

**Submission by the Norfolk Island Accommodation and
Tourism Association (ATA)**

to

Committee Chair, Dr Anne Webster MP

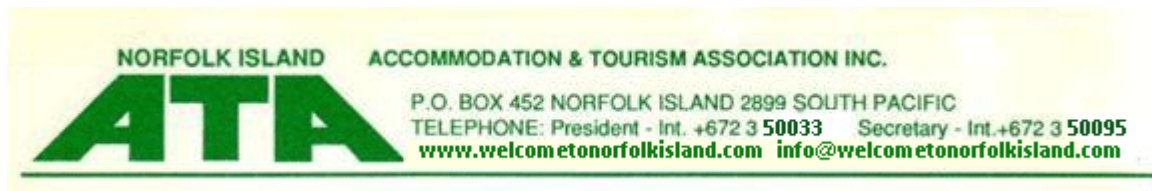
**Joint Standing Committee on the National Capital and
External Territories**

Enabling communications infrastructure in Australia's external
territories of Norfolk Island, Christmas Island, and the Cocos
(Keeling) Islands.

27 January 2021

Accommodation and Tourism Association – Principal Contact
Rael Donde
President





RE: Norfolk Island Telecommunications

Dear Committee Chair, JSCNCET

Thank you for the opportunity to provide a submission on Telecommunications, which is so vital to the social and economic wellbeing of Norfolk Island. The Norfolk Island Accommodation and Tourism Association (ATA) represents most tourist accommodation operators on Norfolk Island, offering a diverse range of accommodation options to tourists, as well as representing other Norfolk Island tourism providers. The focus of this submission is primarily around the tourist telecommunications experience and opportunities for improvement.

Submarine Fibre Optic Cable

On 6 November 2016, the ATA wrote to the then Minister for Territories and the Minister for Communications requesting Federal Government support to seize the opportunity to secure a Norfolk Island connection to the Hawaiki submarine cable. This letter is included as Appendix 1 in this submission, as it is as relevant today as it was in 2016.

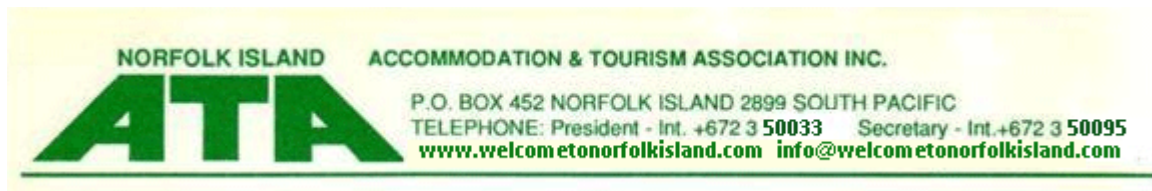
This commercial cable initiative, which was laid approximately 70 kms to Norfolk, offered a once in a generation opportunity for the island to have first world telecommunications services, enabling superior education, health, and other government services as well as greater opportunities for tourism and other service sector businesses to locate and thrive on the island. This infrastructure would also enable Norfolk Island to diversify its economy instead of being almost completely reliant on tourism.

Unfortunately, at that time, the Federal Government declined to become involved to facilitate a fibre optic connection to Norfolk Island, and the opportunity was sadly lost. The Federal Government naively claimed that the NBN Skymuster service was suitable for Norfolk Island's needs.

Norfolk Island's high-quality fibre and copper fixed line assets are becoming stranded as the NBN continues to use SkyMuster to compete with Norfolk Telecom's fixed line service.

The NBN's current approach of SkyMuster only is clearly inappropriate as evidenced by the fact that Norfolk Island with around 1385 premises and a population of approximately 1,800 people is by far the most populated location targeted by the NBN for SkyMuster.

ATA Submission: Enabling communications infrastructure in Australia's external territories



Please refer to the Submission by Ben Howard to the Joint Standing Committee on the NBN Rollout dated March 2017. Copy is provided in Appendix 2 of this submission. Excerpt copied below:

Will the NBN rollout on Norfolk Island bridge the digital divide?

