# **From 5G PPP to the SNS JU era**

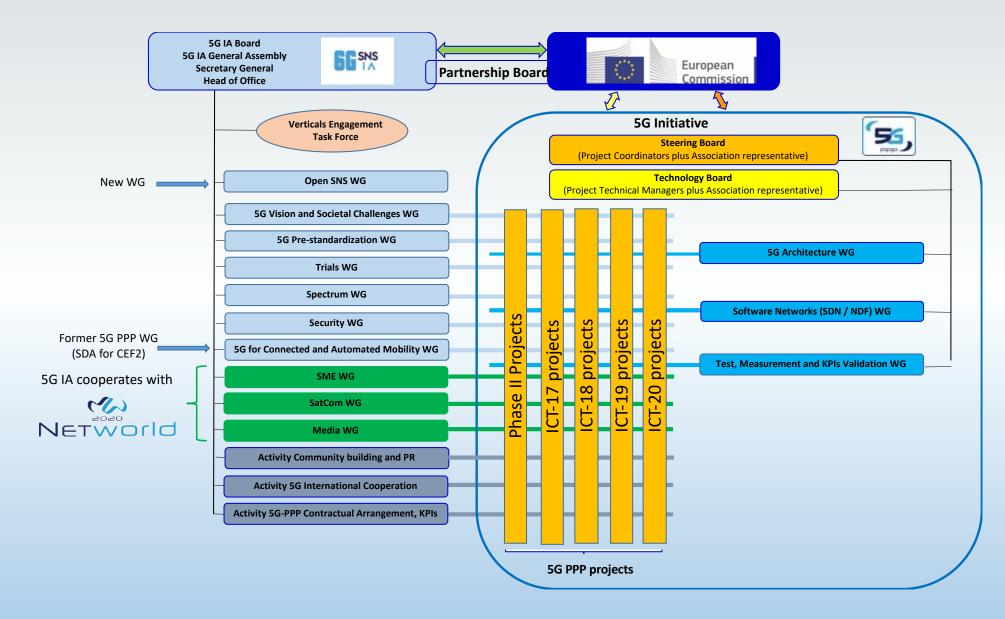
The Voice of European Industry and Research for Next Generation Networks and Services

This webinar is being recorded – The video and presentations will be shared after the webinar

## Presentations

Time (CEST)	Торіс	Presenter	Presenter Affiliation						
Introduction									
10.00 - 10.05	Welcome (Moderator)	Alex Kaloxylos	Executive Director 6G-IA						
10.05 - 10.15	Importance of 5GPPP (DG-CONNECT)	Datar Studemann	Head of Unit – Future						
		Peter Stuckmann	Connectivity Systems						
10.15 - 10.25	Transition from 5GPPP to SNS (6G-IA)	Colin Willcock	Chairman of the Board 6G-IA,						
			Chairman of SNS JU Board						
5G PPP Status, lessons learned & path to completion									
10.25 - 10.35	Steering Board	Dan Warren	SB Chairman (Samsung)						
10.35 - 10.45	Technology Board	Mikael Fallgren	TB Chairman (Ericsson)						
10.45 - 10.55	Architecture WG	Oemer Bulakci	WG Chair (Nokia)						
10.55 - 11.05	Test, Measurement & Validation WG	Vangelis Kosmatos	WG Chair (WINGS ICT)						
11.05 - 11.15	Software Networks WG	Bessem Sayadi	WG Chair (Nokia)						
SNS WGs proposed structure									
11.15 - 11.35	SNS WG structure proposal & way	Pavlos Fournogerakis, Alex	SNS JU Programme Pfficer,						
	forward	Kaloxylos	Executive Director 6G-IA						
11.35 - 11.50	Q&A session	Moderator: Alex Kaloxylos	Executive Director 6G-IA						
End of Webinar									

