5GSC

5G for Smart Communities

COMMUNITY CONFERENCE

Welcome!

European Commission

Welcome by

Jan Dröge

Project Director, 5G for Smart Communities Support Platform

5GSC
5G for Smart Communities

European Commission

Introductory Speech

Miguel Gonzalez Sancho

Head of Unit, Future Connectivity Systems Unit,
DG CNECT, European Commission

5GSC
5G for Smart Communities

European Commission

Strengthening Europe’s digital infrastructure: 5G large scale pilots with CEF Digital

Project: OYS private 5G SA and AR/VR solution for Healthcare

Petri Parviainen

Head of Sales, Public Sector, Boldyn Networks

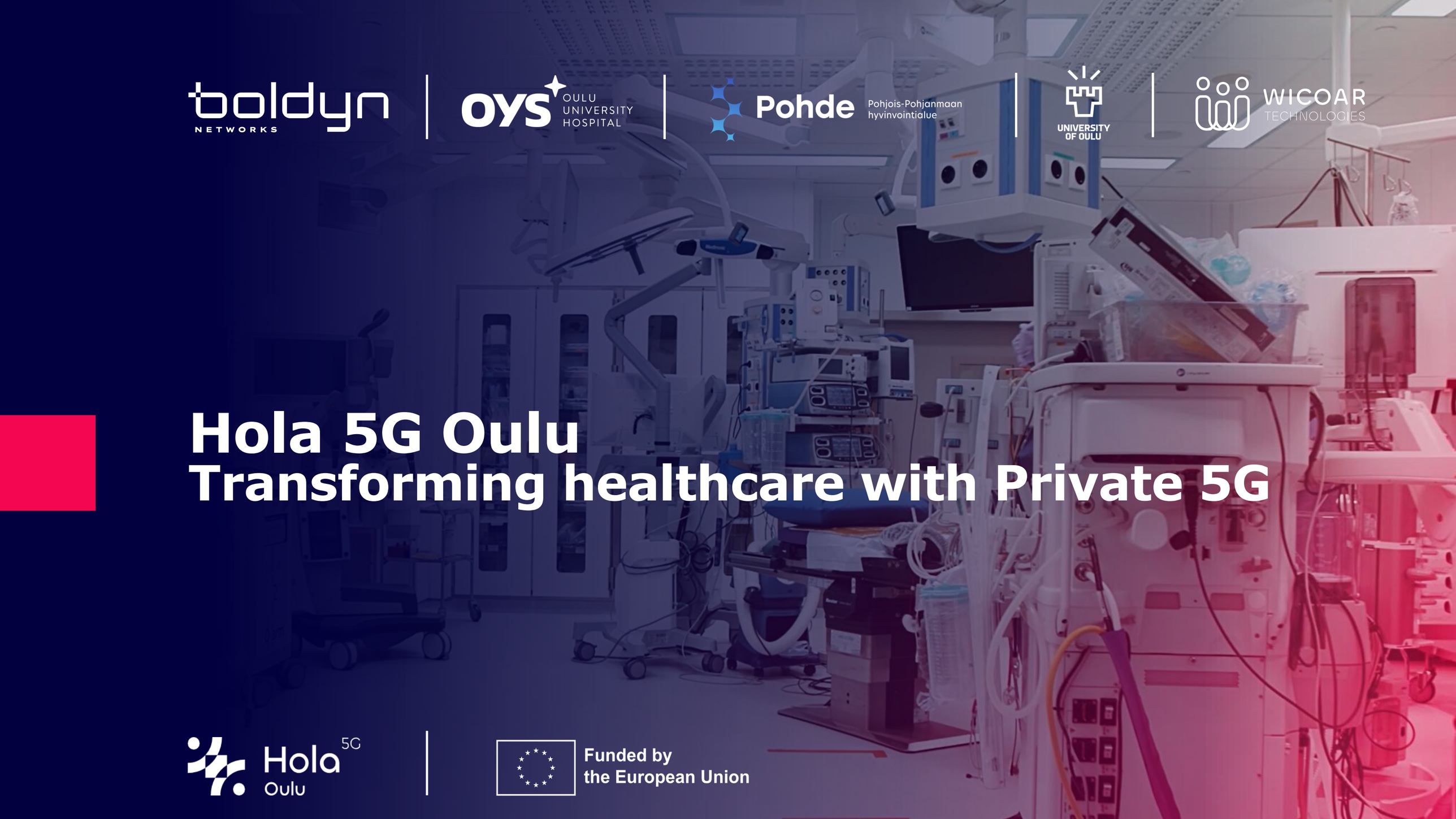
Project:5G SEAGUL

Fofy Setaki

Principal Engineer, OTE S.A.

5GSC
5G for Smart Communities

European Commission



Hola 5G Oulu
Transforming healthcare with Private 5G

Hola 5G Oulu

Funded by
the European Union

Hola 5G Oulu

Pohde Pohjois-Pohjanmaan hyvinvointialue

OYS OULU UNIVERSITY HOSPITAL

UNIVERSITY OF OULU

WICOAR TECHNOLOGIES

boldyn NETWORKS

Partner, Owner

Wellbeing services county & OYS

- Premises
- Connections
- An enabler

Medical Faculty

- Clinical Medicine Research Unit
- Usability testing

Faculty of Information and Electrical Engineering

- Centre for Wireless Communications
- Immunity testing
- Safety testing

Meet the consortium team

Timo Alalääkkölä
Head of Testing & Innovations, Pohde/Oulu University Hospital

Mikael von und zu Fraunberg
Head of Testing and Innovations, Pohde/Oulu University Hospital

Rauno Jokelainen
Co-Founder and CO WICOAR Technologies

Petri Parviainen
Head of Sales Public Sector, Boldyn Networks

Jani Katisko
Specialised Medical Physicist, Adjunct Professor, Pohde/Oulu University Hospital

Erkki Harjula
Associate Professor (tenure track) University of Oulu

Jani Saarikoski
Program Director, Boldyn Networks

Supported by
EU/HaDEA Team

Oana Bodron
Project Adviser
CEF-Digital at HaDEA

Chrysoula Lentzou
Project Adviser
CEF-Digital at HaDEA

CHALLENGES IN IMPROVING PATIENT CARE

50%

Up to 50% of doctors’ and nurses’ time is spent on computers

- **Excessive administrative workload**
- **Staff wellbeing and stress**
- **Communication inefficiencies**

CONFIDENTIAL. BOLDYN NETWORKS 2025.

USE CASES AND IMPACT

Wicoar HealthAudio

Secure and reliable communication, ward-to-ward

Wicoar HealthVision in patients wards

Facial recognition and retrieval and visualisation of patient information through AR glasses

Wicoar HealthVision in surgical theatres

Retrieval and visualisation of patient information through AR glasses

CONFIDENTIAL. BOLDYN NETWORKS 2025.
[SEC=PROTECTED]

WHY PRIVATE 5G?

Data stays on site
accessible only to authorized personnel

Interference resistant
tested by University of Oulu to avoid interference with medical devices

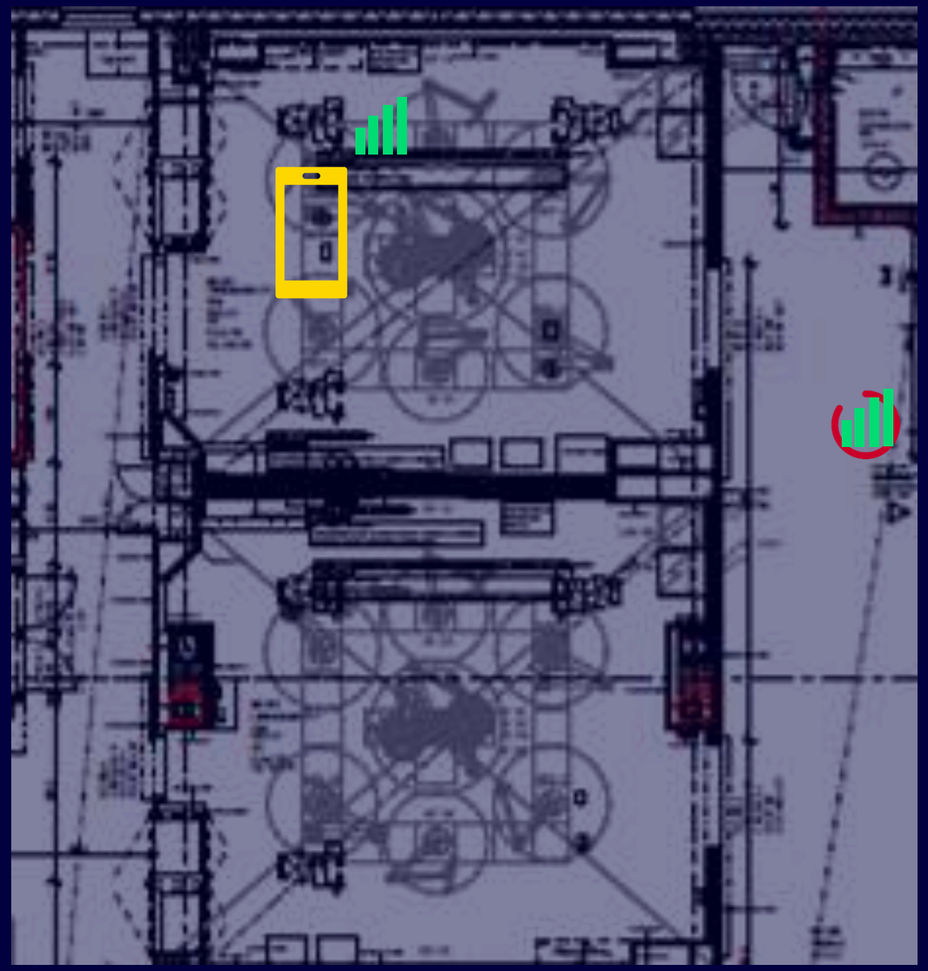
Low latency performance
supports real-time applications (AR/VR) and immediate patient data access

Network resilience
no single point of failure even in emergencies

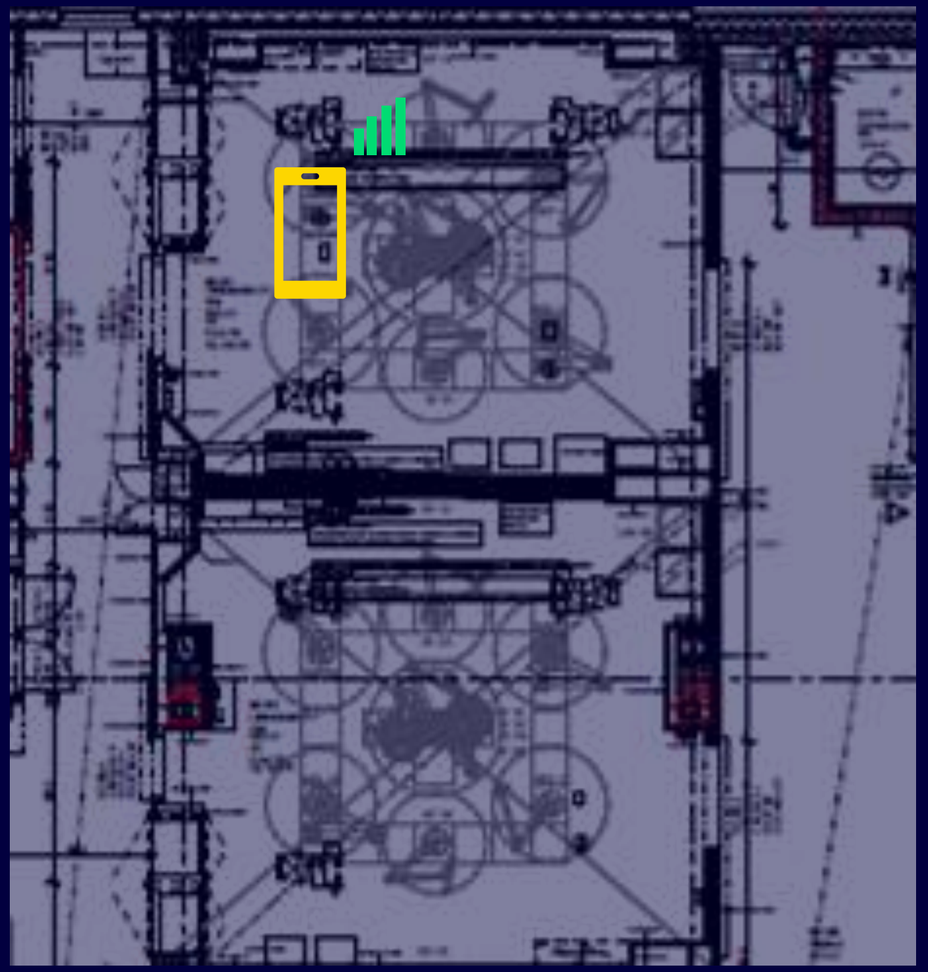
CONFIDENTIAL. BOLDYN NETWORKS 2025.

PRIVATE 5G CONNECTION STAYS INTACT WHEN MOVING BETWEEN WARDS

Handover over Wi-Fi



Handover over 5G



CONFIDENTIAL. BOLDYN NETWORKS 2025.

FUTURE VISION

Unified network for all medical devices
Better synchronization. Simplified maintenance

Robotics
Relieving staff from auxiliary tasks to focus on patient care

Resilient voice solutions
Cost optimization. Full functionality in crisis situations.

AI & analytics
Automatically records patient records. Identify anomalies. Saving time.

Hybrid network
Extending network coverage across entire wellbeing area

TRANSFORMING HEALTHCARE

CLOSING REMARKS

- **Proven technology:** no interreference between medical devices and the network
- **Proven use cases**: reduce time behind computers. Improving precision and safer surgeries.
- **Huge interest from healthcare ecosystem:** ongoing innovation into use cases.
- **Collaboration**: essential driver behind project success.
- **EU funding**: vital enabler.

CONFIDENTIAL. BOLDYN NETWORKS 2025.

boldyn NETWORKS | OYS OULU UNIVERSITY HOSPITAL | Pohde Pohjois-Pohjanmaan hyvinvointialue | UNIVERSITY OF OULU | WICOAR TECHNOLOGIES

THANK YOU

Hola 5G Oulu

Funded by the European Union

5G SEAGUL CEF2 5G GR-BG CBC Project (2023-2025)

5G SEAGUL
5G Seamless Roaming for the Greece-Bulgaria Cross-Border Corridor

Fofy Setaki
5G SEAGUL Technical Project Manager

2025 5G Community Conference

8 October 2025

5G Seamless Roaming for the Greece-Bulgaria CBC(*)

CEF-DIG-2021-5GCORRIDORS-WORKS

Main Goal

To deploy SoTA 5G network infrastructure (access, transport, core, edge) to provide seamless, uninterrupted connectivity along 473Km of the Orient/East-Med TEN-T(**) corridor Sofia-Thessaloniki-Athens, incl. the GR-BG border-crossing of Promahonas/Kulata

Consortium

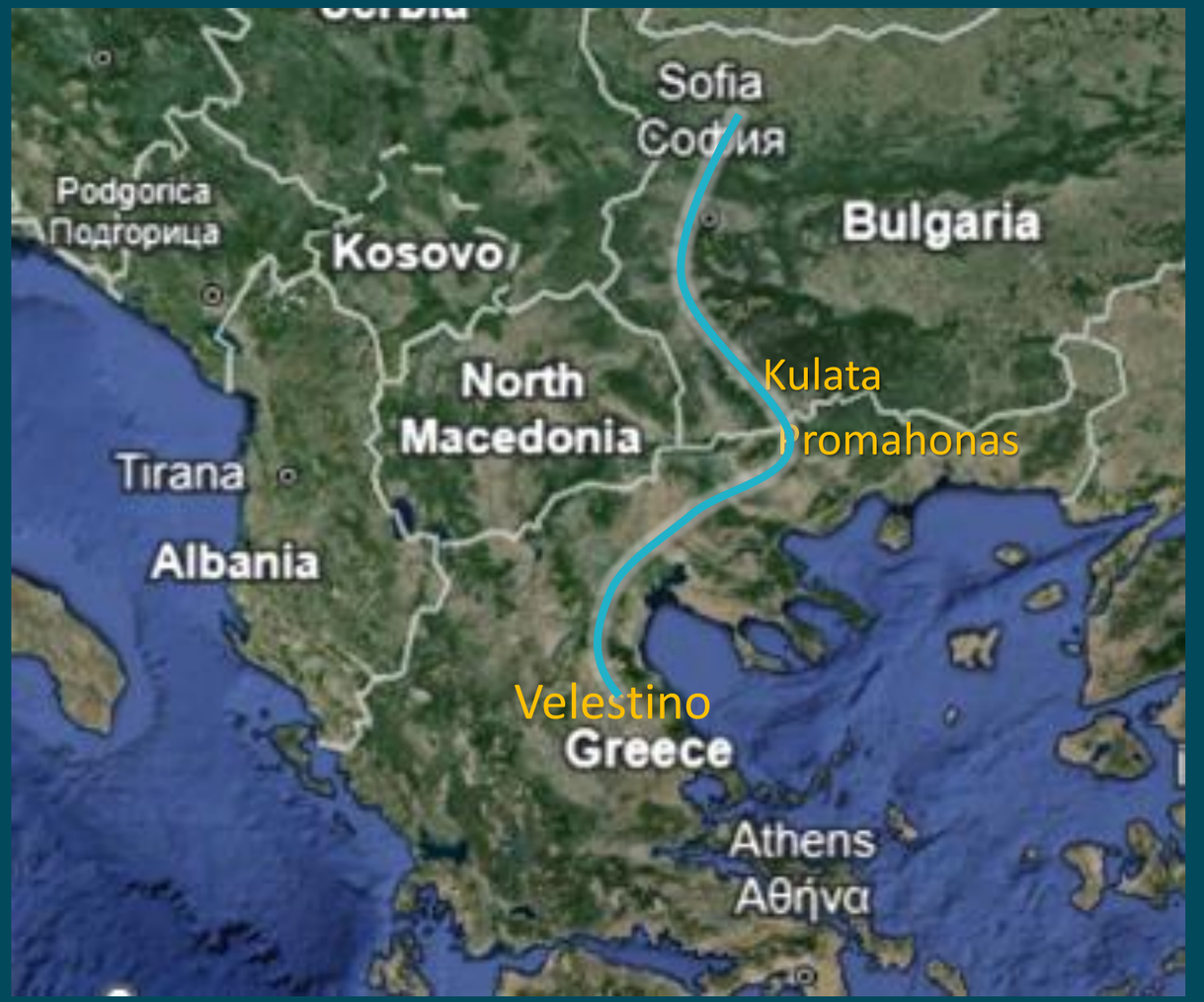
WINGS (GR), COSMOTE TELECOM (GR), A1 (BG)

Duration

3 years (1/1/2023 – 31/12/2025)

Total Budget

11, 5 m€ (50% Funding)



(*) Cross Border Corridor, (**) Trans-European Transport Network

Implemented by the European Health and Digital Executive Agency (HaDEA) under the CEF Digital Programme to support & stimulate the digital infrastructure investments in Member States

Implementation Approach

Year 1 - 2023	Year 2 - 2024	Year 3 - 2025

Uninterrupted 5G coverage @700 MHz for the 473 km GR-BG corridor & Seamless Roaming

CAM services support 20 Mbps throughput, 20 ms e2e latency and 99% reliability

- ❑ 300 Km (GR) (Velestino – Promahonas) | Upgrade of 66 BS and 12 New Sites (COSMOTE)
- ❑ 173 Km (BG) (Kulata – Sofia) | Upgrade of 39 BS, 13 New Sites (A1BG)

Year 1 - 2023		Year 2 - 2024		Year 3 - 2025	
COSMOTE: 28 upgrades, 1 new	A1: 29 upgrades	COSMOTE: 29 upgrades	A1: 2 new	COSMOTE: 9 upgrades, 11 new	A1: 10 upgrades, 11 new (6 DAS)

Phase 1: NSA Implementation

- ❑ New BG (Border Gateway) in Thessaloniki
- ❑ S1 Handover (EPLMN)
- ❑ inter-MME S10
- ❑ Direct Interconnection Thessaloniki-Sofia

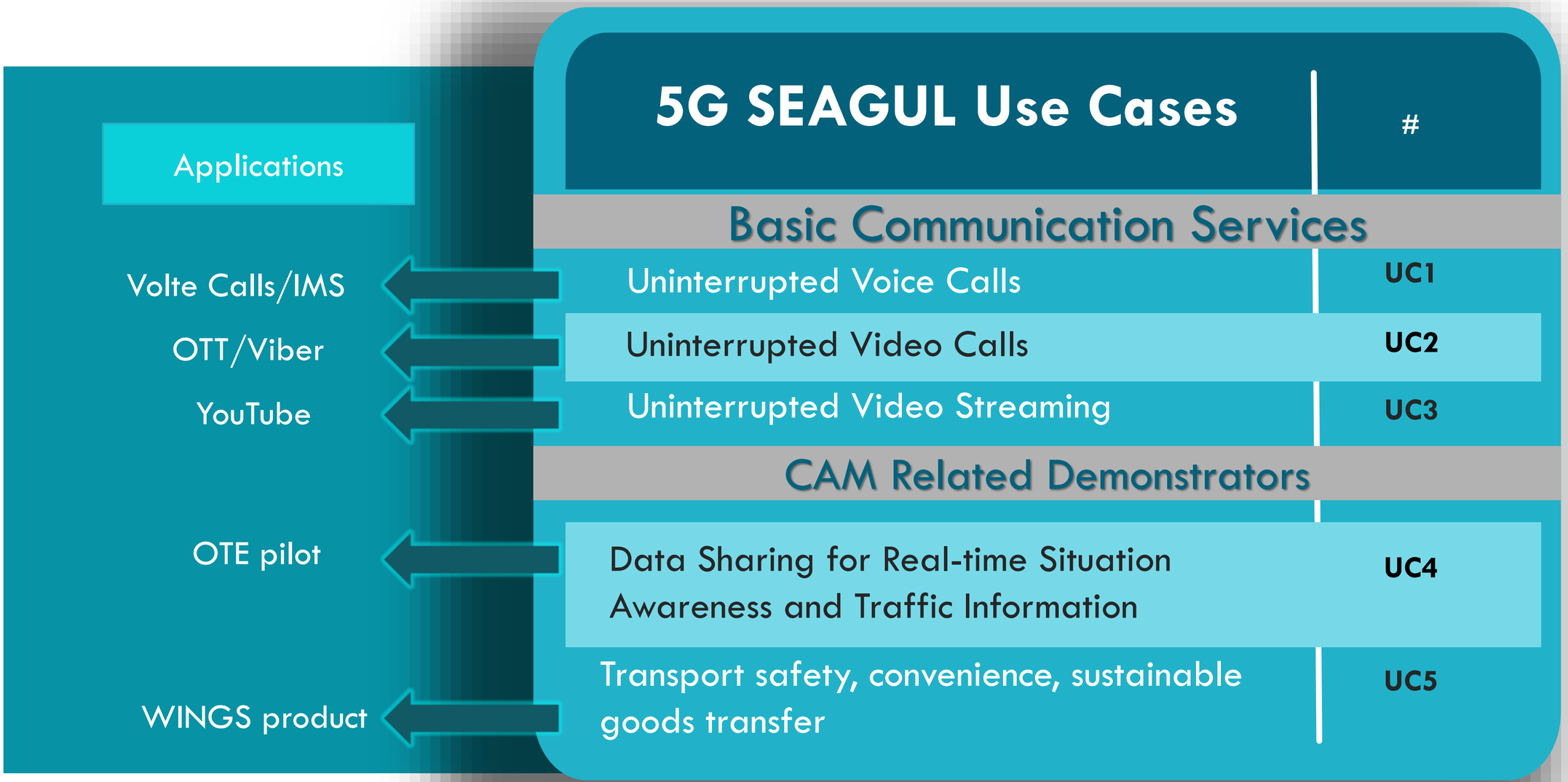
Phase 2: SA Implementation

- ❑ Introduce SEPP (Security Edge Protection Proxy)
- ❑ 5G SA Roaming
- ❑ 5G SEAGUL Slice & Seamless Roaming

