

Optus Submission to
Australian Competition and Consumer Commission
on
Transmission Capacity Service

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1. Introduction

- 1.1 Optus welcomes the opportunity to respond to the ACCC's September 2003 discussion paper relating to regulation of the domestic transmission capacity service.
- 1.2 Throughout this submission, Optus argues that:
- The intercapital transmission market is strongly competitive and achieving efficient, market-based solutions. Re-declaring these routes would unnecessarily distort investment decisions and harm competition in downstream markets;
 - Transmission on the Brisbane to Cairns route is sufficiently competitive to warrant a revocation of the declaration. This would reduce industry costs and promote infrastructure investment, thereby strengthening the conditions required for ongoing competition;
 - The retention of the declaration is appropriate for the remaining transmission routes. The vast majority of these routes display strong natural monopoly characteristics, thereby providing the access provider with strong incentives to over-recover the wholesale costs of transmission, and to restrict access. Regulation is necessary to ameliorate these incentives, and to safeguard competition in downstream markets and the provision of services to rural, regional and remote Australia;
 - The intercapital transmission price monitoring programme is of questionable value, yet imposes significant compliance costs on the industry. Given that the intercapital market is strongly competitive and absent of market failures, the monitoring programme should be abandoned; and
 - Pricing principles for the declared transmission services should be based on either:
 - i) A forward-looking TSLRIC approach; or
 - ii) Parity between price reductions on competitive routes and price reductions on monopoly routes
- 1.3 This submission is structured in a manner that follows the format of the ACCC's discussion paper. Each of the questions asked by the ACCC in its paper are set out below, along with Optus' response.

2. Market Definition

The Commission's view in the previous inquiry was that national long distance call and international call services, data related services and IP-based services are the relevant downstream markets for transmission capacity. Are these still the relevant downstream markets for which transmission constitute an input?

- 2.1 Optus believes that national long distance call and international call services, data related services and IP-based services remain the relevant downstream markets to transmission capacity.

What is the extent to which downstream services are concentrated on certain transmission routes?

- 2.2 The demand for transmission capacity is driven by demand for downstream services. Because demand for voice, data and IP-based services is greatest in the capital cities, it follows that the intercapital routes carry the vast majority of traffic. As would be expected, volume is greatest on the Sydney-Melbourne routes, followed by the Sydney-Brisbane routes. Long distance remains an important downstream market for regional non-intercapital transmission. In addition, universities and government organisations also demand data related services in rural and regional areas.
- 2.3 Where the downstream market has an international aspect (e.g. international call services or IP backhaul from an international router), traffic is routed through either Sydney or Perth, as this is where the international cable and satellite stations are located.

To what extent do different transmission routes constitute different markets?

- 2.4 Section 4E of the Trade Practices Act provides that:

... 'market' means a market in Australia and, when used in relation to any goods or services, 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.

- 2.5 Using this definition, Optus believes that each intercapital transmission route comprises a different market. Clearly, transmission over the Adelaide-Perth route is not in competitive with, or substitutable with, transmission on the Canberra-Sydney route.
- 2.6 However, there is no obvious 'one size fits all' market for the non-intercapital routes. Instead, the market is best defined as a function of customer demand. For example, a university may require transmission services between its different campuses. The market can then become defined as transmission services between these campuses.
- 2.7 In this context, therefore, markets for non-intercapital routes can be route, state, regionally or nationally based.
- 2.8 Further, to the extent that there are diverse routes between destinations, then obviously all transmission capacity possibilities should be considered in deciding whether the market for transmission between particular destinations is competitive.

3. Technologies used to provide transmission services

Have the alternative technologies to fibre optic cable become more or less viable in the provision of transmission capacity since the previous inquiry?

- 3.1 At this point in time, while numerous alternative technologies to fibre exist, none of these technologies are sufficiently viable to lessen the natural monopoly characteristics of the regional routes, or to justify investment by non-Telstra parties. Indeed, alternative technologies to fibre optic cable are becoming less viable as the cost of fibre based transmission equipment falls and demand grows.

