

# SPECTRUM

THE FUNDAMENTAL ELEMENT OF MOBILE



5G Ecosystem

Wang Hu



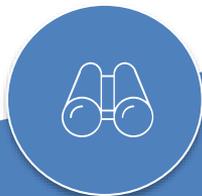
# 5G ECOSYSTEM UPDATE

Wang Hu

GSA Asia Pacific



# VISION



## VISION

wirelessly connect almost all 7 billion people globally to new and exciting services through 100 billion devices and things, by 2030



## HOW

spectrum from the low-band, mid-band and high-band frequency ranges helps realise the Vision

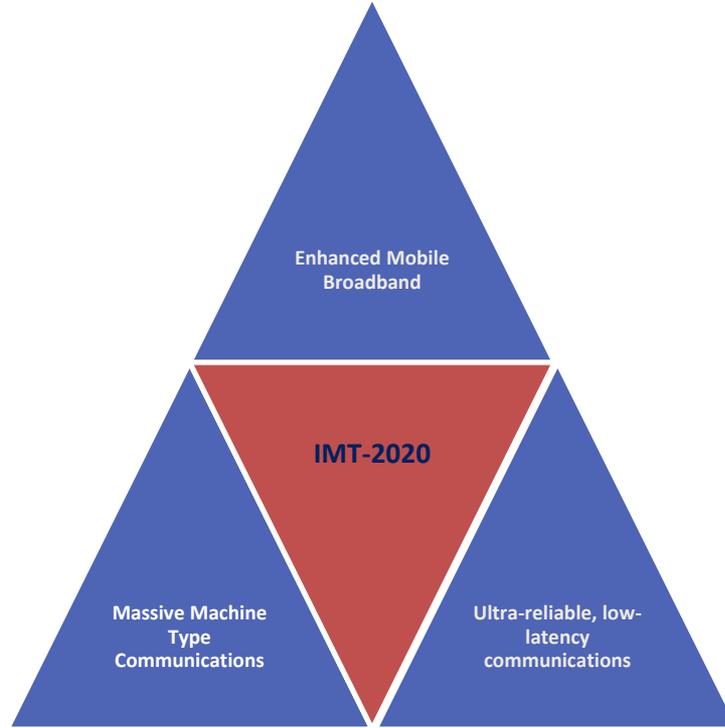
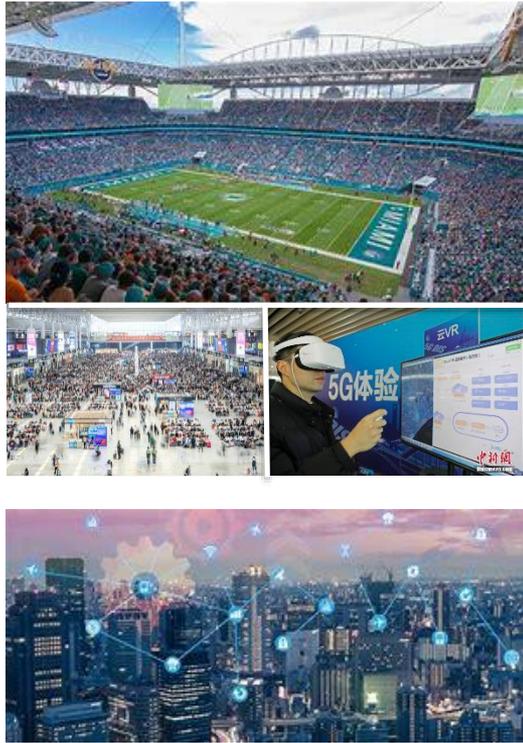


## WRC-19 GOAL

large contiguous amounts of high band (mmWave) harmonised spectrum, with suitable regulatory conditions, helps enable extreme capacity and ultra fast local area services.

planning for the future with WRC-23 mid & low band agenda item

# USE CASES





Release 15 complete (2017-2019)

Release 16 development (2018-2020)

