



6G - a (short) European Perspective

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Beyond 5G/6G: Global Context

B5G/6G Initiative



- “Secure 5G & Beyond Act” March 2020
- DoD Testbed programme, \$ 600 million
- Next-G initiative, industry federation (ATIS)
- Open RAN Drive, \$2Bn



- MIC “Roadmap towards 6G”, June 2020, B5G Promotion Consortium
- METI support
- \$300+200million
- Open RAN Drive, \$2Bn



- MSIT 6G programme, September 2020, 5G Forum
- ≈ \$200 million public support



- MIIT 6G programme, creation of IMT 2030 Promotion committee (2019)
- Multi € Billion until 2035, including industrialisation



- **6G Smart Networks and Services Joint Undertaking proposal**
- **€ 900 millions / 6 years**
- **Member States Initiatives: Finland, Germany, [France](#)**

6 Orientations for 6G

New classes of applications

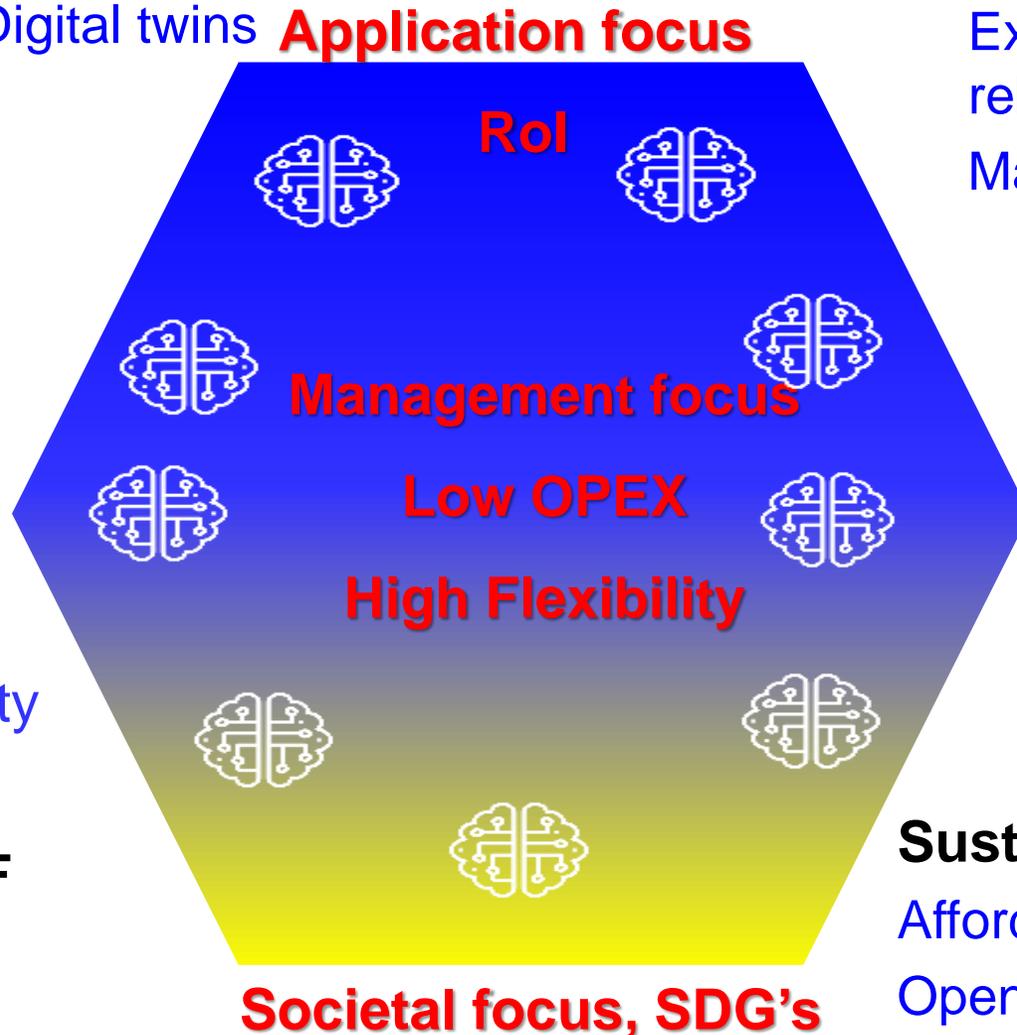
XR, Holographic coms, Digital twins
Internet of Senses
Deterministic E2E

Automated & autonomous Infra/Service Mgt

-Programmability
-Intelligence connectivity

Ultra low energy/EMF

-connectivity
-use cases



Vertical use cases beyond 5G

Extending 5G KPI's in speed, latency, reliability, density, positioning
Massive M2M

Ultra high security/trust

E2E, From component to application

Sustainable Development goals

Affordability, Accessibility
Openness..

