



COMMERCE COMMISSION

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**Final Report on whether the Resale Services should be omitted
from Schedule 1 of the Telecommunications Act 2001
(or if not omitted, amended in some form)**

Final Report under clause 4 of Part 1 of Schedule 3 of the Telecommunications Act 2001

The Commission:

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Date of Final Report:

16 December 2010

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LIST OF TERMS AND ABBREVIATIONS

Act	the Telecommunications Act 2001.
Designated service	a service described in subpart 1 of Part 2 of Schedule 1.
Designated Services Price List (DSPL)	the list of Resale Services and prices that was prepared by Telecom in accordance with the terms of Decision 497 and 563 and that is maintained in accordance with clause 64 of the Undertakings.
FTTP	Fibre to the Premises.
Order	the confidentiality order released for the purposes of the Resale Services Investigation
Resale Services	the following designated services: <ul style="list-style-type: none"> ▪ retail services offered by means of Telecom’s fixed telecommunications network; ▪ residential local access and calling service offered by means of Telecom’s fixed telecommunications network; ▪ bundle of retail services offered by means of Telecom’s fixed telecommunications network; and ▪ retail services offered by means of Telecom’s fixed telecommunications network as part of a bundle of retail services.
Residential Services Price List (RSPL)	the list of Resale Services and prices that was prepared by Telecom in accordance with the terms of Decision 525 and that is maintained in accordance with clause 64 of the Undertakings.
UBA	the designated access service of Telecom’s unbundled bitstream access set out in subpart 1, Part 2 of Schedule 1 of the Act.
UCLL	the designated access service of Telecom’s unbundled copper local loop network set out in subpart 1, Part 2 of Schedule 1 of the Act.
Undertakings	Telecom’s Operational Separation Undertakings.
WBS	Telecom’s Resale broadband service Wholesale Broadband Solutions.

EXECUTIVE SUMMARY

- i. This Report sets out the Commission's recommendation to the Minister regarding Resale Services, and whether they should remain, be omitted from Schedule 1 of the Act, or be altered in any way.
- ii. Resale Services provide telecommunications providers with access to wholesale services that directly replicate fixed line end-to-end services offered by Telecom in retail markets. An Access Seeker is able to purchase the wholesale service (at a discount on Telecom's retail price), re-brand, and sell to its end users.
- iii. Resale offers the opportunity for access seekers to enter retail fixed-line telecommunications markets without the need to deploy an access network or invest in local loop unbundling. Resale can be used to facilitate the entry of new providers into fixed-line telecommunications markets, or by providers wishing to offer services in those areas where they have not deployed their own infrastructure.
- iv. Resale Services are currently subject to the Telecommunications Act 2001, as designated access services contained in Part 2 of Schedule 1 of the Act (the Resale Services). The four services are:
 - Retail services offered by means of Telecom's fixed telecommunications network (Single Service Resale) – this covers services in the local access, broadband and data markets, for example, business line rental, Call Minder, ISDN, Wholesale Broadband Solutions, ATM and Frame Relay;
 - Residential local access and calling service offered by means of Telecom's fixed telecommunications network (Residential Resale) – this covers price-capped services in the local access market, for example, residential line rental;
 - Bundle¹ of retail services offered by means of Telecom's fixed telecommunications network (Bundled Resale); and,
 - Retail services offered by means of Telecom's fixed telecommunications network as part of a bundle of retail services (Parts of Bundles).
- v. As Resale Services are designated access services, the Commission is able to issue standard terms determinations for price and non-price terms. No such determinations have been made and resale services are currently provided by Telecom on a commercial basis.
- vi. The Commission's view is that regulatory intervention should be scaled back in areas where there is effective competition and that regulation should not impose or maintain burdens which are unnecessary. As set out in its Statement of Intent, the Commission's objective is to reduce regulation of telecommunications markets as effective competition develops².

¹ Bundles covers any bundled offering from Telecom Retail. The only bundles that have been regulated in the past (under Decision 525) are Messageline and Smartlines.

² Commerce Commission, 2010 – 2013 Statement of Intent, page 13.

- vii. Products falling within the scope of the four Resale Services (originally provided as a result of previous bilateral resale decisions determined by the Commission) are offered by Telecom on a commercial basis. Therefore, at present, the regulation of Resale Services in the Act is acting as a regulatory backstop: parties are able to seek a determination of the terms and conditions of access (including price) if commercial negotiations with Telecom for the supply of resale services fail. While the Commission has been able to exercise powers in relation to standard terms determinations since 2007, it has not done so in relation to Resale Services as there have been no grounds to. The presence of resale services in the Act poses no regulatory compliance burden because there are no standard terms determinations in place.
- viii. The Commission has decided to proceed with concluding its Schedule 3 Investigation despite the uncertainty that the roll out of ultra fast broadband may provide. The Commission's recommendations are predicated on existing regulated wholesale services, such as the unbundled bitstream service (UBA), being accessible as the next step on the investment ladder for telecommunications operators. It is critical that the regulated wholesale services remain a viable alternative to the resale services which are recommended to be deregulated.

Recommendations

- ix. Section 10(1)(b) of the Act and clause 4(3)(d) of Schedule 3 of the Act require that this Final Report include the Telecommunications Commissioner's recommendation and the views of two members of the Commission (other than the Telecommunications Commissioner) regarding the recommendation.
- x. The Act requires the Commission to make recommendations in the Resale Investigation which it considers best gives or are likely to best give effect to the promotion of competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand.
- xi. In making these recommendations, the Act requires that the Commission consider the efficiencies that will result, or will be likely to result, from its proposed recommendations, as well as submissions received.

Recommendation of the Telecommunications Commissioner

- xii. For the reasons set out in this Final Report, I am of the view that the following recommendations are likely to best give effect to the purpose of promoting competition in telecommunications markets for the long term benefit of end-users of telecommunications services within New Zealand:
 - the removal of regulation of resold broadband and data services;
 - the removal of regulation of Bundled Resale; and
 - continued regulation of resold local access and calling services and Parts of Bundles.

- xiii. In order to implement these, the following recommendations are made with regards to the Resale Services in the Act:
- a) the designated access service “retail services offered by means of Telecom’s fixed telecommunications network” be altered so that resold broadband and data services are not captured by the service description³;
 - b) the designated access service “bundle of retail services offered by means of Telecom’s fixed telecommunications network” be omitted from Part 2 of Schedule 1 of the Act;
 - c) no changes be made to the designated access service “retail services offered by means of Telecom’s fixed telecommunications network as part of a bundle of retail services”;
 - d) no changes be made to the designated access service, “residential local access and calling service offered by means of Telecom’s fixed telecommunications network”; and,
 - e) none of the proposed alterations should be deferred for any period.

Views of Commissioners Mazzoleni and Duignan, and Associate Commissioner Pickering

- xiv. We fully concur with the recommendations of the Telecommunications Commissioner.

Summary of Analysis

- xv. When considering regulatory changes in the context of this Investigation, the Commission had regard to whether regulation could be removed in certain geographic areas, if it was determined that these areas were considered competitive. The Commission concluded that this was not an appropriate approach for this Schedule 3 Investigation for a number of reasons. In particular, market boundaries are potentially unstable as a result of continual infrastructure investment and changing technology⁴, and in these circumstances arrangements to take full account of the geographic aspect of competition would be more appropriately achieved by using the competition test attached for this purpose to the relevant service description should a standard terms determination process be initiated.
- xvi. For the purposes of the competition assessment for this Investigation, the Commission has concluded that there are separate wholesale markets for:
- metropolitan local access services and non-metropolitan local access services;
 - metropolitan data services and non-metropolitan data services; and,
 - the national market for broadband access.

³ See Section D of this Report for details of the proposed alteration

⁴ See for instance, Geographically Segmented Regulation For Telecommunications, OECD Report from the Working Party on Communication Infrastructures and Services Policy, 22 June 2010, pages 4-6.

- xvii. In assessing the level of competition Telecom faces in the provision of Resale Services, the Commission has considered separate metropolitan and non-metropolitan markets for local access and data services. While this metropolitan and non-metropolitan split (referenced to the main areas in which competing infrastructure is located) has been used to assist with the competition analysis, the Commission does not think it is appropriate to recommend geographic exclusions to a regulated service as part of this Schedule 3 Investigation for the reasons noted in paragraph xv.
- xviii. The Commission's conclusions in terms of the competition that Telecom faces in each of these markets is summarised in the table below, along with the current service descriptions in the Act and the resale products that fall within those descriptions. The Commission uses the term 'effective competition' in this Report to describe situations where Telecom does not face limited, and is not likely to face lessened, competition in the relevant market. As the Resale Services span a number of markets, the table below also indicates the markets in which the resale products are supplied.

Table 1: Current resale services and competition conclusions

Service Description in Schedule 1 of the Act	Retail product offered by Telecom ⁵	Relevant market	Competition Assessment
Retail services offered by means of Telecom's fixed telecommunications network ("Single Service Resale")	<ul style="list-style-type: none"> - Business Line Rental - Call Minder - Caller Display Service - Faxability - Permanent Toll Bar products - Quick Dial - Call Diversion - Remote Divert Service - Call Restriction - Call Waiting - 3 way calls/Conference calls - Dual telephone number - Hotline - Reminder call - Centrex - Centrex features - Centrex Message Manager - CustomerLink - DDI - Digital Voice Access - Fax Address - Fax Advantage - Installations - ISDN BRA - ISDN PRA - Message Manager 	<p>Non-metropolitan local access market</p> <p>Metropolitan local access market</p>	<p>Limited competition</p> <p>Effective competition</p>
	<ul style="list-style-type: none"> - Wholesale Broadband solutions 	National broadband market	Limited competition

⁵ The table is illustrative only of the type of services falling with the Resale designated access services and includes grandfathered services.

Service Description in Schedule 1 of the Act	Retail product offered by Telecom ⁵	Relevant market	Competition Assessment
	<ul style="list-style-type: none"> - Analogue Data Service (A1, A2, A3) - ATM - Frame Relay - High Speed Digital Data Service - IP Net - Megalink Services - Office Anywhere - One Office - One Office Serial - Private Office Networking - Voice circuit service 	<p>Non-metropolitan data market</p> <p>Metropolitan data market</p>	<p>Limited competition</p> <p>Effective competition</p>
Residential local access and calling services offered by means of Telecom's fixed telecommunications network ("Residential Resale")	<ul style="list-style-type: none"> - Residential Line Rental 	<p>Non-metropolitan local access market</p> <p>Metropolitan local access market</p>	<p>Limited competition</p> <p>Effective competition</p>
Bundle of retail services offered by means of Telecom's fixed telecommunications network ("Bundled Resale")	<ul style="list-style-type: none"> - Messageline - Smartlines 	N/A	N/A
Retail services offered by means of Telecom's fixed telecommunications network as part of a bundle of retail services ("Parts of Bundles")	To date, the Commission has not released a determination on this Resale Service.	N/A	N/A

- xix. The factors that the Commission took into account to determine whether continued regulation is required where Telecom faces limited competition include the uptake of resale products, the existence of alternative products, the costs of ongoing resale regulation, Telecom's commercial incentives, future uncertainty (including that regarding the Operational Separation Undertakings and the Government's Ultrafast Broadband Initiative), and the efficiency implications of resale regulation.
- xx. Where Telecom faces effective competition, there is no need to keep regulation in place. In markets in which Telecom faces limited (or is likely to face lessened) competition, it is the Commission's view that absent other factors constraining Telecom's behaviour, there is a case for continued regulation of resale in markets.

Local access and calling services

- xxi. In the wholesale market for local access and calling services, Telecom faces limited competition in non-metropolitan areas. There is currently a lack of alternative wholesale services in areas where there has been no competitive infrastructure

development. Competing providers rely on resale access in order to provide services to residential and business customers in areas where they do not have their own infrastructure.

- xxii. Due to the lack of alternative services and in the absence of regulation, there would be little constraint on Telecom's ability to increase the price for local access services and accordingly regulation should be retained.
- xxiii. Residential local access and calling services are included in the service description Residential Resale, whilst business local access and calling services are included in the service description for Single Service Resale.
- xxiv. It is therefore recommended that the service description for Residential Resale be retained, and the service description for Single Service Resale be amended so that whilst business local access and calling services are still covered, a narrower set of services (as discussed below) are covered.

Broadband services

- xxv. Telecom faces limited competition in the national market for the provision of wholesale broadband access. However, regulation of resold broadband services is not required, given the regulation of the unbundled bitstream access (UBA) service.
- xxvi. Wholesale bitstream is an economic substitute for resold broadband, both now and into the future, and therefore the removal of regulation is unlikely to adversely impact on the level of competition in the downstream retail market for broadband services. There is very little take-up of resold broadband services, and this has been declining in recent years.
- xxvii. Resold broadband services are included in the service description for Single Service Resale. The removal of resold broadband services from regulation would be implemented by narrowing the broad Single Service Resale service description.

Data services

- xxviii. Telecom faces effective competition in metropolitan areas, but faces limited competition in non-metropolitan areas, for the provision of wholesale data services.
- xxix. Data products such as HSNS, UNS (Over Ethernet), and UPC⁶ provide alternatives to resale data services and as a consequence, the uptake of resale data services is low. The removal of regulation is therefore appropriate.
- xxx. The Commission acknowledges the obligations contained within the Undertakings to migrate access seekers from resale data services to EOI (equivalence of inputs) input based services, such as HSNS, UNS (Over Ethernet), and UPC. However, the variation powers in respect of the Undertakings, and the frequency of Telecom's variation requests, creates considerable uncertainty over the future role of the EOI Undertaking obligations in respect of the supply of these data services.

⁶ See <http://www.telecomwholesale.co.nz/products/data>

- xxxi. The Government's UFB initiative currently requires structural separation between the retail and layer 2 levels. In removing vertical integration between the retail and layer 2 levels, structural separation alleviates the competition concerns that the EOI obligations on the layer 2 services were designed to address. The Commission notes that Telecom is considering structural separation of its retail business unit, in order to be able to potentially participate in the UFB initiative. In addition, the Commission recognises that HSNS and UPC have been provided by Telecom on a commercial basis for some time and that to some extent pricing (at least that of HSNS – see discussion at paragraph 505) has been influenced by competitive forces. Finally, the take-up of resold data services seems relatively low. The Commission has concluded that Telecom is likely to have the incentive to continue to offer these layer 2 services on a reasonable basis in the future and that continued regulation of resold data services is not warranted.
- xxxii. Resold data services are included in the service description for Single Service Resale, so the removal of resold data services (as well as resold broadband services, as noted above in paragraph xxvii) from regulation would be implemented by narrowing the broad Single Service Resale service description.

Bundles

- xxxiii. Bundles are where two or more services are offered at a retail price less than the price of the aggregate parts. As noted above, 'Bundled Resale' and 'Parts of Bundles' are subject to Schedule 1 of the Act.
- xxxiv. Access seekers are able to replicate bundles by combining individual wholesale services. For example, an access seeker is likely to be able to compete with Telecom in the retail supply of bundled voice and broadband services by combining, for example, resale local access service with a broadband service using a wholesale bitstream input service.
- xxxv. The Commission's view is that Bundled Resale should be omitted from Schedule 1 of the Act. Given the relatively low margins involved with resale-based competition, the ability to purchase an entire bundle on a resale basis is unlikely to be an attractive option in the situation where the access seeker is able to supply certain components of the bundle through other means. In addition, the main bundle purchased by access seekers ('Access + Message') is offered by Telecom on a commercial basis, and is not captured by current regulation. In these circumstances, regulation of resale of entire bundles of services is unlikely to best promote competition for the long-term benefit of end-users.
- xxxvi. However, the Commission considers that the Parts of Bundles service provides a valuable safeguard against the potential anti-competitive effects of bundling, whilst being subject to a condition that regulation applies only where necessary for Telecom's rivals to compete in the retail market. Accordingly, the Commission is of the view that the Parts of Bundles service should be retained in Schedule 1 of the Act.

DATED this 16th day of December 2010

A handwritten signature in black ink, appearing to be 'Dr. Ross Patterson', with a long horizontal flourish extending to the right.

Dr Ross Patterson
Telecommunications Commissioner

Confidential information cited in this Report is subject to the confidentiality order made by the Commission under s 15(i) of the Act and s 100 of the Commerce Act 1986 ('the Order'). The Order in relation to the Resale Services Schedule 3 Investigation is dated 15 October 2009.

Information in relation to Telecom's, Vodafone's, TelstraClear's, CallPlus', WorldxChange's and Orcon's restricted information is denoted as []TRI, []VRI, []TCLRI, []CPRI, []WRI and []ORI respectively.

Commission only information is denoted as []COI.

All restricted and Commission only information is subject to the Order and has been extracted from the public version of this Report.

Key documents relating to confidential information are available on the Commission's website at www.comcom.govt.nz/telecommunications-resources

A. BACKGROUND

Structure of this Report

1. This Report contains the following sections:
 - a) This **Introduction** section provides an introduction and a brief context for the Investigation.
 - b) The **Framework for this Investigation** section outlines the legislative and assessment framework for the Commission's Investigation under Schedule 3 of the Act in respect of the Resale Services.
 - c) The **Are there grounds to deregulate?** section sets out the markets that are relevant to this Investigation; the state of competition within each of these markets; the factual and counterfactual scenarios that are appropriate for this Investigation, and a discussion about the grounds to remove resale regulation. In this section there are two stages to the Commission's assessment:
 - first, the Commission considers the circumstances under which removal of resale regulation⁷, in general, is likely to be appropriate; and
 - second, the Commission assesses the potential impact of removing resale regulation in respect of the local access, broadband and data markets, by considering the likely outcomes under the factual and counterfactual scenarios.
 - d) The **Commission's proposed alterations** section outlines the changes it is proposed be made to the Single Service Resale service description in order to narrow the services covered, (i.e. to exclude data and broadband); and,
 - e) The **Appendices** include a List of Resale Services (providing a brief description of each service); the Market Definition section; the Competition Assessment Section; tables showing the uptake of Resale Services; and a summary of the main points made in submissions on the Draft Report.
2. Resale Services provide telecommunications providers with access to wholesale services that directly replicate fixed line end-to-end services offered by Telecom in retail markets. An Access Seeker is able to purchase the wholesale service (at a discount on Telecom's retail price), re-brand, and sell to its end users.
3. Resale Services are currently subject to the Telecommunications Act 2001 (the Act) as designated access services contained in Part 2 of Schedule 1 of the Act. The four services are:

⁷ For the purposes of this assessment, 'removal of the regulation' encapsulates both the situation where the Service Descriptions in the Act may be omitted, and where the Service Descriptions may be narrowed via amendment.

- Retail services offered by means of Telecom's fixed telecommunications network (Single Service Resale);
 - Residential local access and calling service offered by means of Telecom's fixed telecommunications network (Residential Resale);
 - Bundle of retail services offered by means of Telecom's fixed telecommunications network (Bundled Resale); and,
 - Retail services offered by means of Telecom's fixed telecommunications network as part of a bundle of retail services (Parts of Bundles).
4. The scope of resale regulation is broad covering all services offered by Telecom Retail via its fixed telecommunications network. Detail about these Resale Services, including a description of the services, is included in Appendix 1.
 5. The scope of the four Resale Services are derived from bilateral resale decisions determined by the Commission in 2003, 2004 and 2005 under the 2001 Act. These determinations have all expired⁸ and the services within the scope of the definitions are now provided by Telecom on a commercial basis. No applications for determinations of Resale Services have been made since the determinations expired, and the Commission has not, under the 2006 Act, initiated a Standard Terms Determination process. Therefore the regulation of resale services in the Act is acting as a backstop, i.e. although the Resale Services are included in Schedule 1 of the Act, there are no regulatory determinations in force in respect of these services.
 6. The main purpose of the Act is to regulate the supply of telecommunications services in New Zealand. Under Schedule 3, the Commerce Commission (the Commission) may, on its own initiative, or if requested by the Minister, commence an Investigation into whether or not it should recommend to the Minister that Schedule 1 should be altered in any of the ways contemplated by the Act, which include omitting designated or specified services, or amending these services.
 7. Prior to commencing the Resale Services Investigation, the Commission conducted an initial period of consultation to gather views as to whether there were reasonable grounds to commence an investigation⁹.
 8. The Commission conducted a Schedule 3 investigation into the extension of regulation of designated and specified services (which includes the Resale Services) in August 2006. The reason for that investigation was that the thirteen services originally regulated under the Act were due to expire on 19 December 2006, and under the Act at that time the Commission could make a recommendation to the Minister that any or all of the services should continue to be regulated under the Act for a further two year period. The Commission concluded that there were reasonable grounds to investigate whether to extend ten of the thirteen services. Included in these ten services were the Resale Services, i.e. the four designated access services that are contained in Part 2 of Schedule

⁸ Decision 497 expired on 12 November 2004 and Decision 525 expired on 14 December 2005.

⁹ Responses were received from CallPlus, Kordia and Orcon, Vodafone, NZ Communications, TelstraClear, and Telecom New Zealand. See <http://www.comcom.govt.nz/resale-services-investigation/>

1 of the Act (listed in paragraph iii above). The Commission's recommendation to the Minister in relation to that investigation was:¹⁰

...in the case of all ten services under investigation, an extension of the period of regulation for a further two years will best promote competition in telecommunications markets for the benefit of end-users of telecommunications services. Accordingly, the Commission recommends that all ten services be extended for two years from 19 December 2006.

9. This recommendation was accepted by the Minister for Communications and Information Technology on 12 December 2006¹¹.
10. Since 2006, the telecommunications landscape across New Zealand has fundamentally changed. Competition in fixed-line telecommunications markets has increased, following the introduction of alternative services such as local loop (and sub-loop) unbundling, and unbundled bitstream. The deployment of fibre infrastructure has also increased in recent years. Operators such as Vector and CityLink have extensive fibre networks in certain areas of the country. Telecom has been subject to Operational Separation since 2008¹².
11. On 1 October 2009, the Commission announced the commencement of an Investigation into:
 - whether or not Resale Services should be omitted from Schedule 1 of the Act;
 - whether the description of the Resale Services set out in Part 2 of Schedule 1 of the Act should be amended, if the Resale Services are not recommended for omission from Schedule 1.
12. The Commission has consulted with industry throughout the process and has made several requests for information throughout its Investigation.
13. Pursuant to the Act¹³, any party who wished to offer an undertaking in relation to the services being considered in this Resale Investigation had to do so no later than 27 November 2009. The Commission has not received an undertaking offer from Telecom, the access provider of Resale Services.

Legislative Framework

14. The Resale Services are described in the Act as:
 - **Retail services offered by means of Telecom's fixed telecommunications network:** a "non price-capped retail service offered by Telecom to end-users by means of its fixed telecommunications network in the following markets: (a) all markets in which Telecom faces limited, or is likely to face lessened, competition for that service; (b) all, some, or no markets in which Telecom

¹⁰ Commerce Commission, *Schedule 3 Investigation into the extension of regulation of designated and specified services*, 28 August 2006, page 7.

¹¹ Media release, *Regulated services extension promotes competition*, 12 December 2006.

¹² http://www.med.govt.nz/templates/ContentTopicSummary_26310.aspx

¹³ Clauses 13 and 14 of Schedule 3A.

does not face limited, or is not likely to face lessened, competition for that service as determined by the Commission (Single Service Resale);

- **Residential local access and calling service offered by means of Telecom’s fixed telecommunications network:** A price-capped residential local access and calling service offered by Telecom to end-users by means of its fixed telecommunication network, in the following markets: (a) all markets in which Telecom faces limited, or is likely to face lessened, competition for the service; (b) all, some, or no markets in which Telecom does not face limited, or is not likely to face lessened, competition for price-capped residential local access and calling service as determined by the Commission (Residential Resale);
- **Bundle of retail service offered by means of Telecom’s fixed telecommunications network:** a bundle of retail services offered by Telecom to end-users by means of its fixed telecommunications network in the following markets: (a) all markets in which Telecom faces limited, or is likely to face lessened, competition for that bundle of retail services; (b) all, some, or no markets in which Telecom does not face limited, or is not likely to face lessened, competition for that bundle of retail services as determined by the Commission (Bundled Resale); and,
- **Retail services offered by means of Telecom’s fixed telecommunications network as part of a bundle of retail services:** A retail service that – (a) is, or has previously been, offered separately by Telecom to end-users by means of its fixed telecommunications network; and (b) is offered by Telecom to end-users as part of a bundle of retail services – (i) in markets in which Telecom faces limited, or is likely to face lessened, competition for that service; and (ii) if the effect of the bundled price is likely to significantly reduce the ability of an efficient rival to contest the market (Parts of Bundles).

15. The term “fixed telecommunications network” is referred to in all of the above regulated Resale Services and is defined in subpart 1 of Part 1 of Schedule 1 of the Act. Value-added telecommunications services are included in the definition of “fixed telecommunications network” in subparagraph (f). This term is defined as follows:

fixed telecommunications network means—

- (a) any *lines* between a user's premises and the local telephone exchange or equivalent facility;
- (b) any fixed PSTN;
- (c) any telecommunications links between fixed PSTNs;
- (d) any fixed PDN;
- (e) any telecommunications links between fixed PDNs;
- (f) any value-added telecommunications services associated with telecommunications services provided by those assets. {Emphasis added.}

16. Subparagraph (a) refers to “line”(including a fibre optic cable) and is defined in section 5 of the Act as:

line—

- (a) means a wire or a conductor of any other kind (*including a fibre optic cable*) used or intended to be used for the transmission or reception of signs, signals, impulses, writing, images, sounds, instruction, information, or intelligence of any nature by means of any electromagnetic system; and
- (b) includes—

- (i) any pole, insulator, casing, fixture, tunnel, or other equipment or material used or intended to be used for supporting, enclosing, surrounding, or protecting any of those wires or conductors; and
- (ii) any part of a line. (Emphasis added)

17. Consequently, regulation of Resale Services captures all current and future retail fixed-line services offered by Telecom and, to the extent that they are delivered over the networks described in the Act, regardless of whether they are delivered over copper or fibre. It also captures bundles of services and parts of bundles.

Schedule 3 of the Act

18. Part 1 of Schedule 3 of the Act, sets out the procedure for omitting or adding designated access services to Schedule 1 and amending pre-existing designated access services.

19. Under Part 1 of Schedule 3, the Commission may (on its own initiative) undertake an investigation into whether or not Schedule 1 should be altered in any of the ways set out in sections 66 or 67 (the proposed alteration), and recommend to the Minister:

- whether or not the proposed alteration should be made;
- in the case of a proposed alteration to a designated service, whether or not the Minister's decision regarding the proposed alteration should be deferred for any period that the Commission thinks fit.

20. The scope of the proposed alterations that the Commission may make in respect of the Resale Services are set out in section 66 which provides that alterations can include:

- adding a telecommunications service and includes setting out, in relation to that service, items such as, a description of the service, any applicable conditions, a description of the access providers and access seekers, etc;
- omitting a telecommunications service; and
- in respect of a service, amending items such as the description of the service, any applicable conditions, the description of access seekers, the description of access providers, the description of the applicable access principles, etc.

21. The Commission commenced the Resale Services Investigation pursuant to Schedule 3 of the Act on 1 October 2009.

22. The Commission is required to prepare a Draft Report under clause 2 of Part 1 of Schedule 3. This was released on 26 August 2010.

23. The Commission must make reasonable efforts to hold conferences in relation to the proposed alteration or hold a public hearing in relation to the proposed alteration (where the Commission is satisfied that it is in the public interest to do so).¹⁴ The Commission held a conference in relation to the Resale Services Investigation on 27 October 2010.

¹⁴ Schedule 3, clause 3(1) of the Act.

24. The Commission has throughout the Resale Services Investigation, undertaken additional consultation to that required by the Act.
25. The Commission must make reasonable efforts to prepare and deliver a Final Report to the Minister regarding the proposed alteration no later than 120 working days after the date of giving public notice of the investigation.¹⁵ On 11 February 2010, the Commission wrote to the Minister informing him that the Commission would be unable to meet this timeframe.
26. In preparing the Final Report, the Commission has considered all submissions made on the Draft Report and all information and opinions presented or expressed at the Conference on the Draft Report.¹⁶
27. The requirements for the Commission's Final Report for this Schedule 3 Investigation are set out in clause 4(3) of Schedule 3, which provides:¹⁷

4 Final report of recommendation of Commission

...

(3) A final report must include—

- (a) the detail of the proposed alteration; and
 - (b) a recommendation by the Commission as to—
 - (i) whether or not the proposed alteration should be made;
 - (ii) in the case of a proposed alteration to a designated service, whether or not the Minister's decision regarding the proposed alteration should be deferred for any period the Commission thinks fit; and
 - (c) the reasons for the Commission's recommendations; and
 - (d) the views of two members of the Commission (other than the Telecommunications Commissioner) regarding the recommendation.
28. The Commission did not receive any application for an undertaking for an access provider to supply the Resale Services to all access seekers. Accordingly, the Commission is not required to consider the provisions of Schedule 3A in relation to undertakings.

Statutory purpose and considerations

29. In making its recommendation on the Schedule 3 Investigation, the Commission (and the Minister as the case may be) is required under section 19(c) of the Act to make a recommendation that best gives, or is likely to best give, effect to the purpose set out in section 18.
30. Section 18 of the Act provides as follows:

18 Purpose

¹⁵ Schedule 3, clause 4(1).

¹⁶ Schedule 3, clause 4(2).

¹⁷ Schedule 3, clause 4(3).

- (1) The purpose of this Part 2 and Schedules 1 to 3 is to promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand by regulating, and providing for the regulation of, the supply of certain telecommunications services between service providers.
- (2) In determining whether or not, or the extent to which, any act or omission will result, or will be likely to result, in competition in telecommunications markets for the long-term interests of end-users of telecommunications services in New Zealand, the efficiencies that will result, or will be likely to result, from that act or omission must be considered.
- (3) Except as otherwise expressly provided, nothing in this Act limits the application of this section.
- (4) Subsection (3) is for the avoidance of doubt.

31. Section 19 of the Act provides as follows:

19 Commission and Minister must consider purpose set out in section 18 and additional matters

If the Commission or the Minister (as the case may be) is required under this Part 2 or any of Schedules 1, 3 and 3A to make a recommendation, determination, or a decision, the Commission or the Minister must—

- (a) consider the purpose set out in section 18; and
- (b) if applicable, consider the additional matters set out in Schedule 1 regarding the application of section 18; and
- (c) make the recommendation, determination, or decision that the Commission or Minister considers best gives, or is likely to best give, effect to the purpose set out in section 18.

32. Section 19A of the Act provides as follows:

19A Commission to have regard to economic policies of Government

- (1) In the exercise of its powers under Schedule 3, the Commission must have regard to any economic policies of the Government that are transmitted, in writing, to the Commission by the Minister.
- (2) The Minister must, as soon as practicable after transmitting a statement of economic policy of the Government to the Commission under subsection (1),—
 - (a) arrange for a copy of that statement to be published in the *Gazette*; and
 - (b) present a copy of that statement to the house of Representatives.
- (3) To avoid doubt, a statement of economic policy of the Government transmitted to the Commission under this section is not a direction for the purposes of Part 3 of the Crown Entities Act 2004.