Are certain types of technology more viable on certain inter-capital routes?

- 3.2 Fibre remains the most viable technology for the provision of transmission capacity across intercapital routes, because of its large transmission capacity and greater reliability.

Are there other technologies that may become available in the foreseeable future that are viable technologies to provide a wholesale transmission services?

- 3.3 Unless there is a quantum shift in understanding of the physics in transferring information between two points, the most viable low cost technology for the provision of high capacity transmission services will remain as fibre. While all current and emerging technologies can compete with fibre economics up to certain amounts of bandwidth and distance, once these two variables exceed certain thresholds, fibre becomes the dominant technology.

4. Market Structure

Are there likely to be new entrants in transmission markets (i.e. both declared and non-declared) in the foreseeable future?

- 4.1 Notwithstanding an existing degree of demand uncertainty, Optus would expect to see continued entry into some intercapital and CBD transmission markets. Further, Optus notes there are potentially a number of niche opportunities in other markets.
- 4.2 However, there is unlikely to be any significant entry in the declared transmission markets in the foreseeable future. This is because, due to various demand and supply side conditions, the vast majority of non-declared links display strong natural monopoly characteristics. In particular:
- On the demand side, because the markets served by the transmission routes are generally small there is limited demand for the services downstream to transmission along each route. This limits the extent to which multiple transmission providers can recover infrastructure costs; and
 - On the supply side of the market, because Australia is geographically large, individual transmission routes potentially need to span very large areas and the network effects (inter-connectivity) are limited.
- 4.3 Further, the economics of providing CBD transmission is such that it is only financially viable for Optus to provide transmission to customers using bandwidth over certain levels. For smaller customers, Optus purchases transmission capacity from Telstra.

- 4.4 By implication, an effective access regime is of vital importance to enabling competition in the market for downstream services.

Would the exit of any carriers from transmission markets have ramifications for effective competition in particular intercapital transmission markets?

- 4.5 The exit of any carriers from the intercapital transmission market would, in the majority of cases, have little demonstrable impact on the extent of competition in the market for two reasons.
- 4.6 Firstly, individual sales of transmission capacity are very few in number and significant in size, meaning that network owners can capture a large proportion of the market by successfully undercutting a rival. Therefore, the incentive to ‘cheat’ on collusively high price is very strong. Given this, it is highly unlikely that anticompetitive outcomes would ever arise in a transmission market where there were at least two competing carriers.
- 4.7 Secondly, in the event that a firms’ assets were not offered for sale, it should be remembered that conduct is constrained not only by the level of existing competition, but also by the threat of new entry. Faced with steady demand for downstream services and low barriers to market entry, the threat of market entry is both credible and pervasive. Therefore, a reduction in the number of market players will not necessarily reduce competition.

Do barriers to entry exist in transmission markets? If so, what are they?

- 4.8 The primary barrier to entry in the declared transmission markets is the fact that the vast majority of declared transmission links display strong natural monopoly characteristics. Entry into natural monopoly markets is neither desirable from a welfare perspective, nor viable from a business case perspective.
- 4.9 Compounding the barriers imposed by the limited size of the various geographic markets in regional and rural areas are additional barriers imposed by the following:
- Telstra’s economies of scale in transmission;
 - Telstra’s significant downstream market share; and
 - The use of access prices by Telstra as a tool for discouraging build by competitors (discussed in further detail of Section 5 of this submission).

Are there barriers to expanding in any intercapital transmission market? If so, what are they?

- 4.10 Optus believes that there are very few barriers to expanding the intercapital transmission market due to the following features of the market:
- Steady growth in the demand for the services downstream to transmission, including an expected strengthening of broadband demand growth;

- Sufficiently strong competition to preclude the ability of any carriers to exert market power in a manner that harms competition;
- Availability of dark fibre deals and the advent of DWDM layers means that effective entry can occur with relatively low sunk cost requirements; and
- The absence of any structural or behavioural market failures.

Taking into account the scope of the existing declaration, does the Commission need to give consideration to removing any elements of wholesale transmission that are currently declared?

