A Future Europe with a Reinforced Technological Leadership

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6G-IA Board Chair
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The Voice of European Industry and Research for Next Generation Networks and Services

Who We Are - What we represent

Strong contributors to EU economy:

- **€ 210 Billion** of European revenues (EU board Members)
- **€ 420 Billion** of European revenues (all EU industry members)
- More than **200 5G Network** deployments in the world.

Focus on:

- **advanced Networking** Tech, systems
- EU industry competitiveness
  - Sustainability
  - Sovereignty.

An industry driven Association of ~400 Members

Committed to Innovation

- Typical R&D investment: 20% of revenues for lead supply companies
- About 40% of Standard Essential Patents from 2G to 5G
- Leading the initiation of new Digital Markets, 5G and 6G for Verticals

Committed to collaborative research

- € 900 millions of private investments in EC 6G Programme
- Partnerships with >130 EU academics and RTOs

Technological sovereignty for connectivity and services

Connectivity and Services are now essential public utilities (like water, electricity, …)

Technological Sovereignty is a MUST-HAVE (not a nice-to-have)

Fluid geopolitical environment and technological breakthroughs form a path full of challenges and opportunities

Challenges

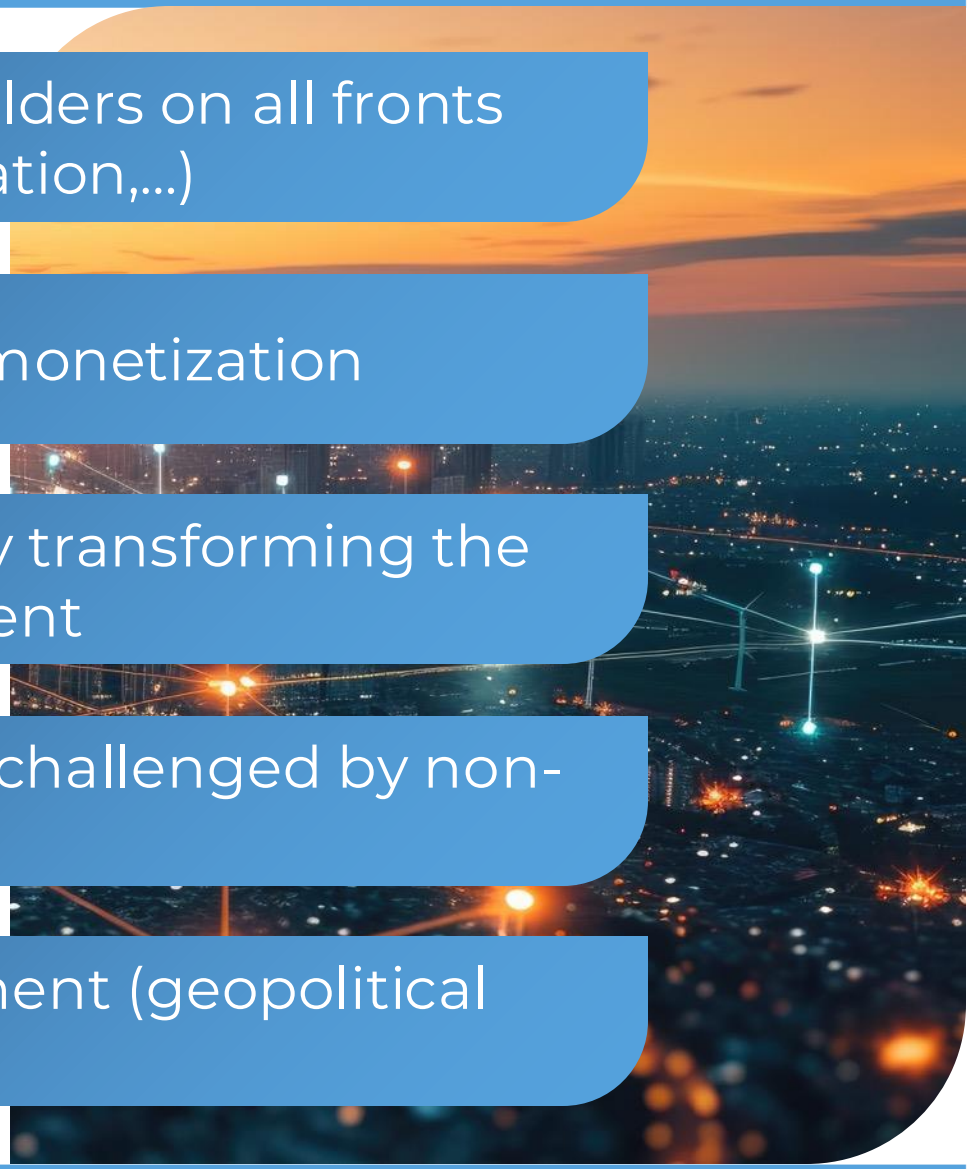
Intense competition for EU stakeholders on all fronts (commercial, standardization,...)

