IMT Vision

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AGENDA

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2 Evolution of data rates

3 IMT 2020 use case

4 IMT 2030 vision

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1 IMT

IMT: International Mobile Telecommunication

A concept established by the International Telecommunication Union (ITU) to define global standards for future mobile telephony networks.

IMT 2000 (3G)

High-speed mobile communication services, such as data transmission, video streaming and Internet access at higher speeds than previous 2G systems.

IMT ADVANCED (4G)

Enhance 3G performance by delivering even higher data rates, reduced latency and improved quality of service with advanced applications such as high-definition video streaming.

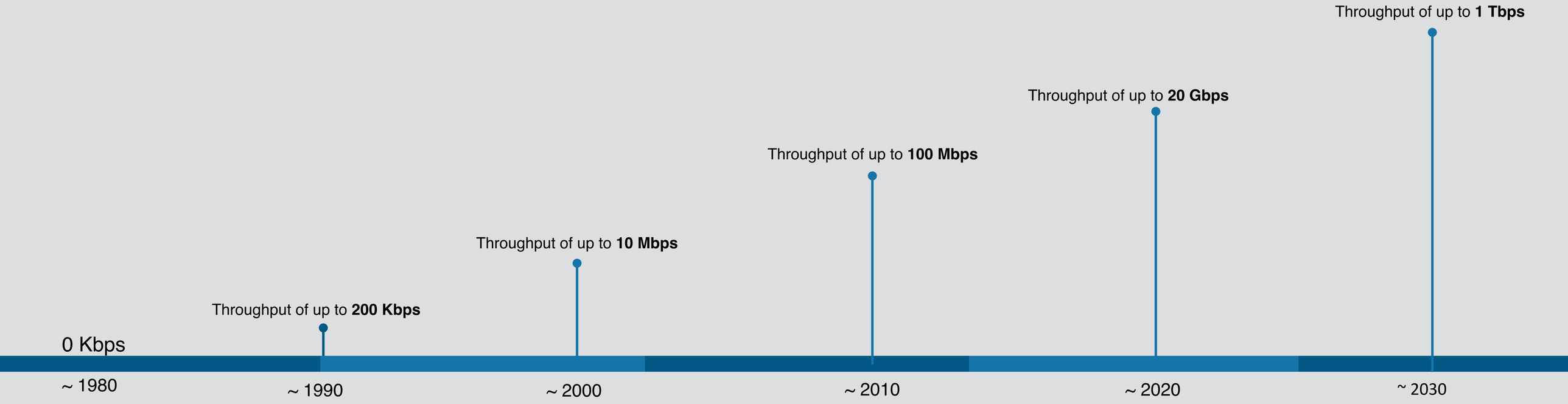
IMT 2020 (5G)

Extremely high data rates, ultra-low latency and the ability to connect a large number of devices simultaneously. It is designed to support a diverse range of applications, including the Internet of Things (IoT), autonomous vehicles, telemedicine, virtual and augmented reality, and many others.

2 Evolution of data rates

1G 2G 3G 4G 5G 6G

Analog | Numeric | IMT - 2000 | IMT - Advanced | IMT - 2020 | IMT - 2030



3 IMT 2020 use case

Platform for addressing industry and society transformations

Massive machine type communication
- Smart meter
- Tracking
- Fleet management

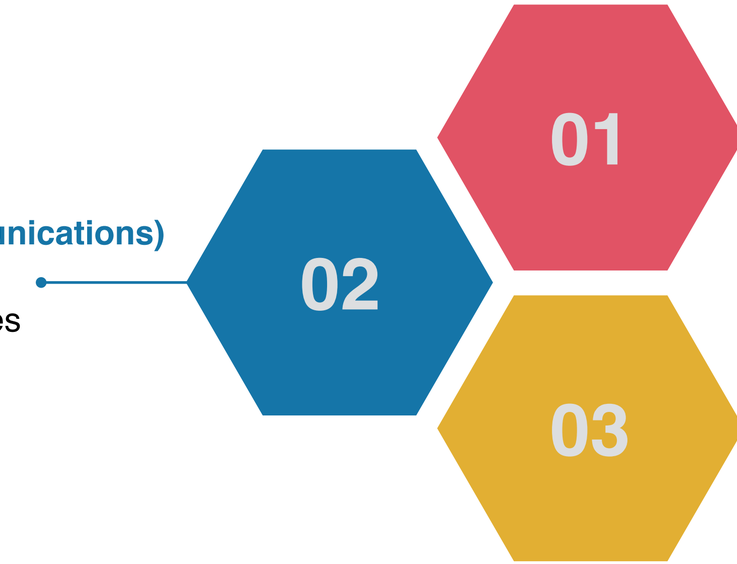
Critical machine type communication
- Industrial applications
- Traffic safety & control
- Remote manufacturing

