

Question on notice no. 104

Portfolio question number: 104

2017-18 Additional estimates

Environment and Communications Committee, Communications and the Arts Portfolio

Senator Anne Urquhart: asked the Australian Communications and Media Authority on 27 February 2018—

1. How many customers did the ACMA identify are currently receiving wireless broadband services from WISPs?
2. What did the ACMA's work show will be the impact on WISP customers of the auction of 3.6 GHz spectrum including in Future Use of the 3.6GHz band decisions and preliminary views?
3. What does the ACMA's work show is the expected timeframe for Area 3 to receive 5G mobile services?
4. What consideration did the ACMA give to dynamic sharing of spectrum in the 3.6 GHz band? Why is this not considered as viable?
5. How did the ACMA take account of the economic and social benefits to regional consumers in its Highest Value Use Assessment for the 3.6 GHz band auction assessment?
6. What consultations has the ACMA held with the Bureau of Meteorology about the capacity of the Wireless Internet Providers moving to the spectrum band 5.6GHz that is currently used by BOM for their weather monitoring? Please provide the dates of these consultations.
7. In your consultations with BOM, have they raised any concerns about the capacity of the 40 MHz of spectrum in the 5.6 GHz band being able to accommodate their services and the Wireless Internet Service Providers? If yes, what are these concerns?
8. What is the ACMA's view of the capacity of the 40 MHz of spectrum in the 5.6 GHz band to accommodate both BOM and WISPs? Please detail your view and the reasons.
9. What did the ACMA mean by the following statement (highlighted) made at Senate Estimates hearing on 27 February:

Ms O'Loughlin: If I could just add to that? The cost-benefit analysis we did looked at both quantifiable and unquantifiable costs and benefits. We did look at the benefits of changing the use of the band. That ranged from \$86 million to \$1.8 billion, and the quantifiable costs ranged from about \$47 million to \$144 million. So there was a significant additional benefit of changing the use of the band.

But in that regard, we also looked at the unquantifiable costs which would occur if the WISPs were unable to continue providing the services, and at benefits, including access to news services, that were not quantifiable. As I mentioned, we proposed that WISPs can continue providing services during the transition phase. We have given

them a uniquely long reallocation period, giving existing services a seven-year right of access. And **early allocation of spectrum licences to any purchasers at auction are conditional on not causing interference to existing services that is, the WISPs. So we have given the WISPs a very strong bargaining chip to negotiate with spectrum licencees, either for compensation for early clearance or for ongoing access to the band beyond those seven years.**

(a) Will this condition be specified in spectrum licences to all purchasers of the 3.6GHz spectrum?

(b) What oversight will the ACMA undertaking over this situation to ensure a fair outcome for all parties?

Answer —

1. During the course of an extensive consultation process, there was no information provided to the ACMA by the WISPs that detailed the number of customers that were using a WISP service being transmitted on 3.6 GHz band spectrum. The Wireless Internet Service Provider Association of Australia (WISPAU) did indicate that, “As a group we service in excess of 200,000 regional Australians.”¹ However, WISPAU did not indicate whether this is the number of customers reliant on the point-to-multipoint (P-MP) licences in the 3.6 GHz band.

2. The ACMA’s analysis identified that WISPs may have to incur infrastructure costs as part of a transition from the 3.6 GHz band and that WISP customers may incur some minor costs in upgrading their receiver equipment. However, most customers are expected to be able to retain the services they currently receive from WISPs due to the suite of options being provided to help mitigate the impact of displacement from the band, and opportunities to continue providing services.

3. The ACMA assumes that the rollout of 5G is likely to follow similar patterns and timeframes to that of previous generations of cellular technology, that is rollout will occur over a number of years. However, the exact timing and location of service rollout is ultimately a commercial decision for each spectrum licensee.

4. The ACMA has considered the case for dynamic spectrum access sharing in the 3.6GHz band but concluded that it would not meet the requirements of both aspirant wide-area broadband networks (such as the major telcos) and the WISPs. This is because both incumbents and prospective broadband service providers wish to provide high-reliability, ‘always-on’ services, with aggregate demand to provide services likely to exceed the supply of spectrum in many areas.

The ACMA considers that its proposals to provide an extended re-allocation period along with the identification (where possible) of alternative spectrum is a better approach.

5. In the paper *Future use of the 3.6 GHz band: Decisions and Preliminary views* (October 2017), the ACMA considered the public benefit of the 3.6 GHz band being

in a new use, compared with the cost to existing band users of providing their services without access to the band.

The quantitative analysis of benefits was disaggregated geographically to identify benefits for regional consumers. The areas of analysis included metropolitan areas (Area 1), 'metro-plus' areas (Area 2), regional areas (Area 3) and Australia-wide. Regional consumers are primarily located in Area 2 and Area 3. The detailed assessment is outlined at Annex B of the paper.

The highest value use assessment was one input into the decision to reallocate the 3.6 GHz band.

6. The ACMA has contacted BOM on a number of occasions about the scope for sharing the 5.6 GHz band with P-MP services, including wireless internet service providers. ACMA staff met with BOM staff on 21 April 2017 and (by telephone) on 8 May 2017. In developing the detailed spectrum sharing arrangements for the 5.6 GHz band the ACMA made further contact with BOM on five occasions over the period between October 2017 and February 2018.

7. BOM has indicated concerns both regarding the protection of their existing radar services and the ability to expand the coverage of their radar network in the 5.6 GHz band.

8. The ACMA intends to consult on a proposal to make available 40 MHz in the 5.6 GHz band for P-MP apparatus licensing suitable for WISPs. This is part of the suite of mitigation strategies for affected licensees. Given these other mitigation measures, it is unclear what percentage of WISPs, in which areas, will seek to move to 5.6 GHz.

9. The ACMA intends to impose a condition imposed on spectrum licensees who gain access to the reallocated spectrum requiring them to not disrupt or interfere with the existing WISP services during a seven year reallocation period. If the spectrum licensees want to deploy services during the reallocation period that could interfere with a WISP, they will need to negotiate with the WISP licensee.

a) Yes.

b) The ACMA has consulted extensively over the last 18 months on this issue and will continue to do so with all affected parties.

¹'WISPAU submission pdf', found under 'Other submissions received' at https://www.acma.gov.au/theACMA/future-approach-to-the-3_6-ghz-band.