



User's Demands in the Era of AI and the Path to 6G Services

Key Needs for Users



Hyper-personalized
services



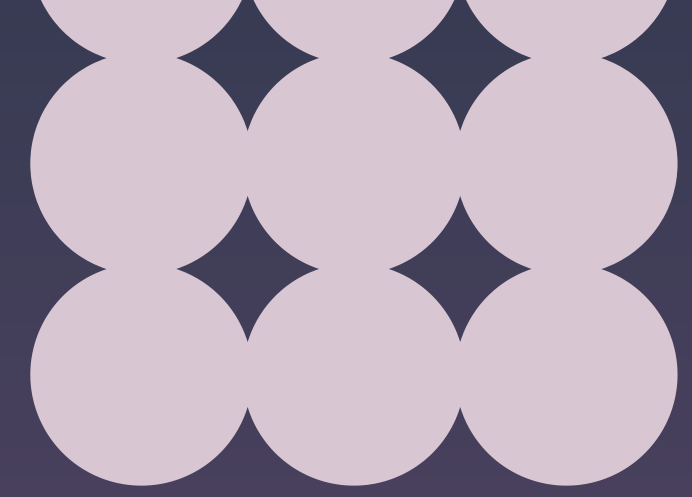
Ubiquitous
connectivity



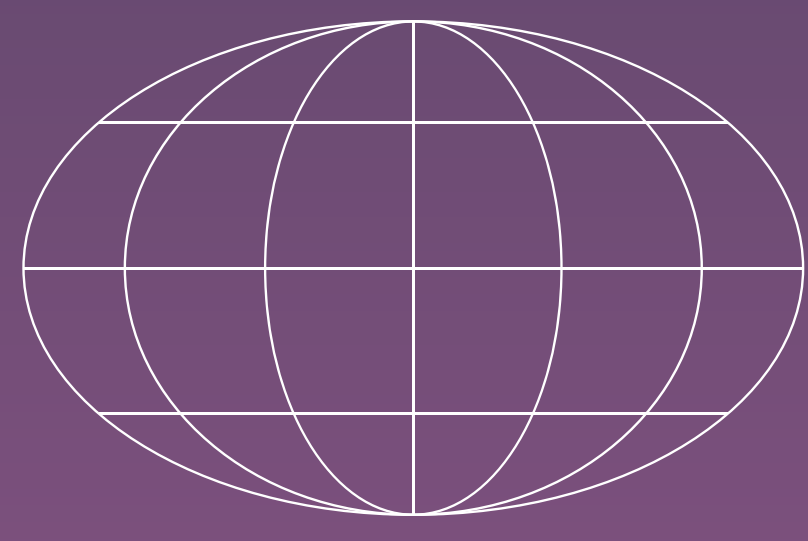
Real-time
responses

+ **Security, resilience, reliability**
+ **Strong privacy, sustainability**

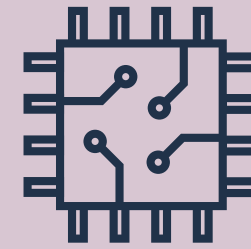




Applications of 6G Technology

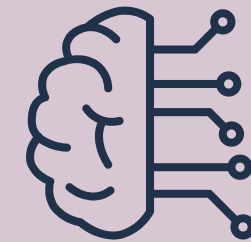


Accelerating digital transformation



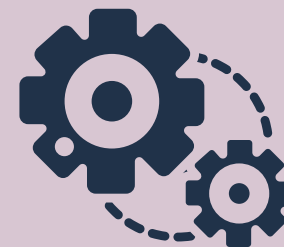
Smart healthcare (e.g.: Dynamic monitoring, tele-diagnosis, remote surgeries), smart cities, logistics, industry (e.g.: assembly lines, mass production), **autonomous vehicles**, **sensing technologies** (e.g.: high-accuracy localization, tracking, mapping, augmented human senses)

Immersive experiences



Extended reality (XR), with higher resolution and video frame rates, it will push the limits of human perception. **Multi-sensory** communication will also become possible, allowing to exchange real-time information related to touch, vibration, force, taste, sight, and more.

AI Optimization



Network automation: Native AI will analyze services and traffic, optimize communication and computing resources, and dynamically manage networks according to demand. **Data processing:** AI will process raw data efficiently to reduce complexity and save energy.

Users expectations

- Larger capacity, faster speeds, lower latency.
- Enhanced user experience and precise localization.
- Assurance of security, privacy, and digital sovereignty.



Challenges:

- Efficient resource use and equitable access.
- Meeting growing user expectations for instant connectivity.
- New interaction methods and dynamic spectrum sharing.

Opportunities:

- Adaptive bandwidth and AI-driven network optimization.
- Innovations in immersive experiences and real-time responsiveness.
- Collaborative ecosystem among operators, companies, academia, civil society, and governments.

Thank you!

