external stakeholders supported	259 third-party projects and 347 external stakeholders supported through FSTP mechanisms by end 2025	Reinforced European technological autonomy and diversification of the 6G ecosystem

Category	KPI code	KPI name	Unit of measurement	Results for 2025	Target
Impacts (I)	I1	European position in the connectivity value chain	Qualitative indicator	Contribution to strengthening European industrial capabilities and strategic autonomy in 6G technologies	Strengthened global competitiveness of European industry
	I2	European consensus on future 6G technologies	Qualitative indicator	Common technology roadmaps and architectural choices emerging across SNS projects	Increased European influence on international standardisation and future 6G development
	I3	Deployment readiness of solutions for vertical sectors	Number/type of mature solutions	Deployment pathways established through large-scale trials and pilots across priority vertical sectors	Accelerated deployment and adoption of advanced connectivity solutions
	I4	Long-term sustainability impact	Qualitative indicator	Long-term contribution to energy-efficient and sustainable digital infrastructures	Reduced environmental footprint of future communication networks

IKAA REPORT FOR YEAR 2025

DESCRIPTION							Annual reporting				Cumulative reporting		
Title	Description	Category	Scope/Type	AA linked to Project	Project acronym	AA linked to programme	Estimated value for the year	Incurred value for the year	Certified value for the year	Estimated AA total value	Cumulative AA value incurred	Cumulative AA certified	Cumulative AA not yet certified
1. Support to additional R&I	<p>Activities related to the preparation of, and participation in, research and innovation projects funded by private or public bodies other than the Union.</p> <p>Spin off research and development activities (all research activities aligned with the goals of the SNS partnership, namely research into the evolution of 5G systems and research into 6G systems which is not funded by the SNS partnership).</p>	1. Support to additional R&I	<p>a. High Risk Research Funding</p> <p>b. Technological consensus building</p> <p>c. Advanced 6G Solutions for verticals</p> <p>d. Uptake of digital solutions within verticals</p> <p>e. Energy Efficient Telecommunication Networks</p>	N/A	N/A	Yes Stream B, C, D projects	54 000 000.00	104 081 426.12	104 081 426.12	700 000 000	327 441 419.14	327 441 419.14	0.00
2. Scale up of technologies	Investment in start-ups and new products in the advanced networks and services domains.	2. Scale up of technologies	<p>a. SME Innovation and participation</p> <p>b. A competitive data economy</p> <p>c. Foster emergence of new actors in the 6G supply chain</p> <p>d. Uptake of digital solutions within verticals</p>	N/A	N/A	Yes Stream B, C, D projects	500 000.00	26 523 002.06	26 523 002.06	50 000 000	50 505 372.74	50 505 372.74	0.00
3. Demonstrators	Trials, demos, pilots and Proof of Concepts (PoCs), go to market, early deployment of technologies; (not funded by SNS projects like customer trials).	3. Demonstrators	<p>a. Advanced 6G solutions for verticals</p> <p>b. Uptake of digital solutions within verticals</p>	N/A	N/A	Yes Stream B, C, D projects	1 000 000.00	0.00	0.00	2 000 000	1 270 194.18	1 270 194.18	0.00

