Optus Submission to

Australian Competition and Consumer Commission

on

Telstra's Exemption Application for the Domestic Transmission Capacity Service

November 2007

Table of Contents

1. Introduction

1.1 Optus welcomes the opportunity to respond to the ACCC's October 2007 discussion paper relating to 'Telstra's transmission exemption applications'.

1.2 Telstra has applied for exemption from regulation on twenty capital-regional routes ('exemption area') relating to the supply of domestic transmission capacity services (DTCS). The DTCS service is a transmission service that is used by carriers to provide a range of communications (voice and data) using wideband carriage.

1.3 The exemption was lodged under section 152AT of the *Trade Practices Act 1974* (TPA) which relates to the Commission's powers to grant individual exemptions from declaration. Section 152AT directs the Commission to grant an exemption only if it is in the long-term interests of end-users (LTIE).

Distance threshold

1.4 In its count of the potential alternative providers, Telstra proposes a new approach to defining the geographical boundaries of the markets in which the services are being provided - the '5% rule'. Telstra has proposed that a carrier with an optical fibre network within a distance (from the regional centre) of 5 per cent of the route distance between the capital city and the regional centre should be counted as a competitor in the market (the '5% rule').[1] Optus will argue in this submission that Telstra's proposed new approach is not reasonable.

1.5 Optus has a number of concerns with Telstra's proposed approach to defining the geographical boundaries of the market. First, CRA's critical loss analysis contains errors. Second, the approach is inconsistent with the standard approach to market definition. Third, it could lead to exemptions being granted in circumstances where there would be insufficient competitive constraint on Telstra, since the proposed rule counts firms which are not able to enter without substantial irreversible new investments. Consequently, the 5% rule has the potential to result in a substantial lessening of competition in transmission capacity markets. Finally, when applied to further routes in future, Telstra's 5% rule would remove all constraint to Telstra's market dominance in respect of a vast swathe of regional Australia.

1.6 Further, Optus notes that some of the assumptions used by Telstra in deriving the 5% rule are incorrect or overly simplistic, and as a result, it would not be reasonable to use the 5% rule even for assessing the likelihood of entry (as opposed to defining the geographical boundaries of the market). Optus notes that entry decisions are substantially more complex than is implied by the simple approach taken by CRA.

[1] Telstra (2007), *Submission to the Australian Competition and Consumer Commission - Domestic Transmission Capacity Service Exemption Application*, Supporting Submission, Confidential Version, page 7.

1.7 Optus proposes that the ACCC should clearly reject Telstra's role and approach the distance threshold for geographical market definition from the perspective of usual business practice – in which regard a threshold of around four or five km from the town centre would be appropriate.

Substitute services

1.8 Telstra has applied for exemption from regulation on twenty capital-regional routes ('exemption area') relating to the supply of domestic transmission capacity services (DTCS), on the grounds that there is sufficient competition on the routes in question to warrant removal of declaration.

1.9 Telstra's application was made on the grounds that there is sufficient competition or contestability on the routes in question to warrant removal of declaration. In order to establish that the relevant transmission capacity markets would be contestable and workably competitive if the exemptions were granted, Telstra relied on (undisclosed) evidence that suggested there are potential alternatives for its own DTCS on the listed routes.

1.10 Optus considers that the definition of an effective substitute for Telstra's DTCS is a key issue in the assessment of Telstra's application. Accordingly, in this submission Optus will:

1. set out the characteristics required of an effective substitute for Telstra's DTCS;

2. set out the providers that Optus surmises are the providers most likely to have been counted by Market Clarity in its count of the providers on each route listed for exemption (since Telstra has not provided this information); and

3. assess those providers against the characteristics of an effective substitute noted above to determine whether they can be considered effective substitutes for Telstra's DTCS.

1.11 Optus submits that to be considered a viable substitute for the DTCS in the context of Telstra's exemptions, a potential alternative supplier must possess the following attributes:

- It is a wholesale provider;
- It has sufficient available bandwidth (capacity);
- It has sufficient quality of service; and
- It is a sustainable competitor in the long run.

1.12 Optus contends that potential substitutes will not provide sufficient competitive constraint on Telstra to discipline its pricing of transmission capacity services unless they possess these attributes.

1.13 Telstra's submission has queried the continuing use of the ACCC's existing competition threshold, suggesting that competition may exist at a "lower threshold" where there are substitute services including competitors using non-

fibre substitutes or rented fibre networks.[2] Optus rejects Telstra's "lower threshold" and submits that the presence of alternative carriers who own optical fibre infrastructure is the only valid indicator for competition along these routes.

1.14 Optus submits that a number of firms active on the routes in question do not provide a transmission capacity service that is comparable to either Telstra or Optus, and therefore cannot be considered to exert an effective competitive constraint on Telstra.

1.15 Optus submits that Telstra's submission presents a misleading view of the current level of competition for transmission services along many routes listed for exemption. In particular, Optus has concerns regarding 14 of the routes for which Telstra has applied for an exemption from declaration. Optus submits that the removal of declaration on these 14 listed routes may have a negative impact on competition. Exemptions on these routes could allow Telstra to strengthen its dominance in the transmission capacity market and reduce the ability of users to access transmission services.

Timing matters

1.16 With regard to timing, Optus submits that there should be a phase-in period before the exemptions come into effect, which should last until at least 12 months after the ACCC's final decision. Optus proposes that any exemptions be granted for a period of three years only, and that during that period the ACCC should monitor Telstra's conduct and pricing of transmission capacity services.