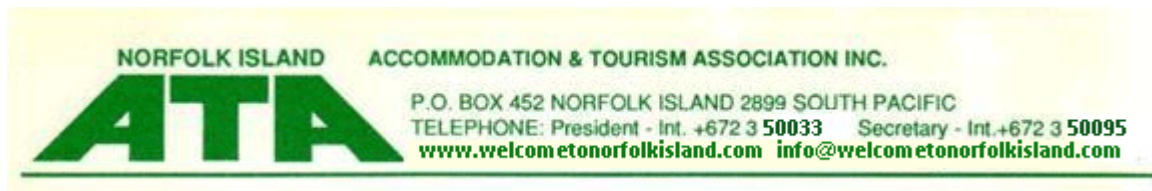
The NBN corporate plan explains its purpose is to “connect Australia and bridge the digital divide”, but Sky Muster is unlikely to help much to achieve this aim on Norfolk Island. In their singular commitment to deliver the minimum mandated service, NBN has seemingly lost sight of its intended purpose. Sky Muster is not a solution to the actual communications problems that need attention on Norfolk Island. Norfolk Island is already serviced by fixed-line DSL offered to 100% of premises.

Sky Muster has a faster download speed in theory but suffers from higher connection delay (latency) and does not offer improved monthly limits or monthly pricing for end users. Good communications technology is especially critical in extremely isolated places because there are limited alternatives. In the middle of the Pacific Ocean, Norfolk Island does not have access to a regional centre for better employment or education opportunities. Yet with 1,385 premises, Norfolk Island has the largest number of premises of any town/suburb to be serviced exclusively by Sky Muster. 1 With only the poorest NBN offering, Norfolk Island is set to become a study in what happens when a community is stranded on the wrong side of the digital divide.

What is the most effective bridge that could be built to Norfolk Island?

Building on Norfolk Island’s existing infrastructure to connect optic-fibre submarine cable would enable all communications services on the island to be provided under a single framework, meeting the needs of all current and future residents, businesses, visitors and service providers and allow future upgrade paths. The 25+ year life-expectancy of a cable would see the island through the recovery of its economy and the education of at least 1000 school students.

Opportunities for Australians on Norfolk Island would be brought into line with those of mainland Australia, and also with other Pacific islands such as Fiji, Tonga, and Samoa who have all secured connections to optic-fibre cables. DFAT’s contribution of US\$1.5M toward Samoa’s connection shows the Australian Government understands how effective fibre connections are for islands. Being a single land mass with an existing cable landing station and an existing FTTN network, Norfolk Island is perfectly positioned for a connection to a cable. If this was to happen then NBN would not need to own the cable but could lease



capacity from the cable supplier, like it does to service Tasmania and elsewhere.

The Federal Government has made possible the undersea fibre optic cable connections to Samoa, Vanuatu, Solomon Islands, Papua New Guinea and Christmas Island, but not to Norfolk Island.

Refer to the Statement below in italics dated 7 September 2018 by the Administrator of Christmas Island, Natasha Griggs, regarding their undersea Fibre Optic cable which was made possible by the Federal Government:

*Internet services provided by undersea cable will also be more reliable as they will not be disrupted by the weather. Government agencies, businesses and residents on island will all now have access to **internet services that are as good as those available on the mainland.** Tele-health will be facilitated by improved video-conferencing and students will find it quicker and easier to access the internet for their studies.*

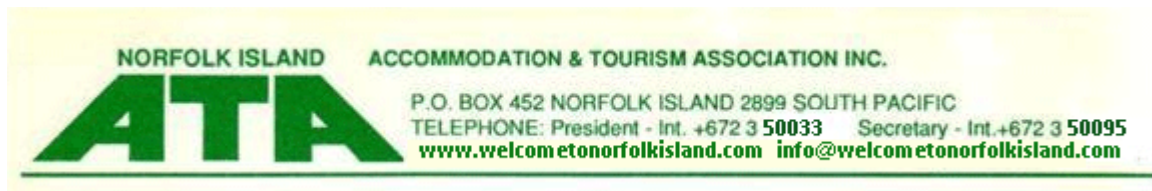
***Tourists will be a major beneficiary of high-speed Internet**, building on last week's launch of free WiFi at Christmas Island airport. Looking to the future development of the Christmas Island economy, improved connectivity will create opportunities for new and existing businesses seeking to deliver goods and services via the internet. Earlier this year, Vocus Communications laid a cable extension to Christmas Island branching off from the main Australia-Singapore cable.*

On 12 January 2021, Norfolk Island upgraded its mobile network from 2G to 3G/4G, which is providing a vast improvement to the tourist experience on Norfolk Island, as tourists can stay connected to the internet almost anywhere on Norfolk Island for the first time. This is a basic expectation anywhere in the world.

However, the 3G/4G network still requires limiting and expensive satellite links, and the slow speed, limited bandwidth, high cost and impact of the weather will continue to be factors. Cable transmits far more data at far less cost than satellites.