IKAA REPORT FOR YEAR 2025

DESCRIPTION							Annual reporting				Cumulative reporting		
Title	Description	Category	Scope/Type	AA linked to Project	Project acronym	AA linked to programme	Estimated value for the year	Incurred value for the year	Certified value for the year	Estimated AA total value	Cumulative AA value incurred	Cumulative AA certified	Cumulative AA not yet certified
4. Creating new business opportunities	<p>Activities related to patent Filing not funded under a grant by the Union (the costs associated with all Patent filing activities aligned with the goals of the SNS partnership, namely IPR in the area of 5G and 6G. This includes both the costs associated with IPR preparation as well as submission costs).</p> <p>Contributions to standardization (all standardization activities aligned with the goals of the SNS partnership, namely standardization of 5G and 6G in SDOs like 3GPP, O-RAN Alliance, ITU etc. which is not funded by the SNS partnership. This includes both the costs associated with participation in standardization as well as any necessary technical preparatory work such as research or simulation).</p>	4. Creating new business opportunities	a. Share on Family patents	N/A	N/A	Yes Stream B, C, D projects	1 000 000.00	454 907.27	454 907.27	6 000 000	2 565 347.16	2 565 347.16	0.00
5. Training & skills development	R&D training programs (e.g., PhD programs) not being funded by the EC in the advanced networks and services domain	5. Training & skills development	a. Scientific excellence	N/A	N/A	N/A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Contribution to the development of new standards, regulations and policies	Contributions to standardization (all standardization activities aligned with the goals of the SNS partnership, namely standardization of 5G and 6G in SDOs like 3GPP, O-RAN Alliance, ITU etc. which is not funded by the SNS partnership. This includes both the costs associated with participation in standardization as well as any necessary technical preparatory work such as research or simulation).	6. Contribution to the development of new standards, regulations and policies	a. Standardization contributions	N/A	N/A	Yes Stream B, C, D projects	22 000 000.00	18 908 957.12	18 908 957.12	100 000 000	101 112 584.48	101 112 584.48	0.00

IKAA REPORT FOR YEAR 2025

DESCRIPTION							Annual reporting				Cumulative reporting		
Title	Description	Category	Scope/Type	AA linked to Project	Project acronym	AA linked to programme	Estimated value for the year	Incurred value for the year	Certified value for the year	Estimated AA total value	Cumulative AA value incurred	Cumulative AA certified	Cumulative AA, not yet certified
7. Supporting ecosystem development	Activities to develop the ecosystem including building cooperation with verticals; (e.g., creation of specific interest groups, International cooperation not funded under a grant by the Union).	7. Supporting ecosystem development	a. SME Innovation and participation b. A competitive data economy c. Foster emergence of new actors in the 6G supply chain d. Uptake of digital solutions within verticals	N/A	N/A	Yes Stream B, C, D projects	400 000.00	1977 474.95	1977 474.95	900 000	4 446 808.5	4 446 808.5	0.00
8. Communication, dissemination, awareness raising, citizen engagement	Dissemination activities of results globally to achieve consensus on supported technologies as preparation of future standards; (publications, workshops, conferences). SNS related education and events to promote future ICT technologies.	8. Communication, dissemination, awareness raising, citizen engagement	a. Rapid diffusion b. Reach Programme level consensus on 6G KPIs	N/A	N/A	Yes Stream B, C, D projects	250 000.00	0.00	0.00	500 000	402 030.71	402 030.71	0.00
9. Others	Contributions to activities of the 6G Smart Networks and Services Industry Association (6G-IA) and any other group or association of stakeholders in the area of the Smart Networks and Services Joint Undertaking, not funded under a grant by the Union; (e.g., working groups, white papers).	9. Others	a. Development of energy efficient telecommunication networks b. Collaboration and synergies with other Partnerships c. Ensure research on secure future digital services	N/A	N/A	Yes Stream B, C, D projects	1 000 000.00	0.00	0.00	2 000 000	1 504 681.11	1 504 681.11	0.00
							80 150 000.00	151 945 767.52	151 945 767.52	861 400 000.00	489 248 438.02	489 248 438.02	0.00

IKAA Reporting - breakdown per country

Country (Code)	Incurred value in 2025	Certified value 2025
Belgium	151 945 767.52	151 945 767.52

TOTAL IKAA 2021-2025 (Evolution- Value in EUR)											
Planned IKAA				Reported IKAA							
2022	2023	2024	2025	2022		2023		2024		2025	
				Reported Certified IKAA	Reported Certified IKAA with pending certification	Reported Certified IKAA	Reported Certified IKAA with pending certification	Reported Certified IKAA	Reported Certified IKAA with pending certification	Reported Certified IKAA	Reported Certified IKAA with pending certification
87 550 000	60 000 000	80 550 000	80 150 000	85 727 939.45	0	116 182 773.29	0	135 391 957.76	0	151 945 767.52	0
				85 727 939.45				135 391 957.76		151 945 767.52	
TOTAL PLANNED IKAA				TOTAL REPORTED IKAA							
308 250 000				Reported Certified IKAA				Reported IKAA with pending certification			
				489 248 438.02				0			
				489 248 438.02							



IKAA update

Total certified amount at the end of 2025: EUR 489 248 438.02

40% of objective achieved

*IKAA can be declared and certified until 2031



9.

