

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

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Date:	28 Feb 2014

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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.



Vodafone Hutchison Australia submission on the Commonwealth Government's Mobile Coverage Programme

Vodafone Hutchison Australia (VHA) welcomes the opportunity to respond to the Government's Mobile Coverage Programme ('Programme') Discussion Paper. The Programme is an important recognition that improvements in mobile coverage are a vital element of improving the lives and economy of regional Australia.

Mobiles are now the essential telecommunications device and this is particularly the case in regional areas. In regional Australia, people are more likely to travel to greater distances to visit friends and relatives, gain access to government services, and to carry out their professional duties or operate a business.

VHA sees substantial growth opportunities for our business in playing a more active role in regional Australia. Over the last twelve months we have increased the regional mobile coverage available to our customers by over 40%. However, as we will discuss in this submission, there are a range of factors that limit the viability of competitive regional investment. Overcoming these roadblocks requires a range of policy changes. The Mobile Coverage Programme is a step in the right direction and we are particularly pleased that the Government is seeking input from interested stakeholders to ensure that the outcomes of the Programme are optimised.

VHA believes that it is right for Government to play a role in facilitating the delivery of mobile services to regional consumers and implementing policy and regulatory responses that ensure the market is competitive and viable. VHA therefore applauds the Government's recognition that it should provide social funding and foster incentives to expand mobile coverage where it is not commercially viable for carriers to invest in the required infrastructure. The economic benefits for Australia will be substantial. In developing the new policies it is vital that the Government makes a careful assessment of the structure of the mobile market and understands the constraints for private investment.

The importance of promoting competition in regional Australia

VHA commends the Government's objectives for the Mobile Coverage Programme to both:

- invest in telecommunications network infrastructure in regional Australia, *and*
- improve competition in the provision of mobile services.¹

We agree with the Government that any new policy responses must stimulate, rather than inhibit competition. It is clear that the enhancement of coverage and competition are interlinked and ensuring that there is a level competitive playing field will encourage more overall private sector investment. In contrast, ignoring the roadblocks for competition will result in underinvestment and dependence on Government handouts to meet the needs of regional consumers.

¹ Department of Communications, "Mobile Coverage Programme Discussion Paper", p. 3



It cannot be overstated that the decisions the Government makes today through the implementation of this Programme will establish the ground rules for how the market operates in regional Australia for the next ten years. Should the Programme not ensure competitive outcomes, it could entrench serious market distortions for years to come.

Mistakes of previous funding programs

As the Discussion Paper advocates, careful Programme design that delivers pro-competition outcomes is essential. The success of the Government's involvement in improving mobile services is dependent on the avoidance of outcomes that merely provide taxpayer money to directly benefit only one industry player. In the past, simplistic tender processes have not delivered sustainable ongoing improvements in mobile coverage and have entrenched significant roadblocks for private sector investment. This has resulted in higher prices for regional consumers and reduced overall industry investment in regional Australia. We urge the Government not to make the same mistakes again.

Many previous government funding initiatives have merely subsidised Telstra to extend its own coverage with limited requirements for infrastructure sharing to the serious detriment of competition. This has severely undermined the ability of other market players to invest and compete, and have ensured that regional consumers and regional economies have remained captive to an expensive retail monopoly without the prospect of choice that competition delivers.

Subsidising the most dominant carrier, whilst undermining the ability for its competitors to invest, is not an outcome that should be accepted. In addition, subsidising infrastructure to benefit one carrier is a perverse and inefficient use of taxpayer funds.

Many previous approaches to the provision of social funding have occurred through an 'open' tender process that failed to understand the dynamics of the mobile market. These tenders have been naively set up in such a way that virtually guaranteed that the dominant player would gain access to the funding and ensured that no other mobile operator would be able to viably invest in these areas.

