



Vodafone response to Radio Spectrum Management's discussion document on WLAN use in the 6GHz band

30 June 2021

Introduction

1. Thank you for the opportunity to provide our views on the Radio Spectrum Management's (RSM) discussion document on Wireless Local Area Network (WLAN) use in the 6 GHz band.
2. Access to the 6 GHz band is important for an increasing number of industries. It is therefore crucial that spectrum policy balances the needs of different technologies and use cases in this spectrum by adopting a technology neutral approach in the allocation process.
3. Vodafone New Zealand Limited is one of Aotearoa's leading digital services and connectivity companies, and we believe every New Zealander will thrive with access to the world's best digital services. We offer almost 3 million connections to Consumer and Business customers. Vodafone is owned by Infratil and Brookfield Asset Management and remains a partner market in association with Vodafone Group, one of the world's largest telecommunications companies. For more information, please visit www.vodafone.co.nz.
4. We have set out our responses to selected questions included in RSM's discussion document below.



Our position

5925 – 6425 MHz for WLAN use

Q1. Do you agree with RSM's proposal on making the 5925 - 6425 MHz available for WLAN use?

5. Vodafone supports allocating the 5925 – 6425 MHz range for wireless usage with a **technology-neutral approach**. The conditions of the allocation should allow usages on equal terms by both IEEE standardised WLAN technology and 3GPP standardised 5G NR-U technology, and their future evolutions. It is also important that the licence conditions are harmonised with other major markets to ensure a healthy network and device ecosystem.
6. This approach will allow the most efficient use of this spectrum, and encourage new technologies and applications based on both 3GPP and IEEE standard to be developed and used in the local market, providing significant benefits to New Zealand. This could include new technologies that combine unlicensed spectrum (5G NR-U) with licence spectrum to boost deployments, enable more effective spectrum utilisation, deliver higher capacity and provide better user experience with higher 5G speeds.

Q2. What are your views on the potential future use of 6425 - 7125 MHz for new applications (e.g. Wi-Fi or IMT)?

7. Vodafone's view is that the 6425 – 7125 MHz band is technically suitable for International Mobile Telecommunications (IMT) use, as it provides a good balance for coverage and capacity for high-speed 5G NR networks in urban and suburban areas. Allocating this band for IMT use will realise significant economic benefits by boosting 5G NR deployment and the development of new use cases.
8. Vodafone understands that studies are ongoing both in 3GPP for the potential use of the 6 GHz range for LTE and 5G new radio NR, and in ITU-R for a potential IMT identification at WRC-23 with the least restrictive conditions for the band usage. We support RSM's proposal to monitor international developments and studies in this band. We also proposed that New Zealand proactively supports the ITU-R studies for this frequency range.



General user licence for low power and very low power devices

Q3. Do you agree that RSM should include 5925 - 6425 MHz in the GURL-SRD for WLAN low power indoor and very low power use?

9. Vodafone believes that if RSM is to allocate 5925 – 6425 MHz for the General User Radio Licence (GURL), it is important that the licence conditions allow 3GPP standard based IMT technology use, including 5G NR-U and its future evolutions. Excluding 5G NR-U from this band would remove scope for the potential benefits outlined above.

Q4. Do you agree that RSM should mandate ETSI EN 303 687 as the radio standard for WLAN use in the 6 GHz band? Is there any other regulatory compliance standard we should consider?

10. We propose that any standards to be mandated in the 6 GHz band must allow 3GPP standard based IMT technology to be deployed in this band on equal terms as other technologies allowed to be used in this band.

Contact

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