



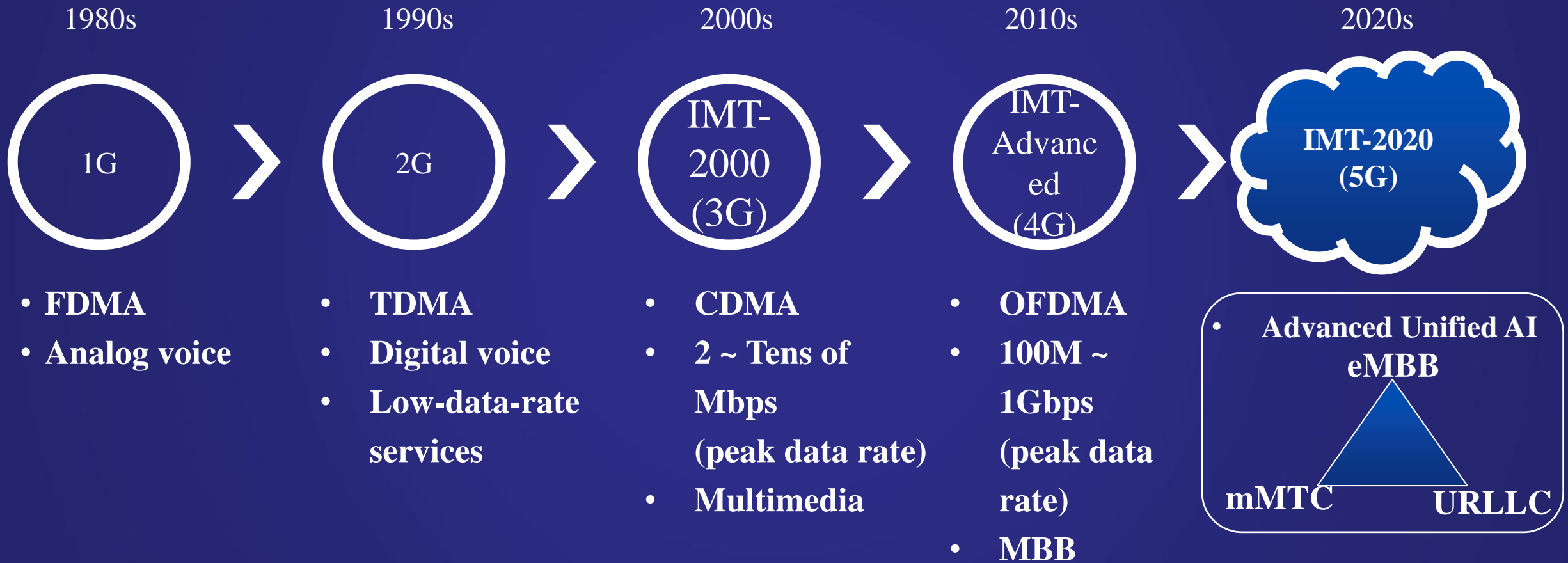
China's development towards IMT-2020

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IMT-2020 Promotion Group

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IMT-2020: a Global R&D Focus