Cost effective delivery of increased data traffic

Enhanced Mobile Broadband
- VR/ AR
- 4K/ 8K UHD
- Smartphones

Fixed Wireless Access
- Mobile / wireless / fixed
- Enterprise
- Home

Oil & Gas | Automotive / Transport | Manufacturing | Energy & Utilities | Mining | Logistics | Construction | Smart Cities | Agriculture | Public safety



eMBB (enhanced Mobile Broadband)

Improving the mobile broadband experience that 5G can offer over previous mobile standards and technologies, increasing data speeds by up to more than ten times.

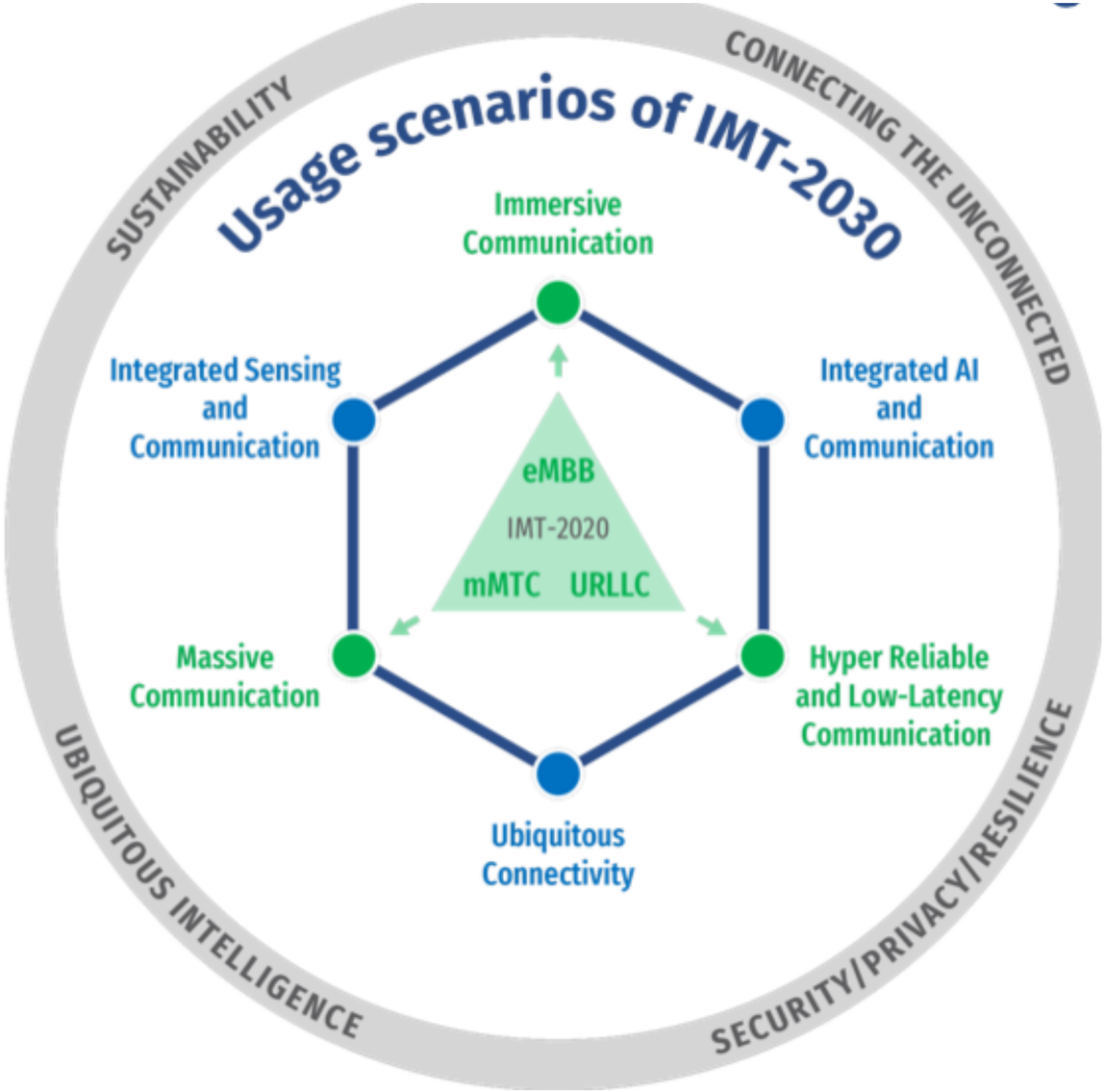
mMTC (massive Machine Type Communications)

