

COMMERCE COMMISSION

Determination on the TelstraClear Application for Determination for Designated Access Services

Decision 477

Determination under section 27 of the Telecommunications Act 2001 (“the Act”) in the matter of an application for determination for designated access services under section 20 of the Act by:

TELSTRACLEAR LIMITED

and

CLEAR COMMUNICATIONS LIMITED

The Commission

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Summary of Application

TelstraClear Limited, on behalf of itself and Clear Communications Limited, applied for a determination under section 20 in regard to interconnection with Telecom’s fixed PSTN and interconnection with TelstraClear’s fixed PSTN.

Date of Determination

5th November 2002

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LIST OF TERMS AND ABBREVIATIONS

ACCC	Australian Competition and Consumer Commission
Benchmark Report	The Commission's <i>International Benchmarking Report: A Comparative Review of Interconnection Pricing</i> , 2 September 2002 (attached at Appendix 4).
CPE	Customer premises equipment. Terminal equipment – such as telephones, key systems, PBXs, modems, video conferencing devices – connected to the telephone network and residing on the customer's premises.
DTT	Direct trunked transport. Transmission of traffic between the serving wire center and another ILEC office, without intermediate switching, charged on a flat-rate basis.
EBITDA	Earnings before interest, taxes, depreciation and amortisation
FCC	The Federal Communications Commission is an independent United States government agency, directly responsible to Congress. The FCC was established by the Communications Act of 1934 and is charged with regulating interstate and international communications by radio, television, wire, satellite and cable. The FCC's jurisdiction covers the 50 states, the District of Columbia, and U.S. possessions.
FLCB	Forward-looking cost-based. A price that is set on FLCB means: The price for a service is set on the basis of those efficiently incurred costs that are directly attributable to providing that service, and includes a reasonable contribution towards efficiently incurred common costs, i.e. FLCB is usually taken to include some allocation of common costs.
Forward-looking common costs	<ul style="list-style-type: none"> a) means those costs efficiently incurred by the service provider in providing the service that are not directly attributable to providing an additional unit to that service; but b) does not include any costs incurred by the service provider in relation to a TSO instrument.
ILEC	Incumbent local exchange carrier
Interconnection Price	The price fixed at paragraph 173 of this Determination as an average weighted price for the origination and termination of toll-free calls, toll bypass calls, standard calls, payphone calls and the origination of calls to premium rate services and 50XY services.
ISP	Internet service provider

Interconnection Terms	means the terms agreed between the parties and contained in Appendix 2 of this Determination.
LICA	Local Interconnect Calling Area. A geographical area that is listed in Schedule 5 of the Interconnection Terms (Appendix 2). See the definition of LICA at clause 1.1 of Schedule 2 of the Interconnection Terms (Appendix 2).
LICA Group	Local Interconnect Calling Area Group. A LICA Group consists of a Primary or Secondary Major LICA and its associated Minor LICAs, as listed in Schedule 5 of the Interconnection Terms. See the definition of LICA Group at clause 1.1 of Schedule 2 of the Interconnection Terms (Appendix 2).
Local Bypass Call	A call originating on Telecom's fixed PSTN and presented by TelstraClear to Telecom for termination in the same LICA.
Premium Rate Service	090X and each other service which the carriers may agree from time to time is a Premium Rate Service for the purpose of the Interconnection Terms.
PSTN	Public Switched Telephone Network is a dial-up telephone network used, or intended for use, in whole or in part, by the public for the purpose of providing telecommunication between telephone devices.
Standard Call	See the definition of a standard call at clause 1.1 of Schedule 2 of the Interconnection Terms.
Toll Bypass Call	See the definition of a toll bypass call at clause 1.1 of Schedule 2 of the Interconnection Terms.
Toll-Free Call	See the definition of a toll-free call at clause 1.1 of Schedule 2 of the Interconnection Terms.
TSLRIC	Total Service Long Run Incremental Cost, in relation to a telecommunications service, means: <ul style="list-style-type: none"> a) the forward-looking costs over the long run of the total quantity of the facilities and functions that are directly attributable to, or reasonably identifiable as incremental to, the service, taking into account the service provider's provision of other telecommunications services; b) and includes a reasonable allocation of forward-looking common costs.
TSO	Telecommunications service obligations means obligations in relation to a TSO instrument.

