SNS Call 3 Webinar: Streams B-01-08 and C-01-01

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Scope & Orientations:

To work on the end-to-end system integration of SNS AI/ML solutions

- Develop a reference framework for end-to-end AI usage in relation to 6G
- Develop data infrastructure and functionalities that enable novel AI-based services as well as AI as a Service to vertical industries
- Develop models for AI costs and benefits in telecommunications applications
- Create solutions guaranteeing reliable use of the technology and building trust in 6G and services enabled by 6G
- Provide energy friendly AI/ML solutions
- Produce data sets and validation methodologies contributing to 6G Human Centricity and Societal acceptance

Expected outcome:

- Realistic applicability of AI at large scale in 6G networks
- Development of curated data sets of realistic 6G scenarios
- Analysis, aggregation and harmonisation of results from existing projects
- Creation of an overall framework for benchmarking and calibration, end-to-end testing and evaluation of AI solutions for 6G networks
- Creation of metrics and models to assess the pros and cons of AI technologies in telecommunications
- Recommendations for policy and regulatory guidelines on the development and usage of AI solutions for network optimisations
- Development of a trustworthy AI framework

“Stream B-01-08 ” Project Portfolio

Project Number	Project Acronym	Project Duration	Project Total Costs	Project Requested EU Contribution
101192750	**6G-DALI**	36	6,223,736.25	5,826,453.130

Expected TRL: 2-4

Scope & Orientations:

To develop new or evolved experimental platform(s), where solutions from the microelectronics domain developed either in the context of Phase 1 SNS WP, or Horizon Europe Cluster 4 WP, or the Chips JU will be validated in terms of performance and applicability for 6G networks.

- Advance baseband capabilities needed in virtualised platforms from the device or network side
- Integrate the THz communications technology into a complete THz communication chain and demonstrator
- Push the disruptive THz components developed previously to higher TRL levels and demonstrate their capabilities in D-band
- Include microelectronics solutions in the transport domain or unified solutions with NTNs and support of the IoT-connectivity-service provision value chain

Expected outcome:

- Validate/demonstrate 6G candidate microelectronics technologies and systems as part of a representative end-to-end 6G architecture building on advanced components/HW technologies
- Exploit the results and momentum of the COREnect project
- Integrate the solutions for the Radio Access part of the network
- Validate/demonstrate the performance of key 6G candidate HW solutions, technologies, components, and architectures operating across various frequency bands
- Support integration of key 6G related Chips JU developments
- Validate/demonstrate feasibility of “better than 5G / 5G Advanced” KPIs

“Stream C-01-01 ” Project Portfolio

Project Number	Project Acronym	Project Duration	Project Total Costs	Project Requested EU Contribution
101192681	**X-TREME 6G**	36	10,360,359.75	9,974,738.55

Expected TRL: up to 6