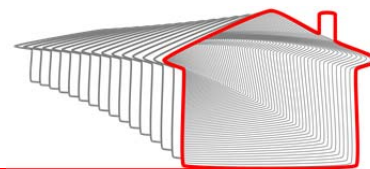


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The Hon Malcolm Turnbull MP  
Minister for Communications

Per: [infrastructureandaccess@communications.gov.au](mailto:infrastructureandaccess@communications.gov.au)

## Consultation on draft carrier licence condition

Thank you for the opportunity to respond to the Department of Communications “Consultation on draft carrier licence condition” as per [http://www.communications.gov.au/consultation\\_and\\_submissions/consultation\\_on\\_draft\\_carrier\\_licence\\_condition\\_of\\_15\\_October\\_2014](http://www.communications.gov.au/consultation_and_submissions/consultation_on_draft_carrier_licence_condition_of_15_October_2014). It is appreciated that this opportunity has extended beyond the “telecommunications sector” allowing for a broader spectrum of stakeholders to respond, and hopefully a more balanced outcome to be achieved. Our understanding is that the documents as below are open to comment:

- Draft carrier licence conditions
- Early assessment regulatory impact statement

### **Background**

The effective digitisation of Australia’s built environment is critical to the countries future economic competitiveness and growth. Access by users of Australia’s built environment to suitable and cost competitive broadband networks will be a key to this.

Our company is working very closely with the “built property environment”, a sector distinct from the property developer market and by some estimates a sector accounting for over \$2.3 trillion of investment in Australia. This is the sector that owns and manages built property, including trying to ensure its stock is kept up to international standards, both in terms of fit out and emerging technologies. The sector is important to ensuring the ordinary “person-in-the-street” has a roof over their head, accommodating the country’s business community as well as being a pension fund stalwart.

Please note we do not purport to represent the “Built Environment Sector” but are presenting our experiences in this sector to provide a Built Environment perspective.

### **“Milking” the Built Environment Sector ?**

Given that Property is largely a State function and Telecommunications is a Federal function it is understood that despite the Built Environment Sector dwarfing the Telecommunications sector it has at best been minimally considered in the development of Telecommunications legislation.

Unfortunately the perception is that at a Federal level it is also regarded as a sector to be “milked” for the benefit of the Telecommunications sector. The widely publicised dispute between the Federally imposed NBN Co<sup>1&2</sup> and TPG over the use of the Built Environment

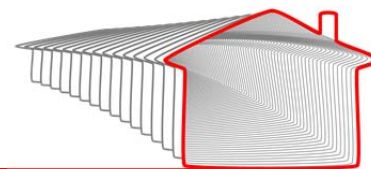
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<sup>1</sup> NBN Co’s surprise counterstrike against TPG, Communications Day, 29<sup>th</sup> July 2014

<sup>2</sup> Apartment dwellers to get FTTP by July as NBN Co fights TPG, David Braue, ZD Net, May 5, 2014

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Sector's assets to generate a profit<sup>3</sup> underlines this view. Even within your Regulatory impact statement it is casually claimed that profit (*utilising the assets of the building investor!*) is for the carriers<sup>4</sup> (!!). This line of thinking culminates in the cry to use the built environment's assets to subsidise rural broadband rollout (a noble tax in our view) but also subsidise poor planning/ execution/ inappropriate solutions in urban areas and lack of innovation in rural areas by the Federally owned NBN Co.

## **More important impact**

Notwithstanding the petty squabble brought about by poorly drafted self-serving Federal legislation, there are bigger implications now visited on the Building Sector by this legislation. Where once the Built Environment Sector (prior to 2011) could engage with multiple different carriers this choice has now been reduced to a few of the bigger carriers that happen to have plant within an arbitrary 1 kilometre of the site. This legislation has effectively now put the built environment sector in the position of being held hostage by these carriers – an issue frankly a lot more significant than the Federal preoccupation over which of the carriers will “grab assets with minimal investment in the sector”.

Based on the built sectors previous experience with the Telecommunications industry the term “Rape and Pillage” often comes to mind. The term is strongly associated with the bigger carriers, and certainly some of those loudly represented in your impact statement. Building owners/ investors being forced into their “sweaty embrace” is the consequence of this Legislation.

Cutting to the chase it is understood that the single minded focus of the drafting team was to “herd” customers to the Federally imposed NBN Co, an outcome that was never going to be successful. It is thus strongly requested that any limitations on who the sector may utilise as its Telecommunications carrier are lifted.