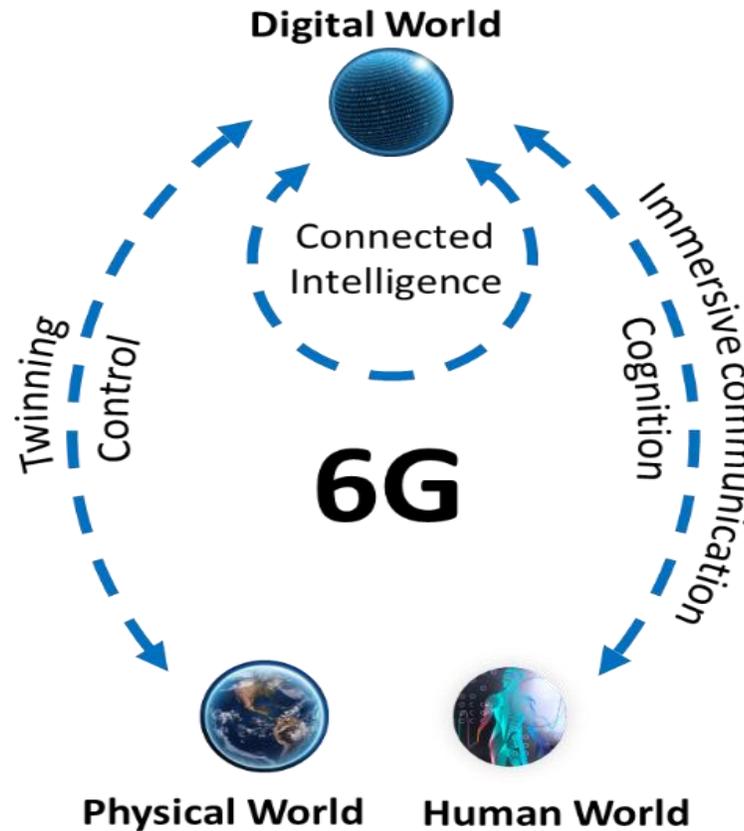
Vision



The 5G Infrastructure Association

European Vision for the 6G Network Ecosystem

Date:	2021-06-07	Version:	1.0
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Massive Digitisation:
representation

Connected Intelligence:
Awareness, RT status

Network Compute Fabric
Decision, action

<https://5g-ppp.eu/wp-content/uploads/2021/06/WhitePaper-6G-Europe.pdf>

<https://hexa-x.eu/deliverables/>

Towards a 6G European Initiative

5G PPP - Bridging phase

1 flagship + 8 6G exploratory projects = 60 M€



Strategic
Autonomy in
critical technology
areas



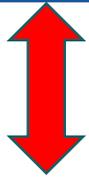
European Green
Deal



Full digitalisation
of the Industry



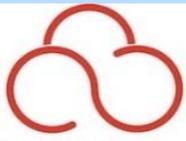
EU Industry
global
competitiveness



Industry 6G Partnership Proposal-Smart Networks & Services Joint Undertaking

https://ec.europa.eu/info/files/european-partnership-smart-networks-and-services_en

5G IA
INFRASTRUCTURE ASSOCIATION


CISPE.cloud


NETworld

NESSI

 Alliance for
Internet of Things
Innovation

Accelerating 5G Deployment: CEF2, pan European corridors for Connected Cars

6G Vision and technologies across a comprehensive supply chain

Thank You !

