

DECISION OF THE GOVERNING BOARD OF SMART NETWORKS AND SERVICES JOINT UNDERTAKING No 20/2023

Adopting the updated Strategic and Innovation Agenda (SRIA)

THE GOVERNING BOARD,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe (hereinafter "Single Basic Act") and in particular to Articles 2 (12), 17 (2) (j), 20 (7) (b), and 159 (2) (f) thereof,

WHEREAS

- (1) The Strategic Research and Innovation Agenda should be the document covering the duration of Horizon Europe that identifies the key priorities and the essential technologies and innovations required to achieve the objectives of a joint undertaking;
- (2) The Strategic Research and Innovation Agenda should be adopted by the Governing Board at the beginning of the joint undertaking and, where necessary, should be updated by the Governing Board throughout the duration of Horizon Europe.
- (3) The States' Representatives group should be consulted when the Strategic Research and Innovation Agenda is updated. Such update should be in line with the Horizon Europe strategic planning and with other Union and Member States funding instruments;
- (4) The first version of the Strategic Research and Innovation Agenda was adopted by the Governing Board on 15 December 2021 (SNS GB decision 12-2021); an update of this document, in line with the Horizon Europe strategic planning and with other Union and Member States funding instruments, appears necessary;
- (5) The States' Representatives Group was consulted on the proposed updated version of the Strategic Research and Innovation Agenda and provided comments that have been taken onboard.

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¹ OJ L 427, 30.11.2021, p. 17.

HAS ADOPTED THE FOLLOWING DECISION:

Article 1

The updated version of the Smart Networks and Services Joint Undertaking's Strategic Research and Innovation Agenda, as annexed to this decision, is hereby adopted.

Article 2

This Decision shall enter into force on the date of its adoption.

Done at Brussels, on13/11/2023.

For the Governing Board

Pearse O'Donohue

The Chair

Annex:

- SNS JU updated Strategic and Research Innovation Agenda



GESNS

Updated version

For Approval





How the SNS SRIA is prepared

The initial SRIA includes the description of the process for update

Networld **Europe SRIA Updated** version **Consultation with** the 6G-IA members

Selection of the most relevant topics from NEtworldEurope SRIA to populate the SNS SRIA

Draft SNS SRIA

Experts from the 6G-IA, Networld Europe, AIOTI, NESSI, CISPE.cloud and the public side to select and prioritize the most promising topics for the future of telecommunications in Europe.

Dissemination of the draft SNS SRIA

Dedicated workshops/webinars and organization of an open consultation process, to receive comments from a public and private stakeholder consultation process

Finalization of the SRIA

based on the feedback from the previous step

December 2022

February - June 2022

July - August 2023

September 2023

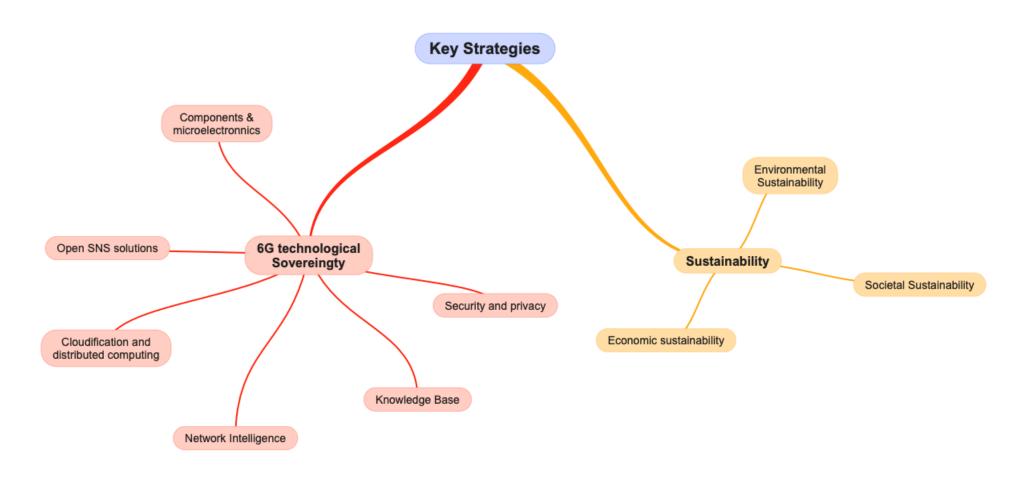
October - November 2023







Priorities: European private side (1/2)



Source: 6G-IA position paper - https://6g-ia.eu/plans-papers/





GGSNS

Priorities: European public side (2/2)

KSO A, 'Promoting an open strategic autonomy"

- Leading in key digital, enabling and emerging technologies, sectors and value chains
- Accelerate and steer the digital and green transitions.'