The creation of an alternative licence within the Telecommunication regulatory framework, more fitting the needs of the building sector is suggested within this submission. It is proposed that this licence would be held by the Building owner/ investors, either directly where an organisation was large enough to warrant such, or via a nominated declaration (as is currently the case for the smaller Telecommunications companies). This would provide them with rights, and the expected obligations in the Telecommunication's space. It also legitimises Federal involvement in the sector.

## **Addressing your Consultation issues**

The Consultation documents have been studied and frankly leave one with the overwhelming impression of trying to right wrongs in an old technology paradigm that should not have been legislated in the first place. It is very concerning that the new licence will just further entrench old solutions, stifle innovation and put Australia further down a dead end. The emperor really does not have new clothes in this case.

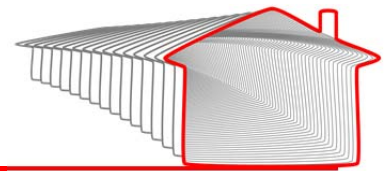
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<sup>3</sup> The Australian headline article, 24 September 2014

<sup>4</sup> Your indented paragraph of page 5.

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## **No consideration for end users or building infrastructure owners ?**

One of the many disturbing aspects of these documents is the “Regulatory impacts of options” of page 11. These evaluation criteria are **solely and purely about the wellbeing of the Carriers** and only indirectly imply secondary consideration of the end-user tenants/strata owners who have made the actual investment in the required infrastructure in order to future proof the premises / built environments involved.

There does not appear to be the slightest consideration of the actual infrastructure owners in your evaluation of your options. In fact there seems to be the pervasive misunderstanding that building infrastructure is an investment made by carriers !.

## **Who owns the underlying infrastructure ?**

To emphasise the earlier issues, the Consultation is from a Carrier perspective and regardless of the underlying morality (or even constitutional basis) clearly regards it as the Carriers prerogative to determine what they do with the built environment’s infrastructure.

In any other industry it is the owners prerogative to determine who and how their infrastructure is utilised. **The rights of the actual owner and investor in the private infrastructure (via their tenure of Layer 0 and direct investment in Layer 1) to control who may and may not** utilise the infrastructure, whether this be the actual carrier providing the Line Terminal or the RSP’s who wish to profit from this layer 2 model **need to be protected in the issuing of any new licences**. Constitutionally (and morally) it can be argued that this should not be dictated by a Federally based department with questionable purview over the built environment, and certainly a major conflict of interest given their ownership and funding of one of the main protagonists.

## **Innovation ?**

Throughout the documents the Commonwealth seems to have “bought into” the regulation of the industry from the self-serving layer 2 paradigm as there are “endless opportunities” for innovation<sup>5</sup> which will lead to lower prices for consumers. Arguably the opposite view is more accurate:

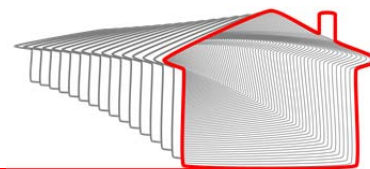
- a) there is only a limited margin available to Retail Service Providers. It is really a quick race to the bottom. Opportunities to reduce end-user costs by innovation are limited to cents per user once this bottom has been reached. The overwhelming experience relating to the Telecoms sector in the built environment is that “innovation” in this case is arguably code for innovative ways to avoid legal obligations and provide poorer customer services.
- b) by favouring this very fixed layer 2 approach the Commonwealth is eliminating both:
  - the attractiveness of other innovative business models e.g. buildings or precinct’s investing in their own interconnected layer 0 & 1 infrastructure

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<sup>5</sup> The top of your page 6

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able to meet the needs of tenants but also the bigger fast emerging challenge of Building Management Infrastructure;

- innovative technology solutions; for example the layer 1½ solution of unlit fibre terminated with universal Network Terminations Devices (NTD's) that terminate an aggregated layer 2 only service, but also providing for completely separate Service overlays and Service Management, the Internet of Things (IOT) and Big Data opportunities.

The layer 2 paradigm is a comfortable self-serving status quo we believe the carriers, including NBN Co are keen to perpetuate. For interest we have approached NBN Co via both their front door (Website) and via the backdoor to discuss innovative options but to no avail. Understandably, why would they want to question a paradigm that is their raison d'être ?

As an aside we would suggest the Commonwealth query what happened to the early innovative NBN business models of multiple organisations contributing assets to an NBN Co and receiving appropriate shareholdings?. The Internet is one of the most successful networks in the world precisely because it consists of multiple competing networks, as opposed to large monolithic networks. The lessons of the Irish potato famine of the late 1840's (standardised potato) that impacted on many of this country's descendants are still as relevant today as then.

