Regional Mobile Telecommunications Access, Competition and Public Benefits

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Abstract: The Australian Competition and Consumer Commission (ACCC) received an application for merger approval from Telstra Corporation Limited and TPG Telecom Limited related to three interrelated agreements that would put in place a Multi-Operator Core Network (MOCN) arrangement. The three agreements include a MOCN Service Agreement, a Spectrum Authorisation Agreement, and a Mobile Site Transition Agreement. This paper considers the proposed arrangements, identifies that the ACCC's failure to declare domestic mobile roaming in 2018 was, in some large part, responsible for the market environment that fostered the current proposal, and that the proposed arrangements are not a satisfactory mechanism to fundamentally improve the delivery of reasonably priced, open and competitive, reliable, and high-quality mobile telecommunications in regional and remote areas.

Keywords: Mobile, Telecommunications, Australia, Telstra, ACCC

Introduction

Telstra Corporation Limited (Telstra) and TPG Telecom Limited (TPG) lodged a merger application with the Australian Competition and Consumer Commission (ACCC) on 23 May 2022 (ACCC, 2022).

The application for merger authorisation covers three interrelated agreements related to a Multi-Operator Core Network (MOCN) commercial arrangement. The arrangement includes a MOCN Service Agreement, a Spectrum Authorisation Agreement and a Mobile Site Transition Agreement.

Under existing rules, the ACCC is required to publish a decision on the merger application within 90 days of the lodgement date. An extension can be requested by the ACCC. The applicants have agreed to an extension request from the ACCC. The ACCC now has until 17 October 2022 to decide on the application.

http://doi.org/10.18080/jtde.v10n2.595

The ACCC has invited submissions on the MOCN commercial arrangement. The submissions are to be considered in the authorisation process.

The Applicants seek to establish an arrangement for Telstra to use spectrum currently held by TPG, Telstra providing TPG with network services in selected regional and urban fringe areas (the Regional Coverage Zone), and for TPG to transfer ownership of up to 169 existing mobile sites in the Regional Coverage Zone to Telstra. TPG will use the MOCN commercial arrangement to offer 4G and 5G retail and wholesale services and to decommission mobile sites no longer required in the Regional Coverage Zone. The MOCN service agreement would have an initial term of 10 years, with an option for TPG to extend the agreement twice with five-year extensions.

This paper considers the proposed MOCN commercial arrangement between Telstra and TPG (the Applicants).

Background

The Australian mobile telecommunications market has evolved since telecommunications deregulation commenced in 1997. Today, there are three dominant carriers in the Australian mobile telecommunications market: Telstra, Optus and TPG. In addition, there are a number of smaller operators and Mobile Virtual Network Operators (MVNO).

Regional mobile telecommunications is dominated by Telstra due to its history and generous local, State and Commonwealth government grants over the past decades that have provided assistance to Telstra to build out its regional telecommunications network.

In 2014, after consultation with the telecommunications industry, the federal government introduced a Mobile Black Spot Programme (DITRDC, 2022) to provide mobile network operators and network infrastructure providers with co-funding for new infrastructure in selected areas. To date, this program has generated a total investment of more than $875 million delivering more than 1,270 new mobile base stations across Australia.

Most of the Mobile Blackspot Programme funding has been allocated to Telstra due to its position in the market and other factors, including the fact that it is the only network provider in large areas of regional and remote Australia and, in many locations, the only carrier with access to regional backhaul capacity.

In an earlier paper (Gregory, 2021), regional mobile telecommunications was discussed with a focus on performance and, in particular, throughput (capacity). The paper also provides a background discussion on issues affecting regional mobile telecommunications. One important issue was the ACCC's decision to not declare domestic mobile roaming in 2018 after a public inquiry was completed.

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Domestic mobile roaming declaration

The MOCN service agreement between Telstra and TPG is a logical and pragmatic outcome of the flawed decision by the ACCC to not declare domestic mobile roaming in 2018. The failure of the ACCC (Gregory, 2021) to acknowledge and understand that new competitive infrastructure would not eventuate in large areas of regional and remote Australia underpins the rationale for TPG to seek to put in place a service arrangement with Telstra.

In the years after the ACCC's domestic mobile roaming inquiry, the disparity between the Telstra regional mobile telecommunications network and the competitor networks appears to have increased (Telstra, 2021a), and Telstra has attracted most of the Mobile Black Spot funding from the Commonwealth and State governments (Telstra, 2021b). Consequently, there does not appear to have been a substantive change in the area of regional Australia that is covered by more than one mobile network operator.

