

Misuse of Market Power Complaint

8 February 2017

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Subject of the Complaint: NBN Predatory Pricing in External Territories

We write to express our concern at NBN Co Limited's (**NBN**) installation of infrastructure that will enable its resellers to provide heavily subsidised services on Christmas Island by means of the Sky Muster Long Term Satellite Service (**LTSS**). The NBN LTSS is subsidised by the Federal Government and designed to bypass an existing local access network operated by Christmas Island Internet Administration Limited (**CiiA**).

We are concerned that, quite apart from NBN's plans being in neither the interests of Australian taxpayers in terms of responsible expenditure nor the interests of many Christmas Island internet users in terms of service quality, affordability or utility, the investment and recurring subsidy to NBN's resellers raise the prospect of a breach of sections 46 and 151AK of the *Competition and Consumer Act 2010* (Cth) (**the Act**).

The supply of NBN's services to certain consumers at prices well below the cost of delivery – in effect predatory pricing – will render CiiA's business model unsustainable and will trigger market failure long before NBN contractors are able to connect all of CiiA's existing subscribers, leaving hundreds of internet users in the remote Australian territory with no internet. NBN installers are expecting it will take between 12 and 18 months to install the 900 satellite dishes that may be required to connect all current CiiA subscribers to Sky Muster. CiiA, which is operating on a not for

profit basis with very small margins across its current subscriber base, will be pushed towards insolvency shortly after the subsidised churn to NBN resellers begins – possibly within a single billing cycle (March 2017). If the estimates provided by the NBN contractors are correct, the majority of the community will be left without internet for up to a year (or longer) from that time.

According to a recent survey by the Australian Communications Consumer Action Network (ACCAN)¹, the most important factor for consumers in choosing a broadband service is price, followed by monthly data allowance and then quality. While NBN resellers will be offering NBN LTTS services at an attractive price, we are concerned that NBN promises on service levels and speeds may be overly optimistic.² Given generally low broadband literacy amongst consumers, it is therefore likely that any attempt by CiiA to differentiate its service will be unsuccessful and therefore any increase in prices to offset losses resulting from the subsidised churn of its subscribers to NBN resellers will result in further customer loss, exacerbating the risk of CiiA's trading position.

CiiA's has made significant investments in a current mobile and fixed data network. These investments, together with the US\$242,000 investment made by the Department of Infrastructure and Regional Development in the 03b satellite terminal on Christmas Island in 2015, have ensured that the "data drought" that exists in much of regional Australia has not existed on Christmas Island. It is difficult to argue that a substantive further taxpayer funded intervention to replace the existing Commonwealth state of the art low-latency satellite backhaul infrastructure and CiiA's fixed wireless and LTE mobile broadband network with hundreds of small high latency satellite dishes is required - or that is it represents a technical advancement. Furthermore, if (as discussed further below) fibre optic cable is going to be landed on Christmas Island in 18 - 24 months it will make the Sky Muster satellite dishes (installed at a cost of several million dollars) the most costly, least technically sound way to deliver an internet service to the community going forward.

To ensure that the residents of Christmas Island continue to have access to the range of mobile data and high-quality fixed data services that are currently available at an efficient cost to Australian taxpayers, CiiA seeks your intervention to ensure that the introduction of heavily subsidised Sky Muster services do not trigger a market failure.

CiiA

CiiA operates on a not for profit basis and offers both fixed and mobile data services to Christmas Island subscribers. CiiA holds a carrier licence provided by the Australian Communications and Media Authority (**ACMA**) and an ACMA 700 Mhz radio spectrum licence to operate a 4G / LTE mobile broadband network on the Island.

Christmas Island does not have an undersea cable to facilitate communications, whether voice or data. As such, to provide a functional internet service to the Island residents, government agencies and businesses, CiiA procures commercial satellite capacity at commercial rates (~\$100,000 per month) which is then distributed locally on its wireless network.

CiiA currently offers mobile broadband services and a range of fixed data services to residential, business, State and Commonwealth subscribers.

CiiA has continued to improve the coverage and reliability of its wireless broadband network by upgrading the technology it uses and investing several hundred thousand dollars in a 4G LTE

¹ <https://accan.org.au/our-work/research/1159-broadband-performance-consumer-decision-making>.