1.17 Optus' submissions are set out in the following sections:

Section 2 - Distance threshold for geographical market definition;

Section 3 - Substitute services on routes listed for exemption; and

Section 4 - Timing matters.

[2] Telstra (2007), *Submission to the Australian Competition and Consumer Commission - Domestic Transmission Capacity Service Exemption Application*, Supporting Submission, Confidential Version, page 5.

2. Distance threshold for geographical market definition

2.1 Telstra has proposed that a carrier with an optical fibre network within a distance (from the regional centre) of 5 per cent of the route distance between the capital city and the regional centre should be counted as a competitor in the market (the '5% rule').[3]

2.2 The Commission has asked interested parties if Telstra's proposed 5% rule is reasonable in the context of the exemption application, and whether there are any issues associated with the assumptions used by Telstra in deriving the 5% rule.

2.3 Optus has a number of concerns with Telstra's proposed approach to defining the geographical boundaries of the market. First, CRA's critical loss analysis contains errors. Second, the approach is inconsistent with the standard approach to market definition. Third, it could lead to exemptions being granted in circumstances where there would be insufficient competitive constraint on Telstra, since the proposed rule counts firms which are not able to enter without substantial irreversible new investments. Consequently, the 5% rule has the potential to result in a substantial lessening of competition in transmission capacity markets. Finally, when applied to further routes in future, Telstra's 5% rule would likely remove all constraint to Telstra's market dominance in respect of a vast swathe of regional Australia.

2.4 Further, Optus notes that some of the assumptions used by Telstra in deriving the 5% rule are incorrect or overly simplistic, and as a result, it would not be reasonable to use the 5% rule for assessing the likelihood of entry (as opposed to defining the geographical boundaries of the market). Optus notes that entry decisions are substantially more complex than is implied by the simple approach taken by CRA.

2.5 Optus proposes that the ACCC approach the distance threshold for geographical market definition from the perspective of usual business practice – in which regard a threshold of around 4 or 5 km from the town centre would be appropriate.

CRA's approach to market definition

2.6 Telstra's 5% rule is based on analysis carried out by CRA which considers whether a hypothetical competitor with a nearby fibre network would be motivated to construct a fibre spur to enable its network to reach the regional centre in question as a result of a 5% SSNIP[4] by the hypothetical monopolist incumbent. CRA's analysis is intended to determine the largest distance over which such a competitor could do this, charging its own average avoidable

[3] Telstra (2007), *Submission to the Australian Competition and Consumer Commission - Domestic Transmission Capacity Service Exemption Application*, Supporting Submission, Confidential Version, page 7.

[4] Small, substantial, non-transitory increase in price

cost, and undercut the incumbent's SSNIP price. This approach is said to determine "the outer boundaries of substitution possibilities". [5]

Errors in CRA's critical loss analysis

2.7 CRA provide a critical loss analysis based on a 5% SSNIP. This analysis drives most of the results of its paper. It is used as the basis of determining the '5% rule' as it determines in effect that entry would occur if Telstra raised prices by 5% because the market share of an entrant would be highly likely to exceed the threshold critical loss of 4.8% derived from the CRA calculation.

2.8 Optus considers that CRA's implementation of the critical loss analysis is incorrect. CRA make two errors. First, it assumes that the SSNIP and resultant critical loss should be based on a short run test. Second, it takes an overly simplistic and incorrect approach to the interpretation of the Lerner Index.

2.9 CRA has implicitly assumed that the SSNIP test is a short run test. This is implied based on CRA's view that the appropriate "marginal cost of transmission is very close to zero" in the Lerner index.[6] Optus notes that the relevant SSNIP in this circumstance is not a short run test. The correct economic measure of cost in the case of the entry decision is the long run incremental cost of supplying services as this reflects the opportunity cost to the entrant of providing capacity to the market. Only post entry would the short run marginal costs (which Optus agrees is close to zero) be the relevant indicator.

2.10 In this way, CRA appear to have incorrectly understood the meaning of the Lerner Index. The Lerner Index measures the profits of the industry and the interaction of profits and price levels. It therefore captures the dynamics of competition in the market.

2.11 The derivation of a Lerner index close to unity implies a market in which competition is highly effective and alternative suppliers greatly constrain the ability of any one supplier to raise prices. This is not the market context for the case of transmission provided to regional centres by a single provider. The significant investment required to establish alternate capacity represents a key barrier to entry. The regional market is characterised as one in which prices are likely to be in excess of the costs and the incumbent is unlikely to be effectively constrained.

2.12 Optus submits that it is therefore an incorrect assumption (or an incorrect interpretation of the current market context) that drives much of the results of CRA's analysis.

[5] CRA (2007), *Economic Report on domestic transmission capacity service exemptions*, 23 August 2007, page 7.
[6] CRA (2007), *Economic Report on domestic transmission capacity service exemptions*, 23 August 2007, page 2.

Standard approach to competition analysis

2.13 To properly assess the proposed 5% rule, it is first necessary to step back and consider the purpose of this analysis. The purpose is to assess the competitive state of the market in the event that regulation was withdrawn. That is, to carry out a competition analysis, similar to as the process that occurs in merger cases. The aim of market definition in this context is to identify those competitors that currently represent the most important competitive constraints on the regulated firm in the event that regulation was withdrawn.

2.14 In competition analysis, there are typically a number of steps, including:

- Market definition; and
- Consideration of likely entry.

2.15 At each of these steps, distinct questions are posed and different analytical tools are employed to answer the questions.

