
E-Mail exchange with Mr. Kazushige Fujita Ministry of Posts and Telecommunications, Japan

Questions

On March 13, 1996, Ian Gifford sent the following message to Mr. Kazushige Fujita of the Ministry of Posts and Telecommunications, Japan:

Kazushige Fujita
Section chief
Land Mobile Communications Division
Telecommunications Bureau
Ministry of Posts and Telecommunications, Japan

Dear Fujita-san,

I am writing to you on behalf of the IEEE 802.11 Frequency Hopping Physical Layer Sub Group per your comments dated E-Mail received on February 28, 1996. Our group has the following questions we would like to review and respond to.

We are currently in an IEEE 802 Plenary Meeting and would like to possibly receive your e-mail before the end of the week.

Questions:

1. Can Call Sign be included in a Data section of a Special purpose packet that is sent once any time after power up?
2. Transmitted power: can we transmit at $1.2 * 230$ mW instantaneous power given that we hop over 23 MHz bandwidth and utilize 1 MHz wide channels?
3. The 802.11 proposes specific hopping sequences over 23 channels for use in Japan. Do these specific sequences violate Japanese regulations concerning frequency hopping?

Thank you for consideration in this matter.

Ian Gifford
Voting Member IEEE 802.11

Answers

On March 15, 1996 Mr. Kazushige Fujita of the Ministry of Posts and Telecommunications, Japan, sent the following message:

Dear Mr. Hayes,

I am writing to respond to the questions sent from Mr. Gifford. The answers are as follows.

Q1. Can Call Sign be included in a Data section of a Special purpose packet that is sent once any time after power up?

A1. It is not enough to send Call Sign only once after power up. Call Sign must be added to each frame. In addition, even if Call Sign is added to each frame, Call Sign must be transmitted immediately after Synchronous Signal. Any signal (e.g. PLCP Header) is not allowed to be transmitted between Synchronous Signal (or Start Frame Demiltier) and Call Sign.

Q2. Transmitted power: can we transmit at $1.2 * 230$ mW instantaneous power given that we hop over 23 MHz bandwidth and utilize 1 MHz wide channels?

A2. Transmit Power is regulated as "10mW/1MHz" in the Ministerial Ordinance. In addition, RCR STD-33A, which is the private standard for the Wireless LAN in Japan, describes the Transmit Power requirement as follows. So I think the answer depends on the symbol rate.

Instantaneous power must be less than $[10\text{mW}] \times 1.2 \times [\text{bandwidth}(\text{MHz})] / [\text{frequency}(\text{MHz}) \text{ equals to the symbol rate of transmitting signal}]$.

Q3. The 802.11 proposes specific hopping sequences over 23 channels for use in Japan. Do these specific sequences violate Japanese regulations concerning frequency hopping?

A3. Both the Ministerial Ordinance and RCR STD-33A do not regulate the hopping sequence, so it does not violate Japanese regulations for the 802.11 group to determine specific hopping sequences. However, I would like to make a comment that 802.11 standard should not be mandatory one to leave the possibility of manufacture variety.

Please excuse me for my delayed response.

Sincerely yours,

Kazushige Fujita
Ministry of Posts and Telecommunications, Japan