Refer to DIRD commissioned GQI Norfolk Island Mobile Network Review report. Fixed and mobile services on the island will remain poor and generally not support tourism, other service sector businesses and high-quality provision of government services.

In August 2020, the Chilean government announced plans for the development of its Transoceanic Cable, a route that will span the Pacific to connect Chile to Oceania. The route for its planned 13,180km transoceanic fibre-optic cable would run through Auckland and



have its terminus in Sydney. This exciting development presents another rare opportunity to connect a cable spur to Norfolk Island. The ATA encourages the Federal Government to make this possible.

The Federal Government would need to commit to funding a branching unit to connect Norfolk Island with the Chile-NZ-Australia cable for use in long-lining services, with further funding to be provided subject to partnerships sourcing complementary funding and a business case prepared by the Norfolk Island Regional Council (NIRC) with DIRD and in conjunction with an Australian mobile telecommunications provider, most likely Telstra.

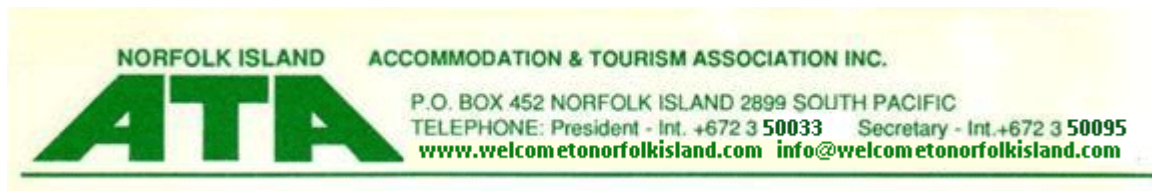
Under this scenario Norfolk Telecom would own and operate the cable spur and wholesale the link to the NBN. Norfolk Telecom would also retail data offerings to other government agencies and businesses as required, e.g. Border Force, Education and Health (e.g. for CCTV and transmission of digital medical scans), accessing educational applications and enabling remote medical diagnostics saving further government funds and enhancing services.

The NBN would acquire Norfolk Telecom's fixed line assets (similar to the acquisition of Telstra assets which has occurred in Australia) and wholesale Fibre to the Node (FTTN) to Norfolk Telecom as an NBN retailer, as well as fixed wireless and SkyMuster services if and where necessary.

Current System Limitations

- Exorbitant International phone charges between mainland and Norfolk Island. This is detrimental to the visitor experience and increases the cost of doing business.
- Lack of access to most Australian free phone numbers.
- Limited SMS capability prevents access to the two-step authentication process for many websites, including accounting, taxation, online banking, online booking platforms such as Booking.com).
- Examples of SMS Denial: Xero accounting software sends an SMS to authenticate the monthly Australian Superannuation payment. Businesses on Norfolk Island are unable to receive the SMS. The accommodation booking platform Booking.com sends an SMS to authenticate a log in from a new device or to verify users. Businesses on Norfolk Island are unable to receive the SMS.
- Limited choice of data plans with a maximum of just 200 GB per month. With visitors consuming around 1 GB every day, this means the maximum data plan only services 200 visitor nights (eg. Less than 7 visitors for 30 nights).
- Excessive internet pricing compared to mainland Australia and most locations worldwide.
- The data plans should roll over month to month, rather than use it or lose it.

ATA Submission: Enabling communications infrastructure in Australia's external territories



- Integration into the Australian country code 61 has not occurred yet. Cloud based VOIP PABX means a local PABX is still required for local calls as Australian and Norfolk Island systems do not share the same country code.

Please refer to actual feedback from ATA members below:

Response 1: ATA Member

From the point of view of our guests and our businesses, being a “part of Australia” but not having access to the basic infrastructure like communication (as well as hospital and stable education system) is the greatest flaw in the program of integrating Norfolk Island into the Australian system.