Challenging environment for monetization

Technological breakthroughs rapidly transforming the overall ICT environment

The enforcement of public policies is challenged by non-EU stakeholders

Supply chains are under reassessment (geopolitical tension)



Opportunities

Connectivity is a stronghold for Europe	Leverage to other ICT domains
MNOs have direct access to the end users (nearest link)	Natural enabler for advanced services
High quality and stable academic and research environment	EU Leadership in technology development
EU Leadership in technology development	First to deploy and use cutting edge technology

Europe currently has the best-structured R&D environment in terms of activities, diversity and resources globally

Is future investment needed in this sector?

R&D in connectivity and services is continuous and not a discrete process

R&D in connectivity and services is long-term, broad and high-risk

Several areas of public interest (e.g., EUCCS, Rail, Security and Resilience) need the public sector to set the pace

Dual use of results is a new important aspect in our brave new world

Important reminder

Progress does not always come fast
It depends on various conditions

Mobile Internet as killer application was identified in mid 90s

Delivered by the end of 2000

- Network: LTE
- Device: iPhone
- Service: video/pictures (youtube, facebook,,...)

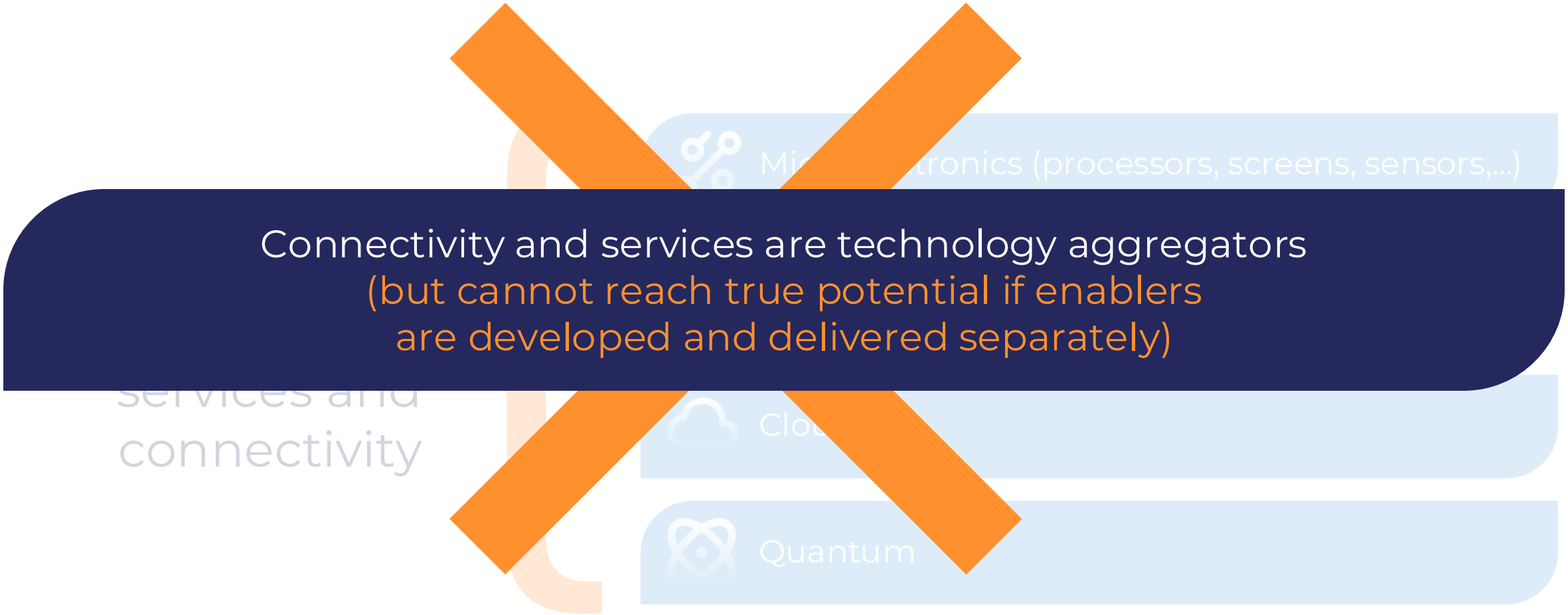
Current expectations

Breakthroughs in related technologies

Rapidly reshape end-devices, services and connectivity

- Microelectronics (processors, screens, sensors,...)
- AI/ML
- Cloud
- Quantum

The hard reality



Current R&D status in Europe

A successfully established R&D pan-European ecosystem that delivers results

5G PPP
The 5G Infrastructure Public Private Partnership

6G SNS

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Is anything new needed?

Need: Integrated Implementation

Thanks for your attention!

Dr. Colin Willcock

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