

Public Version

1 Introduction

The Australian Competition and Consumer Commission (**ACCC**) is holding a public inquiry about the declaration of the Domestic Transmission Capacity Service (**DTCS**), which is set to expire on 31 March 2019. As part of the inquiry, the ACCC released a discussion paper in March 2018 (**the Discussion Paper**). As an active participant in telecommunications markets in Australia, Vocus is directly affected by, and has an interest in, the issues being considered in the ACCC's inquiry.

In the Discussion Paper the ACCC has invited submissions from interested parties on the key issues that are relevant to the review of the DTCS declaration. Vocus welcomes the opportunity to provide a submission.

2 Overview of this submission

2.1 Summary

This submission addresses the application of the DTCS declaration to the Australia Singapore Cable (**ASC**) international subsea cable system currently being constructed by Vocus.

Upon the commissioning of the ASC, some services which may be supplied by Vocus to the Christmas Island may fall within the scope of the current DTCS declaration.

Vocus considers that transmission services supplied to external Territories by subsea cable should be excluded from the DTCS as:

- International services were never intended to be regulated by the Domestic Transmission Capacity Service;
- existing and proposed satellite services provide competitive substitutes for transmission services which may be supplied by the ASC subsea cable; and
- there are investment and other high risks inherent in international submarine builds.

In the alternative, Vocus considers that transmission services supplied to external Territories by subsea cable should be excluded from the DTCS until such time as the price terms of any final access determination (**FAD**) for the DTCS are varied to provide for the additional cost (including risk) associated with providing and maintaining the submarine cables to external Territories.

2.2 Structure of this submission

- **ASC.** The ASC is discussed in section 3 of this submission.
- **Current DTCS service description.** The possible application of the current DTCS service description to external Territories and the ASC is discussed in section 4 below.
- **Regulation of International transmission routes.** International routes for the transmission of data traffic are not declared under the access regime in Part XIC of the *Competition and Consumer Act 1997* (Cth) (**CCA**). Vocus' key message to the ACCC is

Public Version

the inclusion of transmission services between mainland Australia and the external Territories is unintended by the current declared DTCS and that such services should not be regulated by the *domestic* transmission capacity service. This is discussed in section 5 below.

- **Application of declaration criteria and emergence of competitive satellite services.** If the ACCC is not inclined to exclude transmission services between mainland Australia and the external Territories from the DTCS on the basis that these services are supplied on international routes, Vocus submits that these services should, in any event, be excluded from the DTCS service description due to the recent emergence of competitive satellite services: the NBN Co Sky Muster services launched in 2016 and the enterprise-grade services recently announced by NBN Co to be supplied by Speedcast. These issues are discussed in sections 6 and 7 below.
- **Variation of FAD.** In the alternative, Vocus submits that the ACCC should exclude from the service description of the DTCS the supply of transmission services to the external Territories until such time as any access determination for the DTCS is varied to provide prices that reflect the real costs of the infrastructure. This issue is discussed in section 8 below.

3 The Australian Singapore Cable

Vocus is building the ASC submarine cable system linking Perth and Singapore, via Jakarta, Indonesia.

3.1 The ASC

The ASC system route from Perth to Singapore will have a cable length of 4,600 km. The system is a four-pair fibre network with 40 Tb/s of capacity (100 x 100 Gb/s per pair) using Dense Wavelength Division Multiplexing.

The system is being installed by Alcatel Submarine Networks, using high performance fibre with more than 100 repeaters. It will use state-of-the-art submarine network management and includes a robust data communications network providing protection against wavelength failure and cable break.¹

The ASC has an expected ready-for-service timeframe of Q4 2018. The project cost is US\$170 million.

3.2 Branch to Christmas Island

The ASC system includes a branch to Christmas Island (**Christmas Island Branch**). A map of the route for the ASC system is at Confidential Annexure A.

Christmas Island is 2,600 km north-west of Perth. The branch from the core Perth-Singapore cable system to Christmas Island is approximately 30km and comprises [Commercial-in-confidence].

4 The application of the current DTCS service description to the ASC

Section 10 of the *Telecommunications Act 1997* (Cth) (**Telecoms Act**) provides that the Act extends to:

- the Territory of Christmas Island;

¹ See <https://australiasingaporecable.com/> for more information about the ASC.

Public Version

3

- the Territory of Cocos (Keeling) Island; and
- such other external Territories (if any) as are prescribed.

(the external Territories).

Hence, the current DTCS service description may capture transmission services supplied from a transmission point in mainland Australia to a transmission point in Christmas Island.

