14 August 2017

ACCC advice on allocation limits for the auction of unsold 'omnibus' spectrum

On 4 July 2017, the Minister for Communications and the Arts wrote to the ACCC requesting advice on whether allocation (competition) limits should apply to a proposed auction of unsold spectrum in the 1800 MHz, 2 GHz, 2.3 GHz and 3.4 GHz bands (the omnibus spectrum). The Minister asked that the ACCC have regard to the long-term interests of end-users.

The ACCC conducted limited stakeholder consultation, requesting views from existing mobile and fixed broadband licensees in the bands, and undertook analysis of competition issues raised by the proposed allocation.

Our findings are as follows:

- The likely use of the omnibus spectrum will be to provide mobile broadband (MBB), including voice services and wireless broadband services. As such, we consider the relevant market for the omnibus spectrum is the market for mobile services.
- Competition in the mobile services market is currently exhibiting signs of reasonably effective competition.
- While spectrum is an essential input into mobile services, the relevant holdings are dispersed and the amount of spectrum available is not significant.
- Current allocation limits in the 1800 MHz band are sufficient to promote competition as they would allow Vodafone Hutchison Australia (VHA) or TPG to acquire spectrum in the Mackay area where they currently do not have any spectrum holdings in the 1800 MHz band.
- We also consider that Telstra and Optus hold sufficient spectrum in the 1800 MHz band such that either entity is unlikely to be constrained in the mobile broadband market if it did not acquire further 1800 MHz spectrum in the omnibus spectrum auction.
- We consider allocation limits in the 2 GHz, 2.3 GHz and 3.4 GHz bands would not:
    - promote competition as acquiring the available spectrum would not significantly improve an operator's ability to compete by expanding its network;
    - encourage the economically efficient use of, and the economically efficient investment in, spectrum as they could prevent incumbent holders acquiring residual and contiguous lots and achieving greater technical efficiency;
    - facilitate a new market entrant as a potential carrier could not build a competitive mobile network using only the spectrum available in the omnibus spectrum auction.
- In the 2 GHz band, we consider allocation limits may result in inefficient allocation of spectrum, including the possibility of spectrum being left unsold at the end of the auction which would not be in the interests of end-users. We also consider that the absence of allocation limits could enable some operators to realise network efficiencies and thereby encourages the economically efficient use of spectrum.
- In considering potential competition issues in the allocation of spectrum in the 3.4 GHz band, we had regard to the proposed auction of 125 MHz in the 3.6 GHz band. The 3.4-

3.8 GHz bands have been identified internationally as highly suitable for early 5G deployment. As such, we consider the bands as direct substitutes. However, due to the limited amounts of 3.4 GHz spectrum available in the omnibus spectrum auction, we do not consider allocation limits will sufficiently promote competition to warrant their imposition, and may hinder the economically efficient investment, and economically efficient use of, spectrum.

Consequently, we recommend that current allocation limits remain for the 1800 MHz band of the omnibus spectrum as outlined in *Radiocommunications (Spectrum Licence Limits – Regional 1800 MHz Band) Direction 2015*, and that no allocation limits are imposed on the 2 GHz, 2.3 GHz and 3.4 GHz spectrum bands. We consider these recommendations are in the long-term interests of end-users.

More detail on our consideration of each band is provided below.

1800 MHz: The ACCC recommends retaining current allocation limits

In March 2015, the Minister for Communications and the Arts sought the ACCC's advice on allocation limits for the auction of 2x60 MHz of regional 1800 MHz spectrum (regional 1800 MHz auction). 1800 MHz spectrum is particularly attractive spectrum for MNOs for next generation services as it is globally harmonised – every 4G device in Australian can operate on this spectrum.

The ACCC recommended a limit be imposed such that no person or specified group of persons be allocated more than 2x25 MHz in any of the geographic areas in the 1725–1785 MHz and 1820–1880 MHz bands (1800 MHz band) as a result of the allocation of spectrum licences, in order to promote competition in the national market for mobile broadband.

We consider this advice is still relevant. The unsold 1800MHz band spectrum is likely to be used for 4G mobile services (including data and voice-over-LTE or VoLTE).

The ACMA proposes to offer the available spectrum as four 2x5 MHz lots and one 2x10 MHz lot in Mackay.

In regional Australia, the majority of the 1800MHz band is licensed by Telstra and Optus. Current allocation limits will prevent Telstra from acquiring any of the 1800MHz lots available in the omnibus spectrum auction except for one 2x5 MHz lot in Maryborough (South Queensland) and prevent Optus from acquiring available lots in Mackay and Dubbo. TPG and VHA can acquire any of the available lots.

