

Australian Competition and Consumer Commission
Domestic Mobile Roaming Inquiry Review Team
via email: mobileroaminginquiry@acc.gov.au
2 December 2016

To: Australian Competition and Consumer Commission

Re: Domestic Mobile Roaming Declaration Inquiry

Introduction

Cotton Australia welcomes the opportunity to provide comment and, as the peak representative body, speak on behalf of cotton growers regarding the domestic mobile roaming declaration inquiry. The cotton industry is an integral part of the Australian economy, worth over \$1.25 billion in export earnings for the 2014–15 season, and employing on average 10,000 people. The industry's vision is: Australian cotton, carefully grown, naturally world's best.

Communities in rural, regional and remote Australia will be most affected by the mobile roaming decision. Currently people living in rural, regional and remote Australia lack choice when choosing a mobile service and experience poor to no mobile coverage. The importance of mobile phone coverage to our members, and many others living and working in these communities must not be underestimated in relation to the enhanced economic and social outcomes a strong mobile network can deliver.

The availability, reliability and affordability of telecommunications services are of major concern to Cotton Australia members. Of these, coverage is the primary concern. Continued investment in the expansion and improvement of existing telecommunications infrastructure in regional areas is our priority. Cotton Australia does not support any regulatory decision that would reduce the incentive for mobile network operators (MNO's) to continue investment in the improvement and expansion of existing mobile networks.

The concerns of our members were mirrored in the 2015 Regional Telecommunications Review. The Review report noted that regional Australia is trending towards becoming highly mobile-centric with consumers increasingly choosing mobile services as their primary means of communication, even more so in regional areas than in urban areas.¹

It has long been recognised that those living out of main cities and metropolitan areas have reduced access to telecommunications services. The Digital Inclusion Index measures the level of digital inclusion across the Australian population and seeks to monitor these levels over time. The

¹ Rural Telecommunications Review 2015, Page 13

Index is designed to measure three key aspects; access, affordability and digital ability. The Index scores locations against these key areas, on a scale of 0 to 100. Higher scores mean higher levels of digital inclusion. The recent Digital Inclusion Index 2016 showed that those living in the country are a staggering 6.6 points behind those living in capital cities.²

We urge the ACCC to consider the 2% of the population that currently live outside the mobile footprint, and the many more in regional Australia whose access to mobile coverage is unreliable. We also wish to highlight that a figure of 2% does not provide an actual picture of our members' experiences with mobile coverage in rural Australia. Members have reported that they have 'one bar' of 3G coverage, however despite this they would be classed as being 'covered' by current mobile infrastructure. This level of mobile performance is insufficient to make phone calls but will eventually allow for the transmittal of texts. These sentiments of insufficient coverage have been indicated by many of our members – an issue which limits their access to new technologies and the associated productivity gains and creates safety risks. Approximately two thirds of calls made to the Triple Zero (000) emergency service are now made from a mobile device.³ It is often assumed by government departments and businesses that everyone has access to basic mobile connectivity, but this reality is out of reach for many rural Australians.

The generation of phone coverage – 3G / 4G provides an indication of performance and capability of a mobile network. It is worth noting that the 3G network was never designed for the level of data usage that is now demanded by consumers. The Australian Bureau of Statistics (ABS) reported in early 2015 that the average broadband downloads grew more than 33 per cent from December 2013 to December 2014. This is indicative of global trends, and it is anticipated that data use and consumption will continue to grow. This is particularly true of agricultural production systems where the use of machine-to-machine (M2M) and internet of things (IoT) are seen the next frontier to improve on-farm decision making and drive productivity, but will require significant increases in data upload capability to facilitate these technologies. Australian cotton growers participate in a global marketplace and must constantly adopt new technologies to increase efficiency and productivity and remain competitive. Reliable access to telecommunications services is critical for the industry to achieve this and will help unlock the full economic potential of rural and regional Australia through improved connectivity.