Once the ASC is commissioned a new 'regional route' may fall within the service description of current declared DTCS:

Perth exchange to the Christmas Island exchange. The distance of this route is approximately 2600 km.

[Commercial-in-confidence]

5 International routes not intended to be regulated by the DTCS

5.1 The DTCS was intended to apply to “domestic” services

Fundamentally, the “domestic” transmission capacity service was never intended to regulate international services.

The geographic dimension of the markets regulated by the DTCS has always had domestic application, e.g.:

- the *ACCC 1997 Deeming Statement* refers to the “inter-exchange local”; “intercapital” or “trunk” and “tail-end” transmission markets;² and
- the *ACCC 2001 DTCS Variation Report* refers to the “intercapital”; “regional to capital city”; “inter-regional”; “metropolitan” and “central business district” transmission markets.³

While Vocus accepts that the Telecoms Act expressly intends to extend to the external Territories, it considers it would be an unintended consequence for transmissions services delivered between mainland Australia and the external Territories - which transverse international waters - to be regulated by the domestic transmission capacity service.

5.2 The legislative history confirms networks to the external Territories were International networks

The legislative history confirms that infrastructure and networks supplied to Christmas Island and other external Territories were considered to be international networks:

- The legislative origin of section 10 of the Telecoms Act is section 12 of the *Telecommunications Act 1989* (Cth) (**1989 Act**). That Act put into effect significant reforms to the Australian telecommunications legislative framework. Section 12 of the 1989 Act provided that the Act extend to “external Territories”;
- The 1989 Act included a declaration of policy for infrastructure and network. This specified that it was the intention of Parliament that:

² See ACCC, *Deeming of Telecommunications Services, A statement pursuant to s.39 of the Telecommunications Transitional Provisions and Consequential Amendment Act (1997 Deeming Statement)* pp.19-21.

³ See ACCC, *A final report examining possible variation of the service description of the domestic transmission capacity service*, May 2001 (**2001 DTCS Variation Report**), p.11.

Public Version

4

- Telecom and AUSSAT should provide Australia's national public telecommunications infrastructure and networks; and
- OTC should provide Australia's international public telecommunications networks and Australia's access to international public telecommunications networks;⁴
- Relevantly, the 1989 Act stated that "Australia" does not include a "prescribed external Territory".⁵ The "prescribed external Territories" were specified as Norfolk Island, Christmas Island and Cocos (Keeling) Island.⁶

So, while the 1989 Act extended to the external Territories, these territories were defined as outside the definition of Australia and within the international functions of the OTC.

The extension of the telecommunications legislations to the external Territories continued through section 30 of the *Telecommunications Act 1991* (Cth) and then by section 10 of the *Telecoms Act* in 1997. While references to the functions of OTC were repealed through these regulatory reforms, the replacement Acts did not refer to the external Territories as being domestic.

5.3 International routes are not declared

International routes for the transmission of data traffic are not declared under the access regime in Part XIC of the CCA.

The types of services that are eligible for declaration under the telecommunications access regime include carriage services supplied between two or more points, at least one of which is in Australia. Accordingly, an international route that connects with Australia (including a transmission point on an external Territory) is eligible for declaration.⁷

The transitional arrangements at the commencement of Part XIC provided for the deeming of certain services covered by access agreements registered under the *Telecommunications Act 1991* (Cth).⁸ The explanatory memorandum to the transitional arrangements stated that it was not intended that regulated access be imposed where existing market conditions already provide for the competitive supply of services.⁹

The ACCC's 1997 Deeming Statement considered whether to deem International PSTN primary and terminating access. These services, which related to the overseas leg of an international call, were considered contestable.¹⁰ The ACCC concluded that new entrants should be able to reach commercial agreements with the existing carriers in Australia for the supply of these services or obtain agreements with international carriers.¹¹ Accordingly, the ACCC did not deem these services as declared services.

Vocus is not aware of any inquiry by the ACCC since 1997 into whether to declare International routes and submits that there has been no inquiry, and no inquiry has been necessary, as these routes are contestable.

Accordingly, as the ASC is an international network, Vocus considers it was not intended to be regulated by the DTCS and so should be exempt from the declared service.

⁴ 1989 Act, s.33(1).

⁵ 1989 Act, s.33(2)

⁶ 1989 Act, s.4.

⁷ See definitions of "eligible service" in s.152AL of the CCA and "listed carriage service" in s.16 of the *Telecoms Act*.

⁸ Section 39 of the *Telecommunications (Transitional Provisions and Consequential Amendments) Act 1997* (Cth).

⁹ See ACCC, 1997 Deeming Statement, p.21.