2.16 At the stage of market definition, we ask the question: if we withdraw regulation from the service (or allow a merger) what substitution possibilities will there be? Both demand side substitution and supply side substitution are considered.

2.17 Supply side substitution occurs when firms endowed with assets that can be easily adjusted to produce substitute goods are able to respond to a price increase by switching their production facilities to produce the goods or services subject to such price increase.[7] The 'hypothetical monopolist' test, which employs a SSNIP analysis, is used to determine the possibilities for supply side substitution. This is the purpose to which CRA claims it is putting its SSNIP analysis.

2.18 A key distinction made at this stage is that between supply side substitution and new entry into the market by competitors. The chief distinction is that with supply side substitution, a firm can promptly redeploy existing assets to serve the market, whereas new entry involves significant, irreversible new investments (i.e. sunk costs) which take time to construct.

2.19 This distinction has been noted by NERA in a paper on supply side substitution:

> *"A necessary condition for two products to be considered supply-side substitutes is that the supplier of one of them already owns all the assets needed to produce the other… However, possession of all relevant assets is not enough. It is also necessary that redeploying these assets involve no additional investments, in particular no sunk costs…"* [8]

[7] Dr. Atilano Jorge Padilla (NERA), 2001, *The Role Of Supply-Side Substitution In The Definition Of The Relevant Market In Merger Control*, A Report for DG Enterprise A/4, European Commission, page 19.

[8] Dr. Atilano Jorge Padilla (NERA), 2001, *The Role Of Supply-Side Substitution In The Definition Of The Relevant Market In Merger Control*, A Report for DG Enterprise A/4, European Commission, pages 4 & 5.

2.20 A firm that cannot currently serve the market without making significant, irreversible new investments is defined as being outside the boundaries of the market. While an entrant might subsequently decide to make the investments necessary to enter the market, this is a possibility that must be considered at a later stage. Due to the sunk costs involved and the time taken to enter the market, a potential entrant cannot be counted as a competitor that currently exercises an important constraint on the regulated firm in the event that regulation was withdrawn. As noted by NERA:

> *"…de novo entry, however, may help to constrain the behaviour of the established firms as effectively as demand substitution* ***only if entry occurs … promptly****."* [9] [emphasis added]

2.21 This distinction between market definition on one hand and the possibility of new entry on the other hand is important because firms approach a supply side substitution decision and an entry decision in quite different ways. It follows that the tools employed at each of these two stages of competition analysis are different. Applying the wrong tool at a given stage may produce incorrect results that would give a misleading picture of reality. In particular, the SSNIP test is a tool for defining the boundaries of the market, so it should not be used to assess the likely extent of market entry.

2.22 An entry decision differs in substance from a supply side substitution decision. A firm considering supply side substitution is capable of redeploying its assets to take advantage of a temporary increase in prices, and then deploy them elsewhere if market conditions change. It is able to respond rapidly to changes in market conditions and thus can quite reasonably be considered part of the market in question. It is this easy substitutability that is captured by the SSNIP test – which is why the SSNIP test is an appropriate tool for market definition. By contrast, a firm considering making a substantial, irreversible investment necessary to enter a new market is likely to set the hurdle for entry significantly higher. Since it cannot easily redeploy its assets if market conditions change, it will not enter in response to any change in market conditions. Rather, it will look at the prices that are likely to prevail after entry, in the longer term. As noted by NERA:

> *"…committed entrants will consider the profitability of entry into the candidate market in the knowledge that entry would cause prices to fall. Their decisions will be mainly driven by post-entry prices (rather than current prices) and, hence, their entry will be unlikely to impose a significant constraint in the short term."* [10]

2.23 For this reason, SSNIP (which posits a 5% increase in price by a hypothetical monopolist) would produce the wrong answer if applied to the market entry context. It would suggest a greater number of current competitive constraints on the regulated firm than actually exist.

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[9] Dr. Atilano Jorge Padilla (NERA), 2001, *The Role Of Supply-Side Substitution In The Definition Of The Relevant Market In Merger Control*, A Report for DG Enterprise A/4, European Commission, p19

[10] Dr. Atilano Jorge Padilla (NERA), 2001, *The Role Of Supply-Side Substitution In The Definition Of The Relevant Market In Merger Control*, A Report for DG Enterprise A/4, European Commission, p20

Application to transmission capacity markets

2.24 Now turning to the matter in hand, we must consider two questions:

1. What would be the state of competition in the market if the exemption were granted?

2. Would new entrants be likely to enter the market if the exemption were granted?

2.25 The first question involves setting out the geographical boundaries of the market. The question to ask in this context is: are there any optical fibre network owners that are able to serve the market in question without making substantial, irreversible new investments? An example of such supply side substitution might be the owner of an optical fibre network that is currently serving its own transmission needs on the capital – regional route, but is not currently active in the wholesale market. Such a player could, assuming it had spare capacity, redeploy its assets at minimal expense to take advantage of a change in market conditions and serve wholesale customers. The SSNIP test would quite properly find that such a firm was part of the market.

2.26 Now consider the owner of an optical fibre network that is a significant distance away from the regional centre. For a more concrete example, consider the owner of a network that reached from Brisbane to Innisfail. According to Telstra's proposed 5% rule, such a network owner would be considered to be a competitor in transmission capacity market defined by the Brisbane to Cairns route.[11]

2.27 However, the owner of such a network is not readily able to redeploy its assets to take advantage of a change in market conditions on the Brisbane to Cairns route. Rather, such a player would need to build a new spur line to connect its existing network (in Innisfail) with the regional centre (Cairns).