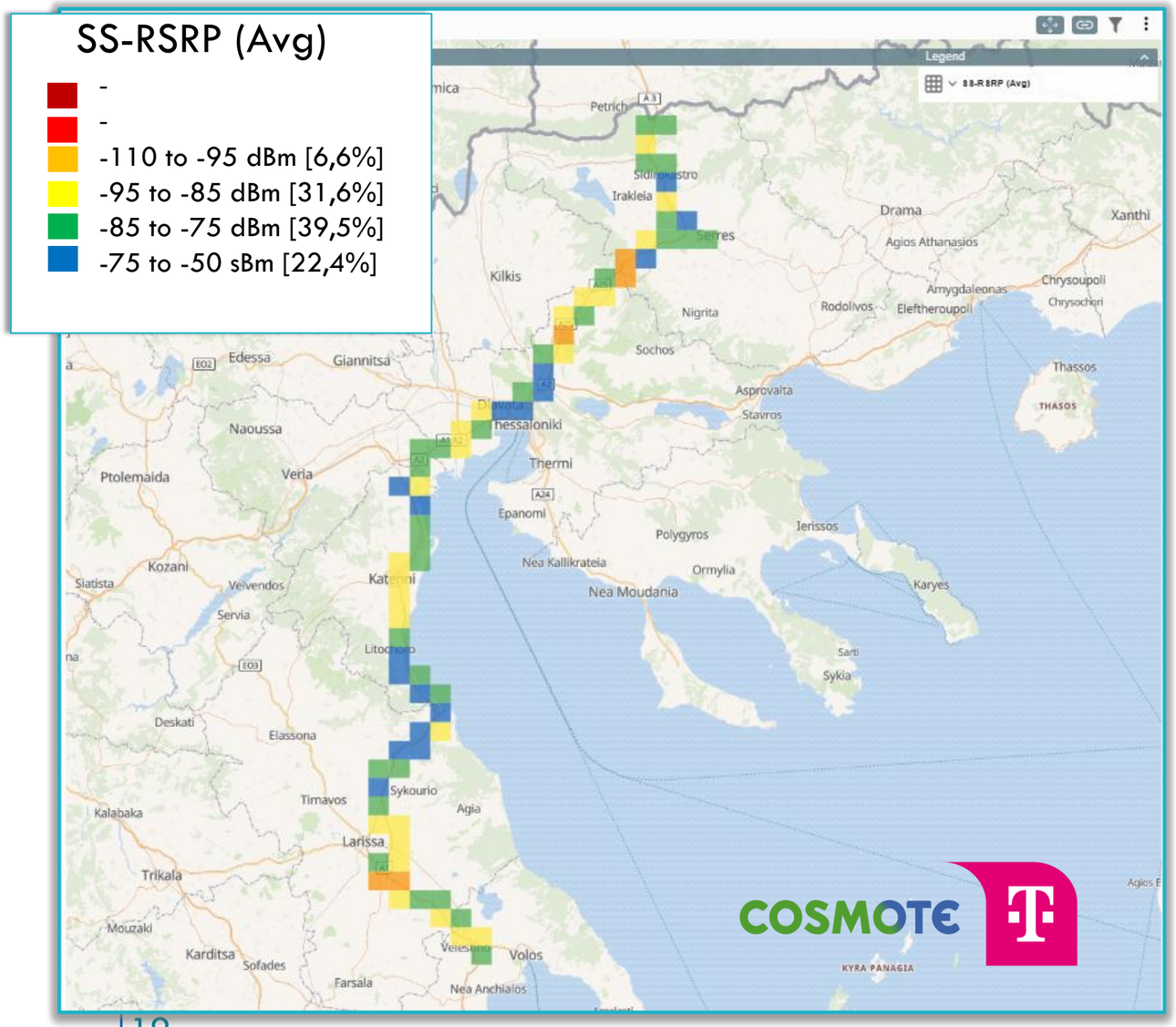
3.5 GHz for 11 km at the border (Promahonas/Kulata)

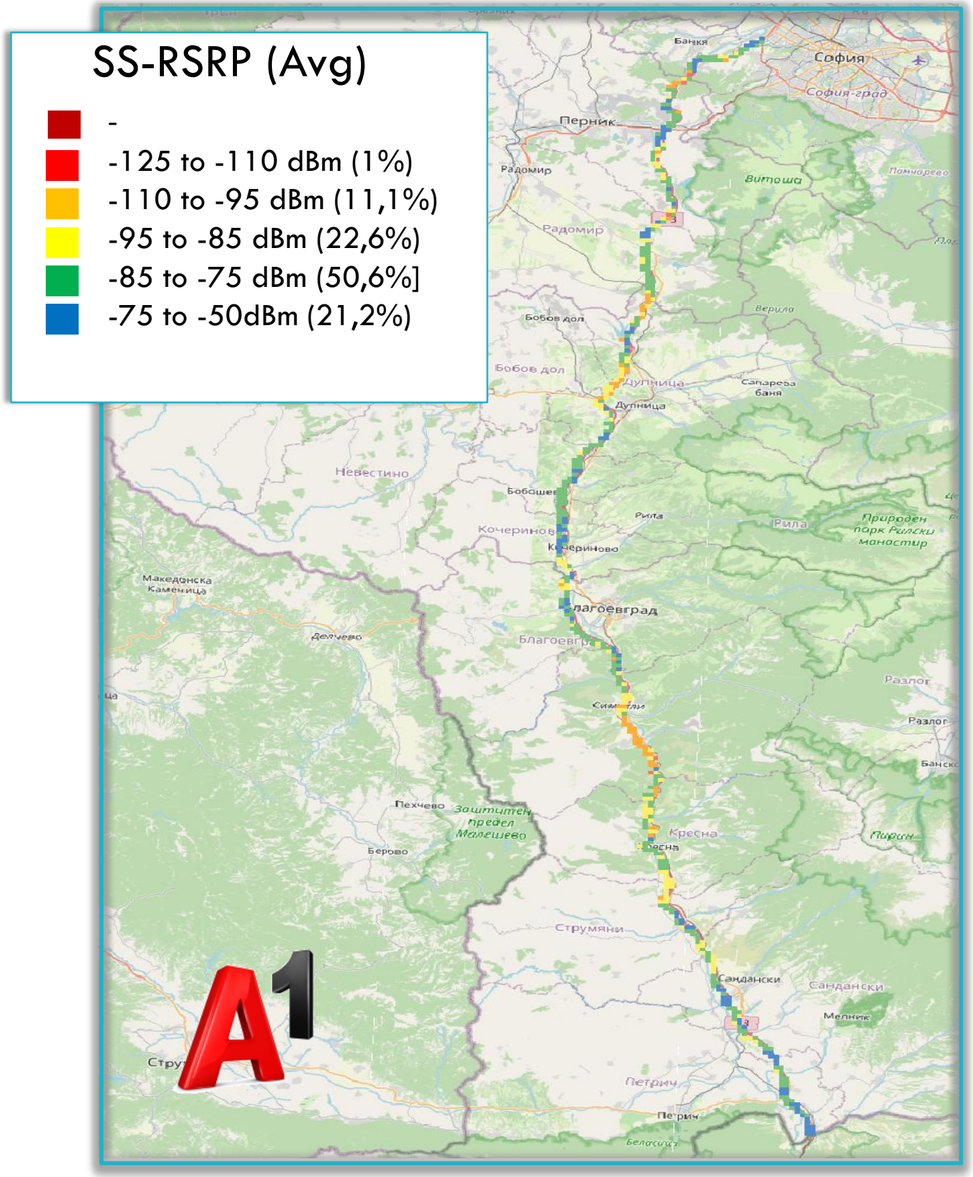
- ❑ 4 Km (GR) | 2 gNB (COSMOTE)
- ❑ 7 Km (BG) | 2 gNBs (A1)

Use Cases

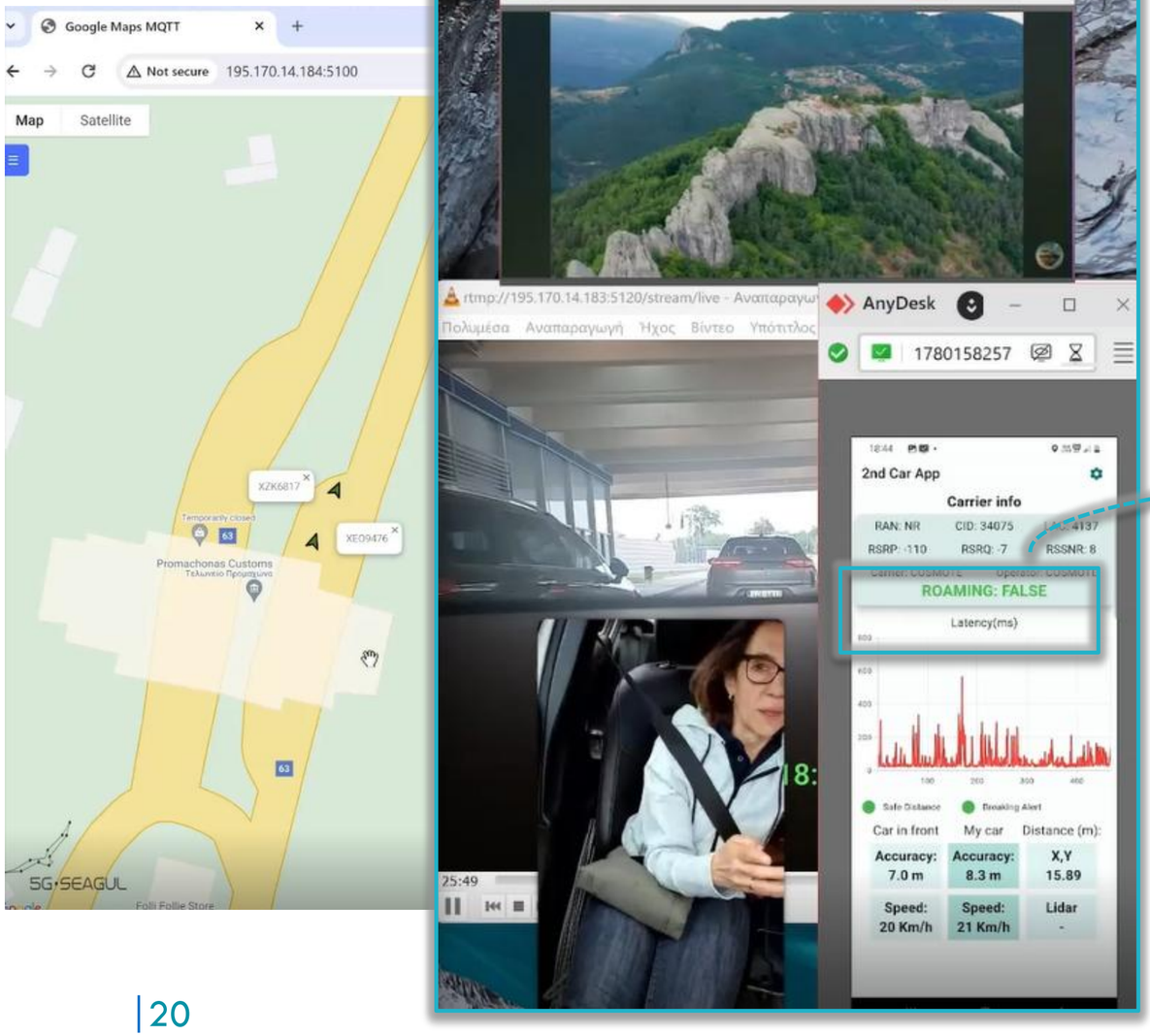

Applications
Volte Calls/IMS
OTT/Viber
YouTube
OTE pilot
WINGS product
5G SEAGUL Use Cases
#
Basic Communication Services
Uninterrupted Voice Calls
UC1
Uninterrupted Video Calls
UC2
Uninterrupted Video Streaming
UC3
CAM Related Demonstrators
Data Sharing for Real-time Situation Awareness and Traffic Information
UC4
Transport safety, convenience, sustainable goods transfer
UC5

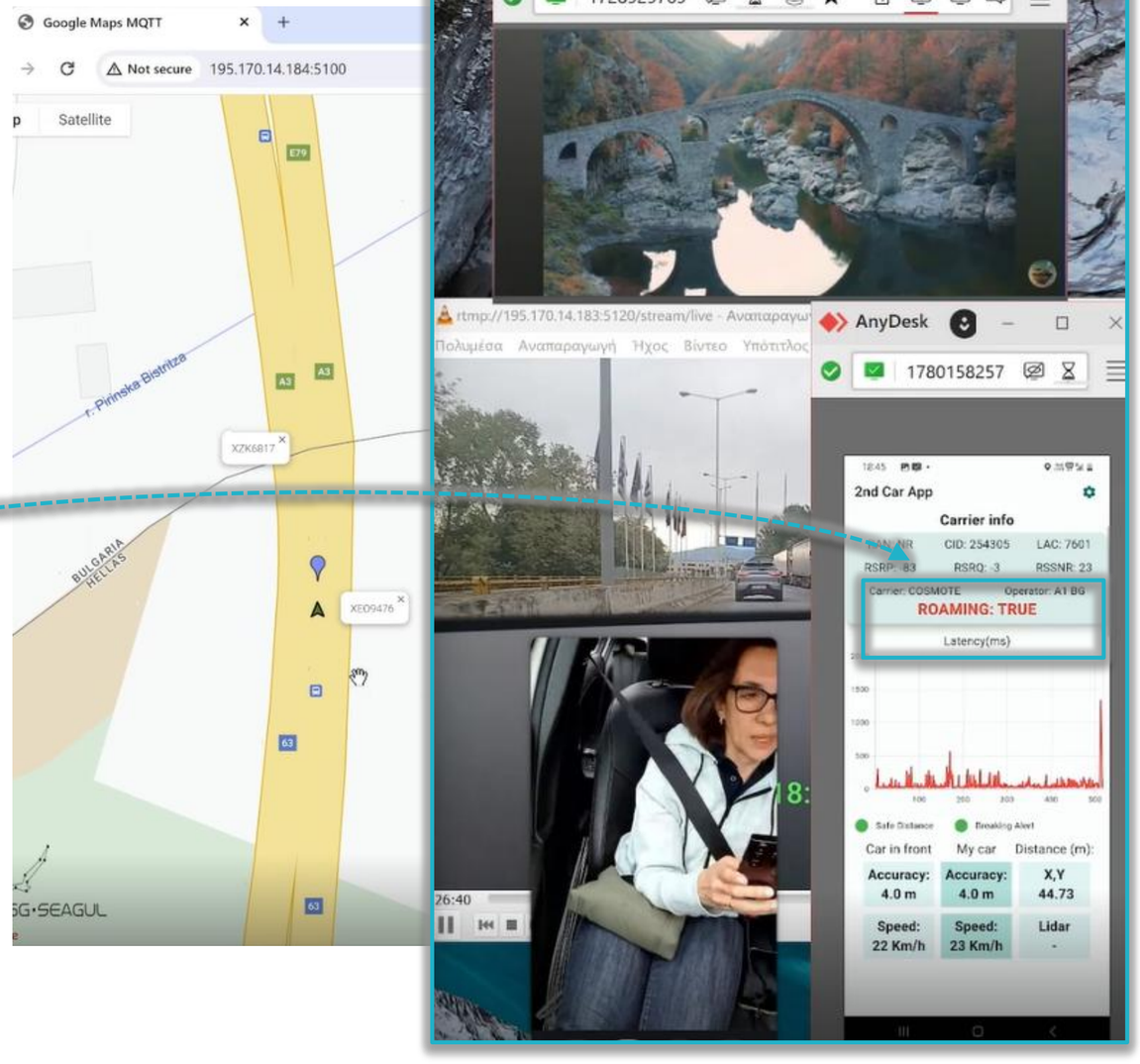
Accomplishments -5G Coverage 7/2025





NSA Seamless Roaming – Demonstrated 4/2024

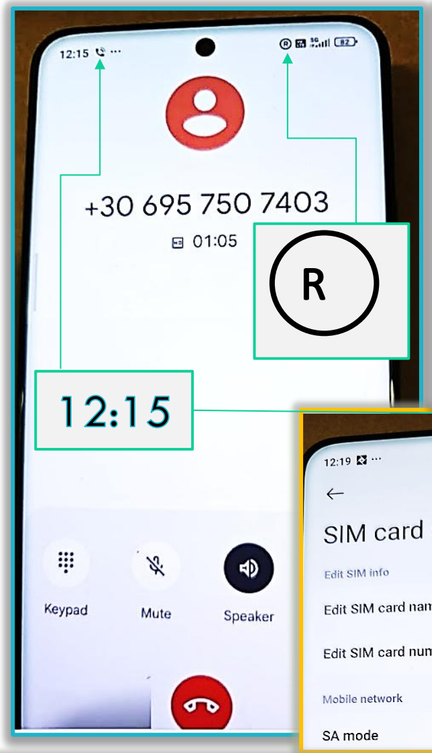




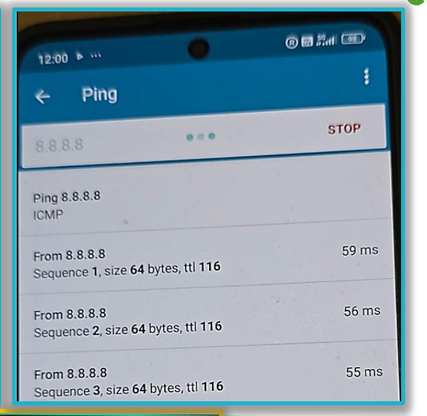
SA Roaming – Work in Progress

5G·SEAGUL

VoNR Call



Data Session



COSMOTE T Data and VoNR ✓

A1 Data ✓

247	12:14:32,477000	17.0.0.17	16.0.0.16	NGAP	52	InitialContextSetupResponse
249	12:14:32,478000	16.0.0.16	17.0.0.17	NGAP/N…	137	DownlinkNASTransport, Registration accept
250	12:14:32,501000	17.0.0.17	16.0.0.16	NGAP/N…	86	UplinkNASTransport, Registration complete
252	12:14:32,536000	17.0.0.17	16.0.0.16	NGAP/N…	179	UplinkNASTransport, UL NAS transport, PDU session establishment request
258	12:14:32,784000	17.0.0.17	16.0.0.16	NGAP/N…	158	UplinkNASTransport, UL NAS transport, PDU session establishment request
268	12:14:33,634000	10.0.1.94	192.168.200.182	HTTP2/…	1329	HEADERS[1]: POST /namf-comm/v1/ue-contexts/imsi-202010927417724/n1-n2-messages
271	12:14:33,636000	16.0.0.16	17.0.0.17	NGAP/N…	279	PDUSessionResourceSetupRequest, DL NAS transport, PDU session establishment ac
272	12:14:33,682000	17.0.0.17	16.0.0.16	NGAP	73	PDUSessionResourceSetupResponse
273	12:14:33,683000	192.168.239.242	10.127.12.31	HTTP2/…	883	HEADERS[2245]: POST /nsmf-pdusession/v1/sm-contexts/2470003472/modify, DATA[22
274	12:14:33,690000	10.0.1.226	192.168.200.182	HTTP2/…	1268	HEADERS[1]: POST /namf-comm/v1/ue-contexts/imsi-202010927417724/n1-n2-messages
277	12:14:33,691000	16.0.0.16	17.0.0.17	NGAP/N…	217	PDUSessionResourceSetupRequest, DL NAS transport, PDU session establishment ac
278	12:14:33,726000	17.0.0.17	16.0.0.16	NGAP	73	PDUSessionResourceSetupResponse
279	12:14:33,727000	192.168.239.242	10.127.12.31	HTTP2/…	883	HEADERS[2247]: POST /nsmf-pdusession/v1/sm-contexts/2470003473/modify, DATA[22
282	12:14:35,603000	10.0.1.94	192.168.202.191	HTTP2/…	1275	HEADERS[1]: POST /namf-comm/v1/ue-contexts/imsi-202010927417724/n1-n2-messages
285	12:14:35,605000	16.0.0.16	17.0.0.17	NGAP/N…	208	PDUSessionResourceModifyRequest, DL NAS transport, PDU session modification cc
286	12:14:35,641000	17.0.0.17	16.0.0.16	NGAP	63	PDUSessionResourceModifyResponse
287	12:14:35,643000	192.168.239.242	10.127.12.31	HTTP2/…	871	HEADERS[2249]: POST /nsmf-pdusession/v1/sm-contexts/2470003472/modify, DATA[22
289	12:14:35,666000	17.0.0.17	16.0.0.16	NGAP/N…	95	UplinkNASTransport, UL NAS transport, PDU session modification complete
293	12:16:18,094000	10.0.1.226	192.168.85.253	HTTP2/…	1175	HEADERS[3]: POST /namf-comm/v1/ue-contexts/imsi-202010927417724/n1-n2-messages
296	12:16:18,095…	…16	17.0.0.17	NGAP/N…	107	PDUSessionResourceModifyRequest, DL NAS transport, PDU session modification cc
297	12:16:18,1…	…	16.0.0.16	NGAP	61	PDUSessionResourceModifyResponse
298	12:16:18…	…242	10.127.12.31	HTTP2/…	869	HEADERS[2253]: POST /nsmf-pdusession/v1/sm-contexts/2470003472/modify, DATA[22
300	12:16…		16.0.0.16	NGAP/N…	95	UplinkNASTransport, UL NAS transport, PDU session modification complete
304	12:…		16.0.0.16	NGAP	67	UEContextReleaseRequest

```
PDU session establishment accept (PDU session type IPv6 only allowed)

PDU session establishment accept

PDU session modification command

PDU session modification command
```