More info:

Smart Networks and Services (6G) Roadmap proposal

<https://5g-ia.eu/sns-horizon-europe/>

Horizon Europe Partnerships (23 Feb PR)

https://ec.europa.eu/commission/presscorner/detail/en/IP_21_702

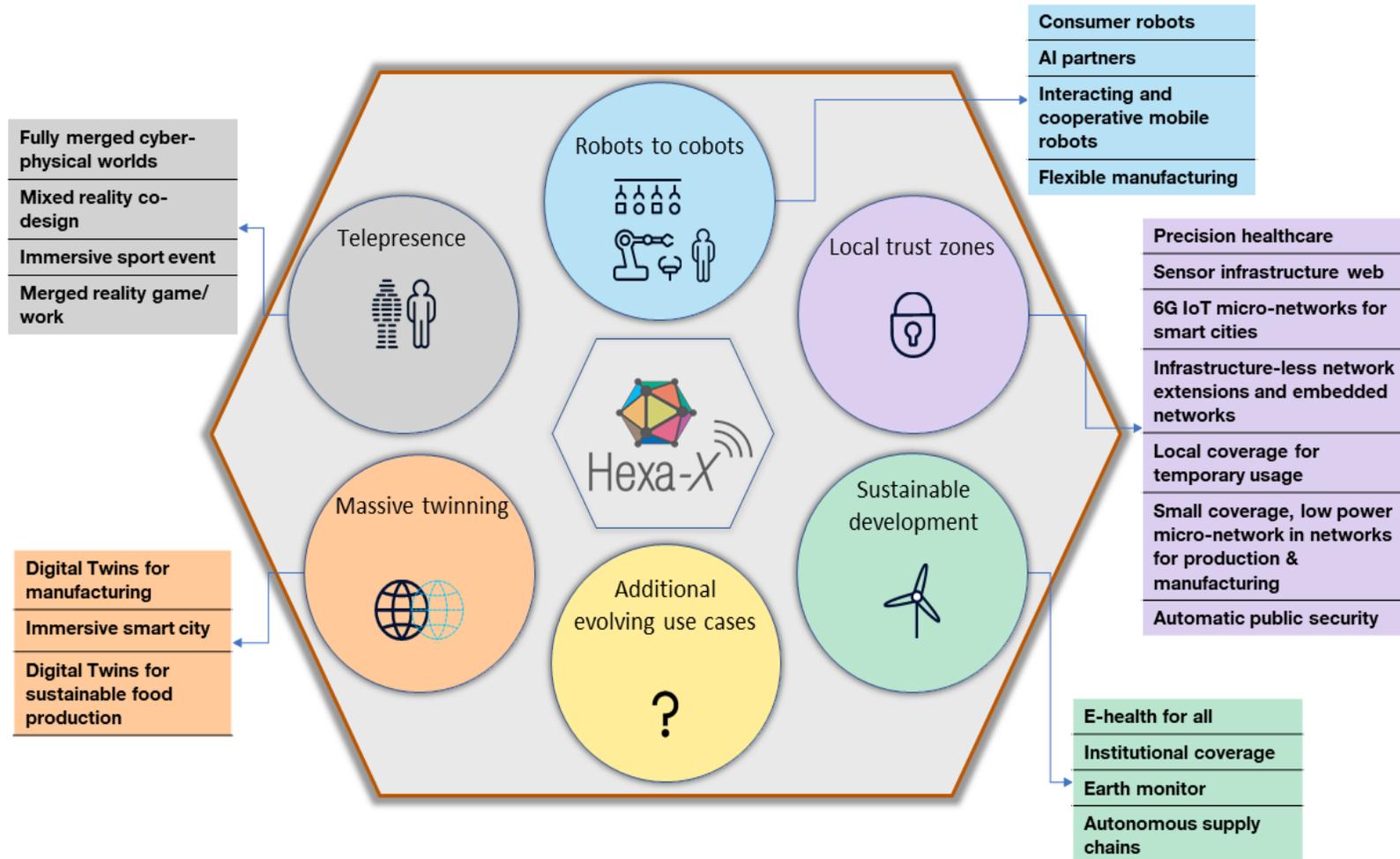
Smart Network and Services (6G) EC announcement

<https://ec.europa.eu/digital-single-market/en/news/europe-puts-forward-proposal-joint-undertaking-smart-networks-and-services-towards-6g>

