

5GIF

**National Workshop on Learnings from WRC-23 and the way forward
Planning for WRC-27 and forthcoming ITU
and APT meetings**



**Thursday, 22nd February, 2024
Hotel Hyatt Centric, MG Road, Bangalore**

Reports from AWG-31

WORKING DOCUMENT TOWARDS A DRAFT NEW APT REPORT ON HAPS INDUSTRY AND ECOSYSTEM FOR BROADBAND CONNECTIVITY

Description of “underserved areas” concept, current and future situations of global “underserved areas” and related challenges, potential role of HAPS to address these challenges

- The Applications and Use Cases
- Spectrum
- Ground and Air segment
- Case Studies
- Technology requirement

Working document towards a draft new APT Report on deployment approaches and solutions for IMT-2020/5G use case
key deployment issues were discussed related to 5G deployment.
Active and passive Sharing models
Coverage extensions
Price elasticity
Multi layer deployment



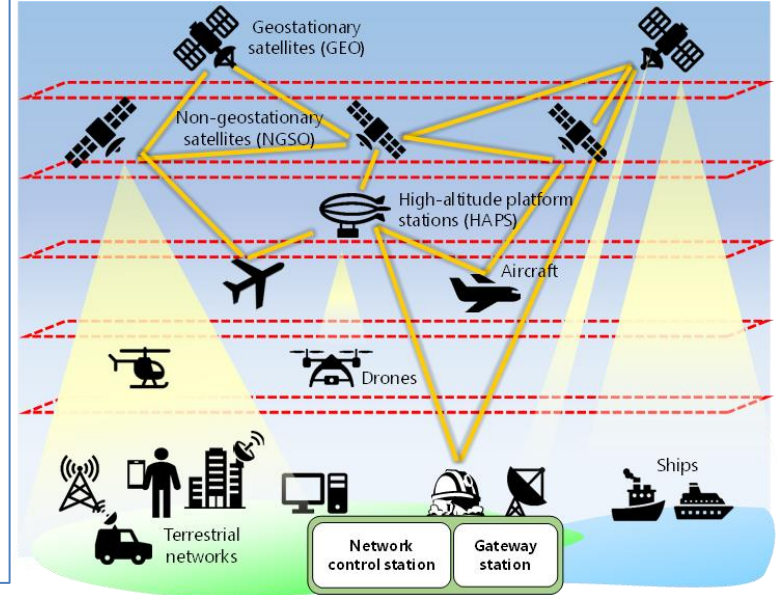
Reports from AWG-31

WORKPLAN FOR SHARING AND COMPATIBILITY STUDIES FOR SELECTED FREQUENCY BANDS BELOW 6 GHZ

To conduct sharing and compatibility studies to facilitate IMT implementation and not related to WRC-19 for the interested APT members: - 470-698 MHz - 1427-1452 MHz - IMT in 1492-1518 MHz and MSS in 1518-1525 MHz - 4 400 – 4 500 MHz - 4 800 – 4 990 MHz

WORKING DOCUMENT TOWARDS A PRELIMINARY DRAFT NEW APT REPORT ON [MULTI CONNECTIVITY FOR MULTILAYERED NETWORK ACCESS USING TERRESTRIAL AND SATELLITE SYSTEMS]

This document provide a very good view use case application and architecture for multi-layered Non Terrestrial network and also quick view on possible interworking .



WRC-23 outcome on Art 21.5

Article 21.5 of the Radio Regulations

- WRC-23 decided NOC to Article 21.5.
- It was agreed to add a description of TRP under item 8AA in Appendix 4 of the Radio Regulations, without limiting the reference bandwidth of the base stations notified by administrations to ITU-R.
- The Conference agreed not to add any additional regulatory restriction to IMT systems in the 26 GHz band. The regulatory uncertainty associated with this band was then removed.

Section II – Power limits for terrestrial stations		8.3	8AA	the power delivered to the antenna, in dBW. For stations where the power delivered to the antenna cannot be measured: – the total radiated power (TRP)*; or – the calculated TRP (e.i.r.p. minus antenna directivity); or – the calculated power delivered to the antenna (e.i.r.p. minus maximum antenna gain (2G)). * The TRP is to be understood here as the integral of the power transmitted from all antenna elements in different directions over the entire radiation sphere. In the case of a transmitting station, required for an assignment: – in the bands below 28 MHz, in all services except the radionavigation service; or – in the bands above 28 MHz shared with space services; or – in the bands above 28 MHz not shared with space services: • in the aeronautical mobile service, meteorological aids service; or • in all other services, if the radiated power is not supplied. In the case of a receiving land station, required if the associated transmitting station's radiated power is not supplied. In the case of a typical transmitting station, required if the radiated power is not supplied.
MOD	B15/338/7			
TABLE 21-2 (Rev.WRC-1923)				
Frequency band				
...				
17.7-18.4 GHz				
18.6-18.8 GHz				
19.3-19.7 GHz				
22.55-23.55 GHz				
24.45-24.75 GHz (Regions 1 and 3)				
24.75-25.25 GHz (Region 3)				
25.25-29.5 GHz				

NOTE: Additional frequency bands above 29.5 GHz may be considered for inclusion in Table 21-2 by a future competent conference.

WP-5D (Feb-24) : IMT characteristics

- ✓ New sub-working group has been formed specific to IMT characteristic considering work load.
- ✓ During WRC 23 cycle 5D was involved in development of AAS study to capture implementation and Theoretical aspects, however further development was suspended .
- ✓ WORKING DOCUMENT ON CHARACTERISTICS OF TERRESTRIAL COMPONENT OF IMT FOR SHARING AND COMPATIBILITY STUDIES IN PREPARATION FOR WRC-27
- ✓ LIAISON STATEMENT TO EXTERNAL ORGANIZATIONS Parameters of terrestrial component of IMT for sharing and compatibility studies in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz and 14.8-15.35 GHz.
- ✓ Work plan for the working document on characteristics of terrestrial component of IMT for sharing and compatibility studies in preparation for WRC-27
- ✓ France, New Zealand has proposed new study item. :enhanced active antenna array radiation pattern model for imt base stations and user equipment's : R19-WP5D.AR-C-1307!!MSW-E (2) : Carry FWD for next meeting

Satellite Characteristics ? : We should also note advancement in satellite technology.



For more information visit
<https://5gindiaforum.in>