2.28 Building a new spur line involves the construction of new fibre optic infrastructure, which constitutes significant, irreversible new investment. Typical costs include the hire of tractors to plough land and lay cable, in addition to the cost of fibre and electronics. [**Start commercial-in-confidence].[12] [End commercial-in-confidence]** Given the scale of sunk costs involved and the time required, we conclude that building a new spur line is an example of a new entry decision – not a supply side substitution decision.

2.29 Consequently, it would not be appropriate to apply CRA's 5% rule to this scenario. To do so would not, as CRA suggests, determine "the outer boundaries of substitution possibilities" – at best it would be an attempt to determine the boundaries of *entry* possibilities. A firm with a network in Innisfail – but not in Cairns – cannot be counted as a competitor that currently

[11] The Brisbane – Cairns route is approximately 1681 km (measured in terms of road distance, as per Market Clarity's method). The radial distance for this route in terms of the CRA / Market Clarity 5% rule is 5% of 1681 = 84km. The road distance between Innisfail and Cairns is approximately 89km. Given that radial distance is likely to be shorter than road distance, it seems likely that a fibre network reaching Innisfail would be counted as a competitor in the Brisbane-Cairns market according to Telstra's proposed rule.

[12] **[C-i-C]**

represents an important competitive constraint on Telstra in the event that regulation was withdrawn on the Brisbane to Cairns route.

2.30 The suggested application of the 5% rule to transmission capacity markets is a misapplication of the SSNIP test to a situation it was not designed for. This misapplication would be likely to incorrectly produce an overly high competitor count – since it would count as competitors in the market firms which are not able to enter without substantial and irreversible new investments that would take some time to construct.

2.31 Optus submits that the application of the 5% rule to define the geographical boundaries of transmission capacity markets is inconsistent with the established principles of market definition. Further, it could lead to exemptions being granted in circumstances where there would be insufficient competitive constraint on Telstra, since the proposed rule counts firms which are not able to enter without substantial irreversible new investments. Consequently, the 5% rule has the potential to result in a substantial lessening of competition in transmission capacity markets. That is, the 5% rule could strengthen Telstra's dominant position in the market and allow Telstra to abuse that dominance unrestrained by either competition or regulation.

2.32 Optus submits that the ACCC should reject Telstra's proposed approach to market definition. In particular, the ACCC should not use the proposed 5% rule to define the geographical boundaries of the market.

Application to further routes in future

2.33 As a further point, Optus notes that Telstra is proposing a rule that could be applied to all DTCS routes, including routes from capital cities to smaller centres. In this regard the proposed rule has potentially enormous consequences, since it could effectively result in transmission routes to vast numbers of smaller centres which are near existing transmission routes being exempted from regulation. There are a number of towns near to the Sydney to Brisbane transmission route, Lismore for example, which are not directly on the route. Under Telstra's proposed rule, regulated transmission services would not longer be provided to towns that match this description.

2.34 Consider the Sydney to Lismore route (in respect of which Telstra has not – yet – applied for exemption). Lismore is 763 km from Sydney. Under the proposed 5% rule, any fibre optic network within 38 km of Lismore would be considered to be serving the Sydney to Lismore route. The problem arising from the rule becomes apparent when we consider that many operators are likely to have fibre networks connecting Sydney with *Brisbane* – and Lismore is very close to the Sydney to Brisbane route (eg, Lismore is only 32 km from the Pacific Highway). While these inter-capital operators are currently not likely to be serving the Sydney to Lismore route (and could not do so without making substantial, irreversible new investments), Telstra's proposed rule would treat them *as if* they were already serving it.

2.35 Lismore is only one example of this situation. There are hundreds if not thousands of smaller centres which would become unregulated under Telstra's proposed rule. The substantial cost required to build a new spur line may well exceed expectations of revenue in smaller centres and make investment by competing carriers uneconomic. Telstra's 5% rule would remove all constraint

to Telstra's market dominance in respect of a vast swathe of regional Australia.

2.36 Regardless of whether the Commission chooses to grant exemptions in the case of this particular application, Optus considers that it should send a clear signal that the 5% rule should not be applied to define the geographical boundaries of the market in this or any future reviews of the declared DTCS network.

2.37 A separate question is whether the 5% rule could be used for assessing the likelihood of entry (as opposed to the geographical boundaries of the market). Entry decisions, however, are substantially more complex than is implied by the simple approach taken by CRA. This issue is explored further in the section below entitled "Using the 5% rule to predict entry decisions".

Optus' proposed approach to the distance threshold

2.38 Optus proposes that the ACCC approach the distance threshold for geographical market definition by asking the question: how close to the regional town centre does a competitor's optical fibre network need to be for that competitor to be able to provide service to the town in question without making substantial, irreversible new investments? In answering this question, the ACCC should be guided by usual business practice.

2.39 From the perspective of usual business practice, a network is generally regarded as capable of serving a town if it reaches the built-up area of town, within which existing networks are likely to exist which can provide last mile capability. Viewed in this way, the ACCC's 1 km rule of thumb is reasonable, although perhaps slightly conservative.

2.40 Viewed in the same way, Telstra's proposed 5% rule has the potential to result in absurdities. As noted above, according to Telstra's proposed 5% rule, the owner of a network between Sydney and Brisbane would be considered to be a competitor in the transmission capacity market for the Sydney to Lismore route. This conclusion would simply be incorrect as a matter of business reality: such a network would not be capable of serving Lismore.

2.41 Optus considers that if the ACCC wishes to revise its 1 km distance threshold, it should rely on standard industry benchmarks. In this regard, Optus notes that **[commercial-in-confidence begins] [commercial-in-confidence ends]** .

