



TELSTRA CORPORATION LIMITED

Response to ACCC consultation: allocation limits advice for 3.4–4.0 GHz band allocation in remote areas

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EXECUTIVE SUMMARY

Telstra welcomes the opportunity to respond to the Australian Competition and Consumer Commission (**ACCC**)’s consultation on its allocation limits advice to the Australian Communications and Media Authority (**ACMA**) for apparatus licences in the 3.4–4.0 GHz band in remote areas (**consultation**).

This is a significant consultation; not only to ensure the ACCC’s advice supports a decision by the ACMA which promotes the long term public interest (**LTPI**) from the use of this valuable mid-band 5G spectrum, but also because this is the first time the ACMA has considered using its new powers to set allocation limits under the modernised *Radiocommunications Act 1992* (**RC Act**) and it is important these new powers are used appropriately.

In this response, we therefore set out in some detail the approach we consider the ACCC should take in its advice. In summary:

- The advice should recognise that the ACMA’s decision will ultimately need to be based on what will promote the LTPI, which involves broad considerations going beyond the scope of the ACCC’s advice.
- The ACCC’s advice should be focussed on competition considerations, and should apply a substantial lessening of competition (**SLC**) test. Where this is a risk, the ACCC’s advice should recommend the least restrictive approach to prevent an SLC, having due regard to other relevant powers of the ACMA, as well as the ACCC’s alternative competition powers.
- Allocation limits under s102G of the RC Act are a blunt, inflexible and long-lasting restriction on future spectrum use. As a matter of principle, allocation limits for administratively allocated apparatus licences should only be imposed in exceptional cases. These are where there is a clear risk of substantial harm to competition in the absence of such limits, which outweighs the risk of regulatory error in the form of the limit itself doing harm to the LTPI. In most cases, use of the ACMA’s more flexible traditional powers to manage any competition issues under s100 of the RC Act should be preferred.

Applying this approach to the present case:

- The available evidence suggests the practical risk of a SLC in a relevant downstream market in the absence of an ex-ante allocation limit is low.
- To ensure any spectrum allocated is used efficiently in the LTPI, rather than imposing allocation limits under s102G of the RC Act, it would be preferable for the ACMA to set a 5-year licence term and include a “use it or lose it” (**UIOLI**) licence renewal statement, permitting renewal for a further 5 years.
- In response to local areas of high competing demand and to ensure adequate access to this spectrum to promote the rollout of 5G in remote areas, the ACMA should use its more flexible powers under s100 of the RC Act, rather than set a fixed ex ante allocation limit under s102G. The ACMA is not obliged to issue apparatus licences ‘over the counter’. In allocating apparatus licences under s100, the ACMA is required to have regard to all matters it considers relevant, including the impact of the allocation on competition. Previously, the ACMA has successfully promoted the LTPI by exercising its administrative discretion under s100 of the RC Act when allocating apparatus licences for 1800 MHz licences in remote areas, 2100 MHz licences in regional areas and most recently for area wide apparatus licences (**AWLs**) in the 26GHz and 28 GHz bands.
- If allocation limits are nevertheless to be imposed, in order to support remote area 5G rollout and our digital economy in accordance with the LTPI, these limits must allow each mobile network operator (**MNO**) the option of using up to 100 MHz each across the entire remote area, aligned with their existing 3.4-3.7 GHz holdings in the adjoining regional areas.



1. HOW THE ACCC SHOULD APPROACH ITS ADVICE

As this is the first time the ACMA has considered using its new powers to set allocation limits under the modernised RC Act, it is important these new powers are used appropriately. We therefore set out below in some detail the approach we consider the ACCC should take to its advice on the use of these powers.

1.1. The context in which the ACCC's advice is being provided

The ACMA's decision on whether to impose allocation limits, and if so what limits to impose, must be based on what will promote the LTPI derived from the use of the 3.4-4 GHz band in remote areas. While the ACMA is required to consult the ACCC before making such a decision, the ACMA's decision involves broader considerations than just the ACCC's advice.

Promoting the LTPI derived from the use of spectrum is the primary objective of the RC Act.¹ The ACCC's competition advice is relevant to the ACMA's assessment of whether it is necessary for the ACMA to issue an instrument under s102G of the RC Act to promote the LTPI by facilitating efficient allocation and use of the spectrum. However, it is only one consideration.

The ACMA must also consider other aspects of the LTPI in order to determine the best approach to managing the spectrum as a finite resource, as set out in its Principles for Spectrum Management.² These include taking the least restrictive approach to achieving policy objectives; and promoting both certainty and flexibility to the extent possible.³ The ACMA must also consider matters such as whether imposing a limit may result in unsold or underutilised spectrum; whether the imposition of a limit is required to ensure that spectrum is likely to be allocated to the highest value use; and whether any limit imposed is compatible with the technology that is likely to be deployed in the spectrum.⁴

In addition, the ACMA's decision should support the Government's communications policy objectives⁵, and the ACMA must both have regard to any relevant Ministerial Policy Statement (**MPS**)⁶ and act consistently with any directions given by the Minister.⁷

In the present case no directions have been made by the Minister, and there is also currently no MPS. As anticipated in the Spectrum Reform proposals⁸, it would be preferable for the ACMA's decision to be guided by an MPS – although we appreciate the timing may not allow for this.

The Government's communications policy objectives⁹ are articulated in the "5G—Enabling the Future Economy" Policy Statement¹⁰. Relevant objectives include supporting the timely rollout of 5G and the growth of Australia's digital economy and enabling the communications sector to be agile in supporting new demand driven business cases to attract investment. These objectives are especially relevant to the

¹ RC Act s 3. The Explanatory Memorandum to the modified RC Act (**EM**) explains "*The new object of the Act puts the promotion of the long-term public interest derived from the use of the spectrum as the key aim in the management of the spectrum*", p 20.

² <https://www.acma.gov.au/sites/default/files/2019-10/Principles%20for%20spectrum%20management%20-%202009.PDF>

³ Principles 3 and 4.

⁴ These are important aspects of achieving Principles 1, 2 and 5.

⁵ RC Act s 3(c).

⁶ RC Act s28C.

⁷ RC Act s102G(5).

⁸ <https://www.infrastructure.gov.au/media-technology-communications/spectrum/spectrum-reform#:~:text=The%20Australian%20Government%20is%20committed%20to%20delivering%20spectrum,approach%20to%20amend%20the%20existing%20Radiocommunications%20Act%201992>

⁹ The EM explains that these can encompass policy objectives specific to radiocommunications, as well as broader communications policy objectives - see https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r6580_ems_6cec7716-2b42-4148-9112-316c241a7eac/upload_pdf/746195Edit.pdf;fileType=application%2Fpdf, p20

¹⁰ At <https://www.infrastructure.gov.au/sites/default/files/5g-enabling-the-future-economy.pdf>. Note that the ANAO found this to be the relevant government policy statement for the 3.6 GHz auction: see <https://www.anao.gov.au/work/performance-audit/management-spectrum-reallocation-to-support-the-deployment-5g-services> at 2.30.