To inform the organisation's response to the inquiry, Cotton Australia has consulted with Telstra, Optus and Vodafone to determine their position on mobile roaming. We note that each MNO put forward different positions, but each appeared to have sound economic reasoning behind their main points. Cotton Australia recognise that only the ACCC will have access to the commercially sensitive information necessary to assess the validity of each of the MNO's claims. We request that the ACCC conduct a comprehensive analysis and report in full regarding the potential risks and opportunities generated through the introduction of roaming. We ask that the ACCC

² <http://digitalinclusionindex.org.au/wp-content/uploads/2016/08/Australian-Digital-Inclusion-Index-2016.pdf>

³ 2015 Rural Telecommunications Review, Page 13

particularly focus on any potential impacts to incentives to invest in regional areas. Cotton Australia will not support any regulatory decision that will reduce investment incentives in rural, regional and remote Australia.

The Supply of Mobile Services in Australia

Competition in Regional Areas

Australian mobile operators compete on the basis of national retail plans that are not geographically differentiated, referred to as national pricing. While many consumers in regional areas lack choice in provider, they benefit from the requirement for competitive pricing for services in metropolitan areas that are transferred to regional, rural and remote communities through Australia's national pricing strategy.

Programs to Address Regional Issues – The Mobile Blackspot Program

The mobile blackspot program (MBSP) has been a welcome acknowledgement of the importance of mobile network coverage for the 2% of the population still left outside the mobile footprint. The MNO's have made it very clear that in many instances, the business case for investing in the fringes of the current mobile network is poor, with the economics for many regional towers failing to stack up. The government co-funding that provides for infrastructure upgrades and construction of new towers is the only way some of these low population density areas will ever receive the mobile service they require.

Cotton Australia has identified that there is a very low rate of co-location on MBSP funded infrastructure under round one and, while this falls outside the remit and scope of the current ACCC investigations, the reasons for poor uptake of co-location mechanisms need to be investigated to allow any restrictive conditions to be rectified. This will maximise the benefits that can be achieved through co-location. It is important the Government continues to review the MBSP guidelines to ensure that the funding meets the purpose of improving telecommunications infrastructure along major transport routes, in small communities and in locations prone to natural disasters.

International regulation of mobile roaming

The regulation of domestic mobile roaming services has been considered and implemented to varying extents by many countries including New Zealand and Canada. While no two roaming declarations have been identical, the experiences of other countries and the effectiveness of mobile roaming in achieving the intended telecommunications outcomes is an important consideration. In light of this, the experiences of New Zealand and Canada in regards to the introduction of mobile roaming have been briefly outlined below.

However, Cotton Australia would like to highlight that while these international case studies provide guidance on the relative effectiveness of roaming, they cannot provide conclusive advice on the relative benefits that may be achieved through the introduction of roaming in Australia. Australia is extremely unique in its geography, size, population distribution and our regulatory framework. There are no international examples that accurately mirror Australia's current telecommunications environment. Taking these factors into account, the potential introduction of roaming in Australia and its potential effects must be thoroughly assessed on its own merits.

New Zealand

Roaming was introduced in New Zealand in 2008 with the aim of allowing new industry entrants to build market share and concurrently required these new MNOs to expand coverage. It was required that new entrants must already have coverage to 10% of the population, and must have plans to extend coverage to 65% of the population.⁴ This is vastly different to Australia's current situation, with Vodafone's coverage already reaching 95.47% of Australia's population.

Canada

The most comparable telecommunications market to Australia is Canada due to its geography and population distribution. Canada introduced roaming in 2008, primarily to facilitate the introduction of new MNOs. In order to obtain the benefits of roaming entrants were required to meet coverage obligations amongst other conditions. Since its initial introduction, Canada has extended roaming provisions indefinitely as new networks had not yet been successful in establishing sufficiently large networks and their coverage footprints were often limited to major urban areas.

The outcomes of Canada's experience suggest that the increase in coverage is not as widespread as was intended. However, there is also no evidence to suggest that infrastructure investment decreased as a result of the roaming declarations. Due to the lack of detailed information available, it is difficult to determine the effect roaming has had on Canadian investment patterns, particularly whether there has been any actual increase in the mobile coverage footprint as a direct result of the roaming declaration. If the ACCC has access to this information, it may provide a useful reference point when evaluating the true impact roaming has had in Canada, and its effect on infrastructure investment and actual coverage expansion into areas previously without a mobile service.