## **5G PPP Governance**



## 5G PPP Status, lessons learned & path to completion

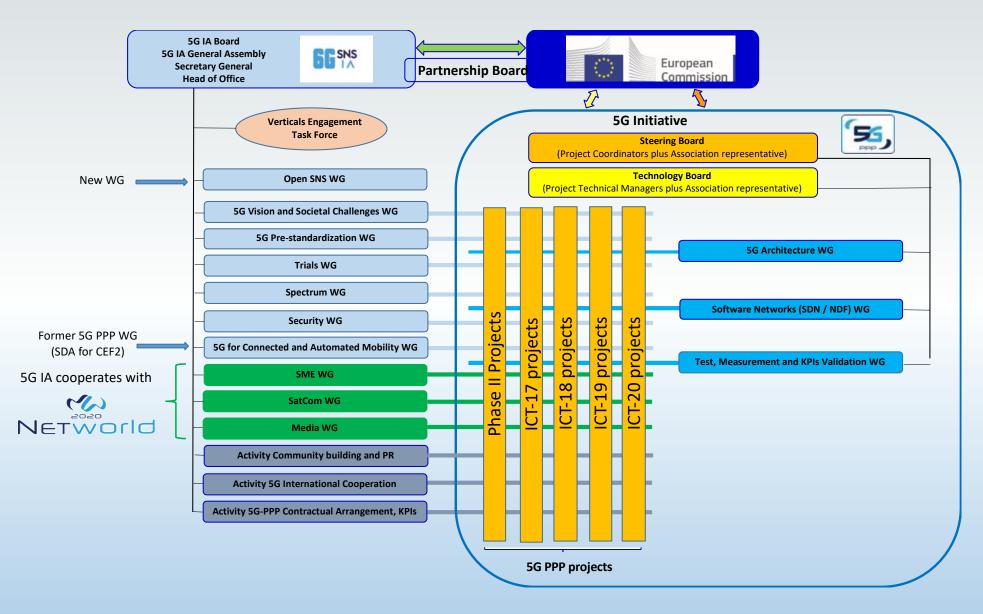
## SNS WG Structure proposal and way forward

Dr. Pavlos Fournogerakis SNS JU – Programme Officer Dr. Alexandros Kaloxylos 6G-IA Executive Director