ACMA's choice of whether or not to issue an instrument under s102G of the RC Act. This is because allocation limits are rigid and cannot readily be tailored to differing spectrum demand scenarios. They could therefore put the Government's 5G policy objectives at risk, by potentially limiting access to spectrum below demand for given use cases in an area.

All of the above matters are material considerations which must be integrated into the ACMA's decision-making process.

While not a matter for the ACCC, it will be important for the ACMA to consult with stakeholders directly on its proposed approach to the allocation and the reasons why it considers this approach will promote the LTPI, after receiving the ACCC's advice:

- This is essential for ensuring all relevant factors are properly considered before making any decision to impose allocation limits, which will have a lasting impact on future use of the 3.4-4GHz band in remote areas.
- It is also consistent with previous ACMA practice – e.g., the ACMA's consultation on assignment of the 26/28 GHz AWLs.¹¹

1.2. The ACCC should recommend the least restrictive approach to prevent an SLC

The ACCC's advice should be focussed on competition considerations, and should apply an SLC test. The ACCC's advice should also have due regard to other relevant powers of the ACMA, as well as the ACCC's alternative competition powers.

1.2.1 We do not support the ACCC's proposed LTIE criterion

We do not support the ACCC's proposed approach to its advice of having regard to the long-term interests of end-users (LTIE).

While the LTIE test is a standard test applied by the ACCC directly reflecting the object of Part XIC of the *Competition and Consumer Act 2010 (CCA)*¹², it does not directly reflect the object of the RC Act and involves a specific gloss on the interpretation of the LTPI. Based on the relevant Government communications policy objectives for the allocation, such an interpretation may be appropriate.¹³ However, this should not be assumed.

In the absence of a relevant MPS as to how the LTPI should be interpreted¹⁴, the ACCC should confine its advice to pure competition considerations which could prevent efficient use of the spectrum. The Explanatory Memorandum to the revised RC Act (EM) provides clear guidance that the object in s3(a) to promote efficient allocation and use of spectrum is intended to include competition considerations, such as factoring in the role of competition in downstream markets.¹⁵

1.2.2 The ACCC should apply an SLC test

In formulating its advice to the ACMA on competition issues, we believe the ACCC should adopt the approach of considering whether it is necessary to impose an ex-ante allocation limit under s102G of the

¹¹ See <https://www.acma.gov.au/consultations/2020-08/proposed-licensing-arrangements-26-ghz-and-28-ghz-bands-consultation-252020>

¹² See CCA s152AB.

¹³ See e.g. <https://www.infrastructure.gov.au/department/media/publications/communications-policy-objectives-allocation-26-ghz-band> and <https://www.infrastructure.gov.au/media-centre/850-and-900-mhz-spectrum-bands-policy-objectives>

¹⁴ The EM specifies that matters the Minister may wish to address in an MPS could include criteria to be considered by the ACMA when setting allocation limits and guidance on what is considered to be in the LTPI, in line with the object of the RC Act – p21.

¹⁵ See https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r6580_ems_6cec7716-2b42-4148-9112-316c241a7eac/upload_pdf/746195Edit.pdf;fileType=application%2Fpdf, p20.



RC Act to prevent the effect or likely effect of an SLC in a relevant downstream market and, if so, the least restrictive limit needed to prevent that harm.

The SLC test is applied when the ACCC is considering whether the issuing of an apparatus licence to use spectrum should be prevented on an ex-post basis, under s50 of the CCA as read in conjunction with s106A of the RC Act. It is appropriate for the ACCC to apply the same SLC test as under s50 of the CCA, because the effect of an allocation limit under s102G of the RC Act (where that limit has been or will be exceeded) is ultimately the same – to prevent the acquisition of a spectrum asset.

The criterion applied by the ACCC is important, inter alia, when it comes to considering the question asked in the ACCC's consultation as to "*whether any operator would be constrained from competing effectively in the markets if they do not have the opportunity to acquire sufficient spectrum in the allocation*".¹⁶ By its very nature, competition expresses itself as rivalrous behaviour.¹⁷ As the ACCC has previously explained to Treasury in the context of the reforms that have now been made to s46 of the CCA¹⁸, under the approach of applying an SLC test:

"...An SLC test would protect legitimate competition and only target anti-competitive conduct. Conduct that enhances competition, by definition, will not substantially lessen competition and will not be captured.

The application of the SLC test allows firms to gain market share by being more innovative and efficient than their rivals, since this benefits consumers and raises productivity. Innovation is at the heart of competitive conduct. Even where innovation and strategic investments lead to market dominance, neither the courts nor the ACCC would regard that as a substantial lessening of competition.

...The provision would not apply to conduct that is merely fierce competition; under an SLC test, to damage competitors, even to the extent of competitors being forced out of business, is not in itself a basis to establish a 'lessening of competition'. The SLC element seeks to protect the competitive process. The SLC test targets conduct that prevents or impedes firms from competing on their merits."

1.2.3 The ACCC should recommend the least restrictive approach to prevent an SLC

Aligned with Principle 3 in the ACMA's Principles for Spectrum Management¹⁹, the ACCC's advice should recommend to the ACMA the least restrictive approach to achieving the policy objective of preventing an SLC.

As the ACCC has acknowledged in its consultation²⁰, this requires the ACCC's advice to have due regard to the ACCC's alternative powers, other than ex ante allocation limits, for addressing any competition issues in downstream markets which may emerge. These include not only powers under s50 of the CCA to deal ex post with acquisitions of assets and the ACCC's associated powers of investigation²¹, but also the more general CCA Part IV powers to remedy competition issues, as well as the telecommunications industry-specific CCA Part XIB powers.

This approach also requires the ACCC's advice to have regard to the ACMA's alternative powers to manage potential competition issues arising in cases where demand for spectrum in the 3.4-4 GHz band in remote areas may exceed supply, which we detail in sections 2.2 and 2.3 of this response below.

¹⁶ ACCC Consultation, p10.

¹⁷ *Vodafone Hutchison Australia Pty Limited v Australian Competition and Consumer Commission* [2020] FCA 117 at 48.

¹⁸ See <https://www.accc.gov.au/system/files/ACCC%20submission%20to%20the%20Treasury%20-%20Options%20to%20strengthen%20the%20misuse%20of%20market%20power%20provision.pdf>, p 6.

¹⁹ <https://www.acma.gov.au/sites/default/files/2019-10/Principles%20for%20spectrum%20management%20-%202009.PDF>

²⁰ See p 14.

²¹ See RC Act s106A(2).



Finally, in the event that the ACCC's advice is to recommend the imposition of allocation limits under s102G of the RC Act, this approach involves recommending the least restrictive limit needed to prevent the risk of substantial harm to downstream competition identified by the ACCC.