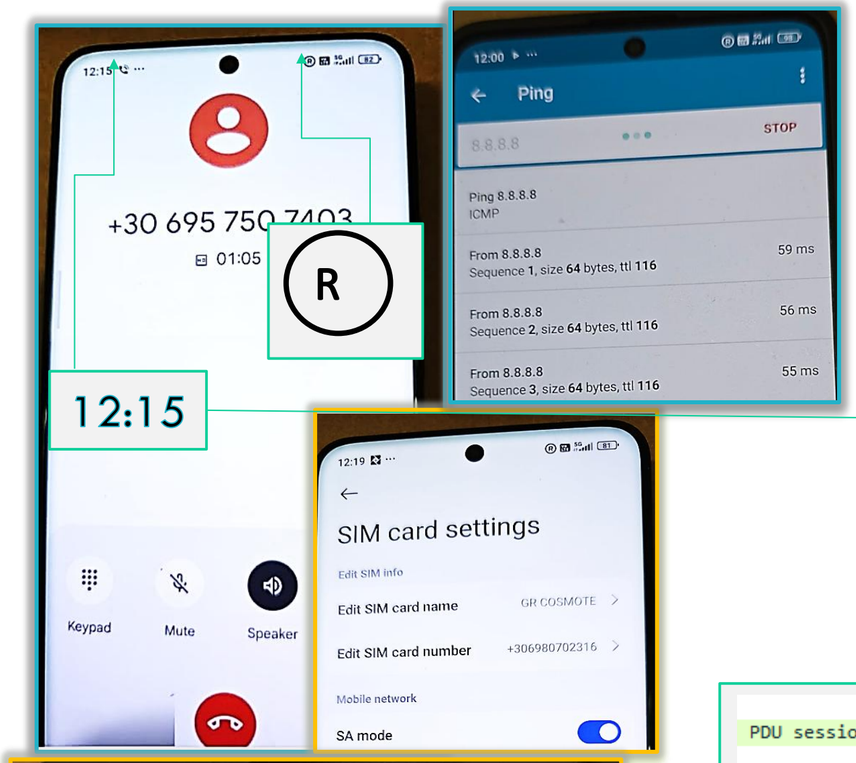
```
▼ QosFlowAddOrModifyRequestList: 1 item
  ▼ Item 0
    ▼ QosFlowAddOrModifyRequestItem
        qosFlowIdentifier: 1
      ▼ qosFlowLevelQosParameters
        ▼ qosCharacteristics: nonDynamic5QI (0)
          ▼ nonDynamic5QI
              fiveQI: 1
        ▼ allocationAndRetentionPriority
            priorityLevelARP: 13
            pre-emptionCapability: may-trigger-pre-emption (1)
            pre-emptionVulnerability: pre-emptable (1)
        ▼ gBR-QosInformation
            maximumFlowBitRateDL: 52000bits/s
            maximumFlowBitRateUL: 52000bits/s
            guaranteedFlowBitRateDL: 52000bits/s
            guaranteedFlowBitRateUL: 52000bits/s
```

SA Roaming – Work in Progress

5G·SEAGUL

VoNR Call

Data Session



COSMOTE Data and VoNR ✓

A1 Data ✓

247	12:14:32,477000	17.0.0.17	16.0.0.16	NGAP	52	InitialContextSetupResponse
249	12:14:32,478000	16.0.0.16	17.0.0.17	NGAP/N…	137	DownlinkNASTransport, Registration accept
250	12:14:32,501000	17.0.0.17	16.0.0.16	NGAP/N…	86	UplinkNASTransport, Registration complete
252	12:14:32,536000	17.0.0.17	16.0.0.16	NGAP/N…	179	UplinkNASTransport, UL NAS transport, PDU session establishment request
258	12:14:32,784000	17.0.0.17	16.0.0.16	NGAP/N…	158	UplinkNASTransport, UL NAS transport, PDU session establishment request
268	12:14:33,634000	10.0.1.94	192.168.200.182	HTTP2/…	1329	HEADERS[1]: POST /namf-comm/v1/ue-contexts/imsi-202010927417724/n1-n2-messages
271	12:14:33,636000	16.0.0.16	17.0.0.17	NGAP/N…	279	PDUSessionResourceSetupRequest, DL NAS transport, PDU session establishment ac
272	12:14:33,682000	17.0.0.17	16.0.0.16	NGAP	73	PDUSessionResourceSetupResponse
273	12:14:33,683000	192.168.239.242	10.127.12.31	HTTP2/…	883	HEADERS[2245]: POST /nsmf-pdusession/v1/sm-contexts/2470003472/modify, DATA[22
274	12:14:33,690000	10.0.1.226	192.168.200.182	HTTP2/…	1268	HEADERS[1]: POST /namf-comm/v1/ue-contexts/imsi-202010927417724/n1-n2-messages
277	12:14:33,691000	16.0.0.16	17.0.0.17	NGAP/N…	217	PDUSessionResourceSetupRequest, DL NAS transport, PDU session establishment ac
278	12:14:33,726000	17.0.0.17	16.0.0.16	NGAP	73	PDUSessionResourceSetupResponse
279	12:14:33,727000	192.168.239.242	10.127.12.31	HTTP2/…	883	HEADERS[2247]: POST /nsmf-pdusession/v1/sm-contexts/2470003473/modify, DATA[22
282	12:14:35,603000	10.0.1.94	192.168.202.191	HTTP2/…	1275	HEADERS[1]: POST /namf-comm/v1/ue-contexts/imsi-202010927417724/n1-n2-messages
285	12:14:35,605000	16.0.0.16	17.0.0.17	NGAP/N…	208	PDUSessionResourceModifyRequest, DL NAS transport, PDU session modification co
286	12:14:35,641000	17.0.0.17	16.0.0.16	NGAP	63	PDUSessionResourceModifyResponse
287	12:14:35,643000	192.168.239.242	10.127.12.31	HTTP2/…	871	HEADERS[2249]: POST /nsmf-pdusession/v1/sm-contexts/2470003472/modify, DATA[22
289	12:14:35,666000	17.0.0.17	16.0.0.16	NGAP/N…	95	UplinkNASTransport, UL NAS transport, PDU session modification complete
293	12:16:18,094000	10.0.1.226	192.168.85.253	HTTP2/…	1175	HEADERS[3]: POST /namf-comm/v1/ue-contexts/imsi-202010927417724/n1-n2-messages
296	12:16:18,095…	…0.0.16	17.0.0.17	NGAP/N…	107	PDUSessionResourceModifyRequest, DL NAS transport, PDU session modification co
297	12:16:18,13…	…0.17	16.0.0.16	NGAP	61	PDUSessionResourceModifyResponse
298	12:16:18	…8.239.242	10.127.12.31	HTTP2/…	869	HEADERS[2253]: POST /nsmf-pdusession/v1/sm-contexts/2470003472/modify, DATA[22
300	12:16:…		16.0.0.16			
304	12:1…		16.0.0.16			

PDU session establishment accept (PDU session type IPv6 only allowed)

PDU session establishment accept

PDU session modification command

PDU session modification command

```
▼ QosFlowAddOrModifyRequestList: 1 item
  ▼ Item 0
    ▼ QosFlowAddOrModifyRequestItem
        qosFlowIdentifier: 1
      ▼ qosFlowLevelQosParameters
        ▼ qosCharacteristics: nonDynamic5QI (0)
          ▼ nonDynamic5QI
              fiveQI: 1
        ▼ allocationAndRetentionPriority
            priorityLevelARP: 13
            pre-emptionCapability: may-trigger-pre-emption (1)
            pre-emptionVulnerability: pre-emptable (1)
        ▼ gBR-QosInformation
            maximumFlowBitRateDL: 52000bits/s
            maximumFlowBitRateUL: 52000bits/s
            guaranteedFlowBitRateDL: 52000bits/s
            guaranteedFlowBitRateUL: 52000bits/s
```

5G SEAGUL CEF2 5G GR-BG CBC Project (2023-2025)

Thank You!

Keynote speech: Telcos: numbers, strategies, scenarios

Jean-Luc Lemmens

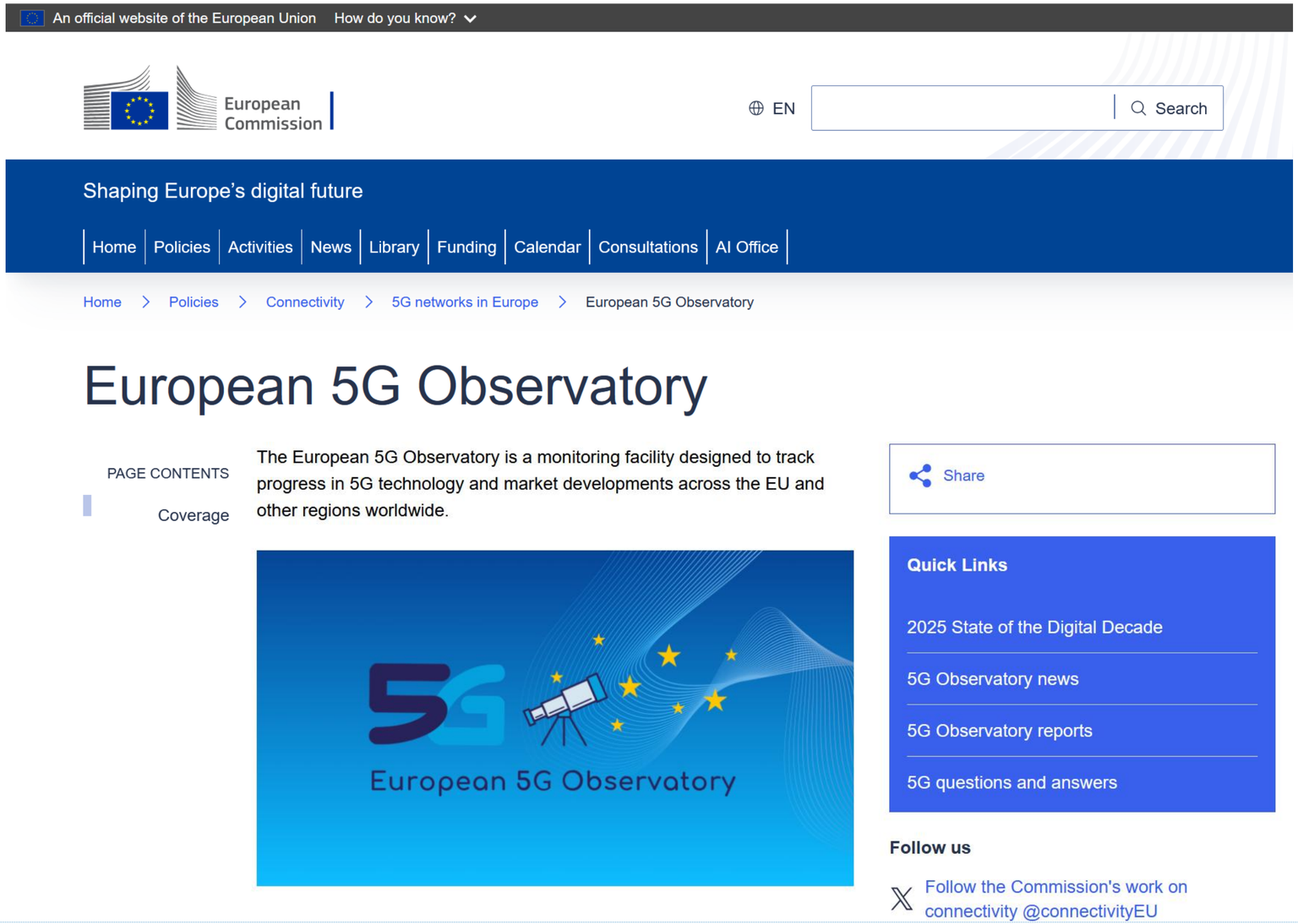
CEO, IDATE

5GSC
5G for Smart Communities

European Commission

The European 5G Observatory

The new European 5G Observatory is online !



Flash me to access the

European 5G Observatory

Objectives of the European 5G Observatory

The European 5G Observatory is a monitoring facility designed to track progress in 5G technology and market developments across the EU and other regions worldwide.

The 5G Observatory offers:

- **Comprehensive data**: the Observatory covers a wide range of metrics, from network coverage to market developments
- **Easy comparisons**: across countries and metrics, to help identify trends and gaps
- **Transparency**: the 5G Observatory's methodology will explain how the data is collected and processed

Moreover, the Observatory contributes to tracking advancements towards the Digital Decade's connectivity targets and comparing progress across countries. In time, 6G early developments will also be reported by the Observatory.

What countries are covered:

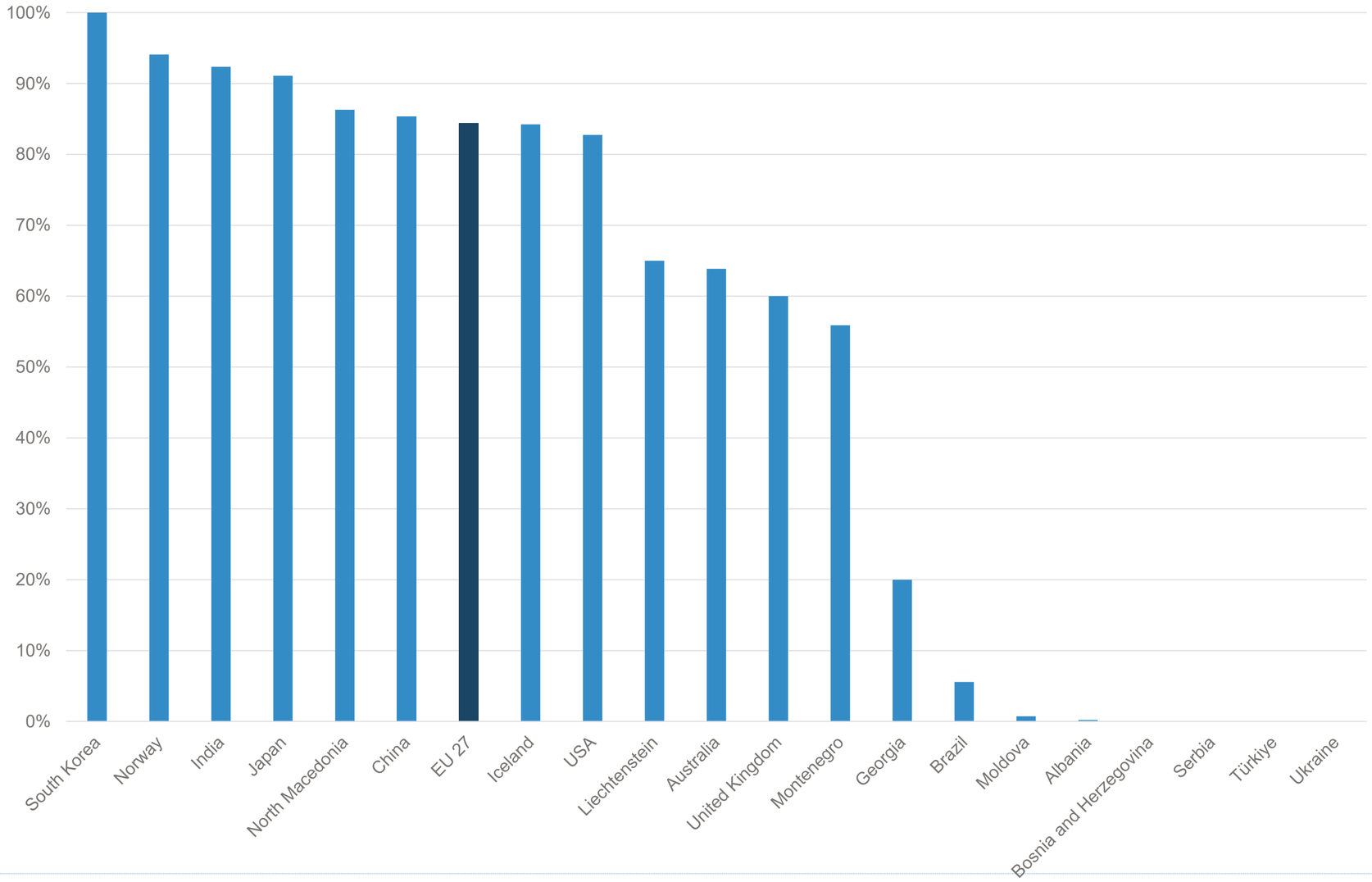
- **27 EU Member States**
- **20 additional non-EU countries**
  - 9 EU candidate countries (Albania, Bosnia and Herzegovina, Georgia, Moldova, Montenegro, North Macedonia, Serbia, Turkey, and Ukraine)
  - 4 EU non member states (Iceland, Liechtenstein, Norway and the UK)
  - 7 international comparison countries (Australia, Brazil, China, India, Japan, South Korea and the United States)

What information is available?

- **5G network coverage**
- **Deployment progress**
- **Quality of service and usage**
- **Spectrum allocation**
- **Infrastructure investment**
- **Market developments**
- **Policy developments**
- **5G verticals (**5G private networks, including its use in 5G)

The rollout of 5G in the EU is on par with the world's major economies

5G geographic coverage, %, Dec 24



- Internationally, the EU27 stands 7th out of the 21 international countries
- One place behind China
- 2 places in front of the USA

- South Korea has already reached country coverage in April 2024

- Close behind, India (92.3%), Japan (91.1%), and Norway (94.1%)

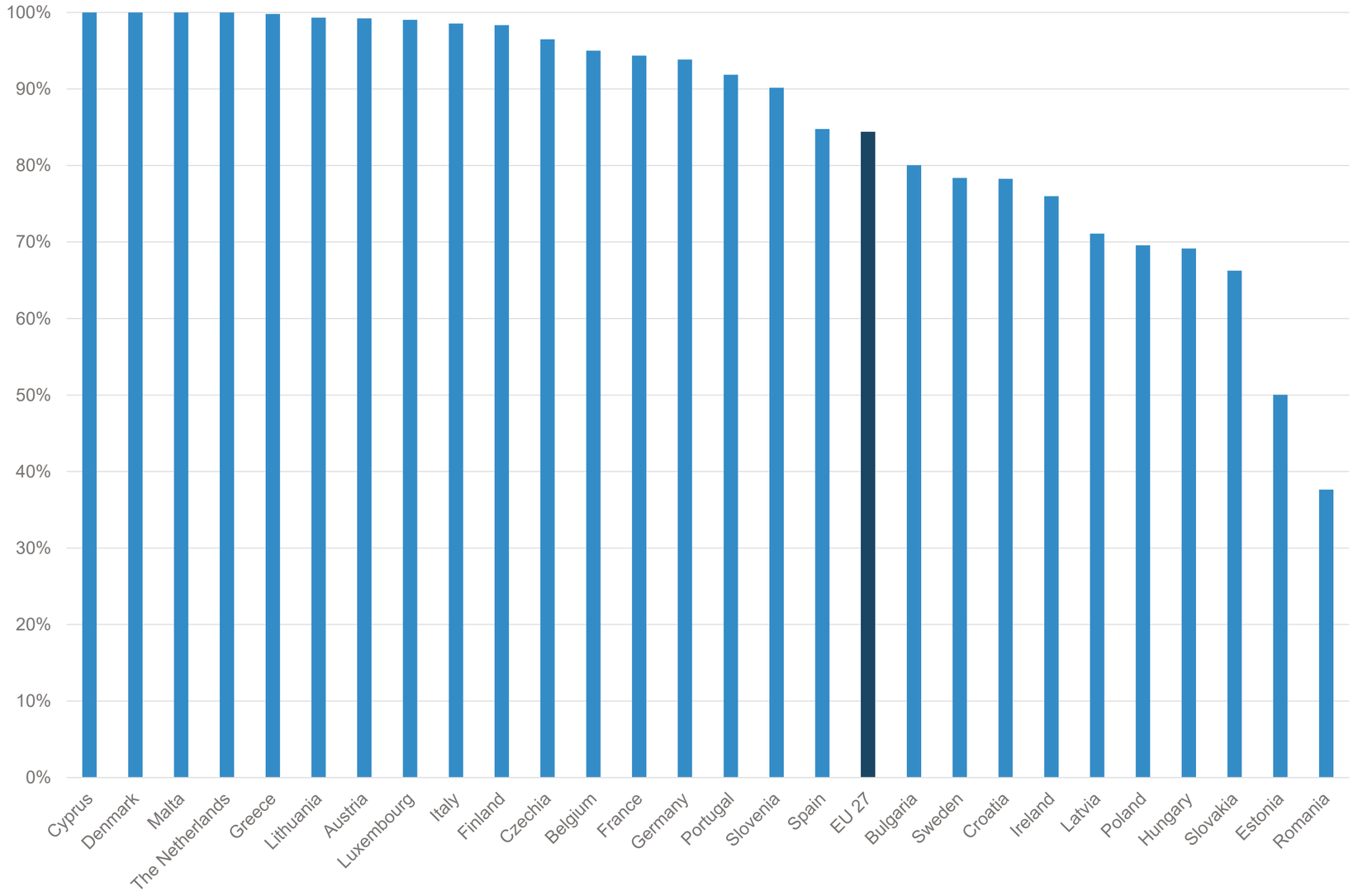
- Countries such as Australia (63.9%), the UK (60.0%), Liechtenstein (65.0%), and Montenegro (55.9%) are in a middle bracket.

- Albania (0.2%) – launched in September 2024 – Moldova (0.7%), Brazil (9.0%), and Georgia (20.0%) show minimal deployment.

- Bosnia Herzegovina, Serbia, Turkiyë and Ukraine had yet to launch 5G

5G geographic coverage in the EU27

5G geographic coverage, %, Dec 24



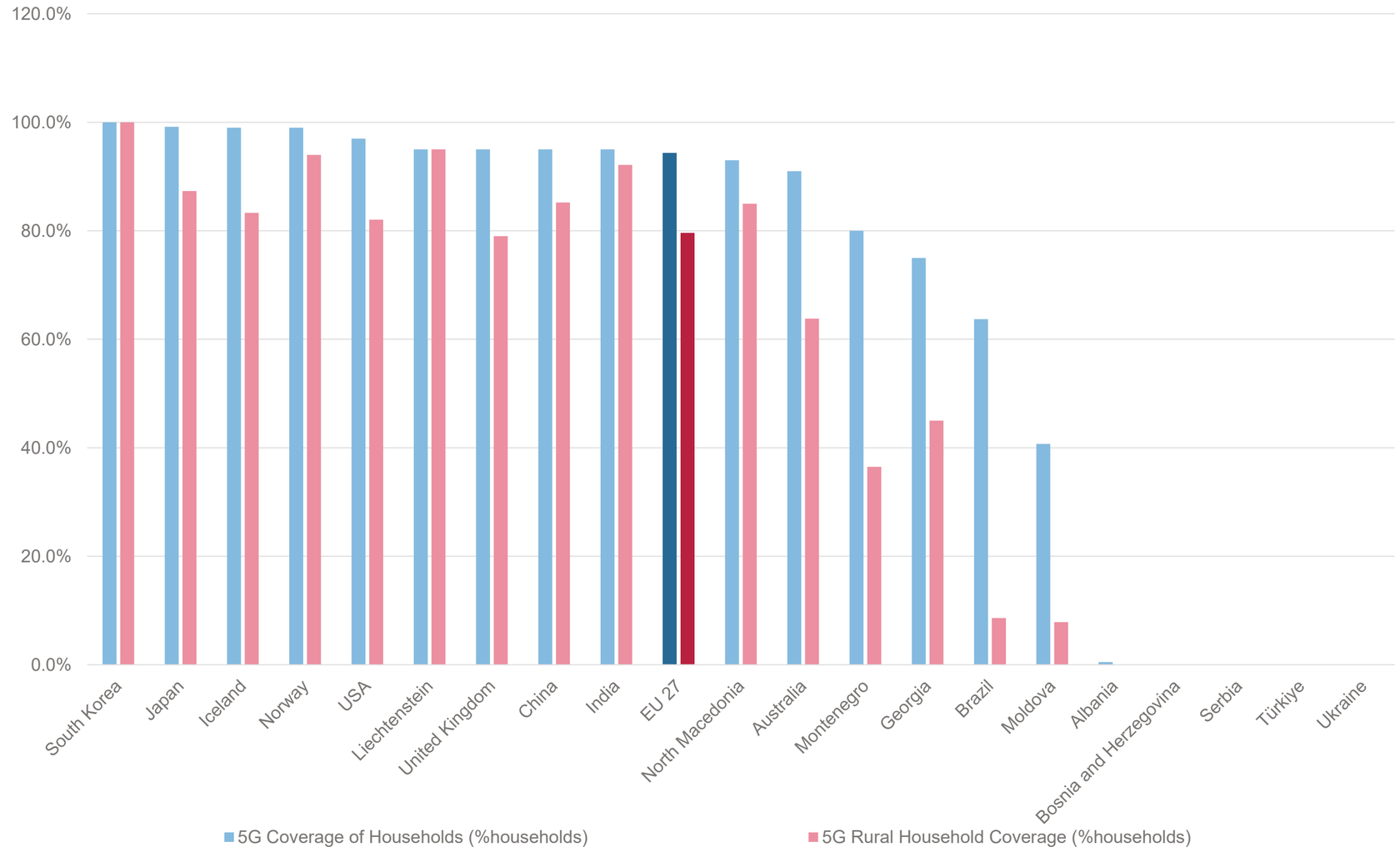
While the EU average of **84.4%** suggests strong overall progress, the gap between full coverage leaders and lagging countries is striking

- nearly **2/3rd** of the Union is close to saturation,
- a handful of states are still in the early stages of deployment.

