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| **The 4th Meeting of the APT Conference Preparatory****Group for WRC-19 (APG19-4)** | **APG19-4/INF-26** |
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Nepal

**preliminary views on WRC-19 agenda items 1.13, 1.16 and 9.1.1**

**Agenda Item 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)****;*

**1. Background**

Resolution **238 (WRC-15)** invites ITU-R 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 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.

**2. Preliminary Views**

Among the frequency bands that have been identified for studies for future IMT development under this agenda item, Nepal has frequency allocations in 37-39.5 GHz, 71-76 GHz and 81-86 GHz Bands for terrestrial point to point microwave links. However, these bands have not been assigned yet. Other remaining bands in this agenda have not been allocated for any other purpose.

In this context, Nepal supports sharing and compatibility studies with priority in frequency bands 24.25-27.5 GHz, 31.8-33.4 GHz, 37-40.5 GHz, 66-76 GHz and 81-86 GHz bands.

**Agenda Item 1.16:**

*To consider issues related to wireless access systems, including radio local area networks (WAS/RLAN), in the frequency bands between 5 150 MHz and 5 925 MHz, and take the appropriate regulatory actions, including additional spectrum allocations to the mobile service, in accordance with Resolution 239*

**1. Background**

Resolution **239 (WRC-15)** invites ITU‑R

1. to study WAS/RLAN technical characteristics and operational requirements in the 5 GHz frequency range;
2. to conduct studies with a view to identify potential WAS/RLAN mitigation techniques to facilitate sharing with incumbent systems in the frequency bands 5 150-5 350 MHz, 5 350‑5 470 MHz, 5 725-5 850 MHz and 5 850-5 925 MHz, while ensuring the protection of incumbent services including their current and planned use;
3. to performsharing and compatibility studies between WAS/RLAN applications and incumbent services in the frequency band 5 150-5 350 MHz with the possibility of enabling outdoor WAS/RLAN operations including possible associated conditions;
4. to conduct further sharing and compatibility studies between WAS/RLAN applications and incumbent services addressing:
5. whether any additional mitigation techniques in the frequency band 5 350-5 470 MHz beyond those analysed in the studies referred to in *recognizing a)* would provide coexistence between WAS/RLAN systems and EESS (active) and SRS (active) systems;
6. whether any mitigation techniques in the frequency band 5 350-5 470 MHz would provide compatibility between WAS/RLAN systems and radio determination systems;
7. whether the results of studies under points i) and ii) would enable an allocation of the frequency band 5 350-5 470 MHz to the mobile service with a view to accommodating WAS/RLAN use;
8. to also conduct detailed sharing and compatibility studies, including mitigation techniques, between WAS/RLAN and incumbent services in the frequency band 5 725-5 850 MHz with a view to enabling a mobile service allocation to accommodate WAS/RLAN use;
9. to also conduct detailed sharing and compatibility studies, including mitigation techniques, between WAS/RLAN and incumbent services in the frequency band 5 850-5 925 MHz with a view to accommodating WAS/RLAN use under the existing primary mobile service allocation while not imposing any additional constraints on the existing services,

**2. Preliminary Views**

In Nepal, the frequency bands, 5150-5350 MHz and 5725-5825 MHz has been designated for Industrial Scientific and Medical (ISM) applications. AlsoWAS/RLANs are authorised to operate in the 5 150-5 250 MHz (max 200 mW e.i.r.p. and indoor restriction), 5 250‑5 350 MHz (max 200 mW e.i.r.p. with indoor restriction and max e.i.r.p. 1W for outdoor) and and 5 725‑5 825 MHz (max e.i.r.p. 4 W) frequency bands in non protection and shared basis. The frequency band 5480 – 5725 MHz Band has been used for Amateur Radio Services.

Nepal supports the ITU-R studies undertaken in accordance with Resolution **239 (WRC-15)** as this work could potentially enable a contiguous block of spectrum in the 5 GHz band for the implementation of wireless access systems, including radio local area networks (RLAN) to address the considerable growth and demand ensuring adequate protection of incumbent services.

Nepal supports sharing and compatibility studies being conducted in ITU-R with a view to enabling outdoor WAS/RLANs operations in the frequency band 5 150- 5 250 MHz including possible associated conditions to protect the existing services.

# Agenda Item 9.1, Issue 9.1.1

*Resolution* ***212 (Rev. WRC-15)*** *- Implementation of International Mobile Telecommunications (IMT) in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz*

**1. Background**

Resolution **212 (Rev.WRC-15)** invites “ITU-R to study possible technical and operational measures to ensure coexistence and compatibility between the terrestrial component of IMT (in the mobile service) and the satellite component of IMT (in the mobile service and the mobile-satellite service) in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz where those frequency bands are shared by the mobile service and the mobile-satellite service in different countries, in particular for the deployment of independent satellite and terrestrial components of IMT and to facilitate development of both the satellite and terrestrial components of IMT”.

**2. Preliminary Views**

Nepal supports ITU-R studies regarding possible technical and operational measures to ensure coexistence and compatibility between the terrestrial component of IMT (in the mobile service) and the satellite component of IMT (in the mobile service and the mobile-satellite service) in the frequency bands 1 980- 2 010 MHz and 2 170-2 200 MHz.

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