Variety of use cases: from intelligent transport systems to autonomous factories thanks to its low-latency connections

URLLC (Ultra-Reliable and Low Latency Communications)

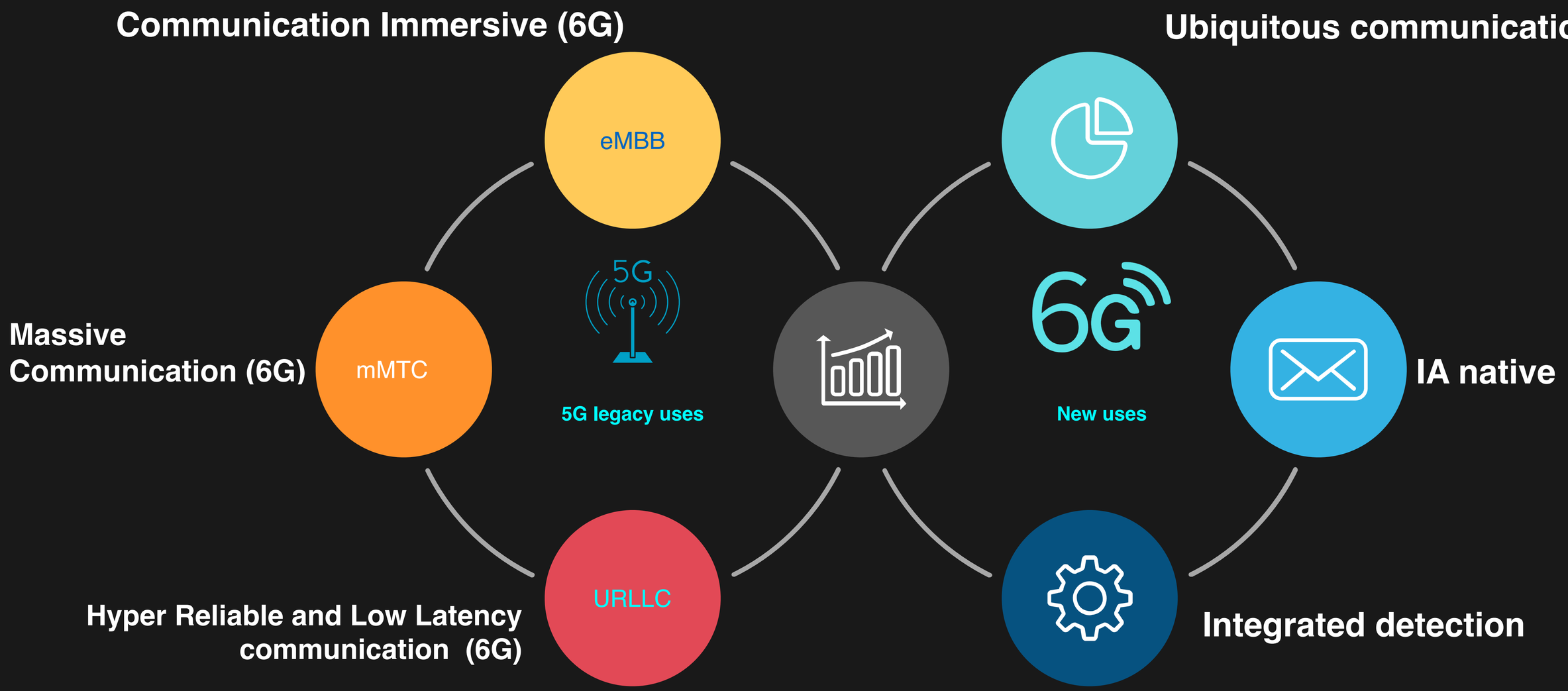
Ultra-reliable, low-latency communication with higher data rates. (Connected cars, autonomous vehicles, industrial applications and virtual reality)