Spare

From Vision to Use Cases

23 use cases, clustered in to 5 families



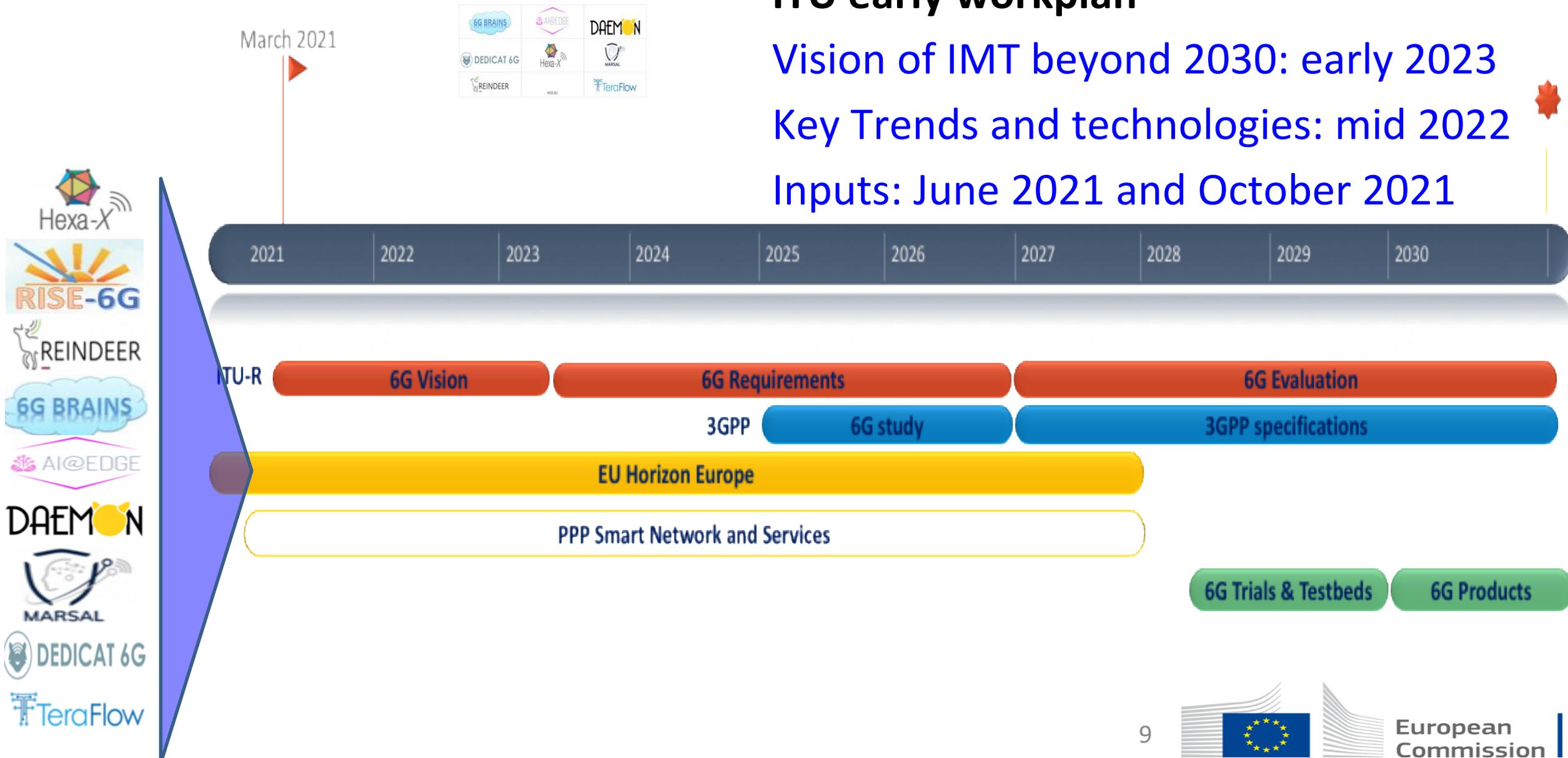
Tentative Timeline

ITU early workplan

Vision of IMT beyond 2030: early 2023

Key Trends and technologies: mid 2022

Inputs: June 2021 and October 2021



Smart Networks & Services: value chain approach

