Optus Submission to

Australian Competition and Consumer Commission

on

Reviewing the declaration of the Domestic Transmission Capacity Service

Public Version

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Table of Contents

1. Executive Summary

1.1 Optus welcomes the opportunity to respond to the ACCC's discussion paper on 'reviewing the declaration for the domestic transmission capacity service'.

1.2 Many of the issues that will be raised in this declaration inquiry have been extensively canvassed in the recent consultation carried out by the ACCC in the context of Telstra's exemption applications for a range of DTCS services (the 'Exemption Applications'). However, important guidance on this issue has been provided by the Australian Competition Tribunal (ACT) in its judgment on Telstra's Wholesale Line Rental (WLR) Exemption Applications.[1] In encouraging access seekers to move up the ladder of investment, the ACCC should take note of this guidance, and accordingly must be careful not to remove regulation prematurely.

1.3 Optus considers that the declaration of the DCTS has created significant benefits for consumers of downstream services and has encouraged economically efficient investment in transmission infrastructure by acting as a stepping stone for access seekers on the path to infrastructure-based competition. Optus submits that a fundamental principle which should guide the ACCC in its review is that regulation should be relaxed only where to do so would promote competition and benefit consumers.

1.4 In the remainder of this submission Optus will make the following points:

- The ACCC should recognise a distinct market for corporate customers, or analyse the distinct competitive impact of the declaration on corporate customers separately from the mass market.
- Each market for transmission capacity must be limited (geographically) to a single route between two points on the network (e.g. a POI to a single end user's home or business premises).
- Alternative technologies are not an adequate substitute for fibre based transmission services, since they do not generally possess the required attributes to exert a competitive constraint upon Telstra's conduct.
- The market for tail-end DTCS is heavily dominated by Telstra and not competitive and to remove the declaration would not be in the LTIE.
- The ACCC's approach to determining the level of competition in capital-regional and IEN routes as applied in the Exemption Applications is a reasonable approach.
- There are significant high sunk costs in the construction of transmission networks. A firm that cannot currently serve the market without making significant, irreversible new investments should be defined as being outside the boundaries of the market.

[1] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 50.

1.5 Optus concludes that it is the LTIE for the Commission to declare the DTCS for another 3 years.

1.6 Optus considers that if during this period market conditions change or further information about the state of competition becomes available, then interested parties are able to ask the Commission to exempt specific routes via Exemption Applications under s 152AT of the *Trade Practices Act 1974* (the 'Act').

2. The role of Telstra's Transmission Exemption Applications

2.1 Optus believes that the Commission conducted a thorough review of the state of competition in transmission markets as part of reviewing Telstra's proposed Transmission Exemptions for DTCS services (the 'Exemption Applications'). The Commission reached a considered position and determined specific routes on which it would be in the LTIE to exempt Telstra from the DTCS declaration.

2.2 Optus supports this type of regulatory action as it affirms the fundamental principle underpinning pro-consumer regulation – that regulation should be relaxed only where to do so would encourage efficient investment and benefit competition and consumers. Such intervention is also in line with the "ladder of investment" approach of Professor Martin Cave that is commonly quoted in regulatory proceedings.[2]

2.3 However, Optus believes the Commission must continue to be mindful that in encouraging access seekers to move up the 'rungs' of investment, it must be careful not to remove rungs prematurely as this could leave access seekers in a very weak position compared to infrastructure owners. Optus highlights that the Australian Competition Tribunal (ACT) recently provided guidance on this issue in its review of Telstra's Wholesale Line Rental (WLR) Exemption Applications and made the following comment:

> *"In deciding to withdraw regulatory protection at a lower rung of the ladder, the regulator in effect leaves the entrants at the mercy of the incumbent for access to the relevant service."* [3]

2.4 Therefore the Commission must be completely "on top of what is happening in the market" and acutely aware of the precise market conditions that exist before being in a position to undertake further deregulation of the DTCS. [4] In this regard Optus strongly submits that there is no new information to suggest that the current DTCS declaration should be relaxed any further.

2.5 In the WLR decision the Tribunal also listed a significant amount of market information that it believed the Commission should be aware of before making decisions, including: [5]

- Firm numbers;
- Competitive options of firms;
- Changes in market shares;
- Capacity in the market;

[2] The first 'rung' of the investment ladder is reselling the incumbents service, the second being some form of independent capacity and the third being complete independence through investment in facilities.
[3] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 50.
[4] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 49.
[5] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 49.

- The long-term interests of end-users; and
- Developments in technology and its deployment.

2.6 Optus considers that in reviewing Telstra's Exemption Applications, the Commission (and industry) thoroughly reviewed the state of competition in the transmission markets and has clearly met the Tribunal's 'benchmarks' for the acceptable level of information and analysis.