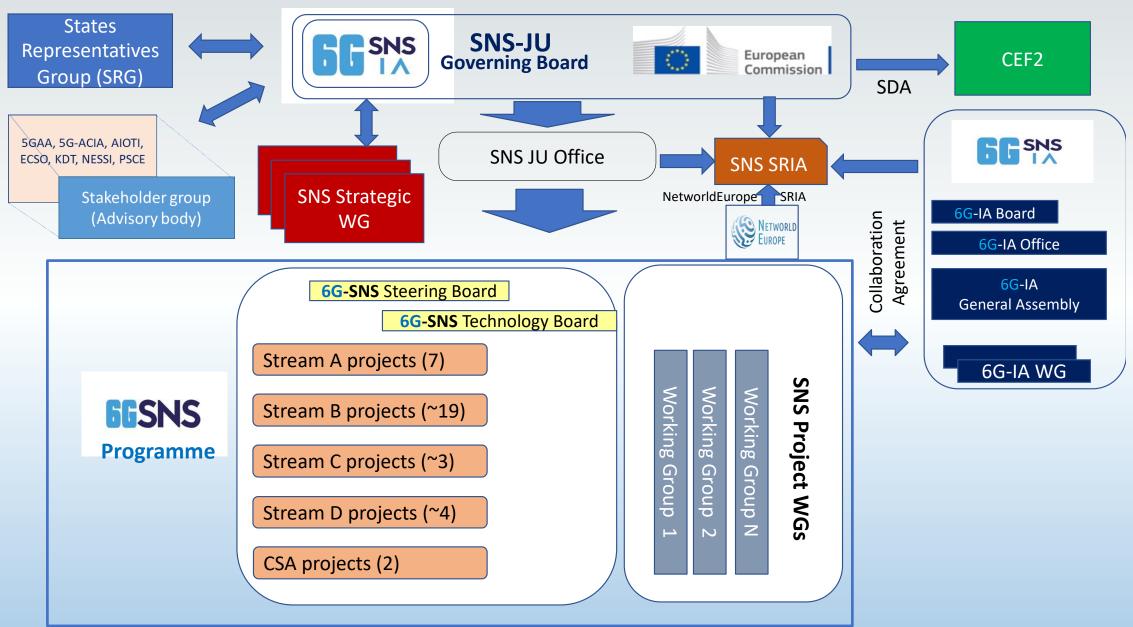
#### **SNS Governance**

Туре	Creation	Participation	Voting	Chairing	Document approval	Document Endorsement
SNS Industry WG	6G-IA GB	6G-IA full members & associate members	6G-IA full members	6G-IA full members	6G-IA GB (6G- IA document)	SNS-JU GB (SNS-JU Document)
SNS Project WG	SNS SB	All who have signed collaboration agreement	One vote per project	Any participant of a SNS project who has signed collaboration agreement	SNS SB (WG Document)	SNS-JU GB (SNS-JU Document)
SNS Strategic WG	SNS GB	To be decided by the SNS GB on ad-hoc basis	To be decided by the SNS GB on ad-hoc basis	To be decided by the SNS GB on ad-hoc basis	SNS JU GB (SNS-JU Document)	6G-IA GB (6G-IA document)

#### **5G PPP Governance**



#### **SNS Governance**



### **Collaboration is the way forward**



European Research Community on 6G SNS

### SNS R&I WP – Call 2022 - Structure





Stream A: Smart communication components, systems and networks for 5G mid-term Evolution systems

Stream D: Large Scale SNS Trials and Pilots with Verticals Stream B: Research for revolutionary technology advancement towards 6G

**Stream C :** SNS experimental infrastructures

### SNS R&I Work Programme 2023-2024 - Structure

#### 2023 Low TRL topics including those not covered during the 1<sup>st</sup> call

- Architecture
- Wireless
- Infrastructure & devices
- Security & Service Provision
- Micro-electronics for 6G Additionally
- Collaboration EU -USA
- 1 federation & possible extension with national testbeds
- Automotive
- Health, Smart Cities, Farming, Education (one or more)
- Societal Challenges

Stream B: Research for technology advancement towards 6G

Stream C: SNS experimental infrastructures

Stream D: Large Scale SNS Trials and Pilots with Verticals

#### **CSA:** Support Action

#### <u>2024</u>

#### **PoC and Standardization**

- Architecture
- Wireless
- Infrastructure & devices
- Security & Service Provision
  Additionally
- Collaboration EU with JP&SK
- Sustainability lighthouse
- Microelectronics for 6G lighthouse
- Vertical use cases
  implementing 6G
  Vision

• SNS Operational Support

### **Overall organization of the SNS R&I WP**

- 2022 Stream A consists of multiple topics that when considered together form a complete system (5G Evolution)
- Main Strands for Stream B in all calls:
  - Strand 1: Architecture
  - Strand 2: Wireless Communication
  - Strand 3: Communication Infrastructure and Devices
  - Strand 4: Security and Service Provision
- Stream B contains, depending on the year focused topics, flagship or lighthouse projects
- In all calls Stream C and Stream D projects are present

- **a.** <u>SNS Architecture WG:</u> collect, analyze, and consolidate information from SNS projects on architecture research requirements solutions and results (clear link to SNS Stream B/Strand 1).
- b. <u>SNS Reliable Software Networks WG</u>: analyze how 6G networks will be designed as software enabled platforms and include topics related to AI/ML, service provision/orchestration as well as security (DevSecOps) (clear link to SNS Stream B/Strand 4).
- c. <u>SNS Test Measurement and Validation WG</u>: bring together SNS projects that have common interest in the development and progress of topics related to test and measurement methods, test cases, procedures etc. At least all Stream C and Stream D projects should participate as well as any other Stream A and B projects that are planning to provide at least a PoC or higher TRL solutions.
- **d.** <u>Communication technologies and Devices</u>: bring together SNS projects working in the areas of wireless communications as well as communication infrastructure and devices. This WG will deal with topics related to 6G RAN enablers and solutions as well optical communications, integration of NTN with 6G Networks, short range communications and IoT evolution (clear link to SNS Stream B/Strands 2 & 3).

