Efficient frequency reuse for 802.16j -Activities for wireless broadband service in Japan-

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None

Purpose:

This contribution is provided as input for 802.16j technical requirements and related issues.

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Efficient frequency reuse for 802.16j

-Activities for wireless broadband service in Japan-

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Objectives of this contribution

- To inform activities for wireless broadband service in Japan
- To include efficient frequency reuse as one of the technical requirements for 802.16j

Activities for wireless broadband service in Japan

- ***MIC will inquire the council on wireless broadband service (February 27, 2006)*** ※

  The Ministry of Internal Affairs and Communication (MIC) announced that they would inquire with the information communication council to find out what kind of technical conditions are necessary to realize the wireless broadband service using a 2.5GHz band. The idea will be obtained in November.

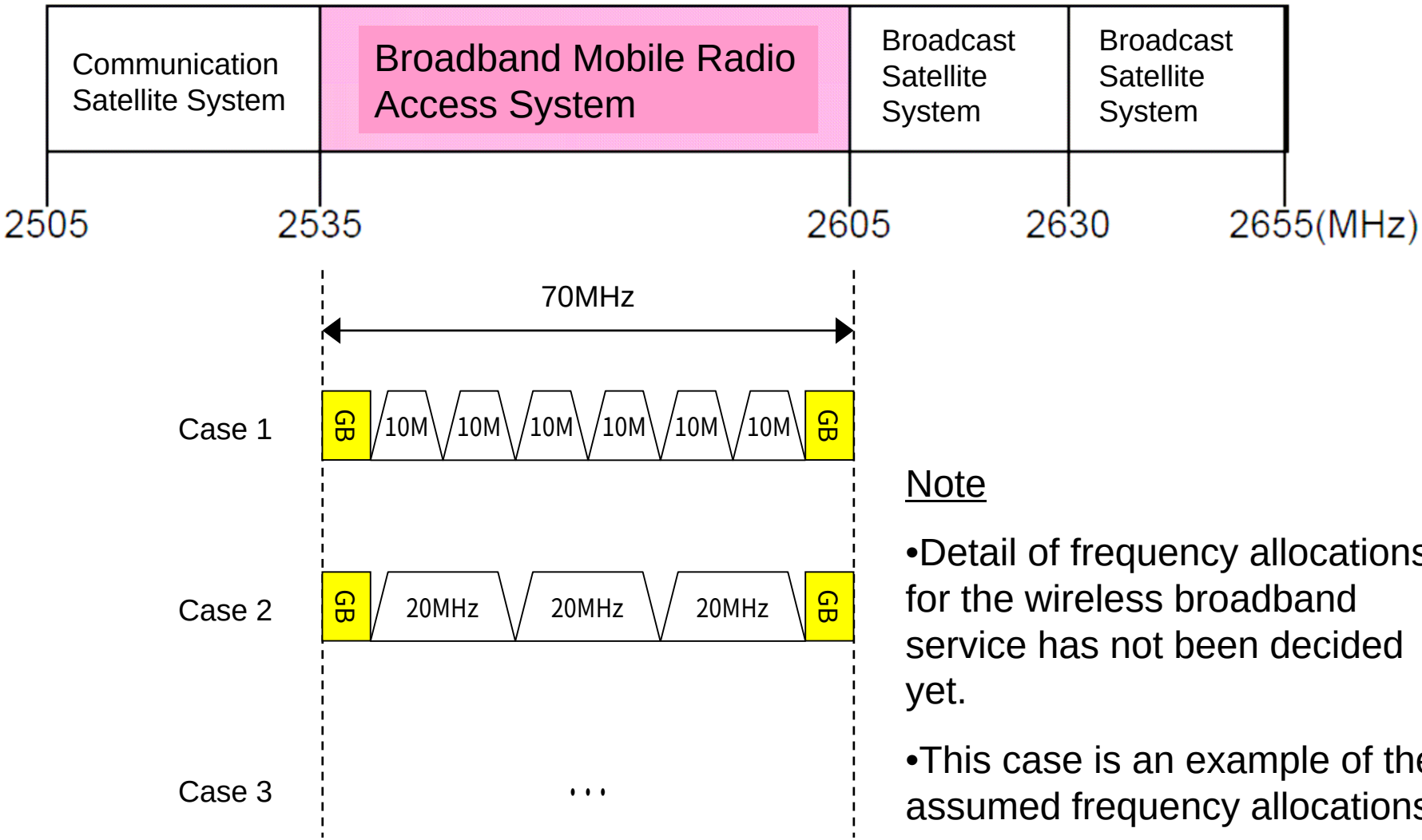
  ※These are quoted from the following URL.
  http://www.jetrocgo.org/index2.php?option=com_content&do_pdf=1&id=351

Activities for Wireless broadband service in Japan
(cont'd)

- Requirements for wireless broadband service using 2.5GHz band
  - Transmission speed should be faster than those of 3G and 3.5G cellular system
    - DL 20~30Mbps and over
    - UL 10Mbps and over
  - Frequency usage efficiency should be higher than those of 3G and 3.5G cellular system
  - TDD system
  - etc.

