

28 March 2008

Mr John Bahtsevanoglou  
Compliance and Regulatory Operations  
Communications Group  
Australian Competition and Consumer Commission  
(“**Commission**”)  
Level 35 The Tower  
360 Elizabeth Street  
Melbourne VIC 3000  
**Fax: (03) 9663 3699**  
**E-mail: john.bahtsevanoglou@acc.gov.au**

**Public Policy and Communications**

Executive Director Regulatory Affairs  
Unit 11, Level 2  
11 National Circuit  
BARTON ACT 2600

Telephone 02 6208 0740  
Facsimile 02 9261 8390

**CONFIDENTIAL COMMUNICATION**

Dear Mr Bahtsevanoglou,

**Telstra’s domestic transmission capacity service exemption application: request for further information**

I refer to Robert Wright’s letter of 4 January 2008. Telstra’s responses to the ACCC’s request for further information are contained in **Attachment 1 (“Response to Information Request dated 4 January 2008”)**. In addition Telstra makes the following submissions in relation to its application.

- 1 Competitive optical fibre infrastructure on the 20 capital-regional routes for which Telstra has applied for exemption**
  - 1.1 Telstra has asked Market Clarity to check its count of the number of optical fibre operators at each of the 20 capital-regional routes for which Telstra has asked for exemption. Market Clarity has advised that it uncovered two errors - one relating to the **Sydney-Penrith** route (where the competitor count is revised from [c-i-c] optical fibre networks to [c-i-c]), the other relating to the **Sydney-Bega** route (where the competitor count is revised from [c-i-c] optical fibre networks to [c-i-c]). Further details are contained in Market Clarity’s supplementary reports at **Attachment 2 (“Market Clarity supplementary report”** dated March 2008). In addition, Market Clarity has made an amendment to the number of optical fibre operators for the Sydney to Tamworth route which has been revised upwards from [c-i-c] to [c-i-c].
  - 1.2 The errors mean that the Sydney-Bega and Sydney-Penrith routes do not currently meet the criteria for exemption proposed by Telstra in this application, namely that there are at least 3 optical fibre operators (excluding operators of leased infrastructure) on that route. Accordingly, Telstra accepts that it may not be appropriate for the Commission’s exemption order to initially cover these two routes.
  - 1.3 Accordingly Telstra invites the ACCC to make the exemption order requested by Telstra (as set out in Telstra’s exemption application) subject to the condition or limitation that the exemption has no effect in respect of:

- (a) the Sydney-Bega route if there are less than three operators with optical fibre infrastructure within 21 km of Bega<sup>1</sup>; and
- (b) the Sydney-Penrith route if there are less than three operators with optical fibre infrastructure within 3 km of Penrith<sup>2</sup>.

Please see **Attachment 3** (“**Draft exemption order**”) in which we have marked up the proposed condition or limitation.

## **2 Counting competitors that are within a distance from the regional centre equal to 5% of the distance of the capital-regional route for that regional centre**

2.1 Telstra asked Mike Smart to respond to Optus’ criticism of his recommendation that an optical fibre network should be considered as competing with Telstra’s network on at a route if the network is within a distance from the regional centre equal to 5% of the distance of the capital-regional route for that regional centre (“**5% rule**”).<sup>3</sup> Please see:

- (a) **Attachment 4** (“**Domestic transmission capacity service exemptions - response to Optus submission**” dated 27 March 2008) for a copy of Mr Smart’s supplementary report; and
- (b) **Attachment 5** (“**Statement of [c-i-c]**”) which contains a statement Mr Smart has relied on in preparing his supplementary report; and
- (c) **Attachment 6** (“**Statement of [c-i-c]**”) which likewise contains a statement which Mr Smart has relied on in preparing his supplementary report.

2.2 Telstra adopts the views expressed in Mr Smart’s supplementary report and makes the following additional comments in relation to Optus’ submission:

- (a) Optus asserts that “it is incorrect to assume that cost is a simple linear function of the length of the route”.<sup>4</sup> While not wishing to endorse it more generally, Telstra observes that the Gibson Quai model (which the ACCC commissioned in May 2007<sup>5</sup>) appears to assume that the cost of constructing a transmission cable is a linear function of the length of that cable.
- (b) Optus asserts that Ergon’s transmission network lacks adequate capacity because it is used to monitor Ergon’s electricity distribution systems. Ergon’s wholesale telecommunications arm is Nexium Telecommunications, which actively promotes its transmission network. Even if it is true that there are capacity constraints, it is open to Ergon to install additional capacity in its network by upgrading its transmission equipment in the manner referred to in the Statement of [c-i-c].

