



BACKHAUL BLACKSPOTS INITIATIVE

SUBMISSION TO THE DEPARTMENT OF BROADBAND
COMMUNICATIONS AND THE DIGITAL ECONOMY

ON THE

BACKHAUL BLACKSPOTS INITIATIVE STAKEHOLDER
CONSULTATION PAPER

NEXTGEN NETWORKS PTY LIMITED

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1 INTRODUCTION

As a leading and innovative provider of wholesale backhaul services to the telecommunications industry, Nextgen Networks Pty Limited ('Nextgen') welcomes the opportunity to provide its views on the approach being undertaken by the Commonwealth to address Australia's regional backhaul blackspots.

Nextgen fully endorses any initiative designed to extend long haul fibre networks into underserved regional areas of Australia. On this basis, it also intends on lodging a response to the foreshadowed June Request for Tender ('RFT') for the deployment of competitive backhaul infrastructure. Nextgen recognises that establishing this competing backhaul infrastructure is critical to:

- Improving the short term competitiveness and service outcomes of Australia's telecommunications industry and downstream users; and
- The long term viability of the proposed National Broadband Network ('NBN') and the Digital Regions Initiative

Nextgen is uniquely placed to provide the Commonwealth with informed insights in relation to determining the best approach to addressing this issue.

Nextgen is a specialist licensed Carrier that owns and operates Australia's third largest long-haul fibre optic cable network. This network spans mainland Australia, serving the cities of Brisbane, Sydney, Canberra, Melbourne, Adelaide and Perth with inter-connect in more than 70 regional centres.

Nextgen provides a select range of wholesale products and solutions that services carrier, service provider, corporate and government transmission carriage requirements. The core network provides seamless high performance data networking carriage services between rural and regional centres, metropolitan centres, mainland capital cities and international cable routes.

Nextgen is actively pursuing a programme to extend its backbone network into new regions throughout Australia. The Backhaul Blackspots Initiative provides an opportunity to enhance the scale and reach of this programme and support the Commonwealth's objective to provide competitive backhaul capability to many regional areas for the first time.

Nextgen looks forward to working with the Commonwealth to find suitable solutions to this issue and would be happy to discuss this submission, or other issues associated with the Backhaul Blackspots Initiative, with the Department.

2 EXECUTIVE SUMMARY

The difficulties associated with the provision of backhaul transmission to Regional Australia are now widely acknowledged and becoming better understood. Nextgen believes that the proposed Commonwealth Backhaul Blackspots Initiative represents an historic opportunity to overcome limitations to addressing these markets.

In light of the key issues that have been raised by the Commonwealth in the Stakeholder Consultation Paper and the possible model for delivering the initiative, it is apparent that bids for Backhaul Blackspots RFT are likely to be assessed on a competitive basis with regard to:

- A set of transparent criteria that can be used to identify and prioritise the regions for funding and the delivery of a defined infrastructure and service;
- The merits of any proposed technical and design solution on the basis of the type and capacity of services, the location and type of interconnection and redundancy arrangements;
- Track record in the timely deployment, operation and successful commercialisation of backhaul links;
- The timeframes and costs that are associated with the proposed planning, land access, construction and commissioning of backhaul infrastructure; and
- Ownership and operational arrangements that guarantee competition now and into the future.

Nextgen supports the formal adoption of these criteria as the basis for any evaluation of industry bids in response to the proposed Backhaul Blackspots Initiative.

3 BACKHAUL BLACKSPOT LOCATIONS

Nextgen submits that the Commonwealth can utilise a quantitative and qualitative framework to gain an understanding as to where Backhaul Blackspots currently exist in regional Australia. Nextgen understands that the sites identified in the Minister's News Release supporting this initiative were based on the definition of 'Backhaul Blackspots' established by the ACCC in its review of the declaration of the Domestic Transmission Capacity Service.

Nextgen generally agrees with the ACCC's principles on defining capital-regional transmission capacity services and believes that these principles are useful with regard to:

- The high-level definition of regional backhaul
- Consideration of areas and proximity to fibre infrastructure; and
- The relative level of market contestability.

Defining "Backhaul"

Nextgen believes that the Department needs to give careful consideration to further defining backhaul in the RFP. Nextgen submits that this should include;

- A Minimum of 2 Mbps point to point speeds
- Zero Contention Ratio
- Reliability suitable for use by a Carrier or Carriage Service provider to deliver services on a variety of different Customer Access Networks
- A **Maximum** level of OSI Layer 2 switching i.e. Ethernet
- Bandwidth upgrades not constrained by third party commercial arrangements

Nextgen proposes that the Backhaul Blackspot Initiative should also consider the following matters when considering what constitutes a Backhaul Blackspot;

- Do the fibre holder/s in any given location favour their own residential retail customers and integrated wireless and DSL customer access investments;

- Does the fibre holder have a primary area of business outside of selling Transmission Capacity Services so that it is not sufficiently incentivised to sell or bring on more capacity in a timely and/or commercial manner;
- Is the pricing and capacity on offer significantly out of step with other comparable locations; and,
- What are the costs, ability and willingness of the fibre holder to break-out/cut fibre cables in order to service locations that the fibre runs through.

