

Title of the event

5G is ON

Open Innovative Business Horizon through 5G

Place:

Date:

Presenter : Mohamed Radhi Zouari

5G Arrives Faster than Expectation

2018

2019

2020

Spectrum

15 countries

Australia, Finland, UK, Spain, Korea, USA, UAE, Kuwait, KSA, Qatar, Bahrain, Oman...

20+ countries

Austria, Belgium, China, Denmark, France, India, Japan...

30%+ countries

Canada, Chile, Thailand...

Terminals



World 1st 5G Commercial CPE



Massive 5G New Terminals on The Way

Networks



LG U+ 3000+ Sites

20K+ Sites

40K+ Sites



200+ Sites

1000+ Sites

3500+ Sites



vodafone 300+ Sites

1500+ Sites

4000+ Sites

Hundreds Thousands



5G Commercial Networks are Reality Now



12K Sites

World's 1st Scaled
5G Network

1.3 Gbps

Superior Gbps
Level Experience

CloudX

Cloud based 5G
services



4G+5G DC
VR Live Sport

VIVA

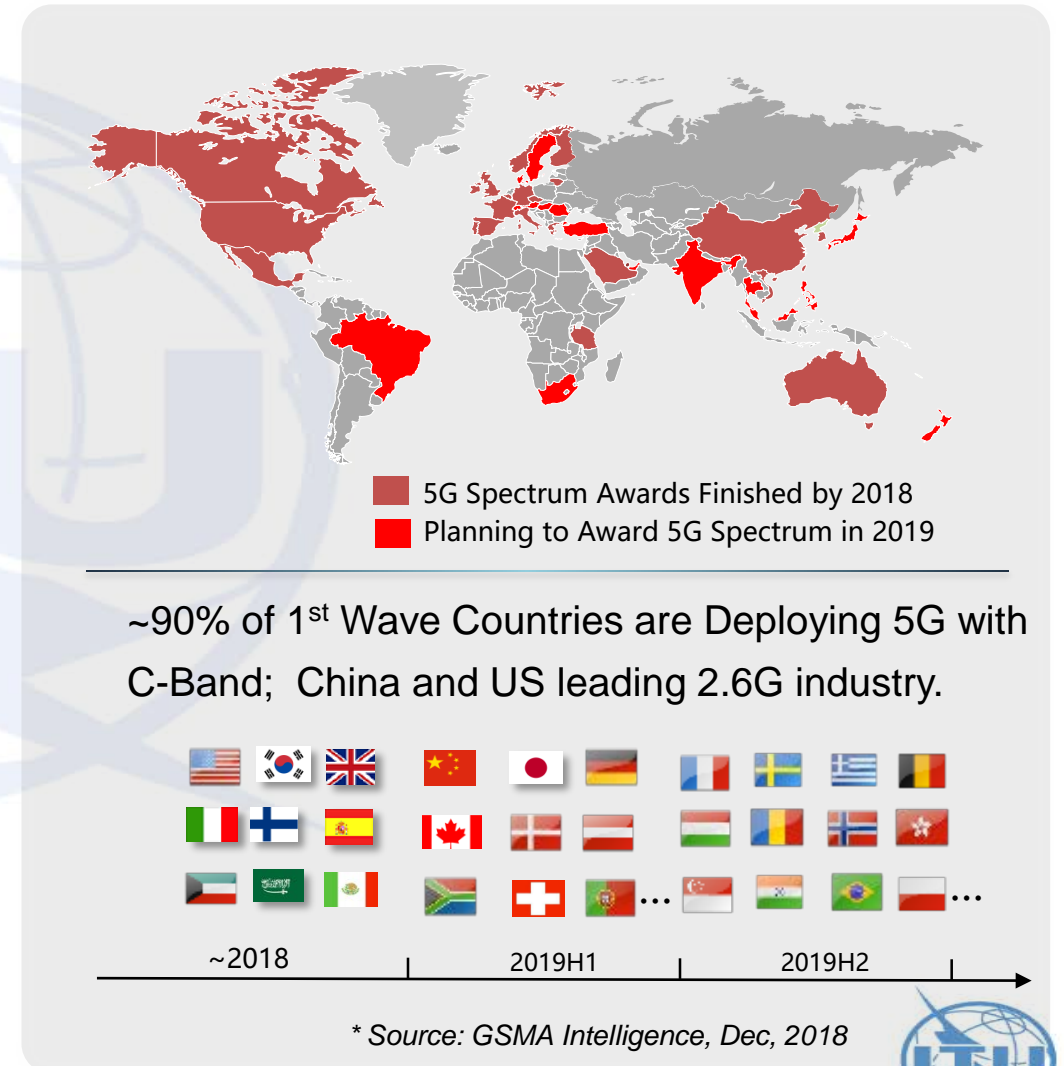
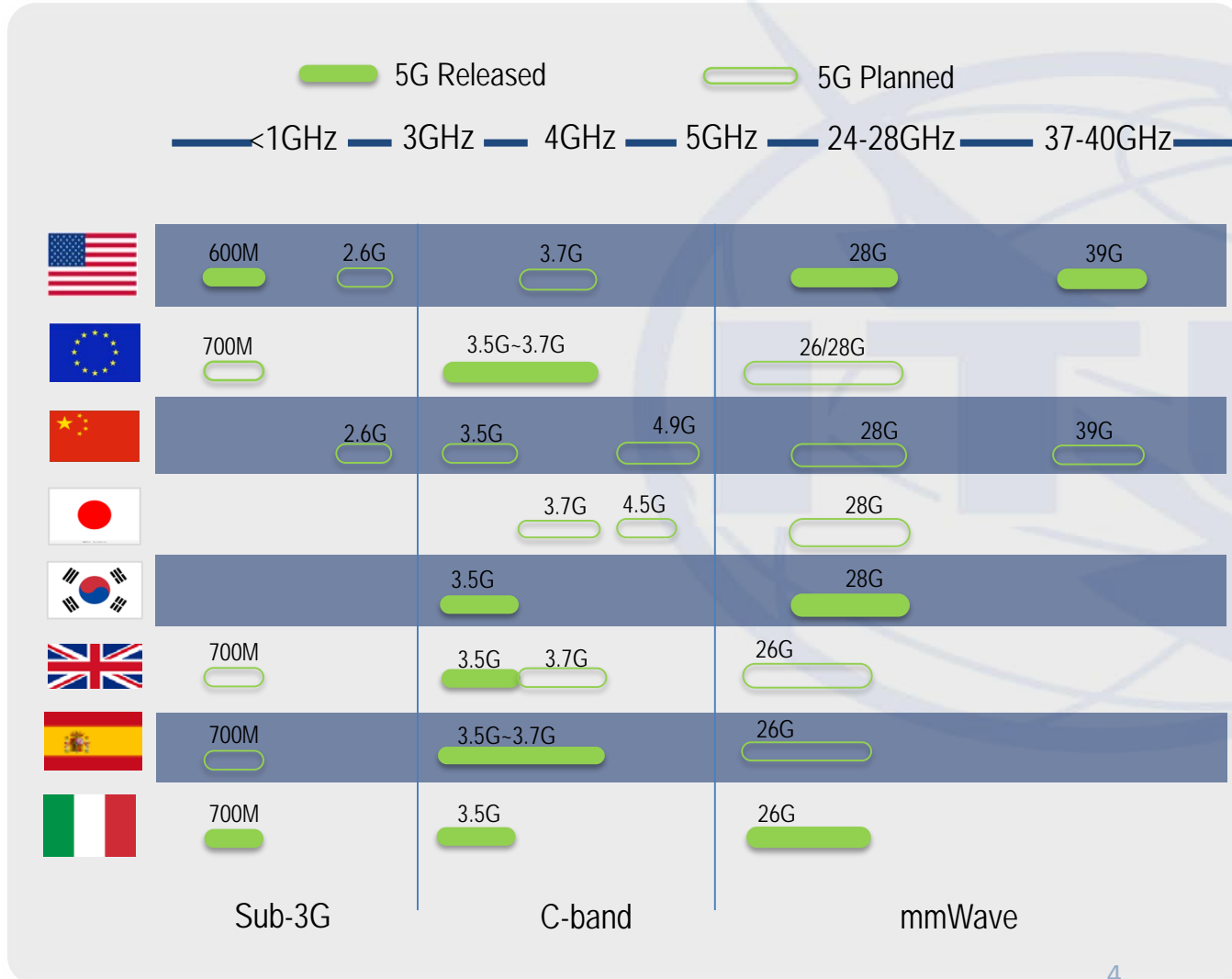