1.3. Allocation limits under s102G should only be recommended in exceptional cases

As a matter of principle, allocation limits for administratively allocated apparatus licences should only be imposed in exceptional cases. For the reasons we explain in section 2 of this response, this is not one of them.

Allocation limits under s102G of the RC Act involve a blunt, inflexible and long-lasting restriction on future spectrum use. As the EM explains: *“a person covered by such a limit could not be issued any further transmitter licences under Section 100 once they reached the relevant limit. In this situation, ACMA would have no discretion to issue or allocate them any further transmitter licences”*.²²

As we explain in further detail in section 2 below, s100 of the RC Act already gives the ACMA power to consider matters such as the impact on competition, in deciding whether to issue an apparatus licence. The additional powers under s102G, which were not in the original draft reform legislation, were only included to address the risk that market power could be obtained by a party through the administrative allocation of apparatus licences.²³

While we agree with the ACCC that in certain circumstances the imposition of such allocation limits under s102G may be necessary to maximise the public benefit derived from the use of spectrum, we do not expect this to be true in the majority of cases. We also note that the choice of an administrative rather than price-based allocation by the ACMA suggests that there is likely to be limited competing demand, reducing the likelihood of any competition issues.

Particularly in rapidly evolving nascent markets experiencing a high pace of technological change as is still the case for downstream markets utilising mid-band spectrum in the 3.4-4 GHz band, whether allocation limits will promote or harm competition and the LTPI in the long run is subject to considerable uncertainty.

There is a risk, for example, that unduly restrictive limits could inadvertently constrain the 5G speeds available to consumers in downstream markets. This is because larger 3.4-3.7 GHz spectrum holdings will allow customers to attain faster peak and average throughput speeds. The GSA illustrates this in Table 1 below.²⁴ Wider channels also reduce the quantity of cell sites required and this is an important factor in determining the cost of 5G services to consumers. In addition, reduced network density also has the advantage of less power usage, creating a lower environmental impact and potentially longer battery life which can be useful for deployments where there is only sporadic access to electricity.²⁵

²² See https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r6580_ems_6cec7716-2b42-4148-9112-316c241a7eac/upload_pdf/746195Edit.pdf;fileType=application%2Fpdf, pp 39-40.

²³ See <https://www.infrastructure.gov.au/sites/default/files/documents/2020-radiocommunications-reform-consultation-outcomes-paper.pdf> p 9.

²⁴ GSA, *The future of IMT in the 3300-4200 MHz frequency range*, June 2017, p 18.

²⁵ See <https://www.gsma.com/spectrum/wp-content/uploads/2021/04/3.5-GHz-for-5G.pdf>, pp 6-8.


Table 1: Theoretical 5G data rates per channel bandwidth

Channel bandwidth	Peak data rate	Average data rate
10 MHz	0.3 Gbit/s	0.078 Gbit/s
20 MHz	0.6 Gbit/s	0.156 Gbit/s
40 MHz	1.2 Gbit/s	0.312 Gbit/s
50 MHz	1.5 Gbit/s	0.39 Gbit/s
60 MHz	1.8 Gbit/s	0.468 Gbit/s
80 MHz	2.4 Gbit/s	0.624 Gbit/s
100 MHz	3 Gbit/s	0.78 Gbit/s
200 MHz	6 Gbit/s	1.56 Gbit/s

As a practical matter, the cost of trying to set and manage any limits so they are effective but do not have unintended consequences is also unlikely to be commensurate with the low value of this remote spectrum, especially considering the added complication of trying to pre-determine limits in situations where there could be partial overlap of coverage areas.

Imposing limits under s102G should therefore be the exception, rather than the rule, which must be based on more than mere speculation or theory of an SLC arising in its absence. That is to say, in the same way as is the approach of the FCC in the US, the ACCC should not recommend imposing limits absent a clear indication that they are necessary to address a specific competitive concern. In the case of the recent US 3.7 GHz auction, the FCC found no such indication.²⁶ Rather, the FCC found that:

“limiting the amount of 3.7-3.98 GHz band spectrum that one party can acquire... could unnecessarily restrict providers’ ability to participate in the auction and acquire spectrum in this band. This ultimately could “constrain providers in their paths towards 5G deployment,” limit providers’ “incentives to invest” in the band, and “delay the realization of related economic benefits.”²⁷

As we explain in section 2 below, there is similarly no evidence to indicate a real chance of an SLC occurring which would justify the imposition of an allocation limit in relation to the present 3.4-4 GHz allocation.

²⁶ [FCC Expands Flexible Use of the C-band for 5G | Federal Communications Commission](#) §83.

²⁷ See <https://docs.fcc.gov/public/attachments/FCC-20-22A1.pdf> §86.



2. ALLOCATION LIMITS SHOULD NOT BE RECOMMENDED FOR 3.4-4 GHZ IN REMOTE AREAS

2.1 The risk of harm to competition in a downstream market without allocation limits is low

In providing its advice to the ACMA, it is important for the ACCC to consider the practical or “real” risk of anti-competitive behaviour such as monopolisation or hoarding occurring so as to create a risk of SLC in a relevant downstream market, in the absence of an allocation limit. It is important that this is more than a mere possibility, generated by economic theory alone.²⁸ In the case of the proposed 3.4-4GHz allocation in remote areas, the available evidence suggests this risk to be low.

As a matter of basic economic principle, it is generally true of all spectrum allocations that the marginal benefit of the spectrum to the acquirer declines as the amount already purchased increases (that is, the demand is downward sloping). In the present case, the amount of mid-band spectrum on offer to provide coverage and capacity in remote Australia – 600 MHz – is large, and the ACMA’s choice of administrative over price-based allocation prima facie suggests no significant anticipated excess demand for this spectrum.²⁹ There is also a strong degree of heterogeneity in the potential downstream markets for the use of this spectrum. These include the national mobile services market which is a market for similar but differentiated services in which the MNOs compete based on a range of price and non-price factors; the fixed broadband market in which providers compete using a large range of both fixed and wireless technologies nationally and/or in more limited geographic areas; and the diverse market for supply of private connectivity solutions to enterprise and government customers. These factors in conjunction suggest there is little realistic incentive for a party to acquire more spectrum than they would need in order to (allegedly) prevent their competitors from acquiring sufficient spectrum to compete in a relevant downstream market.³⁰

Applicant behaviour in the recent allocation of AWLs in the 26 GHz and 28 GHz bands also provides important empirical evidence on this issue. In that case, the ACMA decided not to set allocation limits. The ACMA explained: *“We have decided not to impose limits on the amount of available spectrum that can be applied for... We recognise that different amounts of spectrum are needed for different technology deployments and we want to retain opportunities for interested parties to apply for spectrum at later times to enable network enhancements”*.³¹

Despite this, no applicant sought to acquire all the spectrum on offer. The most spectrum acquired by any single applicant was 2 GHz by Optus in two very small areas in Perth. Most applicants sought between 200 MHz and 400 MHz, and generally did so in quite small and specific geographic areas. The only applicant that sought and acquired spectrum nationally (i.e., all areas that were available) was NBN Co. Telstra only sought 1 GHz of 26 GHz AWLs in areas adjacent to the spectrum licenced areas, in a frequency range that matched our spectrum licenced holdings in those adjacent areas. Further, Telstra sought only 600 MHz of 28 GHz in its first AWL, and only for selected areas for a short time (this licence has already expired and will not be renewed).