Annual accounts

9.1

Balance Sheet

	31 December 2025	31 December 2024
'000		
NON-CURRENT ASSETS		
Intangible assets	-	-
Property, plant and equipment	32	21
Pre-financing	28 831	99 775
	28 863	99 796
CURRENT ASSETS		
Pre-financing	84 548	135 770
Exchange receivables and non-exchange recoverables	122 358	19 786
	206 906	155 556
TOTAL ASSETS	235 769	255 352
CURRENT LIABILITIES		
Payables and other liabilities	168 069	43 768
Accrued charges and deferred income	25 778	15 881
TOTAL LIABILITIES	193 847	59 649
NET ASSETS		
Contribution from Members	442 072	418 091
Accumulated deficit	(222 389)	(86 000)
Economic result of the year	(177 761)	(136 389)
TOTAL NET ASSETS	41 922	195 702

9.2

Statement of financial performance

'000	2025	2024
REVENUE		
Revenue from non-exchange transactions		
Recovery of operating expenses		
Other		
Revenue from exchange transactions		

Recovery of administrative expense	8	
Total revenue	8	
EXPENSES		
Operating costs	(174 469)	(133 811)
Staff costs	(2 120)	(1 887)
Other expenses	(1 180)	(691)
Total expenses	(177 769)	(136 389)
ECONOMIC RESULT OF THE YEAR	(177 761)	(136 389)

9.3

Cash flow statement

'000	2025	2024
Economic result of the year	(177 761)	(136 389)
Operating activities	155 249	16 393
Depreciation and amortization	8	7
(Increase)/decrease in pre-financing	122 166	3 252
(Increase)/decrease in exchange receivables and non-exchange recoverables	(102 573)	1 686
Increase/(decrease) in payables	124 300	12 223
Increase/(decrease) in accrued charges & deferred income	9 897	(9 175)
Increase/(decrease) in in-kind contributions	1 450	-
Financing activities	22 531	128 400
Increase/(decrease) in cash contributions	22 531	128 400
Investing activities	(19)	(4)
(Increase)/decrease in intangible assets and property, plant and equipment	(19)	(4)
NET CASHFLOW	-	-
Net increase/(decrease) in cash and cash equivalents	-	-

'000	2025	2024
Cash and cash equivalents at the beginning of the year	-	-
Cash and cash equivalents at year-end	-	-

9.4

Statement of changes in net assets

'000	Contribution from Members	Accumulated Surplus/ (Deficit)	Economic result of the year	Net Assets
BALANCE AS AT 31.12.2023	289 691	-	(86 000)	203 692
Allocation 2023 economic result	-	(86 000)	86 000	-
Cash contribution	128 400	-	-	128 400
Economic result of the year	-	-	(136 389)	(136 389)
BALANCE AS AT 31.12.2024	418 091	(86 000)	(136 389)	195 702
Allocation 2024 economic result	-	(136 389)	136 389	-
Cash contribution	22 531	-	-	22 531
Contribution in-kind	1 450	-	-	1 450
Economic result of the year	-	-	(177 761)	(177 761)
BALANCE AS AT 31.12.2025	442 072	(222 389)	(177 761)	41 922

Materiality criteria

Materiality provides the basis for the Authorising Officer (AO) to assess the significance of identified weaknesses and risks and to determine whether they should lead to a reservation in the Declaration of Assurance.

Materiality is assessed on the basis of both qualitative and quantitative criteria, taking into account the specific characteristics of the Joint Undertaking and the multiannual nature of its activities.

