Telemetry Spectrum Augmentation

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MITRE

"2.12 to consider spectrum requirements for wideband aeronautical telemetry in the band between 3 GHz and 30 GHz;"

"Wideband Aeronautical Telemetry is defined as:

Emerging Telemetry Systems With Large Data Transfer Requirements to Support New and Different Telemetry Capabilities (such as high resolution video and associated data for remotely-piloted aeronautical vehicles). It is further defined as telemetry generally requiring a bandwidth of 20 MHz or greater. "

ITU-R WP-8B

December 2001

ITU-R WP 8B Circular Letter CA/109

- International Telecommunications Union -Radio, Working Party 8B issued CA/109 in December 2001.
- •Letter solicited information on needs of each nation for wideband telemetry
- Inputs from interested nations were to be reported to ITU in March

•US response follows:

US Response

<u>Question 1</u>: What is the spectrum requirement for wideband aeronautical telemetry in the bands above 3 GHz?

<u>US Answer</u>: 300 MHz contiguous spectrum

<u>Question 2</u>: What are the appropriate frequency bands and in which bands is harmonised worldwide usage possible?

<u>US Answer</u>: Specific bands cannot be identified at this time. However, based on infrastructure and technical characteristics bands below 6 GHz should be given priority consideration.

US Response (Continued)

<u>Question 3</u>: What are the technical and operational characteristics, or practical arrangements that could be made, to facilitate sharing between wideband aeronautical mobile telemetry and incumbent radio services?

<u>US Answer</u>: By utilising a mobile primary allocation with no restrictions against aeronautical mobile, no special technical and operational characteristics are required. A footnote should be added to the selected band identifying that band as a harmonised aeronautical telemetry band for wideband telemetry use. Detailed studies of sharing conditions with existing services are needed to ensure protection of both the existing services and the proposed wideband aeronautical telemetry use. <u>US Point of Clarification:</u> "It should be noted that neither the wideband allocation proposed herein, nor Question ITU-R 231/8 or Agenda item 2.12, contemplate a substitute for existing aeronautical telemetry allocations below 3 GHz. The requirement for these allocations will continue.

Rather, the allocation addressed herein is for new and emerging wideband requirements."

Other Nation Responses

•United Kingdom: "No requirement"

•Other national responses unknown