This unevenness (with EU27 median coverage at **93,9%**) raises challenges for digital cohesion and competitiveness across the EU.

International comparison of 5G coverage of households vs rural coverage

5G household coverage, %, Dec 24



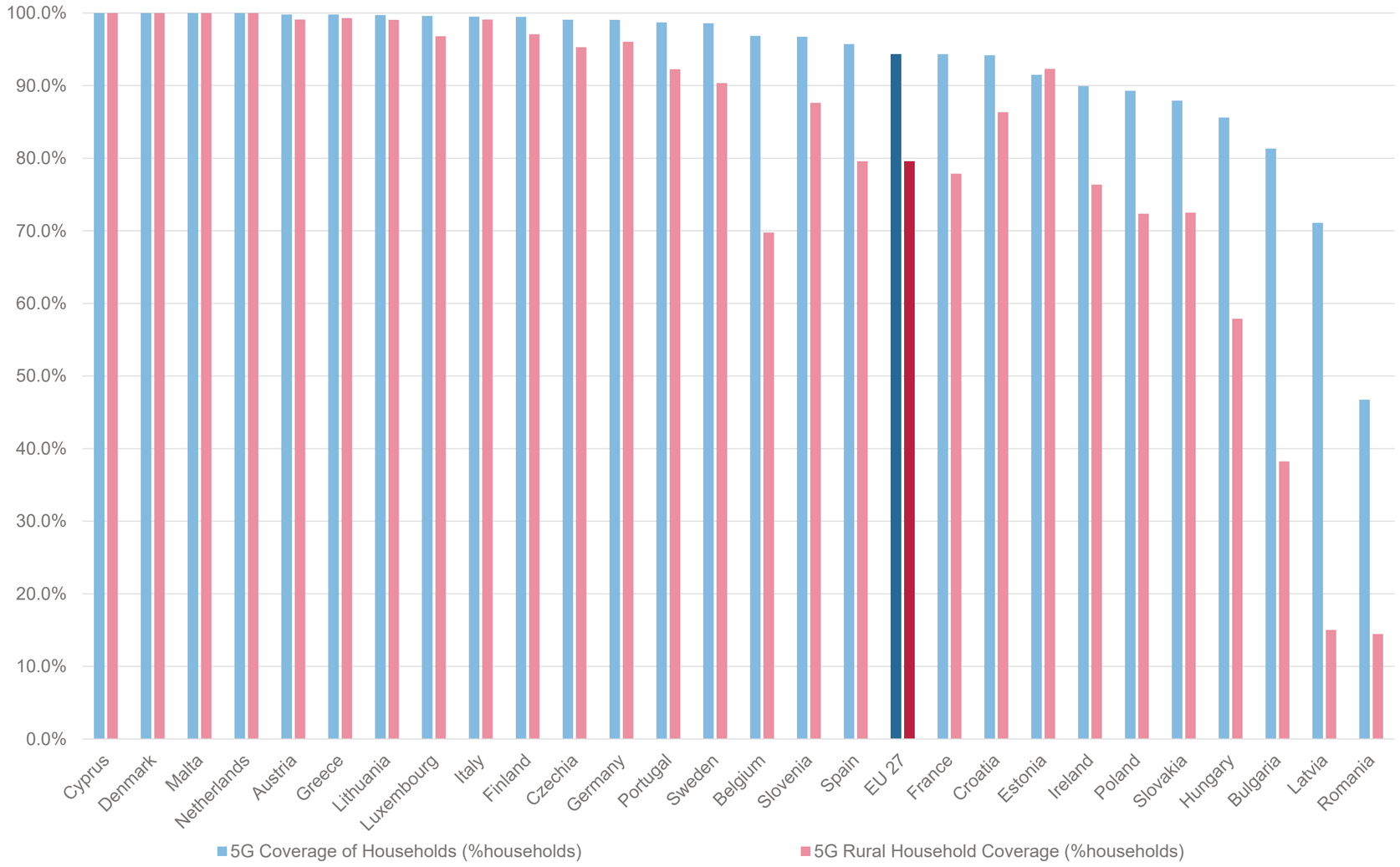
Europe's challenge is not urban households (where coverage is nearly universal) but **rural rollout**, which still falls short compared to the most advanced global peers.

- EU27 is globally competitive on household coverage (94.3%), close to China, the US, and India.
- Rural households are the weak spot: at 79.6%, the EU trails leaders like South Korea, Norway, and India, where rural coverage is above 90%.

The digital divide is widest outside the EU in countries like Brazil, Moldova, Montenegro, and much of the Western Balkans, where rural areas are barely connected.

Comparison of 5G coverage of households vs rural coverage (EU27)

5G household coverage, %, Dec 24



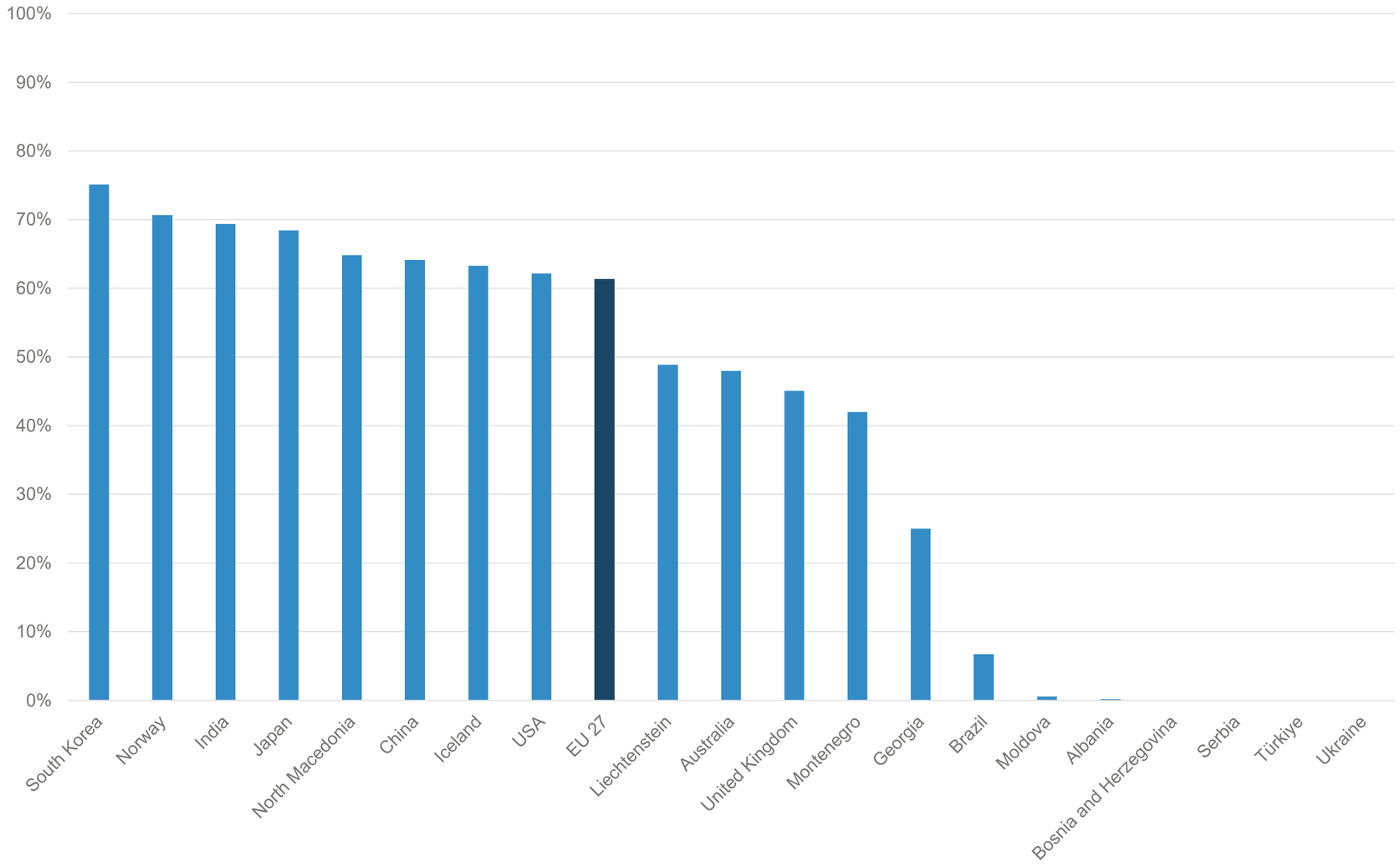
While the EU is approaching universal household coverage overall, rural households remain systematically disadvantaged.

The divide is small or non-existent in leading countries like Denmark, Cyprus, and the Netherlands, but significant in others such as Hungary, Bulgaria, Latvia, and Romania.

Bridging this rural gap is crucial if 5G is to serve as a foundation for inclusive digital transformation.

Indoor coverage: a pressing challenge (international comparison)

Dec 2024



The EU27 average (61.3%) places Europe in the middle of the global pack:

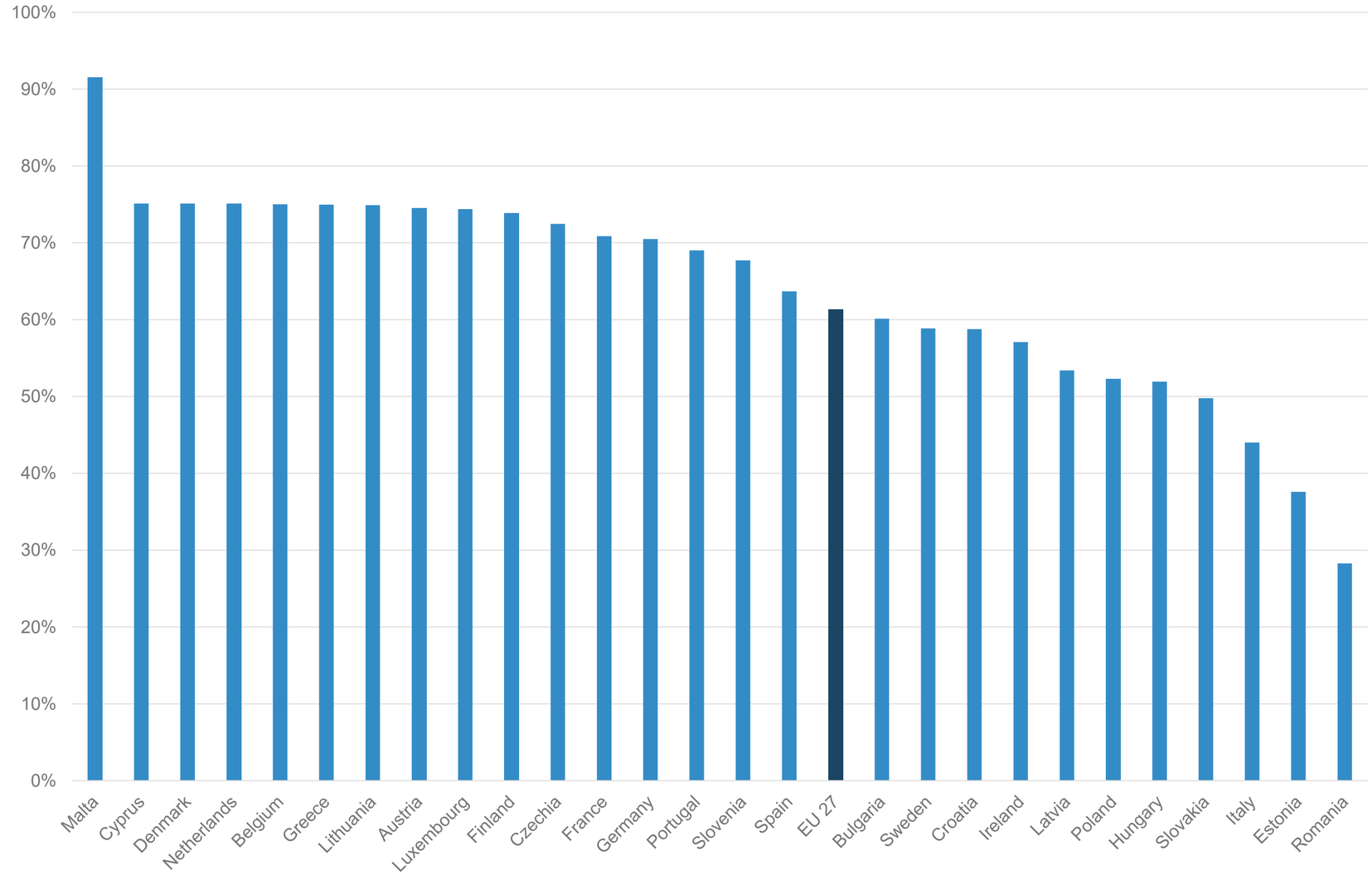
- behind Asia's leaders (South Korea, Japan, India, China) and Norway,
- but ahead of countries like the UK, Australia, and most of the Balkans.

The real global benchmark is Asia, where indoor coverage consistently exceeds 65%.

The EU's challenge is to narrow the gap with Asia's frontrunners while maintaining its advantage over regions where indoor coverage is still minimal.

Indoor coverage: a pressing challenge (EU27)

Dec 2024



The EU27 average (61.3%) highlights that indoor coverage is far weaker than household coverage (94.3%).

Small and compact countries (Malta, Cyprus, Denmark, Netherlands) outperform, since fewer base stations are needed to achieve full indoor reach.

Larger economies like Germany and France have pushed indoor coverage above average, but gaps persist in rural and older urban buildings.

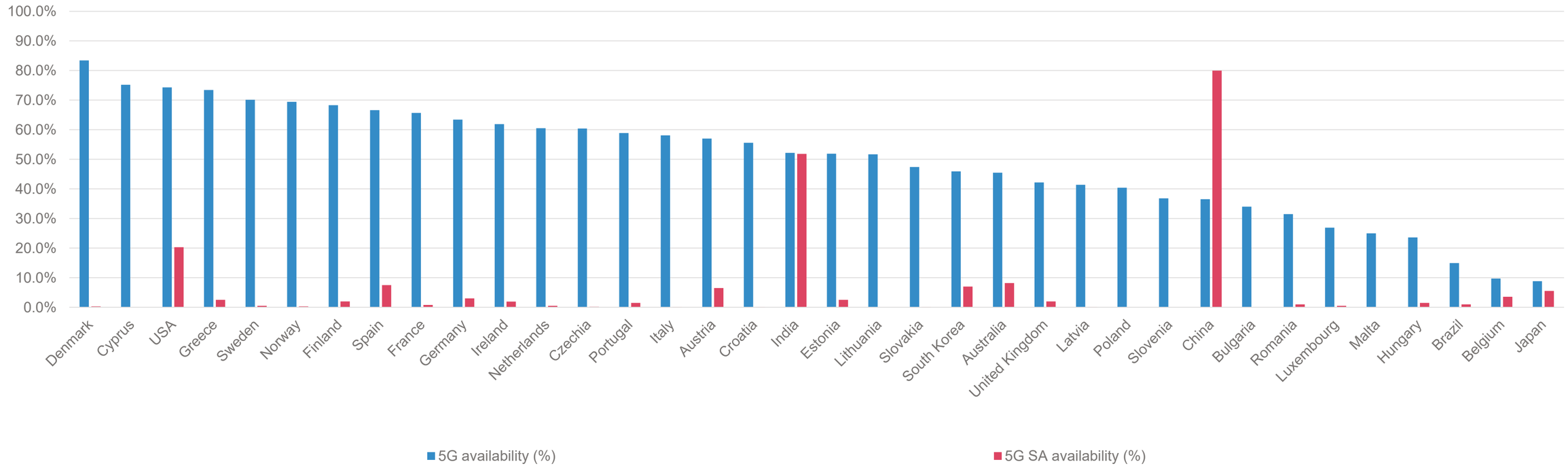
Eastern and Southeastern Europe lag far behind, with Romania, Estonia, and Slovakia showing how late rollout, lower investment capacity, and more challenging infrastructure environments hinder indoor penetration.

Moving to the demand-side: 5G NSA and SA availability

Dec 2024

Europe has achieved widespread 5G coverage on NSA, but is lagging heavily in SA rollout, which is where advanced features (low latency, slicing, enterprise use cases) become possible.

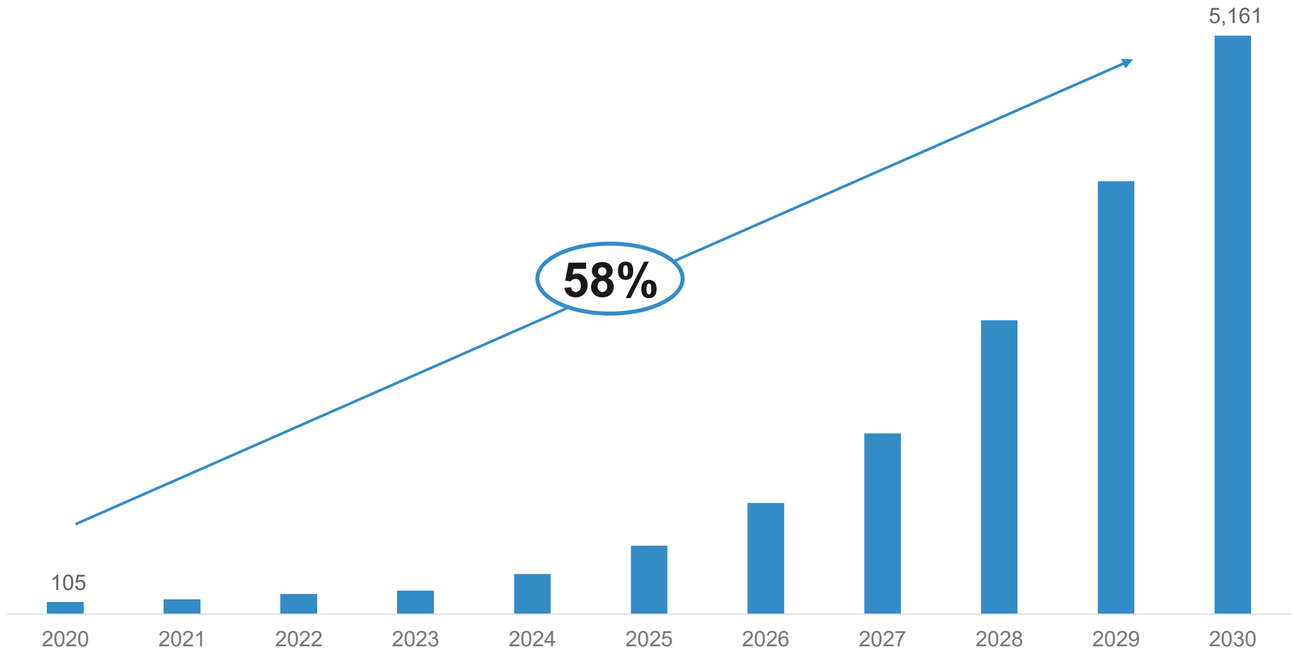
Compared internationally, the EU is mid-table on total 5G coverage but near the bottom on SA. The US, China, and India have pulled ahead, and even smaller economies like Australia are ahead in SA adoption.



Availability is how often users are really on 5G (NSA or SA). Sources come from Ookla reports or from an estimate based on OpenSignal reports

Revenue from private 5G networks* in Europe is expected to increase by 58% annually.

Market for private 5G networks in Europe (*including non-EU countries*) *MEUR*

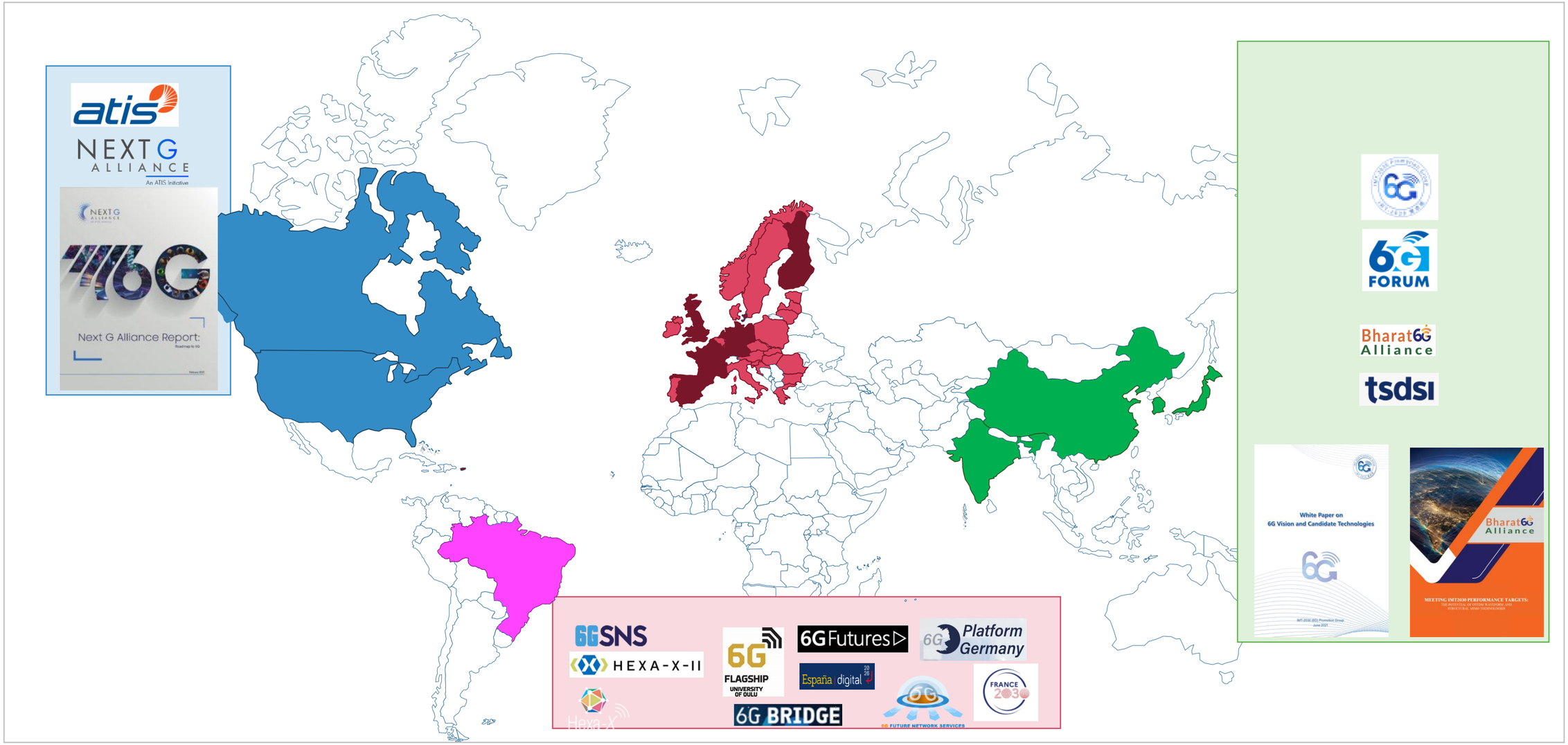


Currently, ~200 private 5G networks are deployed in the EU.

