



## SNS R&I Work Programme 2026- Technical Content

SNS JU Information Day -02.02.26

Dr. Alexandros Kaloxyllos Executive Director, 6G-IA



- Consolidation and visibility of the SNS JU results.
- Groundwork of future industrial capabilities (e.g. devices, AI, testbeds).
- Global positioning and strategic partnerships (e.g. with India, standards bodies).

		TRL	FR	Attn
<b>Stream CSA</b> Coordination and Support Actions towards <b>Consolidation &amp; visibility of SNS JU</b> Results, International collaboration & Future roadmaps	<b>CSA-01.</b> SNS Operations and Output optimisation	<b>1 x 3M€ - Support SNS JU on Programme implementation, project collaboration, community engagement, dissemination and standardisation, EuCNC</b>	N/A	90% 2 years
	<b>CSA-02.</b> 6G Devices	<b>1 x 2M€ - Define a European roadmap towards 6G ready devices</b> bringing together main actors of the European telecom and microelectronics industries, vertical support	N/A	90% Up to 2 years
	<b>CSA-03.</b> EU-India International Collaboration	<b>1 x 1M€ - Facilitate structured cooperation and exchanges</b> between EU and Indian stakeholders in connectivity research	N/A	90%
<b>Stream B</b> Research for revolutionary and evolutionary 6G Technology and systems	<b>B-01.</b> Collection, Generation and Validation of Datasets suitable for training AI Models for 6G Networks and for AlaaS	<b>1 x 8M€ - High-quality real-world and synthetic datasets (and data space) for improving network performance and empowering networks to provide AI-as-a-Service to vertical industries and applications</b>	Up to 7 (5 or 6 for specific outcomes)	70% (IA)
<b>Stream C</b> Smart Network & Services experimental infrastructure	<b>C-01.</b> SNS experimental infrastructure	<b>1 x 8M€ - evolvable infrastructure for running experiments and for validation of key 6G technologies (6 technology areas) during SNS Phase 3</b>	From TRL 4 up to 5 or 6	90% (RIA) FSTP (20%)

- Community-level collaboration across Phases 1, 2 and 3 - supporting activities foreseen in the cross-project collaboration agreement.
- Facilitate the operation of working groups of the SNS JU interest
- Monitor outcomes against SNS JU Key Performance Indicators (KPIs) plus the 6G KPIs and Key Value Indicators (KVI)
- Support the SNS JU: international cooperation, cooperation with national authorities, vertical sectors, and relevant European bodies and initiatives.
- Further develop and update the Europe-wide cartography of relevant initiatives and identify interlinkages with national and EU-level programmes.
- Communicate and promote results across technical, industrial, and policy communities (SNS JU Communication policy and priorities).
- Support the organisation of EuCNC & 6G Summit conferences 2027 and 2028.
- Support the translation of research outputs into standardisation activities.

**A project duration of 2 years is expected.**

- **A European roadmap towards 6G-ready devices, together with a companion implementation strategy**
- **Federate European relevant actors around a device initiative for the next MFF**
- A structured dialogue: European telecom, microelectronics industries, Vertical Industries, Institutional players (e.g. for security of public service-type applications)
- Identification of the key/priority use-cases - including core requirements (storage, computing, intelligence, connectivity.)
- SWOT for the global EU technological competitiveness on 6G devices.
- Identification of key technologies (notably in the microelectronics domain) - gaps in the supply chain, how to “close the gaps” (technological sovereignty, not autarky).
- Potential linkages with the Chips JU and their tools, like the pilot lines.
- 3 basic scenarios: i) TN only devices corresponding to strategic verticals;
  - ii) TN and NTN compatible devices, Integration of WiFi (indoor scenarios);
  - iii) high-end smartphone-like devices as benchmark scenarios
- Definition of an option-dependent roadmap (preferably based on open technologies e.g., RISC V *where applicable*)
- Consider the role of AI at the edge is particularly relevant.
- Eco-friendly device design from a construction/deconstruction perspective.
- Software development ecosystem
- Identification of relevant national initiatives - cooperation strategy