Our biggest concerns are:

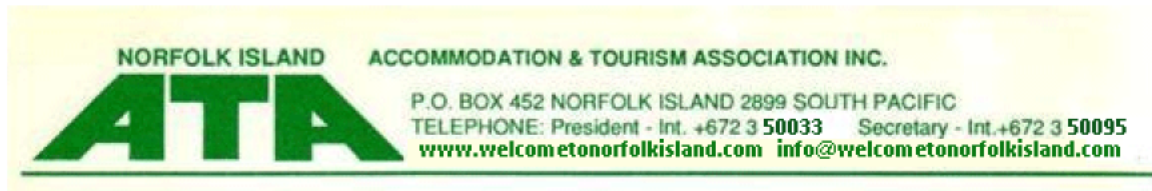
- Not being able to have domestic telephone and internet charges but having to pay international charges when making calls between Australia and Norfolk Island;
- Not being able to use Australian free numbers (without going through a process of allowing access to them on one at a time basis);
- Not having standard phone numbers that makes it impossible in most cases to comply with the two-step authentication process required by most business software (accounting, taxation, online banking, use of online reservation systems, etc).
- Limit to 200Gb (peak data) plans on NBN and other satellite services per location/account does not allow us to provide our guests and office administration with enough data.

Response 2: ATA Member

My thoughts are that the phone system here is not up to scratch, especially the new one. They have had months to get it right, even delaying introducing the system so they could get it right - and have not.

- The pricing is way over the top compared to Australia" and after all, we are Australia.
- The data plans should roll over month to month rather than use it or lose it.
- And we are still international, which is a big problem. Now should have been a time to have integrated into the Australian system of international 61.

ATA Submission: Enabling communications infrastructure in Australia’s external territories

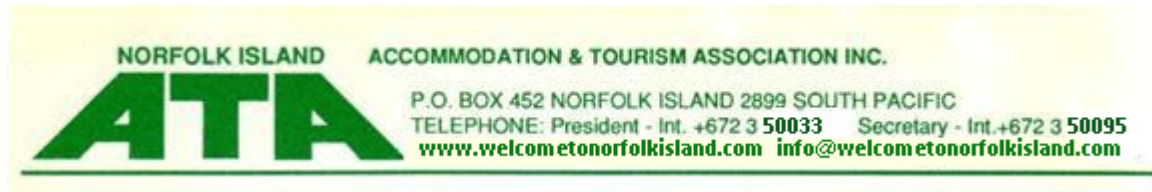


The ATA is hopeful that the Federal Government will not allow Norfolk Island to become an example of what happens when a community is stranded on the wrong side of the digital divide.

The ATA urges the Federal Government to provide appropriate telecommunication infrastructure for Norfolk Island to enhance its social, economic, and medical wellbeing, so that islanders can enjoy the same benefits that many Australians take for granted.

Sincerely,

Rael Dond
ATA President



Appendix 1:

Submission by the Norfolk Island Accommodation and Tourism Association (ATA) to Hon.
Minister Fiona Nash MP, Minister for Local Government and Territories
AND Hon. Minister Mitch Fifield MP, Minister for Communications
Federal Government Support Request
Hawaiki Submarine Fibre Optic link to Norfolk Island
6 November 2016



**Submission by the Norfolk Island Accommodation and
Tourism Association (ATA)**

to

Hon. Minister Fiona Nash MP

Minister for Local Government and Territories

AND

Hon. Minister Mitch Fifield MP

Minister for Communications

Federal Government Support Request

Hawaiki Submarine Fibre Optic link to Norfolk Island

6 November 2016

Accommodation and Tourism Association – Principal Contact
Rael Donde
President



ATA Submission: Hawaiki Submarine Fibre Optic link to Norfolk Island



RE: Norfolk Island Telecommunications

Dear Ministers Nash and Fifield,

Following on from recent meetings, discussions and correspondence, the Norfolk Island Accommodation and Tourism Association unanimously seeks your prompt support and action to secure a Norfolk Island connection to the Hawaiki submarine cable. This commercial cable initiative, which is been laid approximately 50 kms to Norfolk, offers a once in a generation opportunity for the island to have first world telecommunications services, which in turn will enable superior education, health and other government services as well as greater opportunities for tourism and other service sector businesses to locate and thrive on the island.

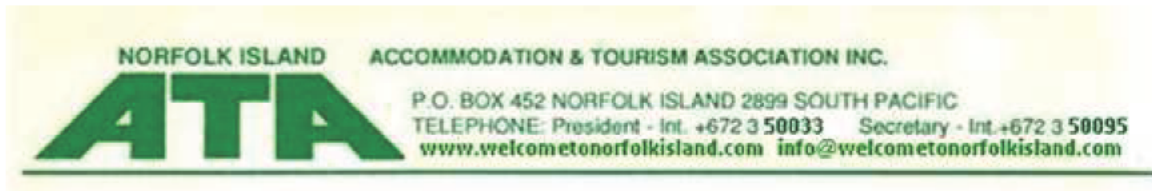
The choice is clear. **Business as usual is not an option**, as under an ongoing STANDALONE SCENARIO, Norfolk Island's high quality fibre and copper fixed line assets will be stranded as the NBN continues to use SkyMuster to compete with Norfolk Telecom's fixed line service.