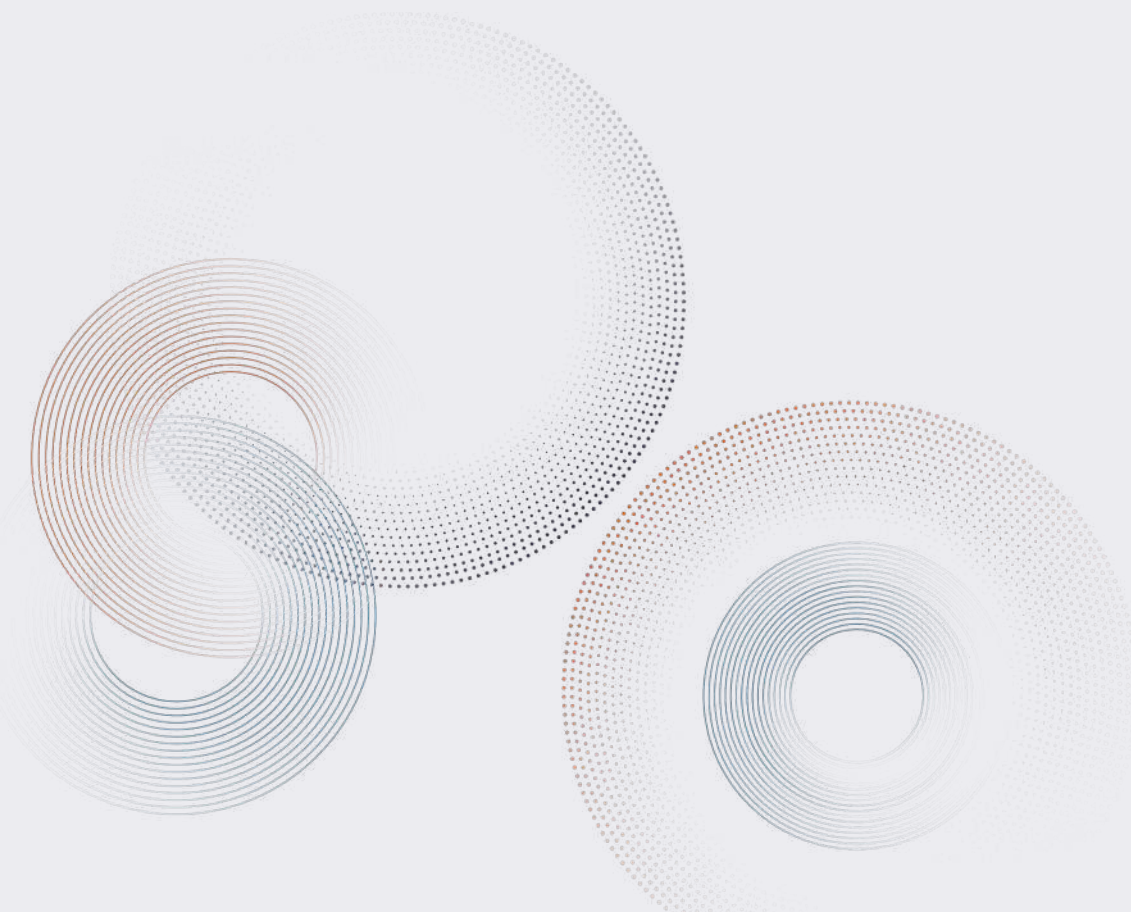
In qualitative terms, the assessment considers the nature and scope of the weakness, its duration and recurrence, its impact on key internal control principles or core processes, the existence of mitigating controls and corrective actions, and whether it reflects a systemic or isolated issue. A weakness may be considered material irrespective of its financial impact where it affects the functioning of the internal control system or compliance with applicable rules.

In quantitative terms, materiality is assessed by estimating the potential financial impact of identified weaknesses, including, where possible, the amount at risk. For operational expenditure, particular attention is given to the residual error rate resulting from Ex-post controls. A residual error rate exceeding 2% of the relevant expenditure is considered material and may lead to a reservation, unless duly justified by mitigating factors.

Given the multiannual nature of the control strategy, the effectiveness of controls is assessed over the programme lifecycle, with the objective of achieving a residual error rate as close as possible to 2% at closure. Where a statistically representative error rate is not available, the assessment is based on available audit results and other relevant management information.