Therefore, in the 26 and 28 GHz AWL applications, there is no evidence of either spectrum hoarding nor ambit spectrum claims for more spectrum than any licensee actually required. The experience of applications for these AWLs aligns with the fact that MNOs have strong incentives to maximise spectrum utility and usage for any spectrum they acquire. In fact, there is absolutely no evidence, and never has

²⁸ See *Vodafone Hutchison Australia Pty Limited v Australian Competition and Consumer Commission* [2020] FCA 117 at 52-65 and *Australian Gas Light Company v Australian Competition and Consumer Commission and Others* (2003) 137 FCR 317 at 416-417 [348]

²⁹ The ACMA’s letter to the ACCC advises that a ‘first-in-time’ administrative allocation is currently being considered, due to the large quanta of spectrum available, coupled with the typically lower demand for access to spectrum in remote areas.

³⁰ Cf the comments in the ACCC’s consultation at p 13.

³¹ See the applicant information pack for the allocation of apparatus licences in the 26 GHz and 28 GHz bands, p 10.



been any evidence, that any MNO would seek to hoard 3.4-4 GHz spectrum in remote areas for anti-competitive purposes. For example:

- In the Omnibus auction in 2017, no bidder purchased all of the spectrum they could have, even though there were no allocation limits for the 3.4 GHz lots, the 2.1 GHz lots, or the 2.3 GHz lots.
- In the 700 MHz auction in 2013, spectrum remained unsold despite allocation limits allowing MNOs to purchase more.
- In the 3.6 GHz auction in regional areas, no bidder acquired the maximum amount of spectrum permitted under their allocation limits in every region.

Recent international mid-band auctions also suggest a low risk of monopolisation or hoarding. In the 2019 Austrian auction of 390 MHz in the 3.4-3.8 GHz band, caps permitted bidders to acquire between 150 MHz and 190 MHz in each region. The maximum amount acquired by a bidder in any region was 140 MHz, with significant purchases made by smaller operators.³² In the 2018 auction in Spain of 200 MHz in the 3.6-3.8 GHz band, the cap permitted up to 120 MHz per bidder but the final purchases by the three successful MNOs were 90 MHz, 60 MHz and 50 MHz – all well below their bidder caps.³³

2.2 Efficient use of the spectrum is better promoted through UIOLI requirements

To ensure any spectrum allocated is used efficiently in the LTPI, rather than imposing allocation limits under s102G of the RC Act, it is preferable for the ACMA to set a 5-year licence term and include a “use it or lose it” (**UIOLI**) licence renewal statement under s103A of the RC Act, permitting renewal for a further 5 years only if the use requirement is met.

We note that in its March 2021 Policy Paper on its approach to licensing and allocation, the ACMA stated that:

“We intend to make medium-term licensing available as a default in bands where there is ... a new allocation of licences where licensees would be seeking an appropriate licence duration to maximise investment confidence, but where concerns about licence under-use (or hoarding) might restrict our willingness to offer long duration licences.”³⁴

We believe a 5-year licence term is sufficient for the proposed licences, balancing the need for investment certainty with the flexibility to ensure efficient use over time. The expected low cost of these licences largely removes the need to have a long licence term in order to provide the required level of investment certainty.

Coupled with the 5-year term, a UIOLI requirement making renewal for a further 5 years conditional on the licensee demonstrating to the ACMA that the spectrum is put to non-trivial productive use would allow the ACMA to ensure the spectrum allocated is being used efficiently in the LTPI, in a superior manner to a blanket allocation limit.³⁵ Where the spectrum acquisition cost is likely to be relatively low, usage requirements are an effective and targeted way to deter speculative acquisitions, while still providing flexibility for bidders to acquire larger amounts of spectrum where there is a relevant use case.

We believe a period of five years from the date of licence grant should generally provide sufficient time for the licensee to have made substantive deployments, absent relevant mitigating circumstances.

³² See <https://www.rtr.at/TKP/presse/pressemitteilungen/pressemitteilungen/PI19092018TK.en.html> and https://www.rtr.at/TKP/was_wir_tun/telekommunikation/spectrum/procedures/5G_Frequenzvergabe_3_4-3_8GHz/5G-Auction-Outcome.de.html (English translation)

³³ See <https://5gobservatory.eu/status-of-the-lte-ecosystem/>

³⁴ See https://www.acma.gov.au/sites/default/files/2021-06/Our_approach_to_radcomms_licensing_and_allocation_information_paper.pdf, p 15.

³⁵ We note, for example, that the GSMA recommends “use it or lose it” obligations as a potential regulatory tool to ensure spectrum is made available in cases where the licensee is not using it within a reasonable period of time (allowing for reasonable planned future usage) – see <https://www.gsma.com/spectrum/wp-content/uploads/2021/09/Auction-Best-Practice.pdf>, p 8.



Procedurally, the ACMA could set the renewal application period to commence 6 months before expiry (which is the default for apparatus licences). It would also be open to the ACMA to set a slightly longer licence term (e.g., 6 years) and a longer renewal application period (e.g., 12 months) so that the licensee would be ensured a full effective 5 years to make its deployment and the certainty of a renewal decision in sufficient time prior to the expiry of the initial term to allow it to make relevant arrangements in the event of failure to meet the UIOLI requirements and the renewal being declined.³⁶

2.3 Localised competing demand is best managed through ACMA discretion under s100

In response to local areas of high competing demand, the ACMA should use its more flexible s100 powers, rather than set an allocation limit under s102G of the RC Act.

2.3.1 The ACMA has flexible powers to consider competition issues under s100 of the RC Act

Current usage of the 3.4-4 GHz band indicates that there are likely to be some localised remote areas where demand may exceed supply. These include areas adjoining regional areas where MNOs have existing 3.4-3.7 GHz holdings, certain existing mining sites³⁷, larger towns or tourist destinations such as Alice Springs, and transport corridors and hubs.

Promotion of the LTPI requires the valuable 5G mid-band spectrum in the 3.4-4 GHz band to be allocated efficiently by the ACMA in these cases.