<sup>1</sup> 21 km being 5% of the distance of 425 km from Sydney to Bega.

<sup>2</sup> 3 km being 5% of the distance of 59 km from Sydney to Penrith.

<sup>3</sup> Optus Submission to Australian Competition and Consumer Commission on Telstra’s Exemption Application for the Domestic Transmission Capacity Service, November 2007.

<sup>4</sup> Optus (November 2007), at para 2.54.

<sup>5</sup> Available at <http://www.accc.gov.au/content/index.phtml/itemId/786666/fromItemId/753833>.

### 3 Competitor counts based on a “5 km rule” and “1 km rule”

Optus proposes “a threshold of around 4 or 5 km from the regional town centre” for counting an optical fibre network as a competitor. Without endorsing this threshold, Telstra observes that all except two of the 20 capital-regional routes referred to in Telstra’s exemption application would have at least three optical fibre networks that are within the threshold proposed by Optus.<sup>6</sup> Please see **Attachment 2.1 (“Market Clarity supplementary report”** dated February 2008).

Finally, given the Commission’s indication that it may wish to separately consider those routes in Telstra’s application where the competitor’s infrastructure is more than 1 km from the GPO, Telstra has asked Market Clarity to undertake a competitor count based on a 1 km rule. According to Market Clarity, 10 regional centres have at least 3 optical fibre based competitors within 1 km of the regional centre. Please see **Attachment 2.2 (“Market Clarity supplementary report”** dated February 2008).

### 4 Scope of exemption sought by Telstra

To ensure there is no confusion, Telstra does not seek exemption in respect of all towns that are within a distance from the regional centre that is 5% of the distance of the capital regional route. The exemption, if granted, only applies to capital-regional transmission between a capital city and the relevant regional centre or town.

We would be pleased to meet with Commission staff to discuss any issues or questions that may arise as a result of this information, or in relation to Telstra’s exemption application more generally.

Yours sincerely

Tony Warren  
Executive Director Regulatory Affairs  
Public Policy and Communications

---

<sup>6</sup> The two routes that do not have at least three optical fibre networks within the threshold proposed by Optus are Sydney-Bega and Sydney-Penrith, being the two routes that also do not currently meet the criteria for exemption proposed by Telstra.

**Attachment 1: Response to Information Request dated 4  
January 2008**



**Attachment 2.1: Market Clarity supplementary report  
dated 6 March 2008**

[c-i-c]



**Attachment 2.2: Market Clarity supplementary report  
dated 11 March 2008**

[c-i-c]



# Attachment 3: Draft exemption order

## DRAFT EXEMPTION ORDER

The Australian Competition and Consumer Commission (“**Commission**”) under section 152AT(3)(a) of the *Trade Practices Act 1974* (Cwlth) (“**TPA**”) determines that Telstra is exempt from the standard access obligations specified below.

### Citation

- 1 This order may be cited as the “**Telstra Domestic Transmission Capacity Service Exemption Order for Exempt Regional Routes**”.

### Commencement

- 2 This order comes into effect on the date of the Commission’s determination.

### Term

- 3 This order expires on the earlier of the Domestic Transmission Capacity Service (“**DTCS**”) ceasing to be an active declared service and 30 June 2013.

### Interpretation

- 4 Unless the contrary intention appears, words or phrases used in this order have the interpretation specified in the TPA, the Telecommunications Act 1997 or the instrument declaring the declared service.

- 5 In this order, unless the contrary intention appears:

***active declared service*** has the meaning set out in section 152AR of the TPA.

***Exempt Regional Route*** means a service for the carriage of communications between two transmission points as specified in Attachment A to this order.

***DTCS*** means the Domestic Transmission Capacity Service as declared by the Commission with effect from 1 April 2004 and set out in the *Commonwealth of Australia Gazette* No. GN 14 of 7 April 2004.

***Telstra*** means Telstra Corporation Limited (ABN 33 051 775 556).

***Transmission Point*** has the meaning given in the Commission’s declaration of the DTCS under section 152AL(3) of the Trade Practices Act 1974.

Unless the context indicates otherwise, the singular includes the plural and vice versa.



## **Exemption**

- 6 Subject to paragraph 7, Telstra is exempt from all of the standard access obligations in section 152AR of the TPA in respect of the supply of the DTCS over the Exempt Regional Routes.