² http://www.theaustralian.com.au/business/business-spectator/sky-muster-a-small-step-forward-for-nbn/news-story/2454f0c629c_d57e91c578a22003e3e2.

network and additional capacity on O3b satellites³ that reduce latency, increase internet speed and improve voice and video quality for end users. Low latency services are particularly important for large consumers such as those using videoconferencing, tele-medicine, etc.

Introduction of Sky Muster by NBN

NBN has selected geostationary satellite services as the technology by which it will meet its universal service obligations in respect of the supply of broadband services to Christmas Island, to be supplied by the Sky Muster satellites. The Sky Muster satellites will provide broadband services to many locations in regional and remote Australia. NBN has designated Christmas Island as a satellite-only location and identified roughly 900 eligible premises.

NBN pays 100% of the cost of installing and maintaining the satellite infrastructure (around \$8,000 per subscriber⁴) that enables private, for-profit NBN resellers to offer services on Christmas Island. It then sells those same resellers satellite capacity on a recurring basis at roughly 15% of the commercial rates CiiA must pay.

NBN Sky Muster services have limited capacity and very low quotas: the maximum allowable peak-hour quota is 75GB a month, which represents about 65% of the average NBN household usage on the mainland.⁵ For most consumers, using this volume of data, the monthly plans offered by NBN resellers that approximate the maximum quota are about 80% more expensive than equivalent CiiA services that are presently available.⁶ However, of particular concern to CiiA is that NBN has set its wholesale pricing far below the cost of delivery for “special requests” by commercial, institutional and not-for-profit customers and that this will result in the larger commercial consumers paying significantly less for the Sky Muster service than they currently do for CiiA’s service. CiiA is concerned that this effectively constitutes predatory pricing. Although these particular consumers are small in number, they have a disproportionate impact on CiiA’s financial viability because their continuing business is essential to support CiiA’s infrastructure investments.

If residents have no option but to acquire services from NBN resellers, then:

- a significant number of CiiA subscribers will likely pay more than they do now;
- approximately 450 residents will lose access to mobile broadband;
- institutions that need a commercial grade low latency service will be forced to use the consumer grade NBN service (or, more likely, pay more for a new commercial service); and
- many households will be forced to ration their internet use as they regularly exceed the NBN maximum peak hour quota.

In this regard, we believe that for most CiiA subscribers the incentive to move to Sky Muster is not to access a service level that does not exist, but rather to access a subsidised service as a hedge against market failure or as a result of a government agency directive. Indeed, for some CiiA

³ O3b satellites are medium Earth orbit (**MEO**) satellites, which are closer to the Earth than NBN’s geostationary satellites. O3b MEO satellite services have a latency of approximately 150 ms, while Sky Muster is a consumer grade geostationary satellite with 600-650 ms latency.

⁴ Coalition Delivering NBN to Regional Australia. Media release (2006, August 17), retrieved from <http://www.fionanash.com.au/Media/MediaReleases/tabid/84/ID/1462/Coalition-Delivering-NBN-to-Regional-Australia.aspx>.

⁵ Aussies watching 13 billion hours of online content a year – ABS. (2006, April 6), retrieved from <http://www.nbnco.com.au/corporate-information/media-centre/media-releases/aussies-watching13billionhoursofonlinecontentayearabs.html>.

⁶ CiiA prices retrieved from <https://ciiA.cx/#plans>; NBN reseller pricing can be retrieved from <https://birrraus.com/satellite/satellite-providers/>.

subscribers, the move to Sky Muster has been hastened by a concern that, if they did not order a Sky Muster service and have the necessary satellite installed during the initial round, they might be required to pay the full \$~8,000 cost of the installation.

Most residential users and small enterprises will see little or no savings on NBN; however, a dozen or so larger entities that currently underwrite the residential services would save by a move to a highly subsidised NBN service. By way of example, Indian Ocean Group Training (**IOGTA**) currently pays \$1,400/month and would be able to access a subsidised NBN service for around \$200/month, Christmas Island High School currently pays \$4,000/month and would see a significant savings on NBN service. Both IOGTA and the High School are satisfied with the CiiA services, however they are purely motivated by a desire to save money.

While the rollout of the NBN LTSS to Christmas Island may on the surface appear to be a worthwhile investment for the taxpayer, with close to 900 eligible premises and a cost of roughly \$8,000 (minimum) per premises, there is evidence to suggest that the taxpayer is being asked to fund a \$7,000,000 dollar project to save a few dozen institutional internet users an aggregate amount of about \$200,000 dollars.