- 4.11 Optus recommends that the ACCC give consideration to removing the declaration on the Brisbane to Cairns transmission route. Optus has committed to investing over \$200 million on its Reef network, and NTL has also deployed a Radio network.
- 4.12 Optus believes this routes to be sufficiently competitive to warrant the revocation of regulation. The resulting benefits of this would include reduced regulatory compliance costs, and the promotion of additional transmission infrastructure investment.
- 4.13 When forming views about the competitiveness of intercapital routes, the ACCC needs to be mindful of the impacts of long-term leases. **[Start: Commercial-in-Confidence] [End: Commercial-in-Confidence]**

Does the Commission need to give consideration to declaring elements of wholesale transmission that are currently non-declared?

- 4.14 The non-declared transmission capacity services should remain undeclared for the following reasons:
- All of the intercapital transmission routes are competitive, achieving efficient, market-based outcomes;
 - The prices charged in the intercapital transmission market are constrained by existing sources of supply, as well as the threat of new market entry;
 - There are no material barriers to entry in the provision of inter-capital city transmission;
 - Access regimes such as Part XIC were never intended to apply to services subject to competitive supply such as intercapital city transmission;
 - Declaration of intercapital transmission would artificially constrain infrastructure investment and generate unnecessary pricing and regulatory uncertainty; and
 - There are a significant number of new entrants and potential new entrants in the market.

- 4.15 Imposing regulation on a market that is already achieving efficient, competitive, market-based outcomes will necessarily reduce welfare and may harm competition in downstream markets the longer-term.

Is there excess capacity in the incumbent and new entrants' networks? If so, is the level of excess capacity relevant for determining the level of competition in the market?

- 4.16 It is both technically and economically efficient for carriers to build transmission links that have some degree of excess capacity to enable future demand growth to be met.
- 4.17 Indeed, Optus considers potential capacity along most routes to be effectively unlimited given the ability of carriers to substantially increase the capacity of fibre using DWDM when there is sufficient demand to warrant this investment.
- 4.18 Some industry participants have raised concerns that excess capacity may be used by carriers as a tool to impose barriers to market entry. Optus does not believe that any such barriers could arise in the intercapital transmission market. Where there are multiple current sources of supply, maintaining spare capacity as an entry deterring device by any single firm is a non-sensible and non-credible strategy, which would necessarily result in the firm's competitive demise. Other current competitors could simply be more cost competitive by not adopting that strategy.
- 4.19 Given this, it would be inappropriate for the ACCC to consider regulating the competitive intercapital transmission market based on any evidence of, or concerns relating to, excess capacity on these routes.
- 4.20 In relation to the non-competitive declared transmission markets, Optus is unable to comment on whether Telstra is using excess capacity as a predatory tool for restricting market entry. From Optus' perspective, however, demand limitations comprises the foremost barrier to market entry.

5. Price movements

The results of the monitoring programme suggest that the price of intercapital transmission capacity has generally fallen over the course of the monitoring programme. Has that been your experience as an access provider/seeker? What is the reason that this has/has not occurred?

- 5.1 Intercapital transmission prices have fallen significantly over recent years. These price reductions can be attributed to a combination of:
- The competitive nature of the market;
 - Substantial entry on key routes;
 - Demand growth for high bandwidth services; and
 - Falling costs associated with building infrastructure.

- 5.2 The fact that prices have fallen in response to these factors (particularly falling costs of building infrastructure) is indicative of a competitive market in which barriers to entry are not prohibitive, and the threat of entry drives prices to efficient levels.
- 5.3 We also note that prices have fallen independent of the ACCC's decision to undeclared the intercapital routes.

Has the price of non-intercapital transmission decreased since the entire service declaration was last reviewed? What was the reason that this has/has not occurred?