The NBN's current approach of SkyMuster only is clearly inappropriate as evidenced by the fact that Norfolk Island with 1385 premises and 2200 people is by far the most populated location targeted by the NBN for SkyMuster.

Upgrading the existing 2G mobiles network will be costly and still require limiting and expensive satellite links (see DIRD commissioned GQI Norfolk Island Mobile Network Review report). **Fixed and mobile services on the island will remain poor and not support tourism, other service sector businesses and high quality provision of government services.**

The exciting alternative CONNECTED SCENARIO is for the Australian Government to immediately **provide up front funds needed now for the Norfolk branching unit (US\$600k on offer or negotiated lower price)** to connect with the Hawaiki cable for use in long-lining services as recommended by the Department of Infrastructure and Development (DIRD) report, with further funding to be provided subject to partnerships sourcing complementary funding and a business case prepared by the Norfolk Island Regional Council (NIRC) with DIRD and in conjunction with an Australian mobile telecommunications provider, most likely Telstra. Under this scenario Norfolk Telecom would own and operate the cable spur and wholesale the link to the NBN. Norfolk Telecom would also retail Hawaiki data offerings to other government agencies and

ATA Submission: Hawaiki Submarine Fibre Optic link to Norfolk Island



businesses as required, e.g. Border Force, Education and Health (e.g. for CCTV and transmission of digital medical scans), accessing educational applications and enabling remote medical diagnostics saving further government funds and enhancing services.

The NBN would acquire Norfolk Telecom's fixed line assets (similar to the acquisition of Telstra assets which has occurred in Australia) and wholesale Fiber to the Node (FTTN) to Norfolk Telecom as an NBN retailer, as well as fixed wireless and SkyMuster services if and where necessary.

Norfolk Telecom would invest the funds received toward paying for the cable. This would enable good quality, affordable connectivity on the island meeting the expectations of the existing 30k tourists per annum, soon to be bolstered by the up to 100k additional tourists brought to the island by cruise ships enabled by the current port facility upgrade. Telstra or other Australian mobile provider would co-invest in Norfolk Telecom's mobile business using long-lining of functionality enabling a low cost upgrade.

This CONNECTED SCENARIO parallels what Prime Minister Turnbull saw when he visited Queensland in late October 2016 where Birdsville (population 116) and several other small communities, some hundreds of kilometres away are being connected by Telstra fibre which is enabling 4G Telstra mobiles and the provision of FTTN NBN into these tiny communities enabled by partnerships with the local councils.

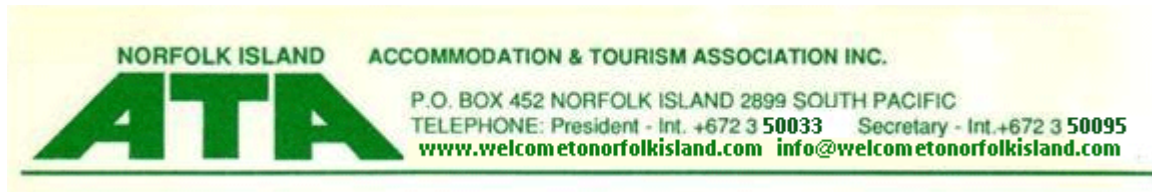
If the Australian Government can work with the NIRC to realise the CONNECTED SCENARIO then the Australian Government will have not one (Birdsville) but two (with Norfolk Island) demonstration proof points of the enormous benefits the NBN can bring to remote communities through effective partnerships with local councils.

The ATA request you to urgently confirm your willingness to support the upfront cable connection costs to Hawaiki and the NIRC and that you nominate a senior telecommunications officer, or perhaps the GQI consultants given their existing knowledge of the island, to work with the NIRC and others to finalise plans for an execution of this exciting scenario.

Sincerely,

Rael Donde

ATA



Appendix 2:

Submission by Ben Howard to the Joint Standing Committee on the NBN Rollout dated March 2017.

**Joint Standing Committee on the
National Broadband Network (NBN)**

Re: NBN's mandated rollout in relation to Norfolk Island

Submission by Benjamin Howard

March 2017

Submission to the Joint Standing Committee on the NBN, re: NBN's mandate in relation to Norfolk Island

Background

Norfolk Island is an Australian external territory located 1,400 km east of the Australian mainland and is home to approx. 2,000. Having a small land mass of only 35 sq km, Norfolk Island's only industry is tourism with approx. 27,000 visitors annually. Many who visit are attracted by its abundant natural beauty and unique history and culture. The Kingston and Arthurs Vale Historic Area (KAVHA) has been formally recognised as both an Australian National Heritage and UNESCO World Heritage site.