CiiA is concerned that if the “low hanging fruit” – a handful of institutional users – switch to Sky Muster, it will deprive CiiA of a sustainable business model on Christmas Island. The introduction of Sky Muster services to Christmas Island will lead to CiiA’s closure and cause the market distortion. This will result in qualitative reduction in the range of internet services on the island for the following reasons:

- there would no longer be any infrastructure-based competition and all consumers (except the largest consumers that may be able to afford an expensive commercial service) would be forced to switch to Sky Muster resellers, who offer the same service and technical solution for similar fees, with no true competition between NBN resellers;
- consumers would lose access to the only low latency satellite service in the Indian Ocean Territory;
- consumer would lose the ability to compare and choose between the services with different latency. In some circumstances a subscriber on a Sky Muster service may be able to download a file more quickly than they do on a CiiA link, however any activity that involves having a back and forth conversation with a network device on the mainland – such as tele-medicine, tele-law, video conferencing, encrypted services, VPN etc – will always be faster on CiiA than on NBN. Currently Christmas Island is served by a dedicated O3b satellite spot beam with roughly the same capacity as the NBN Sky Muster beam, and technically the O3b backhaul and CiiA fixed wireless network can deliver the same (or greater) speeds to subscribers than the 25:5 or 12:1 speeds NBN offers, with much lower latency. While NBN promotes theoretical 25:5 speeds, CiiA submits that the better metric to use for network performance is latency (often measured by a “ping” test, measuring the time that it takes to for a packet of data to get from Christmas Island to the mainland and back). By this key metric, CiiA, using O3b for backhaul, will always be faster than NBN. This is because the Sky Muster satellites are much further away from the Earth than O3b (36,000km vs 8,000km).

- Furthermore, there is a high risk that congestion-caused high contention ratios during peak times might overwhelm the NBN satellites, creating a massive slow down for every customer.⁷
- consumers would lose access to the only 4G LTE mobile broadband solution in the Territory, as this type of service is not provided by NBN;
- consumers would lose access to High Definition Voice over LTE (VoLTE) which provides the only “mobile” voice alternative to the community beyond Telstra’s current 2G service;
- consumers would suffer from lower data caps, based on absolute restrictions on monthly peak data usage (capped at 75GB per month, most NBN resellers cap at 60GB) and the application of NBN’s Fair Use policy (which imposes lower data caps for Sky Muster services due to the finite capacity available). In comparison, CiiA currently offers unlimited off-peak data and high usage plans that have more than double the peak quota offered by NBN resellers for a commensurately lower price. This reflects the fact that many households presently using over 50 GB per month would have to pay more for their NBN service than they do with CiiA.
- The O3b service is a commercial grade service currently used by The Department of Infrastructure, SERCO (the Detention Centre), Parks Australia, Christmas Island Shire, Customs, AFP, ABF, Christmas Island Hospital, Christmas Island Airport and several other agencies. The closure of CiiA would mean these entities would either need to move to the consumer grade service offered by NBN with the high latency characteristics and weather effects (including a tendency to drop out quickly when it rains), or contract with Optus or other providers for a commercial service.

The CiiA failure would clearly represent a substantial lessening of competition in the market for internet services in Christmas Island, given that CiiA is currently the sole provider of internet services on the Island and, furthermore, it is the only provider of low latency and mobile data services. This significant market failure will occur in a community that is not facing poor or lack of service issues, such that it is in an area of “greatest need”⁸, that ought to be the focus of the provision of uncommercial services such as Sky Muster.

Sky Muster is not the only solution available

As noted above, NBN has chosen geostationary satellites as the technological means to meet its universal service obligation. However, alternate options, that are likely to be less expensive and provide a higher quality and broader range of services, are available. In this regard, we note the recently announced agreement between Vocus Group Limited (**Vocus**) and Alcatel Submarine Networks to construct a submarine cable linking Australia to Singapore (known as the Australia Singapore Cable (**ASC**)),⁹ which will pass Christmas Island. The ASC is targeted to be completed by August 2018, and it is understood that Vocus has already planned for a branching unit to be

⁷ Sky Muster a small step forward for NBN, Gregory M. (October, 2, 2015) retrieved from <http://www.theaustralian.com.au/business/business-spectator/sky-muster-a-small-step-forward-for-nbn/news-story/2454f0c629ced57e91c578a22003e3e2>.