2.7 Optus therefore submits that, in reviewing the need for continued declaration of the DTCS, there is no risk for the Commission if it relies heavily on the outcomes of that Exemption enquiry. Optus considers that the industry and interested parties spent a significant amount of time and effort in responding to the Exemption Applications. To now rely upon the conclusions and decisions made in that review reduces regulatory burden for all parties, and importantly, without infringing upon the Commission's review requirements under s152 of the Act.

2.8 Optus strongly submits that there is no new information to suggest that the current DTCS declaration should be relaxed any further.

3. Market Definition

3.1 Optus supports the ACCC's general approach to market definition which is based on the Part XIC of the Act and does not require the ACCC to precisely define the scope of relevant markets for the purpose of assessing an exemption application. Rather, the Commission is directed by the ACT to direct its attention to the markets in which competition may be promoted.

3.2 Accordingly, a market definition analysis under Part XIC of the Act should be seen in the context of shedding light on how continued declaration would or would not promote competition rather than in the context of developing 'all purpose' market definitions. [6]

Product dimension

3.3 The product dimension of a market refers to the types of services that can be supplied in a particular market. Optus supports the Commission's initial view in the discussion paper, which is also the view taken in its Final Decision on Telstra's Exemption Applications, that the relevant downstream market is defined by the following:

> *"The ACCC considers that the relevant downstream market is the range of retail services (that can be provided using transmission services)* ***delivered over optical fibre****. This includes the national long distance, international call, data and IP-related markets. Mobile and local call services can also be provided downstream using DTCS as an input and are therefore included in the downstream retail market."* [7] [emphasis added]

3.4 It is important to note that this definition specifically states that the transmission service must be delivered over optical fibre. Optus strongly concurs with the Commission that only fibre transmission should be considered in the service description and submits further information about the unsuitability of alternate mediums in section 4 of the submission.

3.5 Optus also wishes to highlight that existence of the DCTS declaration impacts on both mass market and corporate (business) customers for all of those services listed above. In this regard it is important to ensure that ACCC considers the distinct effects upon different types of customers, given that corporate customers and mass market customers can require different attributes of the same transmission service.

3.6 Optus considers that in the past the Commission has been reluctant to consider corporate customers in a special market. However, the Commission should note that in the recent WLR hearing the ACT has conceded that corporate customers have distinct and different needs.[8] Given this development Optus

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[6] ACCC, *Telecommunications services- Declaration provisions – a guide to the declaration provisions of Part XIC of the TPA*, 1999 (Declaration Guide).

[7] ACCC, *Telstra's domestic transmission capacity service exemption applications*, Final decision (Public Version), November 2008, page 39.

[8] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 50.

believes that the Commission should place greater weight on this issue in the future.

3.7 In particular, corporate customers have more demanding requirements in relation to service levels than mass market customers. However, since the potential alternatives to the DTCS (such as other wholesale services and technology platforms) have different service levels, it is at least arguable that some of these wholesale services and technology platforms could be an acceptable substitute for an undeclared DTCS for the purposes of supply to mass market customers. But, the same service would not be an acceptable substitute for supply to corporate customers.

3.8 It follows that the removal of the declaration would impact on competition in the supply of services to corporate customers in a way that is quite different from the impact on competition in the supply of services to mass market customers. The ACCC should therefore either recognise a distinct market for corporate customers, or analyse the distinct competitive impacts of the declaration on corporate customers separately.

Geographic market

3.9 To properly assess the markets affected by the declaration, Optus believes the ACCC must consider the purpose of this analysis - to assess the competitive state of the markets in the event that declaration is revoked.[9] The aim of market definition in this context is to identify those competitors that currently represent the most important competitive constraints on suppliers of transmission capacity services in the event that declaration was revoked.

3.10 According to the Federal Court, the ACCC should try to include in the relevant market only those suppliers – of the same or related product in the same or related geographic area – whose existence significantly restrains the access provider's power.[10]

3.11 It is relevant to consider the available substitution possibilities in the event that the exemption is granted. According to the Federal Court, from the buyer's point of view, a market represents a range of goods or services which are good substitutes for one another in satisfying the buyer's requirements.[11] Both demand side substitution and supply side substitution should be considered.

3.12 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.[12] The 'hypothetical monopolist' test,

[9] According to s4E of the TPA, "market" includes "…a market for those goods or services and other goods or services that are substitutable for, or otherwise competitive with, the first-mentioned goods or services."
[10] Singapore Airlines Ltd v Taprobane Tours WA Pty Ltd (1991) 33 FCR 158 at 178, 104 ALR 633 (1992) ATPR 41-159.
[11] Re Howard Smith Industries Pty Ltd (1977) 28 FLR 385.
[12] 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.

which employs a SSNIP analysis, is used to determine the possibilities for supply side substitution.