From the 1st July 2016 and after closing the island's legislative assembly, the Australian Government has taken over the direct administration of Norfolk Island on the basis that they can do it better than the island community. Norfolk Island is now a part of the electorate of Canberra. Many of the Norfolk Island people are reluctant participants in becoming more closely administered by Australia and therefore it is essential that they experience the promised benefits, including the promised upgrades to telecommunications.

Ben Howard holds a Communications Degree from the University of Canberra, and is inspired by information technology's power to promote global economic and educational equality. Ben has had a close relationship with Norfolk Island for over 40 years, his grandparents having relocated there in the 1970's. In July 2016, Ben started investigating what was being done about the rare opportunity to connect to one of the optic-fibre cables that are presently being run past Norfolk Island. Ben found that the Island's priorities to connect to a cable had been dropped under new governance arrangements, and is concerned that Norfolk's communications planning is endangered as a consequence of the governance changes, particularly by the mandated NBN rollout.

Summary

We are entering a time where access to quality telecommunications technology is mandatory for participation in the global economy, and nowhere will the impact of this be more profound than places in extreme isolation such as Norfolk Island.

In the 2016 "NBN Co Statement of Expectations", NBN is mandated by the Australian Government simply to provide a minimum level of broadband access to every residential and business premises as quickly and cheaply as possible. In delivering broadband only, the mandate does not require NBN to consider a region's broader communications needs. In consequence, NBN has assigned the Sky Muster satellite service as its answer for Norfolk Island, despite the technology's inability to meet all the needs of the territory.

Consideration of the suitability of Sky Muster for Norfolk Island finds that:

- Norfolk Island has the largest number of premises for any single location in all of Australia to be serviced exclusively by Sky Muster;
- subsidised NBN competition will endanger Norfolk Island's fixed-line and mobile services;
- various local, state and federal government bodies are unable to use Sky Muster and must therefore maintain their own costly and separate satellite arrangements;
- Norfolk Island has an island-wide FTTN network, an impressive cable landing station, and fixed-line coverage to 100% of premises, that may all go to waste;
- there are better ways to service Norfolk Island than a dish on every roof. Building upon existing infrastructure would achieve far superior results at lower overall cost.

Submission to the Joint Standing Committee on the NBN, re: NBN's mandate in relation to Norfolk Island

Will the NBN rollout on Norfolk Island bridge the digital divide?

The NBN corporate plan explains its purpose is to “connect Australia and bridge the digital divide”, but Sky Muster is unlikely to help much to achieve this aim on Norfolk Island. In their singular commitment to deliver the minimum mandated service, NBN has seemingly lost sight of its intended purpose.

Sky Muster is not a solution to the actual communications problems that need attention on Norfolk Island. Norfolk Island is already serviced by fixed-line DSL offered to 100% of premises. Sky Muster has a faster download speed in theory, but suffers from higher connection delay (latency) and does not offer improved monthly limits or monthly pricing for end users.

Good communications technology is especially critical in extremely isolated places, because there are limited alternatives. In the middle of the Pacific Ocean, Norfolk Island does not have access to a regional centre for better employment or education opportunities. Yet with 1,385 premises, Norfolk Island has the largest number of premises of any town/suburb to be serviced exclusively by Sky Muster.¹

With only the poorest NBN offering, Norfolk Island is set to become a study in what happens when a community is stranded on the wrong side of the digital divide.

Parallels with Queenstown, TAS

Queenstown in remote western Tasmania with 1,209 premises was previously thought to be the largest town in Australia targeted for service by Sky Muster. During the March 2016 hearing of the Select Committee on the NBN, Senators described Queenstown as having been ‘dudged’, with Senator Urquhart describing the decision to the Senate as “nothing short of economic vandalism”.

Recognising the importance of good communications to their remote region, representatives for Queenstown (including the Member for Braddon, the Mayor of Queenstown, and Senator Urquhart) have since secured a different NBN technology mix that ensures Queenstown will not be left behind.

Will the rollout of Sky Muster place Norfolk Island’s existing services at risk?