Promoting the Long Term Interests of End-Users

Competition in regional mobile markets

Telstra's market share in regional Australia is significantly higher than any other MNO. Telstra has a market share of approximately 63%, Optus 22% and Vodafone 6%.⁵ Surveys conducted by NSW Farmers and the Victorian Farmers' Federation found the vast majority of farmers surveyed

⁴ New Zealand *Telecommunications (National Roaming) Order 2008*

⁵ ACCC Domestic Mobile Roaming Declaration Inquiry Discussion paper, Page 24.

(95% and 91% respectively) use Telstra as their service provider. At a recent Cotton Australia General Meeting, the vast majority of grower representatives in attendance identified Telstra as their service provider and cited coverage as the key determining factor when choosing an MNO.

Telstra charges a 10–15% premium for their services and while the majority of our members and others living in regional areas serviced only by Telstra pay this unavoidable premium, national pricing ensures they still benefit from competition in metropolitan markets.

Telstra has made it clear that many of the towers within their network coverage area are un-economical, and cannot be justified based on the number of customers that use them alone. However, Telstra propose that their ability to claim superior coverage over other MNO's, aided by towers such as those that are un-economical on their own merit provides them with a market advantage and a point of difference to other MNOs. Telstra argues that this differential ensure greater urban market share, which in turn cross-subsidises the regional network. Cotton Australia has not been able to verify this claim in relation to the investment in rural, regional and remote infrastructure and we implore the ACCC to investigate the total regional investment over the past decade by Telstra.

The extent of competition for mobile services in regional Australia will potentially change in the future. The roll out of the NBN, which favours no MNO over others, allows companies to compete for 'bundled' deals, for example a single point of billing for a range of services including internet, mobile and pay TV. This provides a new incentive for Optus and Vodafone to increase their mobile network footprint to gain market share of these 'bundled' deals that are fast becoming a clear consumer preference.

Efficient investment and use of infrastructure

Current capacity of the network

The ACCC discussion paper stated that 'it is likely that demand at most mobile base stations in these areas [sparsely populated areas] will be low'.⁶ In some case this may be true, however Cotton Australia has heard of capacity issues with many towers on the fringes of Telstra's mobile footprint in areas in which incorrect assumptions may be made that demand is low.

Numerous growers have reported that during the harvest, when labour requirements peak, the extra people and their machinery are enough to cause serious congestion on their local networks, particularly when machinery equipped with M2M or IoT technologies enter mobile coverage after harvesting in mobile blackspots. Current use of GPS-enabled vehicles with advance yield tracking systems on cotton and other farms produce masses of data that must then be uploaded, leading to mobile networks almost grinding to a halt. Similar congestion has been noticed when local populations temporarily increase due to tourism or other local events.

⁶ Discuss ACCC Domestic Mobile Roaming Declaration Inquiry Discussion paper, Page 31

As the technology in tractors, pickers, harvesters and other farm machinery expands across farm operations, the requirements for data upload speeds in particular will only become more prevalent. Given the potential to improve farm productivity and decision making through automation and collation of data, it is recommended that the ACCC focus on coverage to ensure that businesses are not locked out of these productivity gains as a consequence of poor mobile service.

Alternative considerations

Cotton Australia has limited information regarding the percentage of infrastructure that is being shared under existing regulation. During discussions with Telstra, they have commented that other carriers have a presence on over 1300 Telstra towers and monopoles, while Telstra has a presence on approximately 1200 towers of other carriers and tower providers.

Co-location appears to be a fair approach to efficient use of infrastructure and investment. Co-location is an area that could potentially be reviewed to ensure practicality and that the regulations achieve their desired goals. Co-location appears to remove the risk of removed investment incentives and rewards those willing to invest in expanding their mobile network.

How would a declaration affect the access providers' incentives to invest?

Through the course of this consultation period, Cotton Australia has held meetings with Telstra and Vodafone and heard all of the MNO's through National Farmers' Federation – of which Cotton Australia is a member - Innovation Committee meetings. The farming sector has been heavily lobbied by all of the MNOs.

It has been strongly argued by both Telstra and Optus that a declaration of domestic mobile roaming will reduce their incentive to invest in extending or upgrading their mobile networks. As previously stated, long term infrastructure investment to improve the capacity and extent of the mobile footprint is our number one priority, competition is secondary. While Vodafone points to international examples in which roaming has been declared and decreases in investments have not been seen, Cotton Australia has seen no evidence of roaming actually increasing investment in expansion and improvement the mobile footprint in places in which it has been declared.