Source: IDATE, *Private 5G in Europe*

** only network-related revenues (core network, RAN, connection and transport)*

The battle to influence 6G standards is on



Source: IDATE, *World 5G markets and 6G emergence*, September 2025

THANK YOU

European 5G Observatory |
Shaping Europe's digital future

GROWING EUROPE'S DIGITAL CONNECTIVITY ECOSYSTEM: LEADERSHIP, INNOVATION, AND GLOBAL COMPETITIVENESS

Panel discussion

5GSC
5G for Smart Communities

European Commission

PANEL DISCUSSION: GROWING EUROPE'S DIGITAL CONNECTIVITY ECOSYSTEM: LEADERSHIP, INNOVATION, AND GLOBAL COMPETITIVENESS

1

Pascal Rogard

HEAD OF BRUSSELS OFFICE, ORANGE

2

Letizia Susta

HEAD OF BRUSSELS OFFICE, CELLNEX

3

Edwin Fischer

·WG CO-CHAIR & CO-LEAD TASKFORCE EUROPEAN STRATEGIC DEPLOYMENT AGENDA 5G FOR CAM, TECHNOLOGY STRATEGIC ENABLERS, 6G-SNS JU 5G FOR CAM DEPLOYMENT

4

Pinar Serdengecti

REGULATION AND COMPETITION AFFAIRS DIRECTOR, ECTA

5

Aurélie Bladocha Coelho

HEAD OF EU AFFAIRS AND FUNDING, VANTAGE TOWERS

MODERATOR

Maarit Palovirta

DEPUTY DIRECTOR GENERAL, CONNECT EUROPE

5GSC
5G for Smart Communities

European Commission

Presentation and discussion
Scaling up for 2030: accelerating adoption of 5G, 6G and beyond

Christophe Bodin

Director, CBO Consulting

5GSC
5G for Smart Communities

European Commission

5G Use Cases in the future MFF programme

Discussion on potential funding support mechanisms

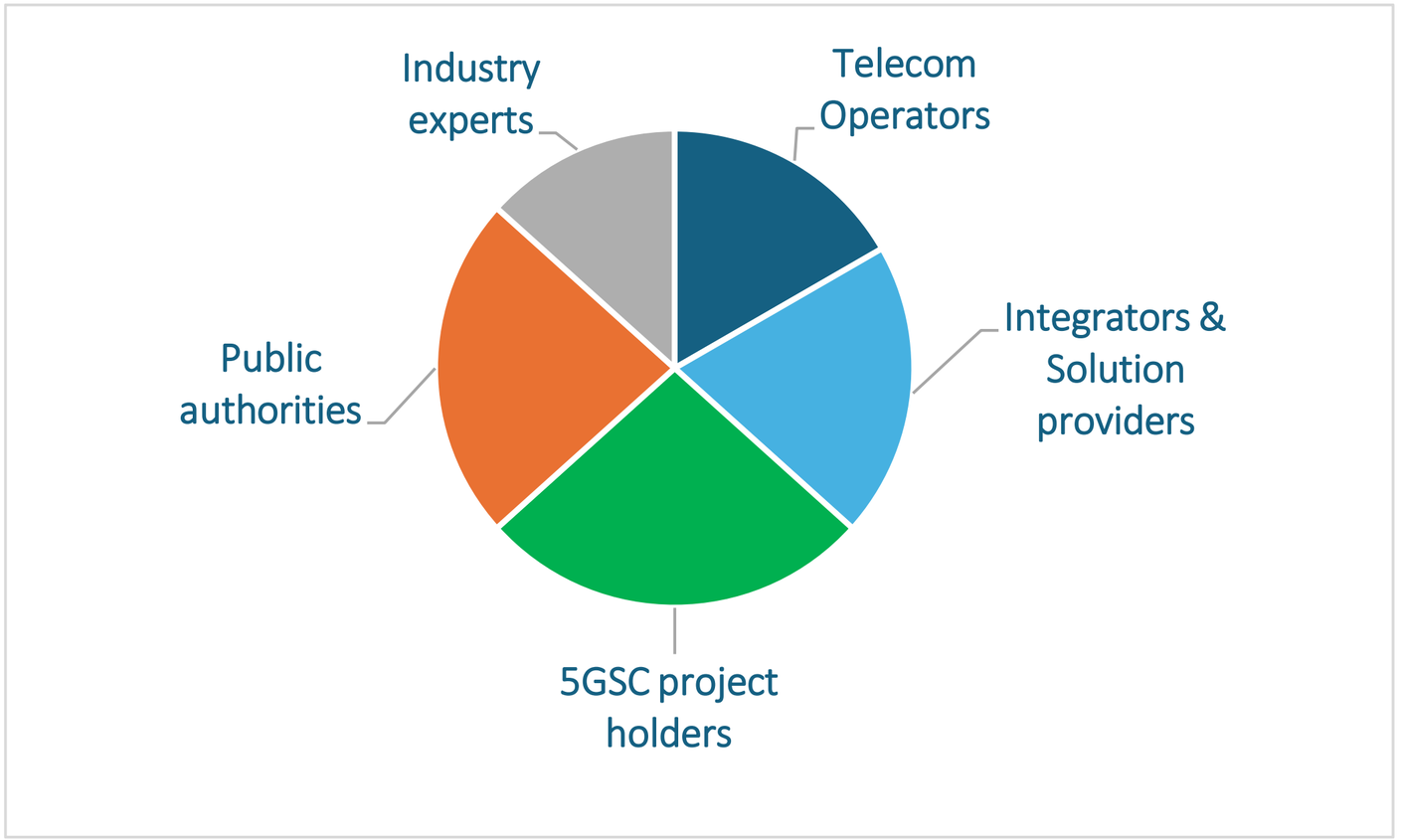
Study for *5G for Smart Communities*

Christophe Bodin – October 8th, 2025

CBO Consulting

With the support of SCHUMAN ASSOCIATES IDATE

Close to 30 interviews have been conducted in Q2 2025



Three major forces are stimulating demand in network infrastructures for 5G use cases

Development push from private 5G networks:

- The awareness level and the demand for private networks has **started to take-off** in Europe.
- Although volumes are still low and many networks are at an **experimental stage.**
- In Germany (most advanced market), **the trend is flattening**, and expected volumes were not reached.
- Telcos are now **preempting** some (large) cases.

MNOs' gradual shift towards 5G SA:

- The **high cost** for upgrading the network has for now prevented a rapid move towards 5GSA.
- Until now, 5G has been used for increasing throughput (NSA) but **not really for innovation.**
- MNOs have developed a **large range of offering** (Wi-Fi, 4G, 5G NSA, 5G SA,..) and propose a hybrid mode.
- 2024-25 **marks the start for SA** in many MS.

Introduction of 5G neutral networks:

- **Early-stage initiatives** have been developed in Rome (Smart Cities), Portugal and Slovenia (Smart Territories)
- Although, the trend is limited and is facing obstacles. MNOs are **reluctant to neutral networks run by 3rd parties**.

5G use case market development is still at its infancy, due to typical ‘early-stage’ barriers

A low level of demand:

- Market awareness as been **limited to large corporations** that could leverage expertise and innovation management
- The **low involvement of MNOs** as hindered market uptake. New entrants have not always managed to convince.
- In some cases, prospects have faced **budget constraints** that have delayed decisions**.**

Fragile operational demonstrations:

- Lack of available platforms, due to **delays in software releases** have jeopardized some demonstrations.
- **Legacy technologies** (LTE, Wi-Fi and LoRA) are resisting, considered as ‘good enough for now’
- 5G SA devices are often **unavailable or expensive** compared to “off-the-shelf” products of legacy technologies.

Uncertainties on the future regulation framework

- **Spectrum availability and affordable prices** are critical for unlocking demand: It is not full defined nor harmonized.
- Development of private networks and shared networks / neutral hosting require **guidance on markets & competition**.
- Development and promotion of **5G open platforms** could stimulate competition and increase ‘value for money’.

At mid-2025, some positive market drivers have emerged

The market has gained awareness:

- There is a **significant involvement of industrial companies**.
- It is **gradually increasing** in SMEs and public bodies**.**

5G expertise has spread across the market:

- **Numerous pilots** developed across the EU (42 through 5GSC but also through national programmes)
- A degree of **'proof of value'** has been sometimes established (e.g. productivity gains of ar. 15%).

Private networks with 'network as a service' pricing have introduced affordable solutions:

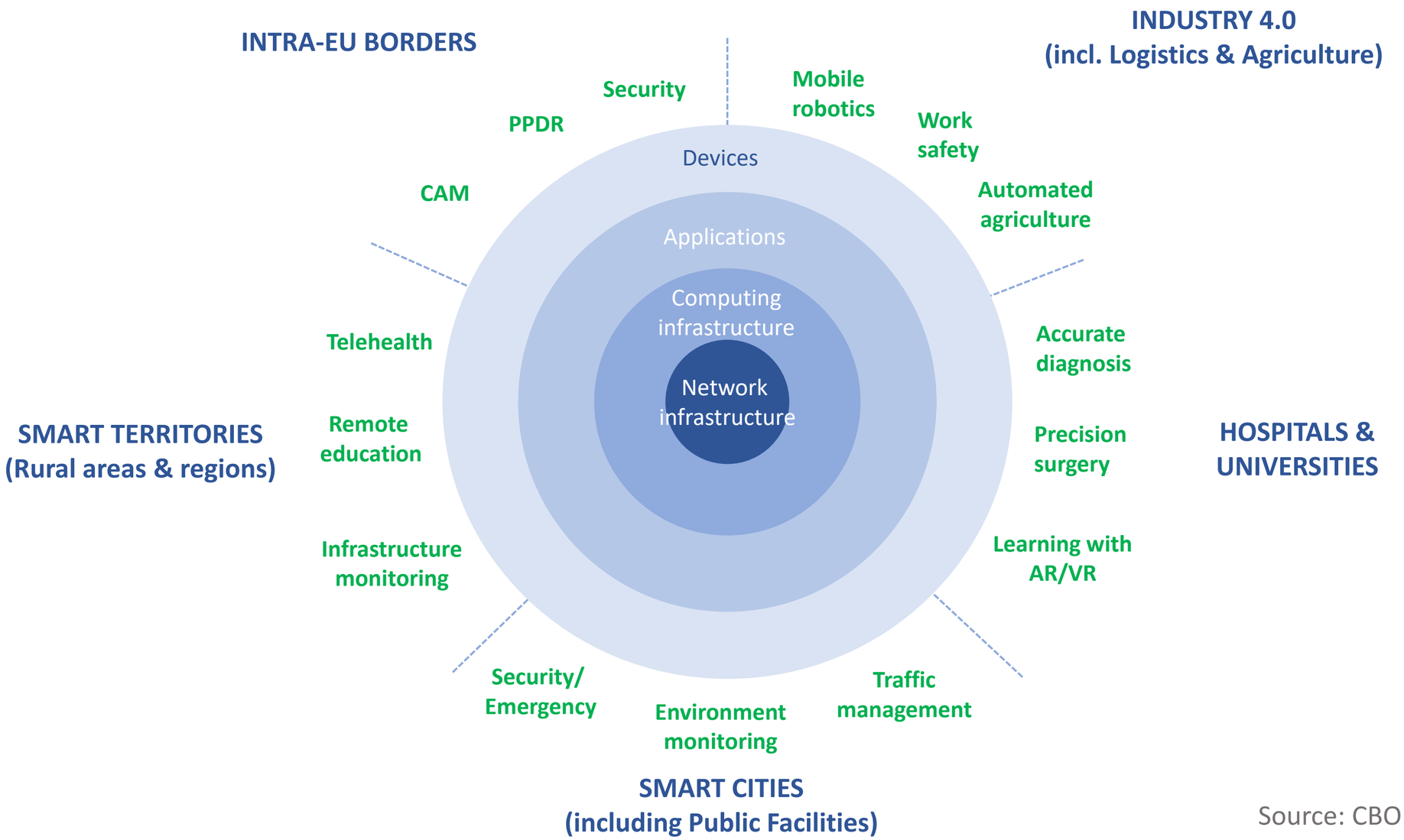
- Total Cost of Ownership (CAPEX + OPEX) starts at **€ 50k over 3 years**.
- Average investment in a 5G network is **around € 300k**.

New drivers will contribute to creating positive market momentum:

- **MNO's recent entry** will boost market awareness.
- Clarifications regarding **5G spectrum regulation** could be a reassurance factor.

As a sign, the latest 5G SC CEF call (Feb. 2025) received a **250% oversubscription**

The infrastructure is the core … but only applications & devices demonstrate the value



Source: CBO Consulting

Industry 4.0 (including Logistics and Agriculture)

5G as a support to more competitive and resilient European industries and agriculture

Market Status

Drivers

- A better understanding & knowledge about 5G but **development is very slow**. Hype is now on AI.
- Killer apps are **mission critical, in-door/out-door applications and flexible mobile robotics** (incl. drones). For the rest, for now, Wi-Fi is enough.
- Current industrial use cases have demonstrated **productivity gains of 15% and RoI under 2 years**.

Barriers

- Still **a very low level of awareness** (notably industrial SMEs) on 5G value potential
- Many companies (except the ones with IT teams) have **a low level of technological expertise**.
- 5G proof-of-value is still not clear (to be fine-tuned).
- SA devices are **unavailable or costly** (vs Wi-Fi/LoRa)
- **Spectrum uncertainty** is an obstacle to investment.

Recommendations

EU policy

- The topic should be **“Industry digitisation”** and globally address 5G & 6G + Edge + AI + Cybersecurity.
- Disclosing **6G could delay & impede 5G adoption**. 5G should be presented as a starting point for 6G.
- There is an urgent need for **a large wake-up call to SMEs** on a fast and large “industry digitisation”.
- Spectrum policy should be **clearly defined and harmonized** across the EU.

Universities & Hospitals

5G as a support to more efficient and quality-driven healthcare and education in the EU

Market Status

Drivers

- For healthcare, **a strong trend in the US** with dozens of pilots. In the EU, a growing interest but coming from medical doctors, not from the administration.
- **Efficiency improvement** has been demonstrated in US which strongly drives adoption there.
- **Cybersecurity** is a strong driver for EU hospitals.
- Universities have often **available 5G frequency bands** (for research purpose) or partner with MNOs.

Barriers

- Demand is still emerging and the awareness on 5G value potential is limited to **“use case innovators”.**
- Hospitals (and Universities) **lack the necessary technological expertise** to implement and run 5G.
- The proof-of-value is still questioned by stakeholders
- 5GSA devices are **unavailable or costly** (vs Wi-Fi)
- Limited budget availability and spectrum uncertainty are **obstacles to investment**.

Recommendations

EU policy

- The topic should be approached at National & EU level with plans on **“Hospitals / Education of the future”.**
- There is a need for a large EU sharing on **best practices** in healthcare (and possibly in education).
- **EU start-ups** providing healthcare applications & devices (robots, AR/VR,…) should be better supported.

Smart Cities

5G as a support to more livable, sustainable and efficient European cities

Market Status

Drivers

- Still very experimental at this stage. Even in the most advanced smart city cases, **no full-scale model**.
- Major app for now is **infrastructure** (gas, power, water, waste,…) **and environment monitoring (IoT)**.
- Killer app expectations are on Urban Mobility (**traffic management and autonomous transportation).**
- MNOs are **well placed** for the implementation through slicing but deployments have been delayed.
- **Neutral hosting** is an opportunity for accelerating.

Barriers

- Despite interest from municipalities, decision-making processes are **political and can face rejection** of 5G.
- Governance is run with multiple stakeholders which make it **more complex in practice**.
- Municipalities **lack the necessary technological expertise** to implement and run 5G.
- Urban mobility is still at **a very experimental stage**.
- Besides the Boldyn Roma case, there are **no clear neutral hosting/network sharing models** in place.

Recommendations

EU policy

- The topic should be best approached through **“Urban Mobility”** where 5G can be fully disruptive.
- There is a need for a large sharing of Smart Cities **best practices**, including neutral hosting/network sharing.
- **EU start-ups** with smart city applications & devices (autonomous vehicles, AR/VR,…) should be better supported.

Smart Territories (Rural Areas & Regions)

5G as a support to more attractive, cohesive and efficient European rural areas

Market Status

Drivers

- Because of densification, MNOs **will have to invest heavily in rural areas** but without real demand.
- For economic reasons, they would have **an interest in mutualising networks** to reduce deployment cost.
- Some initiatives (Portugal, Slovenia, France, Spain,…) have emerged of Private network or Neutral Hosting.
- Demand is limited but **5G networks could be a trigger** for the development of Smart Agri/Forestry, e-health and infra/environment monitoring**.**

Barriers

- MNOs are **reluctant from neutral hosting**, as they are run by third parties. They prefer network sharing.
- Regions and Governments are **not aware of the issue** and are not pushing yet towards mutualization.
- For private networks, a key issue is **in the acceptance of MNOs to interconnect** to avoid any local isolation.
- Funding **will be required** to help an acceleration in the 5G coverage of rural/remote areas.
- As for now, **no clear investment model** has emerged

Recommendations

EU policy

- The topic could be approached under **“Rural 5G mutualized capabilities”** where 5G connectivity is central.
- There is a need for **building awareness** and a large sharing of **innovative cases** for smart territories in the EU.
- A good 5G coverage in rural areas would be **an opportunity to leverage EU start-ups** (smart agri, e-health…).

Intra-EU borders

5G as a support to a seamless Europe and to more secure borders

Market Status

Drivers

- Some 5G use cases **should not be stopped at a land border**: Defense/PPDR, Corridors and Autonomous driving, Maritime telecommunication (future 6G), …
- There are **no initiatives for now**, except for corridors (25 projects funded and investment models tested).
- An interest could come first regarding **Security and Defense (EU borders management)**, but there could an opportunity later for local industries and agriculture & forestry.

Barriers

- **Coordination** between Member States on radio spectrum regarding cross-border topics is requested.
- In these fields, stakeholders are typically national administrative bodies **having authority on their own territory**, even if coordination at EU level exists.
- Projects could involve many stakeholders and may **require 3rd parties** to operate the whole use case.
- Some **high-level political coordination** at European level may be required to monitor these projects

Recommendations

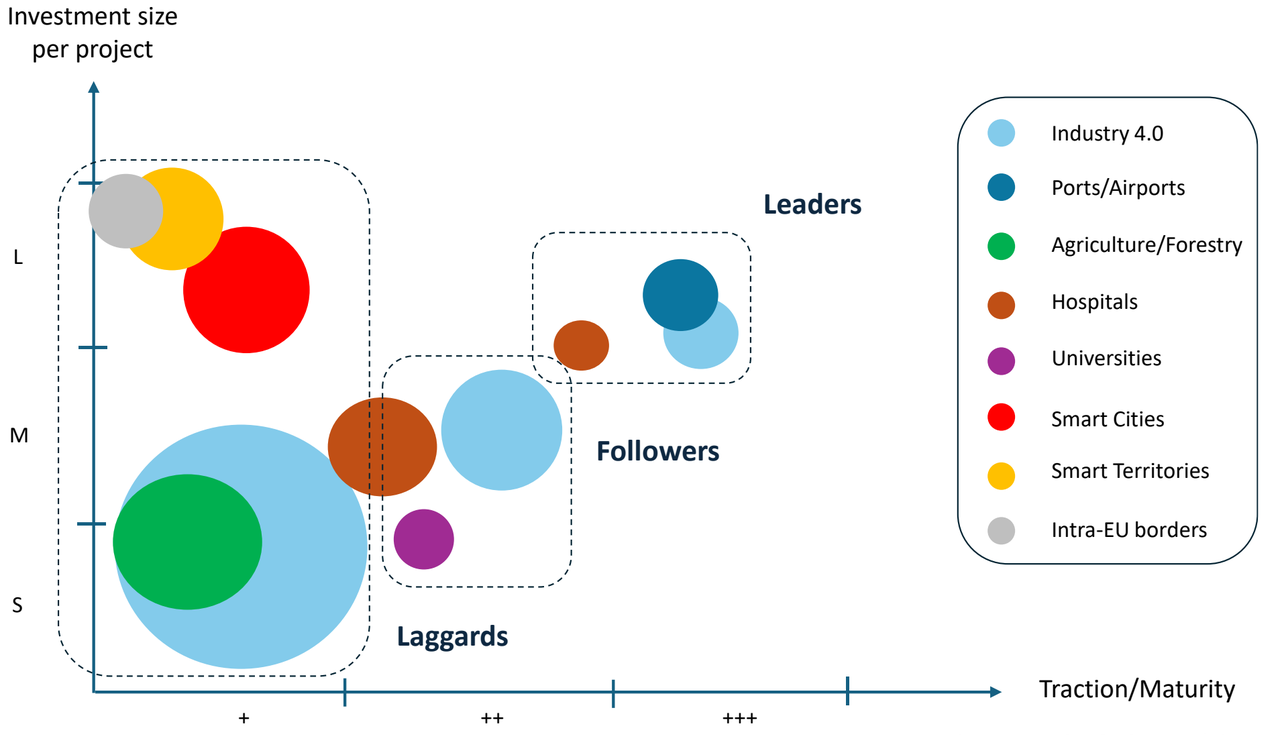
EU policy

- The topic could be approached under **“5G seamless Europe”** where 5G across borders would be central.
- There is a need for **building awareness** and developing opportunities of project collaboration/coordination.
- It would make sense to **leverage available results from 5G corridors pilots** for other use cases, set on larger areas.
- It would also require **coordination at EU level** amongst regulators and amongst use case stakeholders.