3.13 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. 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…"* [13]

3.14 A firm that cannot currently serve the market without making significant, irreversible new investments should be defined as being outside the boundaries of the market. Due to the sunk costs involved and the time taken to enter the market, a potential entrant could not be counted as a serious competitor as it would be unable to exercise any constraint on the regulated firm in the event that the declaration was revoked.

Point-to-point definition for all DTCS services

3.15 Optus submits that each market for transmission capacity must be limited (geographically) to a single route between two points on the network (e.g. a POI to a single end user's home or business premises).

3.16 Optus considers that access seekers purchase the DTCS based on specific routes. Although a particular capital-regional route may be served by more than one geographically distinct transmission ring (or point-to-point route), a point-to-point capital-regional route is not demand substitutable for another route. For example Sydney-Bendigo is not substitutable for Canberra-Bendigo. Therefore, Optus still believes that the 'narrow' definition that it proposed previously to the ACCC in the Exemption Applications is the one that best reflects the true nature of the transmission services.

3.17 Optus submits that a narrower, point-to-point style definition is supported by:

- The terms of the current transmission declaration;
- The terms of Optus' agreement with Telstra for transmission services, and
- Decisions by the ACT in regards to similar services.

3.18 Optus also submits that a point-to-point definition is equally relevant for describing all transmission services – capital-regional, IEN and tail-end. The point-to-point definition is the one which most accurately describes the

[13] 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 and 5.

transmission service with the inference being that the ACCC should assess each route on its merits.

The terms of the ACCC's transmission declaration

3.19 Optus submits that the previous terms of the ACCC declaration of transmission services support a 'point-to-point' definition of the service. In that enquiry, the ACCC described the service boundaries of transmission as:

"…Intercapital transmission refers to transmission between transmission points located in different capital cities…
…'Other' transmission refers to transmission between transmission points located in different call charge areas, except for those between the capital cities listed in the previous paragraph….
…Inter-exchange local transmission refers to transmission between transmission points located at or virtually co-located with an access provider's local exchanges, that are within a single call charge area….
…Tail-end transmission refers to transmission between a point at a customer location and some point on the access seeker's network (such as a point of interconnection or "POI")…" [14] [emphasis added]

3.20 Optus therefore considers this strong evidence to support its contention that a similar, point-to-point, definition should be re-applied by the ACCC and retained in an extended declaration.

The terms of Optus' agreement with Telstra for transmission services

3.21 **CiC**

3.22 **CiC**

3.23 Optus considers this strong evidence to support its contention that a similar, point-to-point, definition should be applied by the ACCC in its service description for all types of transmission in an extended declaration.

Decisions by the ACT in regards to similar services

3.24 Optus considers that the Tribunal has previously provided guidance on how end to end transmission services should be defined. In 2004 the Tribunal was tasked with reviewing a decision by the National Competition Council (NCC) in regards to regulating access to the Duke Eastern Gas Pipeline (EGP).

3.25 In regards to this decision, the Tribunal came to the following conclusions:

"NCC, in its Final Recommendation, noted that there were two possible approaches to the definition of the relevant services, namely the identification of the services with respect to the markets they serve, or definition of the

[14] ACCC, *Transmission Capacity Service - Review of the declaration for the domestic transmission capacity service*, Final Report, April 2004, page 7.

<u>services in terms of both the start and end points of the service</u>. NCC said that it preferred the second approach, for a number of reasons which it gave. We have come to the same conclusion, but because of the view which we take as the proper construction of criterion (b)." [15] [emphasis added] [16]

3.26 The comparison of the gas and telecommunications industries is reasonable in this respect as both services involve transmission. It is clear from the Tribunal's judgement that when one is to compare the substitutability of competing 'transmission' services, the start and end points are a crucial consideration for regulators.

3.27 Optus also highlights that the decisions made by the NCC and ACT in the Duke EGP case were also applied by the High Court in the recent hearing of *BHP Billiton Iron Ore Pty Ltd v NCC*. [17] In the initial declaration inquiry BHP Billiton had proposed that other rail lines were substitutes because they had origination and destination points 'similar' to the line in question. However, the NCC has ruled decisively that the lines were not equivalent because they did not specifically provide an equivalent point-to-point service:

"Given that the Mt Newman and Hamersley lines <u>do not share origin and destination points, they do not provide the same service</u>. The Hamersley line is therefore not relevant to criterion (b)." [18] [emphasis added]

3.28 Optus notes that by up-holding the decision of the NCC, the High Court implicitly supported the NCC's previous ruling that services which BHP Billiton proposed as substitute were not equivalent.

3.29 Optus submits that the rulings presented above in regards to other jurisdictions are relevant, and support Optus' view that transmission services should be declared with reference to a narrow, point-to-point, definition.

