

# REGIONAL TELECOMMUNICATIONS REVIEW 2015

TASMANIAN GOVERNMENT  
SUBMISSION

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## EXECUTIVE SUMMARY

Tasmania has a regional economy and a decentralised population. Its mountainous terrain is separated from Australia's major population centres by the waters of Bass Strait.

These factors decrease the viability of the telecommunications infrastructure needed to deliver services in Tasmania which are comparable to those available in similarly populated areas of Australia.

Telecommunications services in Tasmania have therefore been impacted by:

- a lack of competition, with higher than average dominance of Telstra across the whole sector;
- the high cost of backhaul across Bass Strait;
- mobile and broadband blackspots, and
- fewer retail providers and sometimes reduced retail service performance compared with much of the rest of Australia.

The Tasmanian Government considers that the whole of Tasmania exhibits characteristics of a regional telecommunications market.

The positive news is that recent years have seen some investment in competitive wholesale infrastructure in and to the State, and this has led to investment by retail service providers, particularly in Hobart. In addition, the National Broadband Network (nbn) is improving the quality of telecommunications services available to many households in the State.

However, there remain a number of significant issues. In particular:

- the Bass Strait Islands continue to suffer substantial disadvantage, and
- crucially, the lack of dedicated, redundant, non-Telstra optic fibre capacity across Bass Strait continues to limit what can be achieved in relation to:
  - the attraction of businesses with high-volume data transfer requirements, and
  - the growth and maturity of an on-island wholesale telecommunications industry which can underpin Tasmania's future digital economy.

## GENERAL ISSUES ACROSS REGIONAL AUSTRALIA

The nbn rollout in Tasmania is well progressed. Existing rollout details, together with the recently published indicative schedule of work, now show all localities of Tasmania that will receive an nbn fixed-line service.

Accordingly, the issues listed below focus on the range of telecommunications issues and problems that will exist across the State during and post the rollout:

- mobile phone black spots;
- gaps in availability and quality of broadband services not yet covered by nbn wireless or fixed line services;
- continuing reports by customers of missed appointments and last minute rescheduling by nbn installers, contrary to the Customer Service Guarantee (CSG);
- poor provision of, and ability to change, nbn services in multi-dwelling or complex sites, such as apartments, shopping centres and office blocks, especially where tenancy boundaries are subject to change;
- uncertainty regarding the future range and quality of nbn service offerings for consumer grade through to enterprise grade services, especially uncertainty about the timeframe for committed fault repair times and service availability guarantees suitable for business and enterprise customers, including hospitals, in regional centres; and
- uncertainty on the model for delivery of the universal service obligation (USO), including likely technology mix, costing model and ongoing funding.

The issues listed above are not addressed further in this submission. They have been covered in many other forums. They are also common across all of regional, rural and remote Australia.

# BASS STRAIT ISLANDS

## OVERVIEW OF THE CURRENT SITUATION

The Bass Strait Islands covered by the municipalities of the King Island Council and the Flinders Council, which include the Fumeaux group of islands, have turned into communications backwaters due to lack of investment, particularly in backhaul infrastructure.

Compared to other small localities in rural Tasmania, they have extremely poor broadband services. Telstra is the only mobile phone provider, offering only 3G services. Both municipalities have mobile phone black spots. However, the Flinders Council municipality has particularly poor mobile phone coverage.

Currently, Currie which is the main town on King Island, has good availability, but very poor quality, broadband services. Outside of Currie, broadband availability and quality are very poor<sup>1</sup>.

## BACKHAUL

Lack of backhaul capacity is the major driver of these issues on the Islands.

In most of Australia, the nbn is delivering services from premises to the points of interconnect (POI). This has changed the demand for backhaul services in most of regional and remote Australia. Mobile phone carriers have highlighted that nbn can also be used to assist in the delivery of competitive mobile phone coverage in regional Australia.

The lack of backhaul capacity to the Islands has contributed to the decision of nbn to provide only satellite services to the Islands. Backhaul capacity also constrains the ability to rollout 4G mobile phone services.