33. On 5 February 2009, the Minister transmitted a statement of the economic policy of the Government to the Commission, pursuant to section 19A of the Act. The operative part of this economic policy statement is as follows:¹⁸

‘It is the economic policy of the Government that decisions concerning the regulation of telecommunications services should be consistent with, and take full account of, New Zealand’s relevant international commitments, as expressed in bilateral and multilateral international instruments in effect in New Zealand.

¹⁸ The full version of the Economic Policy Statement is available on the Commission’s website at <http://www.comcom.govt.nz/IndustryRegulation/Telecommunications/Investigations/ContentFiles/Documents/Letter%20from%20Minister%20-%20International%20commitments%20in%20telecommunications%20%205%20Feb%202009.pdf>

In the Government's view, compliance with these commitments facilitates trade in telecommunications goods and services, assists the development of telecommunications infrastructure, and promotes competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand.'

34. The Commission has considered the Government's Statement of Economic Policy as part of its decision making in reaching the conclusions outlined in this Report. The Commission notes that this Statement requires the Commission to consider obligations relating to good regulatory practice, such as basing a decision on objective and transparent criteria. These obligations are equivalent to the Commission's existing legal obligation under statute and common law and this Report has taken account of these matters. The Commission has not been able to identify any other international obligations stemming from the Economic Policy Statement that directly impact on the Resale Investigation.
35. In carrying out its assessment for the purposes of making its recommendations in this Report, the Commission has taken account of the statutory purpose and all of the required considerations pursuant to the Act.

B. FRAMEWORK FOR THIS INVESTIGATION

Introduction

36. This section outlines the assessment framework for the Commission's Investigation under Schedule 3 of the Act in respect of the Resale Services and the general approach taken by the Commission in assessing:
- whether the Resale Services should be omitted from Part 2 of Schedule 1 of the Act;
 - whether the description of the Resale Services set out in Part 2 of Schedule 1 of the Act should be amended, if Resale Services are not recommended for omission from Schedule 1.

Assessment Framework

37. The Commission has considered whether to recommend to the Minister that each regulated Resale Service should be omitted from Schedule 1 of the Act, or alternatively whether Schedule 1 should be amended in some form if the Resale Service in question is not recommended for omission from Schedule 1.
38. The Commission is essentially required to reach a view as to whether competition has developed to such an extent that it can recommend regulation of a particular resale product should be removed or otherwise changed.
39. In this Report, the Commission has adopted the following assessment framework:
- identified the relevant markets for the Resale Services and assessed the state of competition in those markets;
 - identified the factual and counterfactual scenarios that are appropriate to this Investigation;
 - assessed the differences between the factual and counterfactual scenarios, in terms of the potential impact in each of the relevant markets; and
 - assessed what (if any) amendments need to be made to each Resale Service, if the Resale Service is not recommended for omission from the Act.
40. This assessment framework will enable the Commission to make a recommendation on each Resale Service that best gives, or is likely to best give, effect to the promotion of competition in telecommunications markets for the long-term benefit of end-users.

Geographic carve-outs

41. As a preliminary point, the Commission considered whether, if some parts of the market were competitive and some were not, it would be appropriate to recommend a carve out

of ‘competitive’ geographic areas¹⁹ (referred to as geographic exemptions) from the resale regulation by embedding geographic exemptions into the regulated service descriptions contained in Part 2 of Schedule 1 of the Act.

42. Currently none of the regulated services in Schedule 1 specifically identify geographic areas where the regulated services are not available. Instead, the Act sets out generic competition conditions, which upon application by the Commission during a regulatory process, determine where the regulated services are available. For instance, Single Service Resale sets out in the conditions where this designated access service is available: “That either: (a) Telecom faces limited, or is likely to face lessened, competition in a market for the particular retail service offered by Telecom to end-users; or (b) Telecom does not face limited, or is unlikely to face lessened, competition in a market for that particular retail service and the Commission has decided to require that particular retail service to be wholesaled in that market.” The Commission’s view is that it would be inappropriate to recommend geographic exemptions as part of this Investigation, as a new Schedule 3 investigation would be needed if the nature of competition in any region were to change (e.g. if additional areas became competitive, or currently competitive areas were no longer competitive). Such a process would be impractical and costly to administer.
43. If geographic exemptions were embedded in the service descriptions, market boundaries would be defined by reference to the existence of competitive infrastructure, which is ever changing. A market delineation in regulation would ‘lock in’ the situation as it existed at the time of the regulatory change, and if the situation changed (for instance a competing infrastructure based competitor withdrew from a region which had previously been excluded from regulation) a new Schedule 3 investigation would be required to bring the area, where competition was not effective, back within the scope of regulation.
44. The Commission considers there is already an appropriate mechanism to ensure that geographic market segments that are competitive are not regulated: the competition test which is a condition relating to each of the regulated Resale Services, and which applies where a determination is made under the Act.²⁰
45. Should resale regulation be retained in respect of certain services, and if the Commission was to undertake a determination process under the Act, then the competition test would automatically apply at that time, thereby setting the extent of regulation under the determination. Regular reviews of the nature of competition could then be undertaken by the Commission (as they are, for instance, for UCLL Backhaul) at a lower cost and in a more flexible manner than through Schedule 3 investigations.

¹⁹ Geographic areas where the Commission found that Telecom does not face limited, or is unlikely to face lessened, competition in the relevant telecommunications markets.

²⁰ An example of this is the UCLL Backhaul Service, for which the Commission undertakes periodic competition reviews under Section 30R of the Act. For a useful discussion of geographic segmentation, see the OECD paper. “Geographically segmented regulation for telecommunications” by the Working Party on Communication Infrastructures and Services Policy.

Ladder of investment

46. A factor taken into account in respect of the introduction of the 2006 amendments to the Act was the ladder of investment concept. The cabinet paper noted:²¹

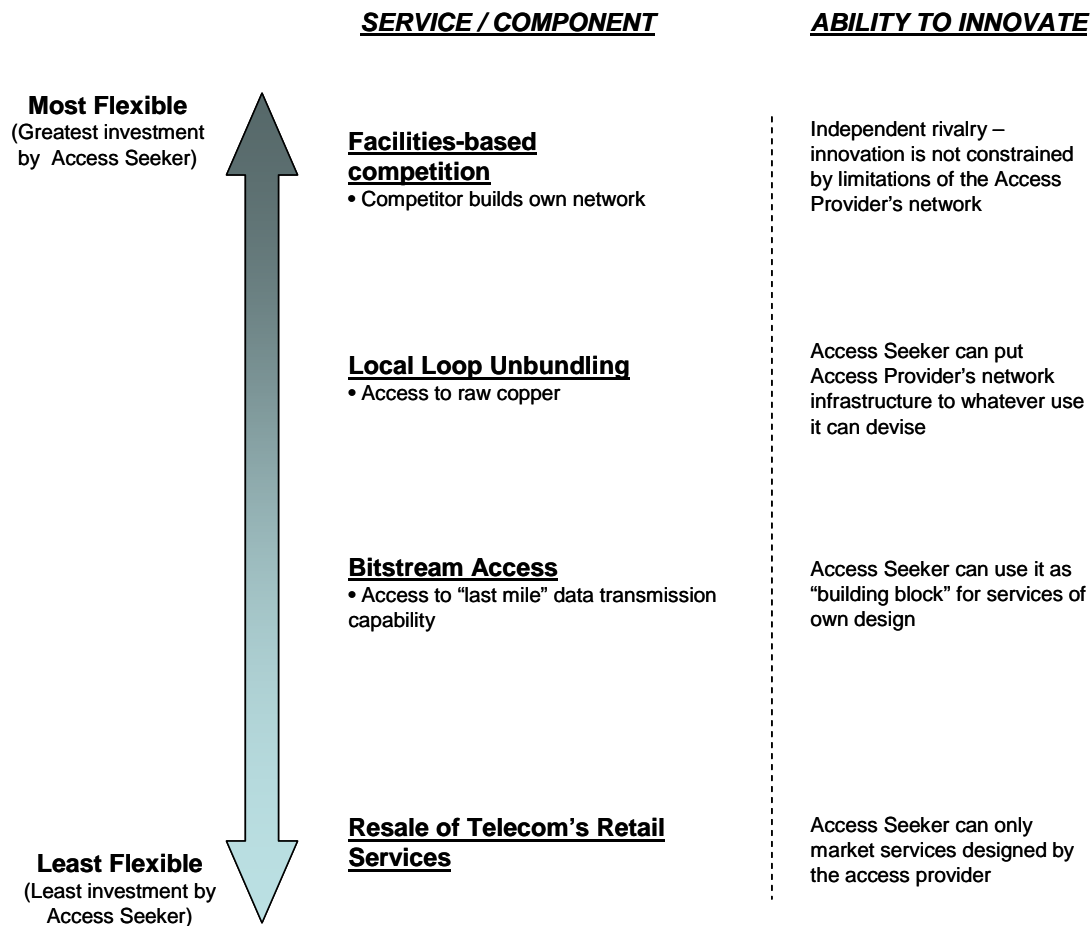
The proposed policies are consistent with approaches adopted in other countries, including those leading in broadband take up, and will bring New Zealand closer to the international norm...

A commonly adopted approach in the EU and other jurisdictions that attempts to find a balance to increase overall investment levels is the so-called "ladder of investment" that drives wholesale competitors toward investment in their own infrastructure. Commencing at lower rungs of the ladder with basic resale and intermediate wholesale of services while building a customer base, this concept envisages movement via LLU to eventual investment in alternative network infrastructure. The long-run aim of such policies is competition on level terms among operators, and it is important to price wholesale access products appropriately so as to maintain incentives for progressive alternative infrastructure investment.

47. Figure 1 below illustrates the ladder of investment in the context of services that are currently available in the New Zealand market to deliver retail broadband services. The lowest level (or rung) on the ladder relates to resale-based competition, while facilities-based competition is at the other end of the scale.
48. Access-based competition is where a competitor purchases a wholesale input (e.g. a resale or bitstream service) from a network operator, and uses that input to supply downstream products and services. Full facilities-based competition, on the other hand, occurs when an entrant constructs a new network without the use of the incumbent's network. The new entrant can install more advanced and more efficient technology, which may cost less.

²¹ Cabinet Policy Committee, *Telecommunications Stocktake*, Minute of Decision, 27 April 2006, paragraphs 98-99.

Figure 1: Ladder of Investment



49. The principle behind the ladder of investment is that a competing service provider will start at the bottom of the ladder, purchasing resale services. Resale is the most basic form of market entry, requiring the least investment by the access seeker. However, resale is also the least flexible option (i.e. provides the least scope for innovation), as the access seeker directly on-sells the retail services offered by Telecom.
50. As the entrant builds market share, it will generate the scale necessary to work its way up the ladder by investing in its own infrastructure. In the context of broadband services, bitstream and local loop unbundling allow greater flexibility for access seekers, but also require additional investment. For example, an access seeker using the UCLL service rents the copper line from Telecom and co-location space in the local exchange, but owns the other infrastructure required to deliver retail services (e.g. DSLAMs).
51. Facilities-based competition sits at the top of the ladder. The Commission has previously stated a preference for efficient facilities-based competition. For example, in its draft guidelines paper on regulatory decision making in the Telecommunications sector, the Commission stated that it:²²

...considers that economically viable facilities-based competition is usually a more effective form of competition for the long-term benefit of end-users. This could create competitive pressure on

²² Commerce Commission, *A guide to Regulatory Decision Making by the Commerce Commission for the Telecommunications Sector – Discussion Paper*, 31 July 2009, p.25, paragraph 122.

the incumbent to upgrade its network and drive competition with minimal regulatory presence. It may introduce strong incentives for productive efficiency across the value chain, leading to greater pricing innovation and sustainable competition. As this form of competition takes a stronger foothold, access regulation may be lifted and focused on remaining bottlenecks.

Submissions

52. In its submission on the Draft Report, TelstraClear argued that deregulation is only appropriate where markets are effectively competitive. TelstraClear submitted that resale regulation was still required in New Zealand and remains an important safeguard.²³
53. TelstraClear also submitted that the bottom rung on the ladder of investment must remain in place in New Zealand for the foreseeable future, primarily because UCLL, one of the next ‘rungs’ on the ladder, was only made available in 2007-2008 and TelstraClear is still migrating its customers to UCLL services.²⁴
54. Vector submitted that the decision to remove certain resale services from Schedule 1 of the Act seemed inconsistent with the ladder of investment framework, as it potentially weakened the first rung of investment. Vector submitted that maintaining the first rung of the ladder of investment is important to facilitate the new entry of service providers without sufficient scale to unbundle.²⁵
55. In response, Telecom argued that retaining unnecessary regulation does not align with the ladder of investment policy. Telecom submitted that:²⁶

The LOI is not about retaining regulation at every level in the market in perpetuity. Professor Cave notes that regulatory intervention may include limiting price incentives to promote service-based competition, clearly signalling a commitment to remove regulation where workable competition has developed, and removing earlier rungs in the ladder as appropriate.

56. Furthermore, Telecom noted that:²⁷

The literature suggests that, where regulators do not intervene to adjust the incentives for market entry once competition at a service based level has been established; operators and regulators can easily fall into the trap on the one hand of expecting, and on the other unintentionally perpetuating, incentives providing “easy access”.

Commission view

57. Professor Cave describes the ladder of investment hypothesis as follows:²⁸

The ‘ladder of investment’ or ‘stepping stones’ hypothesis concerns the development and regulation of infrastructure competition. According to its descriptive or ‘positive’ part, competitive providers challenge an incumbent by offering services that, as their market share rises, rely less and less on the incumbent’s assets and more and more on their own, as they ‘buy’ less and ‘make’ more. By these means, competitive providers progressively build out their networks closer and closer to their customers. This descriptive hypothesis is matched by a normative proposition that regulators should use the instruments available to them to encourage this process. The underlying goal is to increase up

²³ TelstraClear, *Submission on resale draft report*, 23 September 2010, p 4.

²⁴ TelstraClear, *Submission on resale draft report*, 23 September 2010, p 6, paragraph 19.

²⁵ Vector, *Submission on the resale draft report*, 23 September 2010, p 5-6, paragraph 17.

²⁶ Telecom, *Cross-submissions in respect of the resale draft report*, 13 October 2010, p 3, paragraph 11.

²⁷ Telecom, *Cross-submissions in respect of the resale draft report*, 13 October 2010, p 6, paragraph 29.

²⁸ Martin Cave, *Snakes and ladders: Unbundling in a next generation world*, *Telecommunications Policy*, 2009, p 2.

to a feasible limit the level of infrastructure competition, and thus reap the benefits of product differentiation and keener rivalry it brings.

58. The Commission agrees with Telecom that the ladder of investment anticipates the withdrawal of lower rungs of the ladder as competition develops at deeper levels in the value chain. Professor Cave has previously noted that the ladder of investment approach requires active management by the regulator:²⁹

...it is not a policy of continuous 'easy access', but one of 'tough love' in which CPs are chivvied up the ladder by price incentives or the expectation of withdrawal of the more comprehensive access products corresponding to the lower rungs of the ladder.

59. Professor Cave is of the view that the medium and long-run desirable outcome is competition among operators in as much of the value chain as possible, noting that competition is the best regulator:³⁰

It promotes consumer welfare by offering choice, variety, keen prices and innovation...

...service or supply competition in which competitors do little more than resell the incumbent's products services fails to provide two of the above-noted benefits of competition, service variety and innovation.

60. In the New Zealand context, Telecom's rivals have already climbed beyond the resale rung of the ladder in respect of certain markets.
61. In the broadband market, resale accounts for a very small percentage of broadband connections supplied by Telecom's competitors at the retail level. Wholesale Broadband Solutions (WBS), Telecom Wholesale's resale broadband service, is currently in the process of being grandfathered. Telecom's competitors typically rely on alternative wholesale access products (which represent higher rungs on the ladder), such as bitstream and UCLL, to deliver broadband services.
62. Similarly, in respect of business-grade data services, access seekers are in the process of migrating from resale services to alternative layer 2 services which are required to be supplied on an EOI basis by 31 December 2011. In accordance with the Operational Separation Undertakings, resold data services are required to be grandfathered.
63. In these circumstances, the Commission considers that the deregulation of resale services is consistent with the ladder of investment theory. The availability of alternative wholesale access services which are further up the value chain enables greater service variety and innovation, and therefore is likely to lead to benefits to end-users.
64. In respect of local access services however, the next rung on the ladder is local loop unbundling. There is currently no intermediate wholesale access service which facilitates the provision of PSTN-based local access services.
65. As noted in the Draft Report, UCLL deployment is limited to areas where access seekers are able to achieve the scale required in order to make a reasonable return on investment. Given that UCLL deployment is not viable on a nationwide basis, Telecom's rivals are reliant on resale to deliver local access services in areas where they do not have their own

²⁹ Martin Cave, Snakes and ladders: Unbundling in a next generation world, *Telecommunications Policy*, 2009, p 3.

³⁰ Martin Cave, *Making the ladder of investment operational*, November 2004, p 1-2.

infrastructure. For this reason, the Commission is of the view that regulation should be retained for the provision of resold local access and calling services.

66. In its submission on the Draft Report, Vector argued that maintaining the first rung under the ladder of investment framework is important to facilitate the new entry of service providers without sufficient scale to unbundle. Vector also submitted that if resale services were priced and specified attractively then the Commission would expect a greater proportion of service providers to show a preference for resale.³¹
67. In relation to the entry of new service providers, the Commission notes that under its recommendation, resale will still be available in respect of local access services. For resold broadband and data services, for which resale services would no longer be subject to regulation, there is the potential for secondary markets to develop to meet the needs of new entrants.
68. Given that competition has developed beyond the resale rung of the ladder for broadband and data, existing providers are able to offer wholesale services to downstream suppliers. For example, TelstraClear Wholesale is offering a virtual ISP (vISP) service by reselling bitstream services purchased from Telecom Wholesale. vISP is described on the TelstraClear Wholesale website as follows:³²

TelstraClear Wholesale vISP is suitable for a wide range of service providers seeking to offer ISP functionality to their customer base, without the expense and complication of building their own infrastructure...

TelstraClear Wholesale vISP provides you with broadband access services in areas where DSL is available using UBS.

69. Similarly, Vodafone is offering wholesale bitstream services in areas where it has unbundled. The Vodafone bitstream service includes DSL access with POTS and local backhaul.
70. Furthermore, the removal of resale regulation of resold broadband and data services from Schedule 1 of the Act does not necessarily mean that Telecom Wholesale will no longer offer resale services. As Telecom noted at the Resale Conference:³³

We have every incentive to maintain a viable resale business and the reason for that is pretty simple, resale provides better revenues than the counter-factual for us which is in most cases is selling wholesale customers with a regulated largely cost-based input product.

71. On the second point raised by Vector, the Commission notes that such pricing would run contrary to the ladder of investment approach. Ideally, entrants should be encouraged to climb the ladder due to the attractiveness of the rungs above, rather than remaining on the lowest rung of the ladder.³⁴
72. The Commission considers that the recommendations set out in this Report are consistent with the ladder of investment concept.

³¹ Vector, *Submission on the resale draft report*, 23 September 2010, p 6, paragraph 17-19.

³² TelstraClear, *Fact sheet: TelstraClear Wholesale VISP (Virtual ISP)*. See http://www.telstraclearwholesale.co.nz/assets/products/visp/tclw_VISP%20factsheet.pdf

³³ Resale conference transcript, 27 October 2010, p 5, lines 9-14.

³⁴ Martin Cave, *Making the ladder of investment operational*, November 2004, p 23.

Cost-Benefit Analysis

73. The Act requires that the Commission make the decision or recommendation that best gives, or is likely to best give, effect to the purpose set out in section 18 of the Act.
74. In assessing whether or not an option being considered by the Commission for recommendation, such as deregulation of a particular Resale Service, will promote competition in telecommunications markets for the long-term benefit of end-users, the Commission is expressly required to consider the efficiencies that will result, or will be likely to result, from the proposed change. The term 'efficiencies' is not defined in the Act, though the Commission generally assesses a full range of efficiency effects including productive and allocative efficiencies (sometimes referred to together as static efficiencies) and dynamic efficiencies.
75. The Commission may also consider other relevant factors that are linked to section 18. The Act does not direct the Commission as to the appropriate weight to be given to efficiencies or to other considerations. The appropriate weight to afford each consideration is, accordingly, a matter for the Commission.
76. The Commission considers that, in order to aid its assessment of the promotion of competition for the long-term benefit of end-users, it should where appropriate quantify the costs and benefits of deregulation of the Resale Services (or if not deregulated, the scope of any proposed alterations) through a quantitative modelling exercise. This exercise assists in assessing whether the regulatory change being considered will be likely to deliver long term benefits to end-users such as lower prices or quality improvements for the relevant retail services leading to an increase in consumer surplus.
77. In submissions on the Draft Report, Vodafone and Telecom argued that quantitative cost-benefit analysis should be conducted in reaching a decision regarding whether the Resale Services should be omitted from the Act. Vodafone submitted that:³⁵

We believe that there are significant merits in undertaking quantitative analysis of costs and benefits... While we realise that gathering the numbers might require some additional work, in our experience, quantifying analysis tests judgements much more effectively than relying on qualitative analysis. Qualitative analysis provides wide discretion and involves less testing of what factors might really benefit end users. For example, qualitative analysis suggests that the impact for end users would be close to nil of omitting the regulation of bundles from the Act. A quantitative approach shows there could be impacts on access seekers ability to compete from this omission.

78. In response, Telecom submitted:³⁶

We agree with Vodafone that there is value in a comprehensive cost benefit or economic impact assessments to understand the true cost of regulation and the benefits of rolling back regulation where it is no longer necessary. We think that a cost benefit analysis will clearly show that the cost of retaining regulation as a backstop outweighs any benefit – particularly where the evidence shows competition in the market.

79. The Commission has not undertaken a formal quantitative cost-benefit analysis for the purposes of this Investigation. In order to estimate efficiency and consumer welfare gains as part of a cost-benefit analysis, current retail prices and volumes, and an estimate of

³⁵ Vodafone, *Submission on draft resale report*, 23 September 2010, p 5.

³⁶ Telecom, *Cross-submission on draft resale report*, 13 October 2010, p 8-9, paragraph 36.

retail prices and volumes following the regulatory change, are required. The Investigation is considering whether resale regulation should be removed (or if not removed, the scope of any alterations) so predicting what is likely to happen to retail prices with any certainty is likely to be extremely difficult. This uncertainty means that the value in attempting to quantitatively estimate the long-term benefits (or detriments) of a regulatory change is likely to be limited in this case.

80. The current regulated Resale Services are ‘umbrella’ services which cover all retail services offered by Telecom by means of its fixed telecommunications network. A large range of retail services is captured by the current regulation; Telecom has previously stated that there are over 6,000 price points included in RSPL and DSPL.³⁷ Due to the nature of the current resale regulation it would be difficult to accurately model the likely impact that omitting (or amending) the services from Schedule 1 of the Act would have in the downstream retail markets.
81. Rather than attempting a formal quantitative cost-benefit analysis, the Commission has undertaken a largely qualitative analysis of the competitive impact of withdrawing or altering regulated resale services. This includes consideration of whether there are competitive alternatives, for example in the form of economically viable access to upstream services (such as the UBA and UCLL services). In undertaking this analysis, the Commission has, where possible, considered quantitative data where that data is relevant to this inquiry.³⁸

Application of the Commission’s factual/counterfactual analysis

82. Defining and establishing a counterfactual is a critical step in the Commission’s analysis for the purpose of this Investigation. The counterfactual is a benchmark against which any changes are to be measured. The counterfactual analysis will assess the competitive impact of changing any aspect of the regulation of Resale Services.
83. The counterfactual scenario represents the Commission’s view of what is likely to happen in the absence of any regulatory change as a result of this Investigation. The Commission has based its view of a suitable counterfactual on an assessment of what is likely to happen if regulation of the Resale Services continues on the current basis.
84. The factual scenario represents the Commission’s view of what is likely to happen if the proposed regulatory change(s) are implemented. The Commission considers that there are a number of possible regulatory changes that could be proposed. As this Investigation is primarily centred on the question of whether the Resale Services should be omitted from Schedule 1 of the Act the Commission considers that the factual scenario that is most appropriate is the removal of resale regulation.

Operational Separation

85. The Commission considers that the obligations relating to Resale Services under Telecom’s Operational Separation Undertakings (the Undertakings) are a relevant factor to take into account as part of this Investigation because they apply to the Resale

³⁷ Telecom, *Submission on Commission’s review of resale services*, p 14, paragraph 53.

³⁸ This is consistent with the Commission’s approach in the recent MTAS investigation. See for example, paragraph 76 of the Commission’s final MTAS report dated 22 February 2010.

Services.³⁹ The Undertakings were not in force at the time the Resale Services were first regulated under Schedule 1 of the Act, so it is important to consider their impact on relevant markets.

86. However, the Commission notes that Telecom has the ability to request variations to the Undertakings in accordance with the process set out in the Act, and has, to date, had four variations approved. Under these circumstances, the Commission is of the view that only limited weight can be put on the Undertakings for the purposes of this Investigation. The Commission does however consider the effect of the operational separation of Telecom's retail business unit from its wholesale business unit and that this will not be put at risk by any future decisions, in particular those made regarding the Government's UFB initiative.

³⁹ Other statutory context in the Act supports the relevancy of the Undertakings in relation to this investigation. The purpose statement of Part 2A (the Operational Separation of Telecom) – namely section 69A(a) – overlaps with the purpose set out in section 18(1). This statutory context demonstrates that the Schedule 1 services and Telecom's operational separation regime are both designed to promote competition for the long-term benefit of end-users of telecommunications services.

C. ARE THERE GROUNDS TO DEREGULATE?

Introduction

87. This section sets out the Commission's views on whether there are grounds to recommend to the Minister to amend the Resale Services that are currently contained in Schedule 1 of the Act. In this section, the Commission briefly summarises the markets that are relevant to this Investigation, and its view on competition within each of these markets. The Commission's analysis is set out in Appendix 2 and 3. The Commission then considers the potential impact of amending resale regulation, by comparing two scenarios: a counterfactual scenario which describes what is likely to happen in the absence of the proposed regulatory change, and a factual scenario which includes the proposed regulatory changes.
88. Having defined the counterfactual and factual scenarios, the Commission's assessment involves two stages:
- first, the Commission considers the circumstances under which removal of resale regulation is likely to be appropriate; and
 - second, the Commission assesses the potential impact of removing resale regulation in respect of the relevant markets, by considering the likely outcomes under the factual and counterfactual scenarios.

Market Definition

89. The purpose of market definition is to provide a framework within which competition can be assessed. In order to analyse the level of competition that Telecom faces, it is necessary to consider the markets in which the Resale Services are supplied. The Commission has concluded that fixed-line telecommunications services are able to be categorised into three main product types: voice, broadband and data.
90. Having considered the various market dimensions⁴⁰ for voice, broadband and data services, the Commission's view is that the following markets are relevant to this Investigation:
- the wholesale market for metropolitan (Auckland, Wellington and Christchurch) local access services;
 - the wholesale market for non-metropolitan (rest of New Zealand) local access services;
 - the national market for the provision of wholesale broadband access;
 - the wholesale market for metropolitan (Auckland, Wellington and Christchurch) data services; and
 - the wholesale market for non-metropolitan (rest of New Zealand) data services.

⁴⁰ The product, geographic, functional, temporal and customer dimensions.

91. In the following paragraphs (93 to 112) the Commission has summarised its assessment of the level of competition in each of these markets as a first step in determining whether the service descriptions contained in Schedule 1 of the Act should be omitted or altered. For example, if there is a finding of effective competition in the local access market (in both the metropolitan and non-metropolitan aspects of the market), then it will be necessary to consider whether the Residential Resale service description in the Act should be omitted or altered in any way.
92. For a detailed analysis of the reasons for the Commission's conclusions on the appropriate markets for this Investigation, see Appendix 2.

Competition Assessment

93. In determining whether or not to recommend that the Resale Services be omitted from Schedule 1 of the Act, or alternatively whether the service descriptions of the Resale Services should be amended, the Commission has assessed the level of competition within the markets that are relevant to this Investigation.
94. A brief summary of the Commission's assessment of the level of competition in respect of each of the relevant markets is set out below. The detailed analysis regarding this competition assessment is set out in Appendix 3.

Wholesale market for non-metropolitan local access services

95. There is facilities-based competition in densely populated areas (as discussed in paragraph 98), but in most non-metropolitan areas Telecom remains the only telecommunications provider of fixed line services in New Zealand. Telecom's market share for local access services (including retail and wholesale lines) in non-metropolitan areas is approximately 98%.
96. Due to the lack of infrastructure-based competition, competing network operators would need to seek wholesale access to Telecom's ubiquitous network in order to provide retail services in non-metropolitan areas. The two wholesale options currently available to access seekers for delivering local access services are UCLL and resale. However, as a form of facilities-based competition, UCLL deployment is subject to similar constraints as full facilities-based networks, and as a result UCLL is concentrated in densely populated metropolitan areas.
97. Local loop unbundling was introduced in 2008 and approximately 5% of relevant lines have now been unbundled, almost all in metropolitan areas. Uptake of resold local access services in non-metropolitan areas remains significant, and has been increasing in recent years. As at 30 June 2009, there were [] TRI resold local access lines in non-metropolitan areas. Resale has been the main source of competition for Telecom in non-metropolitan areas, with resale representing [] RI of all non-Telecom retail lines in these areas in 2009. Accordingly, the Commission's view is that Telecom is subject to limited competition in the wholesale market for non-metropolitan local access services.

Wholesale market for metropolitan local access services

98. The wholesale market for metropolitan local access services is characterised by those areas where Telecom has reduced its monthly line rental in response to the competitive constraint provided by competing networks. These are the areas where competing infrastructure has been deployed, whether by UCLL operators (primarily in Auckland), or TelstraClear's network in Wellington and Christchurch.
99. As noted in paragraph 297, the Commission has not attempted to identify precise geographic market boundaries in this Investigation, as it has done previously in the context of access determinations⁴¹ (where such boundaries were explicitly defined, including a distinction between networked and non-networked areas).
100. Competitive conditions are likely to vary within the broad metropolitan market that has been defined for this Investigation. Telecom faces competition from alternative networks and the presence of unbundling in certain areas of this market, and has responded to this competition by reducing its monthly line rental in Auckland, Wellington and Christchurch. However, the intensity of competition is likely to be reduced in those areas within the metropolitan market where there is little or no competing infrastructure (for example, exchange service areas in Auckland that have not been unbundled, or are served from cabinets, and those areas in Wellington and Christchurch not covered by TelstraClear's network).
101. For the purposes of this Investigation, the Commission's view is that Telecom faces effective competition in the wholesale market for metropolitan local access services⁴².

