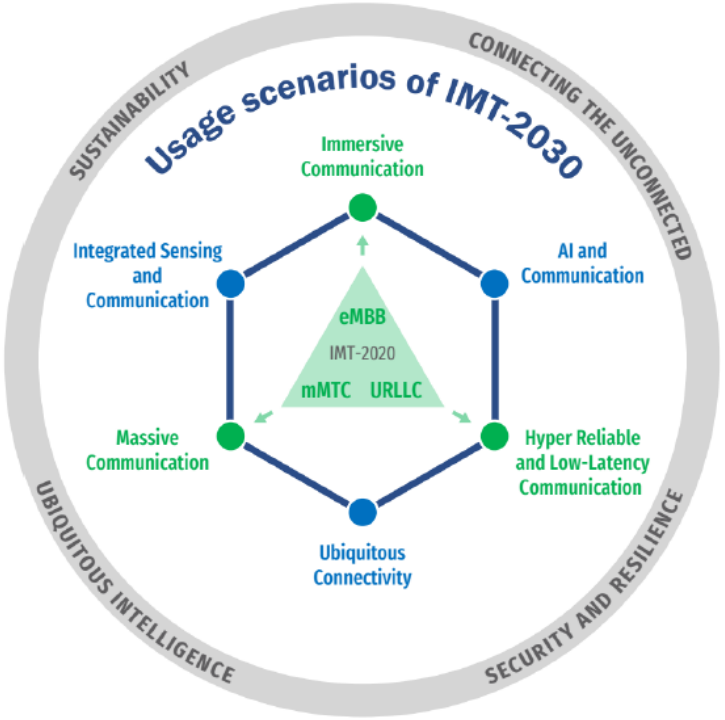
“6G Strategic vision”
RSPG hearing

27 September 2024

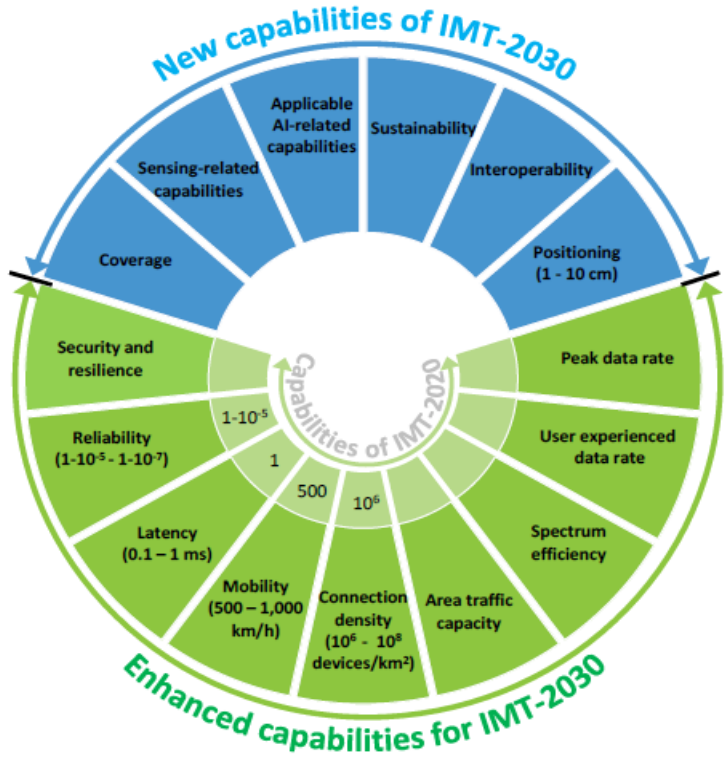
Thomas Konschak, Deutsche Telekom AG

ITU-R has defined a high ambition level for 6G

Usage scenarios and overarching aspects of IMT-2030

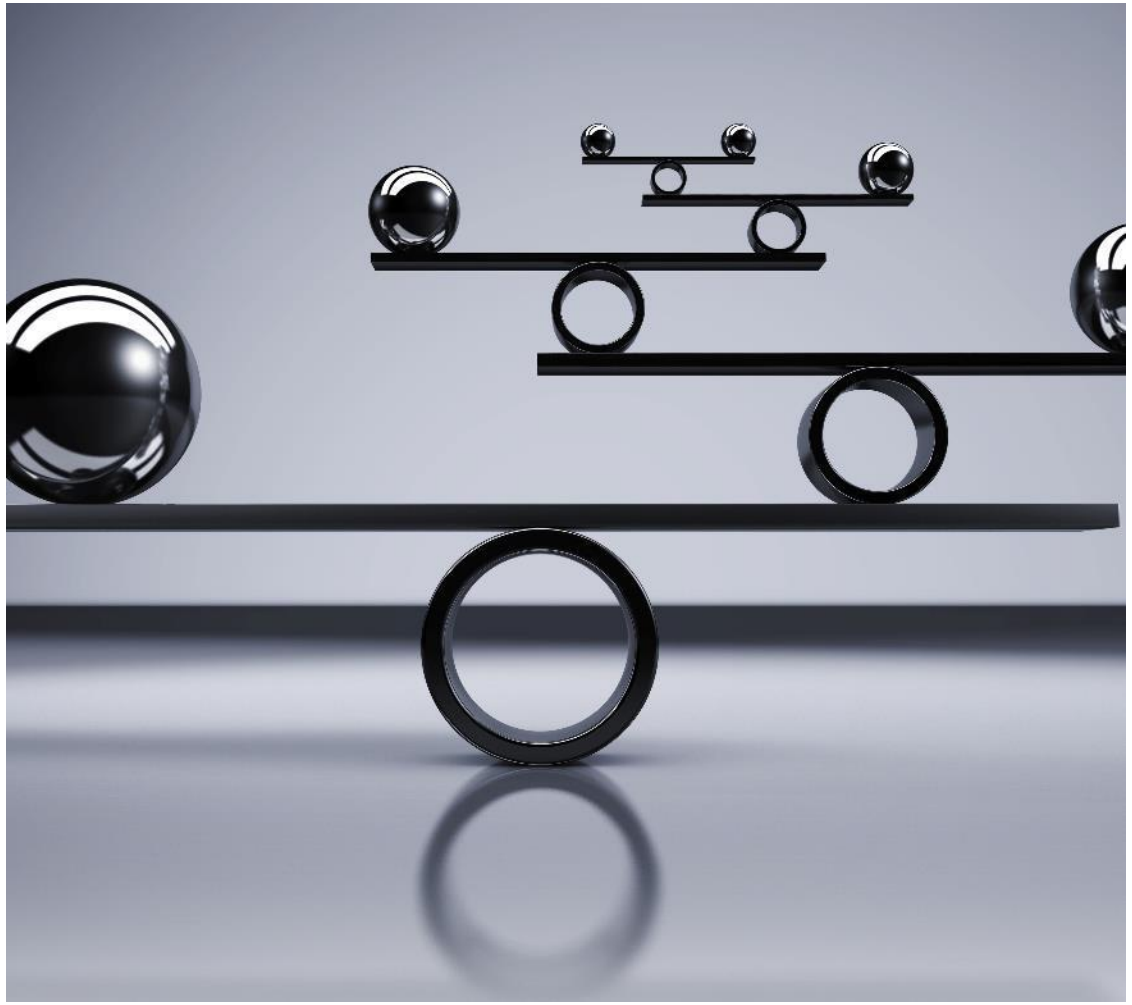


Capabilities of IMT-2030



This 6G vision can only be achieved with the right preconditions to stimulate infrastructure investments.

On the Way to 6G



- A global 6G standard
- No intrinsic need for hardware upgrade
- Software upgrades from 5G-Advanced to 6G
- No performance degradation for 5G customers
- User-centricity via mobile, fixed-line and NTN networks
- Robust resilience
- Backward compatibility with 5G

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DT´s Strategy on 6G Way forward

Best experiences through agile partnering

We put people first and use the right partner ecosystems for the best user experience.

Highly efficient energy consumption

Contribute effectively to the global community's emissions and efficiency targets.

Trustworthiness & Security

Design and integrate trustworthiness and security into all service experiences offered from the start.

Ubiquitous access for our customers

Expanding coverage for our customer base and their evolving needs.

3D Network Deployments

Significantly improved resource utilization

Innovating to make the most of valuable resources, e.g. spectrum, etc..

Leveraging new innovations in the field of radio

Improvements in wireless technologies can bring new experiences and added value to our customers (e.g. JCAS technologies).