Regional mobile telecommunications performance

A global shift away from providing physical access to services by governments and businesses means that regional mobile telecommunications has become an essential service that fundamentally affects access to services and, consequently, the quality of life and economic outcomes. There are three fundamental and measurable parameters that, when combined, provide the basis upon which judgements about mobile telecommunications can be made. The parameters are cost, access and performance.

The proposed MOCN service agreement between Telstra and TPG principally affects access and to a lesser extent cost. The information made available does not appear to provide guidance on minimum mobile telecommunications performance levels for either carrier in the Regional Coverage Zone.

Competition

The proposed MOCN service agreement between the largest (Telstra) and third largest (TPG) mobile network operators excludes the second largest (Optus) mobile network operator. This is not a balanced, open and competitive outcome; however, this is offset by the public benefit of TPG gaining an increased presence in the Regional Coverage Zone.

There is a question over the financial competitiveness of the proposed MOCN arrangement. As the financial details are not available, it is therefore reasonable to assume that the arrangement would benefit Telstra more than it benefits TPG. Optus would not benefit and may find an overall negative impact on its national competitiveness.

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It is also important to note that this arrangement affects the MVNOs that utilise the Optus mobile network and, as discussed later, is likely to have a detrimental effect on regional small network operators.

In this instance, the question of competition is considered in three parts: infrastructure, spectrum and services.

Infrastructure

The MOCN service agreement increases the size of the Telstra mobile network when compared with the other operators. Telstra's dominance in the transit network market further reduces the likelihood of infrastructure competition in regional and remote areas. It is reasonable to assume that, if the MOCN service agreement commences, then further infrastructure investment by TPG will not occur in the Regional Coverage Zone whilst the agreement is in place. This outcome would further undermine the rationale behind the ACCC's flawed decision to not declare domestic mobile roaming in 2018.

The question becomes: if TPG stops investing in infrastructure in the Regional Coverage Zone whilst the agreement is in place, does this reduce competition?

Infrastructure competition is not a fundamental component of market competition, particularly when the infrastructure can be shared without mobile telecommunications performance loss or when sharing is a price-regulated requirement.

In 2021, Telstra "completed the sale of a 49 per cent non-controlling stake in its towers business for $2.8 billion" (Telstra, 2021c). Also in 2021, Optus announced the sale of a 70 per cent "stake in Australia Tower Network (ATN), a wholly-owned subsidiary which operates Optus' passive telecommunications tower infrastructure, to AustralianSuper" (Optus, 2021).

The mobile telecommunications market spectrum auctions ensure that the carriers hold different spectrum lots and generally this means that all carriers can utilise shared infrastructure, including shared access to a common Radio Access Network (RAN), which can avoid unnecessary equipment duplication on towers.

Spectrum

The Applicants' submission to the ACCC seeks merger authorisation that effectively permits Telstra to use TPG's spectrum holding and this is deemed by Section 68A of the *Radiocommunications Act 1992* (Commonwealth) to be an acquisition as identified in Section 50 of the *Competition and Consumer Act 2010* (Commonwealth).

The Applicants have submitted that the Spectrum Authorisation Agreement, MOCN Service Agreement and Mobile Site Transition Agreement are commercially and legally interdependent and should be considered as a whole.

Competition in the Australian mobile telecommunications market is predicated on the understanding of how spectrum lots are allocated, auctioned and utilised by the successful bidder.

Spectrum is first and foremost an economic renewable resource that is allocated according to the government's social and economic policy. The government utilises a legislative instrument to direct the Australian Communications and Media Authority (ACMA) to auction spectrum in lots with spectrum licence limits. Spectrum may be set aside for one or more carriers to purchase or be auctioned with allocation limits. The purpose of this process is to ensure that the carriers have spectrum holdings that will facilitate competition in the mobile telecommunications market.

The proposed Spectrum Authorisation Agreement, if approved, would provide a mechanism for carriers to share or swap spectrum in one or more areas where they operate a mobile network or in fact do not operate a mobile network, as is the case here.

Another potential outcome could be carriers reducing the price bid for spectrum at auction because they have a pre-existing spectrum sharing arrangement or have had discussions on a future spectrum sharing arrangement. This outcome could be detrimental to the government's maintenance of spectrum as a renewable revenue source.

The proposed Spectrum Authorisation Agreement appears to be at odds with the legislative instruments (AusGov 2012; AusGov, 2018; AusGov, 2021) issued to the ACMA that set limits on carriers bidding for spectrum at auction and utilising the spectrum subsequently.