National market for wholesale broadband access

102. There are number of competing suppliers of retail broadband services in New Zealand, using a range of technologies. Telecom's ubiquitous copper network is used to deliver DSL services and there are also competing cable and fibre networks in certain regions.
103. Despite competition from these networks, Telecom's share of broadband connections remains high, at approximately []RI as at June 2009. This indicates that the majority of retail broadband services are provided using Telecom's network.
104. There is however little demand for resold broadband services. Access seekers are choosing to use bitstream services in preference to resale services, and appear to be increasingly using bitstream and UCLL access to enter and expand in the downstream retail broadband services market. These alternative services (particularly bitstream) rely on Telecom's network, therefore limiting the degree of independent rivalry.
105. There are few competing suppliers of wholesale broadband services, and competition is restricted to certain areas of the country. For example, Vodafone is offering wholesale bitstream services in those areas that it has unbundled.
106. The Commission's view is that Telecom faces limited competition in the national market for wholesale broadband access.

⁴¹ For example, in Decisions 497 and 525.

⁴² In the context of a determination process, it is likely that more precise geographic market boundaries would be required to identify those areas where the regulated service is available.

Wholesale market for non-metropolitan data services

107. There are substantial areas of the country, especially non-metropolitan areas, where only Telecom has a local access network able to deliver data services to business customers. Accordingly, in many non-metropolitan areas, competing service providers are likely to require wholesale access to Telecom's network in order to supply retail business-grade data services.
108. The Commission considers that Telecom faces limited competition in the wholesale market for metropolitan data services.
109. The take-up of most resale data services is relatively low, and in many cases has been diminishing in recent years. There are a number of alternative services, such as HSNS and UPC which are provided on a commercial basis and are not regulated services under Schedule 1 of the Act.

Wholesale market for metropolitan data services

110. In Decision 497, the Commission defined metropolitan areas to be all areas within a 200 metre radius of competing local access infrastructure. In that determination, the Commission considered that there was evidence that Telecom was facing significant existing competition from alternative network operators, and that this was leading to an erosion of Telecom's retail market share in metropolitan areas.⁴³
111. The Commission considers that the conclusion reached in Decision 497 remains appropriate for the purposes of this Investigation, and that the same market dynamics are present in the wholesale market. The Commission's view is that Telecom faces effective competition in the wholesale market for metropolitan data services.

Summary

112. Table 2 below summarises the Commission's views regarding whether Telecom faces limited (or is likely to face lessened) competition in each of the relevant markets. The Commission uses the term 'effective' in the table below to describe a situation where Telecom does not face limited, and is not likely to face lessened, competition in the relevant market.

⁴³ Decision 497, p 110, paragraph 547.

Table 2: Summary of competition assessment

Relevant market	Competition
Wholesale market for non-metropolitan local access services	Limited
Wholesale market for metropolitan local access services	Effective
National market for the provision of wholesale broadband access	Limited
Wholesale market for non-metropolitan data services	Limited
Wholesale market for metropolitan data services	Effective

The counterfactual scenario

113. The counterfactual scenario represents the Commission's view of what is likely to happen in the absence of any regulatory change(s) as a result of this Investigation. The Commission has based its view of a suitable counterfactual on an assessment of what is likely to happen if regulation of the Resale Services continues on the current basis.
114. As discussed in paragraph 5, Telecom is currently offering Resale Services on a commercial basis and resale regulation is acting as a backstop. Should Telecom Wholesale withdraw provision of resale services, or offer resale on unreasonable terms and conditions, the Commission would have the ability to launch a standard terms determination process to set the price and non-price terms of access to the Resale Services.
115. The Commission considers that a regulatory backstop is likely to constrain Telecom's behaviour when entering into commercial negotiations for the provision of resale access. Given that the Commission has the power to set the terms for regulated resale access under this scenario, it seems likely that Telecom will continue to offer resale commercially, as it has done since the expiration of the Commission's previous resale determinations.

The factual scenario

116. The factual scenario represents the Commission's view of what is likely to happen if the proposed regulatory change(s) are implemented. The Commission considers that there are a number of possible regulatory changes that could be proposed. As this Investigation is primarily centred on the question of whether the Resale Services should be omitted from Schedule 1 of the Act, the Commission considers that the factual scenario that is most relevant is the removal of resale regulation.
117. In considering whether there are grounds to deregulate, the Commission has considered the likely impact that the removal of resale regulation would have in each of the relevant markets that have been defined.

118. Where the Commission has reached the view that a given Resale Service should not be omitted from Schedule 1 of the Act, the Commission has then considered whether amendments should be made to that service to reflect the Commission's findings in this Investigation. Given the broad scope of the regulated Resale Services currently listed in Schedule 1 of the Act, the Commission has considered whether it may be appropriate to reduce the scope of these services. For example, a finding that Telecom faces limited competition in respect of the market for local access services (but faces effective competition in respect of the other relevant markets) suggests that narrowing the scope of resale regulation to local access services may best give effect to section 18.

Assessment to determine whether there are grounds to deregulate

119. In making a recommendation to the Minister as a result of a Schedule 3 investigation, the Commission must ensure that its recommendation best gives, or is likely to best give, effect to the purpose statement set out in section 18 of the Act⁴⁴. Accordingly, in considering whether there are grounds to deregulate the Resale Services, the Commission has considered the likely impact in downstream retail markets.
120. The Commission has considered a number of factors relevant to section 18 to determine the circumstances under which removal of resale regulation is likely to be appropriate, including:
- Telecom's commercial incentives to offer resale on reasonable terms and conditions in the absence of regulation;
 - the costs of ongoing resale regulation;
 - the impact of Telecom's Operational Separation Undertakings; and
 - the efficiency implications of resale regulation.

Telecom's incentives

121. Prior to the Commission's resale determinations, Telecom and TelstraClear were engaged in negotiations regarding the supply of resale services. Failure to reach a commercial agreement during the course of these negotiations led to TelstraClear submitting applications for determinations, which led to Decisions 497, 525 and 563.
122. Telecom continues to offer resale access on a commercial basis even though the determinations have now expired. The continuation of regulation of resale services would allow the Commission to launch a standard terms determination process to set the price and non-price terms of access, should Telecom Wholesale withdraw provision of these services, or offer them on unreasonable terms and conditions.
123. The Commission considers that a regulatory backstop (with the Resale Services remaining in Part 2 of Schedule 1) is likely to constrain Telecom's behaviour when entering into commercial negotiations for the provision of resale access. This can be particularly important in markets where Telecom faces limited, or is likely to face lessened, competition. Should this regulatory backstop remain, it seems likely that

⁴⁴ Telecommunications Act 2001, s19(c).

Telecom would continue to offer resale commercially, as it has done since the expiration of the Commission's previous resale determinations.

124. The question for this Investigation is whether Telecom faces sufficient competition to offer resale on reasonable terms and conditions in the absence of this regulatory backstop, so that the regulatory backstop can safely be removed.
125. On a number of occasions Telecom Wholesale has argued that it has strong commercial incentives to offer resale services. In a letter of 14 May 2010 in which it outlined its position on resale regulation, Telecom Wholesale stated that:⁴⁵

Wholesale is an arm's length business with its own profit and loss statement. Resale services make up a large proportion of Wholesale's revenues, are a key driver of overall performance and therefore have a significant impact on the financial performance and customer satisfaction incentive based remuneration received by all Wholesale staff. We have strong incentives to continue to offer the resale services our customers want.

126. In addition, Telecom has previously stated that:⁴⁶

Telecom Wholesale remains committed to ensuring its customers have the services they need to succeed. For the moment, in the absence of alternatives, that means resale remains an important offering commercially.

127. Given that resale comprises a large proportion of Telecom Wholesale's revenues, the Commission considers that Telecom Wholesale is likely to be incentivised to continue to offer resale access in the absence of regulation in order to preserve this revenue stream. However, the price at which resale would be offered in this situation may vary, depending on the level of competition Telecom Wholesale faces.
128. The Commission has assessed the level of competition that Telecom faces in the markets relevant to the Resale Services in the Competition Assessment section of this Report. In reaching its views, the Commission considered a number of factors relating to existing and potential competition⁴⁷ (the full list is at paragraph 356).
129. In an effectively competitive market, Telecom will be constrained in its ability to raise the price of resale access. In these circumstances, if Telecom Wholesale increased the price of resale services (for example, by reducing the discount off retail prices), competing providers would face increased incentives to enter the market for resale (or similar) services⁴⁸, and access seekers would have the ability to purchase substitute services from alternative suppliers.
130. However, in the absence of effective competition, Telecom Wholesale, as a profit-maximising entity, is likely to be incentivised to increase prices in order to maximise profits. Prices can be considered to be excessive if they allow the provider of the service

⁴⁵ Telecom Wholesale, *Resale Investigation – Follow-up to meeting with Telecom*, 14 May 2010, p 2.

⁴⁶ Telecom, *Submission on Commission's review of resale services*, 15 May 2009, p 5, paragraph 13.

⁴⁷ For instance, the number and relative size of competitors in the market, including where possible an assessment of trends in shares over time; the extent to which there is product differentiation; the degree to which competitors engage in independent rivalry; the potential for entry and the significance of any barriers to entry and expansion that may exist, and evidence of recent entry and/or expansion.

⁴⁸ For example, UCLL operators are likely to be incentivised to enter the wholesale market in areas that they have unbundled. Vodafone's wholesale agreement with Slingshot is an example of this.

over time to sustain profits higher than it can expect to earn in a competitive environment.

131. In addition to excessive pricing, in a situation where there is not effective competition, Telecom Wholesale may have incentives to engage in entry-detering behaviour. This type of behaviour could include attempts to erect new barriers of entry for potential newcomers to the market, for example by increasing their customers' costs of switching through lock-in clauses in their contracts.
132. Telecom's commercial negotiations with TelstraClear prior to the commencement of Decisions 497 and 525 indicate that at that time Telecom was unwilling to offer resale access on reasonable terms in the absence of regulatory intervention. While the environment has changed since these decisions were made, Telecom Wholesale is an arm's length business with its own profit and loss statement and may still have incentives to excessively price and/or engage in entry-detering behaviour when there is a lack of effective competition.
133. Regulation is designed to replicate competitive outcomes in markets where the access provider does not face effective or workable competition. A finding of limited competition in a relevant market indicates that competitive outcomes would not be observed in the absence of regulatory intervention.
134. In its May 2009 submission, Telecom argued that the Commission should not intervene, or continue to intervene, unless there is clear evidence of continuing market failure. Specifically, Telecom submitted that:⁴⁹

Best regulatory practice dictates that regulation should only be imposed, and retained, for as long as there is clear evidence of market failure, and where the benefits clearly outweigh the costs.

135. The Commission agrees that the first step when considering whether the Resale Services should be omitted from Schedule 1 of the Act is to assess whether there is evidence of market failure in relation to the relevant markets. The Commission's findings in the competition assessment are therefore particularly relevant to the decision of whether resale regulation should be continued. Absent other factors that will constrain Telecom's behaviour, the Commission considers that there is likely to be a case for continued regulation of resale in markets in which Telecom faces limited competition.
136. This view appears to be supported by Telecom Wholesale, which has previously stated it "understands why customers value a regulatory backstop for some key resale services which at present lack take-up of alternative intermediate inputs, and is willing to see this backstop retained"⁵⁰.

Costs of resale regulation

137. Telecom has argued that it faces significant costs due to the regulation of the Resale Services. In a letter to the Commission dated 13 February 2009, Telecom stated that:⁵¹

⁴⁹ Telecom, *Submission on Commission's review of resale services*, 15 May 2009, p 4, paragraph 10.

⁵⁰ Telecom Wholesale, *Resale Investigation – Follow-up to meeting with Telecom*, 14 May 2010, p 2.

⁵¹ Telecom letter to the Commission, *2009 Commission work programme*, 13 February 2009, p 2.

...the costs to Telecom of maintaining regulated resale services are very real. The requirement to continue to support and build resale variants of existing and new/replacement retail services, for example, causes significant systems development costs for Telecom. Telecom's One Office resale services, for example, cost over \$850,000 to develop, and are currently used by less than 100 end customers. Just to undertake the quarterly audits of Telecom's resale Designated Service and Regulated Service Price Lists ("DSPL" and "RSPL" respectively) costs over \$150,000 per annum and these lists require two full time employees to maintain.

138. Furthermore, Telecom has also argued that:⁵²

Regulated resale also imposes unnecessary costs on Wholesale customers. For example, the pricing construct creates regular price variations leading to billing complexity, lack of certainty and risk for Wholesale customers.

139. The Commission acknowledges that Telecom faces significant costs in maintaining RSPL and DSPL. There are over 6000 price points included in these price lists⁵³, many of which are not utilised.

140. While the requirement for Telecom to prepare and maintain RSPL and DSPL was originally set through the Commission's regulatory determinations (Decisions 497 and 563), these determinations have now expired. RSPL and DSPL are now required to be produced and maintained under the Undertakings, and the content can be varied by agreement between Telecom and TelstraClear. Omitting the Resale Services from Schedule 1 of the Act would not remove the obligation on Telecom to maintain RSPL and DSPL, and therefore would not, in itself, enable Telecom to avoid the costs of maintaining these price lists⁵⁴.

141. Accordingly, the Commission's preliminary view in the Draft Report was that the costs associated with the ongoing presence of a regulatory backstop for Resale Services in Schedule 1 of the Act are insignificant.

142. In its submission on the Draft Report, Vector argued that the cost to the industry of resale regulation lying dormant in Schedule 1 is relatively low compared to the asymmetric risk of drawing the wrong conclusion over the future state of the industry and regulation.⁵⁵ In response, Telecom submitted that the:⁵⁶

...reality is that the burden for Telecom, the industry and consumers include the uncertainty for all players and the potential for outcomes that are not in the long term interests of end users. There are also negative externalities, including the opportunity cost of innovation and investment – both at the service level, where “me too” competition trumps genuine innovation (i.e. by weakening

⁵² Telecom, *Submission on Commission's review of resale services*, p 14, paragraph 54.

⁵³ Telecom, *Submission on Commission's review of resale services*, p 14, paragraph 53.

⁵⁴ TelstraClear has previously noted that it is open to discussing modifications to RSPL and DSPL in order to reduce the compliance cost for Telecom. Specifically, TelstraClear stated in its *Submission on potential review of Resale Services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009 that they were “...aware of Telecom's concerns about the costs associated with compiling the RSPL and DSPL reports, in particular the external audit costs. These costs are driven in large part by the complex hierarchical classification of Telecom services into product and product families which Telecom proposed in the TelstraClear Wholesale Determination as Telecom sought a methodology to delineate a boundary around the services it was required to resell. TelstraClear was concerned at the time that the methodology was overly elaborated and we have agreed to subsequent adjustments to reduce Telecom's costs. We are open to engaging with Telecom over how further modifications could be made to reduce the compliance cost for Telecom, while providing the necessary protection for access seekers”.

⁵⁵ Vector, *Submission on resale draft report*, 23 September 2010, p 2, paragraph 7(e).

⁵⁶ Telecom, *Cross-submission on resale draft report*, 13 October 2010, p 8, paragraph 34.

Telecom and other service provider incentives) and by distorting incentives to invest deeper in the value chain.

143. The Commission's view remains that there is little direct cost incurred as a result of the Resale Services remaining inactive in Schedule 1 of the Act. However, the Commission agrees with Telecom that resale access fails to generate some of the key benefits of competition, including service variety and innovation.

Operational separation

144. According to the Undertakings, those Resale Services that are included in DSPL or RSPL are 'relevant wholesale services'. These services are required to be provided on a non-discriminatory basis in accordance with the resale equivalence standard.
145. The Undertakings require Telecom to maintain and update DSPL and RSPL in accordance with the terms of the Commission's Wholesale Determinations⁵⁷ (which have now expired), as if those determinations were still in force. However, this requirement is subject to any amendments agreed between the parties to those determinations (Telecom and TelstraClear)⁵⁸.
146. In its letter of 14 May 2010, Telecom Wholesale outlined its position that residential and business line rental services, as well as a number of key smartphone services⁵⁹, should remain within the scope of resale regulation. However, Telecom Wholesale went on to state that:⁶⁰

For the residual resale services we envisage the following arrangements:

- a. Existing WSA terms continue for the duration of the agreement
- b. Commercial negotiation at the end of the term (without a regulatory backstop)
- c. Assuming the service has been removed from DSPL/RSPL (with the agreement of TelstraClear) it will cease to be a "relevant wholesale service" in the Undertakings.

147. Telecom's intention appears to be to remove a significant number of services from DSPL and RSPL (through negotiations with TelstraClear), which would result in these services no longer being 'relevant wholesale services' in accordance with the Undertakings.
148. Given that Telecom and TelstraClear have the ability to agree to amendments to DSPL and RSPL bilaterally, the Commission considers that the Undertakings provide little certainty for other access seekers regarding the provision of Resale Services by Telecom.

Efficiencies

149. In considering the impact that removing resale regulation would have on competition in the downstream retail markets, the Commission has considered the efficiencies that are likely to result from such a regulatory change. The term 'efficiencies' is not defined in the Act, though the Commission generally assesses a full range of efficiency effects, including productive and allocative efficiencies (sometimes referred to together as static

⁵⁷ Decisions 497, 525 and 563.

⁵⁸ See clause 64.1 of the Undertakings. The requirement to maintain DSPL and RSPL is also subject to Telecom's right to exclude replacement and successor services in accordance with clause 45.2(b)(iii).

⁵⁹ Telecom proposed Call Minder, Permanent Toll Bar, DDI, and Caller Display.

⁶⁰ Telecom Wholesale, *Resale Investigation – Follow-up to meeting with Telecom*, 14 May 2010, p 3.

efficiencies) and dynamic efficiencies. Each of these forms of efficiency is discussed below.

150. Allocative efficiency involves suppliers producing what consumers demand. The willingness and ability of suppliers to devote the correct amounts of resources to meet consumer demands will determine the degree of allocative efficiency achieved. Allocative efficiency is maximised where price is equal to marginal cost.
151. Productive efficiency is where suppliers are able to produce the desired goods and services at minimum cost. Productive efficiency involves using the least-cost combination of inputs and production techniques.
152. Dynamic efficiency refers to suppliers efficiently deploying 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, and is based on the presence of appropriate incentives for investment⁶¹.
153. Economic efficiency is generally enhanced in markets that are competitive. Firms that are subject to competitive pressures from other firms that are supplying the market, or from the threat of new entry, have an incentive to meet the demands of their customers (allocative efficiency), at minimum cost (productive efficiency), as they would otherwise lose market share to more responsive and efficient competitors. Such firms also face an incentive to invest and innovate over time, in order to achieve and maintain a competitive advantage over their rivals (dynamic efficiency).
154. In the absence of effective competition, Telecom is likely to have an incentive to increase prices and maximise profits. The price increases will result in a loss of allocative efficiency (as some consumers will not purchase the product or service even though they value it more than the marginal cost of production). In the absence of competitive incentives to minimise costs and innovate, firms will generally also face less pressure to be productively and dynamically efficient.
155. Resale enables access seekers to rebrand and on-sell services offered by Telecom Retail. As a form of access-based competition where Telecom controls most components of the service, competitors relying solely on resale access are limited in their ability to engage in independent rivalry. Resale provides little flexibility, and therefore, limited scope for innovation.
156. Accordingly, competitors relying on resale alone are unlikely to exert significant competitive pressure on Telecom to upgrade its network as the ability of access seekers to employ cost-minimising forms of supply (productive efficiency) is limited by their reliance on Telecom's network. The limited scope for innovation is also likely to restrict the potential for increases in dynamic efficiency.
157. The Commission considers, however, that resale can be an important stepping stone in facilitating infrastructure-based competition, particularly in the case of local access

⁶¹ Australian Competition and Consumer Commission (ACCC), *Fixed Services Review — A Second Position Paper*, April 2007, page 74, available at [http://www.accc.gov.au/content/item.phtml?itemId=784802&nodeId=8241d42512e3efff76e447301d24d80c&fn=Fixed%20services%20review%E2%80%94a%20second%20position%20paper%20\(Apr%2007\).pdf](http://www.accc.gov.au/content/item.phtml?itemId=784802&nodeId=8241d42512e3efff76e447301d24d80c&fn=Fixed%20services%20review%E2%80%94a%20second%20position%20paper%20(Apr%2007).pdf)

services. As noted in paragraphs 49 to 51, resale facilitates entry into fixed-line telecommunications markets and allows an access seeker to build its own customer base. This enables an access seeker to generate the scale required to justify the investment in the fixed costs of its own infrastructure. This investment provides the access seeker with greater control over the services delivered to end-users leading to the potential for greater innovation, and deeper, independent rivalry in the longer term.

158. Therefore, although resale itself is unlikely to directly lead to outcomes that best promote allocative, productive and dynamic efficiency, the Commission considers that resale can provide an important means of facilitating infrastructure-based competition that will generate these more efficient outcomes.
159. Significantly, the Commission considers that a finding of limited competition in a relevant market indicates that, in the absence of resale regulation, Telecom may have an incentive to supply resale at a price that is substantially above the cost of supply (absent other factors constraining them).

Commission's view

160. The Commission considers that where competition is effective there are likely to be grounds to remove regulation, and that in the absence of effective competition, Telecom is unlikely to face sufficient incentives to offer resale access on reasonable terms and conditions.
161. As a result, the Commission's view is that resale regulation is likely to be required in respect of those markets in which Telecom faces limited competition, unless Telecom is otherwise constrained (for example, through regulation of alternative services) or uptake of the regulated service is low. In these cases the regulatory backstop would no longer be required.

Potential impact of removing resale regulation

162. In this section the Commission compares the potential impact of removing regulation (the factual scenario) with what would likely occur if regulation was retained (the counterfactual scenario), in each of the relevant markets that have been defined in this Investigation.
163. The factual scenario represents the Commission's assessment of what is likely to happen if the proposed regulatory change (i.e. removal of resale regulation) is implemented. The counterfactual scenario, on the other hand, represents what is likely to happen in the absence of the proposed regulatory change.
164. In the Competition Assessment section, the Commission outlined its view that Telecom:
 - faces limited competition in the wholesale market for non-metropolitan local access services;
 - faces effective competition in the wholesale market for metropolitan local access services;

- faces limited competition in the national market for wholesale broadband access;
- faces limited competition in the wholesale market for non-metropolitan data services; and
- faces effective competition in the wholesale market for metropolitan data services.

165. The Commission has considered the potential impact that the removal of resale regulation would have in the markets (i.e. local access services, broadband services and data services) that have been defined in this investigation. In addition, the Commission has considered the potential impact of removing the Bundled Resale Services from the Act. This assessment is set out below.

Local access services

166. In the Competition Assessment section, set out in Appendix 3, the Commission outlined its view that Telecom faces limited competition in the wholesale market for non-metropolitan local access services, and in paragraph 161 above, the Commission stated that resale regulation is likely to be required in respect of those markets in which Telecom faces limited competition.

167. Past submissions from access seekers have generally supported the view that the ability to resell local access services on reasonable terms is important in fostering competition in the provision of fixed-line telecommunications services, and that regulation will continue to be required for the foreseeable future.

168. Vodafone has submitted that the requirement for resale local access services will remain for as long as Telecom's PSTN remains in service. Vodafone argued that resold local access lines may be the only means of providing voice services to customers where the access seeker does not have its own infrastructure.⁶² Specifically, Vodafone submitted that:⁶³

Withdrawal of resale local access would have drastic consequences. It would mean Vodafone would not be able to provide service to [] COI existing customers. UCLL is not a short term alternative for most of these and may never be an alternative for many. Regulation of resale local access must continue for as long as the legacy PSTN remains in service (presumably until 2020).

169. Similarly, Kordia submitted that it is strongly opposed to any removal of regulation for residential and business lines. Kordia submitted that access to these services will continue to be critical to competition until migration off the PSTN in 2020.⁶⁴ CallPlus' submission also supported this view.⁶⁵

⁶² Vodafone, *Submission on the proposed review of the designated access services under the Telecommunications Act 2001*, 15 May 2009, p 2.

⁶³ Vodafone, *Submission on the proposed review of the designated access services under the Telecommunications Act 2001*, 15 May 2009, p 5.

⁶⁴ Kordia, *Submission on review of resale services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 2.

⁶⁵ CallPlus, *Review of resale services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 2.

170. Telecom, on other hand, had originally argued that resale regulation should be removed in its entirety, including for local access services. In its submission dated 15 May 2009, Telecom stated that (emphasis added):⁶⁶

Over time Telecom Wholesale intends to move to a product portfolio containing building block inputs, rather than direct resold products. Mandated resale may lead to commodity price competition, leaving no scope for the reseller to differentiate. This also undermines any gains made by the innovative work of Retail and Gen-i – two of Wholesale’s most important customers.

171. However, in respect of local access services, Telecom noted that:⁶⁷

Wholesale’s next generation voice access portfolio is still in the early stages of development. As yet, we do not have a product roadmap that sets out the migration path onto PSTN Emulation and other next generation voice inputs.

Accordingly, as residential and business lines are the resale services that our customers purchase the most of, Wholesale is committed to providing these services until replacement next generation input products become available. Telecom Wholesale will work with its customers to determine what their desired replacement input products are.

172. At present, Telecom Wholesale’s next generation voice portfolio is still yet to be launched. Further, Telecom has expressed reservations regarding whether the development of a primary line VoIP service is feasible without placing unacceptable levels of risk on customers. These reservations were expressed in a proposal to the MED for a variation to the Undertakings.

Operational Separation Variation 4

173. Telecom was granted a variation of the Undertakings (Variation 4) in October 2010. In its proposal to the MED, Telecom requested the removal of the milestone requiring it to migrate 17,000 telephone lines to be supplied using a primary line VoIP service by 31 December 2010:⁶⁸

We have always strongly held the view that when a primary line VoIP service is launched it must be robust and attractive to customers. It must provide at least the same core functionality of the existing PSTN based service and it should not be launched commercially until it has been thoroughly tested, lest a premature launch tarnish the technology and lead to customer switching inertia.

We do not consider the current migration path allows us to deliver a service that will meet these criteria.

174. Telecom’s arguments in support of Variation 4 included that the life of the PSTN has been extended and there are now lower international expectations for VoIP.
175. In relation to PSTN longevity, Telecom stated that, in its experience, PSTN reliability is improving rather than deteriorating:⁶⁹

There are a number of possible reasons for this but we believe it can be distilled down to the very high build quality of the hardware and the significant subsequent investment in ironing out residual bugs with the system... Suppliers, who had been expected to gradually withdraw support for PSTN

⁶⁶ Telecom, *Submission on Commission’s review of resale services*, 15 May 2009, p 16, paragraph 63.

⁶⁷ *ibid*, paragraphs 67- 68.

⁶⁸ Telecom, *Proposal presented to MED: Variation of Telecom separation undertakings*, 24 May 2010, p 9.

⁶⁹ Telecom, *Proposal presented to MED: Variation of Telecom separation undertakings*, 24 May 2010, p 10.

infrastructure, are now committing to support this equipment through to 2020 and possibly beyond. As a result, Telecom is now confident in its ability to maintain current PSTN infrastructure and meet TSO service quality standards for the foreseeable future.

176. Regarding the international expectations for VoIP, Telecom noted that it was previously assumed that “the anticipated decline of PSTNs and the resolution of residual VoIP problems would combine in an inexorable global transition to VoIP for future voice services”. However, Telecom noted that this is no longer the commonly held view, primarily due to technology driven problems associated with VoIP.⁷⁰
177. In the New Zealand context, Telecom stated that “it is increasingly unclear to us that the current (primary line VOIP) product, designed to “consume” a Telecom Wholesale EUBA service, is a feasible candidate for PSTN replacement”. Telecom noted that it has not been possible to replicate some of the most critical functionality of the current PSTN service, due to:
- the reliance of VoIP on an in-house power source, reducing capability to make calls in a power cut (critical for emergency calls); and
 - restricted calling capacity (for example to perform three-way calling) due to constraints on the specified wholesale input.
178. This indicates that Telecom’s PSTN is likely to remain the primary form of provision of local access services in New Zealand for the foreseeable future.

Telecom’s updated position

179. On 14 May 2010, Telecom Wholesale wrote to the Commission setting out its updated position in respect of resale regulation. Telecom stated:⁷¹

Our preferred outcome from the Commission’s investigation is a narrowing of the scope of the regulatory backstop for resale services. We believe that residential and business line rental (RLR and BLR) should remain within the scope of regulation; in addition, some form of regulatory backstop may also be appropriate for a few key smart phone services (we propose Call Minder, Permanent Toll Bar, DDI, and Caller Display). Most other active (i.e. not grandfathered) resale services may be replicated by service providers on a nationwide basis through the use of a combination of UCLL and / or wholesale intermediate inputs.

180. Telecom further noted that, in practical terms, this would necessitate two main changes:⁷²

First, a narrowing of the four resale related designated access service descriptions within Schedule 1 of the Telecommunications Act to focus on the set of resold services mentioned above and second, a review by Telecom and TelstraClear of RSPL and DSPL to simplify the review and audit processes and reduce the number of service families (and price lines).

181. The Commission considers that the six services for which Telecom has proposed that a regulatory backstop be retained fall within the local access product market that has been defined in this Investigation. Telecom’s position that a regulatory backstop should be retained for these services is consistent with the Commission’s view that Telecom faces limited competition in the wholesale market for non-metropolitan local access services.

⁷⁰ Telecom, *Proposal presented to MED: Variation of Telecom separation undertakings*, 24 May 2010, p 10.

⁷¹ Telecom Wholesale, *Resale Investigation – Follow-up to meeting with Telecom*, 14 May 2010, p 1-2.

⁷² Telecom Wholesale, *Resale Investigation – Follow-up to meeting with Telecom*, 14 May 2010, p 2.

Commission's view

182. Under the counterfactual scenario, where there is ongoing regulation of resold local access services, the Commission considers that Telecom is likely to continue to offer resold local access services on a commercial basis on the current terms and conditions. The Commission considers that the presence of a regulatory backstop is likely to constrain Telecom when entering commercial negotiations, as failure to reach agreement would be likely to result in regulatory intervention.
183. However, as outlined above, the Commission considers that a finding of limited competition suggests that, under a factual regulation of local access services being removed from the Act, Telecom is likely to be incentivised to increase the price of resale local access services in order to maximise profits. This indicates that there are likely to be benefits arising from the ongoing regulation of business and residential local access services.
184. There is a lack of alternative wholesale services that are able to be used by access seekers in order to deliver retail local access services. Competing providers of local access services therefore rely on resale access to services such as Telecom's Homeline and BusinessTime services in order to provide local access services to residential and business customers respectively, in those areas where they do not have their own infrastructure.
185. Under the factual scenario, in which there would be a lack of competitive alternatives and no regulatory backstop, there would be little or no constraint on Telecom's ability to exercise market power and increase the price of Resale Services.
186. An increase in the price of resale local access would increase the costs access seekers face in delivering retail local access services to many customers, and therefore, would be expected to lead to increased retail prices. Accordingly, the Commission's view is that continued regulation of resold local access services is likely to best promote competition for the long-term benefit of end-users.

Broadband services

187. Telecom's share of wholesale broadband connections remains high, at approximately []RI as at June 2009. This indicates that the majority of retail broadband services are provided using Telecom's network. Accordingly, the Commission's view in its assessment of competition was that Telecom faces limited competition in the market for wholesale broadband access.
188. However, there is little demand for resold broadband services. Access seekers are choosing to use bitstream services in preference to resale broadband services, and appear to be increasingly using bitstream and UCLL access to enter and expand in the downstream retail broadband services market.
189. The provision of bitstream services by Telecom is subject to regulation. The Commission released a standard terms determination in respect of Telecom's unbundled bitstream access in December 2007. This determination sets the regulated price and non-price terms of which Telecom is required to make the service available.