At an investor meeting on November 17, 2016, Telstra CEO Andrew Penn, announced Telstra would be committing \$350 million over the next 3-5 years to the 'last 2%' of the population, though exact details of how this money would be spent are not available. The organisation committed another \$100-\$200 million co contribution fund where Telstra is willing to commit capital for projects jointly funded by community and other parties to support infrastructure investment not viable on a standalone basis. This investment, plus the \$240 million being invested through the mobile blackspot program (MBSP) rounds 1 and 2, represents more than \$1 billion investment in regional and remote Australia over the next 3-5 years.

Under the recent announcement for round two of the MBSP it is noted that Telstra successful in their bids for 148 macro and micro cells, Optus for 114 and Vodafone for 4. This is possibly an indication of the future investment plans of each MNO. Given Optus' dramatic increase from zero towers under Round 1 of the program this to some effect supports their claims that they have plans to dramatically increase their coverage footprint in order to compete with Telstra on their coverage claim.

Cotton Australia is not in a position to assess the validity of each MNO's claims, or the true impact each of the competing claims would have in reality but urge the ACCC to conduct thorough, independent analysis to ensure the best income is achieved for end-users, and investment improving and expanding the current mobile footprint is not negatively affected.

Competition is secondary to coverage and the expansion of coverage for our members, and while even if it is found roaming would benefit those in regional areas with existing coverage, this should not come at the costs of mobile coverage for those currently without. Providing access to coverage should be the priority over competition. While increased choice may be available to consumers in places in which roaming is declared, this would come at a cost to 'visiting' networks, and they would likely decide to pass this cost on to their consumers in some form. The national pricing of Australia's mobile market already gives those with only one available or practical MNO the benefits of competition in metropolitan Australia markets.

It is Cotton Australia's view that competition should be secondary to infrastructure upgrades and expansion, especially when regional users already benefit from competition in metropolitan areas due to national pricing for mobile services.

The need for continued network investment and upgrades

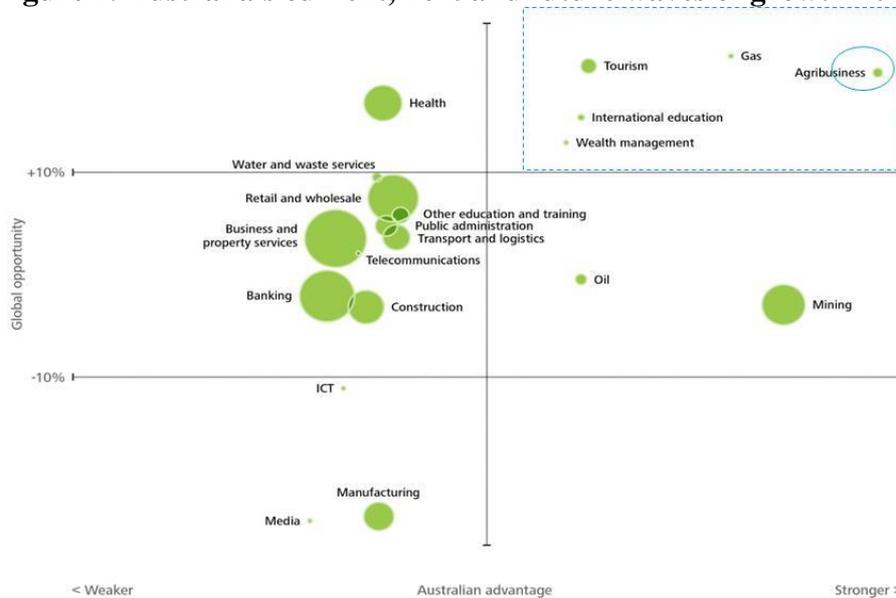
It is well recognised that mobile networks need to upgrade to meet the future requirements of consumers that are using considerably more data, and incorporating multiple devices and platforms. The currently available 3G mobile network towers were not designed to meet data requirements of modern consumers. Systems are transferring to 4G standards and will in time migrate to 5G to enable mobile network infrastructure to meet the required levels of performance. The Australian cotton industry's success has been driven by a culture of innovation partnered with a strong commitment to research, development and new digital technologies which are increasingly commonplace on Australian farms. Cotton growers, like most farming enterprises and regional businesses, rely on digital technologies to run efficient and productive businesses.