Capital-regional DTCS: Application of a distance based rule

3.30 The ACCC should approach the distance threshold for the 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.

3.31 Optus notes that in Telstra's Exemption Applications the Commission rejected SSNIP type tests (e.g. the '5 per cent rule') and instead applied a distance based threshold of 1km. Under this '1km criteria' the Commission considered a party to be a supplier (or potential supplier) of capital-regional transmission services if it met the following criteria:

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[15] Re Duke Eastern Gas Pipeline Pty Ltd [2001] ACompT 2 (4 May 2001), para 70, page 19.
[16] The "criterion (b)" to which the Tribunal is referring to is defined as: "Criterion (b) – that access (or increased access) to the Services provided by means of the pipeline would not be contrary to the public interest.". Re Duke Eastern Gas Pipeline Pty Ltd [2001] ACompT 2 (4 May 2001), page 40.
[17] BHP Billiton Iron Ore Pty Ltd v National Competition Council [2008] HCA 45.
[18] NCC (2006), *Application for declaration of a service provided by the Mt Newman railway line under section 44F(1) of the Trade Practices Act 1974*, Final recommendation, 23 March, page 34.

- *"optical fibre within 1 km of the regional town's specified regional post office; and*

- *connection to an optical fibre network which connects the regional town with a capital city."* [19]

3.32 Optus considers that 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 appears reasonable.

3.33 However, Optus wishes to highlight that a carrier must make a significant and irreversible investment in infrastructure to construct a spur line – even a 1 km spur line. In this regard, Optus notes that **CiC**.

3.34 Consequently, the ACCC's 1km rule should be regarded as an upper limit on the distance from the town centre. The ACCC should consider whether a shorter distance would be more reasonable in the individual circumstances of a specific route.

Corporate customers

3.35 As noted previously, Optus considers the Commission has been reluctant to consider corporate customers in a special market. However given the recent guidance by the Tribunal in regards to WLR, the Commission should place greater weight on this issue in reviewing the need for continued declaration of the DTCS. [20]

3.36 Optus considers that the removal of the DTCS declaration would result in a distinct competitive impact on corporate customers due to their particular service requirements.

3.37 Optus uses the DTCS as an input into its supply of downstream fixed line services to business, wholesale and mobile customers. The key Telstra product in this regard is the Access Network lease ("AN lease"). Optus uses the AN lease product to provide a transmission link between its POI and the end user's home or business premises. If the Optus POI is in the same ESA as the end user's premises, the AN lease product would correspond to tail-end DTCS. If not, then the AN lease would include both IEN and tail-end DTCS.

3.38 Optus wishes to highlight that the declaration impacts on both mass market and corporate (business) customers for all of those listed services. In this regard it is important to ensure that ACCC considers the distinct effects upon different types of customers, given that corporate customers and mass market customers require different attributes of a transmission service. In particular, corporate customers have more demanding requirements in relation to service levels than mass market customers.

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[19] ACCC, *Telstra's domestic transmission capacity service exemption applications*, Final decision (Public Version), November 2008, page 49.
[20] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 50.

3.39 Since the potential alternatives to the DTCS (such as other wholesale services and technology platforms) have different service levels, it is possible that some of these wholesale services and technology platforms will be an acceptable substitute for the declared DTCS for the purposes of supply to mass market customers, but that the same service will not be an acceptable substitute for supply to corporate customers.

3.40 Therefore, in considering whether to continue to declaration the ACCC should therefore either recognise a distinct market for corporate customers, or analyse the distinct competitive impact on corporate customers separately.

4. Technologies used to provide transmission

4.1 Optus considers that the definition of an effective substitute DTCS is a key issue in the assessment of whether the current declaration should be maintained. Accordingly, in this section Optus set out the characteristics required of an effective substitute for the DTCS.

4.2 In assessing whether a proposed alternative is a viable substitute for the DTCS the Commission should take the following general parameters into account:

i) **Bandwidth of service.** The DTCS provides a guaranteed speed of at least 2 Mbps[21].

ii) **Quality of service.** For a product to be reasonably considered a substitute it must be comparable in terms of quality of service attributes such as;

(a) Reliability of service;

(b) Uniformity of quality and freedom from interference. The DTCS is a dedicated line and traffic is not shared with anyone else;

(c) Network architecture (e.g. available POIs);

(d) Fault restoration and support. Business customers would typically expect a 12 hour (or lower) standard restoration time in the event of a fault regardless if it is a complete loss of service or service difficulties; and

(e) Provisioning time. Business customers would typically expect to be provided with reasonable provisioning times once they have placed an order.

iii) **Reasonable costs.** Including, for example, both set up and maintenance costs.

iv) **National coverage**. This is a particularly important factor for business customers because of the "whole of business" service requirements typical of large corporate customers.

v) **Flexibility** as to location of service. The DTCS allows service provision to sites that are not buildings, for example a mobile base station (BTS). Further, the DTCS allows business customers to extend the reach of their premises/office within a short distance.

vi) **Availability at wholesale.** The DTCS is a wholesale input which allows an access seeker to provide services in downstream 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

[21] Service description under the Access Agreement.