190. Given the presence of the regulated bitstream service (UBA) the Commission considers that there are grounds to remove resale regulation in respect of broadband services. This view is supported by submissions received from the industry. For example, Telecom submitted that:⁷³

Wholesale's only resold broadband product, WBS, has been provided under commercial terms for some time. However, there remains an ongoing risk that Telecom's retail broadband plans will be the subject of an application for a determination. We consider that there is no justification for Telecom Wholesale being required to replicate a retail broadband offering.

191. Kordia and CallPlus submitted that the regulated Basic UBA service has largely superseded the resold broadband (WBS), and therefore, there is no need to continue to regulate WBS.⁷⁴ Similarly, Vodafone submitted that resale broadband is not used by many access seekers, and there is minimal need for its ongoing availability.⁷⁵
192. The presence of economic substitutes for resold broadband, particularly those that are currently subject to regulation (i.e. UBA), suggests that the removal of regulation is unlikely to adversely impact on the level of competition in the downstream retail market for broadband services.
193. The Commission considers that the factual scenario of removing regulation of resold broadband services (when compared to a counterfactual of continued regulation) is likely to best promote competition for the long-term benefit of end-users. Accordingly, the Commission's view is that regulation of resold broadband services should be removed.

Data services

194. The Commission's view in its assessment of competition was that Telecom:
- faces limited competition in the wholesale market for non-metropolitan data services; and
 - faces effective competition in the wholesale market for metropolitan data services.
195. Submissions from access seekers prior to the commencement of the Investigation indicated that there is likely to be little benefit in the continued regulation of resold data services, so long as there is the option to migrate to replacement wholesale services. For example, Vodafone submitted that:⁷⁶

Vodafone acknowledges that Megalink, ATM, Frame Relay, HSDDS and One Office are legacy data services that will be grandfathered. Grandfathering these resale products would be acceptable as long as Telecom has committed to a clear migration path to replacement wholesale products over a reasonable timeframe, on terms no worse than the current ones. A key requirement of any such replacement products is comparable geographic coverage.

⁷³ Telecom, *Submission on Commission's review of resale services*, 15 May 2009, p 17, paragraph 72.

⁷⁴ Kordia, *Submission on review of resale services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 1; CallPlus, *Review of resale services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 1.

⁷⁵ Vodafone, *Submission on the proposed review of the designated access services under the Telecommunications Act 2001*, 15 May 2009, p 2.

⁷⁶ Vodafone, *Submission on the proposed review of the designated access services under the Telecommunications Act 2001*, 15 May 2009, p 2.

196. Kordia noted that a small quantity of legacy data products are still used in the market, but that it may be appropriate to remove regulation where a clear migration path (which does not disadvantage end customers or service providers) to a new product is available.⁷⁷
197. The Commission's view is that as long as layer 2 data services such as HSNS are available on reasonable terms and conditions, the benefits to end-users from the regulation of resold data services are likely to be negligible. These layer 2 services are building block services and provide access seekers with flexibility to develop innovative services designed to meet the needs of business customers.
198. Under the Undertakings, HSNS and UNS (Over Ethernet) are currently provided in accordance with the December 2009 Requirements⁷⁸. HSNS, UNS (Over Ethernet) and UPC are required to be provided on an EOI basis by 31 December 2011, allowing access seekers to compete with Telecom on a level playing field in the provision of retail business-grade data services.
199. Telecom does have the ability to request variations to the Undertakings and four variations have been granted to date. The Commission considers that the variation powers in respect of the Undertakings, and the frequency of Telecom's variation requests, creates considerable uncertainty over the future role of the EOI Undertaking obligations in respect of the supply of these data services. In the event that the EOI obligations that currently apply to the provision of HSNS, UNS (Over Ethernet), and UPC are removed, this could impair the ability of access seekers to use these layer 2 data services to compete with Telecom in the supply of retail business-grade data services .
200. The Government's UFB initiative currently requires structural separation between the retail and layer 2 levels. In removing vertical integration between the retail and layer 2 levels, structural separation alleviates the competition concerns that the EOI obligations on the layer 2 services were designed to address. The Commission notes that Telecom is considering structural separation of its retail business unit, in order to be able to participate in the UFB initiative. In addition, the Commission recognises that HSNS and UPC have been provided by Telecom on a commercial basis for some time and that to some extent pricing (at least that of HSNS – see discussion at paragraph 487) has been influenced by competitive forces. Finally, the take-up of resold data services seems relatively low. The Commission has concluded that Telecom is likely to have the incentive to continue to offer these layer 2 services on a reasonable basis in the future and that continued regulation of resold data services is not warranted.

Bundles

Introduction

201. Bundling occurs where a service provider offers two or more services separately, but gives a discount to customers who purchase the services as a combined bundle (often referred to as a mixed bundle). Alternatively, the individual components of the bundle

⁷⁷ Kordia, *Submission on review of resale services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 1.

⁷⁸ Telecom Business Units and Service Providers are provided with the same service on the same terms (including price). The December 2009 Requirements are a stepping stone to the full EOI standard.

may only be able to be purchased together as part of the bundle (referred to as a pure bundle).

202. Two of the four regulated Resale Services contained in Schedule 1 of the Act relate to bundles of services supplied by Telecom Retail. These two bundled resale services are:

- Bundle of retail services offered by means of Telecom's fixed telecommunications network (Bundled Resale); and
- Retail services offered by means of Telecom's fixed telecommunications network as part of bundle of retail services (Parts of Bundles).

203. Bundled Resale gives wholesale access to entire bundles offered by Telecom Retail (where such bundles are offered by means of its fixed telecommunications network). An access seeker is able to purchase, on a wholesale basis, a bundle of services offered by Telecom Retail at a discount to the retail price of the bundle (to reflect avoided costs saved).

204. The regulated Parts of Bundles service, on the other hand, enables an access seeker to 'un-pick' a bundle offered by Telecom Retail, in order to gain access to one (or more) of the individual components that comprise the bundle. Therefore, an access seeker is able to use the Parts of Bundles service to gain resale access to a component of a bundle that it is not able to supply by other means (for example, using its own infrastructure or by purchasing an alternative wholesale service).

Draft Report

205. In the Draft Report, the Commission's preliminary view was that there were grounds to remove the regulated Bundled Resale and Parts of Bundles services from Schedule 1 of the Act. The Commission stated that:⁷⁹

Bundles are becoming increasingly prevalent in retail telecommunications markets. Telecom has recently launched a range of 'Total Home' packages which bundle together landline, broadband and toll calling services. The standard Total Home plan includes monthly landline rental, an unlimited number of national landline calls (up to 2 hours each), and 10GB of broadband for \$99 per month (in Auckland, Wellington and Christchurch) and \$109 per month in the rest of New Zealand.

However access seekers are able to replicate bundles such as these by combining individual wholesale services. An access seeker is likely to be able to compete with Telecom in the retail supply of bundled voice and broadband services by combining, for example, resale local access service with a broadband service using a wholesale bitstream input service. Alternatively, an access seeker is able to deliver bundled voice and broadband services using the UCLL service, in respect of those exchanges that it has unbundled. In this context, the Commission does not consider that there are any competition concerns affecting Bundled Resale contrary to section 18 of the Act.

206. The Commission also noted that uptake of resold bundles has been low since regulated resale was introduced in 2001.⁸⁰

⁷⁹ Commerce Commission, *Resale investigation draft report*, 26 August 2010, p 49-50, paragraphs 193-194.

⁸⁰ See paragraphs 192, 197-198 and 200 of the Draft Report.

Submissions

207. TelstraClear and Vodafone both submitted that regulation of bundled resale should be retained, and that the removal of resold bundles from the Act would have a detrimental impact on their businesses. Vodafone submitted that:⁸¹

Removing the bundled retail services from the Act will remove Telecom's incentive to provide bundled services at a wholesale price that enables access seekers to compete with it.

Although the volumes of these services are relatively modest, it is not obvious to us that the Commission should roll back resale regulation if the result would be disadvantageous financial arrangements for access seekers. The Commission's decision should not be to the detriment of end user's choices for their fixed line services or of service providers' ability to compete.

208. Similarly, TelstraClear submitted that:⁸²

...if the effect of removing the bundled products from the Act is to reduce or remove the discount associated with buying the bundle compared with buying the access services separately from Telecom, this would be a perverse result.

TelstraClear is concerned that the deregulation of bundled products will directly impact its ability to continue to replicate the bundled offering for its own customers at the same price at which it offers bundles currently.

209. In its cross-submission, Telecom noted that Wholesale currently only sells five bundles, all of which are made up of a combination of voice access plus ancillary smart phone services. These five bundles are: 'Family', 'Smartline', 'Messageline', 'Access + Message' and 'Smart Bundle'. Of these bundles:

- Family, Smartline and Messageline have been grandfathered by Telecom Retail;
- Access + Message is a bundle sold commercially by Telecom Wholesale (i.e. it is not available from Telecom Retail, so is not a true resale product); and
- Smart Bundle is the only bundle that could fall within the scope of regulation.⁸³

210. Telecom argued that the low uptake of existing bundles suggests that the ability to take bundles is not important to an access seeker's ability to compete with Telecom Retail. Therefore, Telecom submitted that there is no evidence of limited competition in the market that would justify regulation.⁸⁴

Resale conference

211. Vodafone sought clarification of the scope of bundled resale products at the Conference. In particular, Vodafone queried whether bundles offered by Telecom Retail, such as Total Home, are captured by the existing resale services.⁸⁵
212. Telecom noted that Total Home is a bundle of local access, national calling, international calling and broadband with message and call waiting. Telecom stated that:⁸⁶

⁸¹ Vodafone, *Submission on resale draft report*, 23 September 2010, p 3.

⁸² TelstraClear, *Submission on resale draft report*, 23 September 2010, p 11-12, paragraphs 58-59.

⁸³ Telecom, *Cross-submissions in respect of Resale Draft Report*, 13 October 2010, p 5, paragraph 23.

⁸⁴ Telecom, *Cross-submissions in respect of Resale Draft Report*, 13 October 2010, p 5, paragraph 24.

⁸⁵ Resale conference transcript, 27 October 2010, p 37, lines 1-9.

...we don't have a resale version of the Total Home package because no-one has ever asked for it and I can't see any circumstance where you guys would ask for it because you'll purchase our PSTN and our Access + Message stuff and bundle that with UBA and your own calling that you purchase on the market, and I think that's - I've got a little thing down here that says it's called the Vodafone Ultimate Pack, that's your version of it, and you combine our access resold products with your own broadband and calling.

213. Vodafone summarised its two concerns regarding bundles as follows:⁸⁷

I guess the two concerns to us out of this are that the features that when we are reselling a PSTN line, whether it's residential or business, that the features like call minder, call waiting and that set of features are available to us on similar price terms to retail customers. So, if you get a discount at retail when it's bundled there, then the similar arrangement should be available through the resale process. And secondly, that the resale prices are reflective of the discounting that happens in the retail space when different products are bundled together. But they are the concerns we have in this space, primarily that we are able to have resale on similar terms to - I mean the resale is a true reflection of the retail market place.

214. In response, Telecom noted that:⁸⁸

...we don't resell the total bundles because we've never been asked to and in fact our retail bundles tend to be more expensive than the bundles these guys put together in almost every case....

...the only things that we've ever been asked to bundle are the Messageline, call waiting and Access. For the life of me that's all I can see anyone would want to bundle. And, like I say, we've never managed to get a regulated resale bundle that people want to buy so we've got this commercial offer that people buy in reasonable volumes but not great.

215. Regarding Telecom's incentives to offer bundled resale services in the absence of regulation, Telecom stated:⁸⁹

...Access + Message is about the best example you could have of this...there is no retail comparator to that bundle. We've pulled it together at Wholesale to try and actually sell some of this to wholesale customers, so that's a voluntary product we've been offering for some time now with no regulatory requirement and there's no intention to change that. So, we have natural incentives to try and sell this stuff and on the other side we've got a set regulator. So I just don't see what the evil is out here that we're trying to protect against.

216. Vodafone stated that it can accept Telecom's position that it has an incentive to continue offering resale services. However, Vodafone questioned whether there is a strong incentive for offering discounts on resold bundles. Vodafone stated that:⁹⁰

...the principle that we would like to see is that where there are discounts available in the retail space, that they are also available in resale, and the commercial offering that Telecom refer to I guess is the attempt to reflect that...

...what we want to see is as things change in the retail space and as discounts are made available for add-ons to the home line and things like that, that that flows through to resale...

⁸⁶ Resale conference transcript, 27 October 2010, p 37, lines 20-29.

⁸⁷ Resale conference transcript, 27 October 2010, p 37 lines 30-34, p 38 lines 1-9.

⁸⁸ Resale conference transcript, 27 October 2010, p 38, lines 13-16 and 18-24.

⁸⁹ Resale conference transcript, 27 October 2010, p 40-41.

⁹⁰ Resale conference transcript, 27 October 2010, p 41-42.

Are there grounds to retain regulation of resale bundles?

Reasons for bundling

217. Bundling is often pro-competitive and consumer friendly. Bundling is common in telecommunications and other multi-product industries, reflecting both cost savings from producing services jointly, and consumer preferences for service bundles. In telecommunications, local access services are often bundled with services such as toll calling, call waiting, call forwarding, voice mail, or internet access.
218. However, firms can also engage in bundling for strategic reasons which may be considered anti-competitive. For example, a firm may use bundling to leverage market power in one market to enhance market power in another market.⁹¹ Bundling can potentially be used to foreclose a market or to create barriers to entry.
219. Anti-competitive concerns with bundling may arise when a firm bundles contestable products with non-contestable products, thereby creating a bundle of services that cannot be replicated by its competitors on an economic basis. In these circumstances, the firm may leverage its market power in the non-contestable market to the potentially competitive market.⁹²

Previous bundling investigation

220. Concerns have been raised regarding retail bundles offered by Telecom in the past. In December 2007, the Commission concluded an investigation under the Commerce Act into whether Telecom had squeezed the margins of its competitors through the introduction of a bundled discount for retail customers purchasing Homeline, toll calls and broadband services.⁹³ Customers received a \$10 discount when purchasing all of these services from Telecom.
221. It was alleged that through the introduction of this bundled discount, Telecom squeezed the margins of its competitors and affected their ability to compete. In the investigation, the Commission considered whether Telecom had taken advantage of its market power in respect of residential local access (Homeline) services for the purpose of preventing or restricting competition in the retail broadband market.
222. Although the Commission concluded that this bundle did not breach sections 27 and 36 of the Commerce Act 1986, it stated that it “will continue to monitor bundled discounting closely to ensure that bundles benefit consumers without damaging competition”⁹⁴.
223. Similar bundles continue to be offered by Telecom Retail today. For example, Total Home – which is a bundle that includes a landline, 10GB of broadband, and an unlimited number of calls to national landline numbers. The retail price of Total Home is \$102 per month in Auckland, Wellington and Christchurch, and \$112 per month in the rest of New Zealand (on a 12 month term).

⁹¹ ACCC, *Bundling in telecommunications markets*, August 2003, p 5.

⁹² Note that bundling of contestable and non-contestable products may not, in itself, be anti-competitive. However, competition concerns are likely to arise where such bundling has the effect of, for example, imposing barriers to entry or eliminating competitors from the market.

⁹³ Commerce Commission, *Telecom bundling of broadband services: Investigation report*, 21 December 2007.

⁹⁴ Commerce Commission, Media release: *Commission closes investigation into Telecom*, 21 December 2007.

224. There have however been no further investigations under the Commerce Act 1986 in respect of bundling practices.

Potential for anti-competitive bundling in the resale context

225. In the Draft Report the Commission's view was that Telecom faces limited competition in the wholesale market for non-metropolitan local access services.⁹⁵ This view was not challenged in submissions on the Draft Report. Given that Telecom has market power in respect of the provision of local access services, the Commission considers that there is the potential for Telecom to use bundling to give itself an advantage in the supply of other fixed-line services, such as broadband and tolls.
226. In the event that Bundled Resale and Parts of Bundles were no longer regulated services, Telecom could set the retail price of bundles such as Total Home at a level so that an access seeker would be unable to replicate the bundle (on a competitive basis) by purchasing individual wholesale inputs. This may be the case if Telecom offers a substantial discount for the bundle relative to the retail prices of the individual components.

The role of bundled resale regulation

227. In its cross-submission on the draft report, TelstraClear stated (emphasis added):⁹⁶

We agree that access seekers can technically replicate most Telecom retail bundled offerings from the individual resale services which will continue to be regulated, but like Vodafone we find it difficult to match the prices of the Telecom retail offerings unless we have access to resale of the bundle. Many overseas regulatory regimes can operate if necessary to ensure access seekers can compete fairly in downstream bundled offerings using upstream inputs through their telecommunications-specific competition regimes. New Zealand does not have comparable retail level regulation and instead **the ability to replicate retail level bundles on competitive terms needs to be addressed at the wholesale level in circumstances where replicability is not feasible using existing wholesale inputs or alternative infrastructure,**

228. Under the Parts of Bundles service, an access seeker is able to un-pick a bundle offered by Telecom Retail in order to gain access to certain component(s) of a bundle, potentially at a lower price than it would otherwise pay (if purchasing resale access on a stand-alone basis). The access seeker could then combine these component(s) (purchased on a resale basis) with other more contestable elements of the bundle, in order to compete with Telecom in the retail market.
229. Purchasing a resold local access service on this basis may result in a lower access price than purchasing a resold local access line on a stand-alone basis, as the pricing principle for the Parts of Bundles service is based on a retail-minus discount to the imputed retail price (where the imputed retail price is based on the observed discount of the bundle relative to the total price of the services offered separately).⁹⁷

⁹⁵ Commerce Commission, *Draft report on whether the resale services should be omitted from Schedule 1 of the Telecommunications Act 2001*, 26 August 2010, p 85, paragraph 347.

⁹⁶ TelstraClear, *Cross-submission on resale draft report*, 13 October 2010, paragraph 8.

⁹⁷ However, when determining the imputed retail price the pricing principle in the Act also requires the Commission to take into account "any price difference that arises from the lower cost of providing the services as a bundle, the lower cost of quantity supply, any difference in the cost of providing the services between different markets, and from any other difference in cost".

230. In a situation where Telecom possesses market power in respect of local access services, there is the potential for bundling to be used to limit competition in the provision of other fixed-line telecommunications services, such as broadband and tolls.
231. The Commission's view is that Bundled Resale should be omitted from Schedule 1 of the Act. Given the relatively low margins involved with resale-based competition, the ability to purchase an entire bundle on a resale basis is unlikely to be an attractive option in the situation where the access seeker is able to supply certain components of the bundle through other means. In addition, the main bundle purchased by access seekers ('Access + Message') is offered by Telecom on a commercial basis, and is not captured by current regulation. In these circumstances, regulation of resale of entire bundles of services is unlikely to best promote competition for the long-term benefit of end-users.
232. However, the Commission considers that the Parts of Bundles service provides a valuable safeguard against the potential anti-competitive effects of bundling, whilst being subject to a condition that regulation applies only where necessary for Telecom's rivals to compete in the retail market.
233. Accordingly, the Commission is of the view that the Parts of Bundles service should be retained in Part 2 of Schedule 1 of the Act.

Migration

234. In making the recommendation regarding the removal of regulation of resold broadband and data services, the Commission has also had regard to Telecom's commitment regarding how and when services that do (or will in future) fall outside the scope of the proposed resale regulation will be migrated to other service platforms⁹⁸.
235. Concerns were raised by TelstraClear and Vodafone during the submission period that if the backstop of regulation were to be removed for some services then access seekers would have less control on the migration of these services and may be disadvantaged.
236. This issue was discussed at the Conference, however TelstraClear noted in its opening statement that:

"We also had some concerns about migration in particular grandfathering around these services. I'm pleased to say we've had discussions with Telecom over the past two days and we feel we have resolved those issues on the assumption that we can lock those in. That should resolve Telstra Clear's major concerns on that matter."

237. At the Conference, Telecom agreed to:

"....make a statement, a public statement and put it in writing to TelstraClear to confirm our interpretation of the current arrangements and how we intend applying that interpretation to the renegotiation of our Wholesale Services Agreement with TelstraClear because in simple terms we've always intended and been of the view that the undertakings require that we can't make any changes to RSPL & DSPL without bilateral agreement with TelstraClear."

238. Vodafone confirmed at the Conference that:

⁹⁸ Letter from Telecom to Tom Forster, 11 November 2010

“...a public statement from Telecom clarifying the migration situation there would be a helpful thing to close this off. So we don't really have any issues in this space.”

239. Following the Conference, on 11 November 2010, Telecom wrote to the Commission noting that they had:

“...contacted TelstraClear, Vodafone, Callplus and Kordia and asked them to provide information about any concerns they have with Telecom’s existing migration plans in light of the Commission’s draft decision on resale deregulation.”

And:

“confirmed that we are not planning to change our current legacy data migration plan and we will get agreement from TelstraClear prior to bringing any of the grandfathering or withdrawal dates forward.”

This letter, which refers to discussions had with TelstraClear and Vodafone is an open letter and Telecom have undertaken to put this on their website so that the commitments made apply to all parties.

240. On 11 November 2010, TelstraClear also wrote to the Commission noting that:

“Although TelstraClear is disappointed that Telecom has decided not to clarify this issue (for the avoidance of doubt) directly in the wholesale services agreement, we are prepared to accept Telecom’s commitment to the Commission and TelstraClear that the grandfather and withdrawal dates will not be brought forward without TelstraClear’s agreement”

241. The Commission is satisfied that concerns regarding migration from services that will no longer be subject to regulation have been allayed, and that the commitments made by Telecom to TelstraClear and Vodafone will be available to all affected parties.

D. THE COMMISSION'S PROPOSED ALTERATIONS

Introduction

242. This section sets out the Commission's views on submissions received in response to the new service proposed for inclusion in Part 2 of Schedule 1 of the Act - "non-price capped local access and calling service offered by means of Telecom's fixed telecommunications network" which was recommended for inclusion in the Draft Resale Report.
243. In particular, the section addresses submissions received on the following parts of the service:
- the description of service – there was confusion as to which Resale Services were covered by the service;
 - the competition tests embedded in the description of service and the 'conditions' element of the service; and
 - the initial and final pricing principles.
244. The Commission has considered all submissions received and notes that submissions given at the Resale Conference reflect the most up to date views on the service set out in the Draft Report.
245. In considering the submissions made and deciding on the scope of the proposed service, the Commission has considered the extent to which the proposals set out in the submissions would best give, or be likely to best give, effect to the promotion of competition in telecommunications markets for the long-term benefit of end-users.

Description of service

246. At the Resale Conference, Telecom argued that the Service Description covered all services within Telecom's RSPL and DSPL except for broadband and data and there was not a restriction on the retail services included within the Service. Telecom noted that:

Our general take on the service description is that it is pretty consistent with the current scope of resale, regulated resale services in the Act as far as local access and calling, i.e. it will exclude broadband and data service but not a lot else, So, we have – I think, *we've got a table that we can hand round that has a look at how many lines within our RSPL and DSPL tables would be captured by this and it's pretty much all of them outside of broadband and data.* (Emphasis added.)

247. The table referred to by Telecom, included the following products (which are described in Appendix 1 to this Report):
- Business Line Rental;
 - Call Minder;
 - Caller Display Service;
 - Permanent Toll Bar Products;

- Quick Dial, Call Diversion, Remote Divert Service, Call Restriction, Remote Divert Service, Call Waiting, 3 way calls/Conference Calls, Dual Telephone Number, Hotline, Reminder Call (often collectively referred to as Smartphone Services);
- Centrex, Centrex Features, Centrex Message Manager;
- CustomerLink;
- DDI (Direct Dial-in Service);
- Digital Voice Access;
- Fax Address, Fax Advantage and Faxability;
- Installations;
- ISDN BRA and ISDN PRA;
- Message Manager; and
- Voice Circuit Service.

248. In contrast to Telecom, TelstraClear requested additional clarity on the scope of the service and argued at the Resale Conference that:

The service is quite confusing when we tried to do an analysis of exactly which of these products we bought off Telecom and to find any actual product descriptions and relating them to the things we deal with on a day-to-day basis.

249. Vodafone said that the new service “has been a slightly confusing area” and a complete list of included non-price capped services would need to be available to understand fully the scope of the service. Vodafone said that if the list of services included is too narrow then Vodafone cannot necessarily be competitive with others.

250. In addition, at the Resale Conference, Telecom did not have a strong view on the need to refer to ‘business’ in the proposed service and Vodafone appeared to agree that it was not necessary:

With regard to the words “business” too I think that perhaps that wasn’t appropriate because understanding now that that all of the list of miscellaneous add-on services like call minder and stuff are only in the non-price capped category but equally apply to residential phone lines, then “business” probably is not appropriate to fit into that part of the description although obviously the business line network is as it’s part of that. ..

251. The Commission has decided that uncertainty should be avoided and so has decided to amend the scope of Single Service Resale by deleting the current description of service (as shown in the left hand column below) and propose a new description of service (as shown in the right hand column below), in order to implement the decision to remove the regulation of resold broadband and data services.

252. The reference to ‘local access and calling service offered by means of Telecom’s fixed telecommunications network’ in the new service set out in the Draft Report overlapped extensively with the “residential” equivalent of this service. Given the similarity between

these services, and the uncertainty raised by the parties about the scope of the new service, the Commission considers that some of the services (such as, ISDN PRA, ISDN BRA, Digital Voice Access and Centrex) were not clearly covered by the 'non-price capped local access and calling' component of the service - a component that each retail service would need to satisfy for the Commission's powers to apply.

Proposed alterations in order to remove the regulation of resold broadband and data

Current 'Description of service' – Single Service Resale - recommended for removal	New 'description of service' – Single Service Resale – amendments recommended
<p>A non price-capped retail service offered by Telecom to end-users by means of its fixed telecommunications network in the following markets:</p> <p>(a) all markets in which Telecom faces limited, or is likely to face lessened, competition for that service:</p> <p>(b) all, some, or no markets in which Telecom does not face limited, or is not likely to face lessened, competition for that service as determined by the Commission</p>	<p>A retail service that satisfies both of the following:</p> <p>(a) Any of the following:</p> <ul style="list-style-type: none"> (i) a non price-capped local access and calling service; or (ii) a non-price capped retail service (and its associated functions) supplying an access and calling service in a different form to the service described in subclause (a)(i) (and including, for the avoidance of doubt, a service supplying ISDN digital access, or Centrex based access or facsimile); or (iii) a value-added non-price capped retail service that is supplied in conjunction with a service described in subclause (a) or (b): and <p>(b) A retail service offered by Telecom to end-users by means of its fixed telecommunications network in the following markets:</p> <ul style="list-style-type: none"> (i) all markets in which Telecom faces limited, or is likely to face lessened, competition for the service: (ii) all, some, or no markets in which Telecom does not face limited, or is not likely to face lessened, competition for that service as determined by the Commission.

253. The reasons for each limb of the new description of service (as shown in the right hand column above) are described below:

- A retail service will qualify under Single Service Resale if subparagraphs (a) and (b) are satisfied. Subparagraph (a) describes the technical description of the 'retail service' whereas subparagraph (b) describes which part of Telecom's network must participate in the delivery of the retail service, in this case by means of Telecom's fixed telecommunications network;

- Paragraph (a)(i) includes “non-price capped local access and calling service” as a qualifying retail service. For example, Telecom’s Business Line Rental and Calling Service would fall within this description of service.
- Paragraph (a)(ii) includes all other retail services (and its associated functions) that do not have a price cap but, in effect, deliver an access and calling service but in a different manner (e.g. using a different functionality) to that used in respect of the standard local access and calling service (namely, Business Line Rental service). In this description, the Commission contemplates that the following services would fall within this description – ISDN BRA, ISDN PRA, the Voice Circuit Service, Digital Voice Access, Faxability, FaxAdvantage, Centrex. The reference to “associated functions” in this description covers functions that are associated with the delivery of these non-price capped retail services, such as installations.
- Paragraph (a)(iii) also covers all other value-added retail services that are typically supplied in conjunction with the other services described above. This description captures the Smartphone Services, DDI, Centrex Features, Centrex Message Manager, CustomerLink, Call Minder, Caller Display and Permanent Toll Bar Products.
- Paragraph (b) describes that part of Telecom’s network that must be used to deliver the retail services and the relevant markets where the regulated services would be made available. The Commission has decided to keep this paragraph as consistent as possible with the current description of Single Service Resale which has proven to promote competition in relevant telecommunications markets through now expired bilateral determinations. Other reasons in support of this approach are described in the discussion below on the competition conditions.

254. The Commission recommends that the alterations in the right hand column of the table above be made.

Competition conditions

255. In response to the Draft Report, Telecom submitted that condition (b) for the proposed new service be removed and replaced with a new competition condition (b) as shown below:

That:

- (a) Telecom faces limited, or is likely to face lessened, competition in a market for non-price capped business local access and calling service offered by Telecom to end-users; or
- (b) *Resale of the local access and calling service by an Access Seeker is required to enable that Access Seeker to compete effectively in the market in which Telecom faces limited, or is likely to face lessened, competition. (Emphasis added.)*

256. Telecom submitted that the conditions of the proposed new service should be defined more tightly and precisely and that should the Commission ever be called upon to apply the regulation, the Commission would need to assess whether the service in question is reasonably required to enable the access seeker(s) to compete effectively in the market in which Telecom faces limited, or is likely to face lessened, competition.

257. At the Resale Conference, Telecom argued that:

- the Commission has not ever exercised its discretion under the current condition (b) and doubts that the Commission would ever need to do so in respect of the lowest rung in the ladder;
- its proposed new condition (b) explores the potential difference between the long-term benefits of end-users and a standard significant market power test;
- the proposed new condition (b) is designed to give clearer direction as to when regulated access may be required, i.e. where there is not a reasonably available intermediate input or some other network available for use.

258. The Commission's view is that the current condition (b) be retained to:

- guarantee consistency with all other Competition Conditions in Schedule 1 of the Act including the "price-capped residential local access and calling service" which the Commission is proposing to retain;
- promote regulatory certainty as to the application of the Act to the relevant markets; and,
- ensure that the competition conditions are likely to best give effect to section 18 of the Act.

Pricing principles

259. Telecom's first submission on the Draft Resale Report proposed deleting paragraph (b) of both the initial pricing principle and the final pricing principle for the proposed new service.

260. The effect of Telecom's proposal is that each pricing principle would be limited to considering discounts that apply retail price minus avoided costs saved without the option - through paragraph (b) - of focussing on "discounts comprising actual costs saved pricing" in the case of services offered by Telecom in markets in which Telecom does not face limited, or lessened, competition for that service.

261. The Commission appreciates that Telecom's goal appears to be to focus on reducing the complexity of the pricing principles and, therefore, the difficulties associated with their application. In addition, Telecom's position is also consistent with their proposal to change the competition conditions.