4 IMT 2030 Vision: General principles

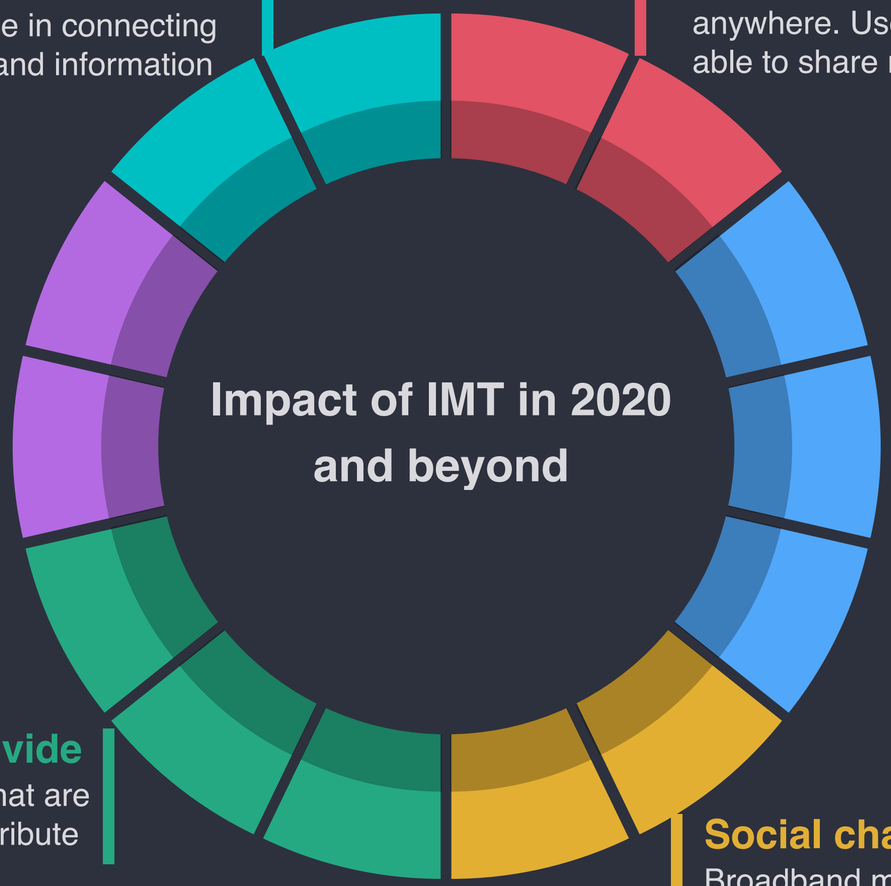


- Sustainability
- Connecting the unconnected
- Ubiquitous intelligence
- Security, Privacy, Resilience

4 Usage scenarios IMT 2030



5 Impact of IMT in 2020 and beyond



Connect the world

Broadband connectivity will become as important as access to electricity. IMT will continue to play an important role in connecting the world through the provision of mobile services and information exchange.

New modes of communication

IMT will make it possible to share all types of content, anytime and anywhere. Users will be able to create more content, which they will be able to share regardless of time or place.

New ICT market

The development of future IMT systems should facilitate the establishment of an integrated ICT sector, which will play a driving role for economies worldwide.

New forms of education

IMT can change the way education is delivered by providing easy access to digital textbooks or cloud storage of knowledge available on the Internet, stimulating the development of applications such as e-learning, e-health and e-commerce.

Reducing the digital divide

Mobile and wireless communications systems that are affordable, durable and easy to deploy can contribute to this objective.

Social changes

Broadband makes it easier for the public to quickly form and share opinions about a political or social issue via social networks.

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