



Proeye Communications & Security Systems

Submission to the Panel conducting the Cost-Benefit Analysis and Review of Regulatory Arrangements for the
National Broadband Network

To NBNReview@communications.gov.au

NBN Regulatory Review

Department of Communications

GPO Box 2154

CANBERRA ACT 2601

From

Proeye Communications and Security Systems
779 High Street
RESERVOIR VIC 3073
Tel: 03 9012 78545
ABN: 69 276 482 171
Email: enquiries@proeyesecurity.com.au
WEB: www.proeyesecurity.com.au
Author: Paul Di Berardino

**Submission to the Panel conducting the
Cost-Benefit Analysis and Review of Regulatory Arrangements
for the National Broadband Network**

by Paul Di Berardino

Manager of Proeye Communications and Security Systems

779 High Street, RESERVOIR, VIC, 3073.

Date: 17 February 2013



Proeye Communications & Security Systems

Submission to the Panel conducting the Cost-Benefit Analysis and Review of Regulatory Arrangements for the National Broadband Network

Proeye Communications & Security systems is an installer and adviser of communications equipment and technologies, with over 16 years experience in the field of satellite and TV reception technologies, security electronics, telecommunications infrastructure, with a focus on research into developing technologies.

With a diversified customer base, below lists some of the areas which may be of interest to the review panel, which has also influenced our response to the submission. 90% of our satellite and TV viewer client base is over the age of 60 years, with little or poor English speaking skills, whom watch overseas non English speaking programs.

Many of our business customers are small enterprises, employing between 1 and 10 employees, that are not internet savvy and are cautious to migrating to new digital IP-based technologies

Our experience regarding poor broadband performance stems from poor installations either on the customer cabling or the providers network, poor customer service, uncontrolled contention ratios or backhaul inadequate and lack of technical expertise to rectify matters accordingly.

Some observations across Melbourne metropolitan estates serviced by fibre to the premise are placing bans on TV and satellite antenna installations, because the digital TV signals are reticulated by using RF over fiber technologies, with complete disregard to niche satellite content.

We continue to provide education and consultancy to our customers about the new digital environment, and help them explore the endless opportunities digital IP-based services applications and technologies are enabling.

We also felt that by responding to this submission enables the opportunity to provide suggestions from a different point of view subject to the current environment and what we have learned. Please see below our response to the principles.



1. Broader structural models

Q. What broader structural model or models for the industry should the panel consider? Why?

R. NBN Co should consider more broader structural models, to allow for cost effective solutions to enable efficient and effective delivery of broadband. However FTTP should be considered as the primary objective and NBN Co should engage with other Government bodies to achieve that objective, where such obstacles exist that hinder fiber FTTP deployment. For example Fiber the Building (FTTB) provides an ideal solution to economically deploy superfast broadband to the DSLAM in building where multi-dwellings or premises exist.

Other technologies such as broadband over power line should not be considered due to the high risk of interference that may be produced from electrical/electronic devices.

Q. Should the panel be considering significantly different industry scenarios to those outlined above? If so, what are those scenarios and why should they be considered?

R. NBN Co currently supply three defined solutions to cater for fibre, wireless, and satellite. NBN Co Fibre access service, Wireless access service, and satellite access service model. There are concerns about the one size fits all network termination device (NTD) and un-interruptible power supply (UPS) solutions for the entire rollout of NBN Co's FTTP build. NBN Co is only providing the current NTD and UPS solution for its part of the NBN build, which may be placing limitations and barriers to facilitate over the top services offered by retail service providers (RSPs). According to the ASIAL report, the security industry raised real concerns with the original UPS performance which provided up to five hours of reserve power to the two phone ports, which was not a fit for purpose solution during a mains power failure.

Further developments in alarm monitoring technologies utilise IP- based monitoring of security systems which there is no battery backup service currently provisioned by the current NTD. Therefore wireless redundancy paths are absolutely essential. Recent NTD developments allow provisioning to supply backup power to the data ports as well.