262. The Commission wishes to retain the flexibility of the current pricing principles for the Single Service Resale Service (as recommended for amendment in this Final Report). As the Commission has decided to retain limb (b) of the competition conditions, a consistent approach is required in respect of the pricing principles so that limb (b) for each pricing principle is retained. This approach enables a different pricing approach to be taken in the event that regulation was ever required "in the case of a service offered by Telecom in markets in which Telecom does not face limited, or lessened, competition for that service."

263. The Commission notes that paragraph (b) of the final pricing principle of Single Service Resale is similar to paragraph (b) of the final pricing principle for the designated service of Telecom's unbundled bitstream access. Therefore, retaining the current approach to the pricing principles (and the competition conditions) is not controversial when considered against other parts of Schedule 1 of the Act.

APPENDIX 1: LIST OF RESALE SERVICES

The following table lists resale services offered by Telecom, providing a brief description of each. The relevant market for each service (in accordance with the markets defined in the Market Definition section of this report) and the applicable category of regulated Resale Service are also provided⁹⁹.

Resale product family	Description	Relevant market	Current regulated service category
Business Line Rental	Basic telephone connection. It is used to make and receive telephone calls and / or faxes, run EFTPOS transactions, transmit data and link to the Internet.	Local access	Retail services offered by means of Telecom's FTN
Call Minder	Calls to a Call Minder customer whose telephone is engaged or not answered will be answered by the customer's voice mailbox. The caller will hear a personal greeting from the mailbox owner, which will ask them to leave a private voice message. Messages can be retrieved from any touch-tone telephone.	Local access	Retail services offered by means of Telecom's FTN
Caller Display Service	A network service that presents calling party information to the called party. Special Caller Display CPE is connected to the line will record, display and process this information.	Local access	Retail services offered by means of Telecom's FTN
Centrex	A private switching and networking service (SNS) delivered directly from the telephone exchange. Centrex can be used to link different sites and integrate CPE (standard phones, key-systems and PABX's).	Local access	Retail services offered by means of Telecom's FTN
Centrex features	Some Custom features are used to build on to the standard Centrex features; others are used as alternatives.	Local access	Retail services offered by means of Telecom's FTN
Centrex Message Manager	A voice messaging service available to Centrex customers. Centrex Message Manager provides the voice messaging features of Message Manager and the call answering features of Call Minder.	Local access	Retail services offered by means of Telecom's FTN
CustomerLink	Enables calls to the customer's PSTN number to be redirected to another PSTN number, or to a mobile telephone.	Local access	Retail services offered by means of Telecom's FTN
DDI	A service available to customers with Private Automatic Branch Exchanges (PABX) to allow direct dialling into extension telephones from the PSTN.	Local access	Retail services offered by means of Telecom's FTN

⁹⁹ The table is illustrative only of the type of services falling with the Resale designated access services and includes grandfathered services.

Resale product family	Description	Relevant market	Current regulated service category
Digital Voice Access	A 2Mbit/s inter-exchange Access –this service used 2Mbit/s links to connect the Telecom PSTN	Local access	Retail services offered by means of Telecom's FTN
Faxability	A network service combining Dual Telephone Number with a distinctive ringing tone for the second number.	Local access	Retail services offered by means of Telecom's FTN
Fax Address	Fax Address is an enhanced network fax mailbox service. This service provides a Direct Access fax number, which is associated with a “Store and forward” fax mailbox.	Local access	Retail services offered by means of Telecom's FTN
Fax Advantage	Is an enhanced network service for business lines which are dedicated for fax usage. The service is provisioned on a Business access line, providing a ‘never miss a fax’ service for incoming faxes, savings for short fax messages and first class international faxing to selected countries.	Local access	Retail services offered by means of Telecom's FTN
Installations	Each visit to a customer’s premises to undertake installation work will incur a service visit fee. Multiple visits due to no fault of the customer will not be charged multiple visit fees.	Local access	Retail services offered by means of Telecom's FTN
ISDN BRA	This provides the customer with ISDN digital access to the PSTN. ISDN access may be Basic Rate Access (“BRA”), (providing two 64 kbit/s circuits (or B channels)).	Local access	Retail services offered by means of Telecom's FTN
ISDN PRA	This provides the customer with ISDN digital access to the PSTN. This service uses 2Mbit/s links to provide access to the local exchange from a customer’s premises and provides up to 30 x 64 kbit/s circuits (B channels)	Local access	Retail services offered by means of Telecom's FTN
Message Manager	Provides customers with a personalised voice mailbox. The service enables customers to listen, save and reply to messages sent to their mailboxes, and to record and send messages directly to other mailboxes.	Local access	Retail services offered by means of Telecom's FTN
Permanent Toll Bar Products	Prevents outgoing calls being made from a customer’s telephone line.	Local access	Retail services offered by means of Telecom's FTN
Smartphone Services	Smartphone services are available over residential and business lines and offer additional functionality. Smartphone services include quick dial, call diversion (call forwarding), remote divert service, call restriction, call waiting, 3 way calls (conference calls), do not disturb, dual telephone number, hotline, reminder call	Local access	Retail services offered by means of Telecom's FTN
Residential Line Rental	A Residential Line is used to make and receive telephone calls and/or faxes and transmit dial up data	Local access	Residential local access and calling service offered by means of Telecom's FTN

Resale product family	Description	Relevant market	Current regulated service category
MessageLine	MessageLine allows customers to package their HomeLine and the Call Minder service on that particular line	Local access	Bundle of retail services offered by means of Telecom's FTN
Smartlines	Smartline allows customers to package their HomeLine and two Smartphone Services	Local access	Bundle of retail services offered by means of Telecom's FTN
Analogue Data Service (A1, A2, A3)	A voice-frequency service with suitable conditioning for data transmission.	Data	Retail services offered by means of Telecom's FTN
ATM	A switching technology that operates in much the same way as the telephone network. When you need capacity, you negotiate a connection at a required speed over a shared network. ATM has the ability to support existing technologies such as Ethernet and Local Area Networks. It can integrate with similar technologies such as Frame Relay, Metropolitan Area Networks and Wide Area Networks.	Data	Retail services offered by means of Telecom's FTN
Frame Relay	A high speed data communication service. It is used to link PCs, work stations, LANs and host computers. It is most suitable for connecting three or more sites in different towns or cities.	Data	Retail services offered by means of Telecom's FTN
High Speed Digital Data Service	A managed data transmission service, with circuits (links) available in multiples of 64kbit/s channels.	Data	Retail services offered by means of Telecom's FTN
IP Net	IP.networking is a range of data networking services that gives you the any-to-any connectivity of the Internet and the security and performance of a private network.	Data	Retail services offered by means of Telecom's FTN
Low Speed Digital Data Service	WITHDRAWN – no longer available at Retail.	Data	Retail services offered by means of Telecom's FTN
Megalink Services	An unmanaged digital transmission service providing a raw 2 Mbit/s circuit. This is equivalent to thirty-two 64 kbit/s channels	Data	Retail services offered by means of Telecom's FTN
Office Anywhere	A simple to use leading edge remote access solution that allows secure authentication to the customers Private Network (LAN) from within New Zealand, which can be integrated with existing authentication systems and desktop policies.	Data	Retail services offered by means of Telecom's FTN
One Office	A managed IP-based Data Networking service. It utilises a secure Multi-Service Core data networking platform and has extensive geographical coverage. It offers access speeds from 128 kilobits/second up to 1 Gigabit/second.	Data	Retail services offered by means of Telecom's FTN
One Office Serial	A replacement product for Low Speed DDS. One Office Serial is a point-to-point solution, with a One Office Serial CLNE (Customer Located Network Equipment) at each end.	Data	Retail services offered by means of Telecom's FTN

Resale product family	Description	Relevant market	Current regulated service category
Packet Switch	WITHDRAWN – no longer available at Retail.	Data	Retail services offered by means of Telecom's FTN
Private Office Networking	An off-the-shelf, private, IP networking product that enables business customers to connect their offices, people, systems and processes together for improved business efficiency.	Data	Retail services offered by means of Telecom's FTN
Voice circuit service	Provides voice-grade circuits for use as PABX tie-lines, Foreign Exchange Service (FES) circuits, etc.	Data	Retail services offered by means of Telecom's FTN
Wholesale Broadband Solutions	Wholesale broadband plans equivalent to those offer at retail	Broadband	Retail services offered by means of Telecom's FTN

APPENDIX 2: MARKET DEFINITION

264. The purpose of market definition is to provide a framework within which competition can be assessed. The Commission's approach to market definition is set out in its Mergers and Acquisitions Guidelines and in particular:¹⁰⁰

For competition purposes, a market is defined to include all those suppliers, and all those buyers, between whom there is close competition, and to exclude all other suppliers and buyers. The focus is upon those goods or services that are close substitutes in the eyes of buyers, and upon those suppliers who produce, or could easily switch to produce, those goods or services. Within that broad approach, the Commission defines relevant markets in a way that best assists the analysis of the competitive impact of the acquisition under consideration, bearing in mind the need for a commonsense, pragmatic approach to market definition.

265. In terms of the current investigation, the Commission is not evaluating the impact of an acquisition, but rather is considering the impact of removing or amending resale regulation. Nevertheless, similar principles remain relevant in terms of market definition.

266. The Commission usually considers markets to have five dimensions:¹⁰¹

- the goods or services supplied or purchased (the product dimension);
- the geographic area from which the goods or services are obtained, or within which the goods or services are supplied (the geographic dimension);
- the level in the production or distribution chain (the functional dimension);
- the timeframe or timing within which the market operates, where relevant (the temporal dimension); and
- the different customer types within a market, where relevant (the customer dimension).

267. In order to test for substitutability between products or services, the Commission generally employs the hypothetical *ssnip*¹⁰² test, whereby buyer and supplier responses to a small yet significant and non-transitory increase in price are tested. The smallest space in which such a price increase is likely to be sustained is defined in terms of the various dimensions of a market.

268. The Commission has previously completed a number of access determinations relating to the Resale Services. These determinations include:

- the TelstraClear Business Wholesale Determination (Decision 497), released on 12 May 2003;

¹⁰⁰ Commerce Commission, *Mergers and Acquisitions Guidelines*, page 14.

¹⁰¹ *ibid.*

¹⁰² For the purpose of competition analysis, the internationally accepted approach is to assume the relevant market is the smallest space within which a hypothetical, profit-maximising, sole supplier of a good or service, not constrained by the threat of entry, would be able to impose at least a small yet significant and non-transitory increase in price, assuming all other terms of sale remain constant.

- the TelstraClear Residential Resale Determination (Decision 525), released on 14 June 2004; and
- the TelstraClear Private Office Networking Determination (Decision 563), released on 9 December 2005.

269. The Commission also considered markets relevant to the Resale Services during the review of regulated services in 2006, and in the Commission's determinations regarding the unbundled bitstream service (UBS).

Market definition for Resale Services

270. Resale services cover virtually all products offered by Telecom Retail via its fixed telecommunications network.

271. Resale offers the opportunity for access seekers to enter retail fixed-line telecommunications markets without the need to deploy an access network or invest in local loop unbundling. Resale can be used to facilitate the entry of new providers into fixed-line telecommunications markets, or by providers wishing to offer services in those areas where they have not deployed their own infrastructure.

272. For the purposes of this Investigation, the Commission considers that fixed-line telecommunications services are able to be categorised into three main product types: voice, broadband and data.

273. The Commission has had regard to these broad categories when considering the markets that are relevant to the Resale Services. The product, geographic, functional and customer dimensions of the markets that are relevant to voice, broadband and data services are discussed in turn below.

274. While telecommunications services often have a temporal dimension (for example the use of peak and off-peak pricing) this is not considered to be of particular relevance to market definition in the current context. Accordingly, the temporal dimension is not discussed in the following sections.

Voice

Product dimension

275. At the retail level, consumers typically purchase fixed-line voice services including local access (line rental) and local calling, as well as national, international and fixed-to-mobile toll calling. Consumers will often purchase both local access services and toll calling services together as a bundle from the same supplier, however, it is also possible to purchase local access from one provider (i.e. Telecom), and toll calling services from another provider. This is made possible through the use of toll bypass services.

276. In Decision 497, the Commission determined that the provision of access lines and the supply of local call services fall within the same product market. The Commission based its decision on the fact that the provision of these services is bundled together by

telecommunications providers.¹⁰³ Included within this product market were a number of specific services including basic business line rentals, Centrex services, PABX services, ISDN services and business local call services.

277. The Commission also concluded that the provision of ‘smartphone’ messaging services such as ‘Message Manager’ and ‘Call Minder’ should fall within the local access services market as it is not clear that these services can be supplied in isolation from the access line.¹⁰⁴
278. The Commission again defined a single product market for line rental and local call services in the context of the residential wholesale determination (Decision 525), and also included messaging services within this market. This product market encompassed the connectivity service in the form of a line rental, and local calling services to residential customers.¹⁰⁵
279. In Decision 497, the Commission considered that mobile calls or services were not a sufficiently close substitute for fixed local call services, hence concluding that they should not be included in the same market. This was primarily due to cellular mobile services being priced significantly higher than fixed local calls, and therefore not acting as a strong economic substitute.¹⁰⁶
280. In a recent review of fixed narrowband services, Ofcom was of the view that fixed and mobile access were in separate markets.¹⁰⁷ Ofcom noted that consumers predominantly view the two types of access as meeting different needs and have a strong preference to purchase both fixed and mobile access. Specifically, Ofcom stated that:¹⁰⁸

...the proportion of mobile-only users has experienced a relatively slow rate of growth over the last five years despite a very large fall in the price of mobile services. Between 2003 and 2008 the real price of mobile services declined by an estimated 47% while the price of equivalent fixed line services fell by only 14%. In the same period, mobile-only households grew from around 6% to around 12%, while the proportion of consumers having fixed and mobile access remained steady at around 80%. This is consistent with consumers taking advantage of the falling absolute and relative price of mobile phones by increasingly purchasing both mobile as well as fixed access rather than substituting away from fixed lines.

281. Similarly, the ACCC has previously expressed the view that mobile use may be viewed by the majority of consumers as a complement to their traditional fixed line rather than as a substitute. The ACCC also noted that “the quality of mobile calls can vary dramatically depending on how close to a mobile tower the end-user is and the general coverage of the service provider”. Accordingly, the ACCC considered that fixed voice services and mobile voice services are in separate markets.¹⁰⁹

¹⁰³ Commerce Commission, *Draft Determination on the TelstraClear Application for Determination for “Wholesale” Designated Access Services*, 25 November 2002, paragraph 101.

¹⁰⁴ Decision 497, paragraph 264.

¹⁰⁵ Decision 525, paragraph 136.

¹⁰⁶ Commerce Commission, *Draft Determination on the TelstraClear Application for Determination for “Wholesale” Designated Access Services*, 25 November 2002, p 40, paragraph 141.

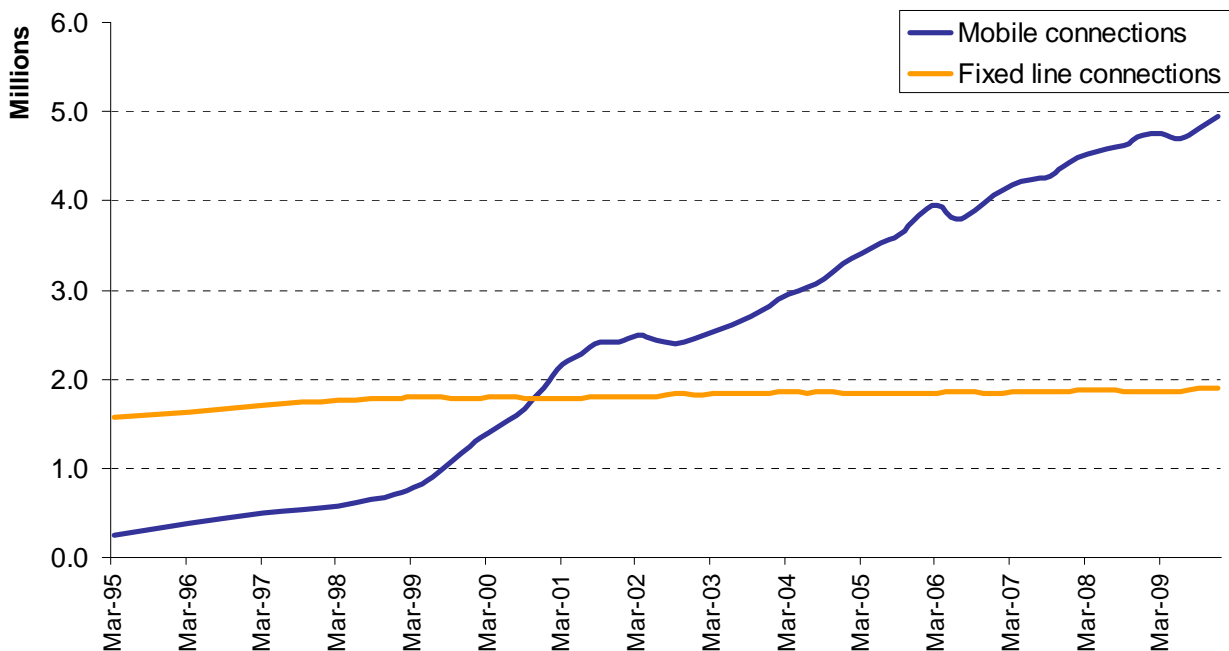
¹⁰⁷ Ofcom, *Fixed Narrowband Retail Services Markets: Identification of markets and determination of market power*, 15 September 2009, p 23, paragraph 4.45.

¹⁰⁸ *ibid*, paragraph 4.44.

¹⁰⁹ ACCC, *Telstra’s local carriage service and wholesale line rental exemption applications: Final decision and class exemption*, August 2008, p 44-46.

282. The view that fixed-line and mobile services are considered to be complements is consistent with the trend observed in New Zealand. As shown in Figure 2 below, the number of fixed-line connections has continued to rise in recent years, despite significant increases in the number of mobile connections. This indicates that consumers are choosing to purchase mobile services in conjunction with fixed-line services, rather than as a replacement for fixed-line services.

Figure 2: Mobile connections versus fixed-line connections



Source: Commerce Commission (2010)¹¹⁰

283. Due to the different characteristics of fixed and mobile services, at present, end-users appear to purchase these services in conjunction with, rather than as substitutes for, one another. In light of this, the Commission considers that mobile services are not sufficiently close substitutes to be included in the same market.
284. The Commission's view is that the local access services product market as defined in Decisions 497 and 525 remains appropriate and is applicable to this Investigation.
285. Voice over Internet Protocol (VoIP) provided over a broadband connection is a potential substitute for PSTN voice services. In determining the scope of the product dimension of the market in which local access services are supplied, the Commission has considered whether VoIP services may be regarded as an economic substitute for PSTN services.
286. The ACCC has previously noted that the physical and technical characteristics of a carrier-grade VoIP product can be quite different to that of traditional PSTN voice. In particular, the ACCC noted that:¹¹¹

¹¹⁰ Commerce Commission, *Annual telecommunications monitoring report 2009*, April 2010, p 17, figure 5.

¹¹¹ ACCC, *Telstra's local carriage service and wholesale line rental exemption applications: Final decision and class exemption*, August 2008, p 43-44.

- the quality of service of VoIP can vary greatly between VoIP service providers and often VoIP has lower quality of service than PSTN voice services;
- on the whole, VoIP services do not facilitate connection to emergency services numbers;
- VoIP services are not available during power outages;
- VoIP services require the customer to acquire a VoIP-specific phone at the customer end;
- to acquire VoIP services an end-user must also acquire a broadband service (unlike traditional PSTN voice); and
- VoIP can provide end-users with greater functionality than PSTN voice through additional features of the service e.g. “simultaneous ring”, ‘sequential ring’ and ‘music on hold’.

287. Accordingly, the ACCC considered that carrier-grade and application layer VoIP services are unlikely to be effective substitutes for PSTN voice due to the current limitations concerning the quality characteristics of VoIP services, the requirement for switching customer premises equipment and also the necessity to acquire a broadband service in conjunction with the VoIP service.¹¹²

288. In the New Zealand market, the Enhanced UBA (EUBA) bitstream service offers an internet-grade class of service and a real-time class of service, provided over a single internet connection. The real-time class of service has priority over the internet-grade class of service, and has tighter performance parameters. As a result, EUBA services enable access seekers to provide real-time products (such as VoIP). However, at present there is very little uptake of EUBA¹¹³ suggesting that VoIP is not currently providing an effective alternative to PSTN services.

289. The Commission’s view is that there is a product market for fixed-line local access services, including smartphone services (but excluding mobile and VoIP services).

Geographic dimension

290. The geographic dimension of the relevant market is usually defined with reference to the area within which demand- and/or supply-side substitution can take place. If a *ssnip* imposed by a hypothetical monopolist in a narrowly defined area resulted in suppliers in other areas switching capacity to serve customers in that area, or in customers switching to suppliers located elsewhere, it might be appropriate to expand the geographic market boundary to include those areas in which the switching takes place.

291. However, such an approach in the context of telecommunications services may lead to extremely narrow markets, possibly at an individual customer level. This is because there is limited scope for a household or business to purchase from other regions in response to an increase in price. Consideration is therefore usually given to the extent to which there may be a uniform or common pricing constraint, and to determine geographic markets on that basis.

¹¹² ACCC, *Telstra’s local carriage service and wholesale line rental exemption applications: Final decision and class exemption*, August 2008, p 44.

¹¹³ As at 31 December 2009, there were 456 EUBA connections across New Zealand.

292. In Decisions 497 and 525, the Commission drew a distinction between metropolitan and non-metropolitan areas for local access services.
293. In respect of the local access market as it currently stands, the Commission notes that Telecom's retail pricing varies by geographic region. The price of Telecom's standard residential line rental plan 'Homeline' is currently \$40.00 per month in the Wellington 04 calling region and Christchurch, \$44.00 per month in Auckland, and \$48.30 per month in the rest of New Zealand. This is summarised in Table 3 below.

Table 3: Telecom Homeline residential pricing

Region	Price (including GST)
Wellington and Christchurch	\$40.00
Auckland	\$44.00
Rest of New Zealand	\$48.30

Source: Telecom (2010)¹¹⁴

294. The geographic regions in which Telecom has reduced the monthly line rental (Auckland, Wellington and Christchurch) are those areas where competing infrastructure has been deployed.
295. TelstraClear provides its own facilities-based PSTN voice services in those areas where it has deployed its cable network (Wellington and Christchurch). In addition, at present, the majority of local loop unbundling has occurred in the Auckland region. At the end of June 2010, there were reported to be approximately 67,000 unbundled lines, and 77 unbundled exchanges in New Zealand¹¹⁵. Approximately 85% of unbundled lines in New Zealand are located in the Auckland region.
296. This suggests that Telecom faces a stronger competitive constraint in the supply of local access services in those areas where competing infrastructure has been deployed either in the form of full facilities-based competition or UCLL-based competition. Telecom's response has been to lower its retail prices for local access services in those areas. Telecom's commercial assessment of, and response to, the deployment of competing infrastructure appears to be based on a sub-national market for fixed-line local access services.
297. In this Investigation, the Commission is considering whether Telecom faces limited (or likely to face lessened) competition, and if it does whether regulation should continue to be available. The Commission has not attempted to identify precise market boundaries using distance rules applied to competing infrastructure (similar to those used in previous determinations¹¹⁶), but rather has defined markets in a way that captures the main differences between 'metropolitan' and 'non-metropolitan' areas, in terms of where competing infrastructure is located.¹¹⁷ The Commission considers that this is an appropriate approach to take for the purpose of a Schedule 3 inquiry.

¹¹⁴ <http://www.telecom.co.nz/homeline>

¹¹⁵ Telecom Quarterly Report, *Management commentary*, Q4 2010, p 38.

¹¹⁶ Commerce Commission, *Draft Determination on the TelstraClear Application for Determination for "Wholesale" Designated Access Services*, 25 November 2002, paragraph 189.

¹¹⁷ The Commission has not used distance rules, such as those used in Decisions 497 and 525, when defining geographic market boundaries in this Report.

298. The Commission's view is that there are separate geographic markets for local access services in metropolitan (Auckland, Wellington, Christchurch) and non-metropolitan (rest of New Zealand) areas.

Functional dimension

299. In Decisions 497 and 525 the Commission focussed on competition in retail markets. In those decisions the Commission was considering whether Telecom faced limited (or was likely to face lessened) competition in the markets for the particular services that were the subject of applications from TelstraClear. At that time there were no regulated wholesale access services supplied by Telecom that access seekers could use to deliver retail services.
300. For the purposes of this Investigation, assessing competition at the retail level alone may not prove particularly meaningful, because there are now multiple alternative wholesale inputs that can be used to deliver retail services, and therefore, facilitate competition at the retail level.
301. Given that resale is a wholesale service used to deliver retail fixed-line local access services, the Commission considers that the relevant functional dimension of the market in which the Resale Services are supplied is the wholesale level. Therefore, although the availability of resale services is expected to impact competition in retail markets, the Commission has focussed on wholesale markets for the purposes of this Investigation.
302. Another issue relating to the functional dimension is whether UCLL and resale should be considered to be part of the same market. As noted earlier, telecommunications regulation in New Zealand is underpinned by the ladder of investment concept. The ladder of investment relies on different functional levels of wholesale access, whereby an access seeker is incentivised to invest further in its own infrastructure as it expands its customer base. Under the ladder of investment framework, there is a complementary relationship between access products at different functional levels ('rungs' on the ladder), as access at a lower rung (such as resale) may be used as a stepping stone to access at a higher rung (such as UCLL).¹¹⁸
303. On the supply side, the Commission considers that there may be scope for a UCLL-based operator to enter the resale market in response to a *snip* for resold local access services. This is because the incremental investment required in order to deliver resale services is likely to be relatively minor, given that a UCLL-based operator is effectively already self-supplying a wholesale input. This view is supported by Vodafone's entry into the wholesale market on the back of its UCLL deployment. Vodafone is wholesaling voice (and bitstream access) services to Slingshot in those areas that it has unbundled.¹¹⁹
304. On the demand-side, however, the Commission considers that a service provider currently purchasing resold local access services from Telecom would be unlikely to shift to UCLL in response to a 5-10% increase in price of the resale service. This is primarily because a move from resale-based to UCLL-based provision of retail services would involve substantial investment on behalf of the access seeker.

¹¹⁸ Resale may also be a complement in a geographic sense, in those areas where UCLL is unlikely to be economically viable.

¹¹⁹ Vodafone media release, *New era in broadband*, 22 September 2008. <http://www.vodafone.co.nz/about/media-centre/2008-media-releases/new-era-broadband.jsp>

305. Accordingly, the Commission's view is that resale and UCLL are in separate functional markets. The Commission considers that this view is consistent with the ladder of investment concept.
306. Although UCLL is not considered to be in the same market as resale, competitive pressure provided by UCLL operators remains appropriate when assessing competition at the retail level. In addition, UCLL-based operators (such as Vodafone) have the ability to offer resale (or similar) services to other service providers, and therefore, act as a constraint in the wholesale market.

Customer dimension

307. The Commission has previously distinguished between business and residential customers in relation to the local access market. In Decision 497, the Commission also drew a distinction between corporate customers and SME customers in relation to some product markets, including the local access market. The Commission based this decision on the fact that there are differences in the way in which telecommunications services are supplied, and differences in purchasing patterns and expenditure levels by these customer groups.
308. For the purposes of this Investigation, the Commission notes that wholesale services are purchased by access seekers in order to deliver retail services. The Commission considers that a business or residential split is irrelevant to the wholesale market, as the wholesale inputs used to deliver local access services are unlikely to vary significantly between residential and business customers.

Conclusion on market for voice services

309. The Commission's view is that the following voice markets are relevant to this Investigation:
- the wholesale market for metropolitan (Auckland, Wellington and Christchurch) local access services; and
 - the wholesale market for non-metropolitan (rest of New Zealand) local access services.

Broadband

Product dimension

310. In determining the product dimension of the market in which resold broadband services are supplied, the various products which may be regarded as substitutes for resale access are considered.
311. In the context of Decision 497, the Commission defined a product market for the provision of broadband internet access which encompassed internet services provided over a permanent high speed connection. This market included Digital Subscriber Line (DSL) services. Although Decision 497 largely related to business services, it also covered broadband internet access for residential customers.

312. There are a number of different platforms by which broadband access can be provided, including DSL, fibre, cable, satellite, fixed-wireless, and mobile technology. In its UBS determinations, the Commission concluded that DSL, cable, satellite, fibre and fixed wireless access (FWA) all fall within the same product market for broadband access, but excluded 3G mobile services.¹²⁰ The Commission considered that there was a significant degree of substitutability between these technologies, and observed that consumers are for the most part indifferent to the method used to provide fixed broadband services.
313. In respect of 3G mobile services, the Commission considers that relatively high pricing for mobile broadband services, coupled with relatively low speeds compared to fixed-line broadband, limit their substitutability for the services relevant to this Investigation.
314. According to Telecom's website, the standard monthly price of the 'Mobile Broadband 2GB' plan is \$61.06¹²¹, and the charge for an additional 2GB is \$29.95.¹²² The standard monthly price for 'Mobile Broadband 4GB' is \$81.51, with the charge for an additional 4GB being \$29.95.¹²³
315. Telecom's pricing for its residential fixed-line broadband plans (based on ADSL2+ technology) is set out in Table 4 below.

Table 4: Telecom fixed-line broadband plans

Plan	Data allowance	Monthly price
Go	3GB	\$41.00
Explorer	10GB	\$51.00
Adventure	20GB	\$61.00
Pro	40GB	\$81.00

Source: Telecom (2010)¹²⁴

316. Compared to its mobile broadband plans, Telecom's fixed-line broadband plans include more data at lower monthly prices, and also enable higher speeds. By way of comparison, it would cost \$111.46 per month for 8GB of mobile broadband data, and \$51.00 for 10GB of fixed-line broadband data.
317. As the Commission noted in Decision 568:¹²⁵
- Some of the pricing differential discussed above is likely to reflect a premium for the mobility feature of a mobile broadband service. However, this pricing differential is significant, and in the face of an increase in the price of a fixed broadband service, it is unlikely that a significant proportion of customers would value mobility sufficiently to switch services.
318. Vodafone submitted that mobile and fixed services are increasing competitive with each other, and are increasingly treated as substitutes by customers.¹²⁶ However, in relation to

¹²⁰ Commerce Commission, *Determination on the application for determination for access to and interconnection with Telecom's fixed PDN service 'Bitstream Access'* (Decision 568), 20 December 2005.

¹²¹ Or \$49.95 on a 24 month contract term for customers who also purchase a fixed broadband service from Telecom.

¹²² See <http://www.telecom.co.nz/mobile/mobilebroadband/plansandpricing/monthly>

¹²³ The Commission notes that Vodafone's pricing of mobile broadband services is very similar to that of Telecom.

¹²⁴ <https://www.telecom.co.nz/broadband/select/1,10627,205728-204466,00.html>

¹²⁵ Commerce Commission, Decision No. 568: *Determination on the application for determination for access to and interconnection with Telecom's fixed PDN service 'Bitstream Access'*, p 20, paragraph 99.

