



13 March 2014

NBN Regulatory Review
Department of Communications
GPO Box 2154
CANBERRA ACT 2601

Via email: NBNReview@communications.gov.au

SUBMISSION: REVIEW OF REGULATORY ARRANGEMENTS FOR THE NATIONAL BROADBAND NETWORK

Dear NBN Regulatory Review Team

Regional Development Australia - Northern Rivers (RDA-NR) welcomes the opportunity to contribute to the deliberations of the Panel conducting the Cost-Benefit Analysis and Review of Regulatory Arrangements for the National Broadband Network (NBN).

RDA-NR seeks to provide a regional perspective on the potential economic and social impacts of the existing communications services and opportunities under consideration by the Regulatory Review Team. The RDA-NR Committee is jointly appointed by the Australian and New South Wales Governments. We are based in Lismore and we cover the northern NSW regional area serviced by the Tweed, Byron, Ballina, Clarence Valley, Richmond Valley, Kyogle and Lismore Local Government Councils.

Our vision is to connect the Northern Rivers to opportunities through sustainable partnerships focusing on the economy, environment and community and serve as a catalyst for regional growth and innovation.

While the benefits of NBN-speed broadband would flow to the entire community, the focus of this submission is on providing fast-track NBN-speed broadband opportunities for the business and service sectors in our region.

CURRENT SERVICE STATUS AND CONTEXT

Under the previous government's NBN rollout plan, the Northern Rivers of NSW was not scheduled to have any substantive Fixed Line Brownfield (FLB) rollout access to the NBN for at least three years. The strategic review recently undertaken suggests that implementation of the original plan would not be completed before mid-2024¹, implying a wait of up to a decade for regions like the Northern Rivers, potentially scheduled towards the end of the FLB-NBN rollout.

In addition to the long wait for the Northern Rivers to access the FLB-NBN service, the uncertainty around when the FLB-NBN will deliver a service to the region appears to negatively impact on the willingness of private sector

¹ "Strategic Review", NBN Co, December 2013 - p.45

providers, including Telstra, to invest in alternative infrastructure that could deliver a competitive service. We understand that for a number of months during 2013 and into 2014, the only retail broadband connection offered to business and residential users out of the Byron Bay exchange was ADSL1. In 2014 it is completely unacceptable and an extreme deterrent to setting up a new business when the fastest broadband available to businesses in some urban parts of our region is ADSL1. The contrast in service options is further increased by the availability of optical fibre NBN in our bordering regions of Coffs Harbour, Gold Coast and New England.

The lack of modern commercial-grade broadband has had a significant impact on our region's economic and social capacity and resilience. Lack of employment opportunities has progressively driven prime age adults, (25yr to 45yr)² out of the Northern Rivers². Attracting businesses that will employ this demographic and draw this demographic back to the Northern Rivers is critical to growing the region's commercial base and re-invigorating its urban and village communities.

The Northern Rivers is a Priority Employment Region. The major employers in the region are Health Care and Social Assistance. Human Services has a large part-time employment workforce and comparatively low levels of remuneration. The Northern Rivers average household income is \$35,822 compared to the NSW average of \$48,793. Business will have a greater opportunity to sell goods and services outside the region, to national and international markets, when they can access commercial-grade broadband. Businesses exporting goods and services outside the region create the opportunity to pay wages that reflect the average national and international wage rates, increasing the average household income within the region.

This submission firstly addresses the three summary stakeholder comments requested in the Regulatory Issues Framing Paper; February 2014 (Page 9.):

1. WHAT SHOULD BE THE PREFERRED OVERALL STRUCTURAL MODEL?

For the Northern Rivers region of NSW, the preferred structural model allows business to, as quickly as possible, access NBN-speed broadband, at NBN prices. Business operators, local government and individuals have expressed a willingness to negotiate co-investment to ensure our region has commercial-grade broadband available within a 6-12 month time period.

Our preferred model is for the region's current optical infrastructure to be made immediately available, at NBN prices, with priority being given to access within our business hubs. We understand that within the usual way of building network infrastructure there is optical cable already connecting each of the Telstra exchanges and mobile towers. All of that capacity is not currently being used. We understand the quickest way for the Northern Rivers to gain access to NBN-speed optical broadband would be if Telstra's existing over-capacity was owned or managed by NBN Co and access was made available to Retail Service Providers (RSPs) at NBN prices.

