



5G PPP Webinar

5G Innovations for Verticals



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ICT Research and Innovation policy context

Commission's strategy on Shaping Europe's Digital Future

- Europe should retain its technological and digital sovereignty and be the global digital leader
- European technological sovereignty starts from ensuring the integrity and resilience of our data infrastructure, networks and communications
- Digital Decade, a vision of what a successful digital transformation will mean for Europeans by 2030

Commission Communication on a New Industrial Strategy

- Climate neutrality and Digital leadership
- Europe has everything it takes to lead the digital technology race
- We must invest now if we want to be a frontrunner in 6G networks

“The EU will support the development of key enabling technologies that are strategically important for Europe's industrial future”

5G PPP Phase 3

- Leverage previous results and 5G technologies towards downstream innovation
- Maintain a significant long-term commitment
- Contribute to building a first class European industrial supply side for core 5G technologies

***Bridging between 5G, B5G and 6G
From PPP to Smart Networks and Services***

Smart Networks and Services partnership

Two Pillars:

- **R&I towards 6G** (under Horizon Europe)
- **Strategic Coordination of 5G deployment** (under CEF2)

Develop lead markets, support **technology sovereignty**

Address **Sustainable Development Goals** (guiding Hexa-X)

Leverage connectivity towards **strategic value chains**, e.g. in the area of **cloud, IoT** as well as **components and devices**

Adoption of the regulation establishing JUs and publication of the first SNS Work Programme **estimated before end of 2021**

Scope of CEF (and RRF) connectivity investments



**Today's focus:
connecting people,
households,
enterprises, socio-
economic drivers**



*New scope for investment (&
policy and regulations)*

**Connecting the “large”:
EU-wide digital
capacities (cloud, HPC,
QCI,...)**



**Connecting the “small”: smart
objects and devices, towards digital
twins and zero-distance society**

Twin Transitions: Green and Digital

Each recovery and resilience plan will have to include

a minimum of



a minimum of



The Commission will assess national plans against these targets.



RRF - €672,5 billion, investments should be implemented by 2026

5G Deployment – Open RAN

Deployment approach raising significant interest in Europe, potential gains expected:

- Capex
- Diversification of suppliers, flexibility,...

Europe short term interest: quick deployment of 5G at scale,

- Open RAN full maturity not expected before 2025
- Significant issues to solve: performance, security, energy efficiency...

→ R&I potential

Europe's medium-term interest: consolidation of leadership in connectivity,

- Development of an EU Open RAN ecosystem globally competitive

ICT-41 Innovation expectations

- Enhanced experimentation infrastructures on top of which third party experimenters will have the opportunity to test their applications tailored to specific vertical use cases,
 - Interoperability of NetApps beyond vendor-specific implementation across multiple domains.
 - Vertical sectors targeted, i.e. industry 4.0 (5G-ERA, EVOLVED-5G, 5G-INDUCE), transport/mobility (VITAL-5G, 5G-IANA), media (5GMediaHUB), public protection and disaster relief (5G-EPICENTRE) and energy (Smart5Grid).
- 5G open source repositories for wide use and towards standards development
 - Re-usable open-source NetApps repositories,
 - Continuous integration and continuous deployment of virtual network functions (for fast service creation).
- Support to the emergence of new innovative market players,
 - Providing opportunities for innovative high-tech start-ups and SME's (49% of participants SME's, 55% new).

Thank you



Political guidelines for the next Commission (2019-2024)

https://ec.europa.eu/commission/files/political-guidelines-new-commission_en

Shaping Europe's digital future

<https://ec.europa.eu/digital-single-market/en/content/european-digital-strategy>

5G Observatory

<https://5gobservatory.eu/>

Digital Partnerships (legal text)

<https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2021:87:FIN>