



# **Future scope of the Local Carriage Service**

**This draft decision is in response to an application by Telstra Corporation Limited for an individual exemption from the Standard Access Obligations in relation to the Local Carriage Service in the Central Business Districts of Sydney, Melbourne, Brisbane, Adelaide, and Perth.**

**DRAFT DECISION  
September 2001**

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# 1. Introduction

In August 1999, pursuant to Part XIC of the Trade Practices Act 1974 ('the Act') the Australian Competition and Consumer Commission ('the Commission') declared a service known as the 'Local Carriage Service'. The Local Carriage Service is a wholesale service involving the carriage of telephone calls over a Public Switched Telephone Network (PSTN) from customer equipment at an end-user's premises to separately located customer equipment of another end-user in the same standard zone. It is used by access seekers to supply local calls to end-users.

Declaration ensures that access seekers have access to the inputs they need to supply competitive telecommunication services to end-users and in accordance with the Standard Access Obligations (SAOs) set out in section 152AR of the Act. Specifically, declaration means that any carrier or carriage service provider who supplies the Local Carriage Service (to itself or another person) must supply the Local Carriage Service to other service providers upon request in accordance with the SAOs. The terms and conditions of supply can be agreed through commercial negotiations. If however, the parties cannot agree on the terms and conditions of supply, either of them can seek an outcome arbitrated by the Commission.

In May 2000, Telstra Corporation Limited (Telstra) applied to the Commission under section 152AT of the Act, for an individual exemption from the SAOs in relation to supply of the Local Carriage Service. The exemption application relates to the supply of the Local Carriage Service within the central business district areas (CBDs) of Sydney, Melbourne, Brisbane, Adelaide and Perth.

The Commission released a discussion paper in August 2000, detailing its consideration of the exemption application and a possible class exemption and sought submissions from interested parties on key issues.

Submissions were received from:

- AAPT Limited
- Telstra Corporation Limited
- Cable & Wireless Optus
- Macquarie Corporate Telecommunications
- PowerTel Limited
- Primus
- RSL COM Australia Pty Limited
- Vodafone

Following the receipt of submissions, the Commission conducted a range of market inquiries to aid consideration of the issues central to a decision on the exemption application and a class exemption and to assess the effect of any such exemptions on the long-term interests of end-users.

This process has resulted in this draft decision report.. Section 2 of the draft decision outlines Telstra's exemption application. Section 3 details the legislative framework under which services are declared and by which individual and class exemptions to a

service declaration can be made. Section 4 outlines the market definition principles that that Commission uses to consider Telstra's exemption. Section 5 examines the state of competition in the Local Carriage Service and related markets and the likely impact of the exemption on competition in these markets. Section 6 considers the likely effect of the exemption on the incentives for efficient investment in infrastructure. Section 7 considers the impact on any-to-any connectivity. Section 8 discusses the possible impact of the exemption on the Local Carriage Service arbitrations brought before the Commission. Section 9 provides general conclusions and details the Commission's draft decision on Telstra's exemption application and the class exemption.

The Commission has made its draft decision on the basis of its understanding of the operation of the Local Carriage Service and related markets based on available information derived from submissions, discussions with interested parties and various other sources. Should the Commission receive new information which alters this understanding, it may be inclined to modify or reverse its draft decision in its final decision. Specific matters that the Commission is interested in receiving further information on are highlighted in the report. However, this in no way limits the information that interested parties are invited to provide in submissions on the draft decision.

The Commission invites submissions from interested parties on its draft decision by **Friday 12 October 2001**. Submission should be addressed to:

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Melbourne VIC 3001

Fax: 03 9663 3699

In addition to a hard copy, the Commission would appreciate submissions also being provided in an electronic copy, addressed to [kim.huynh@acc.gov.au](mailto:kim.huynh@acc.gov.au)

Submissions will be treated as public documents unless submitting parties request otherwise. If parties wish to submit a confidential submission the Commission's preference is that a public submission also be submitted with the relevant confidential parts removed.

Enquires about this draft decision or about the making of submissions, can be directed to Michael Cosgrave on 03 9290 1914 or [michael.cosgrave@acc.gov.au](mailto:michael.cosgrave@acc.gov.au)

## **2. Telstra’s application for exemption**

In May 2000, Telstra made an application for individual exemption from the SAOs in relation to the supply of the Local Carriage Service in the five CBD areas of the mainland capitals.

In its submission in support of its application for exemption, Telstra states that it ‘believes that at least within the CBD areas – characterised by high density and relatively high average consumption of telecommunications services – competitive service providers can profitably service the market using their own facilities’. Telstra argues that at the current level of infrastructure available in each of the CBD areas specified in the exemption, there is no longer any basis to justify Telstra providing the Local Carriage Service in these areas under the regulatory regime set out in Part XIC of the Act. Further, Telstra submits that a decision by the Commission to grant the exemption would encourage further provision of alternative facilities.<sup>1</sup>

### **CBD definition**

Telstra is seeking an exemption from the SAOs in relation to the Local Carriage Service in the CBD areas of the five major mainland capitals. In its application, Telstra defined these CBD areas according to the Exchange Service Areas (ESAs) as set out in its Ordering and Provisioning Manual as amended from time to time.

In response to the Commission’s discussion paper, a number of submissions from carriers expressed concern that this CBD definition would potentially allow Telstra the discretion to change the areas covered by an exemption. For example, in its submission AAPT stated that it does not in principle object to an approach of nominating particular exchange services areas but was weary of any arrangement whereby Telstra could decide which ESAs could be defined as CBD in the future.

The Commission understands that the CBD definition in Telstra’s Ordering and Provisioning Manual is altered infrequently and generally only to add new numbers to the ESAs. This does not appear to allow Telstra the discretion to choose the ESAs that are included in the CBD definition. However, the Commission considers that even though this may be the case, section 49A of the *Acts Interpretation Act 1901* prevents an exemption or instrument to refer to a manual that ‘may be in force from time to time’. For this reason, the Commission proposes that the CBD definition be fixed at 1 May 2000, the time of Telstra’s exemption application. The Commission considers that if for some reason this definition needs to be altered, a new exemption order or instrument would need to be approved.

### **Effect of exemption**

Telstra has requested an exemption from providing the Local Carriage Service within the CBD areas of the five major mainland capitals. This means it applies to the

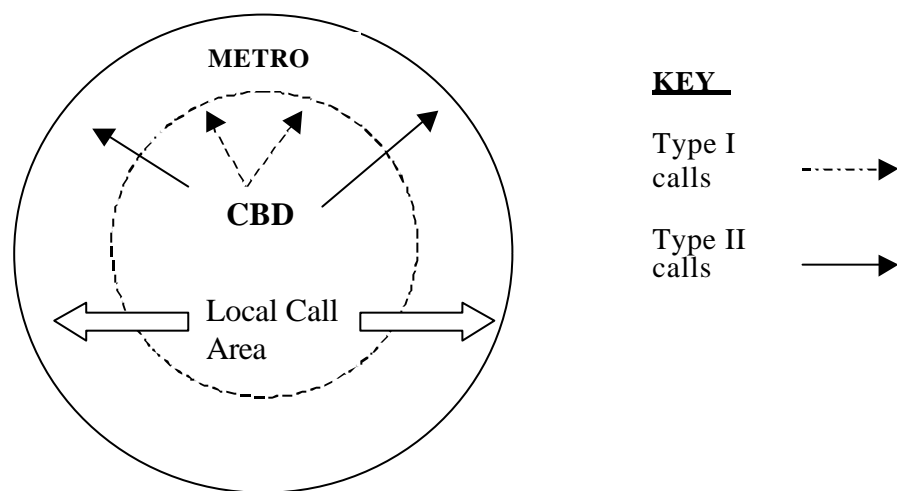
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<sup>1</sup> Telstra Corporation, Application for exemption from the Standard Access Obligations, Submission in support, 7 June 2000.

wholesale supply of end-to-end local calls originating and terminating in the CBD areas of these cities and those wholesale local calls originating in the CBD areas and terminating in the same standard zone<sup>2</sup> outside these CBD areas (ie all local calls originating in these CBD areas and terminating in the applicable 'local call zone'). In other words, on granting an exemption, Telstra would not be subject to the SAOs in relation to the carriage of local telephone calls from customer equipment at an end-user's premises to separately located customer equipment of an end user, within the CBD areas of the five major mainland capitals, and also those calls originating in the CBD areas and terminating within the local call zone.<sup>3</sup>

The wholesale local calls covered by Telstra's exemption application are shown in the diagram below.

**Diagram 2.1: Local call types covered by the exemption application**



In considering Telstra's exemption application, the Commission has found it useful to distinguish two local call types.

The first type is local calls that originate and terminate in the CBD areas of the five major mainland capitals – 'Type I calls'.

The second call type is local calls that originate in the CBD area and terminate outside the CBD areas of these cities but within the local call zone – 'Type II calls'.

<sup>2</sup> The term 'standard zone' is defined in s.227 of the *Telecommunications Act 1997*.

<sup>3</sup> The exemption application does not include the wholesale supply of local calls originating in the local call zone outside the CBD areas and terminating in the CBD areas of the five major mainland capitals.

### 3. Legislative framework

Part XIC of the Act establishes an industry specific regime for regulated access to telecommunications services. The primary objective of Part XIC is to promote the long-term interests of end users of carriage services or services provided by means of carriage services.

#### 3.1 Declaration of the Local Carriage Service

There is no general right of access to telecommunication services. The rights and obligations under Part XIC only apply in respect of ‘eligible services’ which are ‘declared’ by the Commission.

The declaration decision is in essence, a decision by the Commission to apply the rules and regulatory processes in Part XIC of the Act to eligible services covered by the declaration. It can declare a service on recommendation of the Telecommunications Access Forum (TAF) or alternatively, by conducting a public inquiry and be satisfied that the declaration will promote the long-term interests of end-users of carriage services or service provided by means of carriage services (the LTIE test).

Following the declaration of a service, standard access obligations, as set out in section 152AR of the Act, apply to any carrier or carriage service provider who supplies that service to itself or to other persons. One of these obligations is to supply the declared service, on request, to any service providers, along with specified ancillary services. The access regime thus enables service providers to supply carriage or content services to end-users without the (potentially anti-competitive) restriction of access to key services supplied by upstream providers. In the event that parties are unable to negotiate access to declared services, a party can notify the Commission that a dispute exists and the Commission can arbitrate the terms and conditions of access to that service.

In August 1999, the Commission declared the ‘Local Carriage Service’ following a public inquiry examining (among other things) competition for local telephony services (ie, local calls and line rental). The Commission’s reasons for declaring the Local Carriage Service are set out in its report, *Local Telecommunications Services*, published in July 1999.<sup>4</sup>

In declaring the Local Carriage Service, the Commission noted that it was satisfied declaration would promote the LTIE through improving the conditions for competition in the local telephony services market. This was reasoned to occur by encouraging competition for the retail dimension of local calls, enable one bill for local and long -

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<sup>4</sup> Australian Competition and Consumer Commission, *Local Telecommunication Services*, July 1999 (the Local Telecommunications Services report).



distance telephony services and to serve as a ‘stepping stone’ into the market by reducing the risks associated with roll out of alternative infrastructure.<sup>5</sup>

Since declaration, the Commission has been notified of nine disputes concerning supply of the Local Carriage Service by Telstra. The Commission is currently arbitrating six of those disputes. These have been notified by Optus Networks Pty Limited, Macquarie Corporate Telecommunications Pty Limited, Primus Telecommunications Pty Limited, dingo blue Pty Limited, people Telecom Limited, and WorldxChange Pty Limited.

### **3.2 Individual exemption**

Under section 152AT of the Act, a carrier or carriage service provider may apply to the Commission for a written order exempting it from any or all of the standard access obligations that apply to a declared service — an individual exemption.

Essentially, the Commission’s consideration of an individual exemption is similar to declaration, in that both actions must promote the long-term interests of end users before a service can be declared or an exemption order made. In relation to individual exemption applications, sub-section 152AT(4) states that:

The Commission must not make an order under paragraph 3(a) [an order exempting the applicant from one or more of the SAOs] unless the Commission is satisfied that the making of the order will promote the long-term interests of end-users of carriage services or of services provided by means of carriage services.

If the Commission is of the opinion that an order made in respect of an application for an individual exemption is likely have a material effect on the interests of a person, the Commission must publish the application and invite submissions on whether the application should be accepted.

After considering the application for an individual exemption, and submissions received in response to it, the Commission must make a written order exempting the carrier or carriage service provider from one or more of the standard access obligations, or refuse the application. It is noted that where the Commission makes a decision refusing an application, the Commission must provide the carrier or carriage service provider with a statement of reasons as to why the application has been refused.

Where the Commission makes an order for an individual, the order/determination may be unconditional, or subject to such conditions or limitations as are specified in it.

Decisions of the Commission in relation to an individual exemption are subject to review by the Australian Competition Tribunal, upon application from a person affected by the decision.

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<sup>5</sup> Ibid. p. 100.

### 3.3 Class exemption

Under section 152AS of the Act, the Commission can determine that each member of a specified class of carrier (eg, current and future carriers supplying the Local Carriage Service in specified areas), or a specified class of carriage service provider, are exempt from any or all of the standard access obligations — a class exemption.

In its discussion paper, the Commission invited comments on whether it should consider a class exemption in relation to the supply of the Local Carriage Service in the CBD areas of the five major mainland capitals.

In its submission in response to the discussion paper, PowerTel argued that if an individual exemption is granted to Telstra, a class exemption should also be granted. Similarly, Telstra submitted that if it is granted an individual exemption, a class exemption should be considered.

Optus argued that the test for exemption should be based on market power. Using this test, Optus considered that a class exemption should be granted to all providers that do not have a substantial degree of market power. Therefore in Optus's view an exemption should be granted for all carriers other than Telstra.

The Commission considers that if it is appropriate to grant an exemption to Telstra in the areas specified by its application, a class exemption should be granted for all carriers and carriage service providers in the same areas. In this regard, the Commission notes that Telstra is the only carrier with ubiquitous network coverage of the areas in question. Thus, if it is determined that granting an individual exemption to Telstra would be in the LTIE, it is likely that a class exemption would also be in the LTIE.

A class exemption is a disallowable instrument for the purposes of section 46A of the *Acts Interpretation Act 1901*.

### 3.4 Long-term interests of end users

In consideration of an exemption application the Commission is required to have regard to the long-term interests of end users (LTIE). The effect on the LTIE is assessed by considering whether:

- competition would be promoted in the markets for carriage services and services supplied by means of carriage services;
- the economically efficient use of, and economically efficient investment in, the infrastructure by which carriage services and services provided by means of carriage services are supplied would be encouraged;<sup>6</sup>

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<sup>6</sup> In considering this objective the Commission Section 152AB(6) requires the Commission to have regard to whether it is technically feasible for the service to be supplied or charged for, the legitimate

- any-to-any connectivity would be achieved, for carriage services involving communication between end-users.

The Commission's approach in considering exemption applications is to form a view about the likely result of a particular exemption on the achievement of each of these objectives. The Commission then makes an overall assessment of whether the exemption will promote the LTIE, having regard to the impacts on the three objectives.