## VDSL cannot coexist pre-text ?

It is noted that the Telecoms sector is asserting<sup>6</sup> that separate vectored VDSL systems cannot coexist. It is understood that this is a matter of synchronisation and as much as vectored VDSL cards in a single chassis are synchronised, it should be possible for vendors to synchronise separate chassis if there was the will.

Be that as it may, if the industry is claiming non-coexistence:

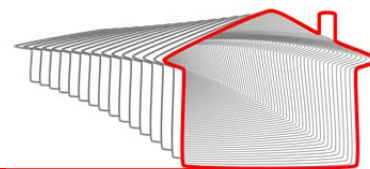
- Will the proposed new licence conditions now prevent overbuild i.e. the installation of a second operator's VDSL equipment into a building ***if this is the fundamental pre-text for this new licence? We are not seeing what is obviously a key issue being addressed in the licence*** and would strongly urge that overbuild of any building infrastructure, whether this be VDSL or fibre is now explicitly forbidden unless there are very clear extenuating circumstances;
- Will the rightful owners of the building now be precluded from utilising their own xDSL/ G.Fast or other copper based technologies within their private wiring? It must again be emphasised that the entire built environment technology paradigm is very very rapidly shifting to strong local cloud solutions, precinct communities, inter-floor intranets, public IoTs and sophisticated Building Management infrastructure. Will the carriers still be able to force their way into utilising building infrastructure with

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<sup>6</sup> Mid your page 6

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this claimed interfering technology, especially in the case where the building owners are already utilising it or plan to utilise it?

## Riskless approach

The impact statement states<sup>7</sup>:

*“Some industry members are concerned that a vertically integrated provider should not enjoy an effective monopoly over access to multi-dwelling units and business centres. iiNet argued that such networks should be wholesale-only and open access”*

Of course these carriers will argue open access. Why would they not grab a “free lunch” with both hands and then agitate for more? They are carrying Zero risk but looking for the reward. The two Principals carrying the risk are:

- The infrastructure provider, as the investor who risks chunks of their investment sitting idle or becoming obsolete; (in the case of NBN Co this risk is transferred to Government as the investor/ surety holder, in the case of the building owner it sits with him/ her);
- The building or site owner (who can normally quite feasibly be the infrastructure provider), specifically where an NBN specified solution has been installed by a builder “herded” to the solution for the sake of ticking a planning approval hoop. The building owner is now saddled with a network that is occupying his space, that he has no access to and that will not meet his future needs, these being greater than just the provision of faster internet;

By all means declare open access but then provide the actual owner of the infrastructure with an incentive to share this infrastructure and provide protections to compensate for the risk of the investment.

## Open Access

The layer 2 bitstream style open access embraced in the Australian regulatory model either needs to be adopted wholeheartedly or not at all. At this stage it appears to be adopted selectively and with little confidence by its proponents of its ability to effectively guarantee open access.

It is thus suggested that in this wholehearted adoption, consideration be given to the investor to minimise some of the investor risk. Such a measure would be **a clear restriction on overbuild**. In this ideal “carrier proposed” Layer 2 open access model, open access to layer 2 bitstream services is presumed and if the Telecommunication’s industry is demanding it they must also have faith that it works. It needs to cut both ways, i.e. where open access is guaranteed they can no longer force their way into a building. We will address this aspect in our proposal for an alternative “Infrastructure only” licence category.

## Conclusion

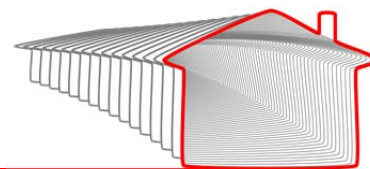
While initially hopeful that there might be a carrier licence protecting the built environment from the past “Rape and Pillaging” of the built environment by the licensed carriers (and *particularly* some of the big carriers cited in your documents) we note no addressing of these concerns but more of an entrenching of a status quo and further diminishing of the

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<sup>7</sup> Mid page 8

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built environments rights and choices. As such we provide general comments applicable to your licence conditions document and also propose an alternative “Infrastructure only” licence.