However, the ACMA is not obliged to issue apparatus licences ‘over the counter’ and it is not necessary to set allocation limits under s102G to achieve this outcome. Under s100 of the RC Act, the ACMA must exercise its decision-making powers to allocate apparatus licences having regard to “all matters it considers relevant”³⁸. As explained in the EM³⁹, RC Act s100(4C) makes it clear, for the avoidance of any doubt, that the ACMA may in so doing consider matters such as the impact of the allocation on competition.

Previously, the ACMA has ensured efficient allocation of apparatus licences by exercising its administrative discretion to adopt a ‘prioritisation’ approach, including in 2019 for 1800 MHz apparatus licences in remote areas⁴⁰ and for regional 2100 MHz apparatus licences.⁴¹

In exercising its discretion in this manner under s100, the RC Act does not require the ACMA to seek advice from the ACCC, nor would this be appropriate. Unlike the new s102G ACMA power to issue a legislative instrument imposing enduring and wide-ranging allocation limits on specified persons or classes of persons, the administrative allocation of apparatus licences under s100 is a core part of the ACMA’s continuing role as the spectrum management authority under the RC Act, which it must be free to perform independently and flexibly as the relevant situation requires.

However, the ability for the ACMA to use these less restrictive and more flexible powers is relevant to the ACCC’s advice as to whether or not the imposition of allocation limits under s102G is a necessary and appropriate tool to mitigate risks to competition in localised areas where there may be competing demand. In the present case, for the reasons explained in this response, we do not believe it is.

³⁶ See RC Act ss s103A(10); 129(3) and 286(1)(a).

³⁷ E.g., the ACMA’s November 2019 Planning Decision Paper on Optimising the 3.4 GHz band states that “there is known demand for spectrum in some remote areas (particularly for mining uses)” - <https://www.acma.gov.au/consultations/2019-08/optimising-3400-3575-mhz-band-consultation-122019#outcome> p 9.

³⁸ RC Act s100(4)(a).

³⁹ See https://parlinfo.aph.gov.au/parlInfo/download/legislation/ems/r6580_ems_6cec7716-2b42-4148-9112-316c241a7eac/upload_pdf/746195Edit.pdf;fileType=application%2Fpdf, p 39.

⁴⁰ RALI MS34 - *Frequency Coordination and Licensing Procedures for Apparatus Licensed Public Telecommunications Services in the 1800 MHz Band*, para 4.14 on pp 32-35, available at: <https://www.acma.gov.au/publications/2019-08/publication/frequency-coordination-and-licensing-procedures-apparatus-licensed-pts-1800-mhz-bands>

⁴¹ See RALI MS33 – Sec 4.15 “Assignment Priority Order”: <https://www.acma.gov.au/sites/default/files/2019-08/RALI-MS33.docx>



2.3.2 The ACMA should manage any local competing demand using prioritisation under s100

We consider that a modified version of the administrative assessment and allocation process used by the ACMA for the 26 and 28GHz AWLs⁴² would be the best way to flexibly manage competing demand, enabling the ACMA to ensure efficient use of the spectrum in accordance with its highest value use and to address any competition issues which may arise in a tailored fashion.

As for 26 GHz and 28 GHz bands, we believe demand in the 3.4-4 GHz band is generally unlikely to exceed supply. The administrative allocation of apparatus licences is optimal when demand for access to spectrum does not exceed its supply, enabling the ACMA to assign spectrum flexibly and efficiently as use cases emerge. However, there is potential for localised excess demand for this spectrum in certain specific cases, including competition between different kinds of operators/service providers.

To manage demand for the 26/28 GHz AWLs, the ACMA used a 2-stage administrative assessment and allocation process to (i) establish the initial level of demand and (ii) manage any excess demand in specific locations and frequency segments. The ACMA decided not to impose fixed limits on how much spectrum could be applied for, recognising that different amounts are needed for different technology deployments, and to retain flexibility for subsequent applications to enable network enhancements. Instead, the ACMA published and applied a set of high-level decision-making principles that promote the LTPI and relevant government policy objectives to undertake an assessment of any contending applications.

It is not necessary for the purposes of the ACCC's advice to ascertain what prioritisation principles the ACMA should apply in the event of competing demand for 3.4-4 GHz spectrum in an area. It is important that the ACMA consult separately with interested parties on this matter.

However, we note that we are likely to recommend the ACMA consider an initial assignment priority round for MNOs and potentially also NBN Co, so that they have a reasonable opportunity to secure spectrum that is broadly aligned with their existing 3.4-3.7 GHz regional holdings in this band. Following the allocation of spectrum in this priority round, applications should be opened for any parties (including the MNOs again, if they wish) to apply for the remaining spectrum without any limits. We consider that such an approach to the allocation of apparatus licences in the 3.4-4 GHz band in remote areas will promote the LTPI because:

- Allowing each MNO the option to have access to up to 100 MHz of mid-band spectrum in remote areas aligned with their existing 3.4-3.7 GHz regional holdings will be important to promote the roll-out of 5G networks into these areas. When initially allocating the 3.6 GHz band for 5G WA WBB, the ACMA always anticipated that while interest in deploying 5G mobile services would initially be in major cities, expansion into regional and remote areas would occur over time as technology advances made this more attractive and cost-effective.⁴³
- Recently, the ACMA has decided to make an additional 100 MHz of spectrum in the 3700–3800 MHz range available via spectrum licensing optimised for wide area wireless broadband (**WA WBB**) services in metropolitan and regional areas. In its Outcomes Paper, the ACMA explained that adding this 100 MHz of spectrum to that available in the wider 3300–4200 MHz band optimised for WA WBB exclusively would make a total of 400 MHz available to the mobile sector in metropolitan areas and 335–365 MHz in regional areas.⁴⁴ It is important that similar amounts of mid-band spectrum are made available to the mobile sector in remote parts of Australia to support the timely rollout of 5G in these areas and avoid structuring a digital divide. The growth of an internationally competitive Australian digital economy in line with the Government's

⁴² See [Area-wide apparatus licensing in the 26 and 28 GHz bands | ACMA](#), pp7-11.

⁴³ https://www.acma.gov.au/sites/default/files/2020-02/3_6%20GHz%20Band_Options%20Paper.pdf, p19.

⁴⁴ <https://www.acma.gov.au/consultations/2020-07/planning-options-3700-4200-mhz-band-consultation-222020> p3.



communications policy objectives is dependent on the mobile sector having access to adequate spectrum throughout metro, regional and remote areas in Australia.