To assess the likely impact of an exemption on the LTIE, the Commission uses a 'with and without test'. That is, the Commission considers the future without an exemption and compares this to the future with an exemption. The 'with and without test' is not a test in its own right, but is used to isolate the effects which are likely to occur as a result of the exemption. Further detail and discussion of the Commission's approach to applying the LTIE test is in its *Telecommunications services – Declaration provisions* guidelines.<sup>7</sup>

A relevant question to consider in determining whether the exemption will promote competition or encourage economically efficient use of and investment in infrastructure is whether the market is likely to function efficiently in the absence of the service declaration. If the market works effectively without regulation, then regulation will impose unnecessary costs to the economy. Removal of regulation would therefore remove these costs, which in turn would be likely to promote competition and encourage efficient investment. Accordingly, if it is likely that the market would function efficiently without regulation, granting the exemption will be likely to promote the LTIE.

Therefore in considering the competition criterion, what is assessed is whether the market is sufficiently competitive so that price and service offerings are likely to be maintained or improved in the absence of a service declaration. In relation to the efficient investment criterion what is considered is whether the incentives for efficient investment will be unaffected, maintained or enhanced in the absence of a service declaration. Recognising the relationship between competition and efficient investment, a key consideration will be whether the market is considered to be sufficiently competitive to encourage efficient investment signals in the absence of the service declaration.

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commercial interest of access providers and the incentives for the efficient investment in the infrastructure by which the access services are supplied.

<sup>7</sup> Refer to pp. 34-37 of that guideline.

## 4. The Market

In considering how an exemption of a declared service might promote the long-term interests of end-users, the Commission must consider how the exemption is likely to affect competition in markets for particular services; namely, markets for carriage services and services supplied by means of carriage services.

Where competition in a market for the supply of a service is effective, and is likely to remain so, continued declaration of the service in those markets is unlikely to be necessary to ensure services are supplied at a competitive price and of the requisite quality. However, if there is not effective competition, continued declaration is expected to be necessary to achieve these outcomes and to preserve competition in markets for downstream services.

### 4.1 Market definition principles

Market definition is an integral part of analysing competition in a market.<sup>8</sup> This provides the Commission with a starting point in which to analyse the extent of competition in a given market.

The market definition process begins by identifying the service under consideration and the firm(s) supplying that service.

In having regard to the markets in which competition may be effected, the Commission gives consideration to the markets for the Local Carriage Service (where these markets are separate). These include consideration of the markets in which the service is supplied as well as downstream markets.

Market boundaries incorporate all other sources and potential sources of close substitutes with which the firm supplying the service would compete. Section 4E of the 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.

As noted by the High Court:

This process of defining a market by substitution involves both including products which compete with the defendant's and excluding those which because of differentiating characteristics do not compete.<sup>9</sup>

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<sup>8</sup> The Commission's approach to market definition is discussed in its *Merger guidelines*, June 1999 and its information paper, *Anti-competitive conduct in telecommunications markets*, August 1999.

<sup>9</sup> *Queensland Wire Industries Pty Ltd v. BHP Ltd* (1989) ATPR 40-925, p. 50,008 per Mason CJ and Wilson J.

To identify services that are ‘substitutable for, or otherwise competitive with’ the services under consideration, the Commission uses the ‘price elevation test’. The logic is that the availability of close substitutes (on both the demand and supply sides) constrains the ability of suppliers to profitably divert prices or quality of service from competitive levels. The resulting market is the smallest area over which a profit maximising monopolist could impose a small but significant and non-transitory price increase.

In addition, the Commission takes account of ‘commercial reality’ to ensure that the market which it identifies accurately reflects the arena of competition.<sup>10</sup> That is, firms’ decision-making in relation to demand and supply substitution is constrained by the practicalities of using such substitutes; in which case, the Commission would need to consider modifying the market definition to reflect how the firms operate.

In identifying relevant markets, it should be noted however, that the Commission’s approach to market definition in relation to service declaration and exemption does not require the determination of a definitive or determinative market definition as is the case in a Part IV or Part XIB investigation.<sup>11</sup>

Accordingly, as noted by the Commission in previous inquiries, market analysis under Part XIC should be seen in the context of shedding light on how declaration or exemption would promote competition rather than in the context of developing ‘all purpose’ market definitions.

## **4.2 Product market**

The delineation of the relevant product dimension of a market requires identification of the product (or service) in question, and the sources or potential sources of substitute products or services.

In the case of the Local Carriage Service, the Commission is of the view that the relevant service for consideration is the wholesale supply of local call services to other carriers or carriage service providers by Telstra or other carriers. Therefore, in examining the impact of an exemption on competition the Commission’s inquiries are concerned with the supply of these services to other carriers or carriage service providers who provide local calls to end-users. A local call is defined as a call where both the calling and called party are located in the same standard zone.<sup>12</sup>

This definition includes alternative wholesale services to the Local Carriage Service which other carriers and carriage service providers could purchase from Telstra or other carriers to supply retail local call services to end-users.

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<sup>10</sup> See, for instance, paragraphs 5.49 and 5.66 of the Commission’s *Merger guidelines*, June 1999.

<sup>11</sup> See the Commission’s *Telecommunications services – Declaration provisions*, July 1999.

<sup>12</sup> The term ‘standard zone’ is defined in s.227 of the *Telecommunications Act 1997*.

### **4.3 Functional market**

The functional dimension of a market refers to the activity, or group of activities, involved in the supply chain. To define the functional market, the vertical stages of production and/or distribution need to be identified by considering whether there are efficiency gains from vertical integration and whether substitution possibilities at adjacent vertical stages can constrain the exercise of market power. Where there are overwhelming efficiencies of vertical integration between two or more stages, it is inappropriate to define separate functional markets.

The Local Carriage Service is provided by Telstra and other vertically integrated carriers to other carriers and carriage service providers to enable them to offer retail local call services to their own customer end-users. In providing a Local Carriage Service to these access seekers the providing carrier will use a number of functional network elements that it either supplies itself or purchases from other carriers. These functional elements might include originating and terminating access and local transmission (which are themselves declared services).

It is evident that local call retail services are supplied by non-vertically integrated suppliers such as resellers. Carriers and carriage service providers also purchase origination, termination and transmission services as separate services and as alternative wholesale services to the Local Carriage Service. The major example of this is when carriers have their own directly connected customers and these customer make local calls to customers connected to other networks. It therefore would appear that there are not overwhelming efficiencies from vertical integration. This suggests that there are various wholesale functional markets and a retail functional market that should be considered part of the relevant market. In the context of this draft decision, the wholesale local call market and the retail local call market are referred to together as the 'local call services market'.

### **4.4 Geographic market**

Delineation of the relevant geographic market involves the identification of the area or areas over which the carrier or carriage service provider and its rivals currently supply or could supply the relevant service.

In the Commission's report, *Local Telecommunication Services*, the customer access market and the local telephony market were defined as national in scope. However, the Commission recognised that the dimensions of the market could change in the future. Given that Telstra's exemption application is restricted to the Local Carriage Service in the CBD areas of the five major mainland capitals the Commission considers that there is merit in examining whether a market for the Local Carriage Service exists in these areas which is distinct from the national market. In so doing it takes account of the differences in demand characteristics and the number and cost of substitution possibilities in these areas compared to the rest of the national market. Moreover, the Commission takes into account of how these may have changed since the Local Carriage Service was declared in 1999.

Telstra's application for an exemption from each of the standard access obligations relates to the supply of the Local Carriage Service within the CBDs of Sydney, Melbourne, Brisbane, Adelaide and Perth including local calls originating in these CBD areas and terminating within the local call zone.<sup>13</sup>

As such, the Commission considers that in the context of its exemption decision, the dimensions of the geographical market for the wholesale supply of local calls is defined as that for the local call zone within which local calls originating from the above five CBD areas terminate. This definition incorporates two geographic aspects. The definition of CBD areas and the definition of the local call zone. The former is defined as per the CBD Exchange Service Areas at the time of the exemption application. The latter is the applicable local call zone with respect to calls that originate in these CBD Exchange Service Areas.

#### **4.5 Temporal dimension of the market**

Time dimension of the market refers to the period over which demand and supply substitution possibilities should be considered.

In considering the substitution possibilities which are set out in section 5, and in reaching its draft decision on the exemption, the Commission has sought to consider alternatives to the Local Carriage Service available to service providers at present and in the foreseeable future. While the Commission has not necessarily set out to engage in short-term or long-term analysis of the time aspect of the relevant market, the Commission is of the view that a cautious approach should be taken in considering the time dimension of the relevant market. This is in recognition of the significance of removing the Standard Access Obligations, and the fact that substitution of alternative infrastructure or services for the Local Carriage Service may not be able to be achieved immediately.

In considering the time dimension of the market the Commission has given consideration to the extent to which market conditions have changed since declaration of the Local Carriage Service in 1999.

#### **4.6 Conclusion – market definition**

Based on the various dimensions of the market considered above, the Commission is of the view that the relevant market is the wholesale supply of local call services to other carriers and carriage services providers via the Local Carriage Service or other means in the geographic areas covered by Telstra's exemption application. It is also of the view that given these wholesale services are used as inputs into the supply of retail local calls to end-users, the retail market for local calls is also a relevant market for consideration. Therefore, the Commission also considers the possible impact of an exemption decision on the supply of local calls at the retail level, and the possible effect of alternative sources of supply of local calls at the retail level.

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<sup>13</sup> Further details are provided in section 2.

Discussion of possible alternative infrastructure and services and their degree of substitutability for the Local Carriage Service at the wholesale and retail level is provided as part of section 5.



## 5. Competition Analysis

In this section, the Commission assesses the level of competition in the market for local call services in the five major mainland CBD areas, and how an exemption would be likely to affect competition in this market. To do this the Commission considers the level of concentration in the retail local call market, whether there are effective local call service substitutes for Telstra's Local Carriage Service in the five major mainland CBDs, the possible barriers to entry to further network roll out and the degree of price competition and product differentiation in the market.

### 5.1 Principles<sup>14</sup>

The concept of competition is of fundamental importance to the Act and has been discussed many times in connection with the operation of Part IIIA, Part IV, Part XIB and Part XIC of the Act.

In general terms, competition is the process of rivalry between firms, where each market participant is constrained in its price and output decisions by the activity of other market participants. The Trade Practices Tribunal (now the Australian Competition Tribunal) stated that:

In our view effective competition requires both that prices should be flexible, reflecting the forces of demand and supply, and that there should be independent rivalry in all dimensions of the price-product-service packages offered to consumers and customers.

Competition is a process rather than a situation. Nevertheless, whether firms compete is very much a matter of the structure of the markets in which they operate.<sup>15</sup>

Competition can provide benefits to end-users including lower prices, and a better quality and range of services over time. Competition may be inhibited where the structure of the market gives rise to market power. Market power is the ability of a firm or firms profitably to constrain or manipulate the supply of products from the levels and quality that would be observed in a competitive market, for a significant period of time.

Market power may be drawn from the ownership of infrastructure required for providing services in the downstream market. Without access to the services provided by the infrastructure, a firm would not be able to operate in the downstream market. Therefore, the establishment of a right for third parties to negotiate access to certain services, on reasonable terms and conditions, can operate to constrain the use of market power, which could be derived from the control of these services.

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<sup>14</sup> This discussion is derived from the Commission's *Domestic Transmission Capacity Service* report, May 2001.

<sup>15</sup> Re Queensland Co-operative Milling Association Ltd and Defiance Holdings Ltd (1976), *Australian Trade Practices Reporter* 40-012, at 17,245.

An access regime such as Part XIC, or Part IIIA of the Act, attempts to change the *structure* of a market, to *limit* or reduce the sources of market power and consequent anti-competitive *conduct*, rather than directly regulating conduct which may flow from market power (which is the role of Part IV and Part XIB of the Act). When the structure of the market becomes more competitive as a result of the access regime or due to other factors, the Commission may consider exempting an access provider or providers from the service declaration or revoking or varying the service declaration. In this situation, maintaining declaration of the eligible service may not have much effect in terms of promoting further competition. In this regard the Explanatory Memorandum for the *Trade Practices Amendment (Telecommunications) Bill 1996* states:

It is not intended that the access regime embodied in this Part impose regulated access where existing market conditions already provide for the competitive supply of services. In considering whether a thing will promote competition, consideration will need to be given to the existing levels of competition in the markets to which the thing relates.<sup>16</sup>

This statement recognises the costs of access, such as administration and compliance, as well as potential disincentives to investment. A continuation of regulated provision of services will only be desirable where it leads to benefits in terms of lower prices, better services or improved service quality for end-users, which outweigh any costs of regulation.

As with the case of declaration of a service, when considering whether an exemption for a service should be granted (or a service should be varied or revoked), the Commission's task is to determine the extent to which this is likely to promote competition. The question of whether competition will actually improve or increase will be highly relevant but is not determinative of this issue. The key issue when considering an exemption is whether the exemption will assist in establishing conditions by which such improvement will be more likely to occur. This interpretation of promoting competition (in the context of a declaration) was recently endorsed by the Australian Competition Tribunal, which stated that the concept of promoting competition:

...involves a consideration that if the conditions or environment for improving competition are enhanced, then there is a likelihood of increased competition that is not trivial.<sup>17</sup>

It is, however, not enough to determine if an exemption will promote competition by simply examining its impact on the competitive process in the market. Rather, the extent to which an exemption promotes competition should be examined from the end-users' perspective; that is, to have regard to the likely results from increased competition in terms of price, quality and service diversity.

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<sup>16</sup> Item 6, proposed s. 152AB.

<sup>17</sup> Re Review of Declaration of Freight Handling Services at Sydney International Airport (2000), *Australian Trade Practices Reports* 40,775, at para 107.

In interpreting the objective of promoting competition, subs. 152AB(4) of the Act requires that regard must be had to, though not limited to, the extent to which the arrangements will remove obstacles to end-users gaining access to carriage services. The Explanatory Memorandum to Part XIC of the Act states that:

... it is intended that particular regard be had to the extent to which the particular thing would enable end-users to gain access to an increased range or choice of services.<sup>18</sup>

Further, in determining the extent to which an exemption is likely to promote competition, the Act provides that:

... regard must be had to the extent to which the thing will remove obstacles to end-users of listed service gaining access to listed services.<sup>19</sup>

Where, for example, an exemption is likely to result in increased service diversity, end-users will be able to gain access to an increased range or choice of services. In such a case, an exemption may be expected to promote competition to a greater extent than continuing declaration that results in a larger number of suppliers in the market, but means all suppliers essentially offer the same service at the same price.

## 5.2 Market concentration in the retail local call market

As at 30 June 1998, Telstra's market share in the total local call market was estimated at 94 per cent.<sup>20</sup> Information supplied by Telstra indicates ongoing erosion of its retail market share since this time, largely on the basis of resale competition. This is evident from Table 5.1 below which shows the market share of Telstra's competitors in the total local call market.

**Table 5.1: Non-Telstra market share for local calls**

	1996-97	1997-98	1998-99	1999-00	2000-01(est.)
Total retail market share	Telstra commercial-in confidence data removed				
Own facilities only (incl. ULL)	0%	1%	4%	6%	7%

Source: Telstra correspondence to Commission, 24 May 2001.