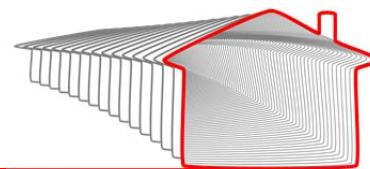
## **Infrastructure only licence (alternative proposal)**

This is a licence category applicable to those who do not want to operate layer 2 networks, but who are happy to provide the supporting infrastructure and maintain control over that infrastructure to maintain the structural integrity of their built environment. Characteristics of the licence are that:

- Private Rights of Way (Layer 0) and Private wiring (Layer 1) must be allowed for both Copper **and for Fibre** based networks. This proposed licence covers that private wiring;
- Clear physical and service demarcation points that all licensed carriers will utilise must be established;
- This licence holder may not offer complete end-to-end layer two services but is restricted to offering rights of way, fibre access and media conversion at the end user premises;
- The holder of the licence will maintain and support the infrastructure from the interconnection demarcation point to the physical media converter delivering an aggregated layer 2 service to the end users “gateway” equipment;
- The infrastructure may be open to multiple carriers (“Operators”) or a single carrier at the discretion of the infrastructure owner;
- Where the infrastructure is only **made available to a single Operator** (not “only taken up by a single Operator”), the Operator will implement a layer 2 open access approach;
- Retail Service Providers and or end-users are not compelled to exclusively utilise the Gateway equipment provided by the Operator;
- Media conversion installed by the Licence holder must be compatible with the layer 2 “Operators” Line Termination equipment;
- This licence holder is to be guaranteed access to multiple virtual circuits for building management by the Carrier (“the Operator”);
- This licence holder will be paid a nominal monthly amount not exceeding \$17 and a market related configuration fee for the circuit from the demarcation point to the layer 2 port on the media converter at the end-users end;
- This licence holder must offer media converters compatible with both GPON as well as optical Ethernet systems with handoff, unless otherwise agreed, to be via a copper RJ45 connector;
- This licence holder is to be protected from overbuild or other attempts to force access to the area covered by the private wiring; with the proviso that Fibre may overbuild copper;
- If the infrastructure owner (and this licence holder) refurbishes their site with Fibre they may immediately require any Layer 2 operators to move their services to the new infrastructure at the cost of the Operator;

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- Standards for the private wiring may not be imposed by the telecommunications sector and will consist of minimal high level performance requirements such as minimum 1G capable equipment, losses from Demarcation to end-user, safety considerations and such like.

## Your Proposed licence

If the Federal Government is determined to proceed with its new licence declaration the following comments are applicable:

- Return the rights of the Building owner to determine who and what runs on his/ her infrastructure. This decision must be guided by a need to improve the attractiveness of the building to tenants;
- Stop overbuild within buildings where adequate infrastructure already exists although allow open layer 1 fibre to “trump” copper infrastructure;
- Require Carriers to move end-users off private copper where fibre options exist. This will also eliminate concerns re further investment in infrastructure by building owners trying to meet new technology demands;
- Allow for the building owners dedicated virtual circuits to be delivered to any Demarcation point within the building by the carrier;
- Allow for a clear demarcation for both private copper and Fibre based infrastructure within a site or precinct much as is the case with current private wiring;
- Force the utilisation of private infrastructure where such infrastructure is offered and as per your Licence clause 4 set a fee. Modelling indicates a fee in the order of \$17 would be in order;
- Review your definition of *Whole Sale service* to include those also wanting to provide layer 1 ½ type services, i.e. end user terminated dark fibre;
- Review your definition of *Layer 2 Wholesale Service* to allow for split layer 2/ layer 3 service ONT's where the User Network Interface is not necessarily on the ONT but separately on an RSP owned gateway;

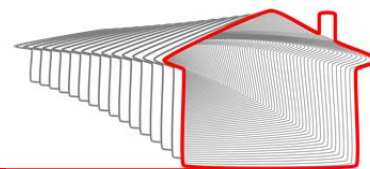
## Telecommunications Act comment

The impact statement requests comment on the Telecommunications Act sections 7 & 8. ***Above all else please remove the restriction on who the Building sector may utilise to connect to and operate it's infrastructure (the 1 km rule).*** Additionally:

- Regarding section 7 of the Telecommunications Act of 1997 we would recommend most of the provisions of the Fibre Deployment Bill 2011 are maintained with the following amendments:
  - No exceptions are permitted to the deployment of fibre ready infrastructure within Greenfields sites. Providing exceptions will only increase the rural/ urban digital divide and limit options to deploy future technologies relying on broadband infrastructure within these sites;
  - That very clear demarcation points, similar to the Main Distribution Frame applying to copper infrastructure are mandated;
  - That sites that have already had NBN Co fibre deployed be given the choice of converting this to Private Fibre;

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- Incidental to Sections 7 & 8 it is also strongly recommended that any consideration of NBN Co setting standards on private property be clearly and unequivocally removed and that a body equally representing the built environment be utilised to set these standards. The work could be passed to a body similar to AS S009.

It is hoped the above provides an alternative perspective before any further knee-jerk legislation is enacted.

DMR Yelland

Director

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26 October 2014