

Allocation of spectrum bands for mobile broadband service in Malaysia

Fujitsu Telecommunications Asia Sdn Bhd

30th Aug, 2019

Comments to Question

Questions	Comments / Responses
5.	<p>Allocate a 10MHz sub-block in either Band 38 (2575 MHz ~ 2615 MHz) or Band 7 (2500 MHz ~ 2570 MHz paired with 2620 MHz ~ 2690 MHz) for Private LTE application in local private premises.</p> <p>Alternatively Band 71 (663 MHz ~ 698 MHz) could also be considered as potential block for Private LTE usage.</p>

Private LTE will expedite the adoption of new technologies including IoT and automation to boost the Industrial Revolution (IR4.0). For example, agriculture sector contributed 8.2% to the Malaysia GDP in 2017. Smart farming can improve the operation efficiency, productivity, quality and reduce the demand on the foreign workers. Private LTE can play a significant role to change the economical landscape.

As reference, please refer to the attached “Private LTE Network in Japan”.

[Reference]

Private LTE Network in Japan

Private LTE Network in Japan

- “Own LTE network” in which radio frequencies, communication facilities, communication service, operation management, etc. are independent from operators.



■ Case study



Mining site
(oil field, natural gas, mine)
※no coverage area



Public safety facilities
(prison, military base)
※needs of secure communication

■ Private LTE service in Japan

name	service
sXGP (1.9GHz)	Next generation campus PHS
Regional BWA (2.5GHz)	Public

Typical Applications

Back ground

- Expand service for specific location
- From wired to wireless

Railway



stations,
railway line

- Advanced Operation Safety Services
- Central command and smooth communication

Construction



construction site
(remote area,
underground,
skyscraper)

- Support for workers and environmental improvement
- Surveillance camera and improved safety

Hospital



hospital,
home visit

- Consolidation of campus PHS and medical devices

Needs

- Proprietary secure communications environment
- Secure communication during disasters and emergencies
- Establish Flexible Communication Areas

Maritime



Ship,
container terminal

- Improving operational efficiency of cargo handling and shipping
- High security closed network

Energy



Power stations, power
plants

- Consolidation of call and data communication
- Improving operation and reducing communication cost