EXECUTIVE SUMMARY

Background and Agreed Terms

- i)* On 16 May 2002, TelstraClear Limited applied for a Determination in respect of price and non-price terms for interconnection between TelstraClear's fixed PSTN and Telecom's fixed PSTN. On 19 June, the Commission decided to investigate the Application, insofar as it concerned interconnection with Telecom's fixed PSTN and TelstraClear's fixed PSTN.
- ii)* On 26 August, the Commission issued a draft Determination to the parties on the Interconnection Application. The draft Determination was publicly released on 2 September.
- iii)* During the course of the investigation, the parties advised the Commission that they had reached agreement on a number of terms initially in dispute. These agreed terms are included as enforceable terms in this Determination. Between 13 and 17 September, the parties advised the Commission that they had reached agreement on the following issues:
 - the Determination would have effect from 1 June 2002;
 - pure bill and keep for all intra-LICA calls (voice and data), 0867 calls and 0873 calls;
 - use by TelstraClear of 0873 codes;
 - internet traffic terms for 0867 and 0873 calls;
 - route splitting for all 0867 and 0873 calls;
 - interconnect capacity provisioning;
 - activation of access codes (excluding the commercial model for 50XY codes)
 - the commercial model for calls to 090X numbers and other premium rate services;
 - non-code access, including the activation charge;
 - dispute resolution and paying for services clauses, except for clause 18.4;
 - rollover of term provisions;
 - contracting parties provisions (including the status of other members of the TelstraClear Group);
 - notification of software and network changes provisions;
 - call handover; and
 - payment guarantee.
- iv)* On 16 and 17 September, the Commission held a conference on the draft Determination. In addition to Telecom and TelstraClear, invitations to the conference were issued to persons considered by the Commission to have a material interest in the

Interconnection Application, namely all carriers with interconnection agreements with Telecom, and the Telecommunications Users Association of New Zealand (TUANZ). Submissions were made by Telecom, TelstraClear, WorldxChange Communications Limited, CallPlus Limited, TUANZ, Compass Communications Limited, The Internet Group Limited, Vodafone New Zealand Limited, and Walker Wireless Limited.

- v) On 9 October, Telecom and TelstraClear jointly notified the Commission that they had reached agreement on forecasting of inter-LICA calls.¹ They also advised that:
- national transport calls, mobile transit calls, or origination or termination on a mobile network are not covered by the Interconnection Terms; and
 - originations and terminations that cross a LICA boundary are only covered by the Interconnection Terms to the extent that the call is handed over in the same LICA Group as it originates and terminates.
- vi) The remaining matters to be decided by the Commission are:
- a) the scope of the designated access services of interconnection with Telecom's fixed PSTN and interconnection with TelstraClear's fixed PSTN, as they relate to fixed to mobile and mobile to fixed calls, payphones, calls crossing a LICA boundary, and 50XY services;
 - b) the commercial model for 50XY access codes;
 - c) the treatment of local bypass calls;
 - d) the interconnection price payable in respect of toll bypass calls, standard calls and toll-free and payphone calls, and the origination of calls to premium rate services and 50XY services;
 - e) call attempts, charging increments, whole cent rounding, and flag fall;
 - f) the application of international best practice in regard to standard access principle 2; and
 - g) the date of expiry of this Determination.
- vii) A summary of the Commission's Determination on the above matters is as follows:

Fixed-to-Mobile and Mobile-to-Fixed Calls

- viii) The following elements of fixed-to-mobile and mobile-to-fixed calls are contained within the designated service:
- the originating leg of a fixed-to-mobile call on a fixed PSTN (i.e. between the calling party and the local switch or equivalent facility); and
 - the terminating leg of a mobile-to fixed call on a fixed PSTN (i.e. between the local switch or equivalent facility and the called party); but

¹ Joint letter from Lusk (Telecom) and Forsyth (TelstraClear) to the Commission, 9 October 2002.

- transit traffic for these calls is not within the service description.

Payphones

- ix)* The origination by Telecom of a payphone call is a regulated service and the charge for call origination will be the same as that for origination of toll-free and toll bypass calls. Other aspects of the payphone service, such as the provision of the payphone equipment, are not regulated services.

50XY Services

- x)* The 50XY service is one where the cost of the call may be divided between the caller and the called party. The Commission has determined to treat the service in a manner analogous to the treatment of 090X services in the Interconnection Terms, with the exception that the terminating carrier is entitled to set the charges and receive the revenue from both its customer and the customer of the originating carrier.

Reciprocity

- xi)* The terms for interconnection with Telecom's fixed PSTN will also apply to origination and termination of voice and data calls on TelstraClear's fixed PSTN.