The *Radiocommunications (Spectrum Licence Limits) Direction No. 1 of 2012* (AusGov, 2012), paragraph 4, states:

> (1) I direct that the ACMA must determine procedures under subsection 60(1) of the Act that impose limits that ensure that, as a result of the allocation of spectrum licences under Subdivision B of Division 1 of Part 3.2 of the Act, no person or specified group of persons may use more than:
>
> (a) 20MHz of spectrum available in the designated area in the frequency band 703MHz to 748MHz; and
>
> (b) 20MHz of spectrum available in the designated area in the frequency band 758MHz to 803MHz.

The *Radiocommunications (Spectrum Licence Limits—3.6 GHz Band) Direction 2018* (AusGov, 2018), paragraph 5, states:

> (2) The limits imposed must:
>
> (c) ensure that no person or specified group of persons may, as a result of the allocation of a spectrum licence that is enabled by a relevant re-allocation declaration, use:
>
> (i) more than an aggregate of 60 MHz of the relevant band in each metropolitan area (whether or not at the same location in that metropolitan area);
>
> (ii) more than an aggregate of 80 MHz of the relevant band in each regional area (whether or not at the same location in that regional area)[.]

The *Radiocommunications (Spectrum Licence Limits—850/900 MHz Band) Direction 2021* (AusGov, 2021), paragraph 5, states:

> (1) I direct the ACMA to determine allocation procedures under subsection 60(1) of the Act that impose limits, in accordance with sections 6 and 7, on the aggregate of the parts of the spectrum that may, as a result of the allocation of spectrum licences under Subdivision B of Division 1 of Part 3.2 of the Act, be used by any one person or by the groups of persons specified in those sections.
>
> (2) The limits imposed must apply to the allocation of spectrum licences in the 850/900 MHz band enabled by the re-allocation declaration.

Paragraph 7 states:

> 7 Limit applying to all persons and relevant groups of persons
>
> (1) For this section:
>
> (a) the limits imposed must apply in relation to the sub-1 GHz band in the major population area and the regional area; and
>
> (b) the limits imposed must ensure that no person or relevant group of persons may use:
>
> (i) more than an aggregate of 82 MHz of the sub-1 GHz band under spectrum licences in the major population area; or
>
> (ii) more than an aggregate of 92 MHz of the sub-1 GHz band under spectrum licences in the regional area[.]

The legislative instruments clearly state that “no person or relevant group of persons may use” and this appears to indicate that the Spectrum Authorisation Agreement cannot be authorised by the ACCC, unless there is another interpretation of the Act or of the legislative instruments being relied upon.

The Applicants state (TelstraTPG, 2022) in paragraph 139 that: “Telstra does not need to make 5G available to TPG at a particular site in the 17% Regional Coverage Zone until six months after the site was activated for 5G for Telstra Comparison Customers (subject to some limited exceptions)”. This statement indicates that, for a period of six months at each site in the Regional Coverage Zone, Telstra can enjoy a period when it is fully utilising the pooled spectrum. This statement highlights the need for clarity on whether or not the ACCC is in a position to override the legislative instruments or there is some other legislation or interpretation upon which the ACCC could support this arrangement.

The Applicants further state (TelstraTPG, 2022) in paragraph 241 (a): “the relative proportion of use [of the pooled spectrum] between Telstra and TPG will be determined by their competitiveness at the retail and wholesale levels. It cannot be assumed that one or the other would get more or less as this is a process of competition …”. An open, fair and competitive telecommunications market does not commence with one network operator having all of the infrastructure and all of the customers in an area, unless there are actions taken through legislation and regulation to balance the “playing field”. In this instance, Telstra and TPG appear to be asking the ACCC to take a leap of faith that the MOCN arrangements will put in place an open and competitive environment for Telstra and TPG to grow market share. What-ifs should not be part of the ACCC’s considerations and should not be entertained.

Another way of looking at this situation is that TPG Telecom has spectrum, has decided to not invest further in infrastructure in regional Australia, and is seeking to find a way forward.

If the government’s view is that Telstra, Optus and TPG are expected to have separately operated mobile networks, then it would hold that the government is expecting the ACCC to enforce the spectrum limits; otherwise, the competitive tension in the mobile telecommunications market could be significantly diminished.

But what about in an area where one carrier does not operate a network and has made the decision that it is not economically viable to install competing infrastructure?

To utilise the spectrum that it holds, TPG has made the decision to seek an arrangement that permits the spectrum to be used in an area where it would otherwise not operate or not fully gain the benefits afforded by the spectrum holding.