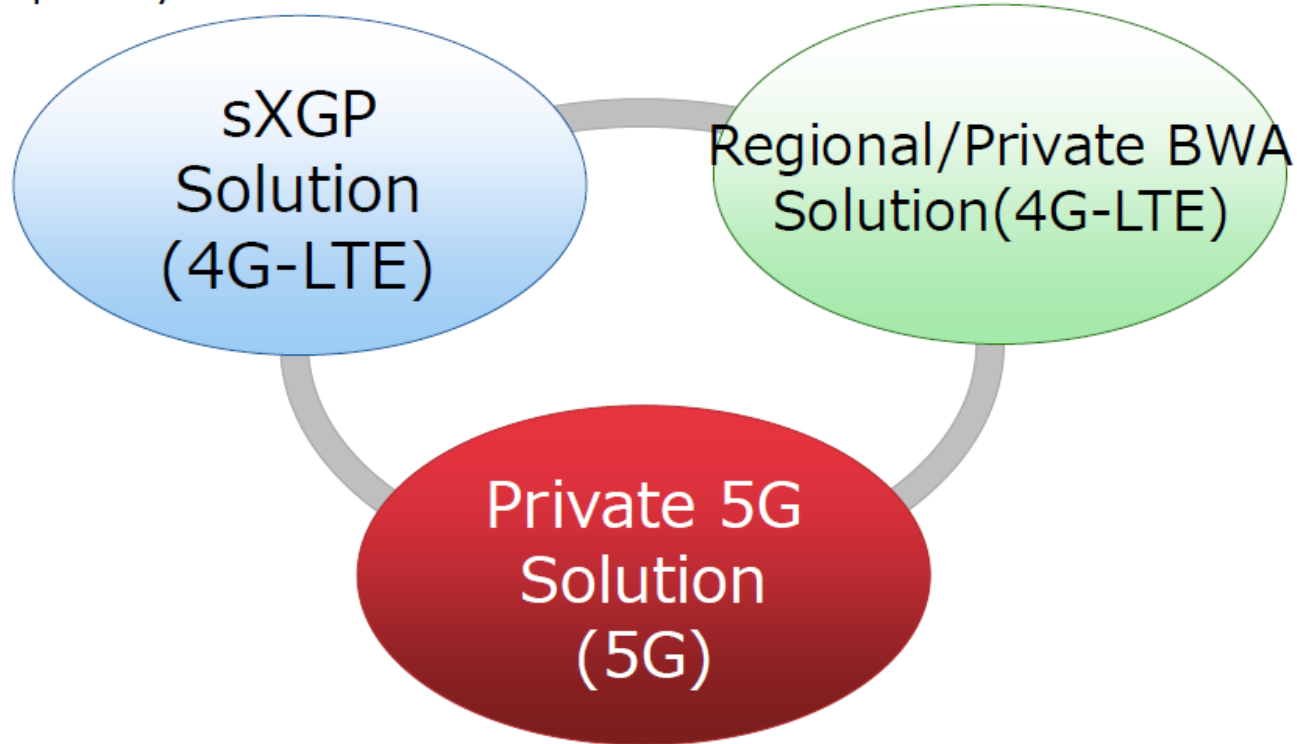
Operator



- Promote the usage of network and cloud services

Private Spectrum

- Composed by 3 areas in accordance with regulations and frequency bands.



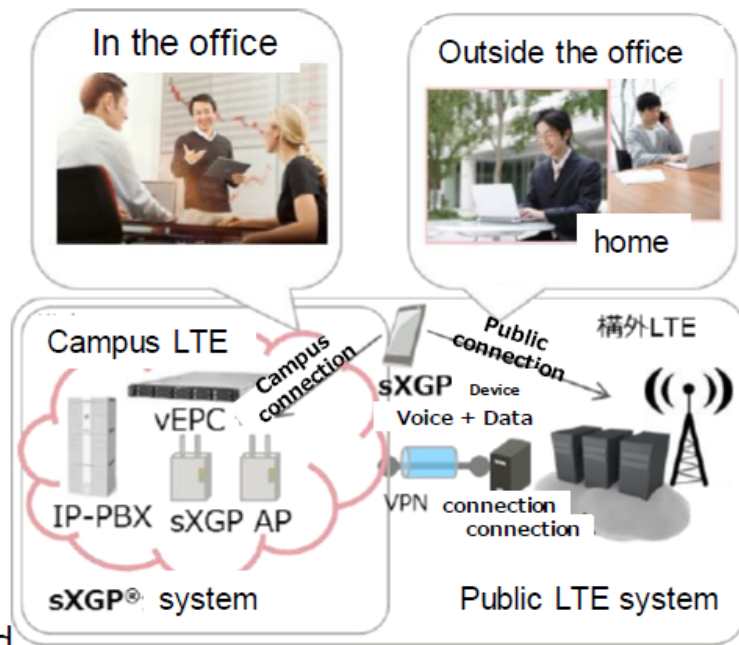
Change of work style by utilizing company owned campus LTE

Customer Benefits

- Combine two terminals, PHS and communication device.
- Business systems can be operated on a wireless network with enhanced communication stability, mobility, and security.
- Enable flexible work styles through easy and secure connections to the corporate network from remote locations.

Features

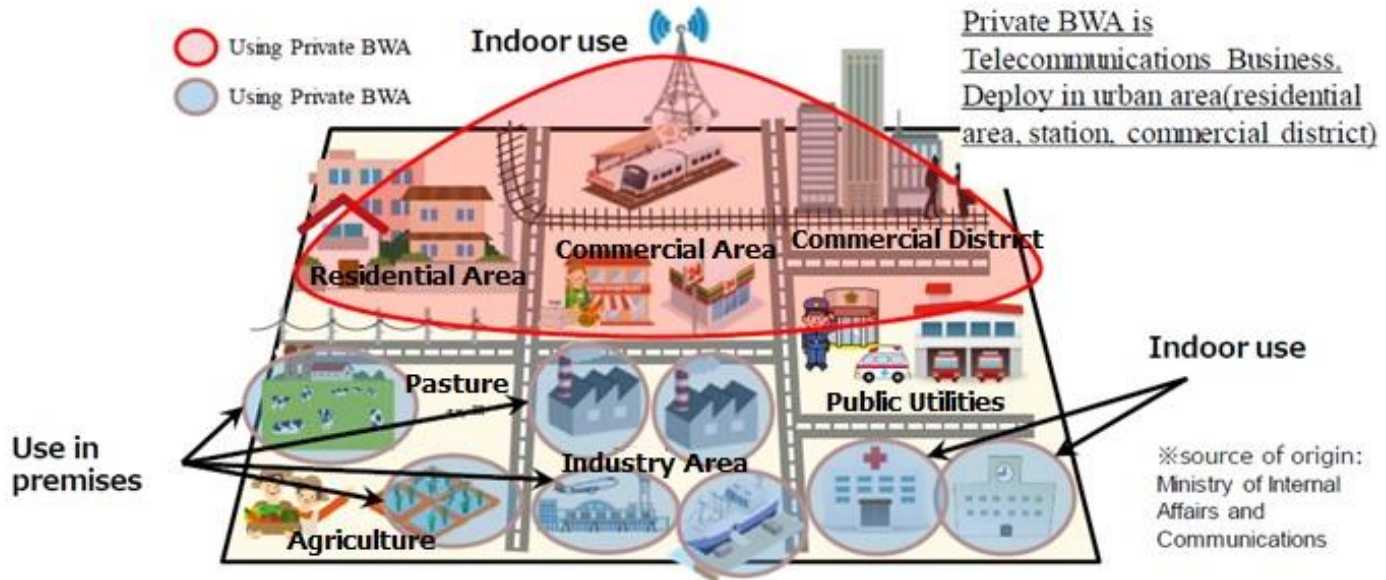
- No license required
- Building wireless areas where needed
- High economic efficiency of own facilities