Materiality is also assessed in relation to revenue and recovery operations, including assigned revenue, as well as reputational aspects. A weakness may be considered material where it is likely to attract significant attention, concerns sensitive areas such as fraud, ethics or governance, or persists over time without adequate corrective action. Reputational considerations may justify a reservation independently of financial impact.

The decision to introduce a reservation is based on the combined assessment of the significance of the weakness, its financial and or reputational impact, its effect on the overall assurance, and the existence of mitigating measures. The final assessment of materiality and the decision to introduce a reservation remain a matter of judgement of the AO.



Specific annexes related to financial management

11.1

Details on controls carried out, results and corrective measures (Sections 4.1 and 4.4)

Ex-ante controls

Ex-ante controls were applied systematically to all financial transactions (commitments, payments and recoveries) and constitute the primary source of assurance.

For operational expenditure, controls were embedded in Horizon Europe corporate systems (COMPASS, SYGMA), including automated validations and workflow controls.

For administrative expenditure, controls were performed in accordance with established internal procedures, covering procurement, contract management, financial verification and payment processing through the Commission accounting system (ABAC).

These controls ensured:

- ▶ compliance with the applicable legal and contractual framework;
- ▶ completeness and validity of supporting documentation;
- ▶ respect of sound financial management principles.

No material deficiencies affecting the effectiveness of ex-ante controls were identified during the reporting period.

Ex-post controls and audit results

Ex-post audits were carried out centrally by the CAS.

In 2025, two risk-based audits (RBA) were finalised, covering two participations with audited costs amounting to EUR 309 141.94. No financial corrections were identified in the audited sample, corresponding to a 0% error rate for this limited and non-representative sample.

In parallel, audits carried out by the European Court of Auditors (ECA) on a limited number of transactions did not identify systemic issues. One limited error related to the calculation of personnel costs was detected, quantified and corrected. This error resulted from an incorrect application of the applicable rules by the beneficiary and did not indicate a systemic weakness. The financial impact of this error was limited and, once corrected, does not affect the overall assurance.

These results, although based on a limited and non-representative audit sample, do not indicate the presence of systemic or material weaknesses affecting the legality and regularity of transactions.

Corrective measures and follow-up

Corrective measures were implemented where necessary without delay.

The limited error identified in ECA audit work was corrected and did not have an impact on the overall assurance.

Non-compliance events recorded during the reporting period were limited, non-systemic and appropriately addressed. Corrective actions were implemented without delay and monitored through the exception and non-compliance register.

No cases of confirmation of instructions under Article 92(3) of the Financial Regulation were recorded.

Contribution to assurance

The combined results of ex-ante controls, ex-post audits and monitoring activities provide consistent and complementary evidence supporting the conclusions on legality and regularity, sound financial management and reliability of reporting set out in Sections 4.1 and 4.4.

11.2

Reports and documentation considered for the assessment

- ▶ The assessment of the functioning of the internal control and financial management systems was based on the following sources:
- ▶ results of internal control monitoring at Joint Undertaking level, including internal control indicators, monitoring criteria and self-assessment results;
- ▶ the register of exceptions and non-compliance events recorded during the reporting period;
- ▶ reports on Ex-post audits carried out by the CAS, including risk-based audits;
- ▶ audit work, observations and recommendations of the ECA, including the clearing letter related to the financial year 2024;
- ▶ results of the limited review carried out by the IAS on the IICF;
- ▶ follow-up of audit recommendations and related action plans;
- ▶ risk assessment and risk monitoring documentation;
- ▶ relevant financial and management reports supporting the assessment of control activities and budget implementation.

Reporting on the internal and external audits and assessing the effectiveness of internal control systems

12.1

Internal Audit Service (IAS)

In 2025, the Internal Audit Service (IAS) carried out a limited review on the implementation of the Internal Control Framework (ICF) in the SNS JU. The engagement was finalised in February 2026.

The IAS concluded that the SNS JU has established appropriate processes to assess the adequacy and functioning of its internal control system.