The current backhaul services uses radio links. These links, which have been recently upgraded by Telstra, support the telephony services, mobile phone services and, where available, ADSL broadband services.

The radio link facilities on Flinders Island are subject to ocean salt spray and this will reduce the life span of the installed equipment.

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<sup>1</sup> National Map broadband availability ([www.nationalmap.gov.au](http://www.nationalmap.gov.au)).

In summary, the lack of capacity and redundancy is impacting on the reliability and range of services available on the Islands.

## NBN PLANS AND LIMITATIONS

nbn plans to service the Islands via satellite. The table below summarises the current situation, and provides a comparison with other similar sized communities in Tasmania.

Location	Population <sup>2</sup>	nbn <sup>2</sup>	Telstra mobile <sup>2</sup>
King Island Council	1,565	Satellite	3G
Currie, King Island	687	Satellite	3G
Flinders Council	776	Satellite	Patchy 3G
Whitemark, Flinders Island	444	Satellite	3G
<b>Comparison localities</b>			
Ross	423	Wireless	3G
Stanley	481	Wireless	3G
Swansea	771	Wireless	4G

The nbn coverage is either actual or planned coverage.

Remote communities have the potential to improve business and education opportunities through the use of high speed broadband services. This includes increased use of video services such as video conferencing.

While nbn satellite services will be a vast improvement over the current broadband services, latency limits their usability for telephony and video conferencing.

As each satellite has a fixed capacity, all of remote Australia will benefit if reasonable sized communities are taken off the satellite service and moved to alternative nbn services.

## SOLUTIONS

In recent years, the Australian Government has recognised the impact of poor backhaul infrastructure on remote and regional locations across Australia, and a range of programs has funded backhaul service improvements. Tasmania did not receive any funding under these programs.

<sup>2</sup> Sources: 2011 Census ([www.abs.gov.au](http://www.abs.gov.au)), NBN coverage maps, Telstra coverage source [www.telstra.com.au](http://www.telstra.com.au)

The Bass Strait Islands are clear examples of locations where the poor quality and low capacity of backhaul services is constraining all telecommunications services.

**The Tasmanian Government believes that the Bass Strait Islands should have backhaul services that are sufficient to support nbn wireless services and 4G mobile services across the Islands.**

# BASS STRAIT BACKHAUL

## COMMERCIAL CHALLENGES

The commercial challenges and limitations of Tasmania's current Bass Strait backhaul communications infrastructure include:

- there are three fibre cables across Bass Strait, but only one service provider can offer dedicated, carrier-grade, redundant capacity;
- mainland to Tasmania carriage is therefore materially uncompetitive;
- this limited competition means that Tasmania struggles to attract major digital service providers or relevant digital infrastructure investment;
- while the cost of Tasmanian backhaul to mainland POIs have come down over time and with regulation, the costs remain materially and persistently higher than for inter-capital links over a similar distances on mainland Australia;
- all data traffic bound for international POIs in Sydney and elsewhere must currently be routed via a non-international POI in Melbourne, and often through a multiplicity of third party owned links to reach Melbourne;
- Tasmania's small population makes it highly challenging to create sufficient scale from local demand to defray the significant capital cost of establishing the standard and pricing of backhaul infrastructure that is required by off-island-focussed, locally-based digital businesses seeking to expand, or new national and global scale digital service providers; and
- retail service providers willing to invest in Tasmania may 'underspec' local infrastructure or use throttling and selective traffic prioritisation to 'claw back' margin lost due to Bass Strait backhaul costs.