Private BWA (4G LTE) in Japan

■ Basic concepts

- Using 4th Generation Mobile Communication System(4G)
- Can be used in locations where regional BWA is not in use/
not likely to be used in near future.
- Both obtaining a spectrum license or using the system of another person who
obtained a license is possible.



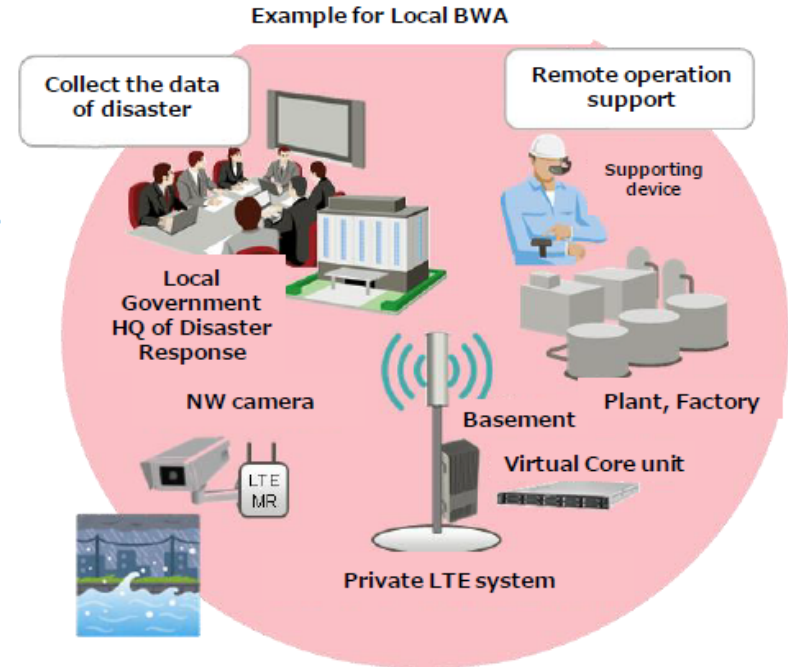
Wide local wireless solution for public and manufacturing

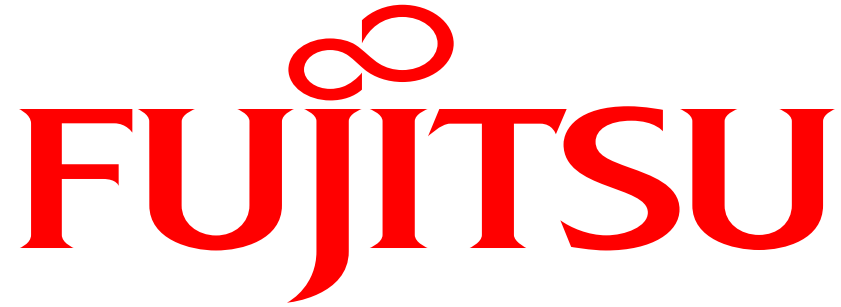
Customer Benefits

- Can use broadband service without wiring construction.
- Can use service without being affected by other region's disaster or system failure.

Features

- On-premise independent operation ensures high disaster resistance and security.
- Can use service in wide area.





FUJITSU

shaping tomorrow with you