## **Limitation or conditions to Exempted Service**

- 7 For the avoidance of doubt the Telstra Domestic Transmission Capacity Service Exemption Order for Exempt Regional Routes has no effect in respect of the DTCS provided under an agreement which is in force on the date of this order for so long as that agreement remains in force.
- 8 The Telstra Domestic Transmission Capacity Service Order for Exempt Regional Routes has no effect in respect of:
- (a) the Sydney to Bega route if there are less than three operators with optical fibre infrastructure within a distance of 21 km of the GPO at Bega; and
  - (b) the Sydney to Penrith route if there are less than three operators with optical fibre infrastructure within a distance of 3 km of the GPO at Penrith.

Dated \_\_\_\_\_





## ATTACHMENT A

### EXEMPT REGIONAL ROUTE

Exempt Regional Route means a route over which the DTCS may be supplied between two transmission points comprising of:

- any Transmission Point located at a capital city in column 1; and
- any Transmission Point located at the regional centre in column 2 in the same row as the capital city in column 1.

<b>(1) Capital City</b>	<b>(2) Regional Centre</b>
Adelaide	Port Augusta
Brisbane	Bundaberg
Brisbane	Cairns
Brisbane	Gladstone
Brisbane	Mackay
Brisbane	Maryborough
Brisbane	Rockhampton
Brisbane	Townsville
Melbourne	Wangaratta
Melbourne	Warragul
Sydney	Armidale
Sydney	Bega
Sydney	Campbelltown
Sydney	Coffs Harbour
Sydney	Gosford
Sydney	Goulburn
Sydney	Penrith
Sydney	Tamworth
Sydney	Wagga Wagga
Sydney	Wauchope



**Attachment 4: Supplementary economic report on  
domestic transmission capacity service exemptions**



## **Attachment 5: Statement of [c-i-c]**

[c-i-c]



## **Attachment 6: Statement of [c-i-c]**

[c-i-c]

# Attachment 7: Note on calculating transmission spur costs

## 1 Introduction

This note explains the basis upon which Telstra developed the cost estimates for building a generic transmission spur over 5, 20, 40, 60 and 80 km from the perspective of the costs that a competitor, with existing transmission optical fibre infrastructure nearby, would face in building a spur to a regional town centre. The accompanying excel spreadsheet “Spur Cost Assessment ACCC.xls” sets out the costs, assumptions and calculations described below.

The cost estimates provided by Telstra are intended to be used as an approximate/indicative estimate only. The actual cost of building a spur may vary considerably from these cost estimates depending on the terrain in which the cable is ploughed or ducted.

## 2 Cost items

There are three key cost items for building a transmission spur:

- (a) cost of ploughing;
- (b) cost of transmission equipment (at the B end only); and
- (c) lease/build cost of ducts.

The following table explains the cost estimates provided by Telstra.

	<b>Item</b>	<b>Cost Estimate</b>	<b>Explanation</b>
1.	Ploughing	[c-i-c] per km	This is the average per km cost of ploughing which is derived from a 2007 internal study of 35 actual transmission ploughing projects undertaken in regional locations between 2001/02 and 2007/8. The costs are indexed to 2007/08 values.
2.	Transmission equipment	From [c-i-c] to [c-i-c] per route	These highly confidential costs for transmission equipment per route are taken from Telstra’s vendors price list for the necessary equipment items to equip a cable at



	Item	Cost Estimate	Explanation
			<p>the regional town end (B-end) of a spur. The cost includes a mark up of [c-i-c]% for overheads, design uncertainties and installation. The equipment costs do not vary with the distance of the route.</p> <p>These are the same costs Telstra would factor into project cost estimations for building a rural transmission spur. The costs include a number of equipment pieces such as multiplexer, port cards, licences, testing, etc. The following assumptions of network configuration are made:</p> <ul style="list-style-type: none"> <li>▪ A competitor would already have transmission infrastructure in an area and would merely be tapping into the existing infrastructure by extending the transmission system to pick-up a new site.</li> <li>▪ There are no intermediary sites on the spur between the competitor's existing transmission cable and the regional town.</li> <li>▪ The SDH transmission into the new site is [c-i-c] line rate capable with [c-i-c] and 2Mbit/s interface capability.</li> <li>▪ The equipment selection made by a competitor would be the same selection that Telstra would make based on Telstra's existing network.</li> <li>▪ The equipment cost excludes the cost of accommodation, power and air-conditioning that would be borne by a competitor to establish presence at a Telstra site, as well as the cost of any customer access equipment such as DSLAMs.</li> <li>▪ Without endorsing the Gibson Quai-AAS transmission cost model, the estimate of [c-i-c] was obtained from the Gibson Quai-AAS transmission cost model cost item: "SDH Multiplexer Equipment". It is comprised of capital investment, spares and installation.</li> </ul>
3(a)	Ducts - leasing costs	One-off fee: <ul style="list-style-type: none"> <li>▪ [c-i-c] per km</li> </ul>	These are the average duct costs per km for leasing ducts which are derived from a study undertaken by Craig Lordan "Estimated Optical Fibre Installation Costs Within CBD