Table 5.1 indicates that although Telstra's market share in the local call market remains relatively high, new entrants appear to be eroding that share not only by reselling local calls, but also by investment in facilities and using other wholesale services. In support of this, a recent survey by Deloitte Touche Tohmatsu on telecommunications purchasing decisions by the top 100 companies in Australia found that these companies

<sup>18</sup> Explanatory memorandum for the *Trade Practices Amendment (Telecommunications) Bill 1996* - item 6, proposed s. 152AB.

<sup>19</sup> Subs. 152AB(4).

<sup>20</sup> ACCC, *Local Telecommunications Services*, July 1999, p.55

are continually reviewing their telecommunications suppliers and are willing to change suppliers if better prices or products are offered. For example, this survey found that 71 per cent of respondents had conducted a review of telecommunications supplier arrangements since November 1999.<sup>21</sup>

It is expected that the erosion of Telstra's market share in the local call market would be greater in the CBD areas. This is because CBD areas are typically characterised by a higher percentage of business customers . and competitors to Telstra have managed to capture a higher local call market share for business customers than for the total local call market. These areas have also been the focus of telecommunications infrastructure investment by new entrants. Although many of the new entrants are targeting the data segment of the business market, the infrastructure being invested in can also be used in the provision of voice services.

### **5.3 Substitute infrastructure and declared services**

In this section, the Commission considers whether the various technologies and declared services available to carriers in providing telecommunications services offer effective substitutes for Telstra's Local Carriage Service in the local call services market.

In so doing, Commission considers the ability of alternative technology and declared services to provide a substitute for voice grade services. In other words, can the technology or declared service be feasibly used to provide local calls at the wholesale and retail level? If the technology or declared service is considered sufficiently suitable for the provision of local calls, the Commission assesses whether it has sufficient coverage to serve as an alternative to the Local Carriage Service and thereby constrain Telstra's behaviour in the supply and pricing of the Local Carriage Service in the absence of ongoing declaration.

If it is considered that an alternative technology or service does not have sufficient coverage, the Commission assesses whether the barriers to entry are sufficiently low such that the threat of entry would constrain decisions in relation to the supply of the Local Carriage Service. However, the Commission considered in its *Local Telecommunications Services* report, that actual entry by carriers, of sufficient scale, is likely to be necessary to generate effective competition. In this regard, the Commission stated that there are a number of features that limit the ability of new entrants and existing players to roll out customer access networks. These factors include economies of scale, the sunk nature of investment and negotiating access to facilities. In such an environment the threat of entry may not be sufficient to constrain a firm's conduct.<sup>22</sup>

At a conceptual level there are a number of wholesale alternatives to the Local Carriage Service supplied by Telstra by which other carriers or carriage service providers with or without their own infrastructure can use to provide local calls. These alternatives are summarised in the Table 5.2.

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<sup>21</sup> Deloitte Touche, Tohmatsu: *Deloitte Top 100 Companies – Consumer Telco Purchasing decisions Survey Report*, November 2000, p. 5

<sup>22</sup> ACCC, *Local Telecommunications Services*, July 1999, p. 49.

**Table 5.2: Alternative methods of supplying local call services**

Local calls — forms of supply					
	A	B	C	D	E
<b>Call origination</b>	LCS	Telstra orig. access	Telstra ULLS plus own line cards, etc	Own network (optic fibre, LMDS, microwave)	Own network
<b>Call termination</b>		Telstra term access	Telstra term access	Telstra term Access	Own network
<b>Type of competition</b>	Access based competition	←	Partial facilities based competition	→	Full facilities based competition

Firstly, carriers may provide an ‘on net’ call. This is where the entire local call (ie an end to end call within the same standard zone) is carried on the one network. Such a call is more likely to occur in the CBD areas than in metropolitan areas, given the amount of infrastructure deployed in these areas relative to metropolitan areas. The ability of a carrier to provide such a call is dependent on the number of customers directly connected to its network and who these customers call. If the called party is not directly connected to the carrier's network then an ‘on net’ call is not possible.

The second way a carrier can use its own network to provide a local call is to use its infrastructure in conjunction with the local or domestic PSTN terminating services. In this scenario, a carrier would originate a local call on its own access network and purchase the local or domestic PSTN service to terminate the call if necessary. As outlined in section 5.3.1, the local and domestic terminating PSTN services are declared services for third party access. The fact that these services are declared is an important consideration for the Commission in the context of an exemption application in that facilities based competition need not be ubiquitous for a carrier to supply local calls.

A third method would be for the carrier to use the unconditioned local loop service (ULLS) in place of its own infrastructure for use with PSTN terminating access as described in the second alternative above. The ULLS is also a declared service for third party access.

A fourth alternative for carriers or carriage service providers to provide local calls is solely via declared PSTN originating and terminating services. This is likely to require some extra network functionality to be provided by the access seeker than the case of the Local Carriage Service but it still does enable an access seeker to offer local call services with minimal network infrastructure of its own.

An analysis of the extent to which various infrastructure and services are present and are being used for supplying local call services are considered below.

### 5.3.1 Substitute infrastructure

In August 2001, the Commission issued a report prepared for it by BIS Shrapnel *Telecommunication Infrastructures in Australia 2001* (the BIS Shrapnel Report 2001) which provides an audit of the various types of telecommunications infrastructure in Australia. The report shows that there is a number of competing local access infrastructures to Telstra's PSTN in the CBD areas of the capital cities under consideration for the exemption. These include fibre optic, xDSL, microwave and advanced broadband wireless networks. It is evident however that there is considerably less alternative infrastructure in metropolitan areas (ie parts of the local call zone outside of CBD areas). Details of the various local access networks reported by BIS Shrapnel are provided in Table 5.2 below.

**Table 5.2: Local access networks in Australia**

Technology	Operator	Launch	Coverage
PSTN Copper	Telstra	Since 1900	Nationwide (99.5% of population covered)
PSTN Copper	TransACT	1999	A local network in Canberra
DSL	AAPT	2001	CBDs in Sydney, Melbourne, Brisbane <sup>(c)</sup> , Adelaide <sup>(c)</sup> , Perth <sup>(c)</sup> and Hobart <sup>(c)</sup> 60 Metro cities (2002/3)
DSL	Agile	2001	CBD areas in Adelaide
DSL	C&W Optus (XYZed)	2000	6 CBDs (Sydney, Melbourne, Brisbane, Canberra, Adelaide and Perth)
DSL	Davnet	Late 2000	CBDs in Melbourne and Sydney
DSL	Ecom	2001	CBD and metro areas in Sydney, Melbourne and Brisbane (constructing)
DSL	Flowcom	2001/02	Metro areas in Melbourne, Sydney, Brisbane and Perth (planning)
DSL	liNet	Reseller	liNet is currently reselling Telstra's ADSL service
DSL	Macquarie	2001	CBD areas in Melbourne and Sydney
DSL	Netcomm	2002	Metro areas in Melbourne and Sydney (Planning)
DSL	One.Tel	2001	Metro areas in Sydney and Melbourne (planning for Adelaide, Perth and Brisbane)
DSL	Pacnet	Reseller	Pacnet is currently reselling Telstra's ADSL service
DSL	Pahth	2002	Perth CBD (2001/2)
DSL	Primus	Early 2001	CBDs in Melbourne and Sydney
DSL	Qala	2002	CBD areas in Sydney and Melbourne (planning)
DSL	RequestDSL	Late 2000	Metro areas in Melbourne, Sydney, Perth, Brisbane and Adelaide
DSL	Telstra	1999	Urban areas in Sydney, Melbourne, Canberra, Brisbane, Adelaide, Perth, Darwin and Hobart, Toowoomba, Launceston and Bunbury (40 regional towns)
DSL	TransACT	Early 2001	Canberra Metro and Urban areas

Technology	Operator	Launch	Coverage
Optic Fibre	AAPT		6 CBDs (Sydney, Melbourne, Canberra, Brisbane, Adelaide and Perth) 3 rural cities in Victoria (2002)
Optic Fibre	Agile	2000	Adelaide CBD
Optic Fibre	Amcom (Fibertel)	1998	4 CBDs (Adelaide, Darwin, Perth and Hobart) 30 cities excluding Melbourne & Sydney in 2003
Optic Fibre	C&W Optus	1993	9 CBDs (Sydney, Melbourne, Brisbane, Canberra, Adelaide, Perth, Darwin, Hobart and Launceston)
Optic Fibre	Davnet	1999	4 CBDs (Melbourne, Sydney, Brisbane and Perth) Others CBDs (Hobart and Adelaide) in 2003
Optic Fibre	Ipera	2000	Newcastle Metro
Optic Fibre	PowerTel	1999	CBDs (Sydney, Melbourne, Brisbane, Gold Coast, Canberra <sup>(p)</sup> and Newcastle <sup>(p)</sup> )
Optic Fibre	Primus	2000	CBDs in Melbourne and Sydney
Optic Fibre	Smart Radio System	2000	Cooma
Optic Fibre	Swiftel	2000	Perth CBD
Optic Fibre	Telstra	1990	CBD in Sydney, Melbourne, Brisbane, Canberra, Adelaide, Perth and Hobart
Optic Fibre	TransACT	1999	Canberra Metro
Optic Fibre	Ue Comm	1999	CBDs (Sydney, Melbourne, Brisbane, Gold Coast and Perth)
Optic Fibre	WorldCom	2000	Sydney CBD and Melbourne CBD
HFC	Austar (Windytide)	1999	Darwin
HFC	C&W Optus	1995	Metro and Urban areas in Sydney, Melbourne and Brisbane.
HFC	Neighbourhood Cable	1999	Mildura, Ballarat, Bendigo <sup>(c)</sup> and Albury-Wodonga <sup>(c)</sup>
HFC	Telstra	1995	6 Metro and Urban areas (Sydney, Melbourne, Brisbane, Gold Coast, Adelaide and Perth)
HFC	West Coast Radio (iiNet)	2000	Perth (Ellenbrook area)
Cellular	AAPT	2001 (terminated)	Network deployment was terminated in 2001
Cellular	Hutchison	2000	Sydney, Melbourne, Brisbane, Perth and Adelaide
Cellular	One.Tel	2001 (terminated)	Sydney, Melbourne, Brisbane, Perth and Adelaide
Cellular	C&W Optus	1993	Nationwide (94% of population covered)
Cellular	Telstra	1987	Nationwide (96% of population covered)
Cellular	Vodafone	1993	Nationwide (93% of population covered and 100% coverage with Globstar Satellites)
LMDS	AAPT	Early 2001	6 CBDs (Sydney, Melbourne, Canberra, Brisbane, Adelaide and Perth) 3 rural cities in Victoria (2002)

Technology	Operator	Launch	Coverage
LMDS/MMDS	AUSTAR	2001	Adelaide, Melbourne, Sydney, Brisbane, Canberra and Perth (planning)
LMDS	C&W Optus (XYZed formerly Agility)	2001	CBD areas (where complimentary to its DSL and fibre coverage) in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart
LMDS/MMDS	Akal	2001	Metro areas and regional Australia (planning)
Microwave	AAPT	1998	CBD and metro areas in Melbourne, Sydney, Brisbane, Adelaide, Perth and Canberra
Microwave	Airnet	1999	A small network in Adelaide
Microwave	Agile	2000	Adelaide and regional areas in SA
Microwave	BushTel	2000	Rural and remote areas
Microwave	Datafast	2000	Melbourne CBD
Microwave	Davnet	1999	CBD and metro areas in Sydney, Melbourne, Perth and Brisbane
Microwave	Netcare (Paladin Resources)	2000	Perth
Microwave	ntl Telecom	2000	Providing regional access in country VIC and NSW
Microwave	OMNI connect		Melbourne CBD
Microwave	Pulsat	2000	Metro areas in Perth, Melbourne, Sydney and Brisbane
Microwave	Third Rail (AMX Resources)	2001	Tamworth
Satellite	C&W Optus	Since 1992	Rural and remote areas in Australia
Satellite	Austar	1999	Regional areas in Australia
Satellite	Bincom		Rural areas in Perth
Satellite	Heartland	2000	Rural and remote areas

c = constructing p = planning

Note: Not all of the operators listed above have succeeded in rolling out their networks. Some operators like Heartland, Cellular One/AAPT and One.Tel have delayed or terminated their network rollouts.

Source: BIS Shrapnel, *Telecommunication Infrastructures in Australia 2001*, A research report prepared for the ACCC, July 2001.

The extent to which these local access infrastructures can be considered substitutes to the Local Carriage Service in the areas covered by Telstra's exemption applications are discussed in turn below.

### ***Fibre Optic and Hybrid Fibre Coax networks***

A fibre optic network uses glass or plastic threads (fibres) to transmit telecommunications services such as data, video and voice telephony. It has greater bandwidth than metal cables and is less susceptible to interference. With new networks, optical fibre is increasingly used (sometimes combined with coaxial cable) for customer connections, and in existing networks, copper is being replaced with optical fibre.



Hybrid Fibre Coax (HFC) is used to deliver video, voice telephony, data and other interactive services over coaxial and fibre optic cables. A HFC network consists of a headend office, distribution centre, fibre nodes and network interface units. The headend office receives information such as television signals, Internet packets, and streaming media and then delivers them through a SDH ring to distribution centres. These distribution centres then send the signals to neighbourhood fibre nodes, which convert the optical signals to electrical signals and redistribute them on coaxial cables to homes and businesses where network interface units send the appropriate signals to the appropriate devices (eg. telephone).<sup>23</sup>

The Commission considers that HFC and fibre optic technologies provide effective voice and data services. This is evidenced by the fact that these technologies are currently being used for such applications. Given this, the Commission considers that local call services provided over fibre optic and HFC networks are technological substitutes for the Local Carriage Service. However, to be an effective substitute these networks need to be sufficiently widespread.

#### *Coverage and use in supplying local call services*

This section assesses whether fibre optic and HFC infrastructure is sufficiently widespread to be considered an effective substitute for the Local Carriage Service in the CBD areas under consideration.

The Commission's discussion paper sought opinions from carriers' on whether this infrastructure should be considered an effective substitute for the Local Carriage Service. Most carriers, however, did not comment on the substitutability of fibre optic or HFC services for the Local Carriage Service. Of those carriers that did make mention of the substitution possibilities, they argued that fibre optic and HFC infrastructure deployment was not of sufficient scale to constitute an effective substitute for the Local Carriage Service. For example, AAPT noted that fibre optic was a possible substitute for the Local Carriage Service, but that its coverage was limited.

The Commission considers it useful to examine the state of the market at the time of declaration and its development since this time. Such information provides an indication of the progress of investment and the extent of new developments and entry in the market. The following table summarises the state of the market at the time of declaration and how the market has developed subsequently to date.

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<sup>23</sup> BIS Shrapnel, *Telecommunication Infrastructures in Australia*, July 2001, p.95.