2.42 In line with these figures, Optus proposes that a threshold of around 4 or 5 km from the regional town centre would be appropriate. However, such a threshold should be applied in a flexible manner. For a very small centre, for example, a shorter distance (perhaps 1 km) would be sensible, due to the smaller size of the built up area of the town within which existing networks are likely to exist which can provide last mile capability (and the smaller number of potential customers). In a very large centre, a longer distance would be appropriate.

2.43 In either case, the appropriate test should be whether the network owner would need to make significant, irreversible new investments in order to supply the market. If so, then it is not within the market.

Using the 5% rule to predict entry decisions

2.44 After considering Telstra's proposed approach to market definition above, Optus concluded that the 5% rule should be rejected as a tool for defining the geographical boundaries of the market. However Optus noted that a separate question was whether the 5% rule could be used for assessing the likelihood of entry (as opposed to defining the geographical boundaries of the market). This issue is explored further in the section.

2.45 In deriving the 5% rule, CRA has made the following key assumptions:

- that the decision of an optical fibre network operator to enter a given capital-regional route market is based primarily on a comparison between its average cost of service provision and the incumbent's pricing;
- that (competitive) pricing in the capital-regional transmission market is equal to the average cost of serving the route; and
- that the average cost of serving the route is a linear function of distance (i.e. the length of the route).

2.46 Optus notes that some of the assumptions used by Telstra in deriving the 5% rule are incorrect or overly simplistic. In particular, Optus contends that:

- the average cost of serving a transmission route depends on a number of factors, of which distance is only one – hence it is incorrect to assume that cost is a linear function of the length of the route;
- pricing on capital-regional transmission routes depends on a number of factors, of which average cost is only one – hence it is incorrect to assume that price is a linear function of the length of the route; and
- the decision of an optical fibre network operator to enter a given capital-regional route market depends on a number of factors, of which a comparison between its average cost of service provision and the incumbent's pricing is only one – hence it is overly simplistic to assume such a simple entry rule. Entry decisions are substantially more complex than is implied by the simple approach taken by CRA.

2.47 Optus concludes that it would not be appropriate to apply the SSNIP test to assess the likelihood of a competitor making an entry decision.

2.48 Optus discusses these points in more detail in the following sections.

Cost drivers of transmission capacity

2.49 CRA assumes that the average cost of serving the route is a linear function of distance. That is, as the length of the route increases, the cost of transmission (and hence price charged to customers) increases by a relatively constant (i.e. linear) amount. Further, CRA assumes that the competitive price in the capital to regional transmission market is equal to the average cost of serving the route and so is a linear function of distance (i.e. length of the route).

2.50 CRA summarise their approach in the following paragraph:

"In essence what is proposed here is a market definition rule based on the ratio of the spur length to the entire route distance, rather than on the absolute length of the spur line. ***The intuition behind this approach is related to the fact that casual inspection of posted transmission prices shows them to be strongly and approximately linearly related to route distance****: the longer the route, the higher the price. On higher priced routes, all else being equal, a longer (and therefore more expensive) spur construction would be justified to enter the market. The linearity of relationships between posted transmission prices and route distances on one hand and between spur construction costs and spur distances on the other gives rise to the proposed rule based on distance ratios."* [13] [emphasis added]

2.51 Optus submits that many of the basic assumptions underlying the CRA approach are incorrect. The CRA analysis assumes away many of the cost drivers for DTCS capacity, resulting in an overly simplistic and erroneous rule that the Commission should reject.

2.52 For example, CRA makes the assumption that "over relatively long distances the distance-based cost element Kx will tend to dominate the fixed cost of termination equipment".[14] However it is Optus' experience that fixed costs outweigh the variable cost of fibre by a significant proportion. Optus submits that in reality there is not such a clear cut relationship between costs and distances. For example the need to build repeaters to boost the signal along the cable dramatically increases the build cost, essentially adding a step-function to the cost curve. On more remote routes (e.g. inland links) there may also be a need to power such repeaters using solar power and/or generators. Again this requirement will add significantly to the build cost.

2.53 Optus notes that despite CRA's claim of a "linearity...between posted transmission prices and route distances" this is not supported by the wholesale transmission prices currently available in the market.[15] A selection of the wholesale transmission prices offered by Telstra for the listed routes is provided in the table below.

[Start commercial-in-confidence]

[End commercial-in-confidence]

2.54 The above table lists a heterogenous selection of routes that extend across varying distances and different regions. It is evident from Telstra's wholesale offerings that the final transmission price is not highly correlated to the radial distance of the link. **[Start commercial-in-confidence] [End commercial-in-confidence]** Although clearly the length of the link is likely to be a factor, it is evident that other factors have a significant influence.

[13] CRA (2007), *Economic Report on domestic transmission capacity service exemptions*, 23 August 2007, page 7.
[14] CRA (2007), *Economic Report on domestic transmission capacity service exemptions*, 23 August 2007, page 6.
[15] CRA (2007), *Economic Report on domestic transmission capacity service exemptions*, 23 August 2007, page 7.

2.55 In conclusion, the average cost of serving a transmission route depends on a number of factors, of which distance is only one – hence it is incorrect to assume that cost is a simple linear function of the length of the route.

Pricing of transmission capacity

2.56 In terms of pricing, CRA assumes that the competitive price in the capital-regional transmission market is equal to the average cost of serving the route – and so is a linear function of distance (i.e. the length of the route). This assumption is overly simplistic, since it neglects other important drivers of pricing such as capacity, duration of contracts and traffic volume.

