

9 January 2014

Public Infrastructure Inquiry  
Productivity Commission  
LB2 Collins Street East  
MELBOURNE VIC 8003  
Email: [infrastructure@pc.gov.au](mailto:infrastructure@pc.gov.au)

## RE: SUBMISSION TO PUBLIC INFRASTRUCTURE INQUIRY

As the largest telecommunications network operator in Australia with a vital interest in the efficient finance, provision and regulation of our nation's infrastructure, Telstra welcomes the opportunity to provide this submission concerning the public infrastructure inquiry.

Telstra supports the objectives of encouraging private infrastructure investment and reducing the costs associated with public infrastructure projects. However, governments do continue to play a pivotal role in:

- Supplementing private infrastructure investment in circumstances where there is a legitimate public interest to be served but it is not viable to make the investment from a commercial perspective; and,
- Supporting private infrastructure investment by making use of it to deliver public services to communities in need.

Two current examples of such cases are Western Australia's Regional Mobile Communications Program and Telstra's proposal for delivering mobile broadband services for emergency services organisations.

### **The Regional Mobile Communications Program**

The Regional Mobile Communications Program (RMCP) involves the delivery of mobile communications to large parts of remote Western Australia. For a State Government contribution of \$39 million, Telstra is delivering \$106 million of value consisting of 113 new mobile base stations for improving highway and community coverage in remote parts of Western Australia, supporting infrastructure, and subsidised tower access for state emergency services.

The RMCP project will increase mobile phone coverage in Western Australia by 22 per cent while significantly boosting access to next generation broadband services. It will enhance the quality of life for people living, working and holidaying in regional WA. Regional businesses will benefit from access to distant markets and data, schools from improved educational resources, and families from improved connectivity to social media and remote health diagnostics.

Telstra will also help improve emergency services by providing the WA Police, the Fire and Emergency Services Authority of WA, and other nominated emergency services organisations the right to collocate their digital radio communications equipment on the mobile infrastructure without charge. This will allow emergency service organisations to use mobile broadband to deliver public safety emergency services, for example:

- Fire-fighters can use wireless broadband to download blueprints for a burning building while out in the field;
- Police officers can receive surveillance video feeds in emergencies; and,
- Emergency medical services can remotely access or transmit medical information in real time.

In addition, nominated non-government agencies will receive rights to use the infrastructure at discounted rates.

The RMCP exemplifies the benefits and opportunities created for the community when government supplements what would otherwise be commercially prohibitive investments in infrastructure.

## Mobile broadband for emergency services communications

Today, in addition to the myriad of private voice and narrowband data networks already in use, emergency services organisations (ESOs) are increasingly using public mobile broadband networks to complement their operations. Natural disasters in Australia frequently occur in regional and remote areas, necessitating a network with expansive coverage. Building such a network with high levels of availability and reliability is extremely complex and costly. In 2012, Telstra released a white paper<sup>1</sup> examining three options for the most efficient and cost-effective delivery of emergency services communications over mobile broadband technology.

One option considered involves ESOs utilising an exclusive spectrum allocation and building and maintaining their own mobile broadband networks. While this would deliver high levels of availability and control to ESOs, the cost would be prohibitive. The upfront costs of establishing the network and acquiring spectrum, and the ongoing operations and maintenance costs are estimated to amount to several billions of dollars.

Another option is for ESOs to utilise an exclusive spectrum allocation and lease back a private network built and maintained by a commercial network operator such as Telstra. Whilst this option would defray some of the significant costs associated with building and maintaining a network, the cost of exclusive spectrum allocation would be substantial and it would not be possible to seamlessly overflow excess emergency traffic to a commercial network in periods of high demand.

A third option is to integrate ESOs' spectrum allocation and network operations within the existing mobile broadband capabilities of commercial network operators.

Telstra considers that the third option is the most efficient and cost-effective and Telstra has been developing an implementation of this option, entitled LANES, in consultation with emergency services organisations. LANES would allow emergency broadband traffic to be carried on commercial infrastructure with appropriate service levels, making the greatest use of existing infrastructure and resources, and sharing costs fairly.

Whilst a decision on which option to pursue is yet to be made, this example illustrates the choice government has between making its own investment in infrastructure or making use of private infrastructure to supply public services to communities in need.

Once again, Telstra strongly supports the inquiry's dual objectives of encouraging private infrastructure investment and reducing the costs associated with delivering infrastructure, and reiterates the critical role of government in supplementing private infrastructure through public investment and support where necessary.

Thank you for the opportunity to provide a submission to the inquiry. Please contact Iain Little (02 8576 2732) if you have any questions or would like to discuss this submission further.

Yours sincerely



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Corporate Affairs

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<sup>1</sup> Telstra (2012), *Delivering 4G/LTE Mobile Broadband for Emergency Services*, November, <http://www.telstra.com.au/business-enterprise/download/document/business-public-safety-whitepaper-mbb-4g.pdf>.