Speed Based FWA
Best Cost/bit with 5G

Sunrise

Realizing FMC
4K TV Over 5G

C-band is the Primary band in Global 5G spectrum allocation



* Source: GSMA Intelligence, Dec, 2018



5G Powerful Capabilities Enabling the 4th Revolution

Bringing MBB to New Horizon

Speed

20X (20Gbps)

Mobile Video (~25Mbps)



4K/8K (~100Mbps)



Mobile VR (Gbps Level)



Mobile AR (Gbps Level)



Exploring Better Future

Latency

1/20 (1ms)

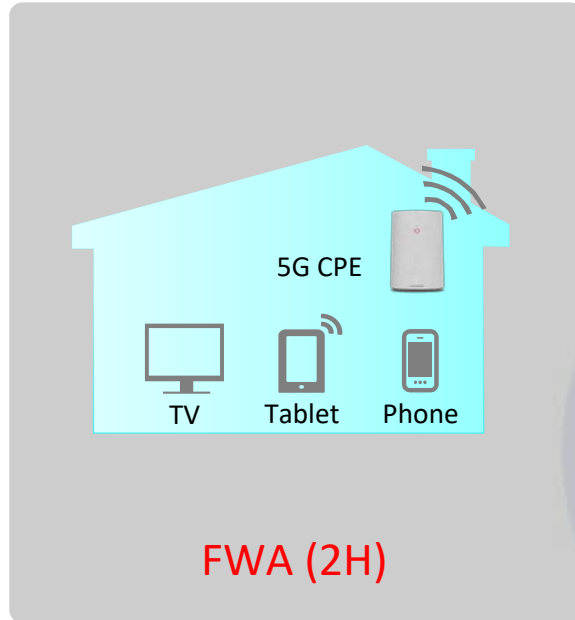
Connection

10X (1M / km²)

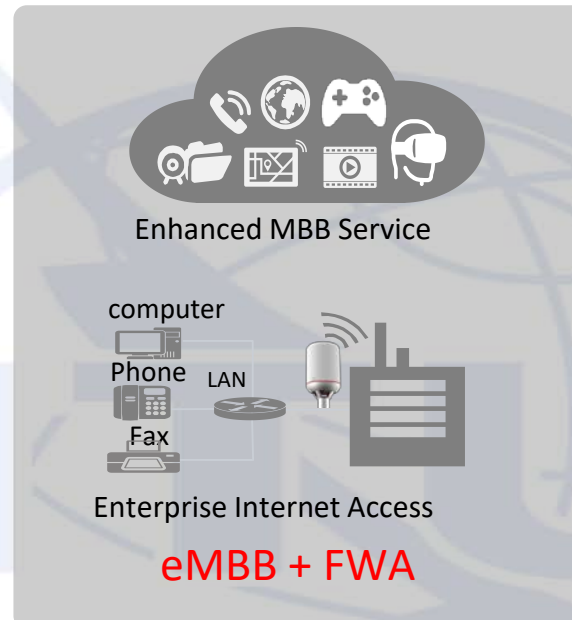


Huawei Understanding for 5G Business

2018 Phase I



2019-2020 Phase II



2021- Phase III



Branding: High Value Area

Offloading: High Traffic Area

Coverage: 100Mbps everywhere

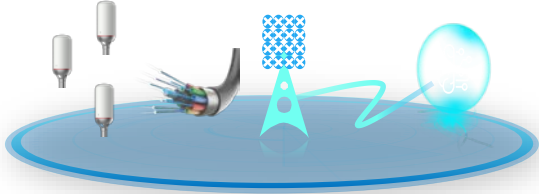
Down Link 100Mbps
Up Link 5Mbps
Latency 20ms