Taking these factors into consideration as well as considering the population of all of Australia’s regional locations, Nextgen submits that the following locations should be at the top of the Backhaul Blackspots priority list;

Darwin
Alice Springs
Mount Isa
Geraldton
Mildura
Albany
Warrnambool
Broome
Karratha
Port Hedland
Broken Hill
Emerald
Colac

Nextgen notes that the above list is consistent with the Backhaul Blackspots announcement identified locations, as listed in “Bold” above, except for Mt Gambier for which Nextgen has just completed construction of a backhaul transmission system.

4 DESIGN AND OPERATIONAL PARAMETERS

Nextgen supports the Commonwealth in establishing design and operational parameters to assess industry bids for any proposed deployment of regional backhaul assets. In particular, we note that these parameters should ensure that:

- Regional stakeholders receive value for the Commonwealth’s investment and not inappropriate or second-best solutions; and
- They address not just short term competition constraints, but longer term capacity requirements.

- That transmission capacity services offered are consistent, preferably nationally, in specification and performance to accepted telecommunications industry practice.

Against this background our preliminary views and comments on the design and operational matters raised in Section 4.2 of the Stakeholder Consultation Paper are set out below:

4.1 Types of Capacity.

- Un-contended capacity services
- Layer 2 services only. Ethernet as a minimum, and where possible Synchronous Digital Hierarchy (SDH)
- Fully monitored and managed 24 x 7, preferably nationally to cater for access seekers of all scale and size.
- Charges that are consistent with comparable locations of similar size and distance from the State's Capital City.

4.2 Location and Type of Interconnect

- To occur at logical points of aggregation such as data centres, exchanges, radio towers etc.
- Clear preference for carrier neutral facilities

4.3 Timeframes and costs

- Bidders will need to demonstrate their track record and capacity to meet the exacting deployment criteria required by this process;
- Solutions should be required to demonstrate value for money, not just in terms of the number of regions serviced, but in the quality of the infrastructure deployed.

4.4 Extent of fibre regeneration equipment

- Active powered and environmentally controlled facilities at spacings consistent with most international networks thus providing for flexible transmission system vendor selection options in the future.

4.5 Merits of deploying alternate routes to existing backhaul

- Complementary routes can be used for service protection.
- Additional fibre break-out locations can be included to service regional locations where the existing backhaul cannot be broken-out.

4.6 Merits of ring architecture

- Ring architectures increase service quality and the ability to service backhaul demands with mission critical requirements.
- Ring architectures typically cost more to deploy without the benefit of a complimentary existing network.

5 OPERATIONAL AND OWNERSHIP ARRANGEMENTS

Nextgen is highly supportive of the implied aims of the proposed operational and ownership arrangements as outlined in the Stakeholder Consultation paper.

Nextgen encourages the Commonwealth to pursue a structure that ensures that **all** users of this Government funded initiative have open access to this critical infrastructure. The use of IRUs and asset transfer arrangements as proposed will allow for a long term reset. However any short term open access regime envisaged for the regional backhaul assets should provide significant levels of protection to downstream operators. The evaluation of open access issues creates a choice between models that either involve:

- Control of these wholesale facilities being independent from any access seeker(s); or

- The incorporation of some level of retail interest into a bid which require additional non-discriminatory obligations or undertakings.

Nextgen notes that Section 4.3 in the Stakeholder Consultation paper aims for access seekers to gain access on 'equivalent terms'. This suggests that the provider may also be providing services to themselves.

Nextgen submits that the definition of equivalence is highly contentious and a 'grey area' when the provider of the transmission services is also the user. Nextgen notes that the Federal Government has provided some guidance as to the various degrees of "increasing equivalence" that are obtained by a number of separation structures.¹ Nextgen notes that - in line with emerging global precedents - the NBN will obtain the highest level of equivalence on this scale i.e. "Structural Separation".

The RFT should therefore offer clear guidance as to the level of equivalence that Government expects from proponents to the Backhaul Blackspots Initiative. Without this guidance responses will not be comparable and difficult to evaluate. Nextgen submits that:

- the evaluation of bids be based on their respective levels of "increasing equivalence"; and
- As a minimum requirement, access undertakings should represent the baseline terms and conditions of a commercial wholesale offer in relation to these backhaul facilities.

The budgeted funding for this initiative should be allocated to seed real and lasting alternative capital investment in the regional Australia in line with the long term structural vision for the nations telecommunication industry.

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¹ Federal Government, *NBN: Regulatory Reform for 21st Century Broadband*, Canberra April 2009