Norfolk Island’s existing communications services include a mobile phone network and a quality fixed-line DSL internet and voice service offered to 100% of premises on the island. Services are provided by Norfolk Telecom - a Local Government Enterprise owned by the Norfolk Island Regional Council (NIRC).

Through the provision of these vital services Norfolk Telecom has historically been an important source of local revenue, however the sudden availability of “free” (NBN subsidised) Sky Muster installations to everyone on the island is eroding Norfolk Telecom’s customer base.

Sky Muster is not a replacement for all the vital communications services it is displacing and its introduction without a plan for the other services may create a situation where the Australian Government will be required to provide repeated bailouts to avoid the loss of those services.

Norfolk Telecom has substantial contractual commitments to satellite providers mainly for the provision of the DSL internet service. In a November 2016 council resolution, the NIRC acknowledged that “the financial viability of Telecom is in serious doubt. Losses from internet operations more than outweigh profits from mobile and landline operations.”

¹ finder.com.au : “NBN: Who gets the most Sky Muster satellite coverage?”

Submission to the Joint Standing Committee on the NBN, re: NBN's mandate in relation to Norfolk Island

Parallels with Christmas Island

Sky Muster is displacing existing services in the Australian external territory of Christmas Island, where “free” installations are being rolled out in competition with existing services.

1st March 2017: Christmas Island’s ISP closes due to insolvency and cites NBN’s “anti-competitive” introduction.² A spokesperson for the ISP told CommsDay: *“For over a year at every opportunity the Commonwealth was told that there was a 100% chance of failure of the local ISP once we started to see a taxpayer subsidised churn to NBN.”*³

10th March 2017: Australian taxpayers are forced to foot a costly bill for the re-establishment of services on Christmas Island.

Is Sky Muster an answer to Norfolk Island’s telecommunications needs?

Island communities in extreme isolation face infrastructure requirements usually associated with larger populations, including an international airport, port facilities, school, hospital, admin buildings, banks, Border Force, power generation, and communications networks.

Sky Muster is intended to service only individual premises (spread out geographically over many square kilometres) and not intended to meet these broader infrastructure needs. This means that separate and costly arrangements must be maintained wherever Sky Muster is not capable of delivering the required level of service.

The NSW Government has confirmed they are implementing a link to the NSW Education Department via dedicated satellite connection for the Norfolk Island Central School (290 students from K-12). It is also understood that the Admin offices, Border Force, and Federal Police will each need to maintain separate satellite arrangements.

Norfolk Island’s Mobile network

The DIRD commissioned “Norfolk Island Mobile Network Review” warned in 2014 that an urgent upgrade to Norfolk Island’s mobile network is required to avoid a “major loss of service”.⁴

A modern generation mobile network will demand significant amounts of data capacity, that Sky Muster is not designed to provide. Thus a separate satellite arrangement will again be required to keep mobile services operational.

- Why introduce Sky Muster when the future of the mobile network is unknown?
- Who will upgrade the mobile network if NBN has forced Norfolk Telecom out of business?
- Will Australian taxpayers be forced to bear the cost?

² perthnow.com.au - “Christmas Island internet services cut over NBN rollout”

³ See Attachment01 & 02 - Communications Day articles about NBN competition on Christmas Island

⁴ [GQI Consulting for Department of Infrastructure and Regional Development - Norfolk Island Mobile Network Review](#)

Submission to the Joint Standing Committee on the NBN, re: NBN's mandate in relation to Norfolk Island

Can't NBN use Norfolk Island's existing infrastructure?

Norfolk Island has an extensive underground fibre network (FTTN) that was funded by the Australian Government as part of the Networking the Nation (NTN) program, a precursor to the NBN, at a cost of \$774K in 2003.⁵ Fibre extends throughout the island with direct links to the hospital, mobile base stations, cable landing station, radio station, telecom exchange, council chambers, admin buildings, school and airport.⁶ In addition, 100% of premises are connected to the island's copper fixed-line.

That the NBN rollout could strand this valuable modern infrastructure and ignore the significant cost paid for it by taxpayers highlights a major failing in the way the NBN has been commissioned to conduct their task.

Of NBN's Multi Technology Mix (MTM), Sky Muster is the option of last resort, reserved for use when other means of service are not feasible. It is described by NBN for use "where premises are spread out geographically over many square kilometres".⁷ Yet with 1,385 premises within 35 sq km, Norfolk Island has an average of 40 premises per sq km.

Norfolk Island's building density is more appropriately serviced by a centralised local network - a central receiver dish or an optic-fibre submarine cable - rather than installing Sky Muster rooftop dishes on every single premises.