For example, in 2012 the Western Australian Government set up a winner-take-all-tender process that meant that the successful bidder would receive government funding for its own use. Telstra received \$39m to expand its mobile coverage footprint in that State by 22%. There were no obligations to ensure that all mobile consumers would be able to benefit from the government subsidy. This has led to an extension of Telstra's monopoly in regional Western Australia and an inability for other carriers to invest or compete. This resulted in regional consumers missing out on the ability to choose their provider and the opportunity to pay lower prices and get better service. Similarly, it is disappointing that the Northern Territory Government chose to completely ignore any consideration of open access when it provided subsidies to Telstra to expand both its fixed and mobile infrastructure in 2013. We understand that many Telstra consumers have enjoyed the benefits of the increased coverage that the WA and NT Government's funding have provided. But the customers of other mobile providers have not. We are at a loss to understand why a program that only benefits a select proportion of consumers could possibly be deemed a success.

The WA and NT Government programmes have been a missed opportunity for more optimal outcomes that would have delivered more coverage and more competition in regional Australia. Thoughtfully designing an approach that harnesses the resources of the entire telecommunications market would deliver a larger pool of investment dollars to deliver more services and more choice for regional



consumers. In particular, it is important that we get the right settings to ensure continued investment in regional mobile coverage rather than 'once off' approaches. Vodafone believes that by creating a more competitive market this will lead to greater investment which will in turn lead to more sustained long-term coverage expansion. However by simply focussing on the short-term goal of a patch work approach, it actually has the long-term effect of restricting and undermining future investment in coverage expansion.

It is clear that the Government understands these issues. The Discussion Paper outlines three options of options that are intended to avoid the mistakes of the past. VHA would now like to put forward our preferred approach to delivering the best solution for regional Australia. Before we do so we would like to outline the realities of the economics of regional mobile infrastructure investment.

Understanding the realities of regional mobile coverage.

Government funding initiatives, including the Mobile Coverage Programme must understand the regional mobiles market and the underlying economic structures that currently exist. Without a holistic policy approach (that recognises the existence of a natural monopoly), regional consumers will miss out on the optimal solution.

It is important to understand that in many areas of regional Australia it is uneconomic to duplicate mobile infrastructure. On top of this, Telstra has a series of market advantages that mean they are able to dominate the regional Australian telecommunications market. These include:

- High market share in fixed line services in regional areas enabling cheaper marketing costs to acquire mobile customers;
- Substantially lower backhaul costs compared to the rest of the industry (due to the fact they already have a ubiquitous sunk-cost backhaul network);
- Universal Service subsidies (totalling over \$900 million over the last decade); and
- Previous Government subsidies and grants to build regional infrastructure (around \$450 million over the last decade).

A funding process that fails to acknowledge the significant market advantages of the dominant monopoly incumbent is neither fair nor competitive and will not deliver the stated aims of the Programme. Similarly, taxpayer funding that does not require the recipient to deliver services that allow other mobile operators to deliver choice and competition to regional Australia would be a significant failure.

Note we are not saying that the winning provider of the Programme should not be fairly compensated for the cost of developing the infrastructure. What we are saying is that the taxpayer subsidised network should be made available to other access seekers on fair 'open access' terms.

VHA also believes that the provision of Government funds without proper open access requirements would continue to exacerbate an anti-competitive natural monopoly in regional Australia. What is intended to be 'open access' is key to delivering a programme that both maximises the best coverage and competition outcomes.



Getting 'open access' right: Basic co-location is not enough

Policy makers must accept that in many places in regional Australia it only makes sense to build one set of infrastructure shared by the carriers. The Discussion Paper advocates pro-competition 'open access' requirements for the successful network provider, but is somewhat ambiguous about what 'open access' use of the base station may require. There is some suggestion in the Paper that 'open access' would be a requirement for other providers to locate their separate equipment (antennas, equipment etc) on the base stations of the carrier who had received Government funds (a facilities access requirement that currently exists). As we discuss below the requirements for access to the base station must require a broad set of elements.