**A project duration of up to 2 years is expected.**

- Industrial policies and approaches in India and the EU in the 6G context, including opportunities and risks.
- Analysis of the industrial ecosystems in both regions (Requirements, complementarities, areas for cooperation).
- Identification of priority domains of 6G technological cooperation
- Joint exploratory on 6G Vision, technologies, platforms, socioeconomic aspects.
- Research-oriented roadmaps for possible future collaborations
- Alignment of views on future exploitation in international standardisation
- Describe how the EU-India cooperation will be organised within the project
- How to engage with Indian stakeholders & Interact with relevant Indian organisations.
- Description of specific cooperation activities (exchange of information and results, sharing of data, sharing of methodologies, researcher exchanges and visits, joint workshops, joint testbeds etc.
- A strong and demonstrated innovation and industrial understanding of the 6G ecosystem of India is expected.

- Collecting and making available **high-quality** real-world datasets from **realistic deployment scenarios**
  - operational networks (real data) or
  - network digital twins
  - gen AI tools,
  - experimental platforms (emulators) or trials,
- Full protocol stack, open-source simulators for producing correlated reference datasets at different network layers, and across different network points.
- Support for multi-radio access technologies, Multi-band operation with accurate propagation and channel modelling
- Network anomalies and network attacks
- Open-source framework and toolset for generating high quality realistic synthetic data, tailored to diverse environmental scenarios

- Validation, quality assessment of the **existing SNS JU project datasets**, verifying the data's accuracy, consistency, and completeness, ensuring their alignment with the specific use case and performance requirements of the 6G network.
- Metadata definition (to have a common descriptor for the data), methods to verify that the data is valuable for the training of realistic AI models and ensure data reusability.
- Engagement with standardisation bodies and relevant open-source communities
- Creation of tutorials and implementation of dissemination activities to encourage widespread use of the framework

This Topic expects proposals with **strong industrial participation** with demonstrated **AI and operational expertise** to ensure **credibility, usability, and engagement with standardisation bodies**. Academic institutions and RTOs will complement consortia where their expertise adds clear value

## C-01. SNS experimental infrastructure

- Wide range of technologies towards 6G (e.g., RIS, ISAC/JCAS, NTN/5G, security, privacy, core evolution, AI, RAN evolution, network disaggregation...).
- Hosting advanced pilot “6G” use-cases not feasible during the lifecycle of ongoing Stream D projects
- A well-defined catalogue of experimentation and KPI reporting tools
- A low-barrier entry to an experimental facility enabling SNS-JU technologies, to run experiments.
- Providing trial facilities to enable hands-on experience
- Integrating contributions from participants to expand the capabilities of the platforms.
- Ensuring security provisions for remote connectivity
- Provide plans for reusability and evolvability of the platform over the lifetime of the SNS JU Programme.

Experimental activities are expected to bring the technologies under test from TRL 4 up to 5 or 6 by the end of the experimentation cycle.

Technology added to the platform needs to have a TRL 5 as a minimum.

Experimental platforms are expected to have a TRL 6.

- The platform will be open to any participant interested in running an experiment.
- No funding for the experimenters, who will propose to join according to their interests.
- FSTP (Financial Support to Third Parties) is available to **developers from current running SNS-JU projects** to integrate their solutions into the platform.
- **SNS projects in Phase 3** are expected to **include integration** and experimentation resources with the new infrastructure **in their Grant Agreements**.
- For **SME and academia**, the project will allocate up to **20% of the proposal budget** on the **FSTP mechanism** in the form of **up to 50 K€ grants** to support the integration efforts of key technologies developed in previous SNS JU calls until Call 2025.
- Solutions from **SNS JU Call 2027** projects are not eligible for FSTP