- This will also avoid the risk of allocations being fragmented in geography or frequency, which is not consistent with good spectrum management principles. Previously, in relation to the 3.6 GHz band, the ACMA has determined that technical efficiency can be improved when an operator intending to provide wide-area coverage has access to the same range of frequencies across a wide area, allowing optimised interference management and network planning.⁴⁵ In the same context, the ACMA has acknowledged that whereas the common owner of adjoining licences can merge their licences to remove the issue of dead zones, it may be harder to achieve commercial agreement where lots are not commonly owned, and the problem can be exacerbated if spectrum licences adjoin site-based apparatus licences because the potential involvement of multiple separate apparatus licensees makes a negotiated outcome harder.⁴⁶
- It is beneficial for deployment of downstream mobile services for MNOs to have access to aligned frequency ranges across the country that match existing equipment and device capabilities. In allocating spectrum in the 3.6 GHz band for spectrum licensing in metropolitan and regional areas, the ACMA determined that *“giving a single operator access to the same spectrum across a large geographic area better facilitates the rollout, over time, of wide-coverage and, where necessary, appropriately dense, networks”*.⁴⁷ By contrast, single-purpose or single-site/area applicants have few technical drivers for specific frequencies - often the only thing that matters is the quantity of spectrum acquired, not its frequency position.
- At the same time, having no hard and fast caps will allow flexibility to promote efficient use of all available spectrum. It is notable in this regard that while the GSMA considers that for the 3.3-4.2 GHz frequencies channels of 80-100 MHz are required for each operator to maximise the efficiency and affordability in the first phase of roll out, it considers more capacity will be required as demand increases.⁴⁸

⁴⁵ https://www.acma.gov.au/sites/default/files/2020-02/3_6%20GHz%20Band_Options%20Paper.pdf, p18.

⁴⁶ https://www.acma.gov.au/sites/default/files/2020-02/3_6%20GHz%20Band_Options%20Paper.pdf, p 27.

⁴⁷ https://www.acma.gov.au/sites/default/files/2020-02/3_6%20GHz%20Band_Options%20Paper.pdf, p18.

⁴⁸ <https://www.gsma.com/spectrum/wp-content/uploads/2021/04/3.5-GHz-for-5G.pdf>, p2.



ATTACHMENT: Response to list of issues for comment

1. What are the likely intended uses of 3.4–4.0 GHz band spectrum in remote Australia?

International standards for wireless broadband are based on time division duplex (TDD) technologies that typically operate over the 3300–3800 MHz frequency range. The 3.4-4 GHz band encompasses spectrum for which there is a competitive global equipment ecosystem catering for both fixed and mobile WBB services and Telstra agrees with the ACCC's assessment that there is likely to be demand for this spectrum to support a wide range of use cases in remote Australia. Consistent with the ACMA's allocation of the band, these uses are likely to include the provision of WA WBB, local area wireless broadband (LA WBB) as well as ongoing incumbent use including for point to point (PTP) fixed service links and fixed satellite services (FSS). Incumbent PTP services are provided using site-based licences with low-density deployments, typically providing services over a small area or multiple small areas. In Telstra's case, we currently have a small number of PTP links in this band for purposes including to meet our universal service obligations for voice services.

We agree that demand is likely to come from sources including MNOs to provide mobile WA WBB services; operators (including MNOs) of WA and/or LA fixed WBB services; and operators of private networks.

As we explain further in response to Questions 13 and 14 below, in considering the potential future uses for this spectrum, it is helpful to consider the ACMA's relevant decisions to date on the allocation of spectrum in the 3.4 to 4.0 GHz range, as summarised in the table below.

Table 2: Summary of ACMA allocation related decisions

Frequency Range	Amount of spectrum	Geographic area	Basis of use	Related current/proposed allocations
3400–3575 MHz (3.4 GHz band) ⁴⁹	175 MHz	Remote areas	Point to Multi Point (PMP) apparatus licences to support TDD WBB services. ACMA investigating making larger channel sizes available for PMP use (e.g., 40–100 MHz). Existing arrangements for FSS and LIPD devices maintained.	Consolidated arrangements in remote areas across 3.4 and 3.6 GHz bands. Following a restack, 75 MHz to be available in some urban areas and 35 MHz to 67.5 MHz to be available for apparatus licencing in regional areas.
3575–3700 MHz (3.6 GHz band) ⁵⁰	125 MHz	Remote areas	PMP apparatus licences to support TDD WBB services. ACMA investigating making larger channel sizes available for PMP use (e.g., 40–100 MHz). Existing arrangements for FSS and LIPD devices maintained.	Consolidated arrangements in remote areas across 3.4 and 3.6 GHz bands. Spectrum licenses for WA WBB issued in metropolitan and regional areas (2018 5G auction) ⁵¹ Site based PMP arrangements in the 5.6 GHz band in regional and remote Australia until 2028, to assist WISPs and other prospective site-based WBB operators ⁵² Apparatus licences in the 26/28 GHz band in regional Australia ⁵³

⁴⁹ [Optimising the 3400-3575 MHz band - consultation 12/2019 | ACMA](#)

⁵⁰ Ibid.

⁵¹ [3.6 GHz band spectrum auction | ACMA](#)

⁵² [Future use of 3.6 GHz - decisions and preliminary views | ACMA](#)

⁵³ [Future use of 3.6 GHz - decisions and preliminary views | ACMA; 26 GHz and 28 GHz bands | ACMA](#)



3700–3800 MHz⁵⁴	100 MHz	Remote areas	Arrangements to be introduced to support LA WBB services on a shared basis with existing FSS and PTP services	Will be spectrum licensed exclusively optimised for WA WBB services in metropolitan and regional areas
3800–4000 MHz⁵⁵	200 MHz	Australia-wide	Arrangements to be introduced to support LA WBB services on a shared basis with existing FSS and PTP services	

2. If you intend to acquire the spectrum to deploy wireless services:

(a) In what geographic areas do you intend to use the spectrum?

(b) Do you expect your intended use is likely to change in the future? If so, please provide examples of how that might change.

(c) What do you consider is the optimal allocation of 3.4–4.0 GHz spectrum to support your likely intended uses? What is the minimum allocation necessary?

(d) Is your demand for the spectrum for current use, or more likely to arise in the future?

[c-i-c.....c-i-c]

3. Is there likely to be demand for the spectrum from entities that do not propose to use the spectrum but rather, intend to provide access to the spectrum to other users? If so, what is the extent of demand from these entities and in what geographic areas?

We interpret this question as pertaining to potential demand from “neutral host” providers. Telstra agrees with the ACCC that there could potentially be interest in acquiring spectrum on this basis by such entities. We note that “neutral host” provider Dense Air acquired 3.6 GHz spectrum in metropolitan areas at auction in 2018.⁵⁶ However, we understand this spectrum has recently been traded to TPG in return for TPG’s 2600 MHz spectrum⁵⁷ Dense Air also acquired mm-wave spectrum in Sydney and Melbourne in the recent 26 GHz auction.

4. How is demand likely to be impacted by the: (a) apparatus licence arrangements; (b) likely format of the administrative assignment process; and (c) licence duration?

See section 2 in the body of this response. Through these mechanisms, we consider the ACMA is better able to promote the LTPI by ensuring timely deployment of any spectrum acquired and flexibly managing any localised areas of competing demand than via the setting of a blanket allocation limit under s102G of the RC Act.