The Discussion Paper also proposes that Greenfield base stations must have adequate backhaul for other carriers. Because backhaul costs are the second biggest cost for mobile network deployment, this is a requirement that VHA strongly supports. If backhaul is not part of the programme design carriers would be required to build or buy (usually from Telstra) their own backhaul transmission links, source power supplies, fund and install active equipment on the base stations, and potentially fund increased structural support for the base station. These costs can be substantial and often they can be uneconomic.

This model of 'basic co-location' would be unviable for many sites and would stymie real retail competition. Given the infrastructure has been funded by public funds, VHA submits that there should be a requirement to provide a range of additional elements of infrastructure to subsequent users of the mobile base station.

VHA strongly recommends that at the very least if a carrier is the provider of the Mobile Coverage Programme there should be a requirement to make available:

- Tower access;
- power supply capacity;
- adequate cabinet space;
- air-conditioning; and
- a backhaul link back to a point of interconnect with backbone backhaul infrastructure.

Of course (and as flagged by the Discussion paper), the pricing for these services must "appropriately reflect the level of Commonwealth subsidy provided."²

One suggested approach to making this available to other carriers would be a requirement at the point of construction to offer other carriers the opportunity to co-invest in the infrastructure (or to commit to a minimum spend for usage requirement). This would reduce the cost for all parties and enable all parties to share in benefits of the Government contribution. If a carrier wishes to access these services after construction the provider carrier would be entitled to charge a usage based charge to pay for any additional costs.

Active sharing: a more efficient solution

In many situations open access arrangements that only requires access to the 'passive' components of the network would still not make it viable for second and third players to operate in these areas. We

² Department of Communications, "Mobile Coverage Programme Discussion Paper", p. 9



believe that open access arrangements, particularly in remote or low use areas such as highways, should require access to more 'active' elements of the network, including Radio Access Network (RAN) equipment. The simplest way to provide this is via 'roaming' arrangements. There are well established arrangements for roaming in the Australian industry (particularly for Government funded infrastructure).

Previous government reviews of regional telecommunications have recommended that open access arrangements must include active components of the network. The Estens, Sinclair and Glasson reviews of regional telecommunications have all found that roaming would be an effective regulatory solution to deal with the issue of Telstra's monopoly and the need to extend full retail competition to Regional Australia. The 2012 Sinclair Review of Regional Telecommunications recommended that open-access arrangements for other carriers should be a feature of any future Government funding of mobile infrastructure in rural areas, including mandatory supply of domestic roaming. VHA strongly supports this recommendation noting that access pricing should provide a fair rate of return to the network operator. Similarly, Recommendation 2.1.2 of the Glasson Review recommended that the specific focus of the ACCC should be on declaring roaming in those areas only served by a single mobile network.

VHA therefore recommends that it is time to put the recommendations of the major regional telecommunications reviews of the last decade into practice. The Programme must require the sharing of both passive and active mobile network facilities and equipment. This would be the most cost effective approach and deliver the objectives of the Mobile Coverage Programme.

In summary, it is crucial part of the Programme design is the need to ensure that there is a level competitive playing field. Without careful design, taxpayer funds will merely advantage the dominant player and only one set of consumers. Taxpayer benefit would not be maximised.

The Discussion Paper's Assessment criteria

VHA supports the proposed assessment criteria. We believe that they cover the essential elements of a successful Programme. What is most crucial is an appropriate delivery design.

The Discussion Paper's delivery options

As outlined above, VHA believes that simply conducting a simplistic tender process without properly recognising the significant disadvantages in the market would not deliver a fair and equitable process, and would not achieve the competition outcomes required by the Government's policy. For these reasons Options 1 and 2 are not supported by VHA. A more sophisticated approach is needed.

It is essential that the Government create incentives to develop the most cost effective, pro-competition way to increase coverage and to seek funds from all parts of the industry. Because more income streams are pooled to pay for the cost of the infrastructure this would provide better value for money for the Programme and deliver better results for regional consumers. In the past government programmes have chosen these approaches because they think that it delivers the most financial contribution from the successful network operator. As we have outlined above this thinking is flawed. In the past Telstra has put forward a large contribution to, in effect, extend their monopoly position. A better approach is to design a programme that seeks contributions from the whole industry.