**Table 5.3: Development of CBD fibre optic and HFC infrastructure 1999 to 2001**

<b>July 1999</b>	<b>July 2001</b>
<b>Telstra</b> fibre optic infrastructure in all five CBD areas under consideration. Also HFC pay-TV and broadband data network passing 2.5 million homes.	<b>Telstra</b> continued investment in fibre optic infrastructure. Its fibre network operates in all five major capitals under consideration.
<b>Cable &amp; Wireless Optus</b> optical fibre rings in the CBD areas of Brisbane, Sydney, Melbourne, Canberra, Adelaide and Perth. Also HFC Pay TV, broadband data and telephony network passing about 2.2 million homes in Brisbane, Sydney and Melbourne.	<b>Cable &amp; Wireless Optus</b> continued its fibre optic roll out. Its network operates in the CBD areas of the five mainland capital cities under consideration. <b>HFC network has less than 500,000 telephony subscribers metropolitan Brisbane, Sydney and Melbourne.</b>
<b>PowerTel</b> had rolled out optical fibre in the CBDs of Brisbane, Sydney and Melbourne	<b>PowerTel operates fibre optic networks in Sydney, Melbourne and Brisbane.</b>
<b>WorldCom</b> Australia Pty Ltd had recently entered the Australian telecommunications industry with the objective of deploying networks in Sydney and Melbourne	<b>Worldcom</b> is operating its fibre optic services in the CBD areas of Sydney and Melbourne
United Energy Telecommunications ( <b>Uecomm</b> ) had been involved in providing high capacity broadband services on its optical fibre network in Melbourne on private networks of corporate customers	<b>Uecomm</b> is operating its fibre optic network in the CBD areas of Sydney, Melbourne and Brisbane
<b>AAPT</b> was rolling out optical fibre cables in the CBDs of Brisbane, Sydney, Melbourne and Adelaide, as well as selected regional centres	<b>AAPT</b> has rolled out fibre optic loops and cabling in the five CBD areas covered by Telstra's exemption application;
<b>Primus</b> was installing its cable network in the CBDs of Sydney and Melbourne	<b>Primus</b> is operating its fibre optic services in the CBD areas of Melbourne, Brisbane, Adelaide and Sydney, and is in the process of constructing a network in the CBD area of Perth
	<b>Amcom</b> has fibre optic infrastructure in the CBD areas of Perth and Adelaide
	<b>Davnet</b> is operating in the CBD areas of Sydney, Melbourne, Brisbane and Perth
	<b>Swiftel</b> has optical fibre infrastructure in the Perth CBD
	<b>Agile</b> is operating its fibre optic network in the CBD area of Adelaide

Source: ACCC Local Telecommunications Services report 1999 and BIS Shrapnel 2001.

This indicates that, excluding Telstra there are:

- two carriers offering telecommunications services over their own fibre infrastructure in all five CBD areas considered;
- four carriers offering the telecommunications services over their own fibre in four or more CBD areas considered;
- ten carriers offering services over their own infrastructure in at least one of the CBD areas considered.

Since the Commission's July 1999 report, it is apparent that investment in infrastructure in the CBD has increased and that new entrants are attracting customers to their networks. The Commission notes that although carriers other than Telstra have not obtained full coverage in CBD areas, they have the ability to provide local call services using this infrastructure by combining it with other infrastructure and declared services. Moreover as there can be expected to be considerable up-front costs associated with rolling out small fibre optic loops, the marginal costs of extending the loop and adding additional customers is likely to be relatively low. This costs structure should also mean that once a fibre loop has been installed, the infrastructure owner should have every incentive to try and connect as many customers as possible.

The Commission understands that several carriers have announced plans to deploy further infrastructure in the CBD areas over the next few years. Although the Commission considers that actual entry (ie. the actual existence of infrastructure) is likely to be required to constrain the actions of incumbents, this information provides an indication of the likelihood of increased facilities-based competition in the longer term.

Table 5.4 illustrates that of building wired to fibre optic infrastructure, carriers other than Telstra cover around 30 per cent of buildings. These figures assume no doubling up (with Telstra in particular) which is possible in many cases, and in which case is likely to imply a higher market share to new entrants than those reported. In addition they are probably not very good indicators of customer market shares on the basis that large buildings will often have multiple customers and the number of services per customer connected will also vary.

**Table 5.4: Buildings wired to fibre optic infrastructure**

<b>Company</b>	<b>Buildings wired</b>	<b>Share %</b>
Telstra	5500	69
Optus	1230	15.4
PowerTel	400	5
UECom	300	3.75
Amcom	270	3.38
AAPT	250	3.1
Swiftel	30	0.3
Primus	?	?
Others	?	?
<b>Total</b>	<b>7980</b>	<b>100%</b>

Source: BIS Shrapnel 2001

The Commission also notes that Optus's HFC network is used to offer local and other telephony services to customers in the metropolitan areas of Sydney, Melbourne and Brisbane. However the number of customers is relatively low (less than its 500,000 cable TV subscribers). This would tend to mean that in the vast majority of cases, carriers and carriage service providers with their own infrastructure in CBD areas will be reliant upon Telstra's PSTN terminating access services for offering local call services.

*Possible service specific barriers to entry*

- Access to buildings

In order for a licensed carrier to directly connect customers to its network, it needs to have access to buildings in which customers are located. In CBD areas this frequently means obtaining access to high rise buildings.

Schedule 3 of the *Telecommunications Act 1997* provides licensed carriers with the statutory right to access a building for the purpose of deploying low-impact facilities.<sup>24</sup> Nevertheless, carriers have certain obligations to fulfil prior to entering a building to deploy infrastructure. These obligations include the need to give notice to the owner of the land, to do as little damage as practicable, to comply with industry standards, and to compensate persons for financial loss or damage suffered as a result of the deployment of facilities.

Despite the right of statutory access to buildings, a number of carriers informed the Commission that access to buildings can add to delays and additional costs in connecting customers. Examples were also provided of building owners charging carriers for laying cables in their buildings.

The Commission is not convinced that these represent insurmountable barriers to access to customers. It also notes that the Australian Communications Industry Forum (ACIF), in conjunction with the Property Council of Australia and Telecommunications User Groups, has developed a Draft Industry Code for building access. This code aims to create more efficient and effective building access for Carriers, Carriage Service Providers and Property Owners by standardising procedures across the telecommunications industry with resulting savings in the administrative costs of all parties involved.<sup>25</sup> The Code appears to address a number of the issues raised by carriers in seeking access to buildings to deploy cabling. Although the Code is not binding on property owners, ACIF noted that it understands that as the Property Council of Australia was involved in the development of the code, it will be recognised as best practice by Property Owners and adopted as standard business procedure.

Given this, the Commission considers that access to buildings for telecommunications carriers to deploy cabling should be improved in the future, thus somewhat reducing the barriers to entry in directly connecting customers.

### ***Wireless Local Loop Networks***

Wireless Local Loop (WLL) services can be provided using a variety of technologies, and can be used for a range of voice and data services. In considering the substitutes to the Local Carriage Service within the local call area, the following discussion will focus on microwave technology and LMDS technology.

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<sup>24</sup> Low impact facilities is defined in the Telecommunications (Low-Impact Facilities) Determination 1997, made by the Minister for Communications and the Arts, pursuant to Schedule 3 of the *Telecommunications Act 1997* and section 4 of the *Acts Interpretations Act 1901*.

<sup>25</sup> ACIF, *Draft for Public Comment Industry Code – Building Access Operations and Installation*, April 2001, p.1.

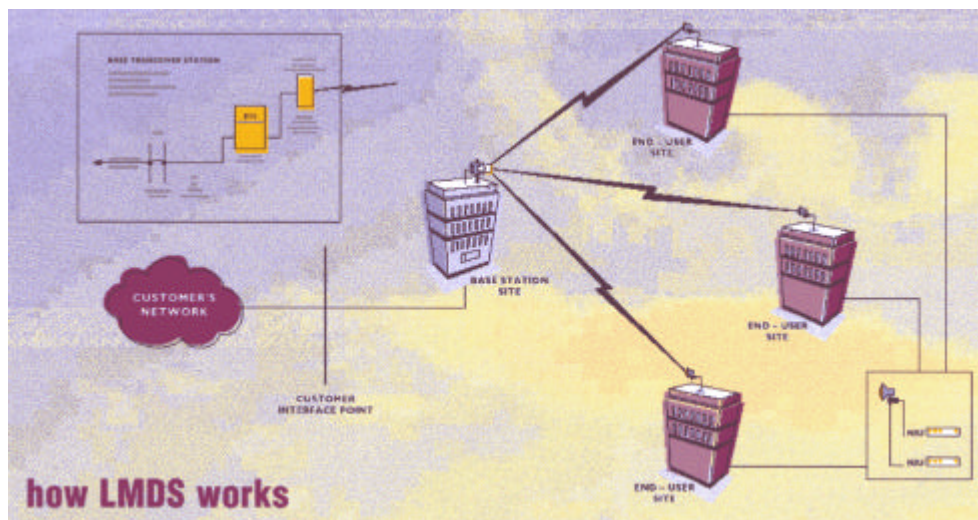
Microwave technology is capable of providing bandwidth of up to 135Mbps, but in practice its average optimum capacity is about 35Mbps. In a microwave radio system, traffic is transmitted in the form of directed beams of microwaves. Microwave repeater stations are set up within line-of-sight of each other, with microwave transmitting and receiving antennas set on tall towers.

These networks are primarily deployed to provide customer access, and are capable of providing voice and data services. It can be used as a backbone network for access to regional areas, and has also been adopted as a local access network in some CBD and metropolitan areas. Microwave technology is considered a mature radio technology.

Local Multi-point Distribution Service (LMDS) technology, however, represents the newest type of broadband wireless network. While LMDS technology is also a radio-based system, it operates at a high radio frequency band, ranging from 24GHz to 38 GHz. It enables point to multi-point connectivity, and can deliver high capacity and high-speed voice, data and Internet services.

Like microwave technology, LMDS technology is used to offer service providers and Internet service providers last mile connectivity between their fixed networks and customer sites. With LMDS technology, network coverage is increased by connecting the existing carrier network to a Base Transceiver Station (BTS) through a Customer Interface Point. This connection is extended using high frequency radio transmission, to an antenna located at the customer's premises. Figure 5.2 illustrates how LMDS technology operates.

**Figure 5.2: LMDS technology**



Source: BIS Shrapnel 2001

The Commission understands that LMDS signal quality and reliability are comparable to conventional technology. It also benefits from lower construction and maintenance costs than fixed wire technology. It can serve as a means of allowing a carrier to

directly access customers in city and metropolitan areas where buildings are difficult to access and where fibre deployment could be uneconomic.

Another advantage of LMDS is that it has minimal impact on end-user sites. The equipment consists of an antenna and Network Interface Unit (NIU), both of which are small, unobtrusive and installed on the customer's rooftop. However, LMDS technology requires line of sight in order to achieve reception, and is dependent on climatic conditions. These do however make it more suited for use in CBD and metropolitan locations than in other locations.

There are other wireless systems, namely MMDS (multi-channel multipoint distribution system), and MVDS (microwave video distribution system), which operate at 2-4Ghz and 40-42Ghz, respectively. MMDS has been used to deliver pay TV broadcasts, and also, like LMDS can be used as a local loop network.

*Coverage and use in supplying local call services*

The Commission notes developments in wireless local loop network deployment in Table 5.7.

**Table 5.7: Wireless local loop technologies**

<b>Operator</b>	<b>Type of Infrastructure</b>	<b>Operator Status</b>	<b>Coverage</b>
AAPT	Microwave	<ul style="list-style-type: none"> <li>Operating</li> </ul>	<ul style="list-style-type: none"> <li>CBD and metro areas in Melbourne, Sydney, Brisbane, Adelaide, Perth and Canberra.</li> <li>Regional Victoria in 2002.</li> <li></li> <li>used in combination with other technologies including xDSL and fibre, to provide broadband services.<sup>26</sup></li> </ul>
	LMDS	<ul style="list-style-type: none"> <li>completed testing on some CBD nodes.</li> </ul>	<ul style="list-style-type: none"> <li>plans to provide coverage to all capital CBD areas to complement existing and planned AAPT optical fibre cable, all key metropolitan areas, and over 20 selected regional centres.</li> <li></li> </ul>
Davnet	Microwave	<ul style="list-style-type: none"> <li>Operating</li> </ul>	<ul style="list-style-type: none"> <li>CBD and metro areas in Sydney and Melbourne.</li> <li>Plans to roll out laser network to link CBD buildings in Sydney and Melbourne.</li> </ul>
DataFast	Microwave	<ul style="list-style-type: none"> <li>Operating</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Melbourne CBD area, distributes voice, data and video simultaneously.</li> <li>Backbone network spans some Melbourne metro areas and regional areas of Victoria.</li> </ul>
Pulsat	Microwave	<ul style="list-style-type: none"> <li>commenced in metro areas of Perth.</li> </ul>	<ul style="list-style-type: none"> <li>further rollout planned for metro areas of Melbourne Sydney, Brisbane, Adelaide and Canberra</li> <li></li> </ul>
Agile	Microwave	<ul style="list-style-type: none"> <li>operating</li> </ul>	<ul style="list-style-type: none"> <li>Adelaide metro areas and regional areas in SA.</li> </ul>
XYZed	LMDS	<ul style="list-style-type: none"> <li>has wholesale LMDS customers in Perth and Tasmania.</li> <li>Intends to extend roll</li> </ul>	<ul style="list-style-type: none"> <li>Intends to roll out in CBD areas of Sydney, Melbourne, Brisbane, Perth, Adelaide, Hobart and Darwin.</li> <li>proposed nodes will provide network</li> </ul>

<sup>26</sup> www.aapt.com.au

<sup>27</sup> AAPT submission, 29 August 2000.

		out the network to 50 locations over the next 12 months,	coverage to all metropolitan and major regional centres in Australia. <sup>28</sup>
AKAL	LMDS or MMDS	<ul style="list-style-type: none"> <li>obtained spectrum</li> </ul>	<ul style="list-style-type: none"> <li>rollout plans cover metropolitan and regional Australia</li> </ul>
Walker Wireless	LMDS or MMDS	<ul style="list-style-type: none"> <li>obtained spectrum</li> </ul>	<ul style="list-style-type: none"> <li>regional Australia.</li> </ul>
Austar	MMDS	<ul style="list-style-type: none"> <li>operating</li> </ul>	<ul style="list-style-type: none"> <li>regional and rural Australia..</li> </ul>

Source: BIS Shrapnel 2001

The Commission recognises that networks based on microwave, LMDS and MMDS technology are potentially substitutable for the Local Carriage Service in CBD areas, given their ability to supply the local call service. Operators of this infrastructure can also use them as a compliment to their fixed network infrastructure (notably fibre loops) and other declared services. The Commission notes that that XYZed is currently supplying LMDS on a wholesale basis. As such, this service offering may provide access seekers an alternative to the Local Carriage Service in providing retail local calls in the local zone.

*Service specific barriers to entry*

A number of difficulties have been encountered by AAPT in deploying its LMDS network. It has been delayed in its deployment due to a change in vendor, and has also experienced technical difficulties. AAPT submits that LMDS technology has also been expensive to implement, with one node costing hundreds of thousands of dollars. The Commission acknowledges that the sunk costs of such investments can be barriers to entry. However, this is not specific to microwave or LMDS network deployment and can arise for a variety of alternative infrastructure deployments.

However, the Commission considers that one of the major barriers to new entry in the establishment of a microwave network, and LMDS or MMDS network is the limited spectrum available to potential carriers for further deployment in Australia. In this regard, further new entry using radio-based networks may not be possible.

***Mobile networks***

Mobile technology allows calls to be made from any location covered by relevant spectrum. The two most common types of mobile services are GSM and CDMA, which utilise spectrum allocated in the 1.8GHz, 800MHz and 900MHz ranges.