As identified earlier, the ACCC’s failure in 2018 to identify this inevitability has likely led us to this point.

http://doi.org/10.18080/jtde.v10n2.595

Services

Whilst an outcome of the proposed MOCN commercial arrangement would be the introduction of TPG 4G and 5G services in the Regional Coverage Zone, there are factors related to the services that should be considered.

The TPG service charges will include a component set by Telstra that is offset by the Spectrum Authorisation Agreement, and a Mobile Site Transition Agreement. Whilst it is not unusual for a network operator to lease access to infrastructure and facilities, the proposed arrangement may be unusual because of the quantum of what is proposed, the unknown value of the Spectrum Authorisation Agreement and the effect that it may have on future TPG product pricing.

Public Benefit

The MOCN commercial arrangement would have an immediate public benefit with the introduction of TPG 4G and 5G services in the Regional Coverage Zone. This would permit existing TPG customers to utilise their mobile devices in the Regional Coverage Zone and, for residents and businesses within the Regional Coverage Zone, the opportunity would exist to select TPG as their mobile service provider.

For Telstra, the MOCN commercial arrangement would significantly boost its regional network, both in size and value. With more customers utilizing this network, the infrastructure cost per customer reduces and profitability increases.

There is also the benefit for Telstra that the Spectrum Authorisation Agreement could potentially enhance the performance of the mobile network, but only if additional capacity is supplied to the existing network.

Effectively, only two carriers would now be bidding for mobile blackspot funding in the Regional Coverage Zone. It is anticipated that an increasing share of the mobile blackspot funding will be delivered to Telstra, thereby further enhancing Telstra's dominant infrastructure and transit position in regional and remote areas.

At some point, if not already, Telstra could become a regional and remote mobile telecommunications monopoly infrastructure and transit provider, particularly if Optus withdraws from or reduces its investment in regional mobile telecommunications.

As discussed earlier, a hypothetical mobile telecommunications market where there are three networks operated by three carriers with roughly equivalent spectrum holdings was always unlikely in regional and remote Australia.

The ACCC has demonstrated difficulty grasping this reality. It is now time for the ACCC to adopt an alternate approach to foster competition in the regional mobile telecommunications market.

Throughput (capacity)

Recommendation Seven of the 2021 Regional Telecommunications Review Report (RTR, 2021) highlights an area of significant concern regarding regional telecommunications. The recommendation calls for government to develop and enforce "minimum wholesale and retail service, performance and reliability standards appropriate for each service type (fixed and landline, mobile, fixed wireless, satellites)".

A potentially significant public detriment could occur if Telstra does not increase the data throughput (capacity) made available at its mobile base stations, by upgrading the capacity of the access network and its backhaul network. With an increase in customers at each mobile base station due to TPG customers using Telstra's network infrastructure, there would be a requirement for a corresponding increase in data throughput (capacity).

The government has committed to a $20 million independent national audit of mobile coverage, commencing in 2022 (Albanese, 2022).

Small network operators

In regional and remote areas small network operators currently enter into agreements with carriers to utilise unused spectrum holdings. This normally occurs in sparsely populated areas where the spectrum holder has no plans to provide services themselves. This is an opportunity that has fostered growth in the regional small network operator market. Small network operators provide a vital service in regional and remote areas and are often the only technical people available in local communities to provide specialised telecommunications advice, services and assistance.

There is a strong likelihood that the proposed MOCN commercial arrangement will result in existing small network operators having spectrum withdrawn or reduced, even in areas where the spectrum is not used and will never be used by the spectrum holders.

Whilst the regional small network operators are not guaranteed access to spectrum as they are not the license holder, the potential for Telstra or TPG, or both, to act to further reduce competition in regional and remote areas by restricting access to this unused spectrum is high. This would be a highly detrimental outcome for local communities in regional and remote areas.

Optus

For Optus the proposed MOCN arrangement between Telstra and TPG is likely to be highly undesirable. If the merger authorisation is approved, Optus is expected to challenge the decision in court, as Optus could argue that the MOCN arrangement significantly alters the nature of competition in the mobile telecommunications market in the Regional Coverage Zone and beyond. Optus may also seek damages against the Commonwealth for potential losses related to a decision by the ACCC that detrimentally affects its future earnings potential.

Whilst market dynamics cannot be predicted, if, as a result of the MOCN arrangement, Optus loses market share or the value of its infrastructure investment in regional and remote areas diminishes, it could be forced to universally raise product charges.