¹⁰ Due to the market and technologies of that time, the focus on the 1997 Deeming Statement was on the carriage of telephony calls rather than data services.

¹¹ ACCC, 1997 Deeming Statement, p.23.

Public Version

Vocus considers that the construction of the 30 km Christmas Island Branch should not have the potential effect of bringing the 2600 km subsea cable from Perth within the regulated access regime, particularly where other international networks are not declared.

6 General approach to declaration of DTCS services

If, the ACCC is not inclined to exclude transmission services between mainland Australia and the external Territories from the DTCS on the basis that they are International routes, Vocus submits that these services should, in any event, be excluded from the DTCS service description.

Vocus considers that developments in the telecommunications markets should lead the ACCC to approach its inquiry with a mindset that less regulation of transmission services is appropriate to meet the long-term interests of end-users.

The Discussion Paper sets out reasons why it is becoming less appropriate to regulate domestic transmission services.¹² These include:

6.1 Consolidation of transmission service providers

Consolidation of the telecommunication industry has resulted in four large vertically integrated service provider groups: Telstra; Optus; TPG and Vocus. Vocus agrees with the Commission's statement that the concentration in the industry has enabled the larger transmission providers to extend the geographic reach of their networks.¹³ The four large service provider groups and other providers now provide competitive wholesale transmission services in most inter-capital routes, routes to major regional centres and in many metropolitan and regional areas.

6.2 Investment in transmission infrastructure

The Discussion Paper notes that the rollout of transmission infrastructure has continued since the ACCC's last declaration inquiry in 2014, including significant investments to mobile sites by TPG, at NBN POIs by Vocus, TPG and Optus and within metro areas by various access providers.

6.3 Changing technologies

Improvements in wireless technologies, such as the introduction of 5G networks and fixed-wireless services, raise the prospect of viable alternative technology to fibre for the delivery of high capacity transmission services.

7 Declaration criteria and the ASC

In deciding whether declaration will promote the long-term interests of end-users, the ACCC must consider the extent to which the declaration is likely to result in the achievement of the following three objectives, contained in s.152AB of the CCA:

- promoting competition in markets for carriage services and services supplied by means of carriage services;
- achieving any-to-any connectivity; and
- encouraging the economically efficient use of, and investment in, infrastructure by which those services are supplied

(the LTIE Test).

¹² Discussion Paper, pp. 3, 11 and 12.

¹³ Discussion Paper, p.14.

Public Version

Vocus considers the first and third of these objectives require most analysis and addresses these below in respect of the ASC build.

7.1 Promoting competition

In assessing whether declaration would promote competition in downstream markets, the ACCC's approach is to define the relevant markets, assess the level of competition in those markets, and assess how declaration might affect competition in those markets in the future.¹⁴

The Christmas Island market

The market for telecommunications services on Christmas Island has two segments: a residential and small business market and a government market.

Christmas Island has approximately 2,000 permanent residents. Vocus understands that approximately 400 internet access services are supplied to the residential and small business customers on the island.

The Australian Commonwealth also acquires telecommunications services on Christmas Island, primarily for border security purposes. Vocus understands that Telstra and Speedcast currently supply services to the Government on the island using satellite backhaul technology.

[Commercial-in-confidence]

Historically, the quality of telecommunications services provided to customers on Christmas Island has been inferior relative to services supplied on mainland Australia, in fact, in early 2017 the then incumbent ISP, Christmas Island Internet Administration, ceased providing services. However, there has recently been a significant improvement in the services supplied, and proposed to be supplied, to the island (see below).

Level of competition

In the 2014 DTCS declaration inquiry, the ACCC used a competition methodology to assess whether a particular route should be deregulated or whether continued regulation was appropriate. Under that methodology, there had to be a minimum of three fibre providers in the relevant area. While that methodology may be appropriate to assess competition in mainland locations, it is not suitable for assessing competition in the external Territories, where services have traditionally been supplied using satellite, fixed wireless or mobile technologies. Vocus considers that the ACCC should adopt a technology neutral approach to its assessment of competition in these remote territories.

As well as the ASC, the telecommunications networks currently servicing, or announced to service, Christmas Island and other external Territories include:

- NBN Co's Sky Muster

The Discussion Paper notes that while NBN services are not regulated under the DTCS declaration, they are in some cases equivalent to a DTCS service, and could be an alternative for a DTCS service. As such, they may be taken into account in an assessment of the state of competition in an area.¹⁵

NBN Co launched its Sky Muster satellite service in April 2016, following the launch of the Sky Muster 1 satellite in October 2015. The launch of the Sky Muster II satellite in October 2016 enhanced the capacity and performance of satellite services supplied by NBN Co. The Sky Muster satellite service covers mainland Australia and Tasmania and remote islands including Christmas Island, Cocos (Keeling) Island, Norfolk Island and Lord Howe Island.