- 5.4 Non-intercapital transmission prices have fallen over recent years. Optus believes that these price reductions can be primarily attributed to the threat of arbitration, and the threat of new build.
- 5.5 **[Start: Commercial-in-confidence [End: Commercial-in-confidence]**
- 5.6 Optus submits that a revocation of the declaration would dampen incentives for Telstra to offer acceptable access prices and leave access seekers with substantially reduced negotiating capacity.
- 5.7 **[Start: Commercial-in-confidence] [End: Commercial-in-confidence]**

How do wholesale prices for intercapital transmission in Australia compare to those in other countries? How do wholesale prices for other types of transmission in Australia compare to those in other countries?

- 5.8 Comparisons with international pricing are inappropriate unless the transmission capacity routes being compared are similar in distance, build costs and have similar demand profiles. Due to the difficulties that would be associated with identifying comparable routes, Optus has not attempted to gather information on wholesale intercapital charges in other countries.

6. Profit margins

Do wholesale prices for intercapital transmission reflect underlying costs? If not, on which intercapital routes is this the case?

- 6.1 Competition in the intercapital transmission market has been effective in ensuring that prices efficiently reflect underlying costs. Indeed, prices have fallen not only to reflect competition, but also cost reductions over time.

Do wholesale prices for non-intercapital transmission reflect underlying costs? If not, on which routes is this the case?

- 6.2 Optus does not have access to the specific costs faced by Telstra in the provision of transmission services. Notwithstanding this, it is likely that, on the monopoly routes, the wholesale prices offered by Telstra exceed the prices that would prevail in a competitive market.

7. Impact on efficient investment in infrastructure

Would maintaining, varying or revoking the declaration have an effect on the investment decisions of new entrants or existing suppliers in the transmission market?

- 7.1 Re-declaring the intercapital transmission routes would raise industry compliance costs, create uncertainty, and could place constraints on the scope of infrastructure providers to price their services efficiently. Furthermore, the regulatory risk arising from the declaration could increase the cost of capital, which could lead to a reduction in investment over these competitive routes. Such regulation would harm the conditions necessary for ongoing competition because incentives for efficient market entry and additional investment would be distorted.
- 7.2 It is difficult to anticipate the likely extent of this impact, but given that the unregulated market is competitive and absent of any significant market failures, consumers would almost certainly be worse off.
- 7.3 Revoking the declaration of the non-competitive routes could lead to monopoly pricing by the access provider, which may in turn encourage too much investment. This is undesirable from an efficiency perspective because non-competitive transmission displays strong monopoly characteristics. As discussed above, additional investment in natural monopoly infrastructure is economically inefficient.

How would maintaining, varying or revoking the declaration affect decisions to invest in downstream markets?

- 7.4 Revoking the declaration of the currently declared services would provide transmission operators with incentives to deny access to the (vital input) transmission market, or to provide access at much higher rates than it supplies itself internally. Vertically integrated access providers would therefore gain a comparative advantage in the provision of downstream services. Investment by other parties in downstream markets would be discouraged, and competition would consequently be stifled.
- 7.5 This is of particular concern because:
- The technology divide would be compounded because the areas more likely to experience reduced levels of investment and market entry are regional, rural and remote Australia;
 - The downstream voice and data markets in which competition will be hindered are of vital importance to the Australian economy; and
 - The uptake of broadband, a service with the potential to drive vast productivity improvements, will be affected. This is because carriers rely on access to Telstra transmission services to provide backhaul from local switches to their core networks.
- 7.6 Additionally, as discussed above, the re-declaration of intercapital transmission would increase industry costs, create uncertainty arising from

regulatory risk, and reduce expected profitability, thereby discouraging market entry into transmission. Reduced competition in transmission markets would have the effect of jeopardising the long-term competitiveness of downstream markets.

8. Monitoring programme

Should the monitoring programme be extended or curtailed in any way?