In its *Competition for long distance mobile telecommunication services* report, the Commission concluded that fixed line calls were not a sufficiently close substitute for mobile services.<sup>29</sup> In this regard, the Commission noted that there were important differences between the two services which limited the extent to which the pricing of fixed services constrained the price of mobile services. It noted that mobile services

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<sup>28</sup> *Communications Day*, 22 May 2001.

<sup>29</sup> ACCC, *Competition for long distance mobile telecommunication services*



are not simply about enabling the end-user to make phone calls; mobility (the ability to make and receive calls from any geographic location) was, in the Commission's view, a significant feature of mobile services which was not present in the fixed market. The premium paid for mobility provided an indication in the Commission's view that the two services were in different markets. The untimed feature of most local call charging and the timed feature of most mobile call charging would suggest that this is even more the case with respect to local call services.

Oftel has also recently expressed the view that calls from mobiles are not in the same market for calls from fixed services. In support of this it referred among other things, its own survey of residential customers in May 2001 in which 79 per cent of respondents considered the home fixed telephone as their main method of making and receiving calls.<sup>30</sup>

The Commission notes that developments of new 'multipurpose' products that combine the characteristics of both fixed and mobile phones are likely to result in increased substitution between mobile and fixed telephony services. For example, Hutchison Telecom is currently offering a product, which allows the customer to make untimed local calls for 18 cents per call at anytime as long as the call is made from the customer's nominated 'TalkZone' surrounding a residence or business.

However, consumers that purchase this local call service are in essence also purchasing a mobile service and incur mobile rates for other types of calls. It is also only currently available in Sydney and Melbourne and the number of subscribers is only about 1 per cent of the total fixed line customer base at this stage. For these reasons the Commission does not believe that this service is yet to reach the stage where it can be regarded as fully substitutable for a PSTN local call service.

In conclusion although there is likely to be some substitution of mobile services for fixed services the Commission considers that at this time such services are unlikely to constrain the prices charged for fixed local call services to the degree that they should be considered in the same market.

### ***Satellite technology***

Satellite technology can be used for point-to-point communications but is mainly used for point-to-multi-point communication services. Satellites receive microwave transmissions from an uplink station on earth, and retransmit those down to the downlink location or region on earth.

Depending on the altitude of the satellite, satellite systems are termed as Low Earth Orbit (LEO) at 600-1500 kilometres or Medium Earth Orbit (MEO), and Geostationary Earth Orbit (GEO) at 36,000 kilometres above earth. Currently, the most common satellite systems in operation are geostationary satellites. These satellites will orbit at over the same point on earth - hence, the term geostationary.

Geostationary satellites have the ability to send phone, fax, telex and data messages across vast distances very quickly. However, satellite communications are very costly,

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<sup>30</sup> Oftel, *Competition in the provision of fixed telephony services*, 31 July 2001.

and are particularly considerably more expensive to deploy in CBD and metropolitan areas than copper and wireless local loop networks. In addition, if the satellite is used for two-way communications, the signal round trip from the ground to the satellite and back takes a delay time of roughly half a second.

Satellite technology can be used as a backbone transmission technology, but is not widely used. However, in rural and remote regions, satellite networks provide an alternative backbone solution in these sparsely populated areas. Satellite technology also appears to have niche application as part of the customer access network in situations where alternative terrestrial technologies are not cost effective or not available, such as in rural and remote areas and where fibre or copper rollout is not practicable.

#### *Coverage and use in supplying local call services*

Many satellites (mostly US based) have some coverage over Australia, but Cable & Wireless Optus and PanAmSat have GEO satellites with Australian dedicated footprints.<sup>31</sup> Cable & Wireless Optus remains the only Australian domestic satellite operator, and international operators such as PanAmSat and GlobalStar are also offering services in Australia.

Cable & Wireless uses its satellites to provide broadcast services to large customers such as FoxTel and Austar. It also provides interactive telephony services to remote areas for large business customers and government agencies. Cable & Wireless Optus does not resell satellite capacity but rather leases capacity over the satellite to its customers where it retains control over the operation and functioning of the satellite capacity. Telstra uses SkyBridge as a wireless technology to complement its terrestrial backbone network, where it provides broadband satellite services to regional Australia.

It is noted that there is potentiality of satellite technology to be a substitute for services provided on the existing fixed network.<sup>32</sup> However, given the nature of satellite technology and the current trend in satellite technology usage, the application of satellite technology tends to be limited to rural and remote areas, where it may not necessarily be employed for local call services.

### **5.3.2 Substitute declared services**

#### ***Local and domestic PSTN originating and terminating service.***

Local and domestic PSTN originating and terminating services enable access seekers to originate and terminate calls with customers connected to an access provider's public switched telephone network. These are declared services and are generally associated with fixed line telephone networks. The services can be used in whole or part (along with an access seekers own direct connections) as substitutes for the Local Carriage Service, but require greater functionality to be provided by the access seeker. The extent to which this is feasible is considered below.

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<sup>31</sup> The region which a satellite transmits to is described as the satellite's footprint.

<sup>32</sup> An observation also noted in the Commission's *Local Telecommunication Services* report

Local PSTN originating and terminating access services involve the carriage of communications between a customer's premises and the access provider's local switch, including the switching provided by the local switch. The access seeker interconnects at the trunk side of the switch and runs or leases a transmission link to its own switch/exchange.<sup>33</sup>

Domestic PSTN originating and terminating services are similar to the local PSTN originating and terminating services. The main difference is that interconnection is associated with a 'gateway' exchange rather than the local switch closest to the end-user. This means that the service will frequently involve greater reach and network functionality than local PSTN originating and terminating services. The Commission understands that there are 66 exchanges or points of interconnection (POIs) that serve as gateway exchanges in Telstra's network which give Australia-wide coverage for this service. Given this it tends to be used to provide origination and termination of non-local calls such as national long distance. These gateway exchanges will often be a local switch, thus making the service functionally identical to local PSTN originating or terminating access where the customer is connected directly to these exchanges. In CBD areas, the gateway exchange tends to be associated with the trunk switch (or TS) therefore adding another component to the charge.

The Commission has made a number of arbitration determinations in which it has set the price for domestic PSTN originating and terminating access, as well as issued undertaking decisions in which it has touted suitable cost-based prices for these services. The reach and pricing of the services on a timed basis means that it is most appropriately used for national long-distance, international, fixed-to-mobile and mobile-to-fixed calls. However this would not preclude its use for local calls, particularly for shorter-held calls. Indeed, unlike the Local Carriage Service, the service is priced on a geographically de-averaged basis so it is likely to be more cost reflective than the geographically averaged Local Carriage Service price in the areas sought by the exemption. Notwithstanding this the Commission accepts that there are potential allocative inefficiencies from use of the domestic PSTN originating and terminating access service to provide local call services given that the charges are based on their use for other purposes.

As the Commission noted in its *Local Telecommunications Services* report, it is technically feasible to use the declared local and domestic originating and terminating access services to provide a local call. If an access seeker does not have directly connected customers at the originating and terminating end, it will require both originating and terminating access. The absence of a preselection determination for local calls means however that the customer must enter an override code to avoid using the access provider's (eg Telstra's) retail local call product. The Commission understands that customers with PABX and other advanced telephone systems can program an override code into their systems that would mean it would not be necessary for callers to do this each time a local call is made.

Where an access seeker has a directly connected customer at the originating end of a call but not at the terminating end it will need to purchase terminating access only. In

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<sup>33</sup> ACCC, *Local Telecommunications Services*, July 1999, p. 29.

this instance no override code or preselection determination is necessary to automatically obtain retail local calls from the access seeker.

*Coverage and use in supplying local call services*

As declared services, all operators of PSTN networks are required to provide local and domestic originating and terminating access to access seekers that request it. If the access provider and the access seeker cannot agree on the terms and conditions of access the Commission can arbitrate. The Commission understands that local or domestic PSTN originating and terminating is only used on a very limited basis by access seekers to provide local calls. While there may be a number of reasons for this, one the major ones is likely to be the availability of the declared Local Carriage Service itself.

Access seekers have indicated to the Commission that the use of local PSTN origination and termination services to supply local call services has not been extensive due to the up-front costs that need to be incurred by access seekers in establishing points of interconnect and transmission links for all exchanges where they wish to offer local call services. This would only tend to make it economical to use these services once a threshold number of customers and calls can be achieved.

The terms and conditions for access to local PSTN originating and terminating tend to have been commercially negotiated. Some access seekers have indicated to the Commission that they do use this service as a substitute for the Local Carriage Service, and pay Telstra a timed rate. However, some service providers indicate that because of timed access, they are unable to provide calls profitably to end-users. Furthermore, using this service is considered a risky option, where a long-held local call to an Internet Service Provider could wipe out the profits earned on several short duration local calls. Nevertheless the Commission understands that the length of business calls average around 2.5 minutes such that local call provision on the local PSTN originating and terminating service will often be economical for a service provider.

As discussed above, domestic PSTN originating and terminating services are not commonly used by service providers for the provision of an end-to-end local call because they are designed and priced for other purposes and will often be uneconomical for the service provider. Nevertheless the Commission has been made aware of instances where they are used to offer local call services. For example, it has been told that there are some new entrants that are wholesaling a Local Carriage Service by linking domestic originating and terminating access via a gateway switch.

As mentioned above, the Commission has the power to set the terms and condition of access to the local PSTN originating and terminating access services if the parties are unable to agree. Therefore if an access seeker is unhappy with the terms and conditions by which is receiving access to these services it can seek an arbitration determination from the Commission. To date the Commission has not received notification of disputes in relation to local PSTN originating or terminating access. As flagged in the *Local Telecommunications Services* report such a price could be set in accordance with government regulatory requirements in relation to the pricing of local calls (such as the requirement by all carriers to offer untimed local calls, Telstra's 22 cent cap and the metropolitan and non-metropolitan parity requirement) in order to protect the legitimate

business interests of the access provider.<sup>34</sup> This suggests that a per call price or a capped time rate is likely to be appropriate.

*Service specific barriers to entry*

When it declared the local PSTN originating and terminating service the Commission indicated it could be used to supply local calls. However it expressed the view that a pre-selection determination by the ACA enabling end-users to select a service provider for the carriage of local calls was necessary to enable service providers to fully exploit the use of this service for local calls. There continues to be no such pre-selection determination for local calls. However, as pointed out previously, customers with advanced telephone systems can overcome this requirement and avoid the inconvenience of entering in an override code before each call is made. Moreover the construction of a range of competing infrastructure since the time of the declaration inquiry means that it is much more feasible for carriers to directly connect customers in CBD areas.

Preselection is only really an issue with respect to the origination end of a call. At the termination end, the issue is whether terminating access is viable on reasonable terms. given that Telstra has the vast majority of directly connected customers and will continue to be the main terminating carrier in these instances. This can be ensured given that PSTN terminating access services are declared services. Nevertheless to take advantage of local terminating access many access seekers are likely to need to extend points of interconnect and transmission to local switches in metropolitan areas of the local call zone or purchase local transmission services to these exchanges from Telstra or other carriers. This may serve as a barrier to entry in the short term but the Commission is not convinced it is an insurmountable barrier in the longer term.

*Conclusion*

The Commission considers that local PSTN originating and terminating access can be used as a substitute to the Local Carriage Service in a technical sense either on its own or in conjunction with an access seekers own facilities to which customers are directly connected. It is however recognised that impediments may possibly exist to the more extensive use of these services. These include the absence of a preselection determination for local calls and the costs of establishing interconnection at the local exchange level in the face of uncertain demand. The Commission is interested to obtain further views from carriers on these matters.

The Commission seeks views of carriers:

- On whether the absence of a pre-selection determination will be a major impediment to the use of local PSTN originating access to offer local call services; and

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<sup>34</sup> ACCC, *Local Telecommunications Services*, July 1999, p. 96.

- What costs are involved in establishing infrastructure to use local originating and terminating access and whether these may serve as a barrier to entry into the local call market for use of local originating and terminating access as an alternative to the Local Carriage Service service.

### ***Unconditioned local loop (ULL) service***

The ULL service is a service which involves the use of unconditioned copper pairs between the network boundary at an end-user premises and a point at which the copper terminates.<sup>35</sup> Given that new networks tend to involve the use of transmission media other than copper, Telstra is the only supplier of this service throughout Australia.

The ULL service is used by access seekers as a component for the supply of high bandwidth end-to-end services, for the carriage of voice or data communications or both. The ULL service can also be used to supply telephony services either with, or independently of, a xDSL (digital subscriber line) service such as Asymmetric Digital Subscriber Line services (ADSL).<sup>36</sup> It is important to note, however, that in most cases a service provider supplying a xDSL service to a customer would need to provide both the xDSL service and voice services on the single copper line, given that the declared ULL service refers to a copper line to the customer, usually a single line. The exception to this is when a customer has more than one line, such that different services can be provided separately on each line.

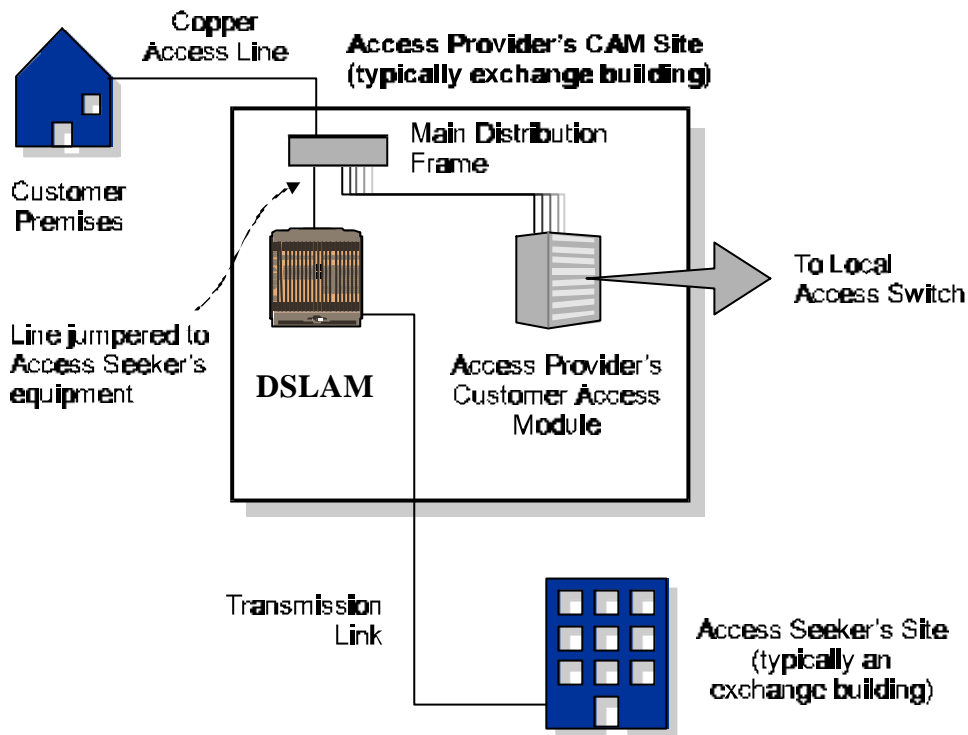
The way in which the ULL service is supplied to an access seeker depends on the xDSL carriage technology. Typically, however, the ULL service involves co-location of the access seeker's equipment with Telstra's customer access module. This involves establishing a connection between the point at which the copper cable is terminated, ie. main distribution frame, and the service provider's 'card' in the co-located facility, such as via a Digital Subscriber Line Access Multiplexer (DSLAM). The service provider runs or leases a transmission link from the DSLAM to its own exchange. Figure 5.1 illustrates how access to the ULL service is typically achieved:

**Figure 5.1: The ULL service**

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<sup>35</sup> The Australian Competition and Consumer Commission, *Local Telecommunication Services*, July 1999, p.13.