**ITU-R has invited proposal for IMT-2020 radio interface technology
In March 2016**

IMT-2020: Diverse Usage Scenarios To Full Connected World

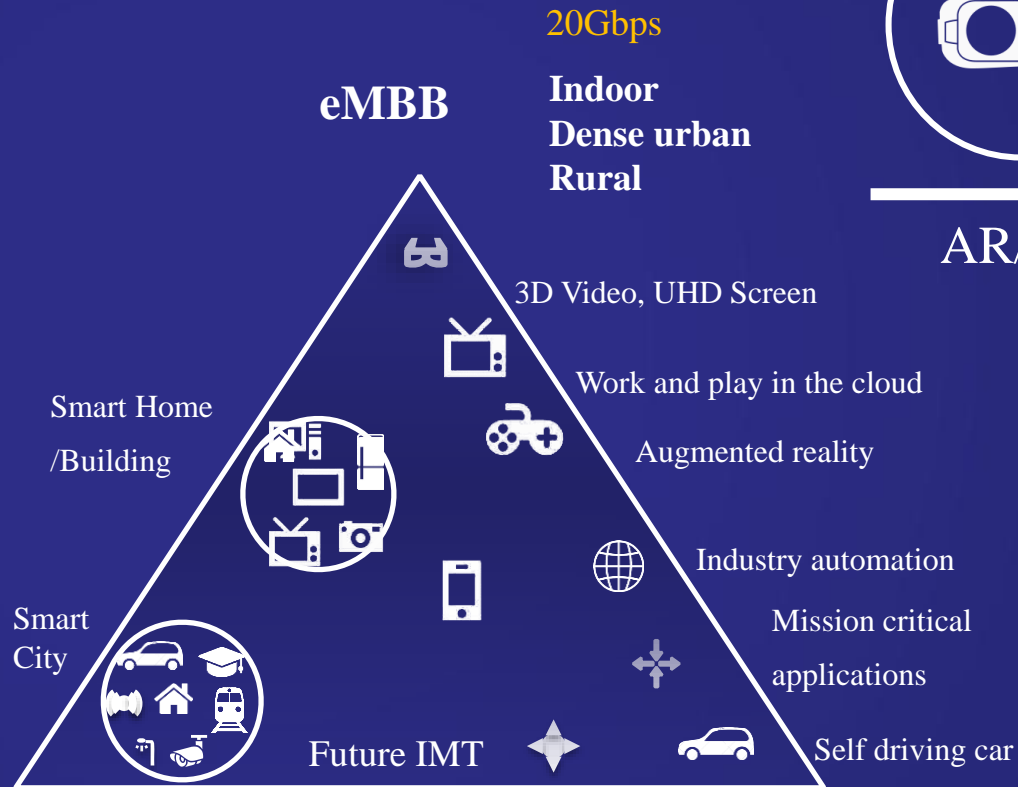
ITU-R IMT-2020 Evaluation

3 Scenarios w. 13 Metrics

- Peak rate/SE
- Cell avg./edge SE
- User perceived rate
- Regional load density
- User-plane latency
- Control-plane latency
- Mobility
- Mobility HO latency
- Network/terminal EE
- Connection density
- Reliability

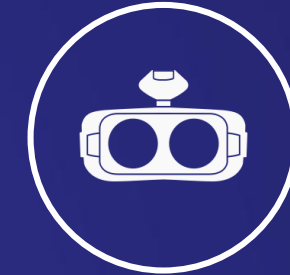


Smart Access



mMTC
Urban macro-mMTC

URLLC
Urban macro-URLLC



AR/VR



Smart Drive

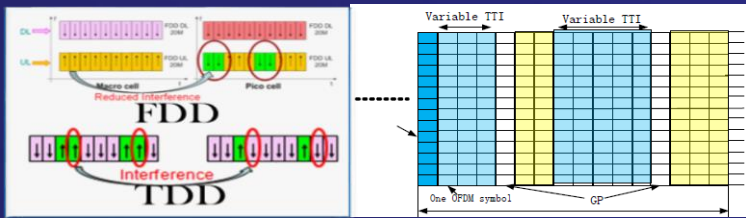
China Devotes to an IMT-2020 Ecosystem with More Vitality, Long Life Cycle



Key IMT-2020 Technologies

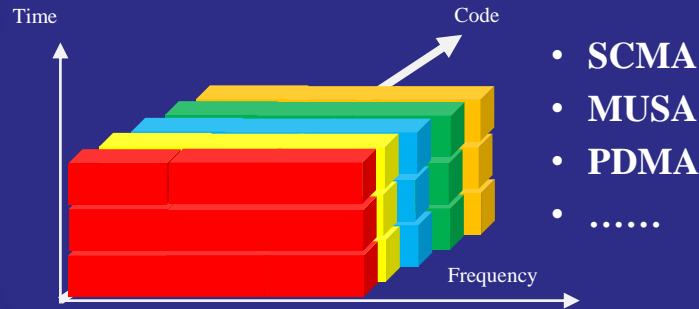
Flexible System Design

- **Flexible Frame Structure** with self-contained & variable length TTI
- **Flexible Waveform** with forward compatibility
- **Flexible Duplex** with Symmetric TX/RX Design