Therefore believes that a that a tender for a single Network Infrastructure Provider (**Infrastructure Provider**) charged with providing services to all carriers is the best model to deliver the optimal results for regional Australia. This approach would fall under the 'Option 3' category suggested by the Discussion Paper. Note, the Provider could be a single carrier but they would be charged with delivering a network that would benefit all consumers not just their own.

The crucial requirement for a Network Infrastructure Provider approach is to maximise the contributions from all parts of the industry. With this in mind VHA puts forward an approach that for the Mobile Coverage Programme that encompasses two elements discussed below:

1. Using the NBN Fixed Wireless Network as a foundation for the Mobile Coverage Programme

The Government's Discussion Paper quite rightly seeks views on the opportunities the NBN can play in delivering the best outcome for this Programme. We believe that the NBN should be the foundation for the delivery of overcoming mobile blackspots. The reason for this is that it would bring together significantly more resources to the task and create opportunities for industry co-investment. It would also ensure that mobile services would be provided in a way that promotes competition not detract from it.

We believe that the NBN would bring to Mobile Coverage Programme an opportunity to substantially increase the coverage area of the \$100 million fund. NBN Co current plan is to build a \$1.1 billion LTE network that covers 4% of the population which is substantially bigger than a \$100 million standalone project. To put the scale of the two projects in perspective; NBN Co is building a network on around 2000 sites; a standalone \$100 million project would only be able to construct something less than 200 sites. It is clear therefore clear that augmenting the NBN project with the \$100 million Mobile Coverage Programme would be likely to deliver significantly more coverage to more black spots than a standalone Program.

Where a blackspot or area of coverage need is identified, and this also corresponds to the NBN fixed-wireless roll out area, it would make economic sense for NBN to deliver a mobile solution in addition to the fixed wireless service. It would not make sense to build separate NBN fixed wireless infrastructure and then separately build and fund a mobile carrier to build mobile infrastructure.

For this reason, the successful Infrastructure Provider should at first instance determine if the NBN has plans to build its network in the areas that have been identified as blackspot areas. If the NBN infrastructure is able to deliver the mobile coverage then there should be a requirement to co-invest with NBN to build the infrastructure. This would reduce the costs for the Infrastructure Provider and for NBN and ensure that Government funding is efficiently utilised.

We recognise that NBN Co would need to address concerns that NBN fixed wireless base stations are not being constructed to allow for the needs of mobile providers. Many NBN towers have been built or have been planned without sufficient load capacity to accommodate additional aerials or active equipment and no consideration has been given to issues like access to power, or whether the location of towers and their size and height would be appropriate for mobile networks. But we believe that improving the multi use nature of the towers would be a moderate incremental expense with significant overall benefits to NBN and the broader community. We are confident that NBN Co's business case would see significant revenue uplift with these network specification changes.



As discussed above, at the very least the NBN network should provide a wide range of essential passive elements of infrastructure. This includes the costs of tower infrastructure, power supply capacity, the cabinet, air-conditioning and the backhaul link back to a point of interconnect with backbone backhaul infrastructure.

Indeed we would go further and recommend that considerations be made for there to be NBN and industry co-investment in active equipment. The NBN fixed wireless project is delivering a Long Term Evolution (LTE) wireless network, similar to the 4G networks of the mobile carriers. VHA understands that simple augmentations to this technical specification could deliver a mobile as well as fixed wireless solution at an incremental cost. If the NBN fixed wireless network also incorporated a wholesale 4G mobile solution, utilising the towers, infrastructure, backhaul and IT smarts it is already building, this could achieve both coverage improvements and increased competition. Increased retail competition will in turn improve the economics for carriers to invest further in coverage expansion through possible co-investment with NBN Co.