The flow-on effect could have a significantly detrimental effect on the MVNOs that utilise the Optus network. Similarly, this could mean higher product charges for affected MVNOs. It is also likely to negatively impact existing MVNOs who utilise TPG's spectrum holdings in regional areas, where Telstra will have the authority to direct TPG to block access to reduce competition.

It is important for the ACCC to identify that the proposed MOCN arrangement is not expected to spur further investment by Optus or any other carrier in regional and remote areas. Current investment in infrastructure in regional and remote areas by Optus highlights that it is carefully selecting locations where customer density (whether this is permanent residents and businesses, or transitory tourists) and access to price regulated non-Telstra transit is such that the investment is justified.

Alternatives

It is reasonable for the ACCC to consider alternatives that might provide a more balanced competitive outcome. The alternatives could be put to the carriers for comment, as they might provide valuable input when the ACCC considers the MOCN arrangement.

A declaration of domestic mobile roaming in regional and remote areas would be inclusive of all mobile network operators, would facilitate infrastructure and spectrum sharing arrangements, and would be price regulated. Further, despite Telstra's protestations, there is no evidence to suggest that this declaration would thwart or stop investments in regional areas.

A condition that Telstra splits into two companies (retail and wholesale) that are separately listed legal entities could provide a similar outcome to a declaration of domestic mobile roaming in regional and remote areas. The new wholesale entity would include (but not be

http://doi.org/10.18080/jtde.v10n2.595

limited to) infrastructure and transit resources needed to provide mobile telecommunications in regional and remote areas.

If the ACCC decides to deny the merger authorisation, the ACCC must not make the mistake that a resumption of the status quo is acceptable, because not only would the benefits of the MOCN arrangement be lost, but also the telecommunications market would not become open and competitive in regional and remote areas.

Telstra's recent change to its business model, where it has split into three segments, two of which are aimed at 'reselling' their fixed and mobile infrastructure, is resulting in a significant change in market dynamics. The Telstra-TPG MOCN agreement is an example of how Telstra's infrastructure holdings, if properly regulated, could be a game changer for regional telecommunications. This warrants strategic telecommunications reviews by the government and the ACCC of what legislation and regulations are needed in this new environment; and domestic roaming, particularly in regional areas, should be a significant element of the reviews.

The 2021 Regional Telecommunications Review Report (RTR, 2021), with its long list of recommendations, highlights that the ACCC must act to improve regional mobile telecommunications outcomes.

Recommendations

The following recommendations are made.

If the ACCC approves the MOCN arrangement:

1. A condition be set that Telstra Corporation is to split into two legal entities (retail and wholesale) separately listed on the ASX with independent share registries and boards. The entities would voluntarily agree to not hold shares amounting to more than twenty per cent of the other entity's shares. The new wholesale entity would own infrastructure, facilities and transit needed (as a minimum) to provide mobile telecommunications in regional and remote areas.
2. A condition be set that Optus be invited to participate.
3. A condition be set that access and other charges be price regulated in areas where there are fewer than two alternate third party infrastructure and transit providers.

If the ACCC does not approve the MOCN arrangement:

1. Alternative approaches are required that permit Telstra, Optus, TPG, small regional network operators, and the MVNOs to competitively provide improved mobile telecommunications to regional mobile telecommunications consumers, ensuring that

Telstra is not permitted to place restrictions on access to TPG's spectrum holdings by third-party MVNOs.

2. A new domestic mobile roaming inquiry be commenced.

Conclusion

This paper has considered the application for merger approval from Telstra Corporation Limited and TPG Telecom Limited related to three interrelated agreements that would put in place a MOCN arrangement. There is a strong linkage between the ACCC's decision in 2018 to not declare domestic mobile roaming and the application for merger put to the ACCC by Telstra and TPG. Telstra and TPG are acting in the best interests of their shareholders.

The question of likely public benefits versus public detriment is vexed, because mobile telecommunications in regional and remote areas has not enjoyed an open and competitive environment, due to how telecommunications deregulation has occurred in Australia. Public funding and mobile blackspot funding over past decades has further diminished competition in regional and remote areas by channelling public money to Telstra, further distorting and unbalancing the market.

If the application for merger is to be approved by the ACCC, then conditions should be placed upon what is permitted. If the application for merger is not approved by the ACCC, then alternative arrangements should be established immediately to provide a more balanced, open and competitive outcome that does not exclude Optus and MVNOs that access the Optus network or MNVOs that currently access the TPG/Vodafone network.

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