Beyond obtaining immediate access for our business hubs to existing unused infrastructure, we understand broader regional access to NBN-speed optical broadband, at NBN prices, can be significantly expanded if the backhaul³ capacity is fast-tracked into our region. We understand the current FLB-NBN deployment plan involves establishment of approximately 1,000 Fibre Access Node (FAN)⁴ sites where customer circuits will be aggregated. Upstream of the FAN sites will be a transit network to connect the

² February 2014 Priority Employment Area Presentation by Labour Market Research and Analysis Branch of the Department of Employment. Further detail and demographic data provided under Item 2 "Why is the identified structural overall model preferred?" section of this paper.

³ For broadband services "backhaul" refers to moving aggregate volumes of data between locations or a connection between major aggregation points like exchanges. We understand Telstra currently owns all of the backhaul capacity into the Northern Rivers; therefore it sets the price it is willing to sell to local ISP's. This price is well above NBN pricing.

⁴ See NBN Co 2013 Annual Report (<http://www.nbnco.com.au/content/dam/nbnco/documents/nbn-co-annual-report-2013.pdf>) - page 24.

FAN sites to the 121 Points of Interconnect (POIs) at which RSPs will be able to gain access to customer circuits. It is our understanding that the majority of NBN Co FAN sites and POIs are due to be located inside existing Telstra exchange buildings.

We understand early rollout of the transit network infrastructure, operated under NBN pricing principles, could serve as a fast-track foundation to deliver NBN-speed broadband services to the region. We believe that this structural model could, with measures outlined below, also support higher-speed "last mile"⁵ services to businesses and individuals in the Northern Rivers region, well before any NBN Co FLB construction commences in the area. Business, local councils and individuals have expressed a willingness to negotiate co-investment options to fast-track access to NBN-speed optical broadband at NBN prices.

We understand that improved backhaul capacity and pricing will not deliver value to businesses and individuals if there is a bottleneck in the "last mile" connections. Ultimately, NBN Co will manage all of the "last mile" but it is clearly impossible for NBN Co to simultaneously roll out the connections to each Australian household. To overcome this natural bottleneck in the establishment of the NBN we support the view that private sector providers should be licensed to lay optical cable to a prescribed standard, including being granted access to existing exchanges and physical access infrastructure.

Private sector providers, licensed to lay optical cable to NBN Co technical standards and specifications, would provide the opportunity for customer-funded fibre connections to points of presence (nominally FAN sites) in the NBN transit network at the point where customer circuits are aggregated. We support the Coalition's Policy⁶ that contemplates end-users being able to obtain fibre-to-the-premises "on demand" in consideration for an appropriate cost contribution.

One other element of end-users being able to obtain fibre-to-the-premises that may require regulatory consideration (or recognition in NBN Co agreement with Telstra), is the means of physical access between the FAN site and the users' premises. We understand that in many cases, using Telstra's ducting will be the most cost-effective option, and the right to access to this ducting may need to be brought forward ahead of the mass rollout in an area. A model similar to the licensed optical installers that operate in capital cities to connect individual end-users in large office or apartment buildings may be worthwhile considering.

As personally discussed with Communications Parliamentary Secretary Mr Paul Fletcher, when he visited the Northern Rivers as a guest of Mr Kevin Hogan, the Member for Page, the Northern Rivers local councils are enthusiastic in their willingness to negotiate a co-investment model to fast-track NBN-speed broadband, with NBN pricing, into the region. Should the region co-fund the infrastructure, it is expected that the infrastructure would eventually be ceded back to NBN Co. It is anticipated that some form of incentive or compensation model would be provided to help business, local councils and individuals fund their up-front capital costs. Compensation options may include accelerated depreciation or up-front deductions for business and service organisations.

⁵ The term "last mile" is traditional industry terminology for the final connection from a major network node (such as a FAN site or exchange) to the end-user. It continues to be used in Australia, even though Australia has long-since moved to metric measures of distance.

