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| **33 MEETING OF PERMANENT****CONSULTATIVE COMMITTEE II:****RADIOCOMMUNICATIONS****April 8 to 12, 2019****Monterrey, Nuevo Leon, Mexico** | **OEA/Ser.L/XVII.4.2.33****CCP.II-RADIO/doc.** **XX March****Original: english** |
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|  | **U.S. PROPOSAL ON WRC-19 AGENDA ITEM 1.13****(71 – 76 / 81 – 86 GHz)** |  |
|  | **(Item on the Agenda: 3.1)** |  |
|  | **(Document submitted by the delegation of the United States of America)** |  |

Introduction

This document contains an attachment including the updated USA proposal on WRC-19 Agenda Item 1.13 (71 – 76 GHz and 81 – 86 GHz) for consideration in CITEL’s preparations on WRC-19 Agenda Item 1.13.

**ATTACHMENT**

1.13 *to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***238 (WRC-15)****;*

**Background**:

Resolution **238 (WRC-15)** calls for studies to determine the spectrum needs for the terrestrial component of IMT in the frequency range between 24.25 GHz and 86 GHz, as well as sharing and compatibility studies, taking into account the protection of services to which the frequency band is allocated on a primary basis, for the frequency bands:

– 24.25-27.5 GHz, 37-40.5 GHz, 42.5-43.5 GHz, 45.5-47 GHz, 47.2-50.2 GHz, 50.4‑52.6 GHz, 66-76 GHz and 81-86 GHz, which have allocations to the mobile service on a primary basis; and

– 31.8-33.4 GHz, 40.5-42.5 GHz and 47-47.2 GHz, which may require additional allocations to the mobile service on a primary basis.

Mobile broadband plays an increasingly crucial role in providing access to businesses and consumers worldwide. According to International Telecommunications Union (ITU) statistics, “Mobile-broadband subscriptions have grown more than 20% annually in the last five years and are expected to reach 4.3 billion globally by end 2017.” while “Mobile-broadband prices as a percentage of GNI per capita halved between 2013 and 2016 worldwide.[[1]](#footnote-1)

 The rising demand for mobile broadband has created increased capacity requirements in the backhaul or transport network. The 71–76 GHz and 81–86 GHz frequency ranges are important for the provision of Fixed Service (FS) backhaul for mobile broadband services. These frequency ranges offer very wide bandwidth, enabling capacities on the order of 10 Gigabit per second or more over distances of a few kilometers and represent an alternative to fiber deployment: this data rate cannot be achieved in other frequency bands that are bandwidth-limited. It is expected that the demand for high-capacity backhaul will create momentum for the transition from lower bands to these frequency ranges. Point-to-point microwave radios used by FS are a key component in many mobile networks, as well as Fixed Service microwave links for various uses including broadcast, utilities and public safety. The 71-76 GHz and 81-86 GHz frequency ranges are expected to experience major growth in Fixed Service use and represent up to 20 percent of new backhaul deployments annually by 2020[[2]](#footnote-2).

In order to provide important backhaul services including those which support IMT-2020 deployments, no changes are proposed for the 71-76 GHz and 81-86 GHz frequency ranges.

**Proposals:**

ARTICLE 5

**Frequency allocations**

**Section IV – Table of Frequency Allocations**(See No. **2.1**)

**NOC USA/1.13/1**

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| **66-81 GHz** |
| **Allocation to services** |
| **Region 1** | **Region 2** | **Region 3** |
| **71-74** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) |
| **74-76** FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) 5.561  |

**Reasons:**  These bands can play an important role in IMT-2020 development by facilitating backhaul and other fixed uses. Therefore, no change is proposed.

**NOC USA/1.13/2**

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| **81-86 GHz** |
| **Allocation to services** |
| **Region 1** | **Region 2** | **Region 3** |
| **81-84** FIXED 5.338A FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth)  5.149 5.561A |
| **84-86** FIXED 5.338A FIXED-SATELLITE (Earth-to-space) 5.561B MOBILE RADIO ASTRONOMY 5.149 |

**Reasons:**

These bands can play an important role in IMT-2020 development by facilitating backhaul and other fixed uses. Therefore, no change is proposed.

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1. ICT Facts and Figures 2017, p 4 and 5. See: https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2017.pdf [↑](#footnote-ref-1)
2. <https://docs.fcc.gov/public/attachments/FCC-17-152A1.pdf> [↑](#footnote-ref-2)