⁸ *Nbn non-commercial services funding options, Final Consultation paper* by Bureau of Communications Research (2015, October 13), p. 7. Retrieved in .doc from <https://www.communications.gov.au/have-your-say/final-consultation-nbn-non-commercial-services-funding-options>.

⁹ Vocus to build 4600km submarine cable linking Asia and Australia (2016, December 6) Retrieved from <https://www.vocus.com.au/news/vocus-to-build-4600km-submarine-cable-linking-asia-and-australia>.

constructed for Christmas Island.¹⁰ The ASC completion and connection of the ASC to Christmas Island by means of a spur from a branching unit would:

- provide the availability of a much faster internet connection to Christmas Island than either CiiA currently provides or Sky Muster will soon provide at a lower cost to the anticipated costs of installing Sky Muster end-user equipment;
- free up capacity on the Sky Muster satellites for redirection to other remote and regional locations that have greater need.

The use of cable transmission is consistent with previous findings of the Christmas Island Chamber of Commerce, as reported to Parliament, as to the best value means of improving internet connectivity to the Island.¹¹

The consequence of the construction of the ASC is that the services provided by Sky Muster would very quickly become technologically redundant. While the capacity itself can be redirected, the end-user technology may not necessarily be repurposed. Such an approach is inconsistent with:

- the Government’s Statement of Expectations for NBN, which provides that its use of a multi-technology mix network should be built “in a cost effective way using the technology best matched to each area of Australia” ensuring that “upgrade paths are available as required;”¹² and
- NBN’s Corporate Plan 2017 which states that “the NBN planning approach determines which technologies are utilised on an area-by-area basis so as to minimise peak funding, maximise speed of rollout, optimise economic returns and enhance the viability of NBN. The multi-technology approach provides the flexibility for NBN to select the most cost-effective and efficient technology for each area.”¹³

Relevant principles and legal framework

Competition in the provision of services remains a key tenet of government policy in respect of the telecommunications industry. In its consultation paper on the funding options for NBN non-commercial services, the ACCC said that “*the long-term interests of end-users is in many situations best served by the dynamic efficiency generated by infrastructure based competition.*”¹⁴ It also expressed the view that “*subsidies to support non-commercial services should be as transparently and efficiently delivered as possible. The ACCC considers the most efficient subsidies are generally those*

¹⁰ Vocus NZ Investor Presentation (2015, November 15), p. 20 Retrieved from <http://www.vocus.co.nz/sites/nz/files/Vocus%20NZ%20Investor%20Presentation%2017112015.pdf>

¹¹ Retrieved from [Joint Standing Committee on the National Capital and External Territories Inquiry into the changing economic environment in the Indian Ocean Territories](http://www.aph.gov.au/parliamentary_business/committees/house_of_representatives_committees%20?url=ncet/economicenvironment/report/chapter%205.htm) (April, 1, 2010), Chapter 5 http://www.aph.gov.au/parliamentary_business/committees/house_of_representatives_committees%20?url=ncet/economicenvironment/report/chapter%205.htm.

¹² NBN Co Ltd , Statement of Expectations (2016, August 24) Retrieved from <http://www.nbnco.com.au/content/dam/nbnco2/documents/soe-shareholder-minister-letter.pdf>.

¹³ NBN Corporate Plan 2017 (2016, August). Retrieved from <http://www.nbnco.com.au/content/dam/nbnco2/documents/nbn-corporate-plan-2017.pdf>, p.40

¹⁴ ACCC Submission to the *NBN Non-Commercial Services Funding Options* Consultation Paper (2015, June 5), p.3.

*that minimise market distortions and are targeted towards promoting specific and measurable pricing and service objectives.*¹⁵

For the reasons noted earlier, the introduction of Sky Muster services to Christmas Island would result in a clear market distortion through the likely failure of CiiA and the consequent removal of certain services that are presently available to Christmas Island residents. The long-term interests of those consumers would not be well served by a single internet provider that offers a more limited range of services at a lower quality to that presently offered, which will in any event cease to be technologically relevant in a matter of years.