⁶ "The Coalition's Plan for Fast Broadband and an Affordable NBN", April 2013 - page 11.

In conjunction with last-mile fibre tails (supported by local financial contributions), early access to standard NBN services could be enabled with NBN Co deploying a minimal installation of its network technology at the FAN sites. We understand that this will not require NBN Co to bring forward any substantial investment to rollout the full optical broadband solution, just a small investment; for example, a shelf of GPON⁷ equipment.

While this submission is primarily focused on fast-tracking services to business and major service providers in the Northern Rivers region, we understand that the early rollout of the transit network infrastructure into FAN sites, for increased NBN priced backhaul capacity, will also make it possible for local and national RSPs to offer an increased range of services, potentially including VDSL2⁸.

While the focus of the Review of Regulatory Issues is on optical fibre, affordable backhaul capacity may also open the market for local RSPs to deliver higher speed wireless broadband within some business and residential precincts. To date, private sector appetite for new investment appears to have been dampened by the looming NBN pseudo-monopoly, but the business case for establishing a presence in a region could only be improved by the availability of more affordable backhaul. Some local councils have already started to build their wireless and wi-fi infrastructure.

2. WHY IS THE IDENTIFIED STRUCTURAL OVERALL MODEL PREFERRED?

The identified preferred overall model for delivery of NBN-speed broadband at NBN prices to the Northern Rivers is focused on speeding up the rollout for critical services and business. As a consequence of progressing this strategy many business, service providers and small business operators will also gain access to a commercial-grade broadband service at an affordable price. We understand residential users may also benefit if the introduction of VDSL2 technology into Telstra's network was accelerated, and the resulting capacity was integrated with the NBN.

As a Priority Employment Area, the Northern Rivers cannot afford to be left 'at the back of the queue' when it comes to accessing commercial-grade broadband at affordable rates. Our region needs to attract businesses willing to employ local people.

The Northern Rivers reputation for a relaxed lifestyle that highly values innovation and creativity naturally draws high value-add product and service businesses to the region. The lack of commercial-grade communications infrastructure frustrates relocation and expansion plans and discourages businesses from operating within our region. This has particularly impacted on the region's capacity to attract and retain prime age adults (25-40yo).

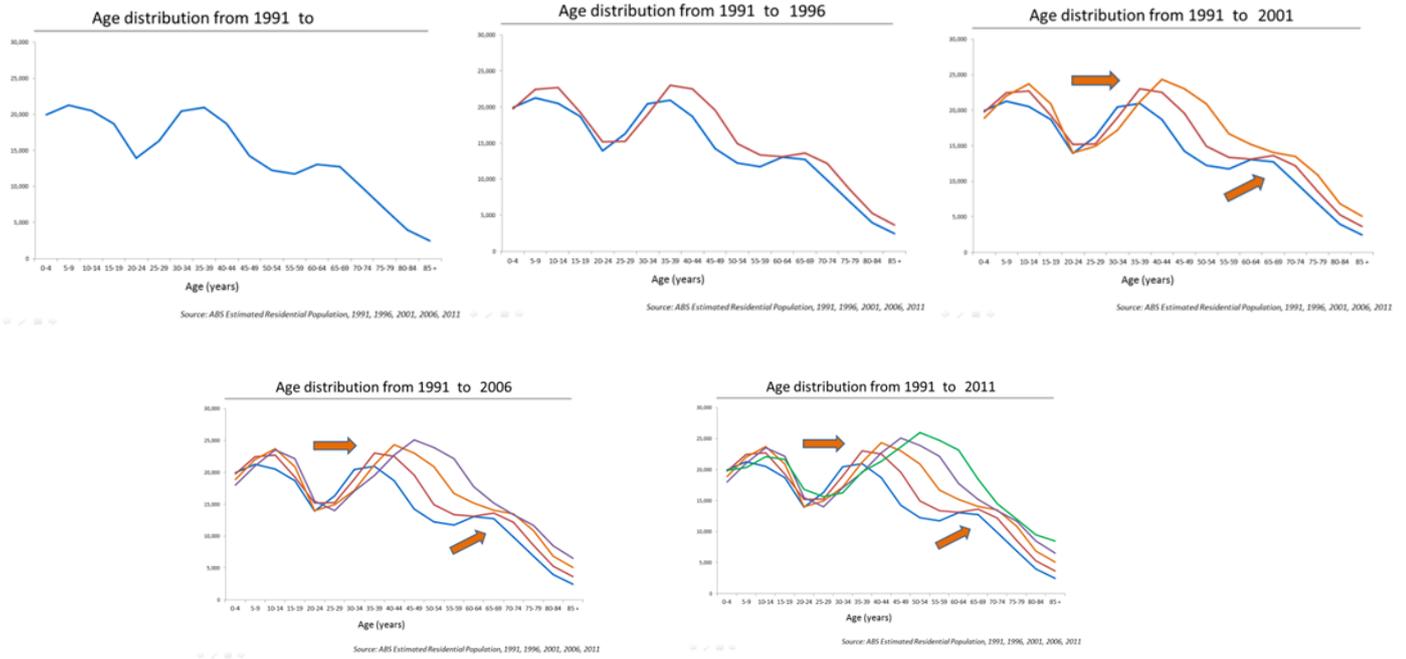
⁷ Gigabit Passive Optical Network (GPON) is a point-to-multipoint access mechanism. Its main characteristic is the use of passive splitters in the fibre distribution network, enabling one single feeding fibre from the provider's central office to serve multiple retail delivery points.