The audit acknowledged the efforts made by the SNS JU to develop and implement its ICF in a context characterised by a limited organisational size and combined roles. In this context, the existence of structured internal control processes and a functioning assessment framework provides additional assurance on the reliability of management and control systems.

The engagement resulted in two recommendations classified as important, which were accepted by the SNS JU. No critical or very important recommendations were issued.

The recommendations relate to the further formalisation and documentation of internal control and risk assessment processes. An action plan has been established, and its implementation is ongoing.

These elements do not affect the functioning of control activities and have no material impact on the overall assurance.

12.2

European Court of Auditors (ECA)

12.2.1 ● Audits related to internal control and financial management

12.2.1.1 ○ Annual audit (financial year 2024)

For the financial year 2024, the ECA issued an unqualified opinion on the reliability of the accounts and on the legality and regularity of the underlying transactions.

In its observations, the ECA noted that elements of the ICF, in particular the risk-based control strategy for Horizon Europe expenditure, were not yet fully implemented at the end of 2024.

This observation is being addressed through the progressive implementation of the SNS JU control strategy and related internal control instruments.

12.2.1.2 ○ Clearing letter (Mission 2 – financial year 2024)

In 2025, the ECA issued a clearing letter including a very important recommendation concerning the need to further systematise the risk-based audit strategy.

The recommendation relates to:

- ▶ internal control principle 12 (control activities and risk-based control strategy);
- ▶ internal control principle 16 (monitoring activities).

It concerns the formalisation and consistency of the risk-based audit approach and does not indicate a breakdown in control activities or a deficiency affecting legality and regularity.

The impact on assurance is assessed as limited and non-material. No quantitative impact on expenditure has been

identified. The recommendation concerns the maturity and formalisation of the risk-based control framework rather than deficiencies affecting the legality and regularity of underlying transactions. Therefore, the recommendation does not lead to a reservation.

SNS JU accepted the recommendation and established an action plan. Implementation is ongoing.

12.2.1.3 Link with IAS observations and follow-up actions

The observations of the ECA related to the financial year 2024 concern two distinct aspects:

- ▶ the incomplete implementation of certain elements of the internal control framework, and
- ▶ the need to further systematise the risk-based audit strategy for ex-post controls.

These elements are complementary to the further observations of the IAS, which focused on the internal control assessment process, including the documentation of the risk assessment exercise and the reporting of internal control results.

Taken together, these observations reflect the ongoing consolidation of the ICF in a context of recent organisational development and increasing operational activity. They relate to the progressive structuring and formalisation of different layers of the control system, namely:

- ▶ the implementation and completeness of the ICF;
- ▶ the risk-based programming and execution of ex-post audits;
- ▶ the documentation and reporting of internal control and risk management processes.

In response, SNS JU has implemented and initiated a set of measures addressing these aspects, including:

- ▶ the adoption and implementation of the ICF and related control strategy;
- ▶ the development of internal control monitoring criteria and tools;
- ▶ the strengthening of the risk-based approach to audit and control activities;
- ▶ the improvement of documentation and reporting of internal control assessments.

These measures contribute to reinforcing the completeness, consistency and maturity of the internal control system. At the time of reporting, they do not indicate deficiencies affecting the functioning of control activities or the level of assurance.

12.2.1.4 Audits of transactions (financial year 2025)

The European Court of Auditors (ECA) carried out audit work on a limited number of transactions relating to the financial year 2025 in the context of its Statement of Assurance (DAS).

At the time of reporting, only one audit had been finalised and resulted in a clearing letter issued in 2025. This audit identified a quantified error related to the calculation of personnel costs, resulting from an incorrect application of the applicable rules by the beneficiary. The error was quantified and corrected. While the error was significant at the level of the audited transaction, it was assessed as isolated and not indicative of a systemic weakness.

The other transaction audits carried out by the ECA in 2025 were finalised after the reporting period, with clearing letters issued in 2026 (February, March and April 2026). These audits did not result in observations or findings and are therefore not taken into account for the 2025 assurance.

These audits form part of the ECA sampling approach supporting the assessment of legality and regularity of EU expenditure and are not representative of the SNS JU population.