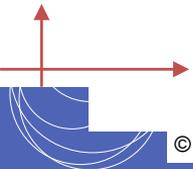
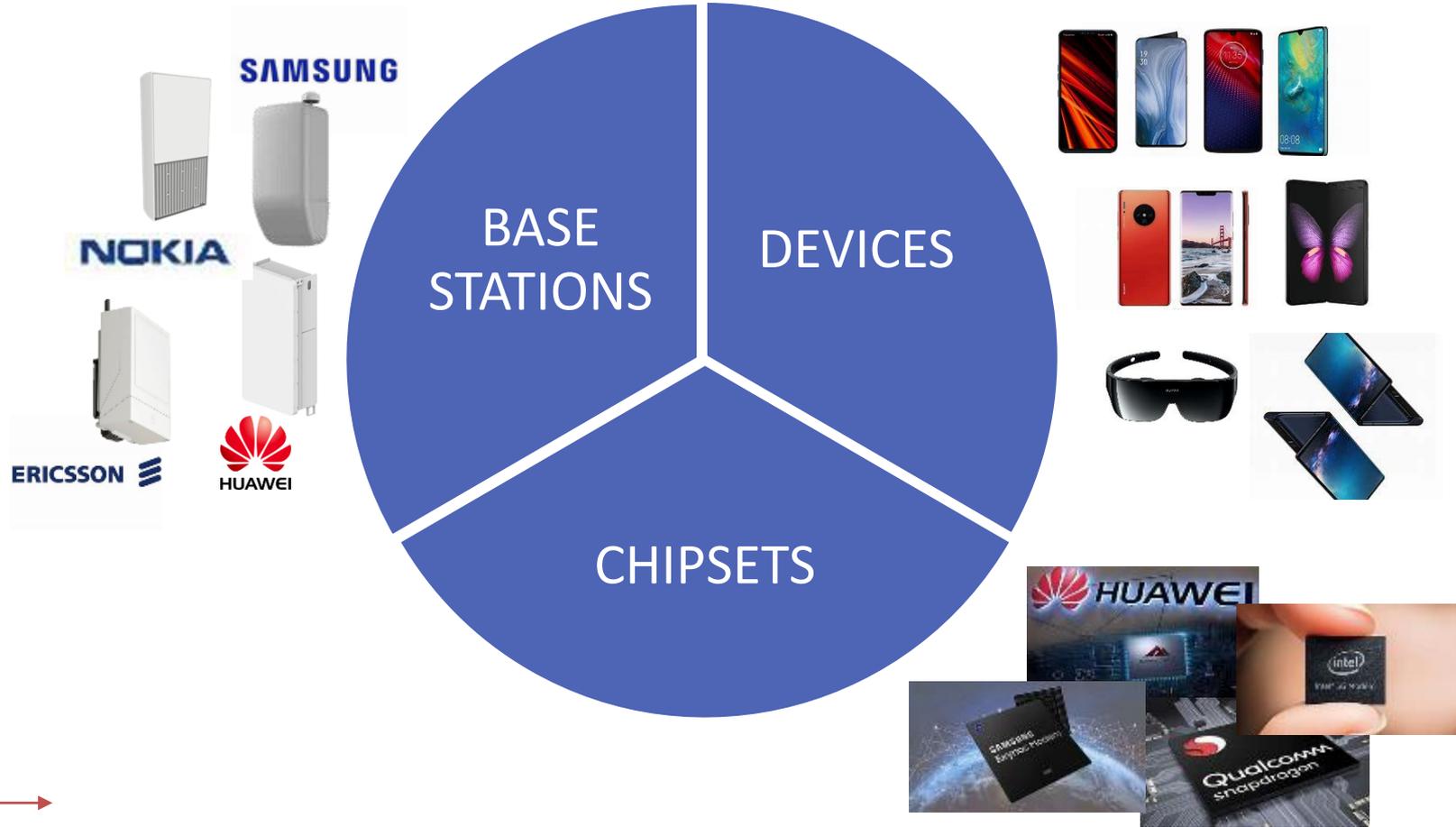
Enhancements, Unlicensed, URLLC+ & IoT+, V2X, etc

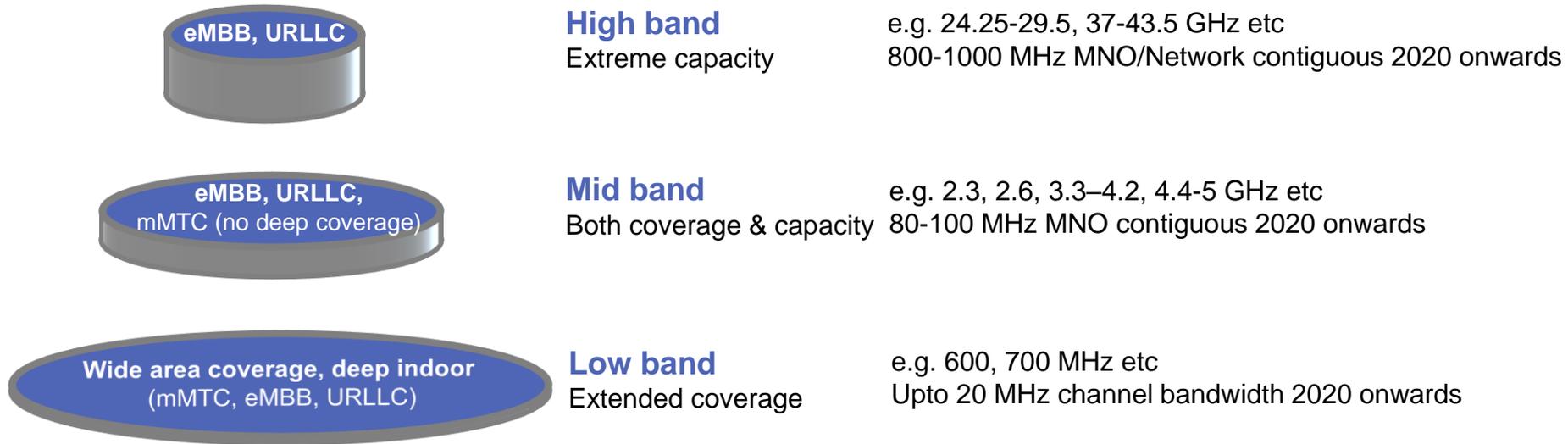
Release 17 planning (2019-2021)

Enhancements to support verticals, coverage improvements, NTN, etc

**3GPP 5G specs complete – work underway on enhancements**

# PRODUCTS





**Various applications and services require access to spectrum from low, mid and high bands**

# The Road to 5G with GSA

The Industry Voice of the Global Mobile Ecosystem

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## THANKYOU

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5G ecosystem update



5G licensing update