300Mbps
50Mbps
10ms

10Gbps
100Mbps
1ms

5G Air Fiber Redefining Wireless Broadband

Outdoor CPE M-MIMO WTTx Suite



- Fast Deployment
- Fiber Like Experience
- Full Service
- Flexible Speed on Demand
- Future Oriented Evolution







Fiber Access = 5G Air Fiber + Underground Fiber

Home Broadband





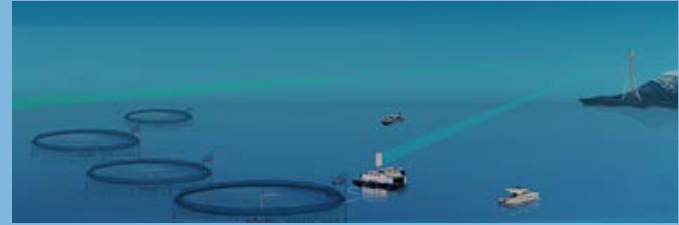
Multi-Play







Mobile + Internet + TV + VR

Sunrise

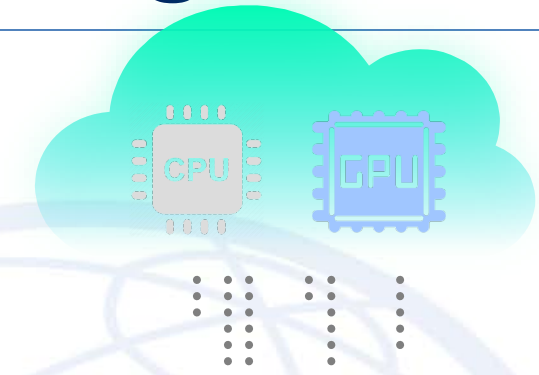
Verticals







5G Brings Cloud PC/Gaming into Reality



Cloud PC/Gaming

Rendering (computing) on cloud

Enormous Storage & Computing Capability



- No console required
- Streaming on any screen
- Cross-platform compatible

Windows 10	2 Core 4GB PC	4.5 USD/mon
	4 Core 8GB PC	8.5 USD/mon
	Cloud Disk	2.5 USD/100GB/mon

Experience as native PC

Everywhere

Low Latency

Ultra Broadband



at Office



at Hotel



at Home



at School



NTT DoCoMo: 5G @ Smart Life Through Ecosystem



1. Vision *Integrating a wide variety of added value through 5G for solid growth*

Source: NTT CEO @ MWC 2018

Smart life
Telecom

dTV dmagazine DAZN for docomo

docomo Hikari
ウルトラパック
Ultra Pack

+d 5G

AI agent FinTech

Drone robotics New entertainment experience Work innovation etc.

Age of 4G Age of 5G

2. Implementation

DOCOMO 5G Open Partner Program

- ▶ 5G partner workshop
- ▶ Easy access to 5G connectivity
- ▶ Latest tips on 5G

Over 610 entities expressed intent to participate

5G Trial Site

- ▶ 5GxSPORTS AR/multi-viewpoint demo
- ▶ 5GxGAMING VR games/VR viewing

Collaboration with 15 entities to create new services

Realization of 5G services

4. Targets: Its Own + Partners

Business expansion

Sales growth

Productivity improvement

3. Initiatives @ Consumers & Verticals

Live transmit of free viewpoint images

Linkage with real-time AR

Remote control of construction machines

Remote control of robots

Remote medical service

Remote monitoring of autonomous vehicles

360° 8k video, drones, VR broadcasting, connected car and smart city sensors @ Tokyo 2020 Olympics



Target Network : LTE & NR coexist for Long Term

Target Network

Current:
LTE + GSM/UMTS

All bands to LTE



Future:
LTE Evolution + NR

LTE Evolution + NR Long Term Co-existence



5G NR

5G Ready

GSM/UMTS LTE NR

Smooth Evolution

As is

CloudAIR

To be



All Sub3G RF Modular 5G Ready:
Evolving to 5G NR on Demand

LTE and NR Collaboration



Huawei : A Capable Partner Beyond the Vendor





Thank you