Telstra's conduct would be constrained by competition in the wholesale market in which the DTCS is supplied.

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

4.4 Optus contends that potential substitutes will not provide sufficient competitive constraint on monopoly suppliers of the DTCS to discipline the pricing of transmission capacity services unless they possess these attributes. As a result, the presence of alternative carriers who own optical fibre infrastructure is the only valid indicator for competition in the DTCS.

Substitute services

Wholesale competitors

4.5 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 the declaration is revoked the ACCC must be satisfied that sufficient competition exists in the various wholesale markets in which the DTCS is supplied.

4.6 Optus considers that this means that some utility providers that utilise fibre connections for data and reporting on their networks (e.g. fault reporting for electrical wiring), cannot be considered suppliers of a substitute service unless they sell wholesale transmission capacity on that service. In Optus' experience, very few such companies provide wholesale access to such fibre networks. Optus therefore submits that the meagre existence of fibre networks does not constitute wholesale competition.

Bandwidth (capacity) available

4.7 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. **CiC**.

4.8 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. [22]

4.9 **CiC**. More generally, microwave is best suited to situations where fibre links are not economically viable. [23] For example in regions that are likely to have

[22] This view was also previously supported by the Commission in its *Review of the Declaration of the DTCS*, Final Report, April 2004, page 24.
[23] 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.

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.

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

4.10 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.

4.11 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 fibre-based transmission.

A sustainable competitor in the long run

4.12 One potential substitute for the DTCS is where a competitor leases capacity on a transmission link and resells that capacity into the wholesale market. 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 transmission leases, 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.

4.13 Optus therefore submits that the existence of resale competition on a route is not, on its own, an effective competitive constraint. Optus submits that the presence of alternative carriers who own optical fibre infrastructure is the only valid indicator for competition along these routes.

There are no close substitutes for fibre transmission

4.14 Optus submits that although alternative mediums to the declared DTCS are available (e.g. microwave, satellite) they are not direct substitutes for the DTCS. Optus considers that these alternate platforms were not built for the purpose of providing transmission capacity services, and they are not capable of meeting the typical requirements of Optus' customers (particularly its business customers) with respect to the parameters noted earlier in this section.

4.15 Furthermore, Optus notes that in the Exemption Applications Telstra specifically asked the Commission to disregard the substitutability of these other mediums when examining the applications stating that it had "no bearing on the case". [24]

4.16 Optus would like to make specific comments about the suitability of the following mediums for which the Commission may consider as alternative to the declared fibre DTCS:

- Microwave;
- Satellite;
- the ULLS, and
- Fibre from non-carriers.

4.17 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." [25]

4.18 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****"* [26] [emphasis added]

4.19 Optus contends that potential substitutes that have been raised will not provide sufficient competitive constraint to discipline Telstra's 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 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.

Microwave

4.20 Optus submits microwave is not a direct substitute for fibre-based transmission services.

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[24] Telstra, *Submission to the Australian Competition and Consumer Commission – Telstra response to questions from ACCC Discussion paper of October 2007*, Public Version, November 2007, page 5.
[25] TPA 1974, s152AB(4).
[26] ACT (2000), *Review of Declaration of Freight Handling Services at Sydney International Airport*, [2000] ATPR (ACT) 41-754, para 107.

4.21 Microwave is subject to interference from other transmission frequencies such as police radio and airport radar and that it would simply be impossible to use microwave around the CBD areas that are near the airport.

4.22 The DTCS allows access seekers to competitively offer national coverage, which is an important factor for business customers. Microwave on the other hand faces problems with:

- Limited spectrum availability especially in metropolitan areas;
- Line of sight to customer premises (especially in metropolitan or built-up areas where there are multi-storey buildings, trees, etc);
- Interference - it would be impossible to use microwave in areas that are near the airport, since microwave is subject to interference from other transmission frequencies such as airport radar, as noted above; and
- Capacity - as the ACCC notes in its final report on Review of the declaration for the domestic transmission capacity service, April 2004, microwave "does not have the high capacity of optical fibre"…and "it can only support a limited amount of bandwidth" ;

4.23 **CiC**

4.24 **CiC**

4.25 **CiC**

4.26 **CiC**

4.27 Optus submits that for these reasons microwave transmission is not a direct substitute for fibre-based transmission services.

Satellite

4.28 Optus submits satellite is not a direct substitute for fibre based transmission services. In general satellite is best suited to 'thin route' transmission or 'point-to-multipoint' uses where a low capacity (small bandwidth) is required for a wide range of addresses.

4.29 **CiC**

4.30 **CiC**

4.31 Optus submits that for these reasons satellite transmission is not a direct substitute for fibre-based transmission services.