- 8.1 Optus believes that price monitoring is a form of quasi-regulation, and that due to the competitive nature of inter-capital transmission, any form of regulation is contrary to the LTIE.
- 8.2 The compliance costs associated with the current intercapital price monitoring programme imposed on the industry are very high. At the same time, we question the value of the information that the data is capable of revealing. Conceptually, therefore, Optus believes that that monitoring programme cannot be justified under a cost-benefit analytical framework.
- 8.3 Optus believes that the annual price monitoring programme should be abandoned and replaced with a system whereby the industry provides the data to the ACCC upon request. These requests could arise when the ACCC had an interest in identifying pricing trends, such as it would if reviewing the service declaration. Additionally, parties to an arbitration may wish to provide pricing information on a voluntary basis.
- 8.4 From Optus' viewpoint, the compliance costs associated with providing this data to ACCC on an ad hoc basis would be significantly lower than currently imposed by the programme (assuming the ACCC required the data less frequently than annually).
- 8.5 In relation to the compliance cost aspect of the current programme, collecting the relevant data within Optus is very time intensive. Optus' regulatory compliance costs relating to intercapital transmission have increased since the service was undeclared. This is a perverse outcome given that price monitoring was intended to comprise a more light-handed and less costly approach than access regulation.
- 8.6 Indeed, notwithstanding the costs associated with collecting the data, Optus believes that price monitoring comprises a form of quasi-regulation and is not as light-handed as often perceived. In a non-competitive market, price monitoring gives rise to the same (or very similar) set of incentives that arise under regulation, i.e. the setting of reasonable access prices as a means for avoiding regulatory intervention. The flip side of this, however, is that the costs of regulation remain. These costs of regulation are unnecessary in a competitive market such as inter-capital transmission.
- 8.7 As indicated above, Optus has doubts as to the value derived from the monitoring programme. Such a programme could only be justified in circumstances where the benefits of competition improvements (or market failure reductions) exceed the compliance costs. However, Optus believes that the extent of any resulting improvements in industry competitiveness is likely

to be negligible given that competition in the market is already strong, as evidenced by rapidly falling prices.

- 8.8 Further, the ACCC has indicated that there have been some limitations to what the data can reveal¹. For example, the ACCC concedes that calculated average prices will be distorted by: links that are not active during the full reporting period, and cost reductions that can be offered by carriers to customers that transmit high data volumes.
- 8.9 If these problems were to be overcome, carriers would need to report at a greater level of detail. However, the administrative burden of producing this data would be too great to justify.
- 8.10 Further concerns arise for Optus from the fact that overlaps between data obtained from the monitoring programme and the information contained in the RAF comprise regulatory reporting duplication.

Would publication of data collected under the monitoring programme aid competition in the relevant markets?

- 8.11 Optus does not believe that the publication of data collected under the monitoring programme would be effective in promoting competition. Not only would this add further to unnecessary regulatory administrative costs in a market that is already competitive, but also the information could be used by the market in a manner that hinders, rather than promotes, competition.
- 8.12 One source of potential distortions is that in transmission markets (and indeed many other markets), a wide range of efficient equilibrium prices can emerge that vary according to the characteristics of each customer's demand profile. For example, a carrier may be able to offer a lower price per link for customers that transmit high data volumes. Lower prices may also be offered to buyers as incentives for entering into long contracts, or for purchasing additional wholesale services from that carrier. It would be extremely difficult, and costly, to produce reports that provide this level of transparency. However, the publication of data that fails to account for these "discounts" may reduce incentives for carriers to offer such efficient pricing structures.
- 8.13 Further, publication of the data would be incapable of providing a sufficient level of transparency required to promote efficiencies. As discussed above, the data collected by the ACCC is skewed by the impacts of long-term contracts and price variances reflecting the transmission of high data volumes. Consequently, the published data would provide market participants with a distorted view of what is really occurring in the market.

9. Developing pricing principles for declared services

What are considered to be the appropriate pricing principles for the transmission capacity service?

¹ Australian Competition & Consumer Commission, "Transmission Capacity Service: An ACCC Discussion Paper reviewing the declaration for the domestic transmission capacity service", September 2003, page 15.