⁸ VDSL2 technology utilises a broader frequency band than ADSL2+ to achieve higher performance over relatively short distances (up to about 2 kms). Configuration options exist to allow ADSL/ADSL2+ and VDSL2 to coexist in the same copper cables in mixed deployment scenarios (where DSLAMs are deployed in exchanges as well as in nodes).

The following images are from the February 2014 Priority Employment Area Presentation by Labour Market Research and Analysis Branch of the Department of Employment.

The ABS data indicates:

- In 1991, the largest demographic cohort was 25-39 years
- By 1996 the largest demographic cohort was 35-45 years
- By 2001 the largest demographic cohort is 40-50 years
- By 2006 the largest demographic cohort is 45-55 years
- By 2011 the largest demographic cohort is 55-65 years



During the February 2014 Priority Employment Area Presentation by Labour Market Research and Analysis Branch of the Department of Employment at Ballina, it was noted that in parts of our region up to one in three children live in a home where no adult has been in work. This statistic is trending to a point where multi-generational welfare dependency has become an acceptable norm.

Less than 15 per cent of Northern Rivers businesses employ six or more people⁹. The local businesses that do employ more than six staff naturally tend to service clients outside the region, with national and international markets. The availability of affordable, fast commercial-grade broadband will help local businesses access national and international markets; leading to growth and the employment of more local people.

To progress fast-tracked access to NBN-speed broadband, Northern Rivers business, local councils and individuals have expressed a willingness to co-invest with government, working with private sector providers to build critical infrastructure. To enable this to happen, changes are required to remove all the bottlenecks and artificial barriers that prevent the region accessing existing optical fibre infrastructure and gaining access to NBN-speeds and NBN pricing. We recommend appropriate changes in legislation, regulation and policy to encourage private sector providers to be licensed to install the required new infrastructure, access existing and new infrastructure, and that markets be opened for national and local RSPs to access backhaul capacity at NBN standard pricing.

⁹ Regional Development Australia – Northern Rivers, Northern Rivers Regional Profile 2013, RDA-Northern Rivers, 2013.

3. PRACTICAL IMPLEMENTATION ISSUES, INCLUDING COST AND SERVICE MIGRATION.

Our proposed structure does not involve NBN Co investing significantly more than it will need to invest anyway, but it does require some reprioritisation by NBN Co. It proposes a fast-track strategy to ensure that regional business and communities have the choice to co-invest and fast-track NBN-speed broadband, at NBN prices into the region.

Naturally, if local business, local councils and individuals are funding their own enabling-infrastructure that would later be managed or owned by NBN Co, there would be an expected financial return in some form of rapid depreciation allowance, direct deduction, reduced service access prices or some other form of return on investment schedule.