Regarding network & edge infrastructures, the EU investment need could be significant

	Industry 4.0 (incl. logistics & agriculture)			Universities / Public Research Institutes & Hospitals		Smart Cities	Smart Territories	Intra-EU borders	
	Manufacturing & Logistics	Agriculture & Forestry	Ports/Airports	Hospitals / Clinics	Universities / Public Research	Smart Cities	Smart Territories	Mission-critical & security	Transport corridors
Potential EU cases	~2m (SMEs except micros)	~3m (more than 5 ha)	~300 (ports) ~300 (airports)	~10,000 (large hospitals)	~500 (universities)	~800 (50,000+ inh.)	n.a.	n.a.	>25

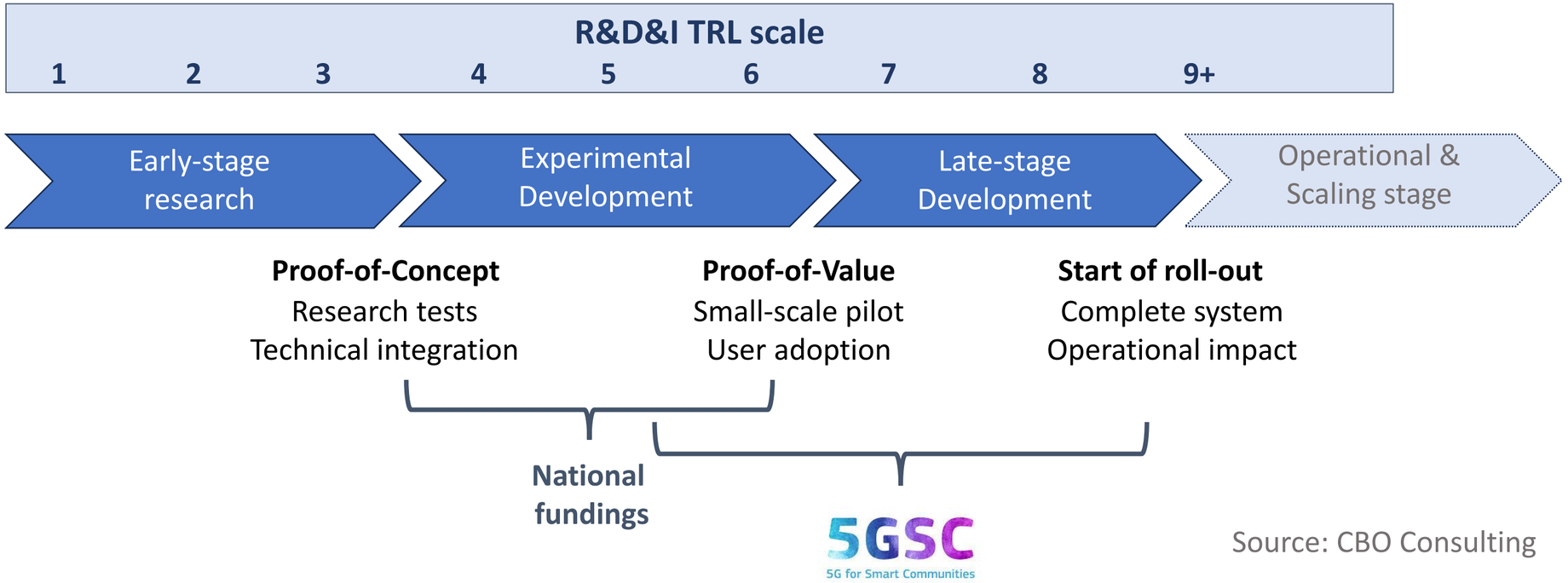
Source: CBO Consulting



Source: CBO Consulting

- Besides large cases, the average investment for 3C infrastructure could range from **around 50,000 to a few million Euros**
- In total, we could evaluate the investment need at EU level to be in the magnitude of **hundreds of billion of Euros**.

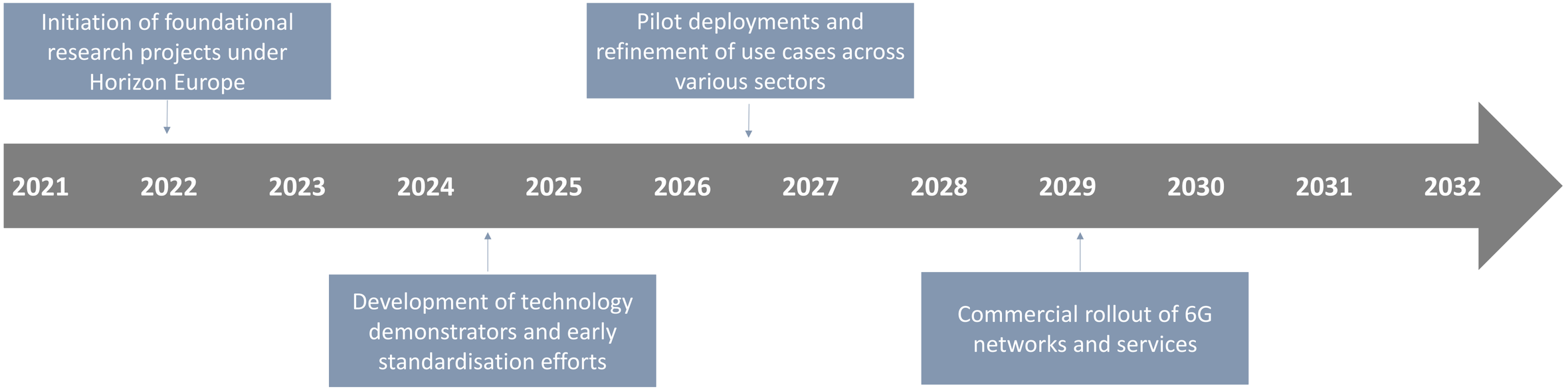
For now, the implementation of 5G SA use cases is mostly at a TRL 6-7 stage, not more



Source: CBO Consulting

- While the 3C infrastructure can be considered at TRL 8-9 stage, the limited number of fully-fledge scalable applications and the lack and high price of 5GSA consumer/industrial-grade devices makes **current 5G SA use case development at a TRL 6-7 stage**.
- In the last years, most national funding programmes have focused on **TRL 4-6 ("Experimental Development")** under GBER section 8.
- Horizon Europe has also supported the testing of 5G use cases (vertical industries, smart cities, …), usually under TRL 6 stage.

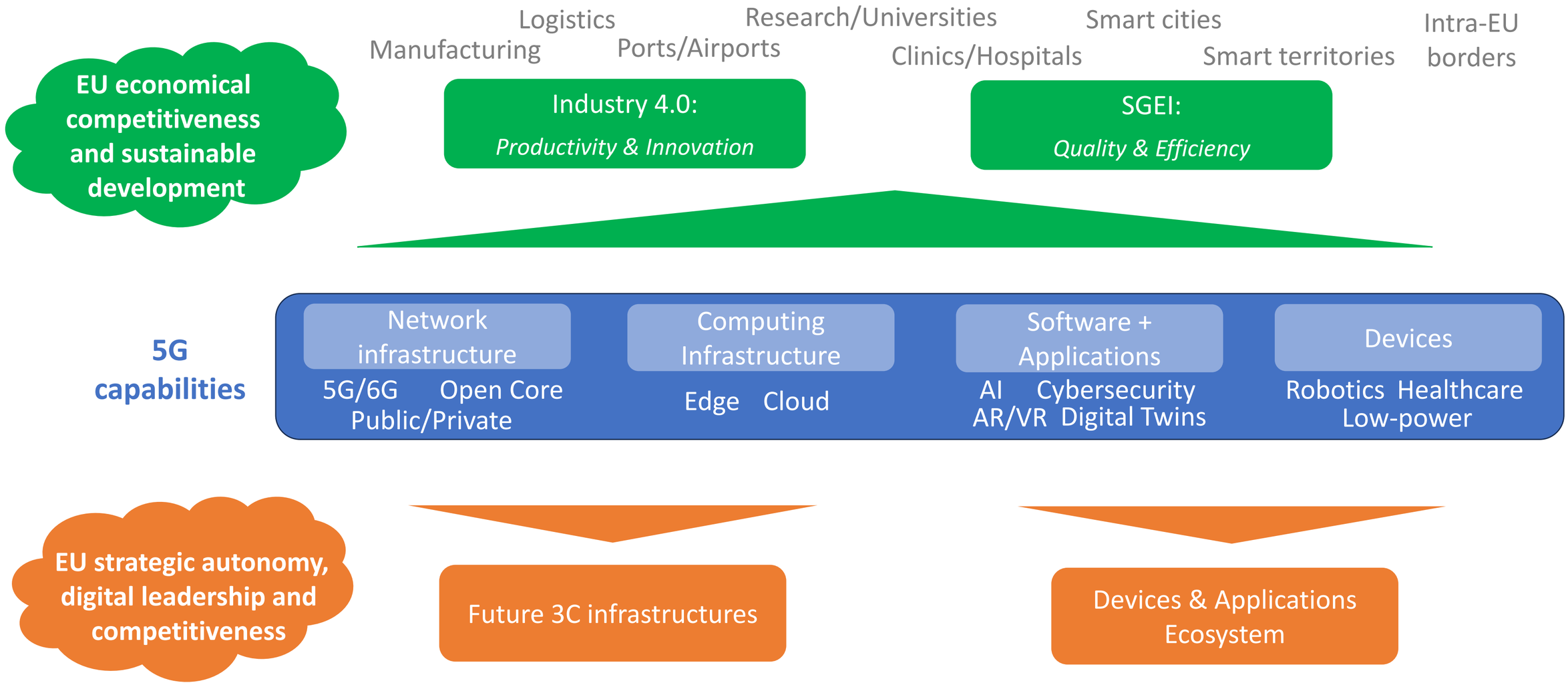
Beyond 5G, 6G is around the corner and should now be anticipated for 2030



Source: IDATE

- 6G is considered in **continuity with 5G** (‘5G and beyond’) as the technology disruption is more between 4G and 5G
- We could expect **more powerful features** and **strategic impacts** notably for enterprises
- A slower 5G adoption would **result in investment delays in 6G** and would then slow down 6G adoption
- 6GSNS is supporting 5G development (towards 6G) but focusing on technological development (test beds at small & large scale)

The development of 5G capabilities could have a double-side critical impact for the EU



Source: CBO Consulting

Future funding support mechanisms for 5G Use Cases

Building up a “5G and beyond” EU ecosystem under the ECF umbrella in the next MFF

EUROPE'S BUDGET THE POWER OF TOGETHER

Objectives / Thematic pillars

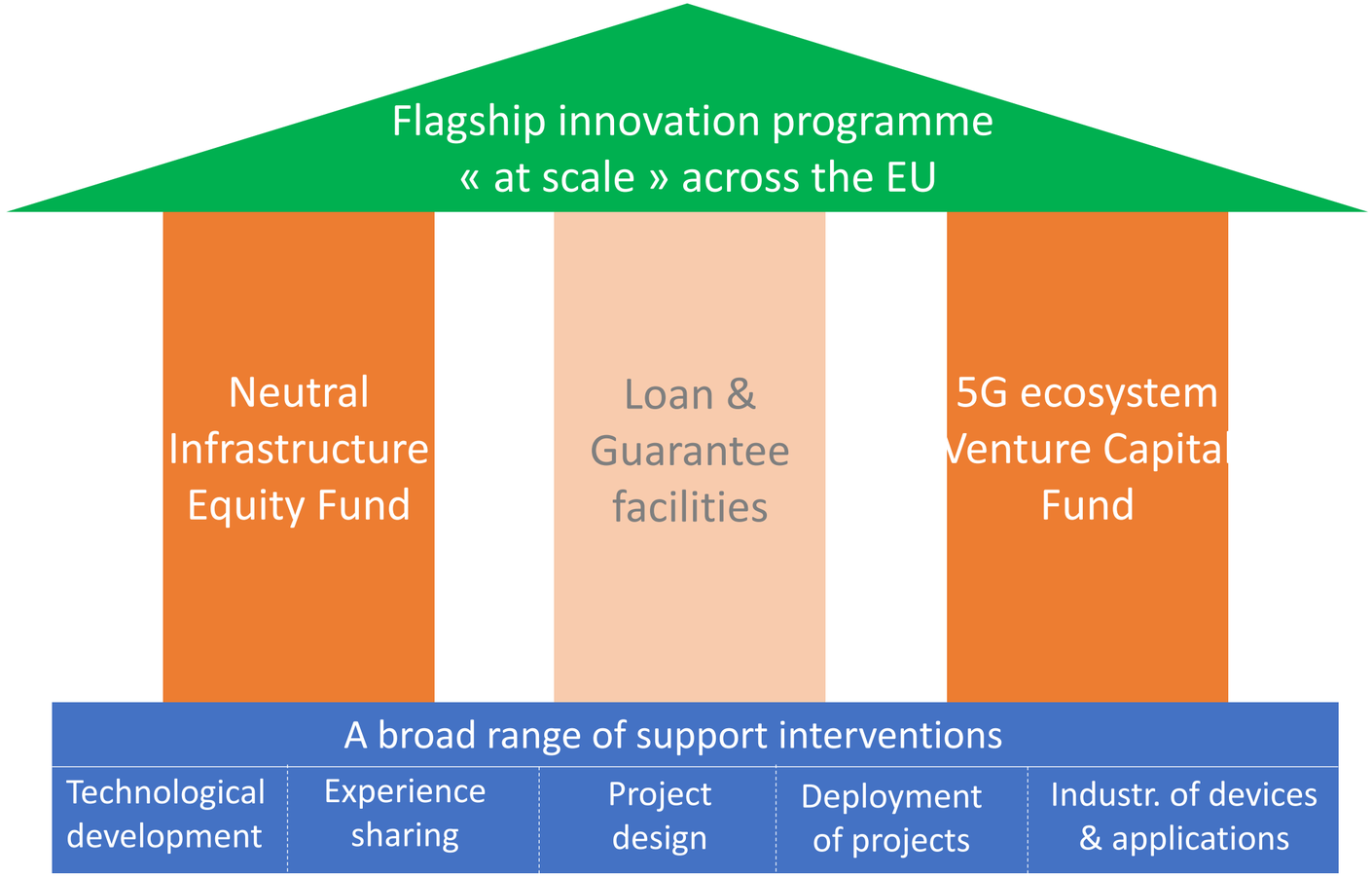
To setup and develop **large 5G sectorial blueprints** to serve as references at EU level

To foster the development of **key strategic capabilities:** neutral infrastructures + 5G ecosystem

To trigger **the proliferation of 5G projects,** devices and applications across the EU

EU Budget under the European Competitiveness Fund

“5G as a key enabler for EU industrial & societal transformation”



Source: CBO Consulting

A set of interventions could trigger project multiplication and expansion

Short Term EU impact

Long Term EU impact

Technological development 5G and beyond

'R&D project type' funding with technological pilots at small & large scale

Experience sharing & Practice harmonization

Budget for awareness building (CSA type):

- European events
- Capacity building
- Industry groups

Project design & implementation

Cascade funding with vouchers for service provision from 3rd parties (e.g., consultants & integrators)

Deployment and scale-up of projects

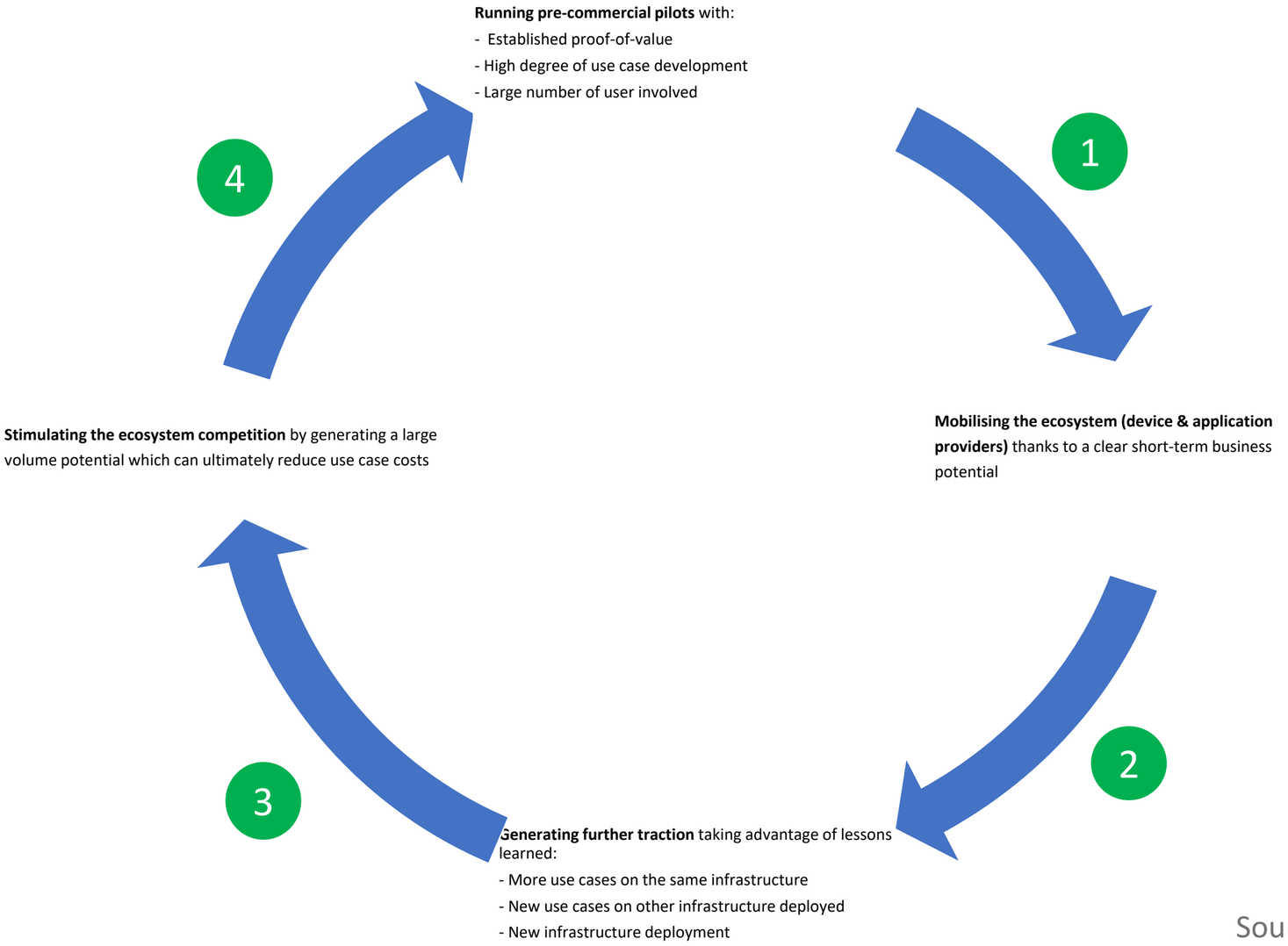
- Vouchers: SMEs
- Small grants: Industry, Hospitals, Universities, Smart Cities
- Large grants when market gaps (e.g., rural areas & intra-EU borders)

Industrialization of devices & applications

- Small grants for short projects on fine-tuning and fast industrialization of market-ready solutions
- The grant should support device + application + technical development/ testing + integration /training (at TRL 7-8).

Source: CBO Consulting

A flagship programme should target large pre-commercial use cases (TRL7-8)



Source: CBO Consulting

An EU innovation programme could scale and develop 5G use case synergies

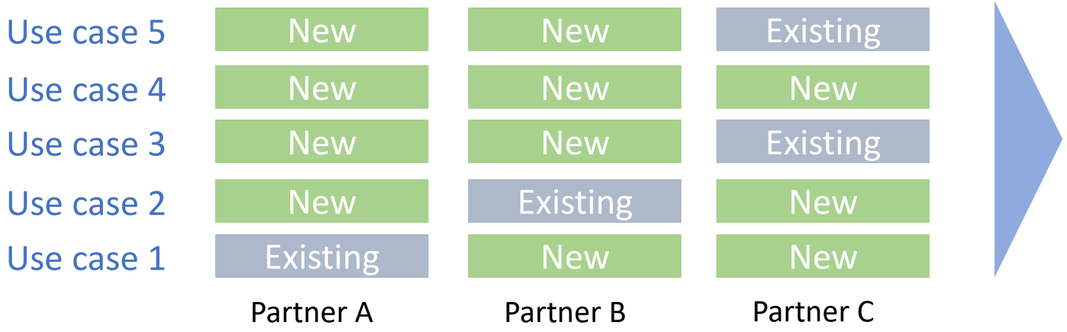
Programme profile:

- At least 3 partners in 3 member states
- A minimum of 5 common use cases
- A large number of users (with a threshold to be defined per use case)
- Topics: Manufacturing & Logistics, Agriculture, Ports, Airports, Hospitals, Universities, Smart Cities, Smart Territories, Borders (Corridors are excluded)
- With clear complementarity/synergy (either same approach and/or in continuity)
- Involving at least 2 EU SMEs as providers for use cases (device, software, …)

Project design:

Potential grant: 10-20 m Euros (infrastructure + devices + software + implementation)
Maximum duration: 2 years

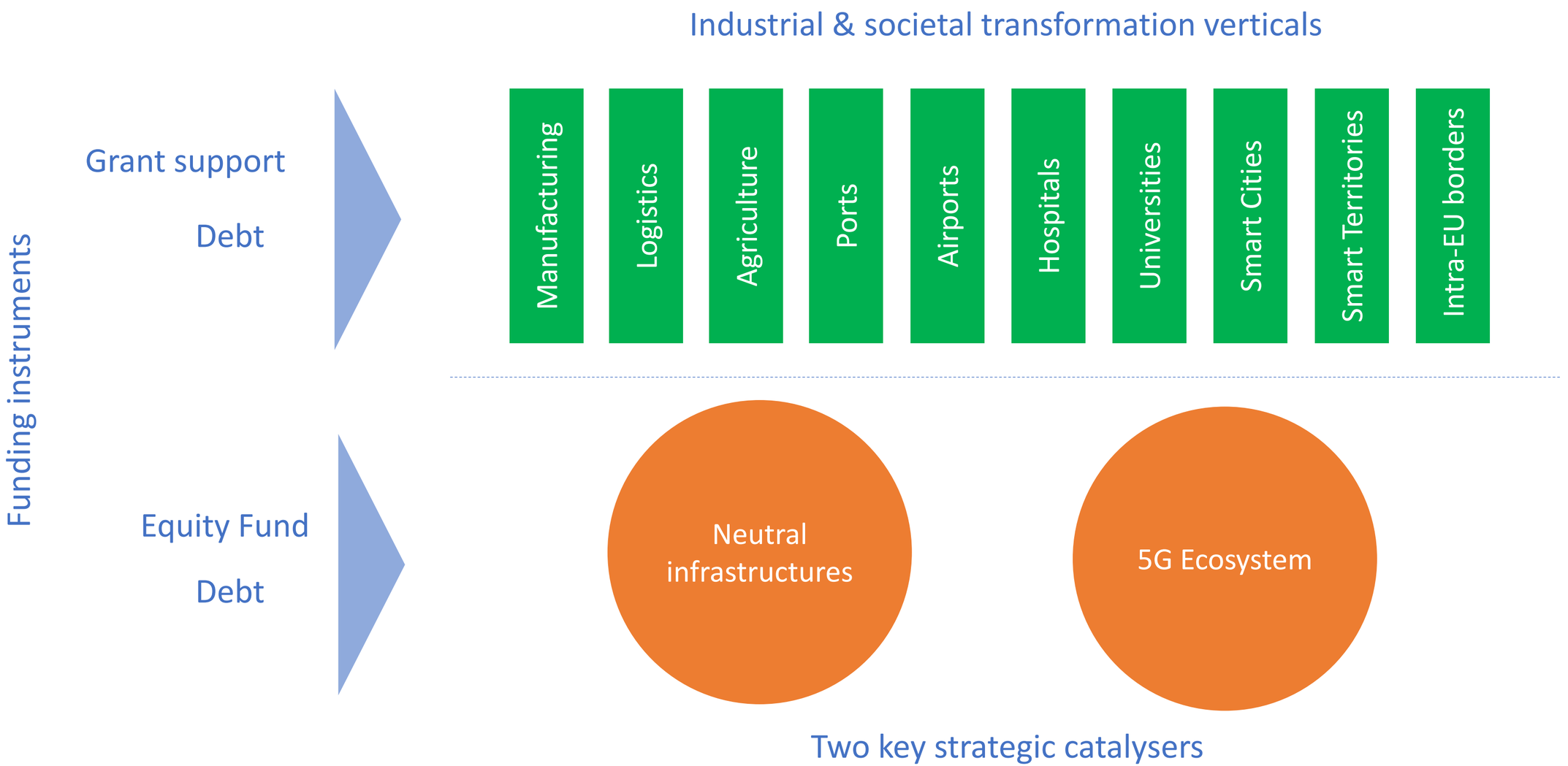
Target: Partners with infrastructures in place & a few use cases tested at small scale