	Item	Cost Estimate	Explanation
		Recurring fee: <ul style="list-style-type: none"> <li>[c-i-c] per km per annum</li> </ul>	Areas” contained in Appendix 3 and summarised in the worksheet “cost ducting” in accompanying spreadsheet. The average per km costs are derived from Mr Lordan’s analysis of the costs to connect fibre to 18 buildings in CBD exchange service areas.
3(b)	Ducts - building cost	[c-i-c] per km	The average per km cost to build ducts is a one-off payment. It is also derived from the Craig Lordan study referred to above. The build costs are likely to be an over-estimate as they are based on all CBD ESA ducting costs, rather than regional town centres. In regional town centres there is likely to be more soil surfaces, unlike CBDs that have more pavement, which significantly reduces the re-instatement costs in rural areas.

No capital charge (WACC) has been applied to the capital costs and recurrent costs have not been annualised.

### 3 Ducting

It is usually not necessary to build ducts for the entire length of a spur. Ducting is generally required at the B-end of the spur, which tends to be urbanised. Without knowing the location of competitors existing fibre from which the spur is built, it is not possible to know whether ducting may be required at the A-end of a spur. Therefore we have assumed there are no ducting costs for the A-end of the spur. In general, the longer the length of a spur, the smaller the proportion that needs to be ducted.

The duct routes at each of the 20 regional towns were examined in the Cable Plant Record database to determine the shortest distance of Telstra ducts in the town on the main relevant route transmission ring. Telstra assumes that the competitor would prefer the shortest duct route. The proportion of the spur that is estimated to be ducted is grouped into the following spur distance classes, where the midpoint of the class is the respective spur distances of interest to the Commission: 5, 20, 40, 60 and 80 km:



Spur distance class	Midpoint	Proportion of spur estimated to be ducted (%)
0-12 km	5 km	[c-i-c]%
13-30 km	20 km	[c-i-c]%
31-50 km	40 km	[c-i-c]%
51-70 km	60 km	[c-i-c]%
71 km and over		[c-i-c]%

Within each spur distance class, an average was calculated of the proportion of the spur distance that is ducted. The average percentages of ducting of the spurs for each spur distance category are used in the cost calculations to determine the cost of ducting. See worksheet “duct distance” in the accompanying spreadsheet.

#### 4 Ploughing

In regional locations the remaining length of the spur, that does not require ducting, ploughing is used for the installation of cable. The ploughing distance is the difference between the total spur distance and the ducting distance.

Ploughing costs per kilometre varying enormously, depending on several factors including the terrain and access to the land. A relatively recent range of costs for ploughing in regional locations is between [c-i-c] per kilometre. For this purpose we use an average cost of ploughing which is approximately [c-i-c] per kilometre. This cost estimate is derived from an internal cost study conducted in 2007 looking at 35 case studies of deployment of optical fibre cable by ploughing in regional Australia by Telstra between financial years 2001/02 and 2007/08. It includes the cost of the optical fibre cable as well as the cost of the ploughing itself. Telstra assumes that a competitor would already have transmission infrastructure in an area and would merely be tapping into the existing infrastructure by extending the transmission system to pick-up a site.

The following scatter diagram shows the range of costs per km from the 35 case studies used to derive the average cost estimate of [c-i-c] per kilometre.

#### Graph 1

[c-i-c]





## 5. Calculation

The cost estimates for transmission spurs are calculated using the following equations:

(a) Where duct build

Total Cost

$$= [SD \times ((DR \times DBC) + (PR \times PC))] + TE$$

(b) Where duct leasing

(i) Cost in 1st year

$$= [SD \times ((DR \times (DLOC + DLRC)) + (PR \times PC))] + TE$$

(ii) Cost in 2nd year and each successive year

$$= SD \times DR \times DLRC$$

Where:

SD = Spur Distance (km)

DR = Ducting Distance Ratio (%) (*refer to table in section 3*)

PR = Ploughing Distance Ratio (%) (*note: PR = 1 - DR*)

DBC = Duct Building Cost (\$/km)

DLOC = Duct Leasing (One-off) Cost (\$/km)

DLRC = Duct Leasing (Recurrent) Cost (\$/km/year)

PC = Ploughing Cost (\$/km)

TE = Transmission Equipment Cost (\$)

Appendix: Spur Cost Assessment ACCC.xls [c-i-c]