- 9.1 In order to develop the most appropriate pricing principles for the declared transmission services, the objectives of the transmission access pricing regime need to be identified. Optus believes the most pertinent objectives to be as follows:
- Transmission is of vital importance to the telecommunications industry;
 - On the monopoly routes, Telstra has incentives to over-recover the costs of providing transmission capacity services, and also to use access prices as a tool for stifling competition in downstream markets;
 - Access prices should not be used as a means of promoting facilities based competition along natural monopoly routes;
 - Access prices can effectively be used as a tool to facilitate competition in downstream markets; and
 - Efficient access prices may promote broadband uptake, the introduction of innovative services Australia-wide, and reduce the extent of the digital and technological divide.
- 9.2 Optus has identified two options that may be well suited to achieving these objectives, namely: the TSLRIC pricing methodology based on forward-looking costs, structured in a manner that recognises many of the declared transmission routes have been funded by the USO; and parity between the price reductions on competitive routes and price reductions on Telstra's monopoly routes. Both of these will now be discussed in turn.
- 9.3 TSLRIC describes the incremental costs a firm incurs in the long term in providing a service. TSLRIC based on forward-looking costs would comprise an appropriate pricing principle because:
- The methodology ensures that asset owners have the ability and incentive to maintain their assets, as TSLRIC enables access providers to recover their legitimate costs of service provision;
 - By basing access prices on forward-looking costs, TSLRIC seeks to establish what infrastructure has been prudently incurred by the asset owner. This goes some way to encouraging dynamic efficiency. Use of historic costs as a basis for setting access prices fails to achieve this outcome; and
 - TSLRIC based on forward-looking costs promotes long-run allocative efficiency by providing price signals that reflect the long-term value of resources embodied in the service.
- 9.4 Note that in Optus' view, TSLRIC is not an appropriate tool for sending the correct investment "build-buy" signals. This is because it is the access seekers' perceived *average* cost of build that forms the relevant basis for build-buy decisions. To the extent that the access seekers' average costs may be completely unrelated to the access providers' incremental costs, TSLRIC does not have the capacity to promote efficiency in this respect, despite often being cited as doing so.

- 9.5 Nevertheless, for the declared routes which are by definition not potentially competitive, TSLRIC is appropriate as access prices do not need to provide incentives for efficient build. This is because build will always be an inefficient option.
- 9.6 Assuming that the ACCC decides to adopt TSLRIC as a pricing principle, when attempting to estimate the TSLRIC the ACCC must bear in mind that a large portion of the costs of transmission have been funded not by Telstra *per se*, but by the USO.
- 9.7 To elaborate, because the USO provides for the provision of certain telephony services to net cost areas (NCAs), it has necessitated the building of network infrastructure to NCAs. Therefore, the costs of the USO reflect the costs of building and maintaining that infrastructure.
- 9.8 To the extent that many of Telstra's monopoly transmission routes fall within NCAs, the network costs of transmission over those routes should not be recoverable by Telstra.
- 9.9 Optus notes that the provision of non-USO services over the USO funded transmission routes will have required additional investment by Telstra in capacity over and above the capacity required to fulfil the USO. These costs should be recoverable by Telstra through access prices. However, the level of recoverable costs must be limited to the costs incurred by Telstra of expanding capacity over the existing (USO funded) transmission infrastructure. Access prices should not reflect any of the initial infrastructure roll-out costs. This is because in the absence of the USO, by definition, the transmission routes would not have been built.
- 9.10 The second pricing principle option raised above is that of parity in price reductions between the competitive inter-capital routes and Telstra's monopoly routes. As discussed earlier, competition provides incentives for carriers to reduce prices where possible. The significant price reductions experienced in the intercapital transmission market provide tangible evidence of the strength of these incentives. On the other hand, the absence of competition over many of the declared routes means that the access provider has few incentives to reduce prices.
- 9.11 Tying transmission price reductions on the declared routes to the price reductions experienced in the competitive market will provide an efficient, market based means for imposing downwards pressure on access prices in a manner that mimics competitive outcomes.
- 9.12 This pricing methodology could be used in the long-term on a stand-alone basis, or could be used by the ACCC for deriving interim determinations. For the latter, the relevant parties would be required to supply intercapital transmission pricing data to the ACCC.