Scaled with the support of 'use case partners' (devices + software + integration + training)

Source: CBO Consulting

Besides grants, equity and debt instruments could accelerate 5G private investment

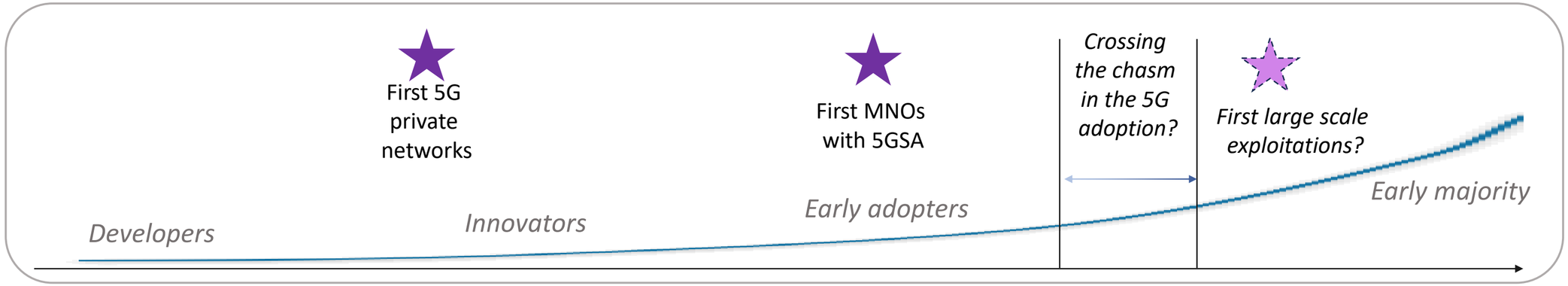


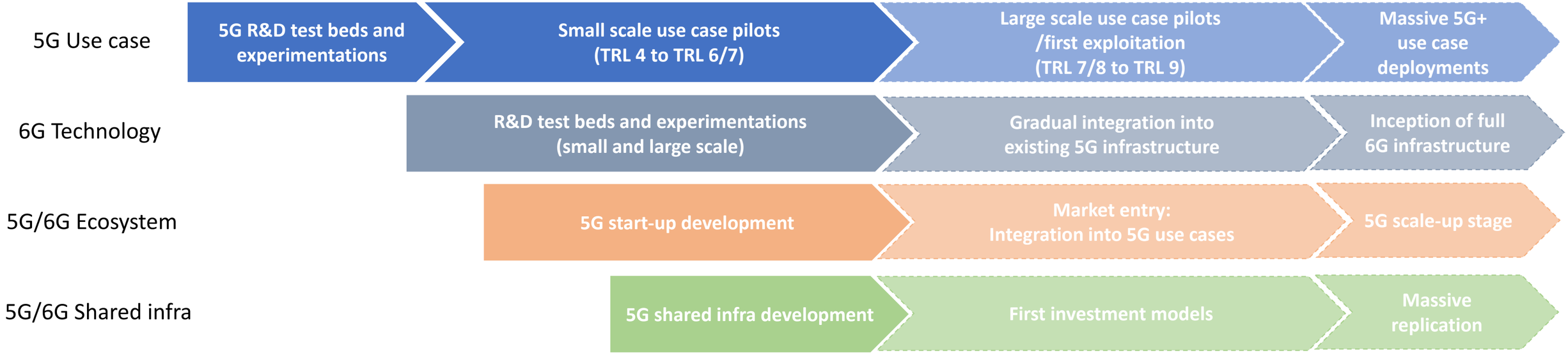
Source: CBO Consulting

Future funding support mechanisms for 5G Use Cases

It is time to accelerate to reach before 2030 a massive 5G uptake and to go beyond 5G

5G use case market development
# of use cases





Source: CBO Consulting

Future funding support mechanisms for 5G Use Cases

Thank you!

Christophe Bodin, CBO Consulting

christophe.bodin@cbo-consulting.eu

Tel: +32 (0) 496 39 09 21

Presentation and discussion

Monetising 5G Edge: Commercial Ecosystem for Smart Communities and Corridors

Dimitri Jungblut

Project Leader, 5GMEC4EU

5GSC
5G for Smart Communities

European Commission

5GMEC4EU

European 5G Network Edge Ecosystem Approach

Monetizing 5G Edge:
A Commercial Ecosystem for 5G Smart Communities and Corridors in Europe

5G MEC
For EU Corridors and Smart Communities

Date:
October 8th, 2025

Funded by the European Union

5GMEC4EU: Who are we?

Detecon

Dimitri Jungblut

Edgar Tamaliunas

Daniel Henkel

Nikola Perkovic

Hendrik Grosser

Nicolas Stichel

Wolfgang Knospe

Stefan Schnitter

Christian Maasem

5GMEC4EU in a Nutshell

Project Duration: **30 Months**

Project Start: **January 2024**

Consortum: **Monotch & Detecon**

Funding: **CEF Digital**

Managed by: **HaDEA**

Type: **Coordination & Support Action (CSA)**

Main Stakeholders: **5G Smart Communities** & **5G Corridors**

The **5GMEC4EU** project supports the establishment of a "**Connected Collaborative Computing**" – "**3C Network**" to align 5G infrastructure and share knowledge across stakeholders. It supports **5G Smart Communities** and **5G Corridors** in implementing **edge computing** through their 5G projects, enhancing Europe's edge capabilities and fostering profitable **business models**.

monotch
SMART MOBILITY PLATFORMS

Paul Potters

Menno Malta

Nicolas Mercier

5G MEC
For EU Corridors and Smart Communities

Funded by the European Union

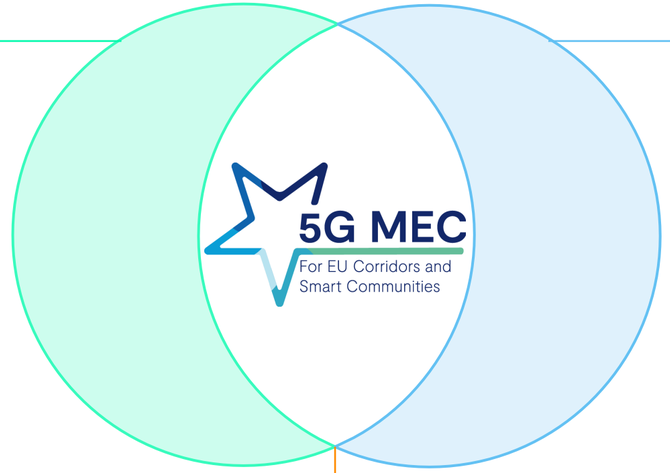
5GMEC4EU coordinates and supports the implementation of edge cloud technologies in 5G Corridor and 5G Smart Community deployment projects.

GUIDE CSA: 5G Corridors *

The GUIDE project aims to coordinate and support 5G Corridors in Europe by capturing and sharing best practices from CEF 5G Corridors projects.

The project objectives:

- Analyze CEF 5G Corridors for best practices.
- Develop guidelines for EU 5G Corridors deployment.
- Coordinate projects, monitor progress, offer feedback.

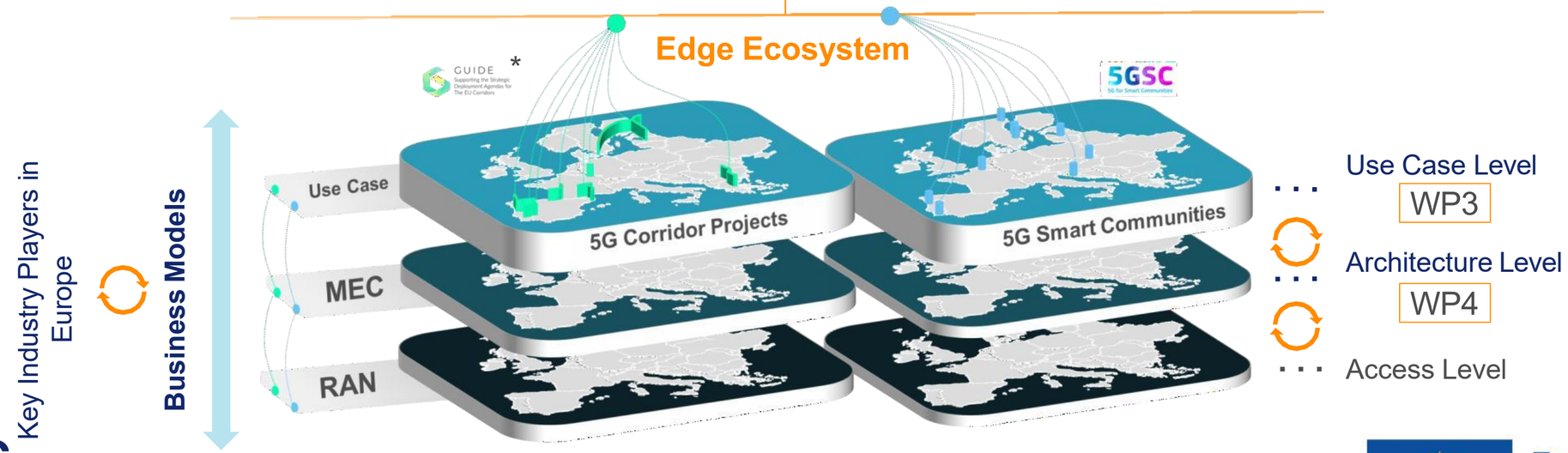


5GSC Platform: 5G Smart Communities

It is an initiative to deploy and use 5G networks to improve public services and socio-economic drivers in local communities.

The project objectives:

- Digital transformation and recovery of local areas
- 5G benefits in various sectors
- Collaboration and knowledge exchange



* CSA finalized in June 2025

5G MEC
For EU Corridors and Smart Communities

Funded by the European Union

A Sovereign European Cloud Ecosystem is essential amid increasing mistrust among Continental Technospheres.

American Technosphere

Dominated by Hyperscalers (AWS, Microsoft, Google) with a focus on global scale.

European Technosphere

Seeking autonomy through regulations like GDPR and fostering cloud sovereignty initiatives (e.g. GAIA-X).

Chinese Technosphere

Focused on state-controlled technology giants (Alibaba, Tencent) and strict data localization laws.

Increasing demand of Sovereign cloud solutions especially by regulated Industries like TelCo, Defense, Public & Healthcare

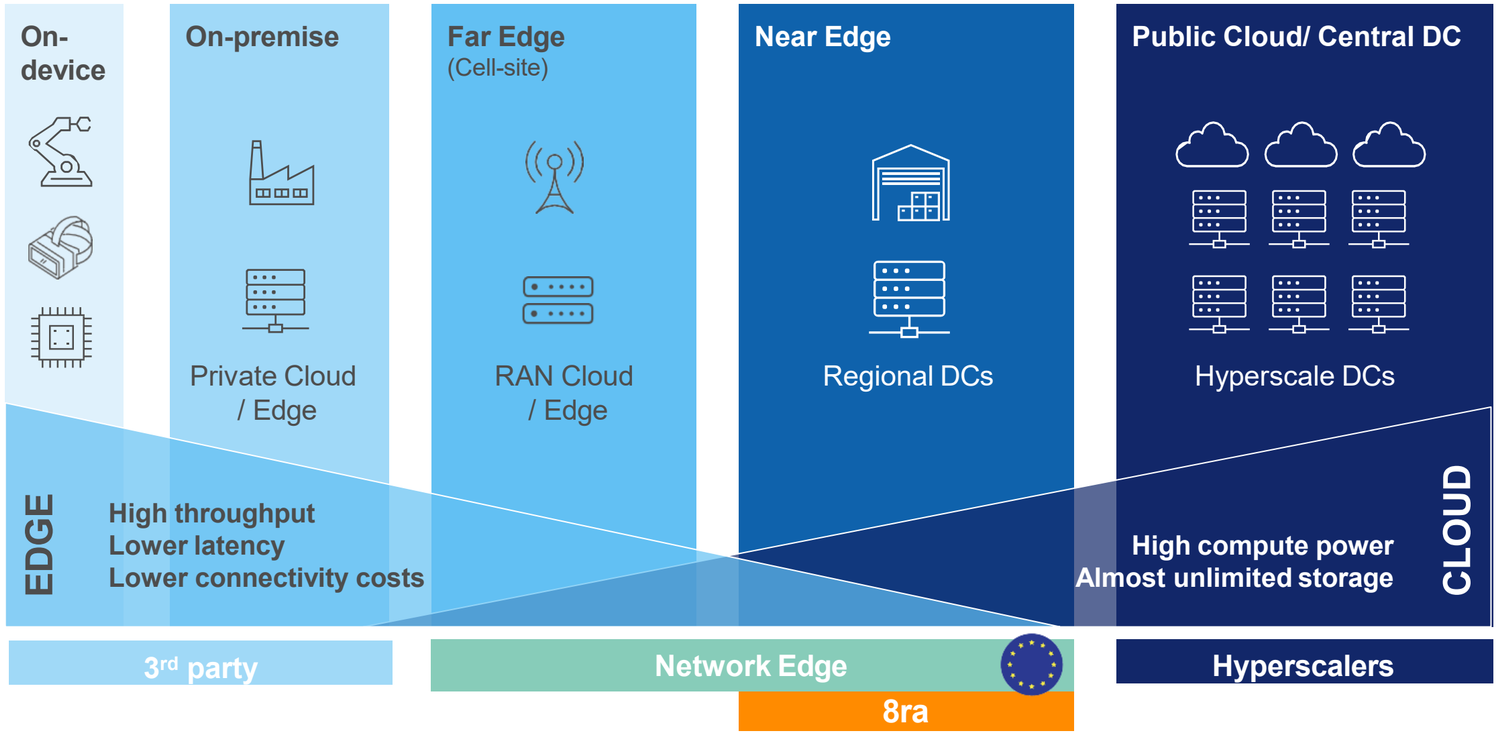
5G MEC
For EU Corridors and Smart Communities

72

Funded by the European Union

Within the Cloud / Edge Continuum, the Network Edge represents a window of opportunity to enable (partial) digital autonomy via European ownership!

The Cloud / Edge Continuum is a fluid ecosystem of many participants



Comments:

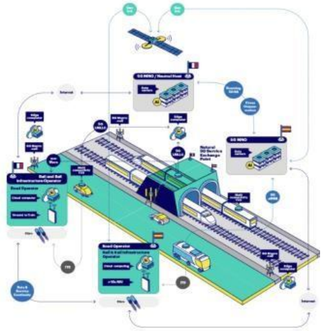
- The Cloud/Edge Continuum spans from on-device computing to hyperscaler-dominated cloud, involving diverse ownership models.
- Unlike the hyperscales , TelCo Edge is not yet dominated by a few large foreign players, offering a window of opportunity for European companies.
- European participation in this domain could allow digital autonomy as especially critical workloads will be deployed on the edge-part of the continuum.
- However currently scalable and viable models of infrastructure provisioning have not yet developed.
- **A thorough evaluation of ownership-, operating & underlying business models is essential to enable an autonomous European Edge Cloud ecosystem.**

5G MEC
For EU Corridors and Smart Communities

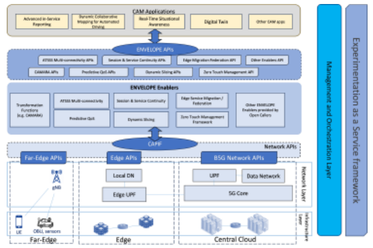
Funded by the European Union

Seamless cross-border CCAM services require more than connectivity. Service providers need to align on quality and performance of their infrastructure.

Examples of current/ previous 5G MEC Cross Border Projects:



Source: https://5gmed.eu/ 5GMED, Mediterranean Cross-Border Corridor, CCAM for automotive and railway



Source: https://envelope-project.eu/architecture/ Envelope 5G

CCAM for automotive

Source: BALTCOR5G - Part of the "Connecting Europe" (CEF) program, funded by the EU. BALTCOR5G

5GMEC4EU has established the **5G MEC Community**, fostering collaboration across 5G Smart Communities and 5G Corridors in 2025. The community serves as a platform for sharing **best practices, exchanging knowledge**, and **providing support at multiple levels**.

Key requirements for delivering uninterrupted, secure, and high-performance digital experiences across borders.

A **Seamless Service Continuity**
Ensure uninterrupted, automatic handover of services and applications across borders and networks. [1]

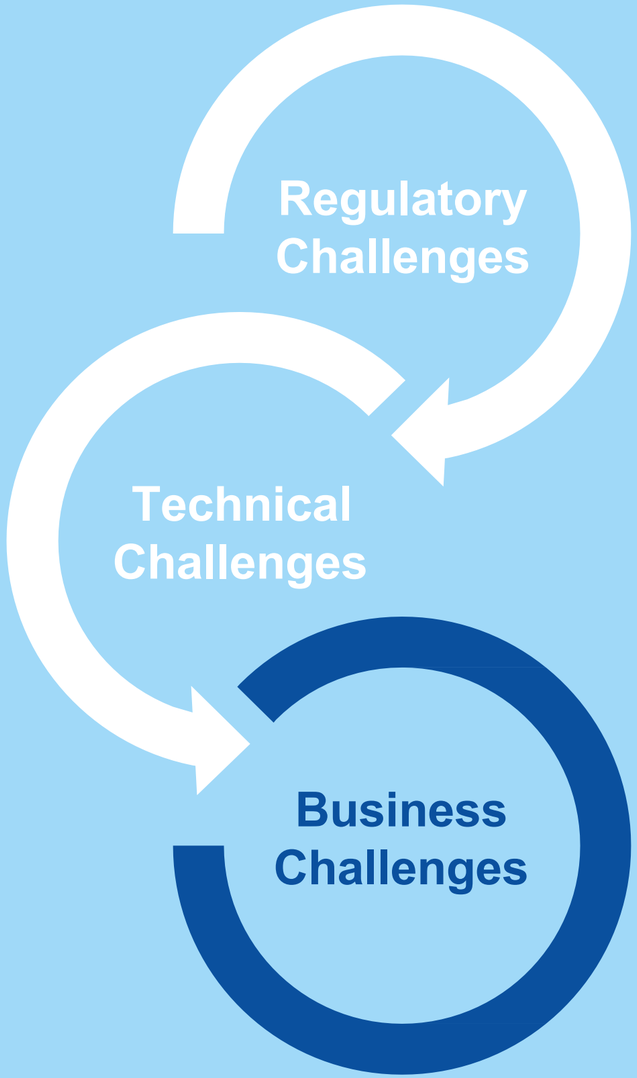
B **Ultra-low Latency and High Reliability:**
Maintain under 10–20 ms latency with robust edge computing resources for real-time use cases. [2]

C **Interoperability and Open Standards:**
Guarantee seamless device and application operation via harmonized APIs and protocols across countries. [3]

D **Privacy, Data Sovereignty, and Compliance:**
Protect user data with GDPR-compliant processing and transparent cross-border data handling. [4]

E **Support for Mission-critical Mobility:**
Provide resilient, high-performance edge services for safety-critical and logistics applications at borders. [5]

Funded by the European Union



Telcos are dealing with technical and regulatory challenges, but struggle with business challenges

Regulatory Challenges

- **Cross-border fragmentation** - inconsistent regulatory frameworks and spectrum policies across EU member states [1, 3, 4, 5]
- **Security restrictions** - varying vendor restrictions and cybersecurity coordination requirements between countries [5, 6]
- **Standards harmonization gaps** - lack of unified site acquisition processes and regulatory approval procedures [1, 5]

Technical Challenges

- **Interoperability complexity** - cross-border network handovers and edge infrastructure deployment coordination issues [1, 2, 7]
- **5G Standalone dependency** - network slicing and resource management requiring standalone 5G architecture [1]
- **Performance optimization** - maintaining ultra-low latency and high reliability across heterogeneous national networks [5]

Business Challenges

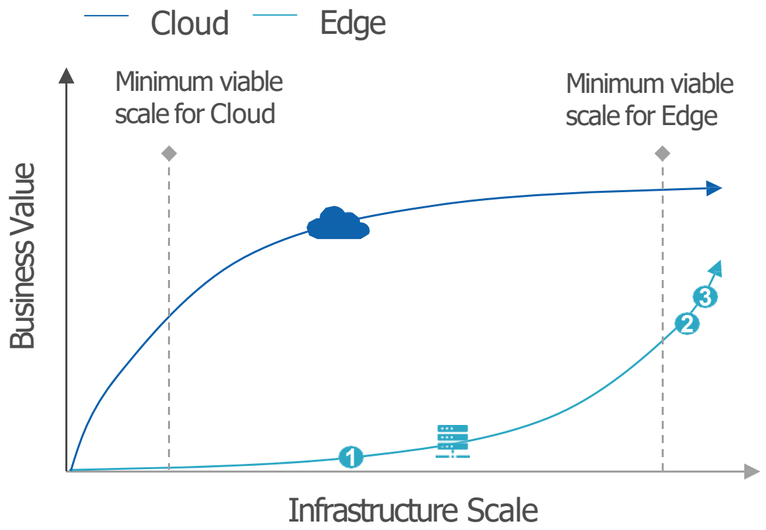
- **Revenue model uncertainty** - unclear business cases and investment structures due to undefined Connected Automated Vehicle requirements [1, 9]
- **Market fragmentation** - 34 separate mobile network operators across the EU creating deployment complexity [8]
- **Minimum viable scale** - difficulty reaching critical mass for economic viability and co-funding requirements [1]

Funded by the European Union

There needs to be an initial demand to reduce costs to a reasonable level backed by a holistic ecosystem & investment to promote minimum scale.