2.57 Once the fibre is 'lit' and active, the final wholesale price will incorporate a value representative of the current state of demand and capacity for the route. A route at or near full capacity will be charged at a higher price representing both scarcity (limited supply) and the need to upgrade (increase) capacity on the link through capax expenditure. Furthermore the upgrade of transmission networks to the DWDM standard (to increase capacity) requires the replacement of repeaters and multiplexers, flowing through to consumers as increased prices.

2.58 Optus notes that a significant influence on pricing of transmission capacity is the length of contracts. At a basic level, the owner of a fibre link recovers its costs through sales of capacity. If it sells capacity to customers via relatively short contracts (e.g. one year) there is (i) a reduced period over which is can recover its costs and (ii) potentially a risk that it will never recover its costs, especially if there is no rollover of the service (contract renewal). In this way shorter contracts have an endogenous riskiness for the supplier which will be reflected in higher prices. Conversely the price of longer term contracts (e.g. 3 to 5 years) will generally be lower as the seller has a longer period over which it can recoup costs and therefore a lower risk of under-recovery.

2.59 A further influence on pricing is the volume of traffic carried on the route. **[Start commercial-in-confidence]. [End commercial-in-confidence]**

2.60 In conclusion, pricing on capital-regional transmission routes depends on a number of factors, of which average cost is only one – hence it is incorrect to assume that price is a linear function of the length of the route.

The entry decision

2.61 Turning to the competitor's entry decision, CRA assumes that the decision of an optical fibre network operator to enter a given capital-regional route market is based primarily on a comparison between its average cost of service provision and the incumbent's pricing. That is to say that an optical fibre network operator would expand its network and enter the market provided a hypothetical price 5% above the incumbent's average cost of service provision was above its average cost of cost of service provision. Optus believes that this assumption is overly simplistic.

2.62 Potential entrants must make a build or buy decision based on the access price offered on the existing route and the costs of a competitor building a competing route given the expected demand obtainable by that firm (in

competition with the incumbent's link). Further, as noted above, in making the entry decision, potential entrants try to assess the prices that are likely to prevail after entry (and disregard current prices that may be only temporary). In this case, potential entrants would try to assess Telstra's likely response to the entry of a competitor. Telstra is acutely aware of this business decision and therefore, rather than pricing at cost, is likely to set its wholesale prices at levels slightly below the point at which it would be profitable for a competitor to build their own transmission link. Optus highlights that this threshold point will not necessarily represent 5% (as per the proposed rule) or any other proportion of the total route cost.

2.63 Consider again the owner of a network that reached from Brisbane to Innisfail, who would need to build a new spur line to connect its existing network (in Innisfail) with the regional centre (Cairns). **[Start commercial-in-confidence] [End commercial-in-confidence]**

2.64 Clearly Telstra might reduce its prices after entry as a response to the competitor. Such a response might make the route unprofitable and strand the entrant's assets. Indeed on many routes two competitors may not both be viable. This scenario would naturally be taken into account by a potential entrant considering making a substantial, irreversible new investment.

2.65 It follows that to mechanically apply Telstra's 5% rule to this scenario might incorrectly predict an entry decision, since this simplistic approach does not take into account all relevant factors.

2.66 In conclusion, the decision of an optical fibre network operator to enter a given capital-regional route market depends on a number of factors, of which a comparison between its average cost of service provision and the incumbent's pricing is only one – hence it is overly simplistic to assume a simple entry rule as CRA does. Entry decisions are substantially more complex than is implied by the simple approach taken by CRA.

2.67 Optus submits that the Commission should be very careful in using the 5% rule to assess the likelihood of entry. The application of the rule in this way has the potential to result in a substantial lessening of competition in the relevant markets. In some circumstances the 5% rule might incorrectly predict an entry decision, suggesting that entry would be likely to provide an effective constraint on Telstra's conduct in the event of an exemption being granted, when in reality no such entry would be forthcoming.

2.68 Optus notes that Telstra is proposing a rule that would apply to all DTCS routes. Regardless of whether the Commission chooses to grant exemptions in the case of this particular application, Optus considers that it should send a clear signal that the 5% rule should not be applied to assess the likelihood of entry (or in fact for any purpose) in this or any future reviews of the declared DTCS network.

3. Substitute services on routes listed for exemption

3.1 Telstra has applied for exemption from regulation on twenty capital-regional routes ('exemption area') relating to the supply of domestic transmission capacity services (DTCS), on the grounds that there is sufficient competition on the routes in question to warrant removal of declaration.

3.2 Optus submits that to be considered a viable substitute for the DTCS in the context of Telstra's exemptions, a potential alternative must possess the following attributes:

- a wholesale competitor;
- sufficient available bandwidth (capacity);
- sufficient quality of service; and
- a sustainable competitor in the long run.

3.3 Optus contends that potential substitutes will not provide sufficient competitive constraint on Telstra to discipline its pricing of transmission capacity services unless they possess these attributes.

3.4 Optus submits that a number of firms active on the routes in question do not provide a transmission capacity service that is comparable to either Telstra or Optus, and therefore cannot be considered to exert an effective competitive constraint on Telstra.

3.5 Optus submits that Telstra's submission presents a misleading view of the current level of competition for transmission services along many routes listed for exemption. In particular, Optus has concerns regarding 14 of the routes for which Telstra has applied for an exemption from declaration. Optus submits that the removal of declaration on these 14 listed routes may have a negative impact on competition. Exemptions on these routes could allow Telstra to strengthen its dominance in the transmission capacity market and reduce the ability of users to access transmission services.