<sup>36</sup> The term 'xDSL technology' is a generic name for a technology that enables twisted copper pairs to be capable of providing high speed data access.



Source: AdvaTel

There are a number of benefits to the use of the ULL service. Most significantly, the access seeker is able to add its own technology in supplying voice and data services to users, as it uses twisted copper pair without conditioning or specific carriage technology. However, it is important to note that it is mainly economical for a service provider to supply the voice and data combination.

*Coverage and use in supplying local call services*

The ULL service provides an alternative means for access seekers to gain direct access to customers to deliver local call services.

Table 5.5 below indicates the number of access seekers that have sought access to a particular number of exchanges in each of the CBD areas covered by the exemption for the purposes of utilising the ULLS. It shows that the number of exchanges for which activations have been sought cover most CBD exchanges. The figures reported relate to 5 a - competing access seekers in total. The Commission has also referenced more detailed figures in informing its views on ULLS take-up but has not been able to report these for reasons of commercial sensitivity.

Figures on the extent of take up on a line basis would offer more useful information about the state of competition, but this information was not available. The Commission does however understand that such numbers are very small. Nevertheless the figures on exchanges activations indicate that there is interest in providing this service by a number of access seekers across the various CBD areas and it offers an indication of significant access seeker enthusiasm for use of the ULLS. Importantly, once access seekers have incurred the expense of investing in equipment and access exchanges to enable them to utilise the ULLS, they have every incentive to maximise the number of ULLS connections to spread these costs over as many services as possible.

**Table 5.5: Number of access seekers which have sought access to Telstra exchanges for the ULLS in CBD areas as of end August 2001**

Capital city	No. of CBD exchanges	Number of access seekers which have sought ULLS activations at given number of exchanges:				
		Five	Four	Three	Two	One
Sydney	5		-	-	-	1
Melbourne	3			3	2	-
Brisbane	4		3	2	-	-
Perth	3			3	1	-
Adelaide	2				3	-

Source: Telstra It is important to note that in considering this exemption, the Commission is particularly interested in the degree of competition in the origination of local call services. Accordingly, DSL network roll out in CBD areas provides an indication of the likely take up of the ULLS, albeit with a focus on the provision of data services.

Since declaration of the ULLS, a number of competitors have invested in the deployment of xDSL technology. In particular, the Commission notes the following developments in xDSL rollout, illustrated in Table 5.6.

**Table 5.6: xDSL rollout**

Operator	Operational Status	Coverage
XYZed, a fully-owned subsidiary of Cable & Wireless Optus	<ul style="list-style-type: none"> <li>Currently providing a wholesale DSL service to service providers</li> </ul>	<ul style="list-style-type: none"> <li>CBDs of Sydney, Melbourne, Brisbane and Perth.</li> <li>At the completion of the proposed network roll out, XYZed will be accessible by more than 75% of Australian businesses.<sup>37</sup></li> <li>Do not currently provide services to retail or residential customers.</li> </ul>
AAPT	<ul style="list-style-type: none"> <li>Initial rollout to 22 exchanges in metropolitan areas of Sydney, Melbourne and Brisbane.</li> </ul>	<ul style="list-style-type: none"> <li>Planned rollout in CBDs in Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart.</li> </ul>

<sup>37</sup> Cable & Wireless Optus submission, 3 October 2000, p12.



		<ul style="list-style-type: none"> <li>• final rollout expected to encompass all capital cities with the exception of Darwin.<sup>38</sup></li> </ul>
Request DSL	<ul style="list-style-type: none"> <li>• provides a wholesale DSL service, and has gained access to 20 exchanges.<sup>39</sup></li> </ul>	<ul style="list-style-type: none"> <li>• CBD and metropolitan areas of Melbourne, Sydney, Brisbane and Perth.</li> </ul>
Davnet	<ul style="list-style-type: none"> <li>• Has a HDSL network</li> </ul>	<ul style="list-style-type: none"> <li>• CBD areas in Sydney and Melbourne</li> </ul>
FlowCom	<ul style="list-style-type: none"> <li>• still under development</li> </ul>	<ul style="list-style-type: none"> <li>• plans to target the metro areas in Melbourne, Sydney, Brisbane and Perth.</li> <li>•</li> </ul>
NetComm	<ul style="list-style-type: none"> <li>• service to be launched in mid 2001</li> </ul>	<ul style="list-style-type: none"> <li>• initially Sydney and Melbourne CBDs, and progressively extend to other capital cities.</li> </ul>
Pahth Telecom (Pahth)	<ul style="list-style-type: none"> <li>• plans to construct an ADSL network in 2001.</li> </ul>	<ul style="list-style-type: none"> <li>• initially Perth metropolitan region, followed by Adelaide and then other cities.</li> </ul>
Primus	<ul style="list-style-type: none"> <li>• has been constructing its DSL network in 2001.</li> </ul>	<ul style="list-style-type: none"> <li>• CBDs of Sydney and Melbourne.</li> </ul>
Qala Australia (Qala)	<ul style="list-style-type: none"> <li>• Plans to roll out in 2002.</li> </ul>	<ul style="list-style-type: none"> <li>• initially Sydney CBD then moving out to the metropolitan area and then expanding to other capital cities.</li> </ul>
TransAct	<ul style="list-style-type: none"> <li>• started deploying in 2001</li> </ul>	<ul style="list-style-type: none"> <li>• Canberra.</li> </ul>

*Source: BIS Shrapnel 2001*

As the above information indicates, most carriers appear to be still in the process of deploying their networks or constructing their xDSL networks. Much of this rollout is focused in the CBD areas of the state capitals, but there has also been some deployment of xDSL networks in metropolitan areas.

In view of the relatively significant number of carriers rolling out xDSL networks, the Commission considers that the ULL service could potentially be used as a competitive substitute to the Local Carriage Service. However, there are a number of considerations which indicate that the ULL service in its own right may not yet have developed to a stage where it could be considered a ready substitute to the Local Carriage Service.

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<sup>38</sup> Communications Day, 22 May 2001

<sup>39</sup> Communications Day, 22 May 2001

Firstly, it tends to be most economically viable for carriers to use the ULL service to offer voice calls in conjunction with a xDSL service, except in high call volume cases. In particular, Cable & Wireless submit that wholesale xDSL services that are currently being rolled out using the ULL are targeted at supplying data services rather than telephony.<sup>40</sup> In this regard, services supplied using the ULL service are likely to be targeted at corporate and small to medium-sized enterprises, which tend to concentrate in CBD areas, relative to metropolitan regions. Customers in metropolitan regions are likely to be mainly residential in nature, and as such, demand for the bundled voice and data combination delivered on xDSL technology are likely to be relatively small. The implications of this are that the ULL service would appear to be most substitutable for the Local Carriage Service in CBD areas, where business customer are willing to purchase the bundled voice and data combination offered by carriers. However, in non-CBD areas, the ULL service is likely to be less substitutable for the Local Carriage Service as residential customers are less likely to take up the voice and data combination or make high volumes of voice calls.

Secondly, and following from the first point, users of the ULLS will still need to purchase terminating access in those cases where customers are not directly connected to their own networks. This will occur for most calls terminating in metropolitan regions, ie Type II calls, where Telstra will tend to terminate the call. In addition, even in CBD areas, the chances are that many calls will terminate on networks operated by other carriers. However, to the extent that there are a range of carriers with customers directly connected via ULL and otherwise, each network operator will have an incentive to offer competitive termination rates.

It is noted, however, that over time as the rollout of xDSL networks increases, this is likely to increase the degree of bargaining strength of access seekers, thereby increasing the substitutability of the ULL service for the Local Carriage Service.

#### *Service specific barriers to entry*

Several market participants indicated that at present, the ULL service is not a viable substitute for the Local Carriage Service. In particular, market inquiries indicate that a number of access seekers have experienced a number of difficulties in gaining access to the ULL service. The main obstacles cited by some carriers were difficulties in negotiating access to Telstra's exchanges and the high commercial cost of the ULL service to access seekers.

In relation to the former point, the process to gain access to Telstra's exchanges typically begins with the access seeker filling out a study or application form, identifying the sites which it wants access to. Space for the access seeker's equipment is approved by the access provider, and then final approval for access is obtained. According to some access seekers, it has sometimes taken unnecessary delays to eventually finalise interconnection and site co-location. For instance, FlowCom, like a number of other access seekers, consider that there is opportunity for it to gain access to the ULL service from carriers like XYZed who supply a wholesale DSL service, albeit in the CBD areas of state capitals. While the more attractive option for these

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<sup>40</sup> Cable & Wireless Optus submission, 3 October 2000, p3.

access seekers is to gain primary access points, the difficulties encountered in gaining access to Telstra's exchanges has meant that it has had to consider other avenues.

The Commission notes that extended delays in gaining access to Telstra's exchanges adds further costs to network investment, and is also likely to perpetuate uncertainty for the access seeker regarding the supply of the ULL service. The terms and conditions of supply of ULLS are also likely to be uncertain due to the notification to the Commission of disputes. However, Telstra has indicated that as of April 2001, the processes for ULL access were to be fully automated which will allow large orders to be serviced more expeditiously. This will replace the previous manual ordering and provisioning process.

The high commercial cost of the ULL service was also referred to by a number of market participants as a barrier to ULL roll-out and implementation. For instance, Cable & Wireless Optus submits that the take up of the ULL service may be slow until more reasonable prices, and terms and conditions are established.<sup>41</sup> It should be noted however that the Commission has flagged a TSLRIC approach to ULL prices in its draft pricing principles for the ULL service issued in August 2000.<sup>42</sup>

The Commission considers that these difficulties encountered by carriers are not necessarily insurmountable barriers, at least over time. It will also likely take some time for the ULL service to be implemented on a large-scale basis, and for carriers to gain an established user base. For instance, AAPT submits that it is not possible to make an assessment of the success of the ULL service until 12 months following the general availability of ULLS.<sup>43</sup>

In the *Local Telecommunications Services* report, the Commission expected that the ULL service could provide a competitive alternative to the Local Carriage Service service, and this view has not changed. As the above analysis indicates, the Commission considers that the ULL service serves as at least a partial competitive constraint on the Local Carriage Service in the CBDs of the state capitals under consideration, and that this will increasingly be the case over time.

### **5.3.3 General barriers to facilities entry**

#### *Economies of scale and scope*

In its *Local Telecommunications Services* report, the Commission stated that given the vast majority of costs for the customer access network - such as trench and cable costs - are fixed, significant economies of scale are likely to exist in the provision of the customer access network.

However, the Commission noted that competitors may still find it profitable to provide dedicated lines for a small number of high volume customers, as their high demand can

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<sup>41</sup> Cable & Wireless Optus submission, 3 October 2000, p12.

<sup>42</sup> ACCC, Draft Pricing of Unconditioned Local Loop Services (ULLS) and Review of Telstra's Proposed ULLS Charges, Discussion paper, August 2001.

<sup>43</sup> AAPT, 29 August 2000.

exhaust economies of scale on those particular lines. This is likely to be the case in CBD areas.

According to Telstra:

On the supply side, the concentration of a high volume of demand in a small geographic space, with many large multi-site lines, materially reduces the costs of by-pass, as there is especially great scope for directly connecting customer premises to fibre rings. As a result, one would expect, and indeed observes, distinctive patterns of competition in CBD areas.<sup>44</sup>

### *Complete service offering*

Many carriers note that customers generally prefer one carrier providing all their telecommunications needs, ie. national long distance, local, international and fixed-to-mobile, rather than having a separate carriers for various services. This suggests new entrants must be able to provide the entire range of services in order to compete effectively with incumbent networks.

This is the result both of consumer preferences and also bundled service offerings by carriers. In relation to the later point, national long distance, international and fixed-to-mobile services are included in the preselection basket, and as such are automatically purchased as a bundle. The Commission understands that many households and organisations also purchase, or would prefer to purchase, local call services from the same carrier that it purchases these services from. The Deloitte Touche Tohmatsu survey on telecommunications purchasing decisions found that 73 per cent of companies purchased local, national long distance and international calls from the same supplier.<sup>45</sup> However somewhat inconsistent with this finding, only 20 percent of the companies used a single telecommunications company to supply all their telecommunications services.

However the Commission understands that most customers generally prefer to be able purchase all call services from one carrier. As such, a carrier must be able to offer local calls, long distance calls, international calls and fixed-to-mobile calls. Carriers are able to effectively target consumers based on their preferences for these services. For example, some carriers offer cheap long-distance calls in an attempt to attract those customers for which such calls make up a large percentage of their telecommunications budgets. However, other services must also be offered so that the carrier remains attractive to the customer.

This preference is reinforced through the bundling of telecommunications products and services. Many carriers who have entered the telecommunications market at the wholesale level are able to offer discounts to customers who select them to provide all services. An example of a carrier offering this type of service is Optus. If a customer has a mobile service and its fixed line services with Optus, a discount on his or her entire telecommunications bill can be achieved. This provides consumers with an

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<sup>44</sup> Telstra's submission in response to the Commission's Discussion Paper, p.3.

<sup>45</sup> Deloitte, Touche, Tohmatsu: *Deloitte Top 100 Companies – Consumer Telco Purchasing decisions Survey Report*, November 2000, p. 4.

incentive to select one carrier for all their telecommunications needs rather than various carriers. Given this, carriers need to provide the entire suite of services and are likely to be required to offer certain discounts to customers. This has implications for resale carriers that are reliant on the wholesale provision of some telecommunications services. Such resale carriers may not be in a position to offer discounted services, or may only be able to offer such services at a loss or low margin.

Essentially for carriers to be able to compete effectively for one telecommunications service, they must be able to compete effectively for all telecommunications services. This means being able to provide services via their own networks, or being able to purchase competitively priced telecommunications services for resale. In terms of the bundling of services, it may be preferable for carriers to have their own infrastructure to take advantage of economies of scope in their service offerings.

## 5.4 Overview of competition in markets

Table 5.7 summaries the alternative local infrastructure within the confines of the five CBD areas that can be used to supply local call services. In addition to Telstra's copper, optic fibre and DSL networks, there are:

- 12 alternative carriers capable of offering services over 19 alternative networks in Sydney;
- 13 alternative carriers capable of offering services over 20 alternative networks in Melbourne;
- 9 alternative carriers capable of offering services over 15 alternative networks in Brisbane;
- 8 alternative carriers capable of offering services over 14 alternative networks in Perth;
- 6 alternative carriers capable of offering services over 11 alternative networks in Adelaide.<sup>46</sup>

**Table 5.7: Alternative networks in relevant CBD areas (inc. planned)**

Operator	Sydney	Melbourne	Brisbane	Adelaide	Perth
Telstra	C/O/D	C/O/D	C/O/D	C/O/D	C/O/D
C&W Optus	O/D/W	O/D/W	O/D/W	O/W	O/D/W
AAPT	O/D/W	O/D/W	O/D/W	O/D/W	O/D/W
Primus	O/D	O/D			
PowerTel	O	O	O		
WorldCom	O	O			

<sup>46</sup> These figures exclude One.Tel which has suffered financial collapse.