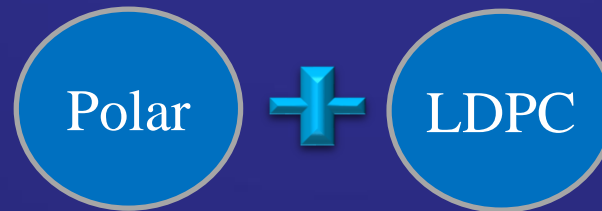


Innovative Tech. for NR

• NOMA

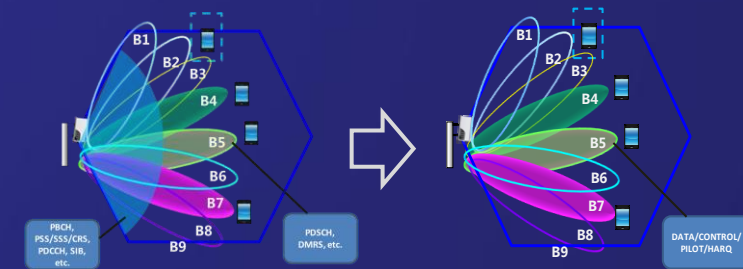


• Advanced coding



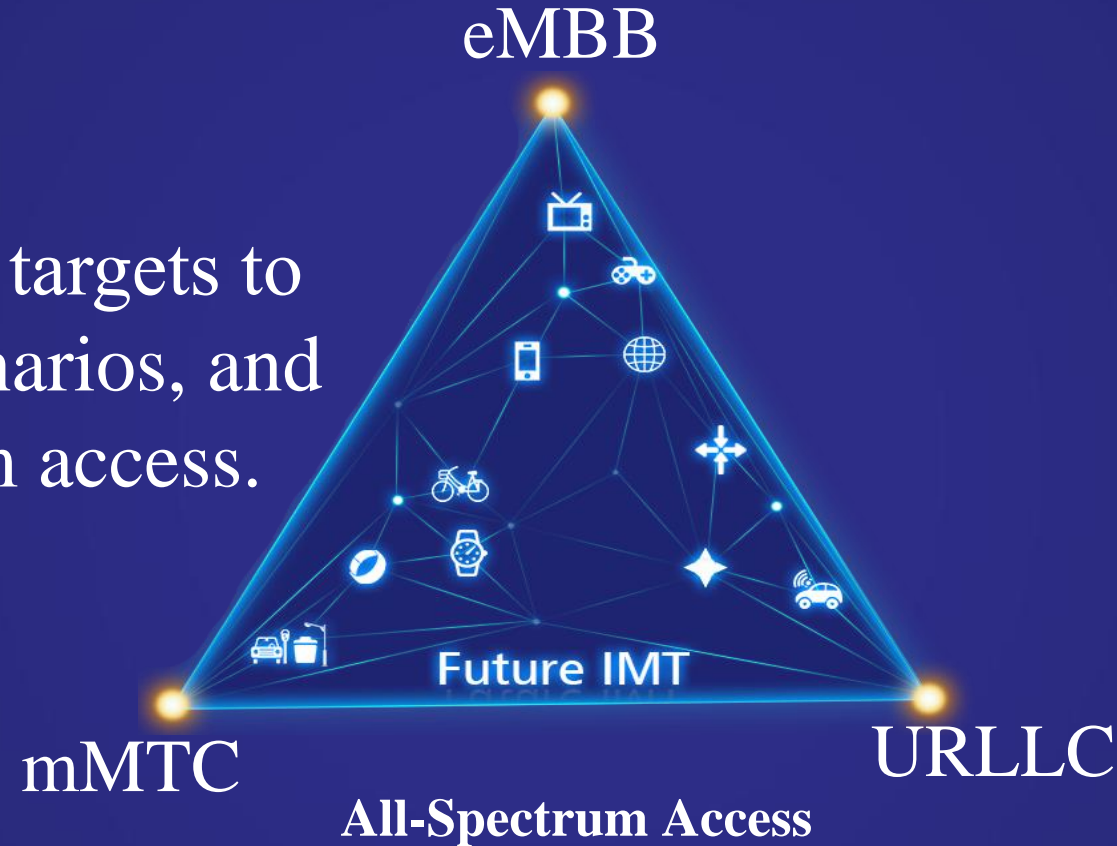
Massive MIMO

- **Unified MIMO framework** for control and data
- Signaling & feedback enhancement with more accurate CSI
- **Beamforming enhancement:** self-contained beam and Hybrid baseband & analog beamforming



Full Capability for IMT-2020 Scenarios

China's submission targets to fulfill all usage scenarios, and support all spectrum access.



For All scenario, All requirements

For Hotspot high data rate enhancement



China Supports Global Unified IMT-2020 Standard

- China supports a globally unified IMT-2020 standard.
- China actively contributes to 3GPP's IMT-2020 (5G) development, and supports 3GPP technology as the globally unified IMT-2020 standard.
- China's submission will include at least NR, and be compliant with 3GPP R15 and R16 specifications, targeting to fulfill all usage scenarios.
- China's initial complete submission is planned when 3GPP finishes Rel-15 developments.



Summary

- China will submit candidate IMT-2020 RIT/SRIT to ITU-R to support ITU-R's activity on IMT-2020 development.
- China studied IMT-2020 key technologies, and actively contributes to 3GPP as a global effort for IMT-2020.
- China's submission will include at least NR, and be compliant with 3GPP R15 and R16 specifications.
- China's initial complete submission is planned when 3GPP finishes Rel-15 developments.
- China supports 3GPP as the globally unified IMT-2020 standard.



THANK YOU!



IMT-2020 (5G) Promotion Group is willing to strengthen international collaboration to promote globally unified 5G standardization and industrialization.

www.imt-2020.cn