Given the limited audit evidence available within the reporting period and the non-representative nature of the sample, no conclusions can be drawn at the level of the SNS JU population.

On this basis, and taking into account the isolated nature of the identified error and the absence of indications of systemic weaknesses, the impact on assurance is assessed as limited.

12.3

Performance audits

No ECA performance audits (Special Reports) specifically covering SNS JU were finalised during the reporting period.

12.4

Ongoing audits

In December 2025, the ECA launched an audit of the budget revenue for the financial year 2025. Fieldwork was carried out in early 2026.

At the time of reporting, the audit was ongoing. No observations or recommendations had been issued.

SNS JU Portfolio

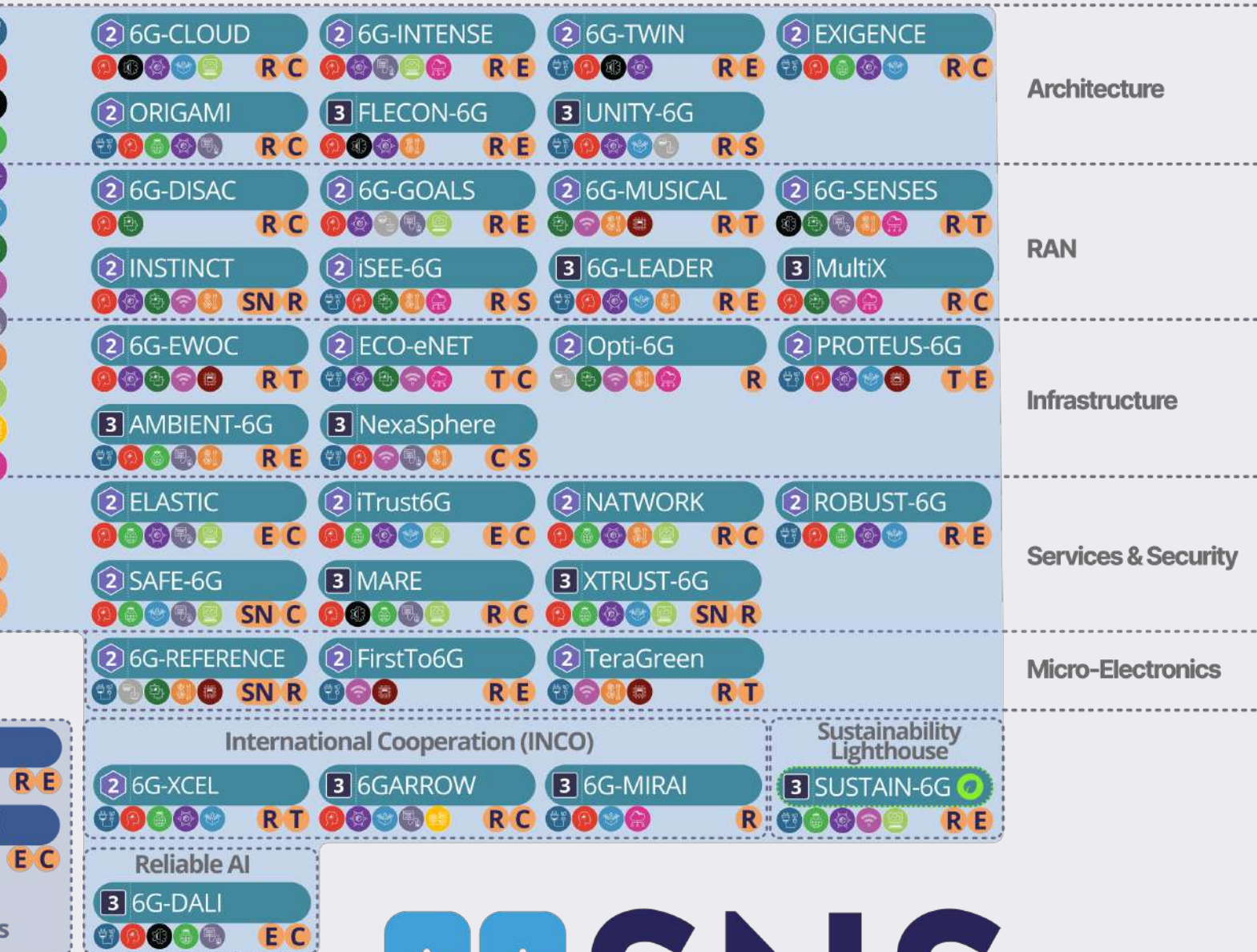
EUR ~618M of EU Public Funding Invested in SNS JU Calls