5. What are the relevant downstream markets that are likely to be impacted by the 3.4–4.0 GHz band allocation in remote areas? Please clearly define the geographic dimensions of these markets, the providers of services and the end-users in these markets.

We consider the ACCC has identified the main relevant downstream markets, at the present point in time. However, consistent with the Government’s “5G—Enabling the Future Economy” Policy Statement, it is important that the communications sector is able to be agile in supporting new demand driven business cases to attract investment, as these emerge. Rigid allocation limits based on current views of expected downstream markets for services using the 3.4-4 GHz band in remote areas risk inadvertently curtailing this agility, to the detriment of the LTPI.

⁵⁴ See [Planning options for the 3700–4200 MHz band - consultation 22/2020 | ACMA](#)

⁵⁵ Ibid.

⁵⁶ See https://www.acma.gov.au/sites/default/files/2019-10/L2_3.6_Att_Auction%20results.pdf

⁵⁷ See <https://www.tpgtelecom.com.au/sites/default/files/media-release/TPG-Telecom-Additional-spectrum-to-boost-TPG-Telecom-5G-capacity-2-Aug-2021-final.pdf>



6. Are there any relevant markets in which the services could be provided by different types of network deployment?

Yes, depending on the use case. In this regard, the ACCC's consultation is correct that spectrum in the 3.4-4 GHz band is able to be used by a range of different providers, in a range of different ways, to meet a wide range of use cases. For example, making use of 5G network slicing an MNO could support different enterprise customers with different industry use cases, and may also provide a solution which integrates one or more private networks into the MNO's public network. Many enterprise customers or industry verticals do not want to build and manage their own communications networks as it is not their core business, and so prefer to outsource that to experienced network operators.

7. Are there any relevant markets which consist of a single, or very small numbers of, end-user(s)?

We do not consider this to be the case for the downstream mobile market, which the ACCC has consistently found to be national in scope. Existing use of the 3.4-4 GHz band in remote areas does suggest localised areas of higher demand generated by the activities of specific enterprise customers, such as at mining sites.⁵⁸ However, the geographic locations of mining and offshore oil and gas sites is determined by exploration discoveries. These locations are by nature unpredictable and not readily amenable to the imposition of allocation limits with pre-determined geographic bounds, which may over time fail to pinpoint areas of increased demand.

It may further be noted that the metropolitan and regional 3.6 GHz spectrum licences issued in 2018 collectively cover approximately 97.8 percent of the population of Australia. The remote areas covered by the present 3.4-4 GHz allocation cover in total only around 2.2 percent of the population.⁵⁹

8. Are there likely to be future relevant markets that have not been identified?

See our response to Question 5 above.

9. Do you have any views on the state of competition in the relevant downstream markets discussed by the ACCC?

There is clear and consistent evidence that Australia's national mobile market is competitive and open, with competition between the mobile operators delivering strong benefits to consumers.⁶⁰ These benefits include Australia having amongst the lowest mobile data prices in the OECD⁶¹ and Australia having amongst the fastest mobile speeds in the world (nearly double the global average).⁶² It is important that any decision by the ACMA to impose allocation limits in the present case promotes the ongoing competitiveness of the Australian mobile market, and does not inappropriately restrict access to this mid-band spectrum to support the further rollout of 5G and the supply of innovative WA WBB services by the MNOs in remote Australia.

10. Are there any other markets that you consider relevant? How would the allocation of spectrum in the 3.4–4.0 GHz band in remote areas impact competition and investment in these markets?

See our response to Question 5 above.

⁵⁸ An example would be the Roxby Downs mining site – see <https://www.roxbydowns.sa.gov.au/lifestyleandsport/visitor-information/about-roxby-downs>

⁵⁹ ACMA, <https://www.acma.gov.au/theACMA/spectrum-tune-up-3-6-ghz-lot-configuration-options>, 9 March 2018.

⁶⁰ See e.g. ACCC, Communications Market Report, December 2020, p 1 - https://www.accc.gov.au/system/files/20-47RPT_Communications_Market_Report_FA.pdf

⁶¹ [Cable.co.uk](https://www.cable.co.uk) reports Australia with the seventh lowest mobile data prices in 2021 among OECD members (after Israel, Italy, Chile, France, Turkey and Poland).

⁶² <https://www.speedtest.net/global-index> and <https://www.speedtest.net/insights/blog/5g-speeds-australia-q1-2021/>



11. To what extent, if any, would licence duration impact competition and investment in these markets?

We recommend that the apparatus licences issued by the ACMA are subject to a 5-year term and include a UIOLI renewal statement under s103A of the RC Act, permitting renewal for a further 5 years only if the UIOLI requirement is met. We consider this approach will promote the efficient use of the spectrum. See further section 2.2 of this response.

12. For an industrial end-user in a remote area, are the deployment models substitutable? That is, would wide area wireless broadband be substitutable for local area wireless broadband? Would these services be substitutable for private LTE, or 5G networks?

Potentially yes, depending on the individual use case. For example, it is currently a focus for Telstra to provide support for customers in the mining and energy industries. We intend to support these customers in managing their priorities such as better managing their workforce, safety and productivity by developing a range of solutions using automation, robotics, IoT, 5G and Edge computing.⁶³

13. Do you consider that substitutable spectrum exists for the 3.4–4.0 GHz band in remote areas to enable the provision of services in the relevant downstream markets? If so, what spectrum do you consider to be a substitute?

The answer to this question depends on the relevant downstream market.

In the case of the downstream national mobile market, MNOs require a mix of spectrum bands working together in order to provide customers the quality of service they expect – in terms of both coverage and speed. MNOs are very efficient in refarming spectrum to newer technologies as older technologies decline in use, because it is economically wasteful to not use such expensive spectrum assets efficiently. In Telstra's case, we are progressively refarming our 850 MHz spectrum nationally for 5G use as 3G usage declines. To provide metro-like speeds to customers in rural and remote areas (and to avoid a 'digital divide' between capital cities and rural areas), the only immediately available and suitable spectrum is spectrum within the existing 3GPP band n78 (3.3-3.8 GHz).⁶⁴ Spectrum in other bands (e.g., lower frequency spectrum in the 700, 850 and 2600 MHz bands) is complementary to this spectrum for use in the downstream mobile market, rather than substitutable. Spectrum in these bands can (and is) also used by MNOs to supply wireless broadband services in remote areas, but the bandwidth in these bands is limited – whereas much wider bandwidths hence higher broadband speeds are possible by using 3.4-4.0 GHz spectrum in conjunction with this spectrum. Further, with the advent of 5G carrier aggregation between higher and lower frequencies, the low-frequency bands (700, 850 MHz) can be used for 5G uplink, greatly improving the range and performance of 3.4-4.0 GHz spectrum used for WBB downlink. High-band spectrum, such as in the 26 GHz and 28 GHz millimetre wave bands is also complementary for mobile use, due to its different propagation characteristics.