## WHY A NEW CABLE

A fourth communications cable(s) to mainland Australia, with ownership independent of existing redundant cable operator Telstra, would:

- create new redundant backhaul communication pathways;
- link Tasmania directly to international submarine pathways with redundant east-west connectivity;

- ameliorate the current monopoly/duopoly on backhaul communications to mainland Australia - benefiting existing and new users by increasing competitive pressure to close the pricing gap relative to equivalent mainland backhaul services, providing greater backhaul scalability and reliability through more diverse redundant communication paths and increasing the choice, range and quality of services;
- potentially, if the new link provided direct access to an international POI in Sydney:
  - open up new economic opportunities not possible with current backhaul infrastructure to mainland Australia including attraction of major data centres providing time sensitive data, transactions, storage and archival services and digital research facilities and other digital services that may cluster around data centres and other foundation businesses; and
  - avoid the higher risk, limited redundancy communications paths to Melbourne and a more direct connection through to international and other markets outside Melbourne.

## CURRENT DISCUSSIONS

The Tasmanian Government remains in discussions with SubPartners about the APX-Central proposal and fibre spur to Tasmania and is seeking specialised technical and commercial advice on the proposal.

Once the Government has investigated the costs and opportunities, it will be in a position to make an informed decision about its involvement in the project.

The Government is open to discussions with the Australian Government on options to support this opportunity, or alternative options, to improve the level of telecommunications competition and redundancy across Bass Strait.

## SUMMARY

In summary a new entrant owned fourth link to mainland Australia would address the disadvantages from the lack of world class digital communications infrastructure, higher latency to end users, limited competition, use by incumbents of market power, and the exclusion from consideration of Tasmania as a potential location for major data centres and other digital services providers.

This is not to say that off-island focussed Tasmanian digital businesses would automatically expand or that global data centres would or could be attracted, only that they will not expand or be attracted without such connections being available. An investigation into why the major potential investors have not seriously considered Tasmania increasingly shows that renewable and/or lower cost energy, geographic stability, cooler climate, lifestyle and other potential advantages of Tasmania as a data centre location are very much secondary considerations to diverse path, direct international POI connected, low latency, dedicated (not shared/leased) competitively priced high capacity communications.

Australian Government support to address this issue will assist Tasmania's economic future

## NBN POINTS OF INTERCONNECT

There has been comment in the media on the current nbn points of interconnect model. These comments have focused entirely on nbn issues, not the broader telecommunications industry or ICT industry.

The Australian Competition and Consumer Council (ACCC) took a whole of the telecommunications market approach in its determination on this point. Any proposal to change the POI model must consider possible impacts across the telecommunications sector, not just nbn-specific issues.

The current model of having 121 nbn POI, including two in Tasmania, has received recent criticisms due to the increased costs it creates for nbn retail service providers.

A heavily consolidated POI model consolidates demand for a range of telecommunications services. As noted by the ACCC<sup>3</sup>, this approach runs the risk of removal of existing competition in the backhaul market and reducing future options.

The ACCC's criteria places the 121 POIs where there is a competitive backhaul service market. This creates a number of benefits in Tasmania:

- *Enhances local, on-island, information and communications technology development.* This requires local access to the nbn, not access via the transmission to the mainland. It also requires the ongoing existence of a dynamic, innovative, local transmission market.
- *Enhances local, on-island, service and content deployment capability.* This requires that local nbn traffic not be routed via the mainland Australia.

A centralised POI model, including the super-POIs model recently floated by some industry commentators, would displace intrastate transmission providers and could also stifle wholesale and inter-modal competition. It would also lead to more pervasive regulation than is necessary, at significant cost to end users and the economy generally.

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<sup>3</sup> ACCC, nbn Points of Interconnect, 13 December 2013.  
<https://www.accc.gov.au/publications/NBN-points-of-interconnection>.

Maintaining nbn POIs in Tasmania supports a competitive backhaul market. This, in turn, produces benefits for mobile phone carriers, who are steadily increasing their backhaul requirements, retail service providers and the owners of telecommunications, and related, infrastructure aimed at business customers.

In a Tasmanian context, the two POIs support a competitive local ICT service industry that supports local businesses. This includes investment and competition in telecommunications infrastructure to supply services to local businesses and non-government schools.

Locating POIs in Tasmania makes the problem of competitive backhaul across Bass Strait a visible problem to all users of telecommunications services in the State.



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