In relation to the specific structural questions proposed for stakeholder comment: Regulatory Issues Framing Paper, February 2014 (starting on Page8). The following comments are made:

1. "WHAT BROADER STRUCTURAL MODEL OR MODELS FOR THE INDUSTRY SHOULD THE PANEL CONSIDER?"

- As noted earlier in our submission, to fast-track deployment of NBN-speed broadband to the regions, we urge the Review Panel to consider greater participation of private sector optical fibre installation and measures to facilitate the removal of artificial barriers to accessing existing optical assets and physical service delivery infrastructure.
- It is important that competition be enabled in the regions, and we support the Coalition's Policy¹⁰ that contemplates end-users being able to obtain fibre-to-the-premises "on demand" in consideration for an appropriate cost contribution.

2. "SHOULD THE PANEL CONSIDER AND ADOPT WORKING ASSUMPTIONS OTHER THAN THE ONES OUTLINED ON PAGE 5?"

- Earlier comments support the assumption that NBN Co should achieve structural separation from Telstra in respect of retail and fixed network services supplied in the mass market. In particular, we support the early rollout of the transit network infrastructure to FAN sites with local and national RSPs gaining access to NBN backhaul capacity at appropriate competitive pricing.

3. "SHOULD NBN CO CONTINUE TO BE SUBJECT TO WHOLESALE-ONLY (STRUCTURAL SEPARATION) AND OPEN ACCESS REQUIREMENTS?"

- We support wholesale-only structural separation for NBN Co. For regional Australia, Telstra tends to have a retail monopoly; it sets the price to RSPs through ownership of the infrastructure. Wholesale-only structural separation should lead to Telstra being on equal footing with other RSPs with wholesale purchasing capacity, opening the way for new RSPs to enter the regional market, and increasing consumer choice with the consequential trend to lower prices.

6. "WHERE PROVIDERS OTHER THAN NBN CO SUPPLY FIXED NETWORK SERVICES, SHOULD THERE BE PROVISIONS THAT ENSURE CONSUMERS SECURE PARTICULAR OUTCOMES, FOR INSTANCE BY COMPARISON TO THOSE GENERALLY AVAILABLE FROM NBN CO."

- Ensuring Northern Rivers region customers pay no more than metropolitan customers for access to NBN-speed broadband is the core message of this submission. As a Priority Employment Region, barriers to businesses opening or growing in our region must be mitigated. For well-paying, high value-add businesses, NBN-speed commercial-quality broadband is critical infrastructure which should cost no more to access in the Northern Rivers than it does in central Sydney or elsewhere.

¹⁰ "The Coalition's Plan for Fast Broadband and an Affordable NBN", April 2013 - page 11.

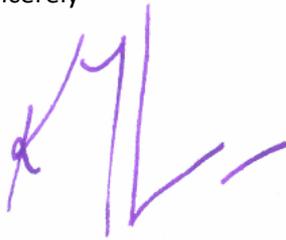
10. “TO WHAT EXTENT SHOULD THE PROVISION OF NON-COMMERCIAL SERVICES BY NBN CO BE FUNDED THROUGH CROSS-SUBSIDIES...?”

- For regions like the Northern Rivers, reasonably priced commercial-grade communications infrastructure is as essential as roads and bridges. It links us with Australia and allows our products and services to be marketed to the rest of the world and enables our businesses to service their clients. For regional centres to continue to grow, cross-subsidisation of regional service delivery should be factored into the service delivery model.
- A further core message of this submission is that NBN-speed broadband should be provided at NBN prices to regional centres. The NBN price should be the same for regional as for metropolitan customers.

The focus of this paper is a plea for fast-tracking NBN-speed broadband, at NBN prices into the Northern Rivers region of NSW. RDA-NR believes that such a strategy, deployed on a wider-scale, could fast-track commercial-grade broadband infrastructure into all regional communities. However, bottlenecks in every link in the connection between end-users and their RSPs need to be alleviated in order to realise meaningful broadband improvements. This includes the “last mile” issues and connectivity between NBN POIs and RSP core networks as the remaining link in the connection.

Thank you for the opportunity to provide this submission on behalf of the Northern Rivers of NSW.

Yours sincerely



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This paper was prepared with some technical and network systems advice from Mr Robin Eckermann