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Allocation of spectrum bands for mobile broadband service in Malaysia

Fujitsu Telecommunications Asia Sdn Bhd

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Comments to Question

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Questions	Comments / Responses
5.	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. Alternatively Band 71 (663 MHz ~ 698 MHz) could also be considered as potential block for Private LTE usage.

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”.

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[Reference]
Private LTE Network in Japan

Private LTE Network in Japan

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- "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

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Back groud

- Expand service for specific location
- From wired to wireless

Needs

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

Railway

stations, railway line

- Advanced Operation Safety Services
- Central command and smooth communication

Maritime

Ship, container terminal

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

Construction

construction site (remote area, underground, skyscraper)

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

Energy

Power stations, power plants

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

Hospital

hospital, home visit

- Consolidation of campus PHS and medical devices

Operator

- Promote the usage of network and cloud services

Private Spectrum

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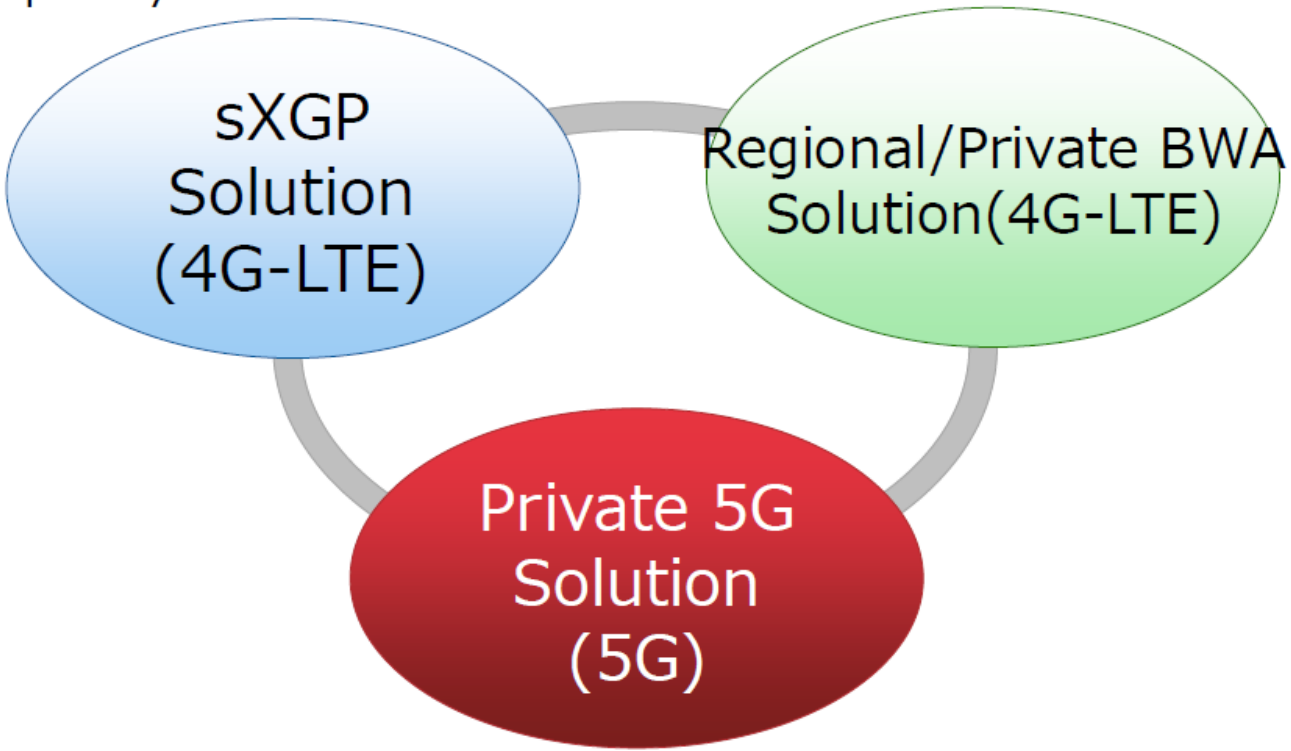
- Composed by 3 areas in accordance with regulations and frequency bands.



sXGP solution (4G-LTE)

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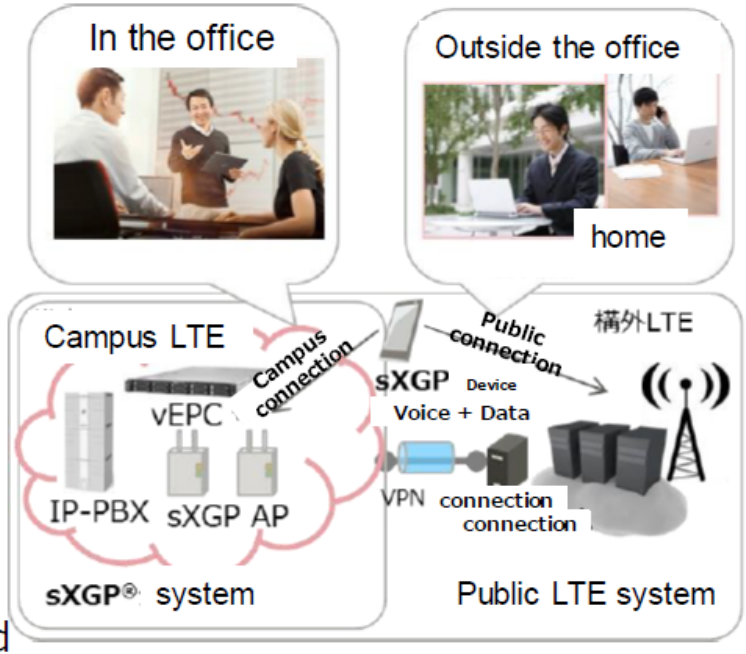
Change of work style by utilizing company owned campus LTE

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.