The ULLS

4.32 The ACCC has made a final decision in regards to the Exemption Applications that the proposed tail-end exemptions would harm competition in metropolitan and CBD areas since the ULLS is not a close substitute for the DTCS at capacities up to 2MB. Optus strongly supports this decision and also considers ULLS to be an inappropriate substitute at capacities above 2MB.

4.33 Optus' concerns regarding the substitutability of the ULLS and DTCS can be summarised into the following key points:

- The presence of RIMs and pair gain systems mean that a copper line may not be DSL enabled;
- The ULLS has distance limitations which impact the capacity achievable;
- The ULLS cannot be extended physically to new termination points;
- Exchange capping means that ULLS may not be deployable in some ESAs;
- ULLS orders often face provisioning issues (e.g. address verification); and
- There are significant SLA variations between the ULLS and DTCS services.

4.34 In its submissions to the Exemption Applications Optus provided detailed information explaining each these issues.[27]

[27] Refer to 'Appendix A' of the *Optus' main reply submission* and *Optus' supplementary reply submission* (November 2008).

5. Competition analysis

5.1 In determining whether the DTCS declaration should be maintained or not, section 152AB directs the Commission to declare a service 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." [28]

5.2 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****"* [29] [emphasis added]

5.3 Optus submits 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. Therefore, if declaration on the relevant transmission capacity routes is removed in reliance on inadequate substitutes then there will not be sufficient competitive constraint on the pricing of transmission capacity services and competition in downstream markets – such as long distance calling – will suffer as a result.

Market structure

Capital-regional and IEN DTCS

5.4 Optus notes the ACCC's view on the level of competition along capital-regional routes as applied in the Exemption Applications.

5.5 In that review the ACCC determined that where at least two infrastructure owners (other than Telstra) have an existing optical fibre network that passes within a 1 km radius from a regional town's GPO (on a given capital-regional route) the competition or likelihood of competition provided by these alternative infrastructure owners is likely to exert sufficient constraint on monopoly conduct on that route. [30] The ACCC then examined data received

[28] TPA 1974, s152AB(4).
[29] ACT (2000) *Review of Declaration of Freight Handling Services at Sydney International Airport*, [2000] ATPR (ACT) 41-754, at para 107.
[30] ACCC, *Telstra's domestic transmission capacity service exemption applications*, Final decision (Public Version), November 2008, page 46.

from the Infrastructure RKR to determine which capital-regional routes currently meet the 1 km criteria.

5.6 However, Optus notes that the Tribunal's recent WLR decision raises issue with the use of 'rules of thumb' such as this. In that decision the Tribunal was highly critical of the ACCC (and Telstra) for "avoiding empirical analysis by the adoption of a rule of thumb".[31]

5.7 The Tribunal described the issue as follows:

> *"The problem with a fixed rule of thumb in the area of deregulation is that it is just a shortcut. Simple numbers-based rules of thumb are not uncommonly used as a screening device to indicate thresholds beyond which markets might ordinarily be expected to work competitively. But a rule of thumb is a static indicator only and reveals nothing about market dynamics over time*
>
> *…While the Tribunal acknowledges that certain rules may be useful as screening devices, to be ultimately determinative of a regulatory process that seeks to minimise regulatory distortions and to promote productive allocative and dynamic efficiencies,* ***any rule must be carefully researched and justified (if it is capable of being justified) on the grounds of sound economic knowledge****."* [32] [emphasis added]

5.8 This sends a clear signal to the Commission and industry that rules of thumb should be used very cautiously to establish regulatory guidelines.

5.9 Optus considers that for the purpose of this declaration review it is still appropriate for the Commission to apply the 1km rule. The Commission has simply applied the rule to "screen" the level of information down to a manageable size. Actual specific data such as the Infrastructure RKR, as well as information obtained thorough submissions from interested parties, will then used to form a more comprehensive opinion on the state of competition in a market.

Tail-end DTCS

5.10 Optus submits the current declaration needs to be maintained because Telstra, as the incumbent, still enjoys a significant first mover advantage over other carriers in accessing buildings. According to research by BIS Shrapnel (2001) referred to by Telstra in the Exemption Applications, its fibre network is connected close to **CiC** of buildings. The corresponding figure for Optus is around **CiC**.

5.11 Because Telstra's network is already connected to every (or almost every) CBD building, it generally does not face the above problems faced by other carriers. The high cost of building access fibre infrastructure is a significant barrier to entry in tail-end transmission capacity and in metropolitan areas the barriers to entry are even greater, since greater distances and lower expected revenues mean that it is likely to be less economic to build fibre access infrastructure compared to CBD areas.

[31] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 57.
[32] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 58.