¹⁴ Discussion Paper, p.14.

¹⁵ Discussion Paper, p.22.

Public Version

The NBN Co website describes Sky Muster as providing access to peak wholesale download data rates of at least 25 Mb/s.¹⁶ Telecoms research firm Ovum has stated that 'Retail plans based on nbn's satellite broadband service are world leading in terms of both performance and affordability'.¹⁷

The NBN Co website indicates that there are 11 services providers offering NBN Satellite service plans in Christmas Island: Activ8me; Ant Communications, BorderNET; Clear Networks; Harbour ISP; iiNet; IPSTAR; reachnet; Skymesh; Southern Phone and Westnet.¹⁸ These providers offer NBN Satellite plans with peak speeds of up to 12 Mb/s download/1 Mb/s upload or with up to 25 Mb/s download/5 Mb/s upload.

- Speedcast's satellite, fixed wireless access and 4G network.

Speedcast has provided wireless and 4G services on Christmas Island. Prior to the launch of SkyMuster, it was contracted by the Australian Government to deliver wireless and 4G network services on Christmas Island, until those services were transitioned to the NBN.¹⁹

Speedcast has recently announced commercial agreements that will enable the supply of enhanced services to business and government customers in remote areas of Australia, including Christmas Island and other external Territories.

On 5 February 2018, Speedcast announced a 10-year contract with NBN Co to deliver enterprise-grade satellite services. Speedcast announced that, 'The services provided by Speedcast will complement NBN Co's consumer satellite service and will serve to increase the availability of enterprise-grade cost-effective communications solutions for Australian businesses'.²⁰

On 10 April 2018, Speedcast announced an expansion and renewal agreement with AsiaSat. Speedcast's press release stated that its agreement with AsiaSat, 'Asia's leading satellite operator' will utilise the new AsiaSat 9 satellite. Speedcast stated, 'This upgrade will enhance high quality managed network services for Speedcast's global customers in the Mobility, Maritime, Energy, Enterprise and Government sectors, and for cellular backhaul solutions to emerging markets'.²¹

- Telstra's 2G mobile network

Telstra operates a 2G mobile network on Christmas Island. This service would not be considered a substitute for a DTCS service.

Vocus considers that the NBN Sky Muster and Speedcast services are each substitutes for the basic DTCS service. The emergence of these competitive satellite services make it unnecessary to declare access to fibre transmission services supplied over the ASC.

How declaration may affect competition in those markets

[Commercial-in-confidence]

¹⁶ See <https://www.nbnco.com.au/blog/the-nbn-project/nbn-sky-muster-wholesale-plan-upgrades.html>.

¹⁷ See <https://www1.nbnco.com.au/corporate-information/media-centre/media-statements/Ovum-nbn-will-deliver-world-leading-satellite-broadband-service-to-Australians.html>.

¹⁸ See <https://www.nbnco.com.au/connect-home-or-business/check-your-address/choose-a-provider-sky-muster.html?csald=&addressCategory=HOME> for addresses in Christmas Island.

¹⁹ See <https://www.speedcast.com/speedcast-returns-internet-services-to-christmas-island/>.

²⁰ See <https://www.speedcast.com/speedcast-secures-contract-valued-au184-million-nbn-co-australia/>.

²¹ See <https://www.speedcast.com/speedcast-expands-capacity-asiasat-9-serve-asia-pacific/>.

Public Version

7.2 Encouraging the economically efficient use of, and investment in, infrastructure

Legislative framework

In considering the objective of encouraging the economically efficient use of, and investment in, infrastructure, the ACCC must have regard to the factors set out in subsections 152AB(6) and (7) of the CCA. These factors include:

- the legitimate commercial interests of the DTCS supplier; and
- the incentives for investment in infrastructure.

An infrastructure operator's legitimate commercial interests relate to its obligations to the owners of the firm, including the need to recover the costs of providing services and to earn a normal commercial return on the investment in infrastructure.²²

The matters the ACCC take account include how declaration may impact incentives for investing in new infrastructure and investing in extensions of infrastructure.²³ In determining incentives for investment, regard must be had to the risks involved in making the investment.²⁴

International submarine cable builds are inherently high risk

A project to build a long-distance international subsea telecommunications cable involves significant commercial and technical risk.