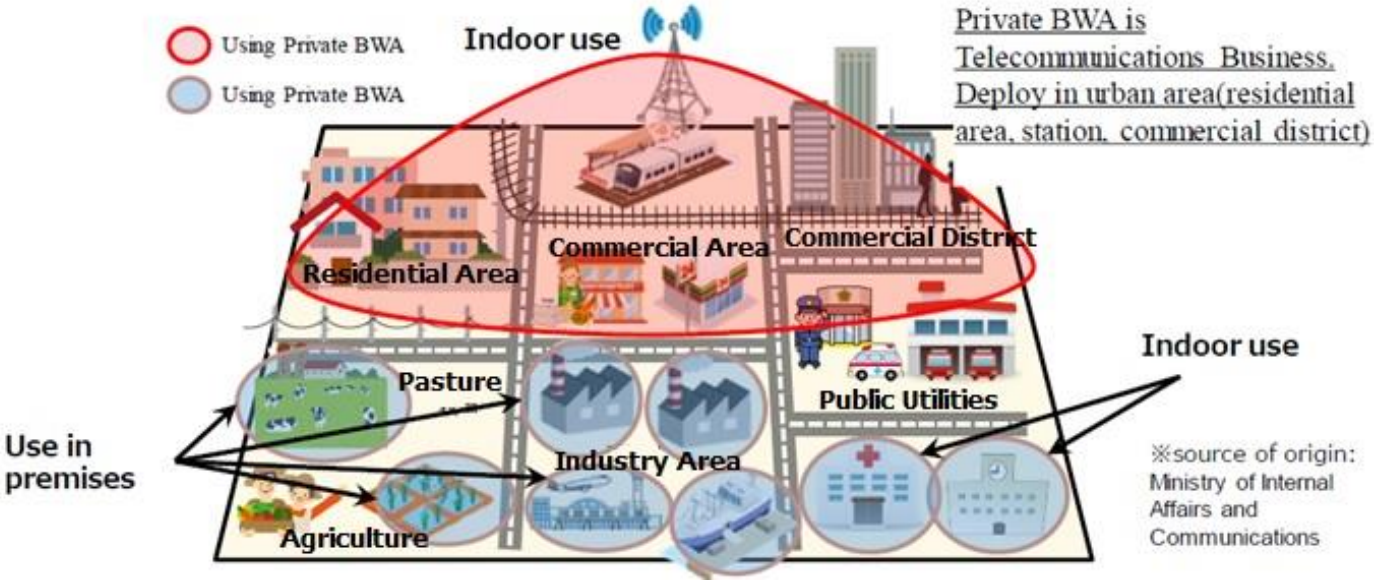


Features

- 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.



Local BWA (4G-LTE) in Japan

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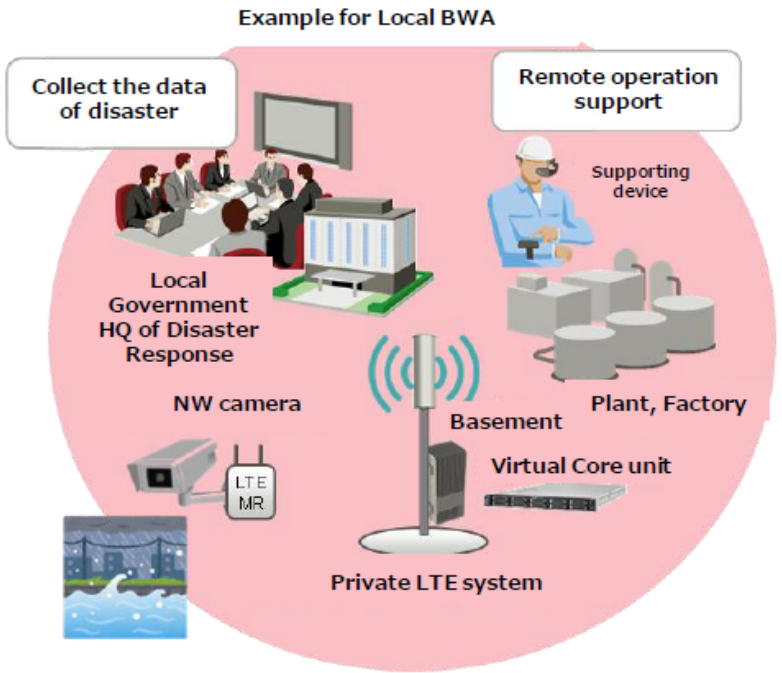
Wide local wireless solution for public and manufacturing

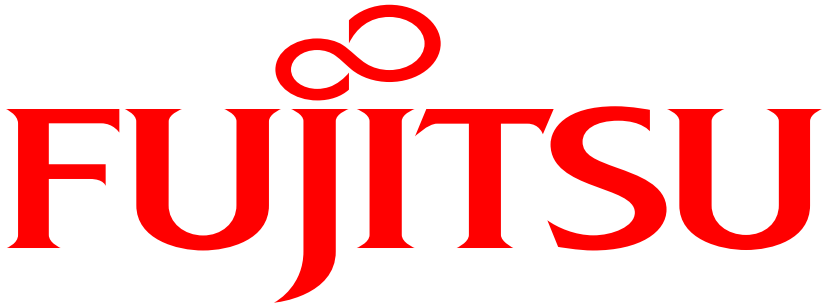
Customer Benefits

- 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.





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