3.6 This section is set out under the following headings:

- Characteristics of an effective substitute;
- Likely providers on routes listed for exemption; and
- Assessment of likely providers.

Characteristics of an effective substitute

3.7 Optus submits that to be considered a viable substitute for the DTCS in the context of Telstra's exemptions, a potential alternative must possess the following attributes:

- a wholesale competitor;

- sufficient available bandwidth (capacity);
- sufficient quality of service; and
- a sustainable competitor in the long run.

3.8 Optus contends that potential substitutes will not provide sufficient competitive constraint on Telstra to discipline its pricing of transmission capacity services unless they possess these attributes.

3.9 Each of these attributes is discussed in more detail below.

Wholesale competitor

3.10 The DTCS is a wholesale input which allows an access seeker to provide services in downstream retail markets (such as long distance calling). Accordingly, a viable substitute network must offer transmission services in the wholesale market. If Telstra's application is to be granted, the ACCC must be satisfied that Telstra's conduct would be constrained by competition in the wholesale market in which the DTCS is supplied.

Bandwidth (capacity) available

3.11 Sufficient capacity is a crucial requirement for any potential substitute for the DTCS to be effective. Capacity demands on major capital-regional routes are high and, with increasing take-up of broadband, increasing rapidly. **[Start commercial-in-confidence]. [End commercial-in-confidence]**

3.12 Optus submits that although microwave links can provide similar service quality to fibre optic cable, they do not provide a complete substitute. Optus and other carriers (including Telstra) use a significant amount of microwave technology, particularly in the mobile network for connecting base stations to the network. However the purpose to which microwave links are put is usually 'tail-end' transmission (i.e. connecting mobile base stations to hubs) which is clearly not an equivalent service to the high bandwidth services provided along the capital to regional fibre routes of the DTCS. [16]

3.13 [**Start commercial-in-confidence].**[17] **. [End commercial-in-confidence]**

3.14 More generally, microwave is best suited to situations where fibre links are not economically viable. [18] For example in regions that are likely to have low population density (e.g. rural and regional areas) and low traffic requirements, microwave transmission facilities with relatively small and limited bandwidth (as compared to fibre) are more appropriate.

[16] This view was also previously supported by the Commission in its *Review of the Declaration of the DTCS*, Final Report, April 2004, page 24.
[17] **CiC.**
[18] A more detailed explanation of the economics of the choice between microwave and fibre links is contained in Optus (2007), *Optus Submission to the ACCC on Transmission Network Cost Model*, June 2007, page 4.

Type of service (e.g. quality of service offered)

3.15 For a product to be reasonably considered a substitute it must be comparable in terms of quality of service attributes. Optus considers that important attributes to consider include parameters such as:

- Reliability of service;
- Uniformity of quality;
- Network architecture (e.g. available POIs); and
- Fault restoration and support.

3.16 With respect to reliability, redundancy is a crucial element of a transmission service, particularly with respect to large business and government customers. This suggests that a single network link (in a single trench) would be insufficient to be considered a viable substitute for Telstra's DTCS. Further, a route in close physical proximity to Telstra might be discounted as offering an alternative source of supply where it is required for redundancy.

A sustainable competitor in the long run

3.17 One potential substitute for Telstra's DTCS is where a competitor leases capacity on a transmission link and resells that capacity into the wholesale market.

3.18 Telstra's submission has suggested that lease-based competitors could be viable substitutes, and queried the continuing use of the Commission's existing rule, suggesting that competition may exist at a "lower threshold" where there are substitute services.[19] Telstra noted that: *"…it may be that competition is also effective at a lower threshold, for example, where there are only two fibre networks but a further competitor leases capacity on one of those networks or supplies transmission capacity via microwave infrastructure."* [20]

3.19 Optus considers that a wholesale competitor providing capacity that it controls only for the duration of a lease can only be a competitive constraint on Telstra in the short term, until the lease ends. If declaration is withdrawn, then Telstra would have the incentive to refuse to renew the lease, eliminate the lease-based competitor and secure monopoly profits on the line. At the very least, the lease would need to be of long duration to be considered.

3.20 Optus therefore submits that the existence of resale competition on a route is not, on its own, an effective competitive constraint on Telstra. Optus rejects Telstra's "lower threshold" and submits that the presence of alternative

[19] Telstra (2007), *Submission to the Australian Competition and Consumer Commission - Domestic Transmission Capacity Service Exemption Application*, Supporting Submission, Confidential Version, page 5.
[20] Telstra (2007), *Submission to the Australian Competition and Consumer Commission - Domestic Transmission Capacity Service Exemption Application*, Supporting Submission, Confidential Version, page 5.

carriers who own optical fibre infrastructure is the only valid indicator for competition along these routes.

Likely providers on routes listed for exemption

3.21 In evidencing the apparent level of competition along various routes, Telstra relied exclusively on a supporting submission by Market Clarity (listed as Annexure 1). Market Clarity concludes that there are potential alternatives for Telstra's DTCS on the routes in question.

3.22 Optus has reviewed the Market Clarity report and submits that the Commission should not consider it to be a credible piece of supporting evidence. Optus notes that the evidence relied on by Market Clarity in reaching its conclusion is not disclosed.

3.23 Market Clarity states that it determined the number of competing carriers by using its in-house "Telecommunications Infrastructure Database". The database is understood to provide information on backhaul fibre infrastructure gained from a range of informal and formal sources. [21] Optus notes this database is not publicly available, not subject to any form of evaluation by external parties and, to Optus' knowledge, is not a database that is familiar to the telecommunications industry as a resource. Optus further notes that the Market Clarity report does not list any providers that use, or have previously used, this resource.