5.12 In the Final Decision on the Exemption Applications the ACCC noted Telstra's dominance, stating:

"Although there is evidence to suggest the presence of optical fibre network owners in the CBD, the ACCC concludes that Telstra, even if it does not supply 100 per cent of buildings in a CBD is still the dominant provider of connections to tail-end transmission customers." [33]

5.13 The Commission concluded that the market for tail-end transmission over optical fibre in metropolitan areas was not currently competitive. [34]

5.14 Optus therefore submits that the market for tail-end DTCS is heavily dominated by Telstra and not competitive and so to remove the declaration would not be in the LTIE.

Market entry

5.15 Before commenting on some of the specific issues around market entry for each type of transmission service, Optus highlights that the Tribunal's recent WLR decision points out that the existence of entry, on its own, is not sufficient to show the existing supplier will be constrained:

"…the Tribunal is of the opinion the fact of entry into an exchange by a firm of one, two or more DSLAMs means very little. ***What is important to know for competition assessment purposes is the impact of entry*** *on Telstra: has entry had or, more importantly in terms of the Act, is entry is likely to have, a competitive impact on Telstra's behaviour?"* [35]

5.16 Optus considers the Tribunal's guidance in the WLR decision very relevant to the DTCS declaration review. In particular the Tribunal was highly critical of the ACCC (and Telstra) for "avoiding empirical analysis" by the adoption of a rule of thumb.[36] The Commission must be mindful that in adopting the three competitor rule, and making conclusions from that about the ease or level of entry into a transmission market, it also considers the impact (if any) of such entry. That is, the use of the rule of its own is not sufficient.

5.17 Further impacts that the Commission should consider include whether the entrant has the capacity to satisfy demand in the short and long-run and whether the entrant(s) have the financial strength to ride out response by other player(s) in the market.[37]

Capital-regional DTCS

5.18 Optus believes that there are significant high sunk costs in the construction of transmission networks. A firm that cannot currently serve the market without

[33] ACCC, *Telstra's domestic transmission capacity service exemption applications*, Final decision (Public Version), November 2008, page 55.
[34] ACCC, *Telstra's domestic transmission capacity service exemption applications*, Final decision (Public Version), November 2008, page 56.
[35] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 69.
[36] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 57.
[37] Re Telstra Corporation Ltd [2008] ACompT 2 (22 December 2008), para 70.

making significant, irreversible new investments should be defined as being outside the boundaries of the market.

5.19 In determining the likely level of entry in a market, one consideration for the Commission is the level of investment. Optus submits that the decision of an optical fibre network operator to enter a given capital-regional route market depends on a number of factors including:

- Price of leased lines;
- Capacity;
- Duration of contracts; and
- Traffic volume.

5.20 Optus made detailed comments on these issues in the Exemption Applications and directs the Commission to those submissions for consideration in this declaration review. [38]

5.21 Overall, Optus submits again that there are significant high sunk costs in the construction of transmission networks and therefore a firm that cannot currently serve the market without making significant, irreversible new investments should be defined as being outside the boundaries of the market.

IEN DTCS

5.22 Optus supports the ACCC's conclusions in the Exemption Applications. That is, due to the high sunk cost of building fibre networks in metropolitan areas and obtaining access to Telstra's exchange buildings only "existing optical fibre networks with a POI at a particular Telstra exchange can reasonably be considered to be able to contest the market for inter-exchange transmission" in a particular ESA. [39]

Tail-end DTCS

5.23 Optus submits that the high cost of building access fibre infrastructure is a significant barrier to entry in tail-end transmission capacity. Further, the capital costs required to build access fibre to CBD buildings are highly variable, as are projected revenues. As a result there are many buildings to which it will not be economically feasible for multiple operators to build access fibre.

5.24 Optus previously provided detailed costing information to the Commission in the Exemption Applications.[40] This information demonstrated that it will not always be economically feasible to build access fibre to CBD buildings, since

[38] Optus, *Optus submission to ACCC on Telstra's Exemption Application for the DTCS*, November 2007, pages 13 to 17.
[39] ACCC, *Telstra's domestic transmission capacity service exemption applications*, Final decision (Public Version), November 2008, page 78.
[40] Optus, *Optus submission to ACCC on Telstra's Exemption Application for the tail-end and IEN DTCS*, April 2008.

capital costs are substantial and variable, and revenue projections can be highly variable.

Economic feasibility of investment in tail-end infrastructure

5.25 Economic conditions vary between one building and another within an exemption area. Optus submits that it will often not be economically feasible to build access fibre to CBD buildings, since capital costs are substantial and variable, and revenue projections can be variable.

5.26 As noted above, Optus has calculated estimates of access fibre costs based on recently quoted prices for fibre construction in the Melbourne CBD (the result of a competitive tendering process). This exercise resulted in substantial cost estimates ranging between **CiC** and **CiC**. A separate estimate noted below (for a job with a relatively short required distance) resulted in an estimated connection cost of **CiC**.