The Honorable Turnbull, advocated the NBN Build to be technology agnostic, therefore technology developments allowing different variations of the NTD developed by industry should be supported to enable a greater range of services and products. NBN Co should continue to supply a standard NTD and allow industry to develop and supply its own NTD to offer specific or more broader products and services, on the basis that the device meets NBN Co's or the



regulators minimum performance specifications. Some examples of industry developed NTD's may include the following specifications:

- Increased backup power, or redundancy IP paths by utilising the mobile networks, or specialised NTD's for metering infrastructure.
- Support for multi tenancy dwellings where fibre to the building is only provided.
- Optional RF Port to support IP based RF over Glass Technologies.

2. Working assumptions

Q. Should the panel consider and adopt working assumptions other than the ones outlined on page 5 above? How should the assumptions be prioritised and trade-offs assessed?

In addition to the panels assumptions, the following should be considered:

- Provide a define a minimum upload rate in addition to the minimum specified download rate ensure the delivery of voice services can be carried by either using the designated Voice Ports at the NTD or one of the available data ports.
- The panel to specify minimum latency requirements
- Accessibility requirements
- NBN Co to own all pits and ducts, therefore allowing the possibility of achieving a competitive framework in a layer 1 Fibre deployment.
- Regulation should be no burden or intrusive, however in some developments competing FTTH providers have a complete monopoly over the network and customer cabling, which requires legislative changes in the public interest.
- Schedule 3 of the Telecommunications Act 1997 (the Act), requires further legislative changes, and more engagement from the Australian Communications and Media Authority (the ACMA), so that the NBN build contributes positively in every way possible.

3. Structural separation

Q. Should NBN Co continue to be subject to wholesale-only (structural separation) and open access requirements? If so, to what extent and under what circumstances, if any, should those obligations apply to other market participants?

R. NBN Co should continue to be subject to wholesale-only open access requirements. Where certain services are hindered or required, but cannot be provided economically or commercially, then NBN Co should be able to provide such services until either the services can be provided economically or commercially.



4. Regulatory jurisdiction

Q. Should all market participants, including NBN Co, be subject to the same regulations to the greatest possible degree or are specific regulations that do not apply across the board necessary and justifiable in some areas?

R. NBN Co and competing providers should be all subject to the same regulations across the board. However allowances or exclusions from certain legislation should be provided on a case by case basis following public discussion.

Q. To the extent to which there should be specific regulations, what is the purpose, nature and scope of the differences?

R. The ACMA should adopt and enforce labelling and technical equipment standards for network equipment to ensure provisioning, installation and safety of network equipment is maintained.

The Cabling Provider Rules (CPRs) require cabling providers undertaking customer cabling to obtain the necessary competencies are registration, however there are no specific technical competency requirements to obtain a carrier license or use a person to provide telecommunications network cabling. Shortfalls arising out of such matters increases the likelihood and risk of carriers causing environmental damage, financial loss, failure of services. The panel considering implementing specific regulations and conferring additional powers to the Regulator to deal with such matters.

5. Competitive neutrality

Q. To what extent should competitive neutrality between NBN Co and other market participants be ensured and if so, how?

R. Competitive neutrality between NBN Co and other market participants are generally managed by the ACCC. The legislative arrangements should be maintained to ensure such matters contribute positively to our economy.

6. NBN Carrier Requirements

Q. 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?

R. The ACMA and ACCC should continue to develop legislative frameworks to ensure consumers are not disadvantaged.

Minimum technical performance specifications are required, and should be developed and adopted by the Regulator to ensure adequate service delivery for voice and broadband is enabled.



Some competing providers were not able to adequately facilitate adequate broadband or voice services, which caused subscribers to complain about their service, or lack of. Chat forums such as Whirlpool were used by disgruntled subscribers to highlight their concerns, however it is necessary for the regulator to ensure appropriate regulatory tools are in place to remedy such matters.

7. Overbuild

Q. Where an infrastructure provider other than NBN Co delivers outcomes comparable to those delivered by the NBN, what obligations or restrictions should apply on NBN Co? For example, should NBN Co be prevented from overbuilding that network?

