
Project: IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)

Submission Title: [Progress and Schedule of Japanese Regulation for UWB]

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Abstract: [A draft of spectrum mask for UWB in 3-10GHz has been announced in Japanese regulator MIC on August 25, 2005. The Japanese draft mask as well as European CEPT draft one were involved in Recommendation of ITU-R TG1/8 in October. Although this mask is still a draft and should be revised to be approved in Japanese radio regulation, it is important for IEEE P802.15 standard to be compliant in a world as well as other nations' masks.]

Purpose: [Suggestion to modify specifications such as a band plan, MAC and additional requirement for IEEE P802.15 in microwave band to be world-wide compliant.]

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Progress and Schedule of Japanese Regulation for UWB (update of Doc.15-05-570-02-004a)

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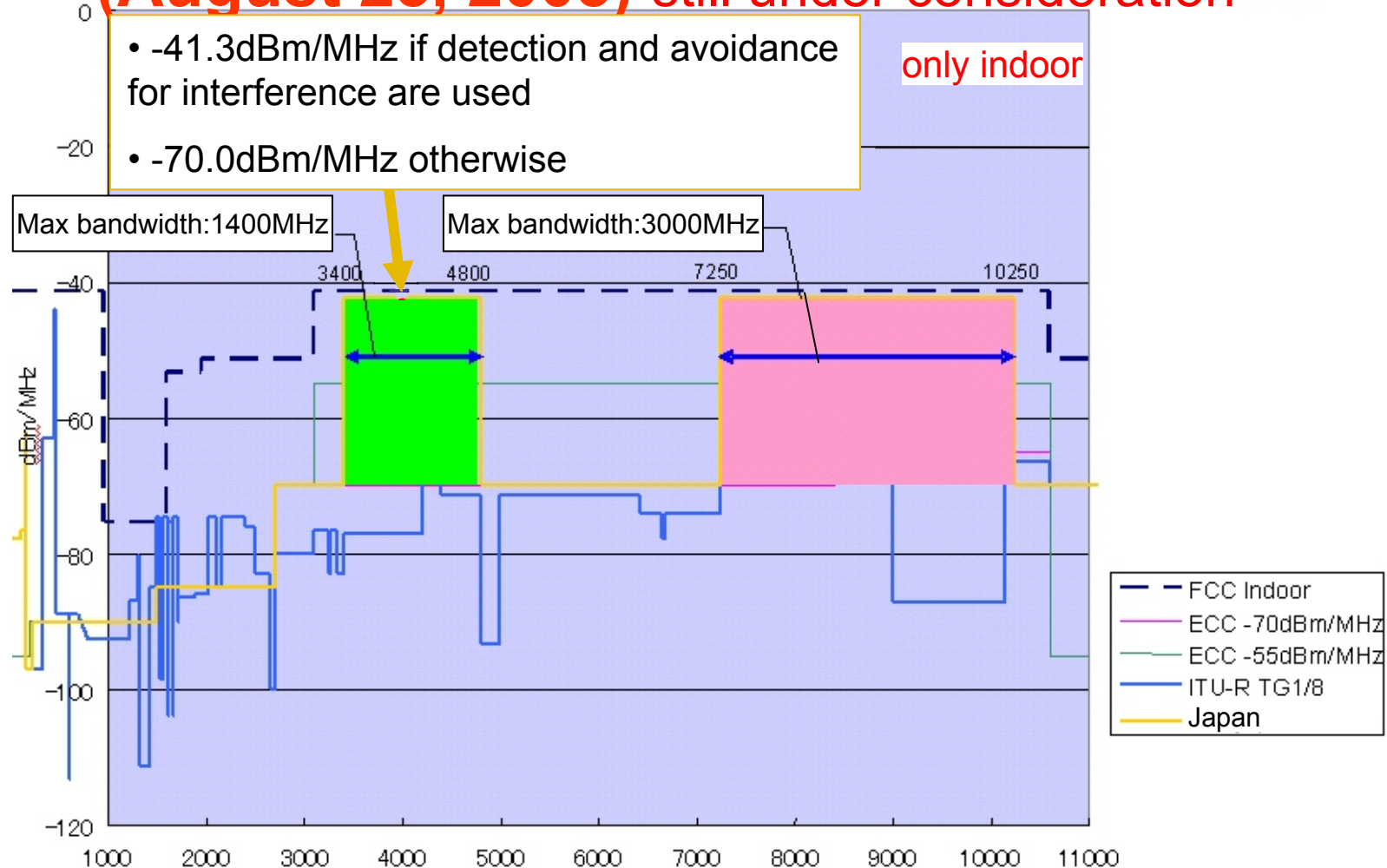
Japanese UWB radio regulation