※Reference
http://www.soumu.go.jp/s-news/2006/pdf/060227_2_bs1.pdf
(Japanese Release)

Activities for Wireless broadband service in Japan
(cont'd)



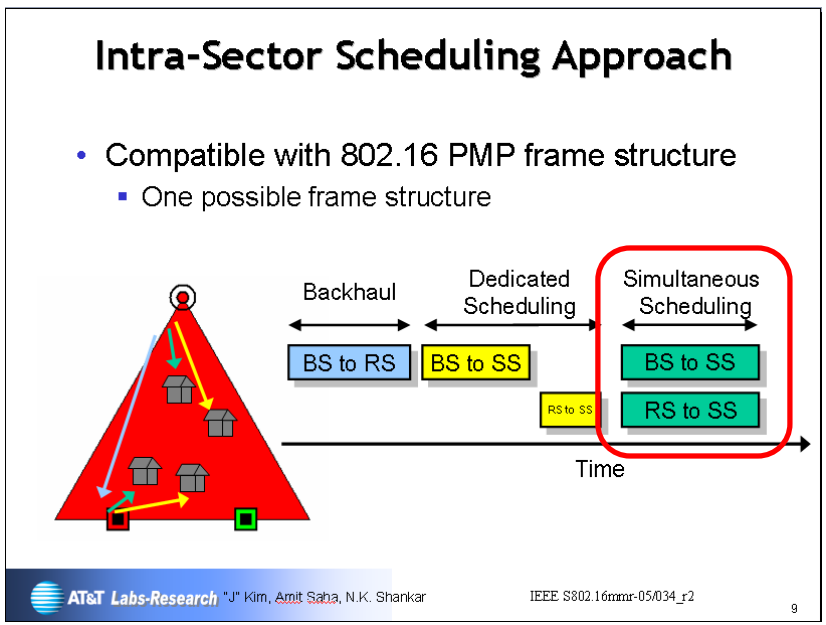
Note

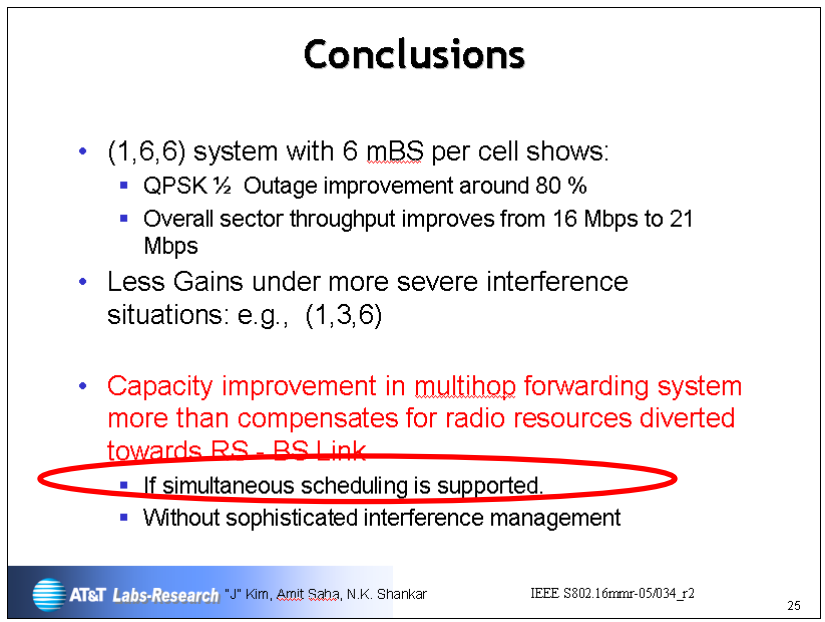
- Detail of frequency allocations for the wireless broadband service has not been decided yet.
- This case is an example of the assumed frequency allocations.

Technical requirements

- Efficient frequency reuse
  - Since frequency allocation for BWA is limited, operators want to make efficient use of the radio resource.
  - We require efficient frequency reuse even in the case of relay use.
  - The requirement for efficient frequency reuse is common among operators, as can be seen from the approach below.

Refer to IEEE S802.16mmr-05/034_r2





Conclusions

We discussed:

- Activities for wireless broadband service in Japan
- Efficient frequency reuse to be included to technical requirements for 802.16j