3.24 Optus has conducted its own analysis to identify the carriers providing a transmission capacity service along the listed routes (refer to table below). Optus surmises (since Telstra has not provided this information) that these are the providers most likely to have been counted by Market Clarity in its count of the providers on each route listed for exemption. Optus finds it puzzling that Market Clarity and/or Telstra have not provided a similar level of detail listing the carriers that it believes are providing a competitive DTCS for each listed route. At the very minimum this would allow Market Clarity's analysis to be verified by parties identified as having capacity on a route.

3.25 The results of Optus' analysis are set out below. The results of Optus' analysis show that along at least 14 of the routes the degree of infrastructure competition is questionable. These routes are marked by an asterisk.

[Start commercial-in-confidence]

[End commercial-in-confidence]

3.26 Although the table categorises a number of firms as 'carriers' Optus believes that many of these firms do not provide a transmission capacity service that is comparable to either Telstra or Optus, and therefore cannot be considered to exert an effective competitive constraint on Telstra. Optus provides further explanation of these contentions below.

[21] Market Clarity (2007), *Telecommunications Fibre Backhaul Infrastructure Summary for Selected Routes*, Prepared for Mallesons Stephen Jacques, Version 1.0, 22 August 2007, page 6.

Assessment of likely providers

3.27 Optus has assessed the carriers it has identified above on the routes for which Telstra has proposed exemptions against the list of characteristics of an effective substitute noted above to determine whether they can be considered effective substitutes for Telstra's DTCS.

3.28 Optus considers that the following firms do not provide a transmission capacity service that is comparable to either Telstra or Optus, and therefore cannot be considered to exert an effective competitive constraint on Telstra: **[Start commercial-in-confidence]**

3.29 **[End commercial-in-confidence]**

Assessment of competition on routes

- As a result of the above analysis Optus submits that on 14 of the routes listed for exemption, there would appear to be only two fibre networks able to provide an effective competitive constraint on Telstra, which may indicate insufficient competition to warrant removal of declaration. **[Start commercial-in-confidence] [End commercial-in-confidence]**

Promotion of competition

3.30 In determining whether a service declaration should be maintained or not, section 152AT directs the Commission to grant an exemption only if it is in the long-term interests of end-users (LTIE). The LTIE is defined under section 152AB(2) with a key consideration being the objective of promoting competition (s152AB(2)(c)). The fundamental task for the Commission is to assess whether the removal of declaration is likely to promote competition on those routes. In considering this section 152AB(4) of the TPA defines 'promoting competition' as:

"…the extent to which the thing will remove obstacles to end-users of listed services gaining access to listed services." [22]

3.31 Optus notes that the Australian Competition Tribunal (ACT) has provided guidance on what type of competition would be considered an 'enhancement' on the status quo:

"…consideration that if the conditions or environment for improving competition are enhanced, then there is a likelihood of increased competition ***that is not trivial****"* [23] [emphasis added]

3.32 Optus contends that potential substitutes will not provide sufficient competitive constraint on Telstra to discipline its pricing of transmission capacity services unless they possess the attributes Optus has set out in this submission. If declaration on the relevant transmission capacity routes is removed in reliance on adequate substitutes then there will not be sufficient

[22] TPA 1974, s152AB(4).
[23] ACT (2000) *Review of Declaration of Freight Handling Services at Sydney International Airport*, [2000] ATPR (ACT) 41-754, at para 107.

competitive constraint on Telstra's pricing of transmission capacity services and competition in downstream markets – such as long distance calling – will suffer as a result.

3.33 In seeking an exemption Telstra claimed that all of the stated routes had "Telstra plus at least two other competitors supply[ing] services on their own optical fibre networks". [24] Optus does not accept this is a correct statement.

3.34 Optus submits that Telstra's submission presents a misleading view of the current level of competition for transmission services along many routes listed for exemption. In particular, Optus has concerns regarding 14 of the routes for which Telstra has applied for an exemption from declaration. Optus submits that the removal of declaration on these 14 listed routes may have a negative impact on competition. Exemptions on these routes could allow Telstra to strengthen its dominance in the transmission capacity market and reduce the ability of users to access transmission services.

[24] Telstra (2007), *Submission to the Australian Competition and Consumer Commission - Domestic Transmission Capacity Service Exemption Application*, Supporting Submission, Confidential Version, page 5.

4. Timing Matters

Phase-in period

4.1 Optus submits that there should be a phase-in period before the exemptions come into effect, which should last until at least 12 months after the ACCC's final decision. This will allow an effective wholesale market to form for services that will be substitutes for the declared DTCS.

4.2 Optus notes that the construction of new fibre spurs, as envisaged by Telstra's application, is a lengthy process, and at 6 to 12 months would be required for the construction process alone.

4.3 Optus considers that access seekers will require a reasonable period of time to adjust their business plans to the new environment and transition customers away from the DTCS.

Duration of exemptions

4.4 Optus considers that any exemptions should only be granted for a limited period, to allow assessment of the impact of exemptions on Telstra's conduct and on competition in downstream markets.

4.5 Optus proposes that any exemptions be granted for a period of 3 years only, and that during that period the ACCC should monitor Telstra's conduct and pricing of transmission capacity services.

4.6 In this respect, the ACCC should consider its ability to address conduct under Part XIB of the Trade Practices Act.