Stream A projects from the call 2022 can participate in the related WGs above depending on their activities

- **1.** Vision WG: Develop a vision for Smart Networks and Services beyond 2030
- 2. Open SNS: open solutions for 5G and beyond 5G/6G networks.
- **3.** Trials: develop a European Trial Roadmap for beyond 5G/6G systems in the context of SNS.
- 4. Pre-standardization: facilitate impact creation in particular towards relevant standardization bodies and open source.
- 5. 5G/6G for Connected and Automated Mobility R&I Stream: Establish a knowledge base and facilitate the exchange of information on ongoing R&I activities in the field.
- 6. Spectrum: The group focuses on the regulatory and technical aspects that relate to spectrum for beyond 5G and 6G systems.
- **7. Security**: The purpose of the group is to foster development of 5G/6G Security Community.
- 8. 6G-IA SNS Forum: A WG to serve as a forum for open technical discussions on any technological topics of interest.
- **9.** WiTaR (Women in Telecommunications and Research): promote a gender-balanced approach in European R&I activities including industry and academia.

#### **SNS Strategic WGs**

- <u>5G for Connected and Automated Mobility Deployment Stream</u>: strategic guidance in view of European deployment programmes on the field, in particular <u>5G Corridors for CAM</u> under the CEF2 Digital Programme. Supported by the CEF CSA 5G-GUIDE
  - a) Establish/Update SDAs
  - b) Facilitate broader stakeholder cooperation through expert consultation sessions, workshops and networking activities.
- 2. <u>European competitiveness for 6G connectivity</u>: shape clear European strategies, roadmaps and recommendations, and to establish synergies on areas supported Supported by the SNS CSA projects (OPS and ICE)
  - a) technological sovereignty in key technologies such as micro-electronics & photonics for 6G networks (identify and facilitate cooperation with KDT JU (soon to become Chips JU) including the plan for coordinated calls),
  - b) open SNS technological solutions and their impact to the ICT ecosystem,
  - c) AI/ML frameworks for smart networks and services,
  - d) Cloud and edge technologies and software-defined implementation of the network,
  - e) 6G security and privacy solutions that adhere to EU principles linking the SNS JU to related EU organizations such as ENISA and ECSO,
  - f) creation of a strong knowledge base of experts in Europe on SNS topics assisting in reversing the brain drain.

#### **SNS Strategic WGs**

**3.** <u>Policy Working Group</u>: Work on EU policies and goals (EU Green deal, Cybersecurity policies, SDGs, including environmental, business, and economic sustainability as well as related opportunities and concerns for EU stakeholders and societal aspects (EMF Awareness, technology acceptance). Supported by the CSA on societal issues under Call 2 expected to start early 2024.

#### **Next Steps for the SNS Projects WGs**

- The SNS Steering Board is responsible setting up the SNS Projects WGs
- The SNS Steering Board does not exist yet The collaboration agreement needs to be signed by a critical mass of projects
- The public and private side will open a consultation to see the opinion of SNS project members about the proposed SNS Projects WG Each organization participating in the the SNS projects will have one vote
- The consultation link will be sent today to the SNS projects PMs.
- The PMs will be asked to forward the link to their project members
- The collected opinions will not have a binding effect but used as an informative feedback so that SNS SB Chair and the SNS Steering Board consider this
- The results of the consultation will be presented during EuCNC during the convened session "<u>5G-PPP – The value generated for Europe</u>" 07.06.23 11:00-12:30, Room Kongresshallen