By contrast, previously when allocating spectrum in the 3.6 GHz band for spectrum licensing in metropolitan and regional areas to enable the launch of 5G in Australia, the ACMA considered spectrum in the 5.6 GHz band and in the 28 GHz band as substitutable for the provision of site-based wireless broadband services by smaller wireless internet service providers (**WISPs**) and other prospective site-based operators.⁶⁵ Single-purpose or single-site/area applicants typically have fewer technical drivers for specific frequencies than WA WBB users.

Also, in May 2020, the ACMA released an information paper entitled "*Spectrum options optimised for local area wireless broadband services*"⁶⁶ which summarised the spectrum options available for other

⁶³ See e.g. <https://purple.telstra.com/industries/mining-energy> and <https://www.telstra.com.au/business-enterprise/industries/mining>

⁶⁴ See 3GPP, *TR 38.817-01 v1.0.0 (2018-3) (General aspects UE RF)*, March 2018, Table 4.1-3, p.5.

⁶⁵ [Future use of 3.6 GHz - decisions and preliminary views | ACMA; 26 GHz and 28 GHz bands | ACMA](#)

⁶⁶ <https://www.acma.gov.au/local-area-wireless-broadband-services>



(non-MNO) spectrum users in rural and remote areas. Non-MNO users typically don't have the same coverage and capacity requirements that MNOs do, nor the same need for multiple spectrum bands. Hence the spectrum bands outlined in this paper would be substitutable for the 3.4–4.0 GHz band in remote areas for many non-MNO use cases and downstream markets.

See also our response to Question 15 below.

14. Does the availability of substitutable spectrum differ within the remote area? Are there areas within the remote area, where no substitutable spectrum exists?

For an MNO, spectrum within the 3.4-4 GHz band that is broadly aligned with the MNO's existing 3.4-3.7 GHz regional holdings, especially in adjoining or adjacent regional areas, is more efficient for use in downstream markets. This is because it is beneficial for deployment of downstream mobile services to have access to aligned frequency ranges across the country that match existing equipment and device capabilities. It also makes interference management easier (see section 2.3.2 of our response).

By contrast, in the case of single-purpose or single-site/area applicants, often the only thing that matters is the quantity of spectrum acquired, not its frequency position. To address those use cases, other spectrum bands are available in remote areas as outlined in the ACMA's information paper "*Spectrum options optimised for local area wireless broadband services*".⁶⁷ The availability of substitutable spectrum will vary within remote areas because existing spectrum use varies.

15. Should the ACCC take into account the availability of spectrum in the 1800 MHz band in remote areas when assessing the need for allocation limits? If so, how?

We note that, when determining likely areas of high demand for the recent allocation of 3.6 GHz spectrum licences, the ACMA considered the extent of existing device registrations in the 1800 MHz, 2.1 GHz, 2.3 GHz and 2.5 GHz bands.⁶⁸

However technical substitutability of a band is not the only relevant consideration when determining the appropriateness of including another band in an assessment regarding the potential imposition of an allocation limit. In some cases, for example, the utility of smaller and/or fragmented holdings, or spectrum that is encumbered by a large number of existing users, may not be equivalent to larger contiguous amounts of spectrum available in the allocation under consideration.⁶⁹

While spectrum in the 1800 MHz band may be considered substitutable for spectrum in the 3.4-4 GHz band for some use cases, we do not consider the future availability of spectrum in the 1800 MHz band in remote areas to be of significance to the ACCC's present assessment for the downstream national mobile market. This is because for MNOs, the 1800 MHz band is complementary to the 3.4-4.0 GHz band, not substitutable. The 1800 MHz band is only 75 MHz paired in its entirety, while much larger bandwidths are possible in the 3.4-4.0 GHz band (600 MHz total). In order to be able to provide metro-like peak-speeds to customers in rural and remote Australia, MNOs need to be able to offer the same bandwidths as they do in metro areas. That requires allocations up to 100 MHz per MNO.⁷⁰

16. Do you consider that there is a risk that a single party may seek to acquire the entire, or majority, of spectrum available in any given areas? Please provide reasons and evidence for your views.

⁶⁷ <https://www.acma.gov.au/local-area-wireless-broadband-services>

⁶⁸ <https://www.acma.gov.au/publications/2020-02/report/future-use-36-ghz-decisions-and-preliminary-views>, p28.

⁶⁹ We note that this was a relevant finding of the ANAO in its Report No. 206 of 2019-20 reviewing the allocation of the 3.6 GHz band for spectrum licensing - see [Management of Spectrum Reallocation to Support the Deployment of 5G Services | Australian National Audit Office \(anao.gov.au\)](#)

⁷⁰ Wide contiguous spectrum assignments to operators in the order of 100 MHz or more are needed to allow operators to reap the full benefits of the 3300-4200 MHz frequency range for 5G – see e.g. GSA, [The future of IMT in the 3300-4200 MHz frequency range](#), June 2017, p 18



We consider this to be a low risk, for the reasons set out in section 2 of this response. Further, to the extent that this is considered to be a potential risk to the efficient allocation and use of the spectrum in the LTPI, we believe this risk is best dealt with through a combination of relevant licence conditions (5-year licence term, UIOLI requirements for renewal) and the use of a 2-stage administrative assessment and allocation process, applying appropriate prioritisation principles.

17. Do you think that allocation limits are necessary for the 3.4–4.0 GHz band allocation in remote areas? Relevantly, would allocation limits promote competition and encourage investment in the relevant markets?

No, for the reasons set out in the body of this response.

18. If so, what do you think the appropriate allocation limits should be? Do you think different allocation limits should apply to different geographic areas within the remote area?

We do not believe it is necessary or appropriate for the ACMA to impose allocation limits under s102G in the present case. However, in the event that any allocation limits are to be imposed, it is imperative that these enable each MNO have the option to acquire up to 100 MHz of spectrum in the 3.4-4 GHz band in remote areas that is frequency-aligned with their holdings in the 3.4-3.7 GHz band in adjoining or adjacent regional areas.

19. How long do you think any allocation limits should apply for?

As noted, we do not support allocation limits in this case. Instead, we recommend that the apparatus licences issued by the ACMA are subject to a 5-year term and include a UIOLI licence renewal statement, permitting renewal for a further 5 years only if the usage requirement is met. We consider this approach will promote the efficient use of the spectrum, without the need for more restrictive allocation limits.

In the event that allocation limits are nevertheless imposed, we recommend a shorter rather than a longer duration in which the allocation limits have effect. As the ACMA has no discretion to issue further apparatus licences once the limit is reached while the instrument imposing the limit remains in force, the shorter the duration of the limit, the less likely it is that access to spectrum could be limited below demand for given use cases in an area, undermining the Government's 5G and digital economy policy objectives.

20. Are there other factors that the ACCC should consider in assessing the possible allocation limits to apply?

Apart from as discussed in the body of this response, no.