NBN has itself stated that, *“the long term interests of end-users will be best served by effective competition and the efficient operation of markets at all levels of the communications sector. In downstream markets, the long term interest of end-users will be best served by the promotion of vigorous competition. At the wholesale level, the operation of networks that display natural monopoly characteristics need to be regulated in a way which achieves efficient outcomes and promotes desirable investment”.*¹⁶

NBN also submitted that, *“it is worth noting that despite claims of reduced margins there are no instances of failed firms or firms that are unprofitable. This suggests that existing downstream RSPs were previously earning economic rents and have capacity (at least in the short term) to absorb reduced margins”.*¹⁷

Notwithstanding this assertion, it is CiiA’s submission that Sky Muster entry into Christmas Island would indeed result in a failed firm.

CiiA is concerned that NBN’s actions constitute anti-competitive conduct under section 151AK of the Act (as defined in section 151AJ) and potentially amount to a misuse of market power in breach of section 46. There can be little doubt that NBN has or will have a substantial degree of power in the market for broadband services in Christmas Island, and its conduct in introducing Sky Muster to provide services at a cost well below that offered by CiiA will have the effect of substantially lessening competition in that market.

We note that section 151DA(4) provides for an authorisation to NBN for engaging in conduct that is *“reasonably necessary to achieve uniform national pricing of eligible services supplied by the NBN corporation”*. CiiA assumes that it is NBN’s position that the introduction of Sky Muster into Christmas Island, as well as the pricing of its services, is intended to achieve that goal. NBN has stated that *“the uniform national wholesale price of \$24 a month is the same for the basic 12Mbps service across fixed line/wireless/satellite”.*¹⁸

However, it is CiiA’s submission that the use of Sky Muster is not *“reasonably necessary”* to achieve that goal. As stated above, the connection of the ASC to Christmas Island would render the Sky Muster services technologically redundant. The capacity of the Sky Muster satellites currently allocated to service Christmas Island could be better directed at other parts of regional and remote Australia that do not have a feasible commercial alternative available.

¹⁵ ACCC Submission to the *NBN Non-Commercial Services Funding Options* Consultation Paper (2015, June 5), p.1.

¹⁶ NBN’s Initial Submission to the ACCC’s Market Study Issues Paper (November 2016), p.11: <https://www.accc.gov.au/system/files/Submission%2013%20-%20NBN%20Co.pdf>.

¹⁷ Ibid.

¹⁸ What the NBN satellite will do for remote Australia (2015, August 25) Retrieved from <http://www.nbnco.com.au/blog/the-nbn-project/what-the-nbn-satellite-will-do-for-remote-australia.html>.

Conclusion

CiiA submits that it should not be placed in to the situation where it is competing with NBN resellers at subsidised rates. The Government should support a market structure and, where applicable, the technology choice that provides the best possible outcomes for consumers. The continued operation of CiiA, at least until an equivalent quality service is available, would:

- allow consumers the choice between NBN services as resold or CiiA services for fixed data services;
- enable the continued offering of low latency fixed data services for corporate and institutional customers and mobile data services by CiiA (neither of which is offered by NBN);
- save the Commonwealth considerable funds: on the basis that the cost of connecting a household to Sky Muster is estimated to be approximately \$8,000 with close to 900 eligible premises on Christmas Island, the cost to the taxpayer of servicing customers already being supplied by CiiA may be in the order of \$7 million, before having regard to the recurring costs of remote maintenance and the opportunity cost of the dedicated satellite beam, which could be redirected to more needy regional locations.

As an interim service until fibre is landed on Christmas Island, or even as a long term solution, LTSS makes little technical or commercial sense. Low latency (using 03b or fibre) and fixed wireless are superior and more cost effective technologies. CiiA believes that, if the risk of withdrawal of CiiA services is removed, the majority of consumers would be happy to continue to use CiiA as an ISP. The Commonwealth will then save at least \$8,000 for each subscriber that stays on the CiiA network and, even if a modest underwrite of the 03b link is required until fibre is landed, the savings to the taxpayer are significant.

If the introduction of the Sky Muster services does continue, then, to be able to continue to compete with the subsidised prices offered by NBN's resellers, it may be necessary that CiiA receive equivalent per-subscriber subsidy as recompense for the anti-competitive effects of NBN's entry to the Christmas Island market, at least until fibre is landed and other more sensible NBN technical solutions (fixed wireless, fibre) become viable.

We would welcome the opportunity to discuss this submission with you so that prompt action can be taken. Please contact me if you have any queries.

Yours faithfully



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Christmas Island Internet Administration Ltd.

8 February 2017