



15 May 2009

The Manager Blackspots Backhaul Branch  
Department of Broadband, Communications and the Digital Economy  
GPO Box 2154  
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By email: [backhaulblackspots@dbcde.gov.au](mailto:backhaulblackspots@dbcde.gov.au)

Dear Mr Kelleher

### **Backhaul Blackspots Initiative: Stakeholder Consultation Paper**

Vodafone Australia welcomes the opportunity to comment on the Government's Backhaul Blackspots Initiative Consultation Paper (the Paper) and to propose locations that might be priorities for the roll out of backhaul supply infrastructure.

#### **About Vodafone**

Vodafone Group Plc (Vodafone Group) is the world's leading mobile communications service provider. Vodafone Group has a presence in 25 countries through equity interests and a further 42 countries through partner market arrangements. At 31 December 2008, Vodafone Group had 289 million customers worldwide. Vodafone Group is the largest acquirer of unbundled local loop access and is the fifth largest broadband provider in Europe.

In Australia, as at 31 December 2008, Vodafone had a direct customer base of 3.95 million customers making it the third largest participant in the Australian telecommunications sector. Vodafone operates a GSM digital mobile network that covers 93 per cent of the Australian population and is currently undertaking a national 3G mobile broadband rollout using High-Speed Packet Access.

On 30 April 2009, Vodafone launched its high speed 3G network in major regional centres. Customers in all other existing Vodafone 2G coverage areas throughout Australia are planned to experience Vodafone 3G services by August 2009. When this second stage is completed, Vodafone 3G coverage will reach 94 per cent of the Australian population.

On 9 February 2009, Vodafone Australia Limited and Hutchison 3G Australia Pty Limited announced their intention to merge their telecommunications businesses in Australia. This proposed merger is subject to regulatory approval. The views expressed in this submission are those of Vodafone Australia Limited.

#### **Interaction of Fixed and Mobile Networks**

Vodafone welcomes the move by Government to focus on backhaul infrastructure and the initiative to address backhaul blackspots. The recent and substantial growth in mobile broadband take up has already increased demand for backhaul transmission and its importance will grow exponentially as technology advances.

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Mobile broadband is a complement and in some areas an effective competitor to fixed line broadband services. Hence Vodafone is concerned to ensure that the regulatory settings and the nature of the infrastructure deployed as part of the National Broadband network (NBN) enables, rather than inhibits, the development of competing non-fixed broadband services.

One option is to ensure the deployment of backhaul transmission overlaps existing mobile network infrastructure. Vodafone considers that this option would provide the Government with several benefits. By August, three of Australia's mobile network operators will provide mobile broadband (and other 3G) services to at least 94% of Australia's population. Thoughtful deployment of backhaul transmission would therefore ensure that genuine broadband choices are available to retail consumers sooner and also help the Government future proof its investment.

Globally, mobile network operators are moving toward deployment of Long Term Evolution (LTE) or 4G network technology. LTE provides theoretical speeds of up to 100Mbps but requires significant backhaul transmission capacity. By overlapping backhaul transmission with mobile network infrastructure, the Government will keep its technology options open so as to ensure the cost-effective deployment of the NBN.

### **Pricing and Wholesale Models**

The vast majority of transmission routes display strong natural monopoly characteristics, meaning entry is neither desirable from a social welfare perspective nor commercially viable. Backhaul access is likely to be one of the most significant bottleneck services in the short to medium term or at least until the NBN has been rolled out.

Vodafone understands the Government's need to establish access pricing early to enable fair and competitive access to blackspot infrastructure. However Vodafone is unable to provide indicative wholesale price points without a clear and detailed indication of what the service will offer, where it will be located and the terms and conditions of access. The nature of the commercial model will play a key role in determining appropriate backhaul access pricing. For example access to dark fibre (as a long term passive infrastructure lease) as opposed to a managed capacity service will offer a range of different incentives to access seekers depending on their existing infrastructure and business model.

Pricing of access to such services is not an issue that can or should be comprehensively and ultimately resolved at the commencement of the blackspots backhaul initiative but should form part of the regulatory consideration of access pricing over the broader NBN. As the NBN is developed the pricing models for backhaul capacity will require ongoing monitoring and updating to adequately take into account revised network architecture of the NBN and changed usage by both fixed and mobile networks.

Vodafone believes that it is important for Government to consider the practical end to end infrastructure required to provide effective and accessible backhaul infrastructure. It may be conceivable for access to dark fibre to terminate some distance from an appropriate access point. The cost of accessing an appropriate transmission tail may result in the movement of the capacity bottleneck from main transmission links to tails or subsidiary links which may only be accessed via a Managed Service. Vodafone believes that the most appropriate method for promoting competition and innovation between mobile networks and between mobile and fixed networks would be for dark fibre backhaul access to be made available to an aggregation point – preferably to regional centres.

## **Priority Locations**

Vodafone Australia has identified the following locations as priorities for backhaul rollout:

- Tasmania (possibly to be addressed by recent developments)
- Darwin
- Alice Springs
- Kalgoorlie
- Inland Regional Queensland

If you have any questions or would like to discuss any of the issues canvassed in this submission in more detail please call me on 0414 207 277.

Yours sincerely

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