5.27 Optus also notes that the costs estimated in this exercise are highly variable. Every building connection is unique in that the specific issues encountered in connecting each building are different. Consequently, Optus submits that it is misleading and inappropriate to view connection cost from an average viewpoint. When Optus makes a decision to invest or connect fibre to a particular building in the CBD, this decision is made on a client by client or building by building basis.

5.28 In this regard, Optus notes that revenue projections from building access fibre to CBD buildings can be highly variable. The substantial cost required to build access fibre may well exceed expectations of revenue in respect of some customers and make investment by competing carriers uneconomic. For example, in early 2008 Optus received an application from a corporate customer located in a capital city CBD to be delivered voice services. After carrying out the normal evaluation procedure Optus decided *not* to build access fibre. The projected total revenue from this customer for the duration of a two year contract was approximately **CiC**. Given a relatively short required distance of 54 metres, and taking into account pit, conduit, subduct and cable haul, Optus has estimated connection cost of **CiC** or **CiC** per metre. To build fibre in this case was uneconomic.

5.29 In this real world scenario, and in many similar cases, it would not feasible to build access fibre, either because the cost for building fibre to the building is high or because the expected revenue was low. However it may well in these circumstances be economically feasible for Optus to purchase the DTCS in order to serve the customer. The cost of a Telstra DTCS suitable for the above case would be around **CiC** a year. In such instances the removal of the declaration would clearly harm competition in the downstream markets in which services are supplied to the customer.

5.30 The removal of the declaration would therefore significantly reduce investment in infrastructure. It is often the case that after Optus has secured a customer using a leased transmission service, it will subsequently become feasible to build access fibre - for example if a second customer in the same building is acquired. Alternatively, in a case where capacity is exhausted in a particular building and a particular customer demands extra services, it may take time to build the necessary infrastructure. In this case, Optus may find it necessary to use the DTCS on a temporary basis. These opportunities for access seekers to build scale before investing in infrastructure will be lost if the proposed exemption is granted, with severe implications for investment and competition.

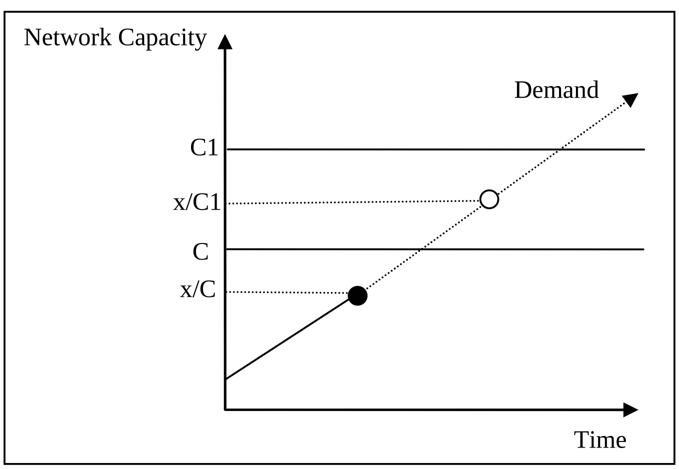
5.31 Optus therefore supports the conclusions of the ACCC in the Exemption Applications that in the metropolitan tail-end transmission market barriers to entry are dependent on the costs of deploying fibre infrastructure and that these sunk costs remain high. [41]

Excess Capacity

5.32 Optus submits that excess capacity is not a significant factor in determining the level of competition in a market. Carriers provision capacity and network architecture based on actual demand and the level utilisation in the network.

5.33 Figure 1 illustrates how Optus adjusts its network capacity to meet actual demand. Initially the transmission network is provisioned to handle a maximum capacity (demand) of C. However Optus increases network capacity once actual demand reaches a threshold point below the maximum. This point is a proportion, x, of the total capacity. Once this occurs Optus will adjust its network, increasing capacity to a higher level of C1, creating a new threshold of x/C1. In this way it can be seen that Optus does not forecast demand, rather it adjusts the network to meet the level of actual network utilisation allowing sufficient spare capacity to expand the network capability.

Figure 1 – Example of adjusting Network Capacity and Utilisation over time



5.34 The size of the spare (or 'excess') capacity will be determined according to factors such as technology availability and budget constraints. In regards to technology availability, the software (or hardware) purchased to increase the

[41] ACCC, *Telstra's domestic transmission capacity service exemption applications*, Final decision (Public Version), November 2008, page 63.

bandwidth of a transmission service may be over-provisioned compared to what is required. For example, Optus may only need to upgrade a DTCS link from a 2MB of capacity (i.e. one E1 link) to 3MB. However this may mean building two E1 links, therefore producing 4MB of capacity and creating an excess of 1MB. Furthermore it may be more cost effective to purchase a technology that allows for significant excess capacity, especially if demand is rising quickly.

5.35 Given the above example, Optus submits that excess capacity continues to be an insignificant factor in determining the level of competition in a market.