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WORKING GROUP ON SPECTRUM ASPECTS

**Questionnaire on usage OF the FREQUENCY band 13.75-14 Ghz in THE ASIA-PACIFIC REGION**

**Background**

In the AWG-16 meeting, input AWG-16/INP 86 proposes to conduct a survey on the usage of the band 13.75-14 GHz in the Asia-Pacific region, in order to assist APT Members in using that band efficiently. The reasons for the proposal in AWG-16/ INP 86 are explained below.

Due to the fast development of fixed-satellite service (FSS) applications in the Ku band, the amount of spectrum of the 14-14.5 GHz band cannot satisfy the communications requirement. Noting the 13.75-14 GHz band has also been allocated to the FSS in primary frequency allocation in all ITU regions since 1996, this FSS application has to meet the severe limitations that are specified in the Radio Regulations.

With the exception of the FSS and a number of secondary service allocations, the band 13.75-14 GHz was also allocated to the radiolocation service on a co-primary basis. Furthermore, radionavigation, fixed and/or mobile service was also additionally allocated on a primary basis in some countries, as indicated in the footnotes Nos. **5.499**, **5.500** and **5.501**.

In order to protect the operation of the radiolocation service in this band, the footnote No.**5.502** (WRC-03) indicates that the minimum antenna diameter of the earth station in a geostationary FSS network is 1.2 m. The pfd level produced by theseearth stations, where the antenna diameter is smaller than 4.5 m, shall not exceed -115 dB (W/m2·10 MHz) for more than 1% of the time at 3 m above the ground at the border, and/or at 36 m above sea level at its low-water mark, at those countries that provide or are planning to provide radiolocation service. In addition, for the protection of the application of space research service, the footnote No. **5.503** (WRC-03) places additional constraints on the operation of FSS earth stations in the 10 MHz band from 13.77-13.78 GHz.

Because of above severe operational restrictions, not only small or narrow countries but also others who want to operate more geostationary fixed-satellite service systems in 13.75-14 GHz band, may face applications difficulties. For example, there is less flexibility in designing VSAT networks, the consultation may also be difficult due to the lack of application information and much consultative work in the Asia-Pacific countries, and so on.

In order to protect the normal operation of the radiolocation service and/or space research service based on the Radio Regulations, as well as to rationalize the arrangement of the applications for those APT members who are using and/or planning to provide more fixed-satellite service in 13.75-14 GHz band, it is necessary to consult the information on the application status of radiolocation and space research service.

**Purpose of Survey:**

This survey is to collect information on the usage of the band 13.75-14 GHz in Asia Pacific region. Based on the result of the survey, an AWG/APT Report on Frequency Usage of the band 13.75-14 GHz in Asia Pacific region will be developed. This could help not only for those administrations who are using or planning to provide more fixed-satellite service in 13.75-14 GHz band to understand the application situation and the due protection requirement of other services in an efficient manner, but also other administrations who could operate their services under its required protection.

This survey is not related to the modification of the footnotes Nos.**5.502** and **5.503**.

**Questions:**

**Question 1:** What are the national frequency allocations within the 13.75-14 GHz band in your country? What is the regulation, especially the specific details on the service operations in your country (e.g. internal country footnote, specific regulation, guideline for application)?

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|  | Allocations  | Range of the Frequency band  | Specific Regulation |
| 1 |  |  |  |
| 2 |  |  |  |

**Question 2:** What are the current applications, including the applications plans based on the frequency allocation (e.g. fixed-satellite, radiolocation, space research, radionavigation, fixed and mobile service) as well as contact point (contact information of administrations and/or operator) if possible in the 13.75-14 GHz band in your country?

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|  | Service | Range of the frequency band  | Current applications or plans | Protection requirement  | Contact point (optional) |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |

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