¹²⁶ Vodafone, *Submission on resale draft report*, 23 September 2010, p4-5.

substitutability between fixed-line and 3G mobile broadband services, Ofcom has previously stated that:¹²⁷

...mobile broadband is largely seen as complementary to existing fixed broadband access, in the sense that mobile customers also purchase fixed access, rather than as a substitute: 75% of those with a mobile broadband connection also have a fixed-line connection. This is likely to be a result of constraints associated with the speed and capacity of mobile broadband, making it less appropriate for in-home use where users may be more inclined to use data-hungry services...

319. The Commission notes that although speeds continue to increase as technology upgrades occur, the speeds available over fixed line networks generally remain significantly higher than those available on mobile networks. Significantly, the data caps available on mobile broadband plans tend to be substantially lower than data caps offered via fixed-line broadband connections.¹²⁸ This is likely to limit substitutability between fixed and mobile broadband services, given that, as noted by Ofcom, in-home users may be more inclined to use data hungry services.
320. A number of providers, including Farmside and Wireless Nation offer satellite broadband services in New Zealand. A summary of the plans offered by these providers is included in Table 5 and Table 6 below.

Table 5: Farmside Webconnect Satellite Broadband Plans

Plan	Speed	Data cap	Monthly price
Lite	512kbps down / 256kbps up	500 MB	\$59.00+GST
Regular	1Mbps down / 256 kbps up	1 GB	\$89.00+GST
Plus	2Mbps down / 512 kbps up	2 GB	\$109.00+GST
Pro	FS/FS	5 GB	\$199.00+GST

Source: Farmside (2010)¹²⁹

Table 6 Wireless Nation Satellite Broadband Plans

Plan	Data cap	Monthly price
Express (512/128kbps)	1 GB	\$69+GST
	2 GB	\$89+GST
	3 GB	\$109+GST
	5 GB	\$149+GST
	7 GB	\$179+GST
	10 GB	\$219+GST
	15GB	\$259+GST
Swift (1024/256kbps)	1 GB	\$99+GST
	2 GB	\$129+GST
	3 GB	\$149+GST

¹²⁷ Ofcom, *Review of the wholesale broadband access markets: Consultation on market definition, market power determinations and remedies*, 23 March 2010, p 30, paragraph 3.106.

¹²⁸ The standard mobile broadband offers from Vodafone and Telecom have either a 2GB or a 4GB data cap, while mobile broadband data packs offered by 2degrees have 512MB (\$20), 2GB (\$50) and 10GB (\$150) data caps. In comparison, most ISPs in New Zealand offer fixed-line broadband connections with data caps in excess of 30GB. For example, Telecom's "Pro" DSL plan has a 40GB data cap at a price of \$81.00 per month.

¹²⁹ <http://www.farmside.co.nz/satellite.html>

	5 GB	\$179+GST
	7 GB	\$219+GST
	10 GB	\$239+GST
	15GB	\$289+GST

Source: Wireless Nation (2010)¹³⁰

321. The speeds available on fixed broadband networks have increased significantly since the Commission's earlier UBS determinations, with the introduction of new DSL and cable technologies (for example, ADSL2+, VDSL2, and DOCSIS 3). At the same time, data caps have also increased and prices have generally declined.
322. Compared to fixed-line broadband services, satellite offers a relatively low speed, low data cap, and high priced alternative. The main advantage of satellite is that it is able to provide nationwide coverage. Accordingly, this form of broadband access is most commonly used in rural areas where fixed-line broadband is unavailable.
323. The Commission considers that the significant pricing differential between satellite and fixed-line broadband services (such as DSL and cable) is likely to limit degree of substitutability between these technologies. The Commission does not consider that satellite technology falls within this market.
324. Woosh is the main provider of fixed-wireless broadband services in New Zealand. However, the Commission has previously noted that limitations of fixed-wireless technology restrict its role as a competitive platform for broadband internet access.¹³¹
325. Woosh's TDD-CDMA wireless network is not assessed in the Commission's broadband performance monitoring due to limitations in its technical capability. The broadband performance monitoring report for Q1 2008 stated (emphasis added):¹³²

Woosh is targeting users more interested in mobility than high-speed access because of limitations in the technical capability of its fixed wireless technology, and therefore no longer attempts to directly compete with DSL providers... For the purposes of this report, therefore, Woosh's fixed wireless performance has not been compared individually with DSL-based ISPs...

326. As a result of these technical limitations, the Commission considers that fixed-wireless technology does not form part of the relevant market.
327. The Commission's view is that the relevant product market is that for broadband access, provided over copper, cable and fibre (but excluding fixed-wireless, satellite and 3G mobile services).

Geographic dimension

328. In Decision 497, the Commission distinguished between metropolitan and non-metropolitan areas for both business and residential customers of broadband internet access. The Commission considered that it was appropriate to define the boundaries according to the same distance rule applied to the local access market, as broadband

¹³⁰ http://www.wirelessnation.co.nz/services_satbb2.php

¹³¹ Commerce Commission, Decision No. 568: *Determination on the application for determination for access to an interconnection with Telecom's fixed PDN service 'Bitstream Access'*, 20 December 2005, p 29, paragraph 145.

¹³² Epitiro/IDC, *Report for the Commerce Commission on New Zealand Broadband Performance*, Q1 2008, Pages 9-10.

internet services tend to be delivered across telephone lines. The Commission noted that broadband internet access is also supplied by way of wireless technologies, but in the absence of specific information on the economics of extending wireless networks, decided to adopt the same approach as for the local access market.

329. After Decision 497 was released, the Commission assessed the broadband internet access market in the context of the TelstraClear UBS decision. In that determination, the Commission placed weight on Telecom's national retail broadband pricing policy in concluding that there is a national market for the provision of broadband access.
330. In the context of this Investigation, the Commission notes that the regulated unbundled bitstream access (UBA) service is supplied at a functional level upstream from resold broadband. The UBA service is available on a nationwide basis and is able to be used as an alternative to resold broadband.
331. Uptake of resale and bitstream services across Auckland, Wellington, Christchurch and the rest of New Zealand is set out in Table 7 below. There is a very small take-up of Telecom's resold broadband service (WBS) and there is little variation in take-up between geographic regions. Across New Zealand, resold broadband connections comprise 2.2% of total wholesale broadband connections.

Table 7: Telecom wholesale broadband lines as at 30 June 2009

	Number of resale connections	Number of bitstream connections	Total wholesale connections	Resale connections as % of total
Auckland	[] TRI	[] TRI	[] TRI	[] TRI
Wellington	[] TRI	[] TRI	[] TRI	[] TRI
Christchurch	[] TRI	[] TRI	[] TRI	[] TRI
Rest of NZ	[] TRI	[] TRI	[] TRI	[] TRI
Total	[] TRI	[] TRI	[] TRI	2.2%

Source: Telecom resale data response

332. The Commission considers that bitstream provides a viable upstream alternative to resale on a nationwide basis. The data in Table 7 suggests that the competitive conditions regarding resold broadband are relatively homogenous across the country, due to the nationwide availability of the competing bitstream services.
333. Further, the Commission notes that Telecom's stand-alone retail broadband services are priced uniformly on a nationwide basis, which is indicative of a national market.¹³³
334. Telecom's Total Home plans, which bundle monthly landline rental, toll calling and broadband services are offered at a reduced price in Auckland, Wellington and Christchurch. The price of Total Home is \$102 in Auckland, Wellington and Christchurch, compared to \$112 for the rest of New Zealand.¹³⁴ However, the Commission notes that this geographic discount corresponds with those areas where Telecom has lowered its stand-alone monthly line rental (see Table 3 above), as opposed to broadband services, which are priced uniformly across the country.

¹³³ See Table 4 above for details of Telecom's retail broadband plans.

¹³⁴ See <http://www.telecom.co.nz/totalhomepackages>

335. The Commission considers that the national pricing of Telecom's stand-alone broadband services, and evidence that bitstream is being used in preference to resold broadband on a nationwide basis, indicate that the competitive dynamics in the market for wholesale broadband access are relatively homogenous throughout New Zealand. This supports the use of a national market.
336. Accordingly, the Commission's view is that a national market for the provision of broadband access is appropriate for the purposes of this Investigation.

Functional dimension

337. For the reasons outlined in paragraphs 299 to 301, the Commission considers that the relevant functional dimension of the market in which the Resale Services are supplied is the wholesale level. Although the availability of resale services is expected to impact competition in retail markets, the Commission has focussed on wholesale markets for the purposes of this Investigation.
338. As with local access services, the Commission's view is that resold broadband services and unbundled local loops fall in separate functional markets. This is primarily due to the substantial investment required by an access seeker to shift from using a resale service to the UCLL service in order to deliver retail broadband services.
339. This is consistent with the view expressed by the European Commission, which noted that an operator purchasing wholesale broadband access will not consider unbundled local loops to be a substitute.¹³⁵ This is because the use of wholesale broadband services would require that the "DSL technologies or equivalents used over the loops were compatible at every level of the network". In addition, the European Commission stated that (emphasis added):

...it is questionable as to whether an entrant using wholesale broadband access to deliver service to the final user market could easily switch to using unbundled local loops to provide an equivalent service. From a demand perspective, a wholesale provider using wholesale broadband access will only consider unbundled local loops a substitute if the wholesale broadband access operator has all the other network elements needed to self provide an equivalent service. The supply substitution possibilities depend on the same condition. **It is clear therefore that unbundled local loops and wholesale broadband access constitute distinct markets.**

340. Although the Commission considers resale and UCLL to be in separate functional markets, resale broadband and bitstream services have similar functional characteristics. As outlined in Table 7 above, there is significant take-up of bitstream services in New Zealand, but very limited take-up of resale broadband.
341. This view was supported by submissions from the industry prior to commencement of this Investigation. For example, Kordia submitted that:¹³⁶

The regulated basic UBA has largely superseded the WBS. Kordia does not believe there is a need to continue to regulate WBS.

¹³⁵ European Commission, Commission recommendation on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the council on a common regulatory framework for electronic communication networks and services. 17 December 2007.

¹³⁶ Kordia, *Review of resale services under schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 1.

342. Similarly, Vodafone submitted that:¹³⁷

The impact of withdrawing WBS would be negligible as valid alternatives exist in UBS/UBA and UCLL.

343. This suggests that bitstream is an economic substitute for resold broadband, and therefore, can be considered to be in the same functional market.

Customer dimension

344. Resale Services are wholesale services purchased by access seekers in order to deliver retail services. The Commission considers that a business or residential split is irrelevant to the wholesale market as the wholesale inputs used to deliver internet-grade broadband services are unlikely to vary significantly between residential and business customers.

Conclusion on market for broadband services

345. The Commission's view is that a national market for the provision of wholesale broadband access is relevant to this Investigation.

Data

Product dimension

346. In Decision 497, the Commission defined a market for higher speed data services delivered to business customers. Included within this market were Digital Data Services (DDS), Frame Relay, ATM and Megalink services. DDS, for example, is a dedicated service that provides end-to-end connections between customer premises.

347. The Commission's view is that the product dimension of business-grade¹³⁸ data services remains appropriate for the purposes of this Investigation.

Geographic dimension

348. In Decision 497, the Commission defined separate retail data markets for business customers in metropolitan and non-metropolitan areas. The Commission considered that this approach reflected the level of network competition emerging in certain areas, and was consistent with the geographic de-averaging of data prices, whereby Telecom draws a distinction between CBD and non-CBD areas.¹³⁹

349. In Decision 497, the Commission defined the boundaries of the metropolitan wholesale data market according to the same rule as that used for the local access markets, namely with reference to a 200 metre rule boundary around competing network infrastructure. The Commission decided that the metropolitan data market should not be defined by reference to wireless networks. The Commission considered that these technologies were

¹³⁷ Vodafone, *Submission on the proposed review of the designated access services under the Telecommunications Act 2001*, 15 May 2009, p 5.

¹³⁸ The data services market includes wholesale inputs that are used to service businesses customers at the retail level.

¹³⁹ Decision 497, paragraph 233.

better suited to delivering lower grade internet services and not secure high-speed data services.¹⁴⁰

350. As noted in paragraph 297 above, the Commission has not attempted to identify precise market boundaries using distance rules from competing infrastructure for the purposes of this investigation, but rather has defined markets in a way that captures the main differences between ‘metropolitan’ and ‘non-metropolitan’ areas, in terms of where competing infrastructure is located.
351. The Commission considers that the geographic dimension in relation to wholesale data services markets should consist of separate metropolitan (Auckland, Christchurch and Wellington) and non-metropolitan (rest of New Zealand) geographic areas.

Functional dimension

352. For the reasons outlined in paragraphs 299 to 301, the Commission considers that the relevant functional dimension of the market in which the Resale Services are supplied is the wholesale level. Although the availability of resale services is expected to impact competition in retail markets, the Commission has focussed on wholesale markets for the purposes of this Investigation.

Customer dimension

353. The Commission notes that data services are generally dedicated, high-quality services, designed to meet the needs of business customers.
354. The services that fall within the wholesale data services market are only supplied for the purpose of serving retail business customers. The Commission did not distinguish between types of business customers for the purposes of Decision 497 as there did not appear to be evidence of price discrimination between SMEs and corporates.

Conclusion on market for data services

355. The Commission’s view is that the following markets are relevant to this investigation:
- the wholesale market for metropolitan (Auckland, Wellington and Christchurch) data services; and
 - the wholesale market for non-metropolitan (rest of New Zealand) data services.

¹⁴⁰ Decision 497, p 57, paragraphs 237-243.

APPENDIX 3: COMPETITION ASSESSMENT

Approach to competition assessment in this Resale Services investigation

356. The factors that the Commission generally considers to be pertinent to the assessment of whether competition in a market is limited are listed below:¹⁴¹

Existing Competition:

- the number and relative size of competitors in the market, including where possible an assessment of trends in shares over time;
- the extent to which there is product differentiation;
- the degree to which competitors engage in independent rivalry;
- the degree of vertical integration;
- the absence of barriers to customer switching;
- the movement in prices over time, and any evidence of their broad relationship to underlying costs; and
- evidence that the access provider is acting inefficiently or achieving excess returns.

Potential Competition:

- the potential for entry and the significance of any barriers to entry and expansion that may exist, and evidence of recent entry and/or expansion;
- the movement in prices over time, and any evidence of their broad relationship to underlying costs; and
- evidence that the access provider is acting inefficiently or achieving excess returns.

Local access services

Overview of local access services

357. There are at least eight competitors that provide retail local access services. The main participants are Telecom, TelstraClear, CallPlus, WorldxChange, Vodafone, Woosh, Orcon and Compass, along with a number of other smaller operators.

358. There were approximately 1.9 million activated lines in New Zealand as at 30 June 2009. Retail local access market shares, based on both activated lines and revenues, are displayed in Table 8 below.

¹⁴¹ See Commerce Commission, *Decision No. 497: Determination on the TelstraClear Application for Determination for "Wholesale" Designated Access Services*, 12 May 2003.

Table 8: Retail local access market shares¹⁴²

	Jun-07	Jun-08	Jun-09
<i>By activated lines:</i>			
Telecom	85%	81%	76%
Vodafone	[] VRI	[] VRI	[] VRI
TelstraClear	[] TCLRI	[] TCLRI	[] TCLRI
CallPlus	[] CPRI	[] CPRI	[] CPRI
Orcon	[] ORI	[] ORI	[] ORI
<i>By revenues:</i>			
Telecom	92%	89%	86%
Vodafone	[] VRI	[] VRI	[] VRI
TelstraClear	[] TCLRI	[] TCLRI	[] TCLRI
CallPlus	[] CPRI	[] CPRI	[] CPRI
Orcon	[] ORI	[] ORI	[] ORI

Source: Resale investigation data responses

359. Although Telecom's market share has been decreasing in recent years, it continues to be the dominant supplier of local access and calling services in New Zealand, with a market share of approximately 76% based on activated lines, and 86% based on revenues.
360. Telecom owns and controls the underlying infrastructure by which the majority of fixed-line voice services are provided to end-users in New Zealand. Currently, end-users can be supplied with retail local access services in five main ways:
- by Telecom Retail directly;
 - by a competitor building its own network (e.g. TelstraClear in Wellington, Christchurch and Kapiti);
 - by an access seeker acquiring UCLL from Chorus, and deploying its own equipment in local exchanges;
 - by an access seeker acquiring resale services from Telecom Wholesale; and
 - by an access seeker acquiring wholesale services from a UCLL operator.
361. Table 9 summarises the breakdown of local access lines in New Zealand for 2007 to 2009. This shows that Telecom accounted for the vast majority of local access lines (approximately [] RI) as at June 2009 (including retail and wholesale lines).

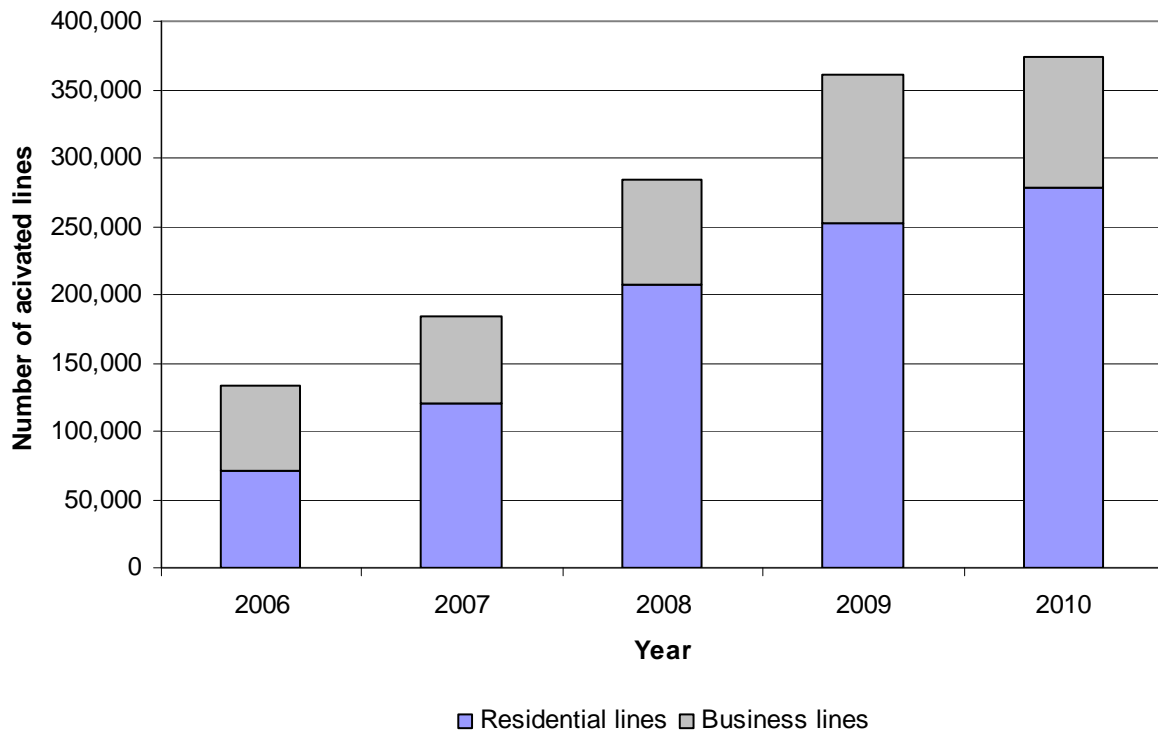
¹⁴² These markets shares are estimated based on responses from Telecom, Vodafone, TelstraClear, CallPlus and Orcon only. As the Commission did not receive information from all suppliers of local access services, Telecom's market share may be overstated. WorldxChange's (WxC) voice services are all IP-based and were not categorised as "local access and calling" services in its data response.

Table 9: Local access lines in New Zealand

	Jun-07	Jun-08	Jun-09
<u>Telecom:</u>			
Telecom Retail	1,634,658	1,535,245	1,405,743
Resale	183,522	284,205	361,199
Total Telecom Lines	1,818,180	1,819,450	1,766,942
UCLL	0	3,000	37,000
Facilities-based (e.g. Cable)	[]RI	[]RI	[]RI
Total	[]RI	[]RI	[]RI
Telecom lines as % of total	[]RI	[]RI	[]RI

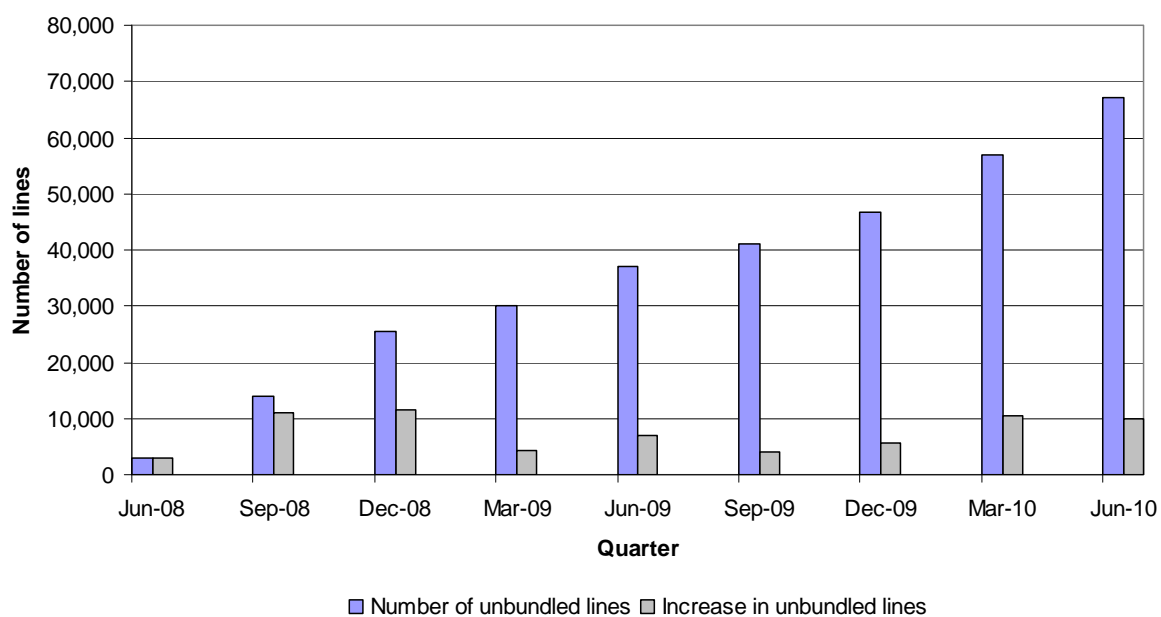
Source: Resale investigation data responses, Telecom Quarterly Report (Q3 2010)

362. The majority of retail local access lines sold by Telecom's competitors are based on resale access to Telecom's fixed lines. The information in Table 9 indicates that, as at June 2009, non-Telecom competitors supplied []RI retail lines. Of this total, resold local access lines accounted for approximately []RI, with pure facilities-based competition accounting for a further []RI, and UCLL for approximately []RI. Importantly, between 2007 and 2009, the number of retail lines supplied by service providers other than Telecom increased by []RI, and a significant majority of this growth was due to resale.
363. The number of resold local access services in New Zealand from 2006 to 2010 is depicted in Figure 3 below. As at 30 June 2010 there were approximately 374,000 resold residential and business lines supplied by Telecom. The number of resold lines in New Zealand increased by 180 per cent from June 2006 to June 2010.

Figure 3: Resold local access services (June 2006 – June 2010)

Source: Telecom resale data response

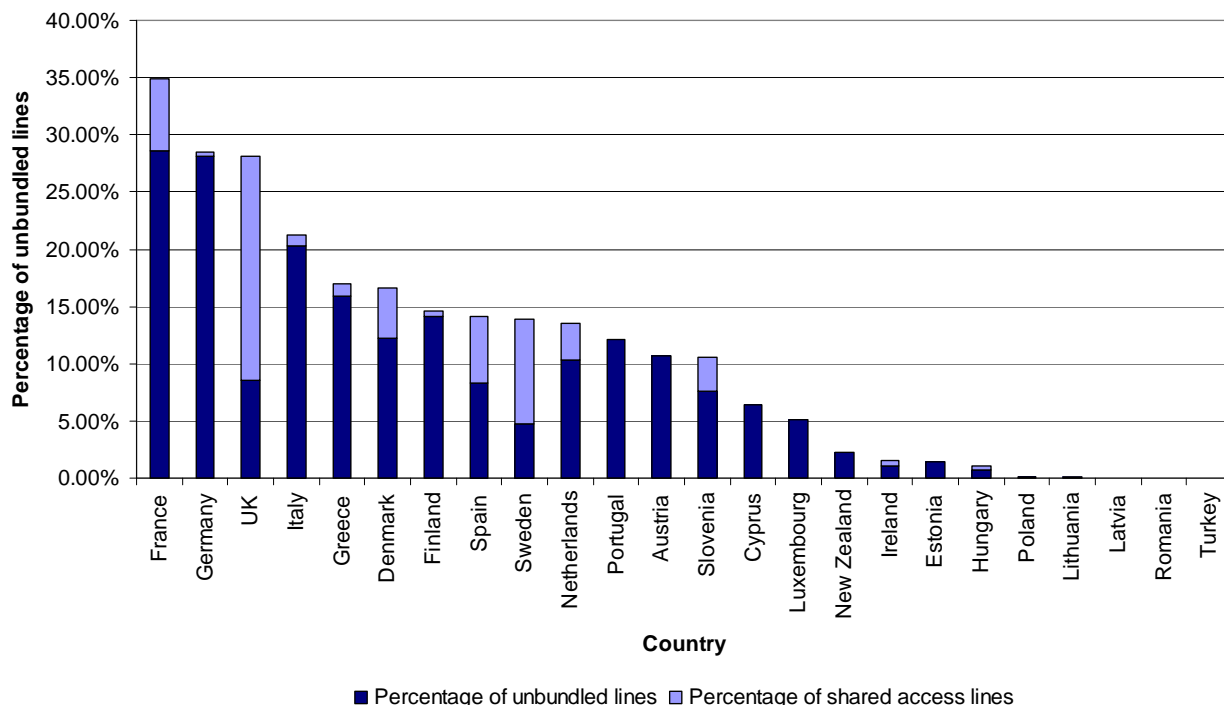
364. Uptake of resold local access services has continued to increase steadily in recent years despite the introduction of local loop unbundling in New Zealand. The number of unbundled lines in New Zealand from June 2008 to June 2010 is shown in Figure 4 below. There were approximately 67,000 unbundled lines in New Zealand as at 30 June 2010 (3.8 percent of total Telecom access lines).

Figure 4: Unbundled lines in New Zealand

Source: Telecom quarterly report (Q3 2010)

365. Local loop unbundling was introduced in New Zealand in November 2007. Since that time, the take-up of unbundled lines (through the UCLL service) has occurred primarily in the larger cities (especially Auckland). However, in the smaller centres (covered by the non-metropolitan regions defined in this investigation), there is little take-up of the UCLL service.
366. As outlined in Figure 5 below, the level of local loop unbundling in New Zealand is low compared to a number of overseas jurisdictions.¹⁴³ This is because local loop unbundling has been available in New Zealand for less than three years (however the level of uptake is greater than observed in most jurisdictions at a similar stage). The figure below uses data for New Zealand from September 2009, when there were 41,000 unbundled lines in New Zealand, representing approximately 2.3 percent of the total number of Telecom lines (as noted in paragraph 364, this number rose to 67,000 by 30 June 2010).

Figure 5: Percentage of unbundled lines as at 30 September 2009¹⁴⁴



Source: ECTA Broadband Scorecard (Q3 2009), NZ data from Telecom Quarterly Report

Wholesale market for non-metropolitan local access services

367. In this section the Commission outlines its views regarding competition in the wholesale market for local access services in areas outside of Auckland, Wellington and Christchurch.

¹⁴³ A shared access line enables a competitor to use the high frequency part of the phone line to provide DSL services using its own equipment, while the incumbent continues to provide the PSTN voice service.

¹⁴⁴ Note: Bulgaria, Slovakia and Malta are excluded as there are no unbundled lines in these countries. Belgium and Czech Republic are excluded because the total number of incumbent access lines was not reported.

Existing competition

368. There continues to be a lack of infrastructure (or full facilities-based competition) in relation to the delivery of telecommunications services to end-users in most areas of New Zealand. Facilities-based competition is limited to pockets of the country and Telecom remains the only telecommunications provider of fixed services in New Zealand that has a ubiquitous network.
369. Competing infrastructure has been deployed in densely populated metropolitan areas where network operators are able to achieve sufficient scale in order to make the investment in fixed-line telecommunications networks viable. For example, TelstraClear has competing network infrastructure to deliver retail local access services, but primarily in the Wellington and Christchurch regions. TelstraClear also has limited infrastructure in the central business districts of Auckland and a number of smaller provincial centres.
370. In non-metropolitan areas there is very little infrastructure-based competition. As indicated in Table 10 below, Telecom's market share (including retail and wholesale lines) in non-metropolitan areas is approximately 98%.

Table 10: Activated local access lines in non-metropolitan areas

	Jun-07	Jun-08	Jun-09
<i>Telecom</i>			
Telecom Retail	[] TRI	[] TRI	[] TRI
Telecom Wholesale (resale)	[] TRI	[] TRI	[] TRI
Telecom total	[] TRI	[] TRI	[] TRI
<i>Facilities-based (including UCLL)</i>			
Vodafone	[] VRI	[] VRI	[] VRI
TelstraClear	[] TCLRI	[] TCLRI	[] TCLRI
CallPlus	[] CPRI	[] CPRI	[] CPRI
Facilities-based total	[] RI	[] RI	[] RI
Overall total	[] RI	[] RI	[] RI
Telecom lines as a % of total	97.9%	97.9%	97.8%

Source: Resale data responses

371. Due to the lack of infrastructure-based competition, competing network operators require wholesale access to Telecom's ubiquitous network in order to provide retail services in non-metropolitan areas.
372. The two wholesale options currently available to access seekers for delivering local access services are UCLL and resale. As UCLL requires an access seeker to invest in its own infrastructure in order to deliver services, this form of competition is subject to similar constraints as full facilities-based networks. In particular, an access seeker needs to be able to achieve sufficient scale in order to make UCLL deployment viable. As a result UCLL is concentrated in densely populated metropolitan areas.

373. At present, the vast majority of local loop unbundling has occurred in the Auckland region. This is highlighted in Figure 6 below.

Figure 6: Regional UCLL Breakdown (August 2010)

COI

Source: Chorus (August 2010)

374. Telecom's quarterly report for the period ended 30 June 2010 noted that there were 77 unbundled exchanges and 67,000 unbundled lines in New Zealand. As at 30 July 2010 approximately 85% of unbundled lines were located in the Auckland region.
375. Uptake of resold local access services in non-metropolitan areas (rest of NZ) remains significant, and has been increasing in recent years. This is demonstrated in Table 11 below.

