

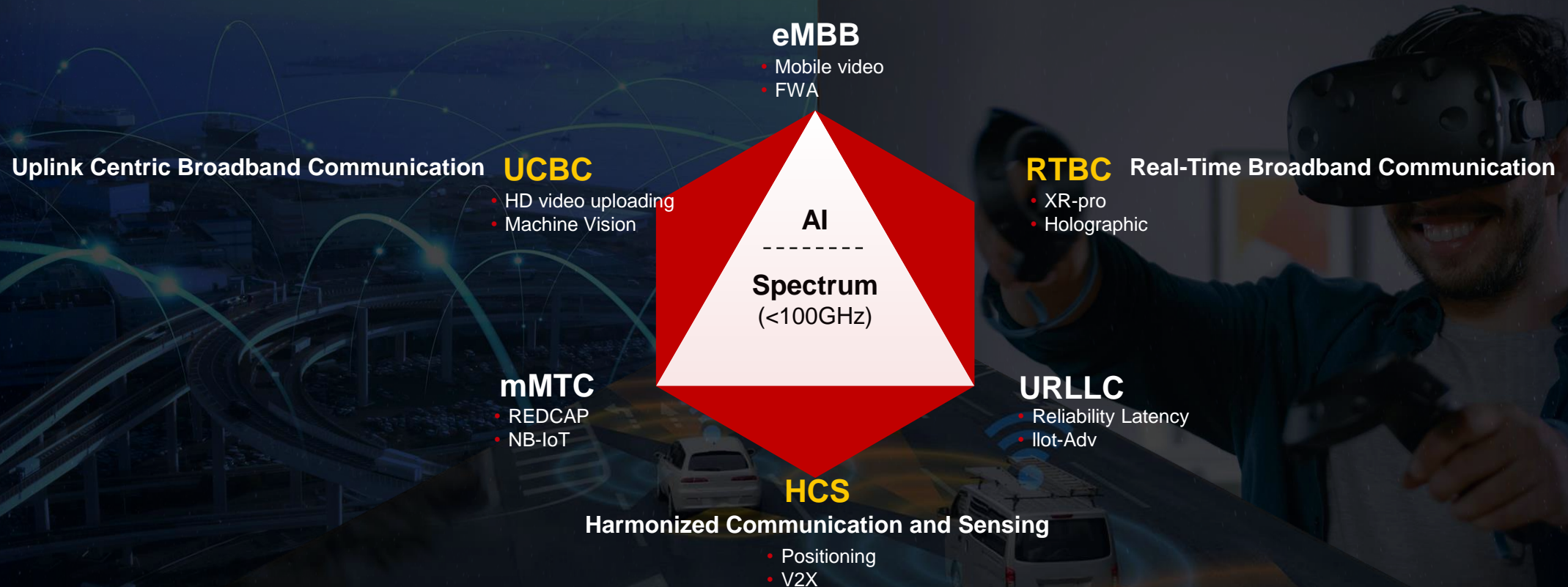
# Defining 5.5G for a better, intelligent world

---

2022-05  
ICASSP'22 in Singapore and Shenzhen.

# 5.5G

Vision: From the Internet of everything to the intelligent Internet of everything



