Mobile Coverage Programme Discussion Paper Submission Cover Sheet

Submission Information	
This cover sheet should be attached to submissions made to the Department of Communications in relation to the Mobile Coverage Programme Discussion Paper.	
Contact Details	
Name of respondent:	
Name of organisation:	TransGrid
Phone:	
Email:	
Website (if applicable):	
Date:	Friday 28th February 2014
Confidentiality and privacy	
All submissions and comments, or parts thereof, will be treated as non-confidential information unless specifically requested, and acceptable reasons should accompany each request. Email disclaimers will not be considered sufficient confidentiality requests.	
Respondents lodging a submission should be aware that submissions (excluding any information agreed to be treated as confidential information) will be made publicly available, including on the Department of Communications' website. Submissions and comments will be subject to freedom of information provisions. Despite a submission being identified as confidential or sensitive, submissions may be disclosed where authorised or required by law, or for the purpose of parliamentary processes.	
Do you want all or parts of the submission to be treated as confidential? Yes \square No \boxtimes	
If yes, identify below which parts of the submission are to be treated as confidential (and provide a reason):	
If the submission contains personal information of any third party individual, indicate on this Submission Cover Sheet if that third party individual has not consented to the publication of his or her personal information:	
Submission Instructions	
Submissions are to be made by 5:00pm (AEST) Friday 28 February 2014.	
Where possible, submissions should be lodged electronically, preferably in Microsoft Word or other text-based	

formats via the email address mobilecoverage@communications.gov.au

Alternatively, submissions can be sent to the postal address below (to arrive by the due date):

The Manager Mobile Coverage Programme **Department of Communications** GPO Box 2154 CANBERRA ACT 2615

All submissions lodged will be acknowledged by the Department of Communications by email (or by letter if no email is provided). Respondents lodging a submission who do not receive acknowledgement of their submission should contact the Department. Submissions which are not acknowledged by the Department as being received may not be considered. Respondents should be aware that emails greater than 10Mb may not be successfully delivered.



Submission to

Department of Communications

Mobile Coverage Programme Discussion Paper

February 2014

Introduction

TransGrid is the owner, operator and manager of the NSW high voltage electricity network connecting generators, distributors and major end users in NSW and the ACT. TransGrid was formed as a Statutory Authority on 1 February 1995, under the *Electricity Transmission Authority Act 1994*. TransGrid became a corporatised entity under the *State Owned Corporations Act 1989* on 14 December 1998.

TransGrid owns and operates a state-wide telecommunications network made up of microwave radio systems and an optical fibre network. Our telecommunications network utilises an extensive range of communication towers and high voltage transmission line towers.

TransGrid has 102 telecommunications towers and more than 2,000 kilometres of optical fibre which make up our telecommunications network, allowing information to be transferred between substations and transmission lines safely and reliably. Our radio sites are also available for use by third party organisations, including government departments, community groups, emergency service groups, private companies and licensed telecommunication carriers.

TransGrid has a significant presence in regional NSW. Our electricity network spans from Broken Hill in the west of the state, to the Snowy Mountains, Albury and Deniliquin in the south, and Lismore and Moree to the north of the state. TransGrid may be interested in providing communications tower infrastructure within NSW under the mobile coverage programme, however would not look to extend outside of the state.

TransGrid has an open access regime in place with regards to access to our radio sites. There are currently approximately 50 customers in the utility, telecommunications, government and emergency service sectors utilising our telecommunications facilities. There is also a number of existing MNO's utilising TransGrid's tower infrastructure.

TransGrid has a proven record for building, owning, operating and maintaining its telecommunications network, including our tower infrastructure. TransGrid has a large annual capital program each year and is able to fund and deliver large scale capital works competitively. TransGrid would be in a position to contribute towards the funding for capital works under the mobile coverage programme based on the development of a suitable business case.

TransGrid also currently provides backhaul services including dark fibre and bandwidth on an open access wholesale basis.

Issues for Comment

TransGrid may be interested in providing services under the Mobile Coverage Programme as a network infrastructure provider in the following areas;

- the site and tower infrastructure where mobile network equipment can be deployed
- backhaul services

TransGrid has provided answers below to the questions posed in the Mobile Coverage Programme Discussion Paper in areas where TransGrid may have an interest, otherwise we have left the answers blank.