Ue Comm	O	O	O		O*
Swiftel					O
TransACT					
Macrocom	D	D	D		D
Agile				O/D/W	
Davnet	O/D/W	O/D/W	O/D*/W		O/D*/W
Pulsat	W	W	W	W	W
AirNet				W	
Request DSL	D	D	D*	D*	D*
Netcare					W
Ecom	D*	D*	D*		
Macquarie	D*	D*			
One.Tel**	D	D	D*	D*	D*
Datafast		W			

C = copper O = optic fibre D = DSL W = Wireless Technologies (including microwave, LMDS and MMDS)

\* Nearing completion

\*\* One.Tel has recently suffered financial collapse.

Source: BIS Shrapnel, *Telecommunication Infrastructures in Australia 2001*, A research report prepared for ACCC, July 2001 (with ACCC amendments).

Table 5.8 provides a summary of available facilities and declared services that can be used to supply local call- services in both the CBD and metropolitan areas of the five major mainland capitals. The column headings indicate the various facilities and declared services that are supplied over these facilities. For example, the table indicates that Primus has fibre optic infrastructure, which partially covers the CBD areas in four of the five mainland capital cities subject to the exemption application and it is also obliged to supply the Local Carriage Service and originating and terminating access on this infrastructure to carriers or carriage service providers which request it. It is to be noted that in this table, DSL networks are not reported.

It is apparent that investment in infrastructure has been concentrated in the CBD areas relative to metropolitan areas. It is likely that for calls terminating in the metropolitan area of the local calls zone in particular, carriers utilising their own facilities in the CBD areas will need to utilise PSTN terminating services to provide an end-to-end local call.

Telstra, in a confidential submission to the Commission, presented analysis which it claims illustrates that at least 80 per cent of CBD sites would be profitable to service with alternative fixed network infrastructure for voice traffic alone. It claims that the inclusion of data traffic, more liberal assumptions about the ability of alternative providers to exploit economies of scale and scope and the use of the ULLS to service

smaller CBD sites would make virtually all CBD sites viable for competition by this means.<sup>47</sup>

Notwithstanding its analysis of the alternative infrastructure and declared services in CBD areas as detail above, the Commission encourages carriers and carriage service providers to provide further information on a number of questions in their submissions. These are detailed in the box below.

The Commission invites carriers and carriage service providers parties to address the following questions in their submissions on the draft decision:

- While there is significant deployment of customer access infrastructure in CBD areas, to what extent is this infrastructure is being used to support the full range of users in CBD areas — large, medium and small enterprises and residential users? Are users in smaller buildings being connected, or is competition limited to users in large buildings?
- What has been the experience in terms of competition in CBD areas? Has the deployment of infrastructure translated to more rivalrous behaviour between service providers? Do end-users receive deeper discounts for local calls?
- Are there constraints on the ability of Telstra's competitors to deploy networks in CBD areas and connect users to their networks in those areas?
- Does the availability of a greater range of substitutes in CBD areas mean that there has been a lower take-up of Local Carriage Service in those areas?

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<sup>47</sup> Telstra confidential submission to the ACCC Discussion Paper on the Future Scope of the Local Carriage Service Declaration dated 4 September 2000 and confidential supplementary submission dated 3 October 2000.

Table 5.8: Alternative local network infrastructure and declared services

Carrier	Local calls PSTN copper		Local calls fibre/HFC		Local calls w/less (a)		LCS copper		LCS fibre/HFC		O & T PSTN copper		O & T Fibre/ HFC		ULLS PSTN copper	
	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M
Telstra	*5	*5	p5	p5			*5	*5	P5	P5	*5	*5	p5	P5	*5	*5
CWO			p5	p3	*5	p5			P5	P3			p5	P3		
Primus			p4						P4				p4			
AAPT			p5		P5				P5				p5			
PowerTel			p3						P3				p3			
Agile			p1			p1			P1				p1			
Amcom			p2						P2				p2			
Davnet			p4			p1			P4				p4			
Worldcom			p2						p2				p2			
Swiftel			p1						p1				p1			
Uecomm			p3	p3					p3	p3			p3	P3		
Airnet					P1											





<b>Datafast</b>					P1											
<b>Pulsat</b>						P1										

Notes

\* = full presence; p = part presence; C = CBD; M = Metro areas; 1-5 = no. of cities out of those covered by the exemption.

(a) Wireless technologies at various stages of deployment.

## 5.5 Price conduct

The level of prices and the types of product offerings in the market provide a good indication of whether there are competitive pressures at play in the market. As such, examination of the retail price and product offerings in the local call market is useful.

If sufficient alternative infrastructure is available and can be used to provide local calls, it should constitute a threat to Telstra's market share in the local call market. In this situation it would be expected that local call prices would be declining towards cost as new carriers viably enter the market and compete for customers.

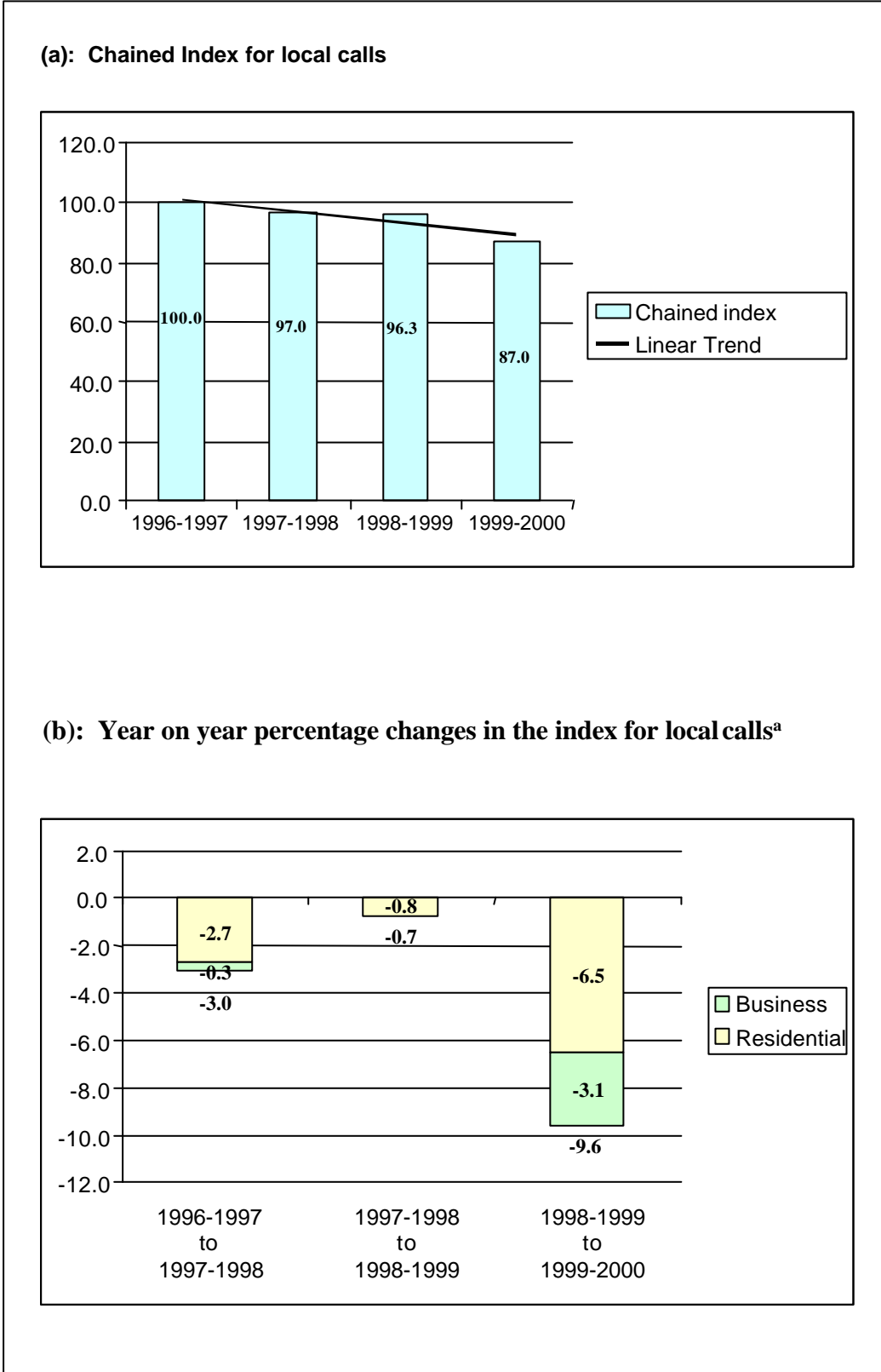
In its report *Changes in prices paid for telecommunications services in Australia 1996-97 to 1999-2000*, the Commission found that between 1996-97 and 1999-2000 the average price of local calls decreased by 13 per cent. The majority of this decrease occurred between 1998-99 and 1999-2000 where the price of local calls fell by 9.6 per cent. As can be seen from Figure 5.3 below, this price decrease was significantly more than in the periods 1996-97 to 1997-98 periods and 1997-98 and 1998-99 where prices decreased by 3 per cent and less than 1 per cent respectively.<sup>48</sup>

These reductions in local calls prices were at least partly driven by Government retail price controls applying to Telstra. Notwithstanding this, if there was no competitive pressure in the market for local calls, it is unlikely that the decreases would have been of the same magnitude.

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<sup>48</sup> 'Changes in the prices paid for telecommunications services in Australia', 1996-97 to 1999-2000, ACCC p.4.

**Figure 5.3: Change in the price of local calls, 1996-97 to 1999-2000**



(a) The sum of the percentage points attributed to each major component of the index may not sum to the total percentage change due to rounding.

Source: ACCC, *Changes in prices paid for telecommunications services in Australia 1996-97 to 1999-2000*.

Another indication of increased competition in a market is the range of products offered to consumers. With local calls, the usual way products and service offerings are distinguished is through pricing plan options and discounts. The most common type of tailoring is on the basis of volume. Many carriers offer cheaper local calls and higher line rental or plan fees to large volume callers, and higher local call rates and cheaper line rental and plan fees to low volume users.

Prices for retail local calls offered by various carriers and carriage service providers are shown in Table 5.8 and 5.9 below. It is evident that there is substantial variation in price offerings among the various companies. Prices for business local calls range from 14 cents to 22 cents per call with varying levels of line rental. Residential prices for local calls range from 13 cents to 22 cents, again with varying levels of line rental.

**Table 5.8: Local Call Rates – Business**

Service Provider	Call price	Monthly Access Fee/Line rental
AAPT	17.6c	\$34.45
DigiPlus	16c	\$31.95
Dingo blue	18.5c	\$31.95
Ecomtel	15c	\$31.95
EzTel	15c	\$31.95
Optus	20c	\$32.00
Optus	15c	\$37.50
RSL COM	16c	\$31.95
Telstra	22c	\$31.95
Telstra	16c	\$34.95
Telstra	22c	\$31.95
TransACT	14c	\$25.00

Source: [www.phonechoice.com.au](http://www.phonechoice.com.au) (accessed 31 August 2001).

**Table 5.9: Local call rates – Residential**

Service Provider	Call price	Monthly Access Fee/Line rental
AAPT	17.6c	\$19.95
Digiplus	18c	\$17.50
Dingo blue	18.5c	\$17.50
Ecomtel	13c	\$17.50
Ecomtel	15c	\$17.50
EzTel	15c	\$17.50
Optus	20c	\$17.50
Optus	20c	\$14.50
Optus	15c	\$24.50
Optus	15c	\$19.50
Primus	16c	\$21.19
Primus	18.5c	\$17.50
Telstra	22c	\$17.50
Telstra	18.5c	\$19.50
Telstra	22c	\$17.50
Telstra	19c	\$14.50
Telstra	22c	\$19.70
TransACT	18.5c	\$17.50
TransACT	20c	\$12.00

Source: [www.phonechoice.com.au](http://www.phonechoice.com.au) (accessed 31 August 2001).

## 5.6 Conclusion - competition

The Commission considers that granting an exemption from the SAOs in relation to the supply of the Local Carriage Service in will not be detrimental to competition in the market. The Commission is of the view that there is substantial alternative infrastructure (optic fibre loops, microwave and LMDS) and declared services (local PSTN originating access and ULLS) for originating local calls in CBD areas either being used or that can readily be used by alternative carriers and carriage service providers. The presence of such alternative infrastructure and services is believed to be sufficient to serve as substitutes to the Local Carriage Service and act as a constraint on

the Local Carriage Service price that Telstra would be able to charge in the absence of the Commission's power to determine a Local Carriage Service price upon the granting of an exemption in the areas of Sydney, Melbourne, Brisbane, Adelaide and Perth covered by Telstra's exemption application. On this basis, the Commission considers that the continued declaration of the Local Carriage Service is not necessary in these areas to ensure competitive market outcomes and deliver benefits to end-users.

Moreover the Commission is of the view that the availability of the Local Carriage Service is preventing these infrastructure and services from being used more extensively to originate calls than is the case at present. This is on the basis that the Local Carriage Service provides an easier means of entry into to market with minimal investment. The Commission believes granting of an exemption would serve to encourage greater use of these alternative infrastructure and services for originating local calls. As a result the Commission expects the exemption will produce an increase in service diversity and that end-users will be able to gain access to an increased range or choice of services which will be in the long-term interest of end-users of local call services.

It is recognised that some carriage service providers may find it more difficult to compete in the origination market upon the granting of the exemption. This will however benefit carriers with their own facilities and increase the scope or depth of competition to Telstra by this means. Carriage service providers have other market segments for voice traffic, such as the business and residential market in metropolitan areas where they will still be able to compete with minimal infrastructure.

The Commission is of the view that the termination of local calls in CBDs is not subject to the same degree of potential competition as origination given the absence of direct relationship with a customer for such services. However, local PSTN termination is a declared service, plus access seekers can access this service without a preselection determination. In CBD areas there will also not be a need for a carriers to build additional infrastructure to access this service as most carriers will have already interconnected at Telstra's exchanges for the purposes of offering long-distance and fixed to mobile services.

The Commission is of the view that the termination the local call zone outside CBD areas is not currently subject to substantial competition from alternative infrastructure. However alternative declared termination services, notably the local PSTN terminating service, are available to carriers and carriage service providers on regulated terms. Moreover it is the origination end of a call that is the main potential bottleneck for winning customers.

## 6. Efficient investment in infrastructure

### 6.1 Principles

In giving consideration to an exemption the Commission is required to have regard to the objective of encouraging the economic efficient use of, and investment in infrastructure by which the carriage service or the services supplied by means of the carriage service are supplied. Section 152AB(6) of the Act provides that, in interpreting this objective, the Commission must have regard to, but is not limited to regard of, the following factors:

- whether it is technically feasible for the services to be supplied and charged for, having regard to:
  - the technology that is in use or available;
  - whether the costs that would be involved in supplying, and charging for, the services are reasonable; and
  - the effects, or likely effects, that supplying, and charging for, the services would have on the operation or performance of telecommunications networks;
- the legitimate commercial interests of the supplier or suppliers of the service, including the ability of the supplier or suppliers to exploit economies of scale and scope; and
- the incentives for investment in the infrastructure by which the services are supplied.