5G Stream A 5G Evolution Systems	6G Stream B Research for Radical Technology Advancement towards 6G Definition	6G Stream C Experimental Infrastructures and Platforms	5G Stream D Large Scale Trials with Verticals
<ul style="list-style-type: none"> • Components, Systems & Networks 	<ul style="list-style-type: none"> • System Architecture • Wireless & Signal Infrastructure & Devices • Security • Microelectronics • Sustainability • International Collaboration 	<ul style="list-style-type: none"> • Platforms • Enablers / Proof of Concept 	<ul style="list-style-type: none"> • Applications & Services • Business Ecosystems
<p>Call 1 Started Jan '23 EUR 240M</p>	<p>Call 2 Started Jan '24 EUR 132M</p>	<p>Call 3 Started Jan '25 EUR 129M</p>	<p>Call 4 & 5 To start in 2026 EUR 116M</p>

FP2-MORANE 2 Joint Synergy Project with Europe's Rail

Stream B

Research for radical technology advancement towards 6G definition



RE
EC
S

Call

- 1 CALL 1 PROJECT
- 2 CALL 2 PROJECT
- 3 CALL 3 PROJECT

Sustainability Focus

6G SNS

Reference Figure Technology Board

List of acronyms

6G IA	6G Industrial Association	KVI	Key Value Indicator
CAAR	Consolidated Annual Activity Report	MEP	Member of the European Parliament
AWP	Annual Work Plan	NCPs	National Contact Points
BOA	Back Office Arrangement (reference to Article 13 of Council Regulation (EU) 2021/2085)	NTN	Non-Terrestrial Network
CA	Commitment Appropriations	PA	Payment Appropriations
CAS	Common Audit Service	PoC	Proof of Concept
CIC	Common Implementation Centre	PPP	Public-Private Partnership
CR	Continuous Reporting	PPDR	Public Protection and Disaster Relief
CRS	Common Representative Sample (CAS audit methodology under Horizon Europe)	PR	Periodic Reporting
CSA	Coordination and Support Action	R&I	Research and Innovation Programme
D2D	Device-to-Device	RAN	Radio Access Network
EC	European Commission	RBA	Risk-Based Audit (CAS audit methodology based on risk selection)
ECA	European Court of Auditors	RIA	Research and Innovation Action
ED	(SNS JU) Executive Director	SBA	Single Basic Act (Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe)
EDPS	European Data Protection Supervisor	SC	Scientific Committee
FEM	Front-End Module	SLA	Service Level Agreement
FWC	Framework Contract	SMEs	Small and medium-sized enterprises
GB	Governing Board	SNS JU	Smart Networks and Services Joint Undertaking
HE	Horizon Europe	SO	Strategic Orientation
HR	Human Resources	SRG	States Representatives Group
IA	Innovation Action	SRIA	Strategic Research and Innovation Agenda
IAS	Internal Audit Service	TA	Temporary Agent
ICF	Internal Control Framework	TN	Terrestrial Network
IKAA	In-Kind Additional Activities	TRL	Technology Readiness Level
IKOP	In-Kind Operational Activities	TTG	Time to Grant
IoT	Internet of Things	TTI	Time to Inform
JU	Joint Undertaking	TTP	Time to Pay
KIP	Key Impact Pathway Indicator		
KPI	Key Performance Indicator		

6G SNS



21.0.1

08.

The image features a dark blue background with several large, overlapping circular patterns. Some patterns are composed of thin, light blue concentric lines, while others are made of small, orange dots arranged in a circular grid. The text '6G SNS' is centered in the middle of the image. The '6G' is in a bold, light blue font, and 'SNS' is in a bold, white font.

6G SNS