Subsea cable projects are long-term capital-intensive infrastructure projects. Investors face considerable uncertainties. The risks include:

- completion or construction risk, where the project may not complete due to financial or technical difficulties;
- jurisdiction regulatory risk, arising from different regulatory regimes existing, and subject to change, in the countries where the network is installed;
- financial risk, arising from the need to raise significant funding and from fluctuations in capital markets over the long timeframes of the project;
- demand risk, as there may not be sufficient buyers of the capacity on the network; and
- pricing risk, as the pricing on the route is not constant and generally decreases over time.

[Commercial-in-confidence]

Given these risks, Vocus considers that in conducting its LTIE Test analysis the ACCC should give considerable weight to the objective of encouraging investment in a submarine cable infrastructure project.

The ASC project

The ASC project cost of US\$170 m is a significant investment.

The directly attributable capital and opex costs for the Christmas Island Branch cable and landing station are specified in Confidential Annexure B.

[Commercial-in-confidence]

²² Discussion Paper, Appendix 3, p.6.

²³ Discussion Paper, p.15.

²⁴ CCA, s.152AB(7A).

Public Version

Vocus considers that, having regard to its legitimate commercial interests and the need to encourage investment in infrastructure, the ACCC should exclude transmission services supplied over the ASC from the DTCS.

Vocus considers that:

- due to the significant investment and the risks inherent in international subsea cable builds;
- the recent emergence of competitive and substitutable satellite services to the external Territories; and
- as International services were never intended to be regulated by the DTCS,

all transmission services provided to the external Territories by subsea cable should be excluded from the DTCS.

8 Exemption until variation of the Final Access Determination

8.1 Exemption until FAD varied

If the ACCC is inclined to include the external Territories in the DTCS service description, Vocus submits in that the ACCC should exempt the external Territories until such time as an access determination for the DTCS is varied to provide prices that reflect the real costs of the infrastructure.

In this regard, Vocus notes that while the current declaration of the DTCS is set to expire on 31 March 2019, the current final access determination applies until 31 December 2019 unless varied.

8.2 Application of FAD to external Territories is an unintended consequence

The pricing in the current FAD was set using a domestic benchmarking approach, based on data provided from 11 providers of transmission services delivered on terrestrial routes on mainland Australia.²⁵ Special consideration was given for services provided across the Bass Strait (see below).

It is clear that the current FAD pricing did not contemplate that the DTCS declaration would include transmission services supplied to the external Territories.

When making the current FAD, the ACCC stated, 'If the FAD results in unintended consequences in the DTCS market, the ACCC notes that it may consider undertaking an inquiry into varying the FAD or consider issuing a BROCC'.²⁶

8.3 Bass Strait example

The current FAD does provide different prices for Bass Strait DTCS services provided by Telstra and Basslink. The DTCS services from the mainland (Melbourne) to Tasmania consist of both a land component and a subsea cable component. The ACCC recognised that there is an additional cost (including risk) associated with providing and maintaining the submarine component and applied a (140 per cent) uplift on regulated prices for services delivered over the subsea cable component.²⁷ The ACCC recognised that the costs of an undersea component will be higher than routes of similar distances and capacity in regional areas due to the specialised nature of submarine cables, the associated transmission equipment and higher maintenance costs.²⁸

²⁵ ACCC, *Final Report on Public Inquiry to make a Final Access Determination for the Domestic Transmission Capacity Service*, April 2016 (Public Version) (**FAD Final Report 2016**), pp.23-81.

²⁶ ACCC, FAD Final Report 2016, p.115.

²⁷ ACCC, FAD Final Report 2016, pp.82-89.

²⁸ ACCC, FAD Final Report 2016, p.88.

Public Version

10

Vocus does not have details of the Telstra and Basslink costs associated with the installation, provision of services over, and maintenance of, a subsea cable across Bass Strait. However, those costs are likely to be very significantly less than the costs associated with providing transmission services to the remote external Territories. Accordingly, an appropriate uplift factor or alternative pricing methodology would need to be set to allow Vocus to recover the cost of supplying DTCS services to Christmas Island or other external Territories.

Please direct any questions regarding this submission to:

Michael Ackland
Head of Corporate Development
Vocus Group
(03) 8613 3310
michael.ackland@vocus.com.au

Tegan Bleys
Senior Legal Counsel
Vocus Group
(08) 9244 6086
tegan.bleys@vocus.com.au

Vocus Communications
20 April 2018

Public Version

11

Annexure A – Map of Australia Singapore Cable

[Commercial-in-Confidence]

Public Version

12

Annexure B – Capital and Operational Costs of the Christmas Island Branch of the ASC

[Commercial-in-Confidence]