The phrase ‘economically efficient use of, and the economically efficient investment in, infrastructure’ refers to the economic concept of efficiency, which has three components, namely productive efficiency, allocative efficiency and dynamic efficiency.

**Productive efficiency** refers to the efficient use of resources within each firm such that all goods and services are produced using the least cost combination of inputs.

**Allocative efficiency** refers to the efficient allocation of resources across the economy such that the goods and services that are produced in the economy are the ones most valued by consumers. It also refers to the distribution of production costs amongst firms within an industry to minimise industry-wide costs.

**Dynamic efficiency** refers to the efficient deployment of resources between present and future uses such that the welfare of society is maximised over time. Dynamic efficiency incorporates efficiencies flowing from innovation leading to the development of new services, or improvements in production techniques.

Efficient infrastructure investment makes an important contribution to the promotion of the LTIE. It can lead to more efficient methods of production, fostering increased competition and lower prices, as well as enhancing the level of diversity in the goods and services available to end-users.

### ***Competition and efficiency***

There is also a strong relationship between competition and efficiency. The Commission's analysis of the likely impact of a variation on competition will, therefore, also influence its analysis of the impact on efficiency. For instance, if the Commission comes to a view that supply of the eligible service is not yet subject to effective competition, then it could conclude maintaining declaration would:

- facilitate the provision of the declared service to access seekers at a price which is closer to underlying costs, resulting in a more efficient allocation of resources; and
- diminish the potential for inefficient duplication of infrastructure used to supply the declared service.

Maintaining regulation is, however, likely to have other impacts on efficiency, both positive and negative. For instance, while declaration may promote efficient investment in downstream markets, it may also result in costs as potential access providers continue to comply with the standard access obligations, or discourage efficient investment in infrastructure used to supply the declared service.

## **6.2 Technical feasibility of charging and supplying the service**

Given that the Local Carriage Service is currently supplied in the market, the Commission does not believe the granting or otherwise of the exemption in full has a bearing on the technical feasibility of supplying or charging for the Local Carriage Service. This is because the removal of the declaration is not going to have bearing on the ability of access providers to offer the service if they choose to do so. This may however be a consideration if the Commission was minded to make a partial exemption in relation to the areas covered by the exemption. However the Commission understands a partial exemption is not likely to pose major difficulties for Telstra to implement. As evidence of this it currently has differential charging for 'neighbourhood' local calls.

Feasibility issues surrounding the use of alternative facilities and services by access seekers are covered in the discussion on substitute services in section 5 on competition.

## **6.3 Legitimate commercial interests of access providers**

The legitimate commercial interests of access providers includes a commercial return on its investments, its interests in maintaining contractual commitments and its interests in using the network for future requirements. The legitimate commercial interests of access providers also include their ability to exploit economies of scale and scope.



The Commission accepts there are differences in costs of providing local calls between different geographical areas, with the costs being highest in more remote areas and lowest in built up areas such as CBDs. Under the Government's retail price controls Telstra faces a 22 cent cap on the price of local calls and a requirement to maintain a high level of price parity between the price of local calls in metropolitan and non-metropolitan areas. Taking these into account, it has been the Commission's practice to specify a Local Carriage Service price based on a retail minus methodology using an averaged wholesale local call price.

It would appear to the Commission that the Local Carriage Service price determined via the retail minus methodology more than compensates Telstra's legitimate business interests in the areas covered by Telstra's Local Carriage Service exemption application. This is because the costs of the local call service are lowest in these areas. This means that the margins for the Local Carriage Service are likely to be highest in the areas sought by the exemption. Taking all areas together however, it has been the Commission's view that the retail minus approach to Local Carriage Service pricing best protects Telstra's legitimate business interests given the retail price constraints it faces.

The issue therefore would appear to be one of whether granting the exemption would further compensate Telstra beyond its legitimate business interests. This will ultimately depend on the level of competition in the markets effected, which is assessed section 5. The fact that Telstra has made the exemption application would tend to suggest that an exemption is not likely to be contrary to its legitimate business interests. The same reasoning can be applied applies to other access providers, such as Optus which have supported exemptions for themselves under a class exemption.

## **6.4 Incentives for efficient investment in infrastructure**

In the context of the declaration of the Local Carriage Service, the Commission gave consideration to the possible impact on incentives for efficient investment in infrastructure in relation to investment in:

- existing PSTN infrastructure
- new infrastructure; and
- infrastructure used to supply other services.

It focused its considerations on incentives for efficient investment in new infrastructure, given that it received little information in submissions from interested parties on the likely effects on the other two.

The Commission expressed the view that the declaration of the Local Carriage Service would serve to facilitate market entry and enable service providers to obtain information about demand characteristics and the likely response of competitors, thereby reducing the risks associated with new infrastructure investment. This was considered to be important in enabling service providers to make efficient decisions about the deployment of alternative infrastructure. The Commission also expressed the

view that it did not believe that declaration would serve as a deterrent to efficient investment more broadly.

The Commission considers that the past two years in which the declaration has been in effect has provided ample time for service providers to make assessments about the state of the market in the areas covered by the exemption. Further it is believed that granting a period before which an exemption comes in to effect, say 1 year, would serve to offer service providers sufficient time to plan alternative arrangements and to obtain further necessary information about the operation of the market.

The Commission is of the view that the retail price control arrangements tend to encourage alternative providers to build infrastructure to provide local call services in areas where the costs of delivering local call services are lower than the average, most notably in CBD areas. As indicated in section 5 there is substantial evidence of infrastructure duplication in CBD areas. The Commission does not believe that regulating or otherwise of the Local Carriage Service in these areas will substantially alter these incentives.

Also relevant is the availability of the declared ULLS which the Commission has signalled it will require Telstra to price according to cost on a geographically de-averaged basis.<sup>49</sup> Indeed the Commission stated at the time of the declaration of the various local call services, that once the ULLS (and local originating and terminating services) could be used to supply local calls, the importance of the Local Carriage Service would diminish. Moreover, if access seekers are not using these services, as seems to appear, it might suggest that the availability of the Local Carriage Service is in fact acting as a disincentive for investment in infrastructure associated with these services.

In respect to the possible use of local PSTN origination and terminating access as an alternative to the Local Carriage Service the Commission has not been required to arbitrate charges for this service. It has however signalled it would be inclined to price such a service on a per call and geographically averaged basis to make it compatible with the untimed local call retail price.<sup>50</sup> As a practical matter the Commission's view is that this would lead to a wholesale charge structure not substantially removed from the current Local Carriage Service price. It would therefore no more encourage inefficient investment in infrastructure by access seekers than is likely to be occurring already and may improve incentives to invest in infrastructure associated with these services.

A possible counter argument is that access seekers are unable to achieve the economies of scale and scope to compete with Telstra in building infrastructure used in conjunction with the ULLS and local PSTN originating and terminating access. For example, it is widely accepted that in most instances access seekers are unlikely to take up ULLS lines to offer voice services alone. On the other hand once carriers invest in infrastructure to use local PSTN originating or terminating access to offer local calls, it

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<sup>49</sup> ACCC, Draft Pricing of Unconditioned Local Loop Services (ULLS) and Review of Telstra's Proposed ULLS Charges, Discussion paper, August 2001.

<sup>50</sup> ACCC, *Local Telecommunications Services*, July 1999, p. 97.

can also be used in offering national long-distance, international and mobile to fixed calls. This would help to ameliorate the costs of this infrastructure by spreading it over these calls as well.

## **6.5 Conclusion – efficient investment in infrastructure**

In CBD areas the Commission does not believe that the exemption will any more encourage inefficient duplication as has been the case with the Local Carriage Service declared. The Commission considers that the availability of the Local Carriage Service may have served to reduce efficient investment associated with other declared services, notably ULLS and local PSTN originating and terminating access. This is on the basis that the Local Carriage Service provides an easier means of entry into to market with minimal investment.

## **7. Any-to-any connectivity**

### **7.1 Principles**<sup>51</sup>

In addition to examining the impact of an exemption on competition and efficient investment, the Commission must consider whether granting an exemption from the SAOs for the supply of the Local Carriage Service in the CBD areas of the five mainland capitals is likely to result in the achievement of the objective of any-to-any connectivity in relation to carriage services that involve communications between end-users.

The reference to ‘similar’ services in the Act enables this objective to apply to services with analogous, but not identical, functional characteristics, such as fixed and mobile voice telephony services or Internet services which may have differing characteristics. The any-to-any connectivity requirement is particularly relevant when considering services that involve communications between end-users.<sup>52</sup> When considering other types of services (for example, carriage services which are inputs to an end-to-end service), the Commission considers that this criterion will be given less weight compared to the other two criteria.

### **7.2 Effect of the exemption on any-to-any connectivity**

The Commission is satisfied that with the presence of alternative infrastructure and declared services, the exemption will not have bearing on any-to-any connectivity.

## **8. Arbitrations**

In response to Commission’s Discussion Paper a number of carriers commented on the consideration of an exemption application in light of the arbitration process. The majority of responses centred on the fact that at the time the exemption application was made the Local Carriage Service arbitrations had not been finalised. A number of carriers considered that an exemption application should only be considered once the effects of arbitration determinations on the local call market could be assessed. Given this, most carriers’ considered it premature for the Commission to be considering an exemption application.

AAPT, for example, commented that the Commission should not consider the exemption application until the ULLS has been widely available for at least 12 months. AAPT stated that this is the minimum time it estimates for modest penetration of the ULLS in CBD areas.<sup>53</sup>

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<sup>51</sup> ACCC, *Domestic Transmission Capacity Service*, Final Report, May 2001

<sup>52</sup> *Trade Practices Amendment (Telecommunications) Bill 1996*, Explanatory Memorandum.

<sup>53</sup> AAPT submission to the Discussion Paper.

RSL COM commented that the effects of the declaration of the Local Carriage Service cannot be determined until the Local Carriage Service is unbundled and all access disputes regarding pricing methodology are resolved and the relevant market has had an opportunity to become self-sustaining in its operation.<sup>54</sup>

The Commission considers that, even if final determinations in relation the arbitrations have not been made, this does not prevent the Commission from considering an exemption application or granting an exemption. Indeed, given that arbitration determinations may be backdated to the time of notification, the Commission does not consider an exemption would impede in any major way the Commission's ability to resolve these arbitration disputes. This would be even more so if there were to be a period of time before which an exemption would to come into force (see section 9).

## **9. Timing of an exemption**

The Commission considers that if an exemption were made, it should come into effect one year after a final decision is issued. This is because carriers are likely to need time to adjust their business plans in the wake of an exemption of the Local Carriage Service in the areas covered. This also recognises that potential alternatives to the Local Carriage Service may take time to be arranged. The delay is considered necessary to help satisfy the objectives of promoting competition and encouraging economically efficient use of an investment in infrastructure and thereby promote the LTIE.

However the Commission seeks views on this time frame in submissions on the draft decision.

<p>The Commission seeks the views of users of the Local Carriage Service on whether a period of 1 year from any final decision to exempt the Local Carriage Service from the SAOs provides them with sufficient time to adjust their business plans and to arrange alternatives to the Local Carriage Service if required.</p>
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<sup>54</sup> RSL COM submission to the Discussion Paper, p.1.

## 8. Conclusion

The Commission is of the view that there is substantial alternative infrastructure (fibre loops, LMDS) and declared services (local PSTN originating access, ULLS) for originating local calls in CBD areas either being used or can readily be used by alternative carriers and carriage service providers. The presence of such alternative infrastructure and services is believed to be sufficient to serve as substitutes to the Local Carriage Service and act as a constraint on the Local Carriage Service price that Telstra would be able to charge in the absence of the Commission's power to determine a Local Carriage Service price upon the granting of an exemption.

It is of the view that the availability of the Local Carriage Service is preventing these infrastructure and services from being used more extensively to originate calls than is the case at present. This is on the basis that the Local Carriage Service provides an easier means of entry into to market with minimal investment. The Commission believes granting of an exemption would serve to encourage greater use of these alternative infrastructure for originating local calls and encourage greater investment in infrastructure associated with other declared services. This should in turn lead to greater service diversity which would be in the long-term interest of end-users of local call services.

It is recognised that some carriage service providers may find it more difficult to compete in the origination market upon the granting of the exemption. This will however benefit carriers with their own facilities and increase the scope or depth of competition to Telstra by this means. Carriage service providers have other market segments for voice traffic, such as the business and residential market in metropolitan areas where they will still be able to compete with minimal infrastructure.

The Commission is of the view that the termination of local calls in CBDs is not subject to the same degree of potential competition as origination given the absence of direct relationship with a customer for such services. However, local PSTN termination is a declared service, plus access seekers can access this service without a preselection determination. In CBD areas there will also not be a need for a carriers to build additional infrastructure to access this service as most carriers will have already interconnected at Telstra's exchanges for the purposes of offering long-distance and fixed to mobile services.

The Commission is of the view that the termination of calls in areas of the local call zone outside CBD areas is not currently subject to substantial competition from alternative infrastructure. However alternative declared termination services, notably local PSTN terminating services are available to carriers and carriage service providers on regulated terms. Moreover it is the origination end of a call that is the main potential bottleneck for winning customers.

<p>The Commission draft decision is to grant a class exemption from the SAOs for suppliers of the Local Carriage Service in the CBD areas of Sydney, Melbourne, Brisbane, Adelaide and Perth to take effect one year after any final decision is made by the Commission to grant such an exemption. A proposed draft instrument to this effect</p>
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is provided at Attachment A. Comment is sought by interested parties on this draft decision.

## Attachment A – Draft Instrument

### TRADE PRACTICES ACT 1974

#### **Class Exemption pursuant to section 152AS in respect of the Local Carriage Service**

The Australian Competition and Consumer Commission exempts, pursuant to section 152AS of the *Trade Practices Act 1974* ('the TP Act'), the following class of persons (exempted persons) from compliance with the standard access obligations in respect of the declared service supplied in the exempted areas.

#### **Definitions**

Where words or phrases used in this class exemption are defined in the TP Act, the *Telecommunications Act 1997*, or the instrument declaring the declared service, they have the meaning given in the relevant Act or instrument.

**declared service** means the Local Carriage Service declared by the Commission on 4 August 1999 pursuant to section 152AL(3) of the TP Act.

Note: The Local Carriage Service is defined as “a service for the carriage of telephone calls from customer equipment at an end-user's premises to separately located customer equipment of an end-user in the same standard zone.”

**exempted areas** are those areas within the Central Business District of Sydney, Melbourne, Brisbane, Adelaide or Perth.



Note: A **Central Business District** of a city comprises the exchange service areas that are classified as CBD for the purpose of the ordering and provisioning procedures set out in Telstra's Ordering and Provisioning Manual as in force on 1 May 2000.

**exempted persons** means persons who are either a carrier or a carriage service provider, and who, at any time on or after [Date Month Year], supply the declared service in the exempted areas.

This instrument is a disallowable instrument for the purposes of section 46A of the *Acts Interpretation Act 1901*.

This instrument takes effect on [Date Month Year].

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Allan Herbert Miller Fels  
Chairperson

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Commissioner

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Commissioner

DATED: .. ..... 2001

Note: This instrument may be cited as Class Exemption 1 of 2001