Table 11: Number of resold activated lines by geographic region (June 2006-2009)

	Jun-06	Jun-07	Jun-08	Jun-09
Auckland	[] TRI	[] TRI	[] TRI	[] TRI
Wellington	[] TRI	[] TRI	[] TRI	[] TRI
Christchurch	[] TRI	[] TRI	[] TRI	[] TRI
Rest of NZ	[] TRI	[] TRI	[] TRI	[] TRI
Total	133,612	183,522	284,205	361,199

Source: Resale data responses

376. As at 30 June 2009, there were [] TRI resold local access lines in non-metropolitan areas. Resale has been the main source of competition for Telecom in non-metropolitan areas, with resale representing [] TRI of all retail lines supplied by Telecom's competitors in these areas in 2009. The number of resold local access lines in non-metropolitan areas grew by 150% over the 2006 to 2009 period.
377. Telecom has previously accepted that it faces limited competition in non-metropolitan areas. In the context of Decision 525, Telecom accepted that it faced limited competition outside of those areas where TelstraClear had rolled out its network. Telecom stated that it:¹⁴⁵
- ...accepts that competition is limited in both the non-networked metropolitan market and the non-metropolitan market and that wholesaling of services (which otherwise satisfy the requirements of the Act for wholesaling) is required in these markets.
378. Similarly, Telecom accepted that it faced limited competition in the non-metropolitan business access market during Decision 497.¹⁴⁶
379. The Commission considers that there have been no changes in non-metropolitan areas since Telecom's previous statements that would alter this conclusion. Although UCLL has been introduced since that time, there is limited uptake of unbundled lines outside of Auckland.

¹⁴⁵ Telecom, *Residential Wholesale Application Submission from Telecom*, 7 March 2003, paragraph (j).

¹⁴⁶ Commerce Commission, Decision No. 497: *Determination on the TelstraClear Application for Determination for "Wholesale" Designated Access Services*, p 86, paragraphs 383 to 384.

Potential competition

380. The telecommunications industry is generally characterised by a number of functional levels through which retail telecommunications services are supplied to end-users. At the upstream level, the establishment of fixed-line telecommunications networks requires significant initial investment, through the digging of trenches and laying of cables. These facilities are then used to supply a range of downstream services to wholesale and retail customers.
381. The substantial initial investment in fixed-line telecommunications networks can give rise to significant barriers to entry and expansion. In particular, this is due to the sunk nature of the investments and the presence of economies of scale and scope.
382. The initial investments required to deploy telecommunications networks tend to be long-lived, irreversible and specific. Once capital is committed to deploying a network, the network can sometimes have little or no value in its next best use. As the Commission has previously noted:¹⁴⁷

Sunk investments may provide an incumbent with absolute cost advantages and may act as a deterrent to other parties intending to replicate large parts of the network.

The need to recover the costs derived from the initial investments may lead incumbents to respond, or threaten to respond, aggressively to potential competitors, which may act as a barrier to entry. It will also act as a barrier to exit, as exit from the market is not costless.

383. In relation to the presence of economies of scale and scope, the Commission has noted that:¹⁴⁸

The presence of significant fixed and common costs in a telecommunications network, combined with a low incremental cost of serving an additional customer, indicates the presence of economies of scale and scope which may deter its large-scale replication. These characteristics will tend to limit the extent to which network competition can be sustained, and tend to be most evident in the access part of a telecommunications network.

384. Given the high level of fixed costs in an access network, increasing the number of subscribers or traffic reduces unit costs. Unless a new entrant is able to capture a significant share of the market, it is likely to operate at a higher unit cost, and this is likely to limit the prospect of new entry.
385. Local loop unbundling enables access seekers to locate their own equipment in the incumbent's local exchange, lease the local loop (the twisted copper pair from the exchange to the customer's premises) and, after connecting the local exchange to their own network, provide fixed-line services (voice and/or DSL broadband) to end-users. The introduction of local loop unbundling in New Zealand has reduced the need for Telecom's competitors to replicate the access network.
386. However, as noted above, UCLL deployment is limited to areas where access seekers are able to achieve the scale required in order to make a reasonable return on investment. In the UCLL STD, the Commission set de-averaged prices for urban and non-urban areas.

¹⁴⁷ Commerce Commission, *A Guide to Regulatory Decision Making by the Commerce Commission for the Telecommunications Sector: Discussion paper*, 31 July 2009, p 9, paragraphs 27-28.

¹⁴⁸ Commerce Commission, *A Guide to Regulatory Decision Making by the Commerce Commission for the Telecommunications Sector: Discussion paper*, 31 July 2009, p 10, paragraph 31.

At present, there is limited unbundling in non-urban exchanges, where the monthly line rental is \$36.63 (compared to \$19.84 in urban areas). The Commission considers that there is little prospect of significant unbundling in non-urban exchanges in the near future.

387. In addition, cabinetisation impacts on the viability of unbundling. Telecom's cabinetisation plan involves rolling out 3,600 new cabinets and 2,500 km of new fibre by the end of 2011. By 3 May 2010, Chorus had rolled out 1,800 of these cabinets, connecting 340,000 customers¹⁴⁹. When rollout of cabinets is completed by the end of 2011, approximately 750,000 customers will be served by cabinetised lines. As there are currently around 1.9 million fixed-line connections in New Zealand, approximately 40% of these will be cabinetised by the end of next year.
388. While service providers are also able to install equipment in Telecom's cabinets in order to deliver voice and broadband services using regulated sub-loop unbundling (SLU), there has been no take-up of SLU. This is likely to be a result of the more challenging economics of SLU for an access seeker given the limited number of customers served off a cabinet.
389. A commercial sub-loop extension service (SLES)¹⁵⁰, is intended to enable voice services to be delivered to end-users via UCLL-based equipment located in Telecom's exchanges, but uptake is currently limited because of issues around taking SLES in conjunction with UBA. This is likely to adversely impact on the business case for local loop unbundling.
390. The Commission considers that the prospect of facilities-based and UCLL-based competition in non-metropolitan areas remains limited. Investment in competing infrastructure is extremely unlikely to be viable on a nationwide basis.

Commission's view

391. At present, there is very little infrastructure-based competition in non-metropolitan areas, and the Commission considers that the prospect of further entry in these areas is limited. Accordingly, the Commission's view is that Telecom is subject to limited competition in the wholesale market for non-metropolitan local access services.

Wholesale market for metropolitan local access services

392. In this section the Commission outlines its observations regarding competition in the market for wholesale local access services in Auckland, Wellington and Christchurch.

Existing competition

393. As outlined earlier, competing telecommunications infrastructure has been deployed in densely populated metropolitan areas, because these are the areas where network operators are able to achieve sufficient scale in order to make the investment in fixed-line telecommunications networks viable.

¹⁴⁹ Chorus, *Media release: Chorus' fibre roll-out hits halfway mark*, 3 May 2010.

¹⁵⁰ The Sub-loop Extension Service (SLES) provides access to the copper loop between Telecom's roadside cabinets and the associated local telephone exchanges. SLES enables access seekers to continue to deliver services they have developed based on their equipment located in the exchange (in accordance with the UCLL Co-location service) once an area has been cabinetised.

394. The wholesale market for metropolitan local access services is characterised by those areas where Telecom has reduced its monthly line rental in response to the competitive constraint provided by competing networks. These are the areas where competing infrastructure has been deployed, whether by UCLL operators (primarily in Auckland), or TelstraClear's network in Wellington and Christchurch.
395. Although Telecom faces increased competition in the wholesale market for metropolitan local access services (relative to the non-metropolitan market), its market share in these areas remains high. Telecom's market share (including retail and wholesale lines) was approximately 89% as at 30 June 2009. This is outlined in Table 12 below.

Table 12: Activated local access lines in metropolitan areas as at 30 June

	Jun-07	Jun-08	Jun-09
<i>Telecom</i>			
Telecom Retail	TRI	TRI	TRI
Telecom Wholesale (resale)	TRI	TRI	TRI
Telecom total	TRI	TRI	TRI
<i>Facilities-based (including UCLL)</i>			
Vodafone	VRI	VRI	VRI
TelstraClear	TCLRI	TCLRI	TCLRI
CallPlus	CPRI	CPRI	CPRI
Orcon	ORI	ORI	ORI
Facilities-based total	RI	RI	RI
Overall total	RI	RI	RI
Telecom share	92.6%	92.2%	89.4%

Source: Resale data responses

396. The fact that Telecom has reduced retail prices for local access services in Auckland, Wellington and Christchurch is indicative of competitive pressure in the metropolitan local access market. However, the Commission considers that the competitive conditions are likely to vary within the broad wholesale market for metropolitan local access services that has been defined.
397. For example, although Telecom has reduced its Homeline monthly rental in Auckland, only 57% of exchanges (43 out of a total of 75), and 10.5% of the approximately 548,000 lines¹⁵¹ in the Auckland region have actually been unbundled. The level of competition faced by Telecom is likely to be higher in respect of those exchanges that have been unbundled (particularly where there are multiple access seekers with equipment installed in a given exchange), compared to those that have not.
398. At present, resale is the only option for delivery of PSTN voice services in areas where an access seeker has not deployed its own infrastructure. In the absence of the availability of resold local access services in these areas, access seekers would need to invest in their

¹⁵¹ As at 31 July 2010.

own network infrastructure (either through UCLL or by deploying their own access network) in order to deliver retail local access services to end-users.

399. Furthermore, TelstraClear's network does not cover the entire Wellington and Christchurch metropolitan regions. When assessing the residential local access market in Decision 525, the Commission defined a market for residential local access services in *non-networked* metropolitan areas (metropolitan areas where TelstraClear does not have its own network)¹⁵². A distinction between networked and non-networked metropolitan markets has not been made for the purposes of this Investigation, given that the Commission is not setting the regulated terms for access to resale services in the context of a determination process¹⁵³. As noted in paragraph 297 above, the Commission has not attempted to identify precise market boundaries for the purposes of this investigation, but rather has defined markets in a way that captures the main differences between metropolitan and non-metropolitan areas, in terms of where competing infrastructure is located.
400. The Commission concluded in Decision 525 that Telecom faced limited competition in the market for residential local access services in non-networked metropolitan areas, as it was the only supplier in this market.¹⁵⁴ Telecom accepted that competition was limited in this market¹⁵⁵. The Commission considers that this conclusion is likely to remain valid for non-networked areas within Wellington and Christchurch.

Potential competition

401. Given the high level of fixed costs involved in the deployment of a telecommunications access network, the Commission considers local loop unbundling provides a more viable form of infrastructure-based competition than deployment of competing access networks (that are completely independent from Telecom). The higher density of customers in metropolitan areas (relative to non-metropolitan areas), combined with a lower urban UCLL monthly rental charge, is likely to improve the business case for local loop unbundling in metropolitan areas.
402. On 25 May 2010, Compass, Orcon and CallPlus (Slingshot) announced that an agreement had been reached to share their unbundled exchanges giving “consumers access to faster and potentially lower cost broadband services across more exchanges in more centres”.¹⁵⁶ In accordance with the agreement signed on Friday 21 May 2010, exchanges unbundled by each ISP will be offered to customers of the other two.
403. To date, CallPlus has unbundled eight exchanges in Hamilton, and Compass has unbundled two in Christchurch. Orcon has unbundled forty in Auckland and two exchanges in Wellington. In the media release regarding the joint venture between these parties, it was noted that “as many as 50 additional exchanges will be deployed this year

¹⁵² TelstraClear did not require a determination in respect of residential local access services in those metropolitan areas where TelstraClear operates its own residential network ('the networked metropolitan market'). Therefore, the Commission did not assess competition in this market for the purposes of Decision 525.

¹⁵³ In the context of a determination, for example, Decision 525, precise market boundaries have assisted parties to identify where the regulated service is available and at what price.

¹⁵⁴ Commerce Commission, Decision No. 525: *Determination on the TelstraClear Application for Determination for 'Residential Wholesale' Designated Access Services*: p 45-46, paragraphs 211-223.

¹⁵⁵ Telecom, *Residential Wholesale Application Submission from Telecom*, 7 March 2003, paragraph (j).

¹⁵⁶ Media release, *Telcos promise 'largest unbundled exchange network'*, 25 May 2010.

as a result of the agreement”.¹⁵⁷ The location of these “50 additional exchanges” is not stated in the media release. The Commission considers that many of these exchanges are likely to be located in metropolitan areas.

404. Consequently, increasing investment from third parties in exchanges (as shown in paragraph 403) strongly suggests that Telecom is likely to face increased UCLL-based competition in the near future with an impact on the metropolitan local access market.

Commission’s view

405. As noted in paragraph 297, the Commission has not attempted to identify precise geographic market boundaries in this Investigation, as it has done previously in the context of access determinations¹⁵⁸ (where such boundaries were explicitly defined, including a distinction between networked and non-networked areas).
406. Competitive conditions are likely to vary within the broad metropolitan market that has been defined for this Investigation. Telecom faces competition from alternative networks and the presence of unbundling in certain areas of this market, and has responded to this competition by reducing its monthly line rental in Auckland, Wellington and Christchurch. However, the intensity of competition is likely to be reduced in those areas within the metropolitan market where there is little or no competing infrastructure (for example, exchange service areas in Auckland that have not been unbundled and those areas in Wellington and Christchurch not covered by TelstraClear’s network).
407. For the purposes of this Investigation, the Commission’s view is that Telecom faces effective competition in the wholesale market for metropolitan local access services¹⁵⁹.

Broadband services

Overview of broadband services

408. There are a number of internet service providers competing in the retail market for broadband services. These include Telecom, Vodafone, TelstraClear, CallPlus, WorldxChange, and Orcon as well as a number of smaller suppliers.
409. Retail broadband services are supplied to end-users in New Zealand by six different methods:
- by Telecom Retail directly;
 - by competitors who have their own infrastructure (e.g. TelstraClear’s cable network in Wellington, Christchurch and Kapiti);
 - by access seekers who have installed their own equipment within local telephone exchanges in accordance with the UCLL service;
 - by access seekers using an unbundled bitstream service (i.e. UBS or UBA);

¹⁵⁷ Media release, *Telcos promise 'largest unbundled exchange network'*, 25 May 2010.

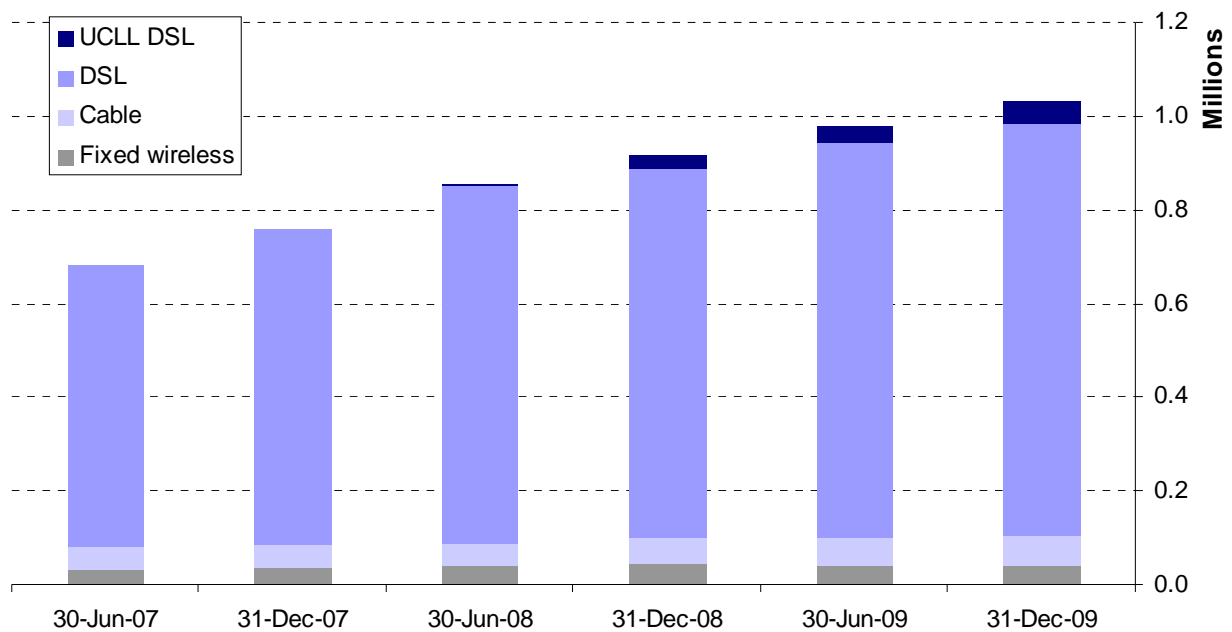
¹⁵⁸ For example, in Decisions 497 and 525.

¹⁵⁹ In the context of a determination process, it is likely that more precise geographic market boundaries would be required to identify those areas where the regulated service is available.

- by access seekers using Telecom's resale broadband product, wholesale broadband solutions (WBS); and
- by an access seeker acquiring wholesale services from a UCLL operator.

410. The total number of fixed broadband connections across all technologies was 1.03 million as at 31 December 2009 as shown in Figure 7 below. DSL is the dominant broadband access technology used in New Zealand, accounting for approximately 90 per cent of fixed broadband connections.

Figure 7: Fixed Broadband Connections by Technology



Source: Commerce Commission (2010)¹⁶⁰

411. The market shares of the main competitors in the retail broadband market are summarised in Table 13 below.

¹⁶⁰ Commerce Commission, *Annual telecommunications monitoring report 2009*, April 2010, p 19, figure 6.

Table 13: Retail broadband market shares¹⁶¹

	Jun-07	Jun-08	Jun-09
<i>By customers:</i>			
Telecom	74%	65%	61%
Vodafone	[] VRI	[] VRI	[] VRI
TelstraClear	[] TCLRI	[] TCLRI	[] TCLRI
CallPlus (Slingshot)	[] CPRI	[] CPRI	[] CPRI
WxC	[] WCRI	[] WCRI	[] WCRI
Orcon	[] ORI	[] ORI	[] ORI
<i>By revenues:</i>			
Telecom	64%	60%	56%
Vodafone	[] VRI	[] VRI	[] VRI
TelstraClear	[] TCLRI	[] TCLRI	[] TCLRI
CallPlus (Slingshot)	[] CPRI	[] CPRI	[] CPRI
WxC	[] WRI	[] WRI	[] WRI
Orcon	[] ORI	[] ORI	[] ORI

Source: Resale data request

412. Telecom remains the most prominent supplier of retail broadband services, with a market share of 61% based on customer connections and 56% based on revenues. However, competitors such as Vodafone, TelstraClear, WorldxChange, CallPlus and Orcon have been gaining market share in recent years.

National market for wholesale broadband access

Existing competition

413. In assessing the level of competition in the wholesale broadband access market, the Commission has considered the ability of competing broadband networks to constrain Telecom. As noted in the market definition section, competing network providers use a variety of platforms over which to supply broadband connections, including copper-based DSL, cable and fibre.
414. The majority of broadband connections are delivered via DSL technologies over Telecom's copper network. However, as noted earlier, TelstraClear operates a cable network in Wellington, Kapiti and Christchurch.
415. As with local access services, facilities-based entry in the broadband market is unlikely to be viable on a nationwide basis due to the significant initial investment that is required. Therefore, wholesale access to Telecom's ubiquitous network is required in order to enable access seekers to compete in the downstream retail market for broadband access.

¹⁶¹ These market shares are estimated based on responses from Telecom, Vodafone, TelstraClear, CallPlus, WorldxChange and Orcon only. As the Commission did not receive information from all suppliers of retail broadband services, Telecom's market share may be overstated.

416. There are a number of wholesale inputs available to access seekers in order to deliver retail broadband services. These include resale, bitstream and UCLL. A breakdown of broadband connections in New Zealand, including these wholesale inputs, is included in Table 14 below.

Table 14: Broadband connections in New Zealand

	Jun-07	Jun-08	Jun-09
Telecom			
Telecom Retail	441,111	507,500	550,978
Bitstream (UBS, UBA)	154,128	241,293	278,520
Resale (WBS)	[] TRI	[] TRI	[] TRI
Total Telecom Lines	[] TRI	[] TRI	[] TRI
UCLL	0	3,000	37,000
Facilities-based (e.g. TelstraClear)	[] RI	[] RI	[] RI
Total	[] RI	[] RI	[] RI
Telecom connections as a % of total	[] RI	[] RI	[] RI

Source: Resale data request

417. Despite the deployment of competing networks, the number of broadband connections on Telecom's network (retail plus wholesale) remains high. As at 30 June 2009, Telecom accounted for approximately [] RI of broadband connections in New Zealand.
418. Telecom's resale broadband service, Wholesale Broadband Solutions (WBS), is described in the Telecom Wholesale product profile as follows:¹⁶²

WBS is a high-speed asymmetric Internet grade connectivity service from an end-user's premises to the Internet. WBS plans are based on the Telecom retail Xtra Broadband plan but without the ISP services of a help desk, email, Domain Name System (DNS) and other ancillary services.

419. Uptake of resold broadband services is low, and has been decreasing in recent years. As at June 2009, resold broadband connections accounted for approximately [] RI of total broadband connections sold by Telecom's competitors at the retail level (down from [] RI in 2007). Over the period from 2006 to 2009 the number of resold broadband connections decreased by 62%, from [] TRI to [] TRI. Bitstream and UCLL services, on the other hand, have displayed steady increases in uptake in recent times. In June 2009, the bitstream services accounted for the majority of non-Telecom broadband connections.
420. The lack of demand for resold broadband may have led to Telecom Wholesale's recent decision to withdraw WBS. All of Telecom's WBS plans are due to be grandfathered to level three with effect from August 2010.¹⁶³ This means that access seekers will no longer be able to request provisioning for new end-users with a WBS service, but existing end-users will be able to keep their service. If an existing end-user moves they can still

¹⁶² Telecom Wholesale, *Product profile: Wholesale broadband solutions*, p 2.

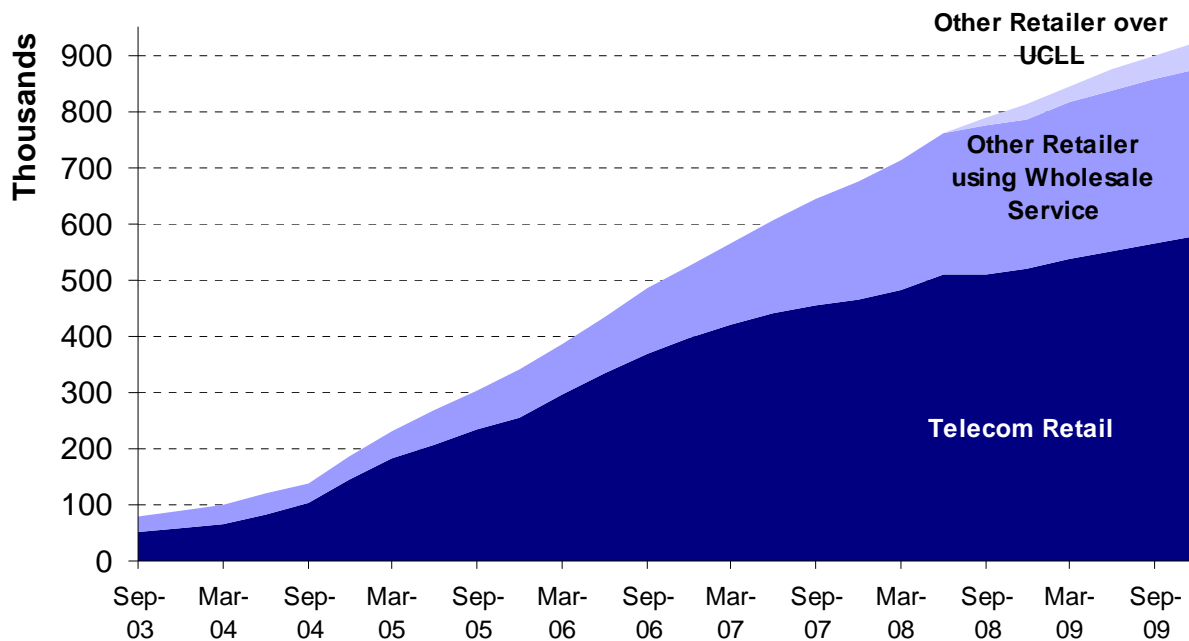
¹⁶³ Telecom Wholesale Informer, *Wholesale Broadband Solution (WBS) grandfathering*, 2 February 2010.

keep the service, and they are also able to order more instances of the service where equipment and capacity allow.

421. In terms of bitstream services, Telecom Wholesale offers a commercial bitstream service, UBS, as well as the regulated bitstream service, UBA. The regulated UBA service has two main variants: Basic UBA (BUBA) and Enhanced UBA (EUBA).
422. Both UBS and BUBA are wholesale access services which provide an access seeker with an internet-grade 'best efforts' bitstream service. UBS and BUBA enable an access seeker to offer its customers digital subscriber line enabled broadband internet services.
423. The UBA STD also provides for three 'enhanced' variants of the UBA service; a 40kbps enhanced variant, a 90kbps enhanced variant and a 180kbps enhanced variant.
424. Unlike the Basic UBA service which provides an internet-grade Class of Service (CoS) only, each Enhanced UBA service has two Classes of Service. Enhanced UBA services offer an internet-grade CoS and a real-time CoS, provided over a single internet connection. The real-time CoS has priority over the internet-grade CoS, and has tighter performance parameters¹⁶⁴. As a result, the Enhanced UBA services enable access seekers to provide a larger range of retail real-time products and allow greater flexibility in terms of the services they can support at the retail level.
425. UCLL enables operators to locate their own equipment in the Telecom's local exchange, lease the local loop (the twisted copper pair from the exchange to the customer's premises) and, after connecting the local exchange to their own network, provide either DSL broadband or DSL broadband and fixed voice services to end-users.
426. The advantage for an access seeker acquiring the local loop service rather than a bitstream access service is twofold. First, while access seekers incur a higher cost from having to undertake investment in equipment, provided they have enough customers, this higher cost is more than offset by the lower monthly charge they pay for local loop access compared to bitstream access.
427. In addition to the potential decrease in the cost of supplying services, the use of the local loop overseas has provided access seekers with the ability to supply enhanced and differentiated DSL broadband service to offer higher bandwidth to end users in the downstream retail broadband market. As an example, in the UK, access to UCLL has provided end users with new and innovative services such as Internet Protocol TV (IPTV).¹⁶⁵
428. Figure 8 illustrates the growth in Telecom's retail and wholesale DSL connections since late 2003. As at 31 December 2009, 296,000 DSL connections on Telecom's network were wholesale connections provided to competing retailers. This compares with 127,000 wholesale connections as at 31 December 2006.

¹⁶⁴ Commerce Commission, Decision No. 611: *Standard Terms Determination for the designated service Telecom's unbundled bitstream access*, p 32, paragraph 109.

¹⁶⁵ Ofcom, *Future Broadband: Policy Approach to Next Generation Access*, September 2007, page 50, available at http://www.ofcom.org.uk/consult/condocs/nga/future_broadband/nga.pdf, noted that in London, VNL (Homechoice) used the UCLL to offer Internet Protocol TV (IPTV) in 2003, yet British Telecom (BT) only developed a similar IPTV service a few years later.

Figure 8: DSL Retail and Wholesale Connections

Source: Commerce Commission (2010)¹⁶⁶

429. UBS accounts for the majority of wholesale DSL services sold in New Zealand. As at December 2009, UBS services made up 95 per cent of the 290,994 wholesale bitstream access services sold by Telecom, with only 13,835 basic and enhanced UBA services supplied. Access seekers have preferred to continue using the commercial UBS service rather than migrating to the new regulated UBA services.

Table 15: Broadband wholesale access services (December 2007 – December 2009)

Wholesale access services	Dec-07	Dec-08	Dec-09
UCLL	0	26,000	47,000
Bitstream			
- UBS	202,143	255,899	277,159
- Basic UBA	0	3,912	13,379
- Enhanced UBA	0	25	456
Resale (WBS)	[] TRI	[] TRI	[] TRI

Source: Sector monitoring data

430. There has been little demand for either the basic or enhanced UBA services introduced by the 2006 amendments to the Act. The main reason for this seems to be that access seekers have already invested in infrastructure to provide retail services using UBS (which is based on ATM) as the wholesale input. The transition costs of moving to the UBA service (which is an Ethernet-based service), appear to have caused there to be little take-up of UBA thus far.

¹⁶⁶ Commerce Commission, *Annual telecommunications monitoring report 2009*, April 2010, p 39, figure 25.

431. However, Telecom has indicated that UBS plans are being grandfathered to level 3 on 1 September 2010, grandfathered to level 1 on 31 December 2010, and withdrawn on 1 July 2011.¹⁶⁷ This will result in a complete migration from UBS to the UBA service.
432. Telecom Wholesale has committed to offering a commercial service 256/128 UBA service to allow retailers to continue to offer low-speed 'entry-level' broadband services. In the wholesale informer, Telecom noted that this offers "a low speed option for Basic UBA plans to help enable a seamless migration from UBS to UBA"¹⁶⁸.
433. There are some competing providers in the wholesale broadband market. Vodafone is wholesaling a Vodafone Bitstream Access (VBA) service in those areas that it has unbundled (the "red network"). On 22 September 2008, Vodafone announced that it had signed a partnership deal to give Slingshot wholesale access to its red network.¹⁶⁹ However, by definition, the competitive constraint provided by Vodafone's wholesale bitstream offering is limited in geographic coverage to those areas where Vodafone has unbundled.
434. Other providers also able to offer resale broadband services on the back of bitstream supplied by Telecom. TelstraClear is offering a virtual ISP (vISP) service by reselling bitstream services purchased from Telecom Wholesale. vISP is described on the TelstraClear Wholesale website as follows:¹⁷⁰

TelstraClear Wholesale vISP is suitable for a wide range of service providers seeking to offer ISP functionality to their customer base, without the expense and complication of building their own infrastructure...

TelstraClear Wholesale vISP provides you with broadband access services in areas where DSL is available using UBS.

Potential competition

435. The substantial initial investment in fixed-line telecommunications networks can give rise to significant barriers to entry and expansion due to the sunk nature of the investments and the presence of economies of scale and scope. Accordingly, the Commission considers that competing fixed networks are likely to remain geographically limited.
436. The deployment of fixed-wireless networks avoids some of the significant sunk costs associated with fixed-line networks, suggesting that the barriers are not as high for wireless entry. However, fixed-wireless networks suffer from limitations which restrict their ability to compete with fixed-line broadband services, such as DSL and cable. For example, the Commission has previously noted that:¹⁷¹

... the functionality and cost limitations of FWA technology will confine its role as a competitive platform for broadband internet access for the foreseeable future. Although FWA is currently deployed throughout parts of New Zealand, the advances in services being delivered over higher capacity fixed broadband infrastructure suggest that FWA is limited in its ability to act as a

¹⁶⁷ <http://www.telecomwholesale.co.nz/ubs>

¹⁶⁸ Telecom Wholesale Informer, *Launch of Basic UBA commercial low speed plan*, 3 December 2009.

¹⁶⁹ Vodafone, *Media release: New era in broadband for New Zealand*, 22 September 2008.

¹⁷⁰ TelstraClear, *Fact sheet: TelstraClear Wholesale VISP (Virtual ISP)*. See http://www.telstraclearwholesale.co.nz/assets/products/visp/tclw_VISP%20factsheet.pdf

¹⁷¹ Commerce Commission, Decision No. 568: *Determination on the application for determination for access to an interconnection with Telecom's fixed PDN service 'Bitstream Access'*, 20 December 2005, p 29, paragraph 145.

widespread constraint. As end-user applications demand more and more bandwidth over time, the economics of FWA may come under greater pressure.