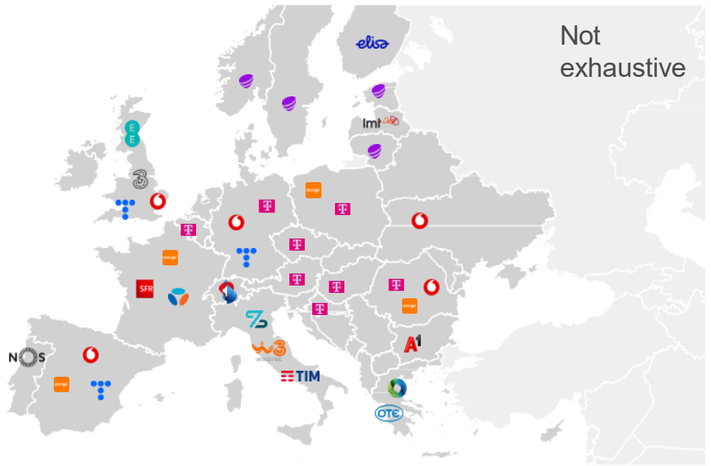
Reaching minimum viable scale

Due to its decentralized nature the minimum viable scale of Network Edge is far higher than Cloud Computing



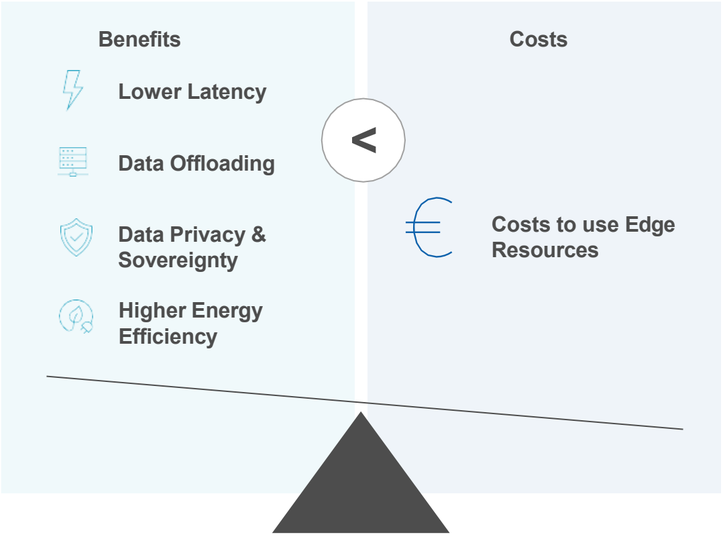
Market fragmentation & Integration

MNOs lack a common approach and a holistic integration with Public & Private Cloud & Device Edge.



Benefits do not outweigh the costs

At the moment the benefits of the Network Edge do not outweigh the cost – especially vs. Public Cloud



Investment to create supply at scale… → **… via a Holistic & Harmonized Ecosystem** → **… based on initial demand.**

To address these challenges, we propose 3 key guiding hypotheses which act as foundation for our concept paper and will be validated with stakeholders.

Overview of key challenges:

I **Ecosystem compatibility:** The network edge is embedded in a fragmented computing continuum across different ownership domains (device, private, public), making E2E workload integration complex.

II **Initial demand & economic viability:** Current benefits of Network Edge do not justify the high costs, and a critical mass of initial demand is needed to drive down prices and reach economic viability

III **Minimum viable scale:** A viable Network Edge-based computing ecosystem can only be established at minimum European scale.

Guiding Hypothesis:

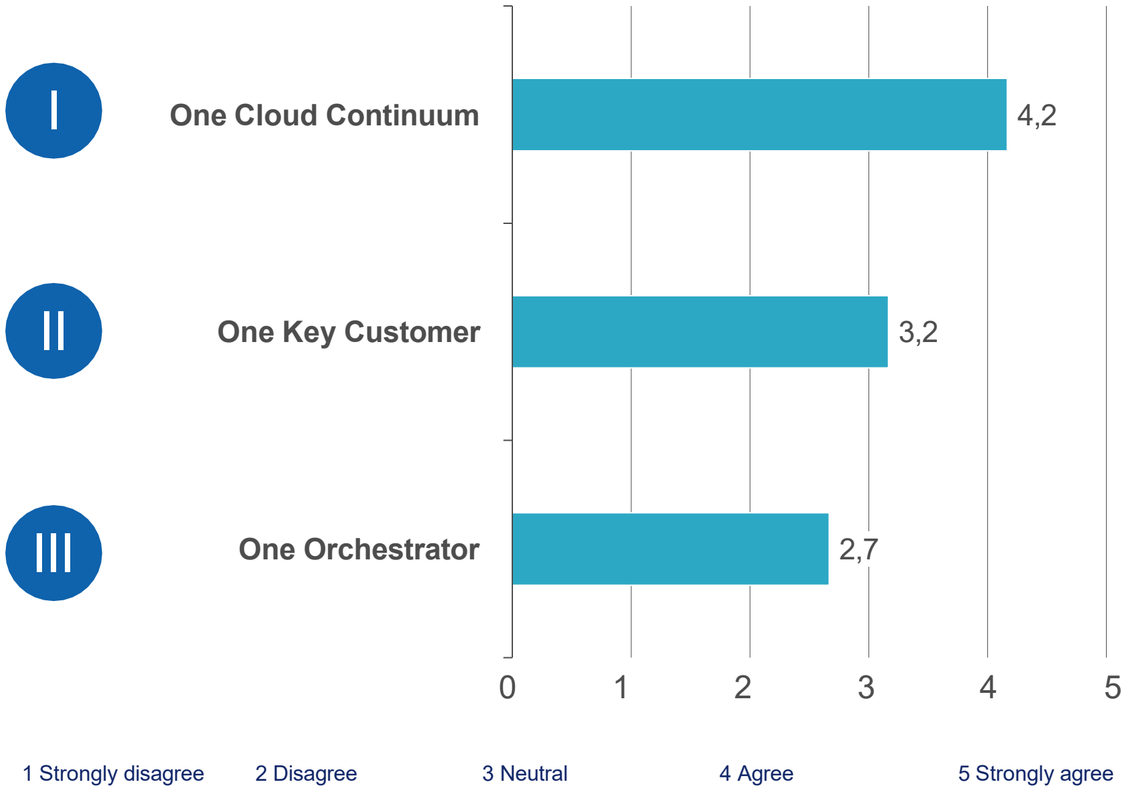
One cloud continuum: End-to-end workload integration at the network edge requires an open architecture that spans hyperscalers, private edge, device and MNO domains.

One key customer: MNOs are currently the only actors with strict demand for the network edge; to accelerate broader adoption, they must share the capacity already required for their own workloads.

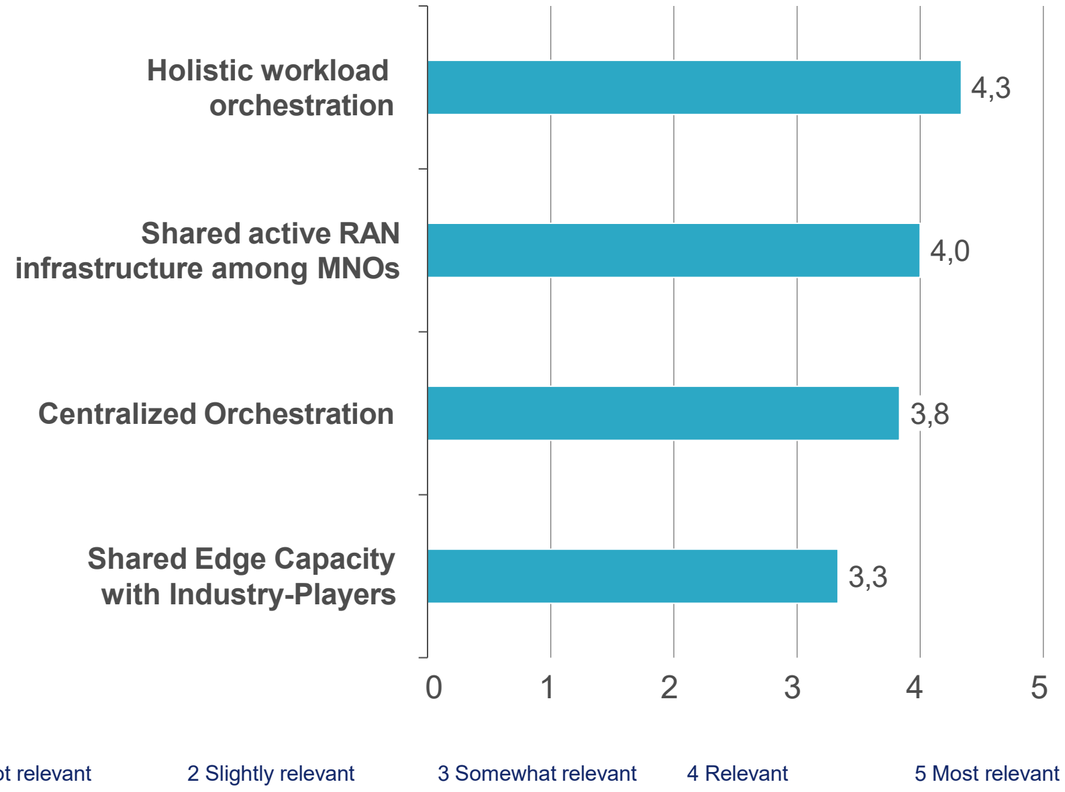
One orchestrator: A single, federated orchestration layer is required across the network edge, but MNOs are not positioned to fulfill this role, as their operations are limited to national markets. Potentially a Joint Venture of European MNOs would be suited well to do so.

Our first Survey results show support of Hypothesis 1 and 2 while most design principles for a successful NW Edge Ecosystem are found to be valuable.

Overview of survey of results – Guiding Hypothesis:



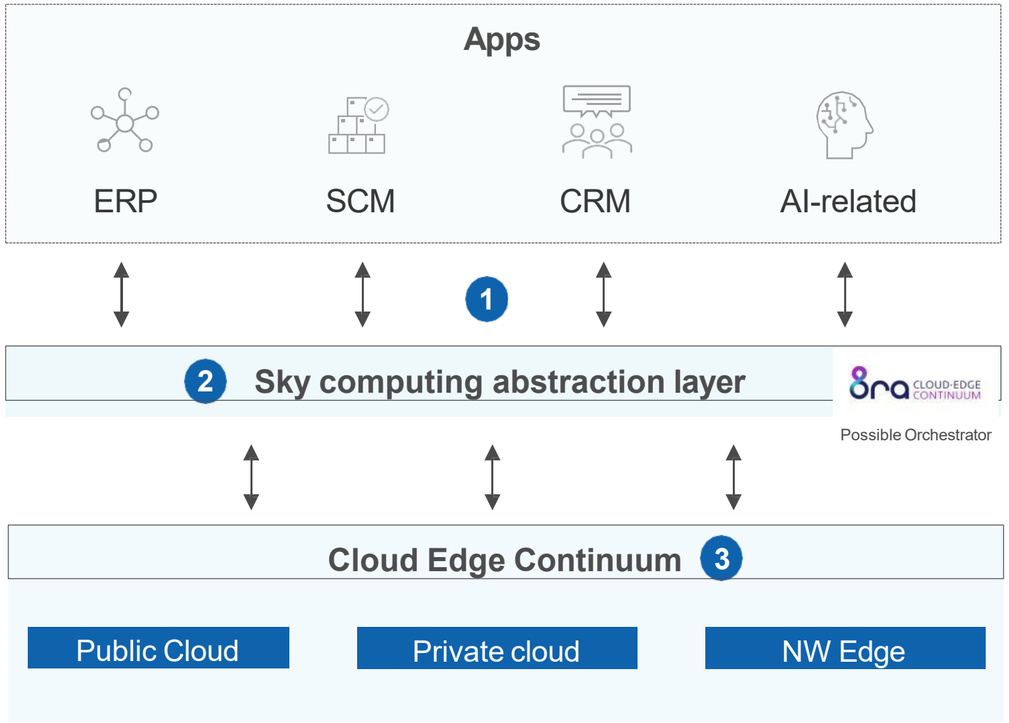
Overview of survey of results – NW Edge Design Principles:



Funded by the European Union

A promising Multi-Cloud orchestration approach is ‘Sky Computing’ a vendor- agnostic API-layer to manage the cloud to edge continuum holistically.

Key paradigm of ‘Sky Computing’:



Sources: Detecon Research, 2024; https://blog.bytebytego.com/p/no-more-vendor-lock-in-the-rise-of

Explanation and comments

Key paradigm:

Apps are not bound to any single cloud provider. You can develop cloud-agnostic apps and optimize for performance, cost or latency.

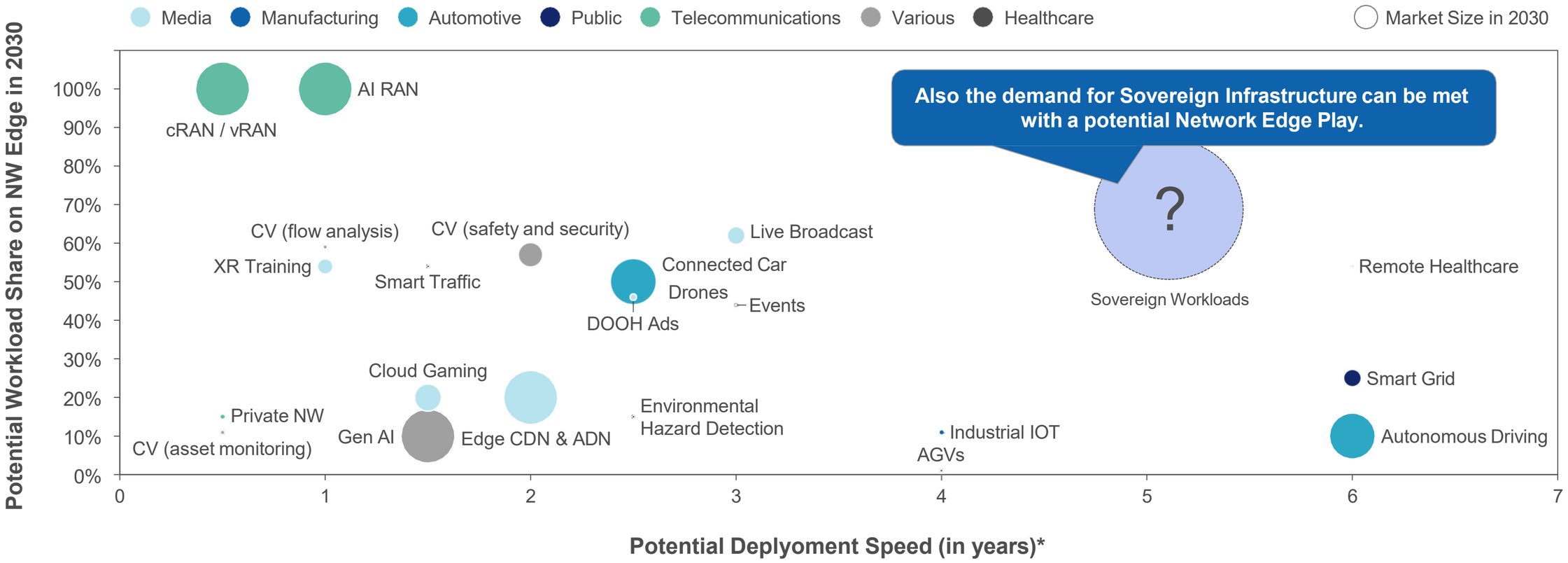
Process:

1. Micro-service architecture for app workloads.
2. Sky Computing layer finds best CSP for each workload.
3. Relevant data exchanged between CSPs and other entities.

Benefits:

- Redundancy & high availability as apps operate cloud agnostically.
- Risk mitigation and cost optimization by flexibility of CSP selection.
- Optimization for specific services based on CSPs specific strength.

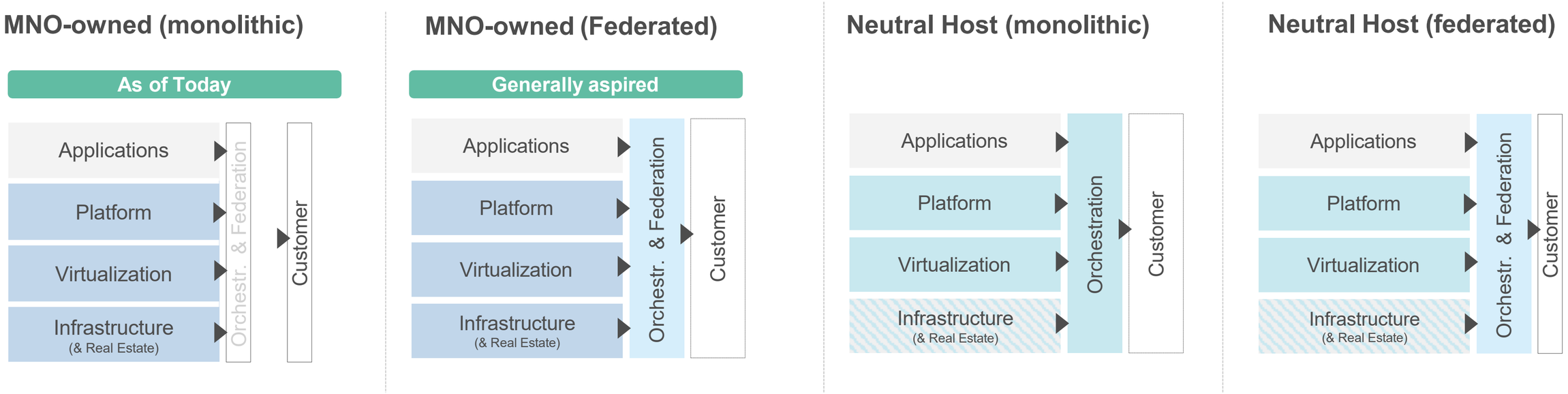
Next to MNO workloads also GenAI, CDN / AND and Connected Car use cases will fuel the demand for Network Edge.



*Assumption: If Network Edge Ecosystem would readily available. **Market Size: Very Small = 1- 9 €m/ Small =10 - 99 €m/ Medium = 0.1 - 1 €B/ Large = 1 – 9 €B/ Very Large = 10+ €B)

Source: Detecon, STL Partners

Creating a neutral host approach enables an edge adoption at continental scale while it is challenging for MNOs to do so due to their national operations.



The advantages of Neutral Host-based architectures are understood but many Interview respondents see a pragmatic execution as challenging, because the MNOs are very sensitive about giving up control of Edge resources!

MNO | Federated | Neutral Host | Various

Altice Ultra Edge is a Neutral Host based Network Edge Player aspiring to share its resources across MNOs - while the Market clearly values the approach.

About Ultra Edge

First nationwide independent distributed colocation provider in France

- Independent distributed colocation provider
- 257 Edge data centers
- Valuation: €764m (29x multiple!!)
- Installed capacity of more than 45MW

Source: MS Press Release

Investment Thesis

“We believe the opportunity to create an independent and distributed edge colocation provider, benefiting from access to SFR’s nationwide fiber infrastructure in France, makes UltraEdge a very attractive investment for MSIP,”

Yacine Saidji, Managing Director and Co-Head of Europe for Morgan Stanley Investment Partners.

“With its extensive countrywide presence, UltraEdge is positioned to benefit from the growing demand for ultra-low latency connectivity services from corporate clients and other telecommunications operators in France.”

Ultra Edge, 2025

We welcome you to participate in our Questionnaire & Interview process and join the debate of future Network Edge Ecosystem in Europe.

Your general benefits by participating

Exclusive Access to Concept & White Paper

- Potentially shape EU policy and funding priorities
- Get early access to survey results and the concept paper on a European 5G Edge Ecosystem

Recognition and Acknowledgment

- Potential public visibility in the published report
- Invitations for speaker slots on follow-up events such as publication.

Networking Opportunities

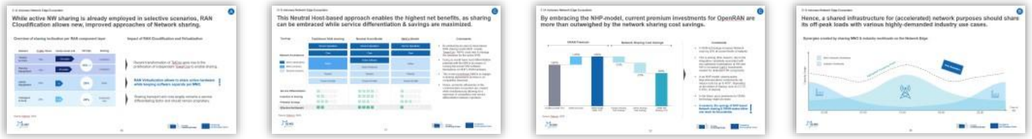
- Contact and alignment with other 5G / MEC stakeholders on both demand & supply-side
- Invitations to community meetings (Roundtable in Brussels)

Selected overview and snippets of our concept paper:

A Visionary Network Edge Ecosystem:

Use Case Evaluation:

Innovative Architecture Approaches & Business Models:



Let’s talk about Edge!

Dimitri Jungblut
Detecon International
Project Coordinator
dimitri.jungblut@detecon.com

Paul Potters
Monotch BV Netherlands
Mobility Use Cases
paulpotters@monotch.com

5G MEC
For EU Corridors and Smart Communities

Presentation and discussion
Introduction to the subjects, the purpose of the breakout sessions and expected outcome

Amalia Elena Lebu

Policy Assistant, Investments in High-Capacity Networks, DG CNECT B.5, European Commission

5GSC
5G for Smart Communities

European Commission

CLUSTER MEETING - THREE WORKING GROUPS SPLIT

Working Group 1: Scaling 5G Infrastructure Deployment and Innovation
Working Group 2: 5G for Smart Cities & Urban Connectivity
Working Group 3: Business and Investment models for 5G pilots

WORKING GROUP 1: SCALING 5G INFRASTRUCTURE DEPLOYMENT AND INNOVATION

Dimitri Jungblut
PROJECT COORDINATOR, 5GMEC4EU
CHAIR

Clara Ulken
SENIOR PROJECT MANAGER, GCORE
CO-CHAIR

Maxime Flament
CTO, 5G AUTOMOTIVE ASSOCIATION
CO-CHAIR

RAPPORTEUR

Bert Vlaminck
CLUSTER DEVELOPER MACHINE BUILDING & MECHATRONICS, POM WEST-VLAANDEREN

5GSC
5G for Smart Communities

European Commission

WORKING GROUP 2: 5G FOR SMART CITIES & URBAN CONNECTIVITY

1

Fredrik Engströmer
HEAD OF INNOVATION,
REGION STOCKHOLM
CHAIR

2

Jens Buysse
RESEARCH MANAGER,
CITYMESH
CO-CHAIR

3

Razvan Mihai
ORANGE ROMANIA
CO-CHAIR

RAPPORTEUR

Stan Seiko
HEAD OF STRATEGIC PLANNING,
RIGA MUNICIPAL POLICE

5GSC
5G for Smart Communities

European Commission

WORKING GROUP 3: BUSINESS AND INVESTMENT MODELS FOR 5G PILOTS

Christophe Bodin
DIRECTOR, CBO CONSULTING
CHAIR

Cinzia Campanella
HEAD OF INNOVATION & VERTICAL SOLUTIONS, VODAFONE ITALY
CO-CHAIR

Edgar Tamaliunas
CONSULTANT, 5GMEC4EU
CO-CHAIR

RAPPORTEUR

Marcel Planagumà
DIGITAL COMMUNICATIONS MANAGER, CONNECT EUROPE

5GSC
5G for Smart Communities

European Commission

CLUSTER MEETING - THREE WORKING GROUPS REPORT

Working Group 1: Scaling 5G Infrastructure Deployment and Innovation
Working Group 2: 5G for Smart Cities & Urban Connectivity
Working Group 3: Business and Investment models for 5G pilots

5GSC
5G for Smart Communities

European Commission

Closing Remarks

Alexandra Rotileanu

Deputy Head of Unit, Investments in High-Capacity Networks, DG CNECT B.5, European Commission

5GSC
5G for Smart Communities

European Commission