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| A close up of a sign  Description automatically generated | **World Radiocommunication Conference (WRC-23)Dubai, 20 November - 15 December 2023** |  |
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| PLENARY MEETING | **Document 180-E** |
|  | **30 October 2023** |
|  | **Original: English** |
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| Myanmar (Union of)/Papua New Guinea/Solomon Islands/Samoa (Independent State of)/Tonga (Kingdom of)/Vanuatu (Republic of) |
| PROPOSALS FOR THE WORK OF THE CONFERENCE |
|  |
| Agenda item 10 |

10to recommend to the ITU Council items for inclusion in the agenda for the next world radiocommunication conference, and items for the preliminary agenda of future conferences, in accordance with Article 7 of the ITU Convention and Resolution **804 (Rev.WRC‑19)**,

Introduction

At the final APG23-6 meeting, some APT Members submitted some proposals for inclusion in the agenda of WRC‑27 to consider the identification of portion of the frequency bands within the frequency range 4.4-15.35 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis. There were no agreement could be reached at the final APG23-6 meeting due to some concerns from some APT Members regarding the frequency bands being considered as future IMT-2030 candidate bands.

These administrations would like to share the following facts whether there should be a need for another new agenda item in seeking additional IMT identification would be required:

1) Since WRC‑19 identified a significant amount of spectrum with a total of 17.25 GHz spectrum for IMT in frequency bands above 24.25 GHz, it is worth noting that many countries, especially in Region 3, have yet to utilize those bands as of today.

2) The other important considerations to justify the need for additional IMT spectrum would be that mobile networks only handled 20.5% of the world’s total Internet traffic in 2021[[1]](#footnote-1), while leaving the majority of the remaining traffic carried by Wi-Fi networks using license-exempt frequency bands. Such a trend is likely to remain in the foreseeable future.

3) The frequency range from 7.125 GHz to 24.25 GHz was already considered for studies for IMT at WRC‑15 and was decided not to be included in the scope of WRC‑19 agenda item 1.13 because not enough contiguous bandwidth could be found. Such reason concurs with one of the conclusions contained in the Plum Consulting study report[[2]](#footnote-2) on “Opportunities for 6G in the frequency range 7-24 GHz”.

4) The frequency range from 7.125 GHz to 24.25 GHz includes some of the core satellite bands in which satellite operators are already struggling to accommodate the growing service demand while sharing the resource among themselves. It should also be noted that GSO satellite networks and non-GSO satellite systems already share spectrum in these frequency bands with each other in a highly efficient and effective manner. Compared to when this frequency range was considered at WRC‑15, thousands of non-GSO and GSO satellites, including new generation satellites in the forms of high-throughput satellites (HTS), very-high throughput satellites (VHTS) and software-defined satellites (SDS), have since started operating within this frequency range, thus making the compatibility with incumbent satellite services even harder to achieve. Such compatibility issues between IMT and the incumbent satellite services is the other conclusion from the Plum Consulting study report indicating that there is very limited opportunity for IMT (e.g., 6G) systems to share with incumbent services.

The above facts are also supported by another recent Plum Consulting study report[[3]](#footnote-3) on “Examining the current assignment and usage of mobile spectrum” which have been published in July 2023. The conclusions of the recent Plum Consulting study report are as follows:

1) Large amount of spectrum has been identified for IMT

• Almost 2 GHz of spectrum in low and mid bands;

• Over 17 GHz of spectrum in mmWave;

2) Spectrum assignment is more limited

• Most countries have assigned less than half the low and mid band spectrum to operators;

• In mmWave, there have been very few assignments at all;

3) Future demand for mobile data is uncertain

• Uptake for 5G has been muted and use of mmWave is limited;

• Spectrum refarming and assignment of existing identifications should be prioritised.

**Proposals**

 BRM/PNG/SLM/SMO/TON/VUT/180/1

Based on the above facts and considerations, these administrations do not support the consideration of a new IMT identification agenda item for WRC‑27 study cycle. However, if an IMT agenda item is indeed to be considered, these administrations would strongly be opposed to any considerations of the frequency range 10.7-14.8 GHz.

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1. Highlights of Cisco’s Internet Traffic Report & Forecast (<https://techblog.comsoc.org/2021/12/29/highlights-of-ciscos-internet-traffic-forecast/>). [↑](#footnote-ref-1)
2. 7-24 GHz opportunities for 6G – final report by Plum Consulting (<https://plumconsulting.co.uk/opportunities-for-6g-in-7-24-ghz/>, 25 Nov 2022). This is a study funded by the UK Spectrum Policy Forum. [↑](#footnote-ref-2)
3. Please see [Examining the current assignment and usage of mobile spectrum (apt.int)](https://www.apt.int/sites/default/files/Examining_the_current_assignment_and_usage_of_mobile_spectrum.pdf). [↑](#footnote-ref-3)