- 1) Would an appropriate minimum quality standard be that base stations must provide high speed 4G LTE mobile broadband communication services and also high quality 3G mobile voice and broadband data services? If this is not an appropriate minimum quality standard, what is?
- 2) What are the most appropriate indicators that could be used to specify the minimum quality standards that should apply to the mobile services being provided through the programme? For instance, should it be a minimum received services signal indication (RSSI) in decibel-milliwatts (dBm)? A similar approach was adopted recently in the UK where a comparable programme specified a minimum RSSI for 3G voice and basic data service of -85dBM on roads and -75dBm in community areas (outside premises).
- 3) Does delivery option 2 for the \$80 million Mobile Network Expansions component raise any additional issues that need to be considered?
 - Option 2 allows for greater competitive tension amongst MNOs. However option 2 should also provide an opportunity for a number of network infrastructure providers to work with MNOs, who may not necessarily have a business model of building and owning tower infrastructure. Allowing network infrastructure owners to participate under this option enhances the potential competition benefits provided via open access.
- 4) Could options 3(a) or 3(b) for the \$80 million Mobile Network Expansion Projects be delivered in conjunction with options 1 or 2 to enable network infrastructure providers to compete with MNOs?
 - Instead of competing with network infrastructure providers, MNOs could partner with infrastructure providers in relation to options 1 and 2. Infrastructure providers would have to work with MNO's to identify the optimum locations of base stations in order to maximise the improved mobile coverage from this programme
- 5) Should bidders be able to propose to incorporate the use of base stations owned by NBN Co as part of their bid?
- 6) Should a joint bid (between a specialist network infrastructure provider and a MNO) be permitted? Should it be encouraged?

Joint bids between network infrastructure providers and MNOs should be permitted. Partnerships between an MNO and a network infrastructure provider would help ensure open access as it is in the infrastructure provider's interest to maximise use of the infrastructure. Also the shared industry experience would help to deliver the mobile network expansion more efficiently, plus it may provide additional benefits beyond mobile coverage such as benefits to electricity network coverage or coverage for emergency service organisations.

7) Is it realistic to expect specialty network infrastructure providers to provide backhaul (recognising that they would presumably need to contract with a third party to provide this)?

Yes it is possible for network infrastructure providers to provide backhaul services.

8) Is option 3(b) suitable for Australia's regional mobile market?

Option 3(b) may be a feasible option, however some network infrastructure providers may not have the ability, expertise or business model to operate the network equipment. This would also be dependent on the business model of each MNO.

9) What are the appropriate specifications for a base station to be able to accommodate at least two other MNOs?

Tower and site infrastructure should be built with sufficient capacity which allows multiple MNOs and other customers to be accommodated on the same tower and within the same radio site compound. It would be in the interest of any specialist infrastructure providers to maximise use of the site. However local site conditions often dictate the specifications required for specific infrastructure, therefore any tender specifications should be generic in terms of site capacity.

10) Will the proposed open access provisions be sufficient to encourage other MNOs to use the base stations to provide mobile services?

In order to facilitate open access and encourage multiple MNO's, both the site infrastructure and backhaul needs to be readily available on open access provisions. Limited backhaul availability may restrict the ability of multiple MNO's to justify investment in a particular site.

- 11) Should MNOs be required to pre-commit to /co-invest in the base stations for which they wish to share infrastructure?
- 12) What is the estimated additional cost of requiring all new base stations to meet the open access requirements?

This can vary, depending on the location and likely number of providers servicing a location.

13) Should the proposed open access provisions be applicable to base stations funded under the \$20 million component, or should there be scope to exclude some base stations from these requirements?

An open access policy across all base stations would ideally enhance competition outcomes.

- 14) What are the most appropriate models/benchmarks for establishing access and backhaul pricing, and for reflecting in that pricing the value of the public funding received by the owner of the facilities (such that access seekers received an appropriate discount from the market price for access to the facility)?
- 15) Do the proposed assessment criteria achieve the right balance to deliver the best value for money outcomes?
- 16) Should the proposed assessment criteria be weighted, and if so, how?
- 17) Is there a more effective means of assessing seasonal demand than proposed in criterion 3(c)?
- 18) To what extent would the use of the NBN fixed wireless network result in improved mobile coverage outcomes in regional Australia
- 19) How best can a greater role in for NBN Co improve compensation and choice for consumers in regional Australia?
- 20) In addition to base station location, design and backhaul access, what other considerations would NBN Co need to take into account if it were to also support mobile coverage and competition benefits as part of its mandate?
- 21) How can early engagement between NBN Co and MNOs be facilitated in the design of each base station? Is there a role here for the Australian Mobile Telecommunications Association (AMTA)?
- 22) How can the Mobile Coverage Programme best complement any role that the NBN fixed wireless services plays in improving mobile coverage and competition?

Conclusion

Selecting options which allows network infrastructure providers as well as MNOs to participate in bidding for the funding for the mobile coverage programme will help foster competition while achieving the improved mobile coverage objective of this programme for regional locations.