Context

- Japanese regulator MIC established **UWB Radio Systems Regulatory Committee** , November 22, 2002.
- MIC reported intermediate draft spectral masks , February 2, 2004.
- MIC mandated MMAC Forum in ARIB to test interference to victim systems during March-August, 2005
- MIC reported latest draft spectral mask on August 25, 2005.
- China, Japan, and Korea (CJK) Workshop on UWB will be held in Seoul on Sept.27, 2005
- MIC submitted the draft with possible revision to ITU-R TG1/8 during Oct.12-20, 2005. Then Japanese and European CEPT draft masks were involved in the Recommendation of ITU-R TG1/8.

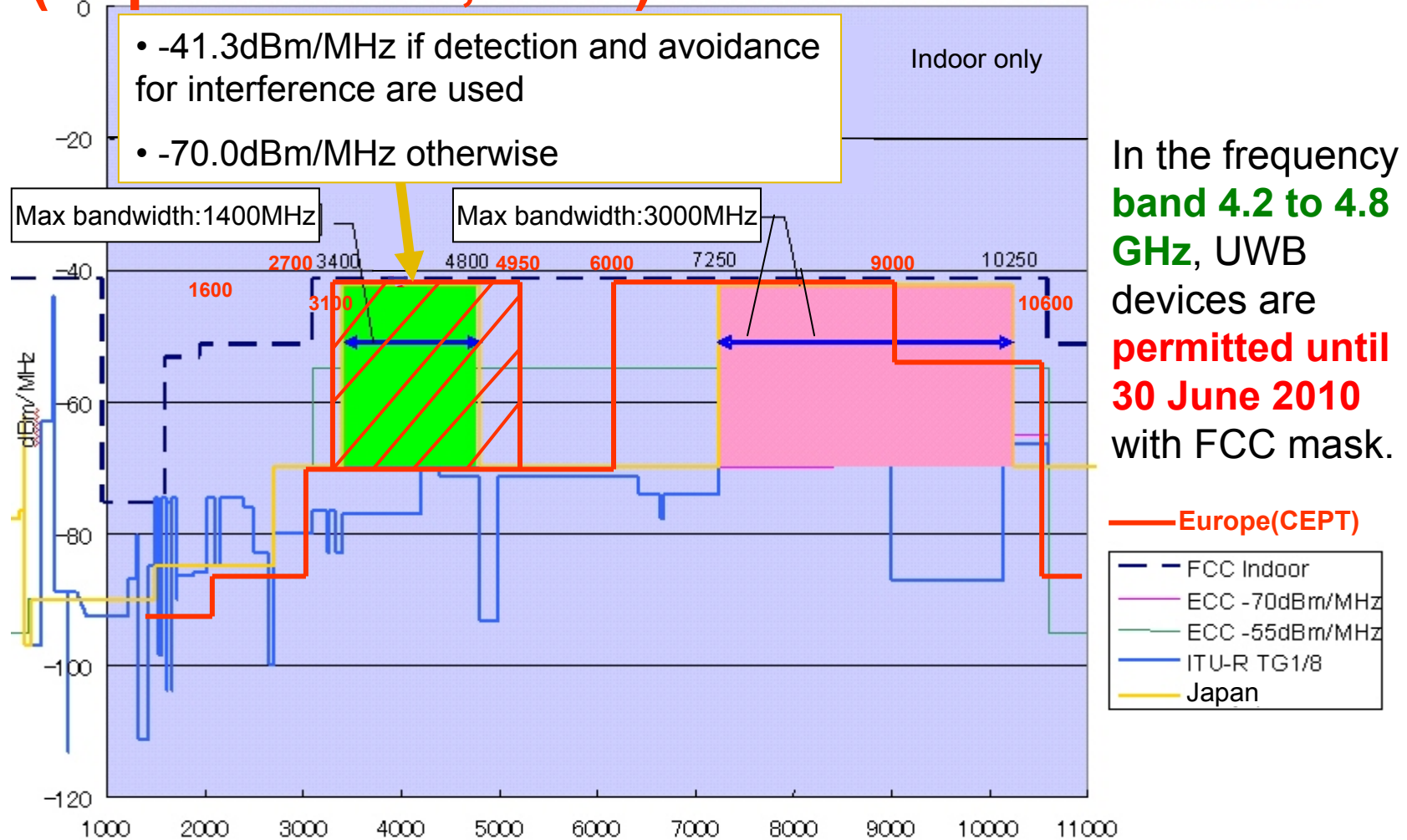
Draft Spectrum Mask in Japan (MIC)