Agriculture has been highlighted by leading analysts as a top five economic sector performer over the next two decades (see Figure 1). In order to achieve this growth, the adoption of robotics, precision agriculture management techniques, and adoption of improved performing varieties are viewed as critical to achieving the predicted productivity gains of between 25–30%.⁷

⁷ (RIRDC). Cross-Industry Innovation Scan, September 2016.

The UN Food and Agriculture Organisation (FAO) estimates that farmers will have to produce 70% more food by 2050 to meet the needs of the expect world population of 9 billion people⁸. This will need to be done with the same or reduced land area due to degraded global resources along with meeting the changing global diets of world populations as a result of rising affluence in developing and emerging economies⁹. While Australian agriculture cannot meet these demands, it certainly has a highly important role to play in ensuring the delivery of high quality, safe food and fibre produce in a way that maximises productivity.

Figure 1. Australia's current, next and future waves of growth 2013-33



Source: Deloitte Access Economics

The Australian cotton industry is well placed to play its role within this challenging global market. We are recognised as world leading, with Australian cotton growers achieving average yields (11.5 bales per hectare in 2014-15) that are more than three times the world average, and double those of our nearest competitors in the United States. The cotton industry is also recognised as a leader within the Australian agricultural industry sector, with yields improving at 2% year-on-year, greater than in any other agricultural industry in Australia, 45% of the improvement due to better varieties, 55% due to better management¹⁰. The 2014 Australian Cotton Sustainability Report, released by Cotton Australia and the Cotton Research and Development Corporation, highlighted major industry achievements and the adoption of technology by the Australian cotton industry:

⁸ (UN FAO). Global Agriculture towards 2050. October 2009.

⁹ (CSIRO). The future of food: growing more with the same land. April 2015. <https://theconversation.com/the-future-of-food-growing-more-with-the-same-land-35559>

¹⁰ (CSIRO). Submission to the Australian Innovation Enquiry.

- 40% increase in cotton water productivity over the last decade
- 89% reduction in insecticide use
- 70% use of soil moisture probes to manage irrigation application
- 90% use of satellite navigation in tractors

It is anticipated that there will be ongoing adoption and update of new M2M and IoT technology by the cotton industry and the failure to equip our members with a network that has appropriate performance and capability standards will impact on the potential productivity of our growers.

We request that as part of the domestic mobile roaming enquiry, the ACCC consider the impacts that mandated roaming may have on the upgrade and future proofing of the network in the transition to 4G or 5G capability. It is Cotton Australia's view that any declaration of roaming should not negatively impact on investment that improves coverage or the upgrade of the current mobile network.

Considerations if the ACCC were to declare a domestic mobile roaming service

It is Cotton Australia's position that the upgrade and expansion of the mobile network is the number one priority for those living in regional, rural and remote Australia. The benefits of continued mobile network expansion and upgrades represent great opportunities for regional Australia, and will allow businesses, families and individuals to access similar services as their metropolitan counterparts. In order to remain competitive and bridge the digital divide, future infrastructure investment must be the priority.

International examples have seen regulations incorporated into domestic roaming declarations in order to ensure infrastructure investment. One example is Canada, but their additional regulations did not achieve their desired outcomes, and roaming was declared indefinitely. This should be noted if the Commissioner chooses to declare roaming in Australia. Conditions would need to be carefully evaluated, and modelled to determine their effect in the unique Australian telecommunications market.

Conclusion

Any declaration of a domestic mobile roaming service would need to absolutely guarantee there would be no negative impact on infrastructure investment for regional Australia in the future. If after thorough analysis the ACCC determines that on the information provided by MNOs that this is possible, then we will support roaming though there must be absolutely no risk of decreased or slowed investment.

For many rural, regional and remote communities, including our members, the mobile blackspot program is likely the only way coverage will reach their homes and businesses.



Advancing Australian Cotton

It is paramount that incentives to invest, including investment alongside this program are not negatively affected by the roaming decision.

Cotton Australia would welcome an opportunity to provide further information on its position. For more information, contact Claudia Vicary, Graduate Policy Officer on [REDACTED] or [REDACTED]

Kind regards,

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