R. NBN Co should not overbuild a network alongside a competing provider.

In the event where a competing provider does not provide an adequate service, regulatory intervention should be applied to enable the provider to provide adequate services, as a last resort NBN Co should overbuild.

8. Overbuild

Were NBN Co to be restricted in supplying services in areas serviced to a specified standard by other network operators, what undertakings, if any, should those operators be required to give about their ongoing performance? Noting links with question 3 in relation to wholesale-only and open access requirements, would it be sufficient to rely on Part XIC processes to secure access to services on these networks, or on Part XIC processes that were further refined?

Q. No comment



9. Essential characteristics

1. What are the essential characteristics that service provided over a network other than NBN Co's should have to meet for those services to be seen as operating on an NBN-comparable basis? For example, should it include the following elements:
 - i) ability to support certain minimum broadband speeds;
 - ii) provision of wholesale services on an open access basis (possibly involving structural separation or some equivalent method of ensuring non-discrimination) and support for retail level competition;
 - iii) an obligation on at least one provider to service all customers within a service area;
 - iv) acceptable performance characteristics – for example in terms of latency, jitter, loss and network availability;
 - v) price structures and levels that provide affordable access;
 - vi) credible, transparent and predictable upgrade paths to higher speeds;
 - vii) the ability to support voice services and the various legacy services; and
 - viii) clear and reasonable timeframes for connection and service restoration.

The applicable regulatory bodies develop and maintain regulatory frameworks to ensure that certain technical regulation and customer service guarantees are adopted. The following response to examples suggested above are:

- ability to support certain minimum broadband speeds;
- provision of wholesale services on an open access basis (possibly involving structural separation or some equivalent method of ensuring non-discrimination) and support for retail level competition;
- No obligation on a provider to service all customers, but additional funding's sourced by the Government to enable competing providers to provide to underserved areas.
- Minimum performance characteristics – for example in terms of latency, jitter, loss, contention ratio, and Quality of Service and end to end management of essential services that may be defined such as voice or legacy devices.
- price structures and levels that provide affordable access;
- credible, transparent and predictable upgrade paths to higher speeds;
- clear and reasonable timeframes for connection and service restoration.



10. Provision of non-commercial services

- Q. To what extent should the provision of non-commercial services by NBN Co be funded through cross-subsidies, and if so, what safeguards, if any, should apply to those cross-subsidies?
- R. The matter should be left up to Government to consult on a case by case basis.

11. Provision of non-commercial services

- Q. Were it not feasible or sustainable in a competitive market for NBN Co to earn sufficient revenue to enable it to cross-subsidise uneconomic customers, how should services to those customers be provided and funded? TUSMA
- R. The matter should be left up to Government to consult on a case by case basis.

12. New developments

- Q. What approach should be taken in new developments? Do they raise particular structural regulatory issues?
- R. Legislation should be included into state and territory planning schemes to ensure a consistent national approach.

13. ACCC

- Q. Should responsibility for the economic regulation of telecommunications remain with the ACCC?

Overall, the panel is most interested in stakeholders' views as to what should be the preferred structural model overall and why.

In putting forward such models, however, stakeholders should also have regard to their practical implementation, including issues of cost and service migration.

Stakeholders should also feel free to raise such other issues and proposals they believe are relevant, particularly in relation to how the panel should tackle the task before it. Stakeholders should note the panel's intention to consult further on more detailed issues.

- R. The ACCC is in a better position to deal competition matters.

The ACCC can apply specialist and broader competitive objectives to the telecommunications environment that are in the public interest.

Other regulatory bodies may not have the resources or specialist skills to implement, develop and maintain legislation regarding competition matters. To provide additional resources to another regulator such as the ACMA or TUSMA to



Proeye Communications & Security Systems

Submission to the Panel conducting the Cost-Benefit Analysis and Review of Regulatory Arrangements for the National Broadband Network

deal with competition matters in place of the ACCC may be construed as inefficient allocation of tax payer funds.

The ACCC is further removed from any influences from the Telecommunications industry and the Department of Communications, that may cloud or influence its competition regulatory objectives.

End.