(August 25, 2005) still under consideration



Draft Spectrum Mask in Europe (CEPT)

(September 15, 2005) still under consideration



Remained Issues to finalize Japanese Regulation for UWB in **MIC, Japan (1/2)**

1. Requirement for UWB

- ① Describe required conditions for UWB systems for expected applications
- ② Investigate feasibility of the required conditions

2. Expectation of UWB Market

- ① Review expected market in other countries
- ② Expectation of Japanese market

3. Technical Specification

- ① Draft Spectrum Mask:
 - Interference testing for the draft spectrum mask
 - Transparency with regulation in other countries, e.g. Time-limited constraint during 4.2-4.8GHz
- ② Dependency on Modulation Scheme:
 - Keep fairness to support possible schemes or determine only a specific scheme.

Remained Issues to finalize Japanese Regulation for UWB in **MIC, Japan (2/2)**

4. Restriction of Indoor Application for UWB

- ① Reconsider outdoor applications as well as indoor
- ② How to guarantee indoor applications only?

5. Feasibility of Interference Reduction to Existing Systems

- ① Review feasible methods of reducing interference, e.g. DAA and LDC
- ② Required conditions for the method of reducing such interference

6. Measurement Method

- ① Method of measuring UWB signals
- ② Method of Type-approval for compliant UWB system

7. Regulatory Restriction

- ① Restricted zoon
- ② Restriction of total number of products
- ③ Time Restriction, e.g. Time-limited constraint during 4.2-4.8GHz

Schedule of Japanese UWB radio regulation

- **Oct.27, 2005: Technical Group meeting of UWB Radio Systems Regulatory Committee** of Japanese regulator MIC was held to report results of ITU-R TG1/8 and to decide action plan.
- **Nov. 25, 2005: TG meeting of UWB Radio Systems Regulatory Committee** will be held to report evaluation results of the draft spectrum mask for coexistence and to discuss on remained problems etc.
- **Mid Dec., 2005: TG meeting of UWB Radio Systems Regulatory Committee** will be held to summarize evaluation results and solution for the remained problems.
- **Mid Jan., 2006: TG meeting of UWB Radio Systems Regulatory Committee** will be held to finalize the draft spectrum mask.
- **Late Jan., 2006: UWB Radio Systems Regulatory Committee** will be held to approve the finalized draft spectrum mask.
- **During Feb., 2006: MIC** will request public comments from any sector in Japan.
- **Mid March, 2006: UWB Radio Systems Regulatory Committee** will be held to approve the finalized the draft to be the official spectrum mask in Japan.
- **March 27, 2006: MIC** will approve the official spectrum mask.