The ACCC considers current allocation limits in the 1800 MHz band are sufficient to promote competition as they would allow VHA or TPG to acquire spectrum in the Mackay area where they currently do not have any spectrum holdings in the 1800 MHz band. We also consider that Telstra and Optus hold sufficient spectrum in the 1800 MHz band such that each company is unlikely to be constrained in the mobile broadband market if they did not acquire further 1800 MHz spectrum in the omnibus spectrum auction.

We have carefully considered the position of TPG given it is a new entrant to the market. However, we consider current allocation limits are sufficient to provide TPG an opportunity to acquire spectrum and promote competition. In the regions in which spectrum is available, TPG holds more 1800 MHz spectrum than VHA (except in Regional West). In substitute bands (2 GHz and 2.5 GHz), TPG and VHA's regional spectrum holdings are quite similar. Therefore we do not consider VHA should be prevented from an opportunity to increase its spectrum holdings.

Therefore, the ACCC recommends retaining the current allocation limits that prevent any person or group of persons from holding more than 25 MHz in the 1725—1785 MHz and 1820—1880 MHz spectrum bands.

2 GHz: The ACCC recommends that no allocation limit be applied

Currently, the 2 GHz band is used predominantly to provide mobile services using 3G technology. However, it is considered likely that deployment of any new services in the spectrum available will utilise 4G technology.

The ACMA propose to offer the 2x15 MHz of available spectrum in Canberra, Hobart and Darwin in two lots of 2x10 MHz and 2x5 MHz. Adelaide, Perth and Brisbane will be offered in single 2x5 MHz lots.

We note that Telstra and Optus have greater holdings of 1800 MHz and 2 GHz spectrum in Darwin and Hobart than VHA and TPG. However, we consider that combined with retaining current allocation limits in the 1800 MHz band, the amount of 2 GHz spectrum available is not significant enough for competition in downstream markets to be adversely affected regardless of the auction outcome. While the absence of allocation limits could enable some operators to realise network efficiencies and thereby encourages the economically efficient use of spectrum.

We also consider allocation limits may result in inefficient allocation of spectrum, including the possibility of spectrum being left unsold at the end of the auction which would be to the detriment of end-users.

Therefore, the ACCC recommends that no allocation limit be applied

2.3 GHz: The ACCC recommends that no allocation limit be applied

The 2.3 GHz band is primarily used to provide fixed wireless services. However, 2.3 GHz spectrum is also currently used by Optus to provide 4G mobile services. We consider that for operators other than Optus, the likely use of the 2.3 GHz band will be to provide fixed wireless services. However, if Optus were to consolidate its spectrum holdings by acquiring available lots adjacent to its current holdings, then the likely use may be for 4G mobile services.

The ACMA proposes to offer the total bandwidth available in each geographic area as a single lot citing efficiency reasons and low demand.

The ACCC considers demand for 2.3 GHz spectrum will not be high enough to warrant the imposition of allocation limits. Many lots will only be of interest to incumbents, and preventing operators from consolidating their holdings within the 2.3 GHz band will result in inefficient allocation of spectrum without materially promoting competition in downstream markets.

Therefore, the ACCC recommends that no allocation limit be applied.

3.4 GHz: The ACCC recommends that no allocation limit be applied

We understand that currently 3.4 GHz is used to provide fixed wireless services. We consider that the current likely use of the 3.4 GHz band will be to provide wireless broadband services. However, 3.4 GHz is being flagged internationally as one of the primary spectrum bands for early 5G deployment. While the available spectrum in the omnibus spectrum auction is not significant enough to create high demand for future 5G use, we consider that the likely future use of 3.4 GHz spectrum will be to provide 5G mobile broadband services.

The ACMA proposes to offer the total bandwidth available in each geographic area as a single lot citing efficiency reasons.

In considering potential competition issues in the allocation of spectrum in the 3.4 GHz band, we have had regard to the proposed auction of 125 MHz in the 3.6 GHz band. The 3.4-3.8 GHz bands have been identified internationally as highly suitable for early 5G deployment. As such, we consider the bands as direct substitutes. However, due to the limited amounts of 3.4 GHz spectrum available in the omnibus spectrum auction, we do not consider allocation limits will sufficiently promote competition to warrant their imposition, and may hinder the economically efficient investment, and economically efficient use of, spectrum.

Therefore, the ACCC recommends that no allocation limit be applied.

Amended on 16 August 2017