# Uplink Centric Broadband Communication (UCBC): Accelerating industry intelligent upgrades

3D-AI  
Machine vision



1~2Gbps  
vs  
150~250Mbps



10x uplink experience rate    Gbps@UL



**Multi-band uplink aggregation**



**Uplink massive array technology**

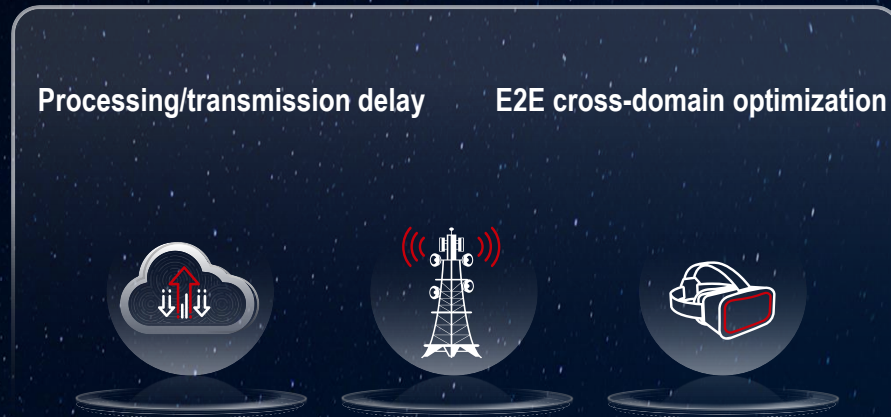


**Rich terminal types**

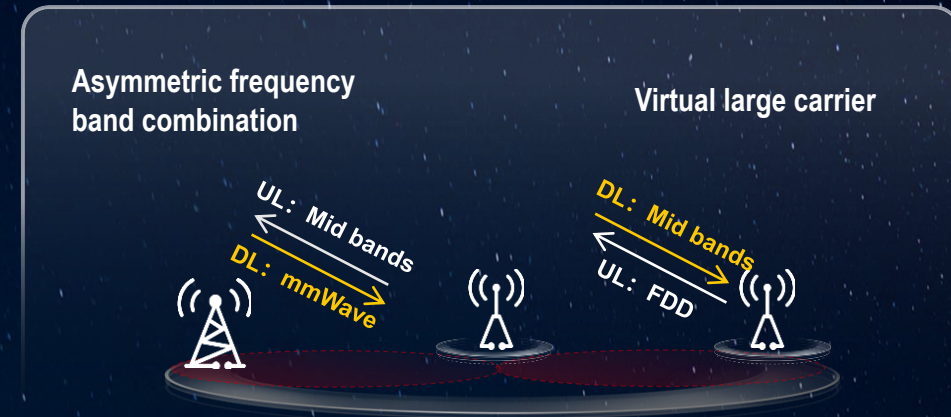
# Real-Time Broadband Communication(RTBC): Making immersive experiences possible

10Gbps with ms-level latency

E2E cross-domain ultra-low communication latency



Generic carrier technology



# Harmonized Communication and Sensing (HCS)

## Upgraded sensing

Spatial precision

Latency

Centimeters

Submeters

Meters

Higher-level smart driving

Lower-level autonomous driving/Aviation control

Incident alerts

Information service

10ms

50ms

100ms

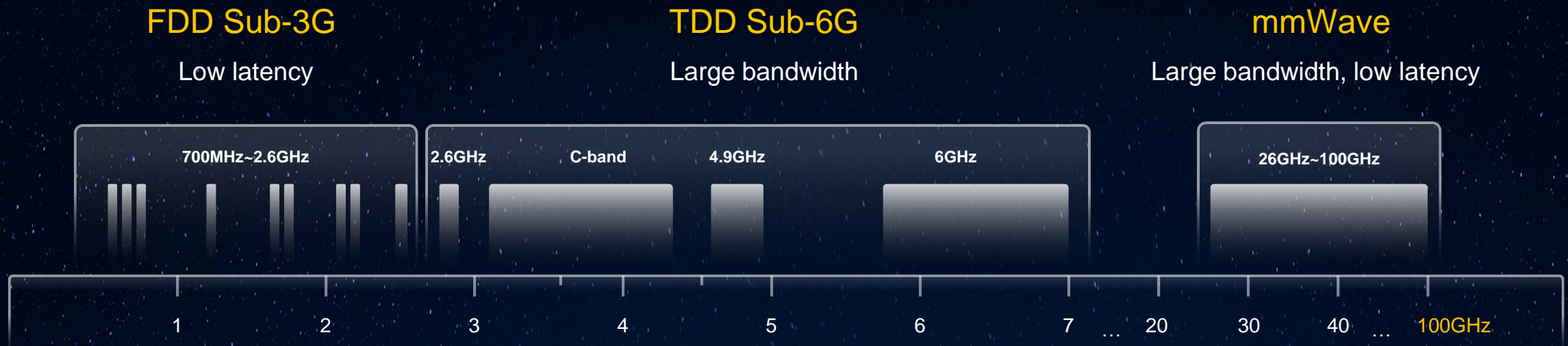
Super-resolution sensing    High-precision, low-power location

Centimeter-level location and sensing

From individual sensing to crowdsensing

360° full view    24/7, all-scenario

# Restructuring sub-100GHz spectrum usage pattern



All-band uplink and downlink decoupling, All-band flexible aggregation on demand

# +AI, 5G networks have limitless intelligence

Differentiated services

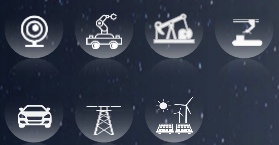
Sub-100GHz spectrum

Massive smart devices

Extreme user experience

Enabling network autonomy

Making industries intelligent



- Device-pipe federated learning
- Full-band self-adaptation

- All-scenario sensing
- Network self-evolution

- Service intent translation
- Deterministic experience

# Defining 5.5G for a better, intelligent world

## Co-defining 5.5G



Defining unified standards within 3GPP framework

## A thriving industry ecosystem



Sub-100GHz spectrum

New network capabilities

Diverse devices

## Jointly developing industry applications



5.5G + Cloud + AI + Applications

5.5G is the evolution of 5G, but is still compatible with it