437. The Commission has had regard to the impact of the Government's Ultra Fast Broadband (UFB) investment initiative but notes there is considerable uncertainty as to the final form of that initiative. UFB is a Government initiative to accelerate the roll-out of fibre-to-the-home to 75 percent of New Zealanders over ten years, with up to \$1.5 billion of public investment.
438. UFB has the potential to impact on further UCLL deployment. For example, TelstraClear submitted that:¹⁷²

...the Government's recent announcement that it will invest in wholesale FTTP networks, while providing potential network-based wholesale competition to Telecom, also raises the risk that further substantial investment by access seekers in DSLAMs on Telecom's copper network could be stranded.

439. As discussed in paragraph 387, cabinetisation also impacts on the viability of local loop unbundling. UCLL-based access seekers are unable to deliver DSL broadband services to cabinetised lines using exchange-based equipment. Although sub-loop unbundling is available to be used to provide broadband services to these customers, as yet there is no uptake of this service.
440. Given that the economics of sub-loop unbundling appear to be challenging from an access seekers perspective, and the geographic coverage of competing networks is limited in scope, wholesale access to Telecom's ubiquitous fixed-line network is likely to continue to be required in order to facilitate entry into the retail broadband market.
441. There is very little uptake of Telecom's resold broadband service (WBS), and availability to new customers is to be withdrawn in August 2010. This is in contrast to bitstream services offered by Telecom Wholesale, which have seen significant take-up.
442. The regulated UBA service is currently available on a nationwide basis and could be used to facilitate entry into the retail broadband market. Although there is limited uptake of UBA at the present time, this is expected to change in 2011 when Telecom's commercial UBS service is withdrawn.
443. The apparent lack of demand for resold broadband indicates that bitstream access provides a suitable entry-level product in order to enable access seekers to deliver retail broadband services. This suggests future entry into the retail market will not be constrained in the absence of resold broadband services being offered by Telecom Wholesale, as long as suitable access at the bitstream (or deeper) level remains available.

Commission's view

444. There are number of competing suppliers of broadband access in New Zealand, using a range of technologies. Telecom ubiquitous copper network is used to deliver DSL services and there are also competing cable and fibre networks in certain regions.

¹⁷² TelstraClear, *Submission on potential review of resale services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 3, paragraph 3.

445. Despite competition from these networks, Telecom's share of broadband connections remains high, at approximately []RI as at June 2009. This indicates that the majority of retail broadband services are provided using Telecom's network.
446. There is little demand for resold broadband services. Access seekers are choosing to use bitstream services over resale services, and appear to be increasingly using bitstream and UCLL access to enter and expand in the downstream retail broadband services market.
447. These alternative services (particularly bitstream) rely on Telecom's network, limiting the degree of independent rivalry. There are few competing suppliers of wholesale broadband services, and such competition is restricted to certain areas of the country.
448. Accordingly, the Commission's view is that Telecom faces limited competition in the national market for wholesale broadband access.

Data services

Overview of data services

449. Data services are high-speed, dedicated services designed to meet the needs of business customers. Examples of legacy data services supplied by Telecom include One Office, Frame Relay, IP Net, Megalink, High Speed Digital Data (using ATM), Analogue Data and Asynchronous Transfer Mode (ATM). All of these data services have been grandfathered or withdrawn (see paragraphs 454 to 457 below regarding Undertaking Requirements).
450. Telecom Wholesale also offers a number of intermediate input (commercial) services that are able to be used to supply retail data services, including High Speed Network Services (HSNS), Unbundled Network Services (UNS Over Ethernet) and Unbundled Partial Circuits (UPC).
451. There are a number of competing suppliers of data services in New Zealand. However, as with local access and broadband services, these competing networks are generally located in metropolitan areas. For example, TelstraClear offers business-grade data services in those areas where it has deployed infrastructure.
452. A number of fibre operators also compete in the data market. Vector Communications, for example, provides high-speed communications services over its fibre optic network in Auckland and Wellington. Services are supplied on an open-access basis, by way of a number of service providers.
453. In addition to Vector's fibre network in Auckland and Wellington, Citylink operates a fibre network in Wellington, while Inspire Net in Palmerston North, Velocity in Hamilton and Network Tasman in Nelson also operate fibre networks.

Operational Separation Undertakings

454. The Undertakings require Telecom to grandfather certain legacy data products, including Megalink, HSDDS, ATM and One Office, and include milestones for migration to EOI input based wholesale services (such as HSNS).

455. In respect of One Office, the Undertakings state the following:¹⁷³

- 25.1 Unlike the Retail Broadband Service it is not feasible to re-engineer One Office to consume Wholesale Unit EOI inputs. One Office Services are complex services designed for customers with multiple sites. Each customer site includes a Telecom-owned router that is pre-configured to the existing versions of One Office Services (well over 10,000 sites in total). {...}
- 25.3 In order to re-engineer One Office Services to consume HSNS, UNS and UPC, it would be necessary to cease the service to every single site and replace or reconfigure the routers manually (at the customer premises) before re-providing the re-engineered One Office Services. This would be very resource intensive and materially disrupt the operations of many of New Zealand's largest public and private sector organisations.
- 25.4 Instead Telecom is committing to stopping innovation of the One Office Services to new customers by 31 December 2008 and stopping sales to new customers of this family of services by 31 December 2009.
- 25.5 By the same date (30 September 2009), Telecom is also committing to launching a new managed network layer (or "Layer 3") data service that will be available to new and existing customers. This service (the "New Data Service") will consume wholesale HSNS, UNS (Over Ethernet) and UPC equivalence based inputs from its inception. Where possible, the New Data Service will be built using HSNS or UNS (Over Ethernet) inputs. In areas where HSNS and UNS (Over Ethernet) are not available, the New Data Service will be built using UPC. Over time and as technology develops, other wholesale inputs provided on an equivalent basis may be used.

456. The Undertakings include an alternative migration plan for One Office Services¹⁷⁴ and Telecom is not required to redesign One Office Services to consume EOI inputs.

457. As discussed in paragraph 198, HSNS, UNS (Over Ethernet) and UPC are required to be provided on an EOI basis by 31 December 2011. The EOI status of these layer 2 services is designed to ensure that access seekers are able to compete with Telecom on a level playing field in the provision of business-grade data services.

Wholesale market for non-metropolitan data services

458. This market involves the supply of wholesale high speed data services designed to meet the needs of business customers in non-metropolitan areas (i.e. all regions other than Auckland, Wellington and Christchurch).

Existing competition

459. In Decision 497, the Commission defined a retail market for non-metropolitan data services which related to retail data services between business customer sites where at least one site is located outside of metropolitan areas. The Commission adopted the same 200 metre rule as it applied to the local access market.

460. The Commission noted that outside of metropolitan areas, there was little infrastructure-based competition in the provision of data services. Specifically, the Commission stated:¹⁷⁵

¹⁷³ Telecom, *Telecom Separation Undertakings*, Schedule 1, Part B, clauses 25.1, 25.3 to 25.5.

¹⁷⁴ Telecom, *Telecom Separation Undertakings*, Schedule 1, Part A, clause 15.

¹⁷⁵ Decision 497, p 112, paragraph 557.

Outside of metropolitan areas, Telecom appears to be the only significant supplier of data services. As noted earlier, while other competitors have deployed wireless-based technology over which to deliver data services, the Commission is not satisfied that such deployment represents a significant constraint in the context of the nonmetropolitan data market.

461. In Decision 497, the Commission considered that entry conditions in non-metropolitan areas were likely to be such that new entry was unlikely to be sufficient to constrain Telecom in those areas. In particular, the Commission noted that lower customer concentrations are likely to deter the deployment of new data networks.¹⁷⁶ As a result, the Commission concluded that Telecom faces limited competition in the market for data services in non-metropolitan areas.
462. The Commission considers that the conclusions reached in Decision 497 relating to competition in non-metropolitan areas remain relevant for the purposes of this Investigation.
463. The Commission's view is that there are substantial areas of the country where only Telecom has a local access network able to deliver data services to business customers in non-metropolitan areas. In many non-metropolitan areas, competing service providers require wholesale access to Telecom's network in order to supply retail business-grade data services, particularly in those areas where competing infrastructure is not available.
464. As part of this Investigation, the Commission collected data from Telecom on the uptake of resale data services. This information includes data services contained in DSPL, and covers both metropolitan and non-metropolitan regions. The uptake of these data services is summarised in Table 16 below.

¹⁷⁶ Decision 497, p 112, paragraph 558.

Table 16: Uptake of resale data services supplied by Telecom Wholesale (June 2006 - June 2009¹⁷⁷)

Resale data services	2006	2007	2008	2009	%Δ (2006-2009)
Analogue Data Service (A1, A2, A3)	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
Asynchronous Transfer Mode (ATM)	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
Frame Relay	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
High Speed Digital Data Service	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
IPNet	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
Low Speed Digital Data Service	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
Megalink Services	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
Office Anywhere	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
One Office	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
One Office Serial	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
Private Office Networking	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI
Voice Circuit Service (V1)	[] TRI	[] TRI	[] TRI	[] TRI	[] TRI

Source: Telecom resale data response

465. This indicates that uptake of most resale data services is relatively low, and in many cases is diminishing. In its May 2009 submission, TelstraClear argued that:¹⁷⁸

Although demand for some of these individual resale {data} products may be low and declining, they can form part of a larger bundle supplied to users who are key customers of access seekers. For this reason, Telecom itself has had difficulty in withdrawing the retail versions.

466. Services designed for corporate business customers are often complex and designed for customers with multiple sites. Although uptake of particular data services (as shown in Table 16 above) may be low, the nature of these services is such that the revenues generated from a relatively small number of customers may be significant for telecommunications providers.

467. The Commission has considered whether regulated access products, such as UCLL and UBA are able to be used by an access seeker in order to facilitate competition in the market for business-grade data services. Submissions received from the industry during

¹⁷⁷ Note that this is not a complete list of services - those services which have no uptake are not included.

¹⁷⁸ TelstraClear, *Submission on potential review of resale services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 19, paragraph 48.

2009 indicated that these regulated access products are unlikely to be suitable for delivery of business-grade services. For example, Vodafone submitted that:¹⁷⁹

Many of the higher performing resale data services (such as ATM or even Frame Relay) also do not have a direct replacement using UBA or UCLL services. Such services require fibre-based replacements (such as HSNS), with business-grade SLAs. The technical performance and SLAs offered with UBA and to a lesser extent UCLL are clearly residential “best-efforts” only. With UCLL the technical performance is much more under the control of the access seeker, but provisioning and faults processes and SLAs remain biased towards residential requirements.

468. Similarly, TelstraClear stated that:¹⁸⁰

... the UBS “best efforts” broadband services does not support data services of sufficient quality and reliability to meet corporate business needs.

469. The Commission agrees that UCLL and UBA are not suited to the provision of business grade data services.

470. As noted above, subsequent to the release of Decision 497, there are now a number of layer 2 data services offered commercially by Telecom Wholesale. These services include HSNS, UNS (Over Ethernet) and UPC. HSNS, for example, is a layer 2 Ethernet access tail service delivering non contended bandwidth over Telecom’s fibre optic network. HSNS is described in the Telecom Wholesale product profile as follows:¹⁸¹

The High Speed Network Service (HSNS) is a layer 2 data access tail service that offers a fast, reliable means for service providers to extend their networks or build their own business-grade private network product.

By using HSNS as the underlying access component service providers have the flexibility to build managed or unmanaged, layer 2 or layer 3 services to their end users.

HSNS will be used by service providers who typically provide corporate and larger customers with high speed data services over a symmetrical bandwidth access to support high-speed or real-time applications, or provide multiple services, such as voice, Internet and data, over a single access point.

471. In its submission of May 2009, Vodafone acknowledged that Megalink, ATM, Frame Relay, HSDDS and One Office are legacy data services that will be grandfathered. Vodafone submitted that grandfathering these resale products would be acceptable as long as Telecom has committed to a clear migration path to replacement wholesale products over a reasonable timeframe, on terms no worse than the current ones.¹⁸²

472. Similarly, Kordia noted that a small quantity of legacy data products are still used in the market, but that it may be appropriate to remove regulation where a clear migration path

¹⁷⁹ Vodafone, *Submission on the proposed review of the designated access services under the Telecommunications Act 2001*, 15 May 2009, pp 4-5.

¹⁸⁰ TelstraClear, *Submission on potential review of resale services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 9, paragraph 21.

¹⁸¹ Telecom Wholesale, *Product profile: High speed network service (HSNS)*.

¹⁸² Vodafone, *Submission on the proposed review of the designated access services under the Telecommunications Act 2001*, 15 May 2009, p 2.

(which does not disadvantage end customers or service providers) to a new product is available.¹⁸³

473. The Undertakings state¹⁸⁴ the following in relation to “Other Legacy Data Services”¹⁸⁵:

Telecom will act in a way that is consistent with a strategy to ultimately migrate all Other Legacy Data Services customers to EOI input based services and decommission the relevant legacy data platforms.

474. Telecom Wholesale has developed a product roadmap for legacy data services in consultation with access seekers. In a Dialogue consultation session on 25 June 2009, Telecom Wholesale noted that access seekers had indicated that UNS and ATM could be grandfathered by December 2009. However, access seekers indicated that a longer timeframe would be required for the grandfathering of Megalink, HSDDS, Frame Relay and One Office.¹⁸⁶

475. In its submission of 15 May 2009, Telecom argued that:¹⁸⁷

Given that any new retail level data products must be based on equivalent inputs, other Access Seekers are equally able to construct and compete with similar data services – eliminating the need for the retail product to be resold. There is no “access bottleneck” that requires resale regulation. In these circumstances, regulated resale is effectively redundant.

476. HSNS and UPC are provided on a commercial basis by Telecom, and are not regulated services under Schedule 1 of the Act, hence the prices of these services are not set under regulation. In many non-metropolitan areas, as the only provider of a network able to deliver data services to business customers, there is therefore a risk that Telecom may exercise market power when setting the price at which these wholesale input services are offered.

477. However, Telecom does face some competitive pressure with regards to the provision of these services, as shown by price HSNS price reductions implemented on 3 May 2010¹⁸⁸. This competitive pressure however is less intense in non-metropolitan areas.

Potential competition

478. There are significant sunk costs associated with building a data network, although these are able to be reduced in a number of ways. For example, network operators are able to avoid some of the costs associated with trenching by utilising existing underground ducts.

¹⁸³ Kordia, *Submission on review of resale services under Schedule 3 of the Telecommunications Act 2001*, 15 May 2009, p 1.

¹⁸⁴ Telecom, *Telecom Separation Undertakings*, Schedule 1, Part A, p 131, clauses 16.2.

¹⁸⁵ “Other Legacy Data Services” are defined in Schedule 1, Part A of Telecom’s Separation Undertakings as follows – “Other Legacy Data Services means the Telecom services called (as at the Approval Date) Dedicated Internet Access, DSTN Services, X25, Corporate Internet Data (CID), IP Net, Megalink, Metro IP, Metro LAN Extension, LanLink, Netway Integrated Access, High Speed Digital Data (using ATM), Analogue Data and Asynchronous Transfer Mode (ATM).”

¹⁸⁶ Telecom Wholesale, Dialogue: *Data products – Final Roadmap FY09/10*, 25 June 2009, slide 3.

¹⁸⁷ Telecom, *Submission on Commission’s review of resale services*, 15 May 2009, p 17, paragraph 71.

¹⁸⁸ From 3 May 2010, Telecom Wholesale lowered the base prices for HSNS Premium and HSNS Lite across all zones. Telecom Wholesale stated that it is “creating a new ‘CBD’ zone to provide lower pricing in CBD areas, particularly for higher bandwidths such as 100M and 1000M” and that it is “also lowering {its} base prices across all zones to offset the removal of term and volume discounts”. See Wholesale Informer, *HSNS re-pricing announcement*, 3 March 2010.

479. However, the Commission considers that lower customer concentrations in non-metropolitan areas are likely to deter the deployment of new data networks in these regions. Therefore, wholesale access to Telecom's infrastructure is likely to be required in order to deliver business-grade data services in many non-metropolitan areas.
480. The availability of layer 2 services that are able to be used by access seekers to develop downstream retail business-grade data services reduces the importance of resale to some extent, so long as these services are supplied on terms and conditions (i.e. price) that do not suggest that Telecom is acting inefficiently or achieving excess returns. These alternative input services offer access seekers greater flexibility and scope to develop innovative new services.
481. This view appears to be supported by the Undertakings, which require Telecom to grandfather certain legacy resale data services, and include milestones for migration to layer 2 wholesale input services which are to be supplied on an EOI basis.

Commission's view

482. There are substantial areas of the country where only Telecom has a local access network able to deliver data services to business customers. Accordingly, in many non-metropolitan areas, competing service providers are likely to require wholesale access to Telecom's network in order to supply retail business-grade data services.
483. Whilst it does appear that Telecom does face some competitive pressure with regards to the provision of these services, this competitive pressure is less intense in non-metropolitan areas. The Commission's view is therefore that Telecom faces limited competition in the wholesale market for non-metropolitan data services.

Wholesale market for metropolitan data services

484. This market involves the supply of high speed data services to business customers in metropolitan areas (i.e. Auckland, Wellington and Christchurch).
485. In Decision 497, the Commission defined metropolitan areas to be all areas within a 200 metre radius of competing local access infrastructure. In that determination, the Commission considered that there was evidence that Telecom was facing significant existing competition from alternative network operators, and that this was leading to an erosion of Telecom's retail market share in metropolitan areas.¹⁸⁹
486. The Commission noted that Telecom's national market share in relation to the provision of data services had been declining for a number of years, and at that time it appeared that its share had fallen to around 57% in 2002/03. The Commission considered at that time that Telecom's share in metropolitan areas was likely to be lower still.¹⁹⁰ The Commission concluded in Decision 497 that Telecom did not face limited, and was not likely to face lessened, competition in the retail market for data services in metropolitan areas. The Commission considers that the conclusion reached in Decision 497 remains appropriate for the purposes of this Investigation, and that the same market dynamics are present in the wholesale market.

¹⁸⁹ Decision 497, p 110, paragraph 547.

¹⁹⁰ Decision 497, p 109-110, paragraphs 542-544.

487. On 3 March 2010, Telecom Wholesale announced that it was lowering the price of HSNS in response to feedback from access seekers. Telecom Wholesale stated:¹⁹¹

We are creating the new 'CBD' zone to provide lower pricing in CBD areas, particularly for higher bandwidths such as 100M and 1000M. We are also lowering our base prices across all zones to offset the removal of term and volume discount for HSNS Premium and HSNS Lite.

488. The Commission considers that the introduction of reduced pricing for the new 'CBD zone' is in response to competition in metropolitan areas.
489. The Commission's view is that Telecom faces effective competition in the wholesale market for metropolitan data services.

¹⁹¹ Telecom Wholesale, *Wholesale Informer: HSNS re-pricing announcement*, 3 March 2010.

APPENDIX 4: UPTAKE OF RESALE SERVICES

As part of the information request sent to the industry, the Commission requested that Telecom provide data on the uptake of each of the resale services for 2006 to 2009.

This information received in response is detailed below. Each resale service is categorised under the relevant regulated category in the Act (i.e. the four regulated resale services). In addition, the applicable retail discount for each of the resale services is included.

Retail services offered by means of Telecom's fixed telecommunications network:

[

]TRI

Residential local access and calling service offered by means of Telecom's fixed telecommunications network:

[

]TRI

Bundle of retail services offered by means of Telecom's fixed telecommunications network:

[

]TRI

Retail services offered by means of Telecom's fixed telecommunications network as part of a bundle of retail services:

Nil

APPENDIX 5: SUBMISSIONS MADE ON THE DRAFT REPORT

General comments

490. Telecom submitted that the Resale Services, as currently provided for in the Act, are a legacy of a very different regulatory regime and that they are no longer fit for their intended purpose or necessary. It was noted that it is worth highlighting that this form of general resale regulation is uncommon and not evident at all in the UK and Australia, our most commonly benchmarked markets.
491. In their cross submission, TelstraClear notes that although Telecom has some basis for this view, unbundled access came to New Zealand much later than in all comparable markets while the incumbent's deployment of fibre in the local loop – which has the practical effect of forestalling unbundled access – is happening much quicker than in most markets. Access seekers like Vodafone and TelstraClear have not 'squatted on the resale rungs' of the ladder of investment but where it is available and deployment is economic, have moved from resale to UCLL.
492. TelstraClear submitted that deregulation is only appropriate where markets are effectively competitive and that resale regulation is still required in NZ and is an important safeguard.
493. In its cross submission, Telecom submitted that the Ladder of Investment theory is not about keeping all layers of regulation in place in perpetuity. The literature suggests that, where regulators do not intervene to adjust the incentives for market entry once competition at a service based level has been established; operators and regulators can easily fall into the trap on the one hand of expecting, and on the other unintentionally perpetuating, incentives providing "easy access".
494. Vector submitted that the Commission's decision to remove certain resale services from Schedule 1 appears to be inconsistent with the Ladder of Investment framework as it potentially weakens the first rung of investment. Whilst it may be true that service providers have a current preference for unbundled or commercial wholesale services (the second rung) over resale services (the first rung), maintaining that first rung under this framework is important to facilitate the new entry of service providers without sufficient scale to unbundle.
495. Vodafone submitted that without the backstop regulation of resale services, there is a risk that Telecom will not continue to provide reasonable commercial terms. If any resale services are to be omitted from the Act, Vodafone believe that the Commission should monitor Telecom's behaviour in the market for resale services to ensure that they are not acting in an anti-competitive manner.
496. Vodafone note that they would expect Telecom to have strong incentives to negotiate reasonable commercial terms in a market with increasing competition in order to maintain its wholesale revenue. However, it has proven to be more and more difficult to get an appropriate level of engagement from Telecom and get some traction from Telecom's representatives on the key subjects that Vodafone wants to address.
497. In its cross submission, Telecom agree with Vodafone's assessment of Telecom Wholesale's incentives. Wholesale's incentives are strongly weighted toward winning

and retaining business; however this does not automatically ensure a meeting of the minds on every issue. Also emphasise that the Commission has decided to deregulate on the basis evidence of competitive alternatives and market developments rather than on the incentives or behaviour of Telecom Wholesale.

Market definition and competition assessment

498. Vector suggested that the competition test should fall under a Part 2 determination not under a schedule 3 Investigation.
499. Telecom submitted that they had no objection to the application of a high level market definition and competition assessment. It was noted however though that whilst this was fit for this purpose, it will not necessarily be suitable when considering whether to regulate or deregulate in other areas.
500. Telecom also submitted that they broadly agreed with the approach and conclusions of the high level competition assessment. They accepted that it was unwieldy to categorise the competitiveness of particular geographic markets in the primary legislation; however, they advocated for limitations in the legislation as to how the regulation could eventually be applied. For example, it was proposed that the Commission should not regulate resale where there is competing infrastructure or the near-entry of competing infrastructure – be that cable, UCLL, fibre, mobile, or fixed wireless.
501. Vodafone submitted that mobile and fixed services are increasingly competitive with each other, and increasingly treated as substitutes by customers. They also noted that they do not find the case for excluding satellite and fixed wireless particularly compelling. There does not appear to be any evidence presented that the prices and performance in fixed broadband have fallen faster than for satellite or fixed wireless over time to provide some logic to change the approach compared to when the UBS determinations were completed.
502. Vodafone also submitted that it is reasonable to apply a general competition test instead of trying to apply specific geographic exemptions in defining where Telecom faces effective competition. The latter approach seems likely to create extra costs that could easily be avoided without adding any real value. If Telecom started to significantly differentiate local access or data pricing within metro areas, a more finely-grained approach to geographical market definition might make sense.

Retaining a regulatory backstop for local access and calling

503. TelstraClear supported the proposal to retain resale regulation for ‘Single Service Resale’ and local access and calling, and discussed their UCLL progress. TelstraClear noted that their business is vulnerable to the premature removal of resale regulation. Resale PSTN has proved critical in enabling TelstraClear to build its customer base, and various issues have impeded TelstraClear in terms of moving up the ladder of investment to UCLL.
504. Telecom agreed with removal of the three services (as proposed in the Draft Report) and accepted the need to retain residential and business local access and certain non-replicable services ancillary to these. However, Telecom was concerned with the broad scope of the proposed new Resale Service and encouraged the Commission to: (a)

505. In their cross submission, Telecom agreed that resale regulation remained an important part of the regulatory landscape, but that they shared the Commission's view, that the scope of the regulatory backstop should be defined in light of the degree of competition and the availability of alternative inputs deeper in the value chain. A backstop should not be retained where there is no market problem to resolve and where there is little or no demand for those services.

Removing the regulatory backstop for Bundled Resale, Resold Broadband and Data Services

506. TelstraClear noted that they were not entirely clear which services were being deregulated and that it was not possible to identify with certainty the exact products that would fall within the product families stated. It was also suggested that if the effect of removing the bundled products from the Act is to reduce or remove the discount associated with buying the bundle compared with buying the access services separately from Telecom, this would be a perverse result.
507. TelstraClear raised concerns about deregulating services which are already in the process of being grandfathered, as this would remove Telecom's obligation to adhere to the established grandfathering rules and allow Telecom to discriminate between itself, on the one hand and access seekers, on the other hand.
508. Vector submitted that current demand for resale services should not be a material consideration in the Investigation. Rather, the Commission should consider whether retaining a resale service in Schedule 1 best facilitates the entry of a new service provider that would not otherwise have the scale to invest in unbundled bitstream.
509. Vector suggested that the Commission had not asked the obvious question of why commercial resale services are so unattractive. Vector suggested that this could partly be explained by the relatively recent ability to unbundle and if resale services were priced and specified attractively then the Commission would expect a greater proportion of service providers to show a preference for resale.
510. Vodafone supported the proposed new designated access service description for non price-capped local access and calling services, as a narrower regulatory scope can create efficiencies for the parties to Resale Services as well as for the Commission.

Removing the regulatory backstop for bundles

511. Vodafone raised concerns about the Commission's proposal to omit bundles and parts of bundles, and suggested that the impact on the price would be significant. Vodafone is currently consuming bundles of retail services from Telecom at a wholesale level on commercial terms and benefit from the differential discounted price. In its cross submission, TelstraClear agreed that access seekers can technically replicate most

Telecom retail bundled offerings, but like Vodafone find it difficult to match the prices of the Telecom retail offerings unless they have access to resale of the bundle.

512. Vodafone submitted that removing the bundled retail services from the Act would remove Telecom's incentive to provide bundled services at a wholesale price that enabled access seekers to compete with it. It was suggested that although the volumes of these services are relatively modest, it is not obvious that the Commission should roll back resale regulation if the result would be disadvantageous financial arrangements for access seekers.
513. In its cross submission, Telecom noted that Telecom Wholesale currently only sells five bundles made up of a combination of voice access plus ancillary smart phone services. Of these five bundles, three have been grandfathered by Telecom Retail, one is a bundle sold commercially by Telecom Wholesale (i.e. it is not available from Telecom Retail, so is not a true "resale" product – so there is no regulatory obligation), and 'Smart Bundle', which is the only bundle that could fall within the scope of regulation. Telecom also noted that the low uptake of existing bundles suggested that the ability to take bundles was not important to an access seeker's ability to compete with Telecom Retail. In other words, there is no evidence of limited competition in the market that would justify regulation. Telecom suggested that removing the bundled retail services from the Act will not remove Telecom Wholesale's incentive to provide bundled services, despite claims to the contrary.
514. 2degrees submitted that bundling was a competitive reaction perpetrated by incumbents, which requires either regulatory management or a resale capability amongst new entrants. And because there is no guidance on bundling in the Act, the resale opportunity should continue to exist. It was submitted that Telecom uses its land line dominance to pursue closed network activity on its mobile phone network.

Operational Separation

515. Telecom suggested that the Commission ignores the significant market impact of Telecom's operational separation model purely on the basis that it is subject to variation where agreed to by the Minister. Operational separation has fundamentally altered the incentives operating on Telecom's Wholesale unit, and the impact of this must be relevant to this investigation.
516. Vodafone submitted that in an environment where the regulatory backstop would be narrowed or removed, access seekers will rely more heavily on operational separation and Telecom's obligations under the Undertakings. Given the ongoing changes, not as confident as previously that Telecom will not negotiate changes to these obligations.

Impact of UFB

517. TelstraClear submitted that when considering the appropriate timing for deregulation, the Commission needed to think about the current paradigm shift in telecommunications away from copper access infrastructure towards fibre access infrastructure.
518. Vector suggested that a robust and informed decision on resale regulation could not be made given uncertainty over how Telecom will continue to be regulated in the near

future. It was submitted that if there is structural separation, then there are likely to be wide ranging impacts on the future application, or even need for, resale regulation. One such example is that applying retail-minus pricing to resale services may be inappropriate. Vector suggested that competition assessments and regulatory decisions need to be informed by fact, not speculation over future market and regulatory outcomes, and that the Commission needs to enforce the Act as it stands today. If there is the potential for the Act to materially change in the near future then the Commission should seek to delay its decision until it has greater clarity.

519. Vodafone supports the concept of aiming for some temporary arrangements which would address the access seekers' concerns regarding the timing of the decision.
520. Telecom submitted that market uncertainty was not a reason to delay the roll back of regulation where there is no evidence of a competition issue today or in the foreseeable future. If anything, markets are likely to get more competitive as end users are provided with greater choice through UFB and other regulatory initiatives. Telecom's submission was that they did not think that the current uncertainty has or should have any material bearing on the Commission's analysis.
521. In response to Vector's submission that the cost to industry of resale regulation lying dormant in Schedule 1 is relatively low, Telecom submitted that this was an easy argument to make, but is not true. The burden on Telecom, the industry and consumers in retaining unnecessary regulation include the uncertainty for all players and the potential for outcomes that are not in the long term interests of end users. Any decision to retain regulation in a competitive market should only happen if a thorough cost benefit analysis shows that it was in the interest of end users. Submitters have not shown any evidence to support this view.
522. TelstraClear agreed that the Commission should not make a decision to scale back resale before there is more certainty about UFB, and in particular whether a structurally separated Telecom will end up as the major UFB provider.

Migration

523. TelstraClear submitted that rather than removing each of the services proposed to be omitted from Part 1 of Schedule 2 of the Act, the Minister could instead amend the conditions for each designated service in such a way that it is clear that for services for which Telecom has commenced the grandfathering process under the WSA, Telecom is required to continue that process and is prevented from reclassifying services. An alternative would be to amend the conditions for each of those services to incorporate rules about how migration from the service is to occur over a minimum 2 year period, including a rule providing that Telecom must offer the same price and non-price terms to access seekers over the course of the migration (i.e. a non-discrimination rule). TelstraClear suggested that a reasonable timeframe for a migration path would be no less than 2 years.
524. Vodafone's view was that if the backstop of regulation is removed, access seekers will have less control over the migration of some services that will fall to Telecom to determine. Vodafone suggested that the Commission requires Telecom to specifically address migration in its proposal for the future commercial terms for Resale Services.