DT’s Vision for 6G

Europe is frontrunner and plays a leading role in 6G deployment

- Mobile **networks will get additional resources to serve the mobile broadband needs of European citizen and to not run out of capacity** before the end of this decade.
- Mid band spectrum providing wider channels of at least 200 MHz per operator, e.g. in 6 GHz, is **key to provide full blown 5G SA as a basis to implement 6G**, and to achieve national and international digitization goals. Europe supports additional IMT spectrum at WRC-27.
- Timely availability at reasonable conditions supports Europe’s competitiveness.
- **The right conditions enable European Telcos to invest in European infrastructure.**

There is the need for timely political and regulatory decisions to allow this vision to become reality.

Mobile broadband demand is recognized in policy but so far no clear commitment for making spectrum available

Europe is aiming for best-in-class mobile networks, appropriate mid band spectrum is key to achieve this goal

Europe cannot afford yet another spectrum authorization process for the next generation mobile technology spreading over almost a decade

How to master Europe's digital infrastructure needs?

EC, February 2024

Allocating this band [6 GHz] for IMT use is crucial for facilitating the high-performance and quality development of 5G services, which, in turn, will lay the groundwork for 6G technologies.

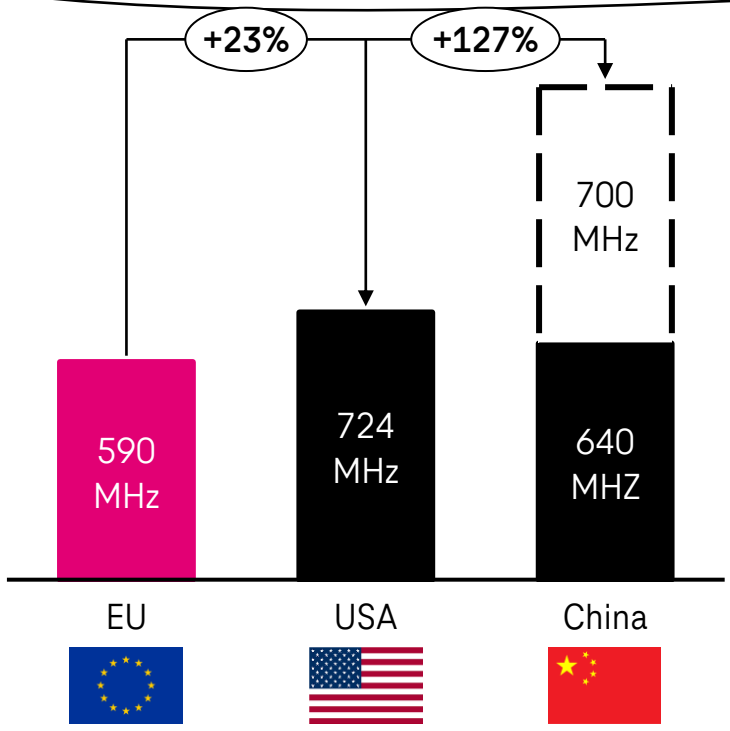
Much more than a market

E. Letta, April 2024

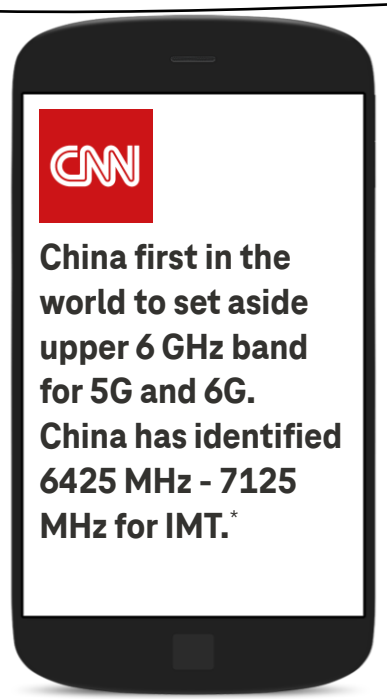
- Europe has not clearly positioned to use the upper 6 GHz for IMT.
- Europe has positioned against further IMT spectrum decisions at WRC-27.
- This risks a timely availability of appropriate resources for 5G and risks 6G introduction.

Other regions provide significantly more spectrum for mobile broadband

Significantly less high-capacity spectrum for IMT in Europe



China has already dedicated the upper 6 GHz band for IMT



Europe's vision for 6G can not become reality without sufficient resources for mobile broadband

*-https://www.policytracker.com/china-first-in-the-world-to-set-aside-upper-6-ghz-band-for-5g-and-6g/

Thank you!