KSO C, 'Making Europe the first digitally led circular, climate-neutral and sustainable economy

Transformation of its mobility, energy, construction and production systems

Strengthening European capacities in key parts of digital and future supply chains.

- Open strategic autonomy in digital and future emerging enabling technologies.
- Agile responses to urgent needs, and by investing in early discovery and industrial uptake of new technologies.





Key technology areas for SNS

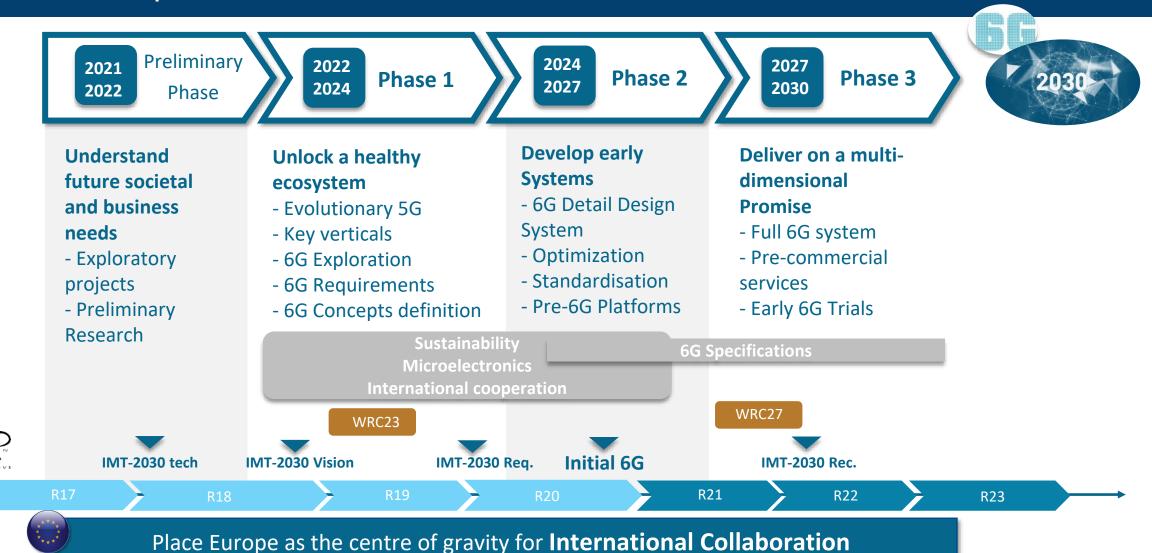
- 1. System level aspects discussing overall considerations at system level
- **2. System architecture** addressing overall 6G system considerations, at the network and computing levels.
- **3. Software technologies** the challenges telecommunications poses to software development.
- **4. Security** handling the perceived security challenges for the future.
- **5. Radio Technologies** discusses the radio physical layer challenges
- **6. Optical Networks** Covering the technologies centred on the backbone of the networks.
- **7. Non-terrestrial networks** discussing satellite and similar technologies.
- **8. Devices and Components** providing an overview of research challenges for the implementation technologies
- **9. Future emerging technologies** an overall coverage of technologies which may have deep impact in the future, but where we do not have yet clear industrial paths.



Source: Networld Europe SRIA - https://www.networldeurope.eu/sria-and-whitepapers/

EGSNS

SNS JU Roadmap









Comments/Suggestions received from SRG

- All comments received by IT, related to social and societal aspects, marked with track changes, have been accepted
- Comments from DE related to Spectrum policy have been implemented: 1) rephrased parts of section 2.1.4 in order to delete the reference to the fragmented regulation & high spectrum costs 2) deleted the last bullet of 2.2.4 on the lack of coordination of regulatory approaches, 3) accepted all proposed consequent softening DE changes in OO10.
- Comments from FR addressed accepted as follows

Suggestion: We wish to better address the industries via the 2.4 section of the document (by mentioning the verticals — naval, aviation, railway, industry 4.0, health, etc.) since we still need to address numerous challenges in those areas.

Action: Text added in section 2.4 to indicate verticals (page 11)

Suggestion: We need to better address societal stakes and issues, in order to avoid the reactions sparked by 5G launch. To do so, 6G technologies must be built around environmental stakes and present sustainable values.

Action: Text added in section 3.2 (page 25) and section 3.5 (page 35)

Suggestion: Ensure the mainstreaming of environmental values within SNS streams and projects

Action: Text added in section 2.4 (page 13)