2. Co-investment

Within a NBN Co led solution (and in addition to the \$100 million and \$1.1 billion contributions the Government and NBN Co are making), the Government should also seek private sector commitments to funds to maximise the size of the Government's Coverage Programme. These commitments could include infrastructure sharing, minimum spend commitments, and capital contributions.

This would pool the resources of the carriers interested in participating in the Programme and ensure optimum competitive outcomes and deliver both coverage and choice to consumers. It would also increase to total amount of private sector funding available across the Programme and result in a greater number amount of coverage expansion overall.

VHA believes that the process of seeking co-investment could operate as follows: Once the community has identified the sites and the Department has selected priority sites for funding, the Infrastructure Provider would ask the carriers which sites they are prepared to commit to use. This commitment could be via a minimum spend requirement based on a reasonable assessment of the relative use of the infrastructure, or via an upfront capital contribution based on expected proportionate use. Carriers that do not want to make an initial commitment would not get immediate access to the site (although after a period it would make sense for these carriers to gain access on a higher usage charge basis). Those sites with the highest level of private sector commitment would be prioritised for rollout. This is because they are the sites that are likely to have the highest levels of demand and therefore consumer benefit.

VHA believes that a co-investment model would help identify the highest priority sites that require new base stations and coverage expansion, maximise the level of private sector financial contribution and maximise the coverage benefits for regional consumers.

Other considerations

- **Transmission availability and pricing**

The ACCC's current Domestic Transmission Capacity Service declaration review must consider an accurate comprehensive cost based price for backhaul. This would improve the business case for coverage expansion.



In addition, the NBN should also offer backhaul services. This should be brought forward as a quick win for regional Australia. This would also improve the business case for NBN adding an additional income stream. The Joint Parliamentary Committee into the NBN and the Sinclair Regional Telecommunications Review recommended using the NBN to improve mobile backhaul.

- **Universal Service Obligation**

In light of the change in the way consumers access technology the Universal Service Obligation scheme is need of review. The telecommunications services that consumers consider universal and essential have changed rapidly in the last 5 years and will continue to change. Widespread adoption of data enabled smartphones only occurred in Australia in 2009, and we now are a world leader in smartphone adoption.

Over the last ten years USO payments to the incumbent Telstra have exceeded \$900m. The time is right to begin a debate about what consumers and the economy consider as universal and essential and therefore what these funds collected by an industry levy should be spent on.

In the first half of 2013 Australians purchased 2.3 million tablets, the same amount purchased for the whole of 2012. Telsyte estimates that by 2017, 70% of Australians will own tablets. More than 60% of us already have smartphones. Broadband for many people is now solely about mobile and wireless. This is an entirely different picture to what policy makers considered when they created the NBN or when they last reviewed the USO.

Given the change of consumer preference to mobiles, the reliance on mobile services, and the need for improved mobile coverage for emergency services serious consideration should be given to utilising the USO to increase the funding available to improve mobile coverage and competition in regional Australia.

- **3G or 4G?**

The Discussion Paper asks whether the appropriate minimum quality standard for the base stations is that they must provide high-speed 4G LTE mobile broadband data communication services and also high quality 3G mobile voice and broadband data services?

It is VHA's view that it would be appropriate that the Mobile coverage Programme aspires to deliver the most up-to-date mobile technology. VHA therefore supports a comprehensive requirement for 3G and 4G services. The NBN approach would significantly improve the viability of a more comprehensive solution. Note part of tis arrangement would be discussions about how carriers would lease their current spectrum holdings to the Programme provider.

However it is important to flag that the different spectrum holdings of carriers and the ACMA's delays in making available regional 1800MHz spectrum is restricting the ability of all carriers in delivering 4G services to regional Australia but these limiting issues are not insurmountable. VHA remains concerned that the ACMA's lack of progress in making available the 1800MHz that is currently significantly underutilised by Telstra for point-to-point wireless backhaul is a major impediment for the success of the Mobile Coverage Programme.