It appears that NBN did not properly evaluate Norfolk Island's existing infrastructure before assigning Sky Muster as their answer, and has not considered the full range of viable technology options. NBN's inflexible set of MTM technologies and their deadline is delivering a "quick fix" and is not thinking about the bigger picture.

Technologies do exist to utilize the existing infrastructure and provide superior service in a more profitable manner over the medium term and with significantly better future options

What is the most effective bridge that could be built to Norfolk Island?

Building on Norfolk Island's existing infrastructure to connect optic-fibre submarine cable would enable all communications services on the island to be provided under a single framework, meeting the needs of all current and future residents, businesses, visitors and service providers and allow future upgrade paths.

The 25+ year life-expectancy of a cable would see the island through the recovery of its economy and the education of at least 1000 school students. Opportunities for Australians on Norfolk Island would be brought into line with those of mainland Australia, and also with other Pacific islands such as Fiji, Tonga, and Samoa who have all secured connections to optic-fibre cables. DFAT's contribution of US\$1.5M toward Samoa's connection shows the Australian Government understands how effective fibre connections are for islands.

Being a single land mass with an existing cable landing station and an existing FTTN network, Norfolk Island is perfectly positioned for a connection to a cable. If this was to happen then NBN would not need to own the cable but could lease capacity from the cable supplier, like it does to service Tasmania and elsewhere.

⁵ [Department of Communication, Information Technology and the Arts Annual Report 2002-03](#)

⁶ See Attachment03 - Norfolk Island Fibre Backbone

⁷ [nbco.com.au - The nbn™ Multi Technology Mix](#)

Submission to the Joint Standing Committee on the NBN, re: NBN's mandate in relation to Norfolk Island

Conclusion

In carrying out their mandate to deliver a broadband service to Norfolk Island as cheaply and quickly as possible, the NBN will strand valuable infrastructure and displace existing services that it will not replace. By endangering the continuation of vital services the NBN rollout will incur additional costs to the Australian Government while holding back the Norfolk Island community.

Recommendations

1. The Australian Government must re-assess the mandate they have given to the NBN in regard to Norfolk Island to ensure that it will be achieving the intention of bridging the digital divide.
2. NBN must engage proactively with the Norfolk Island Regional Council and Australian Government to ensure the inclusion of the island's existing telecommunications infrastructure in the broadband solution for the island.
3. NBN must commence a re-evaluation of Norfolk Island's existing infrastructure and change its technology choice from Sky Muster to an option that will provide service through existing infrastructure.
 - a. The evaluation must include an actual "on the ground" examination by the NBN of all the island's ICT infrastructure in order to identify the technology options for providing broadband through the existing infrastructure, e.g:
 - i. connecting the FTTN via a central receiver dish or an optic-fibre submarine cable.
 - ii. using the existing copper, or fixed wireless to reach the premises.
4. Norfolk Island's new representatives (the Member for Canberra and ACT Senators) must familiarise themselves with the island's ICT infrastructure especially in respect to the connectivity needs of a modern tourism and hospitality economy and ensure their constituency is not left holding the title of most populated single location to be 'duded' by the NBN rollout.
5. The island's new representatives and Norfolk Island Regional Council must advocate for residents of the island and work in co-operation with the NBN and the Australian Government to secure the best available future for communications on Norfolk Island.

Submission to the Joint Standing Committee on the NBN, re: NBN's mandate in relation to Norfolk Island

References

finder.com.au - "NBN: Who gets the most Sky Muster satellite coverage?"

<https://www.finder.com.au/nbn-who-gets-the-most-sky-muster-satellite-coverage>

perthnow.com.au - "Christmas Island internet services cut over NBN rollout"

<http://www.perthnow.com.au/news/western-australia/christmas-island-internet-services-cut-over-nbn-rollout/news-story/211225b92071a21930db951cbdd9f0c7>

GQI Consulting for Department of Infrastructure and Regional Development - Norfolk Island Mobile Network Review

http://regional.gov.au/territories/publications/files/GQI_Norfolk_Island_Mobile_Network_Review_2015.pdf

Department of Communication, Information Technology and the Arts Annual Report 2002-03

http://webarchive.nla.gov.au/gov/20050718012311/http://www.dcita.gov.au/home/department/departmental_annual_reports_-_index_page/2002-2003_annual_report

nbnco.com.au - The nbn™ Multi Technology Mix

<http://www.nbnco.com.au/learn-about-the-nbn/network-technology.html>