GSMA

Spectrum Licensing Best Practice
New Zealand

Flexible, innovative 3.5 GHz award sets the foundations for 5G deployment and rural connectivity expansion

Key lessons

- **Traditionally, New Zealand has preferred auctions as the approach for the award of new mobile spectrum. In the case of the 3.5 GHz band, the government demonstrated flexibility by adopting a direct allocation process through negotiations with mobile network operators.**
- **The direct award ensured an equitable allocation of 80 MHz for each of the three MNOs. This gave early certainty on access to prime mid-band spectrum and allowed operators to seamlessly transition from interim licences to long term rights, avoiding unnecessary delays to their 5G deployments.**
- **In exchange, each operator committed NZ$24m in financial contributions towards improving rural connectivity and pledged to speed up 5G deployment to specific rural towns across the country. For the government this bespoke deal represented a step forward towards its objectives to expand and improve coverage to regional and rural New Zealand.**
- **By setting a fair price level for the spectrum and ensuring that the revenues are directly invested into connectivity infrastructure, the New Zealand approach will help sustainable investment and growth in 5G, benefiting consumers and enterprises in the long run.**

Background

Planning for 5G in New Zealand started back in 2017 and following a consultation it was determined, in early 2019. that the 3.5 GHz spectrum (3.41 – 3.8 GHz) would be the first band to be allocated for 5G services. Due to existing rights in some parts of the band, it was initially planned for short-term rights (running from mid-2020 to 31 October 2022) in vacant parts of the band to be assigned via auction to allow for earlier implementation of 5G by mobile operators. Long-term spectrum rights would commence in November 2022 following the expiry of existing rights.

The arrival of the Covid pandemic in early 2020 led to a re-think and the government decided instead to promptly make the 3.5 GHz spectrum available on a short-term basis through a direct offer, instead of a market-based or competitive award. The spectrum was offered to parties that had registered their interest to participate in the initial auction – Spark (60 MHz), 2degrees (60 MHz) and DenseAir (40 MHz).

In October 2022, the New Zealand government decided that long-term access to the 3.5 GHz band would also be granted through a direct allocation process. Short-term rights were extended until 30 June 2023 to allow for continued 5G roll-out while negotiations for the long-term assignment were being finalised with the involved operators. In May 2023, it was announced that contracts had been signed with mobile network operators (MNOs) – Spark, 2degrees and One New Zealand – to accelerate the roll-out of 5G services to small towns across New Zealand and improve rural connectivity.

The details of this agreement include:

- New Zealand's 3 MNOs each receiving 80 MHz of 3.5 GHz spectrum (3460-3700 MHz) to operate nation-wide 5G networks.
- Each of the MNOs will pay NZ$24 million between 2023 and 2025 which will be used by the Rural Connectivity Group (RCG), an independent shared infrastructure provider, to expand mobile coverage into areas of rural New Zealand which would not otherwise have been provided with coverage commercially.
- Commitments to deliver a faster roll-out of 5G services to around 55 rural and regional towns across New Zealand.

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Benefits from the policy

The assignment of long-term 3.5 GHz rights via a direct award is beneficial for industry, government and consumers. For MNOs, a direct assignment process avoided the uncertainty associated with an auction process, given that 5G deployments had already commenced based on the short-term assignments. An auction process, in this case, could have forced changes to networks which were already using the 3.5 GHz frequencies and resulted in delays in 5G investment and expansion. A negotiated award thus represents a good compromise to ensure an equitable outcome for all MNOs at a reasonable financial cost.

For the government, the administrative process made it possible to directly incorporate requirements for operators towards meeting specific policy goals, namely delivering better coverage and supporting network investment. The requirements allowed the government to direct 5G investment to specific locations while also improving coverage and service quality to communities in rural areas.

And for consumers, this model ensures that spectrum revenue is directed immediately towards accelerated 5G coverage outcomes that will deliver transformative value to regional and rural areas in New Zealand.

Equitable and adequate allocation

Commitment to faster 5G roll-out

Financial payments reinvested to improve coverage

Final impacts

The decision to opt for a direct award of the long-term spectrum rights for 3.5 GHz with early notice gave certainty to MNOs and facilitated a seamless transition from the interim licences to long-term rights. This has helped the rate of 5G deployment in New Zealand. As of mid-2023, 5G population coverage was at 78%, putting it on-par with some of the leading countries in the Asia Pacific region, such as Australia, China and South Korea.

The additional 5G commitment by MNOs will further enhance 5G expansion over the next few years. This will also be aided by the reasonable pricing of the 3.5 GHz band with the funds being directed to support the rollout of non-commercial network infrastructure.

The equitable allocation of 80 MHz of contiguous 3.5 GHz spectrum meant that each of the three MNOs was provided with appropriate mid-band spectrum to capitalise on the full range of 5G's capabilities. This will enable operators to compete effectively and invest in new opportunities, from consumer applications and fixed wireless access (FWA) services to enterprise solutions across different industry sectors.

With an additional 60 MHz (3400-3460 MHz) still available following the decision by DenseAir to withdraw from the direct allocation process, there remains scope to expand the supply of 3.5 GHz spectrum as 5G adoption grows over the next few years.