Interconnection Prices and Other Charges

- xii)* Interconnection prices for toll-free, toll bypass calls, standard calls, payphone calls and the origination of calls to premium rate services and 50XY services are determined on the basis of benchmarking against comparable countries that use forward-looking cost-based pricing methods.
- xiii)* There will not be a separate interconnection charge for unsuccessful call attempts.
- xiv)* Call billing with a minimum usage charge of one minute followed by per second charging is an efficient way of recovering call set-up costs. The parties may as an alternative agree to recover those costs through usage charges or a flagfall charge. Regardless of the method, the overall price for a call of average duration should not exceed the multiple of the Interconnection Price and the average call duration.
- xv)* The Interconnection Price is expressed as a weighted average price, derived using a traffic profile for interconnection traffic between the parties.
- xvi)* The benchmarked prices are converted using currency exchange rates based on both historic exchange rate data and the result of surveyed forecasts out to September 2003.
- xvii)* The risk to dynamic efficiency of a low access price has been taken into account in selecting the final price point from the benchmarked data.
- xviii)* The benchmarked data will not be adjusted to reflect:
- possible differences in cost drivers in different jurisdictions; or
 - offered or commercially negotiated prices.
- xix)* The price for the origination and termination of toll bypass, standard, toll-free and payphone calls, and calls to premium rate services and 50XY services are set at 1.13 cents per minute.

Local Bypass Calls

- xx)* Local bypass means a call originating on Telecom's fixed PSTN and presented by TelstraClear to Telecom for termination in the same LICA. The Commission declines to include clause 3.1c, prohibiting local bypass calls, in the Interconnection Terms. The originating and terminating legs of local bypass calls will be treated, respectively, as toll bypass and standard calls.

International Best Practice

- xxi)* The Commission has declined to define "international best practice" for the purposes of this determination. The Commission considers that the Industry Forum is the suitable vehicle for the development of a telecommunications access code covering standards that are consistent with international best practice.

Date of Inception and Expiry of the Determination

- xxii)* The parties have agreed that the date of inception of this Determination will be 1 June 2002. The Determination will expire on 5 November 2003.

INTRODUCTION

1. The Telecommunications Act 2001 (“the Act”)² regulates the supply of telecommunications services in New Zealand.
2. The Commerce Commission (“the Commission”) has a range of responsibilities under the Act, including making determinations in respect of designated access services. Subject to sections 22 and 23, applicants may make an application to the Commission under section 20 for a determination of all or some of the terms on which a designated access service must be supplied during the period of time specified in the application.

THE APPLICATION

3. On 16 May 2002, TelstraClear Limited on behalf of itself and Clear Communications Limited (together “TelstraClear”) filed with the Commission an application for determination of designated access services under section 20 (the “Application”). Telecom Corporation of New Zealand Limited and Telecom New Zealand Limited (together “Telecom”) also filed applications for determination of designated access services on 17 May as the access provider of the Telecom fixed PSTN, and on 21 May as the access seeker to the TelstraClear fixed PSTN (together the “Telecom Applications”).
4. On 19 June, the Commission issued a Decision under section 25 not to investigate the Telecom Applications, on the basis that, in the interests of efficiency and cost minimisation, the issues raised by the TelstraClear and Telecom applications should be dealt with through a single process.
5. The Application sought a Determination by the Commission in regard to:
 - (a) interconnection between TelstraClear’s fixed PSTN and Telecom’s fixed PSTN and provision:
 - (i) by Telecom to TelstraClear of origination and termination (and their associated functions) of voice and data calls (including dial-up internet calls) on Telecom New Zealand’s fixed PSTN; and
 - (ii) by TelstraClear to Telecom of origination and termination (and their associated functions) of voice and data calls (including dial-up internet calls) on TelstraClear’s fixed PSTN;
 - (b) supply by Telecom to TelstraClear of:
 - (i) non-price capped retail services offered by means of Telecom’s fixed telecommunications network;
 - (ii) bundles of retail services offered by means of Telecom’s fixed telecommunications network; and
 - (iii) retail services offered by means of Telecom’s fixed telecommunications network as part of a bundle of retail services.³

² All terms and phrases that are defined within the Act have the same meanings in this Determination. All references to Parts, schedules and sections are to the Parts, schedules and sections of the Act.

³ TelstraClear, Section 20: Application for Determination for Designated Access Services and Specified Services, 16 May 2002, pp. 2-3.

6. On 11 June, the Commission made an Order under section 9(6) that the services named in the Application could be separated into two distinct types of designated services, i.e. interconnection services and resale services, and that the Commission would consider each type of service separately for the purposes of deciding whether to investigate under section 25.
7. On 19 June, the Commission gave notice to the parties that it had decided to investigate the Application, insofar as it concerns interconnection with Telecom's fixed PSTN and TelstraClear's fixed PSTN ("the Interconnection Application").
8. By letter dated 16 July, TelstraClear notified the Commission that it accepted that the terms of supply should be those contained in the TelstraSaturn Interconnection Agreement which expired on 31 January 2002 as amended by Telecom in Appendix A of its 3 July submission, other than in relation to those issues which TelstraClear identified in the table attached to that letter. TelstraClear continued to seek a determination by the Commission in respect of those latter issues.
9. On 1 and 2 August, Commission staff and representatives from Telecom and TelstraClear held a workshop on price and non-price issues arising from the Interconnection Application. The workshop assisted in narrowing the range of issues and providing further information to the Commission to assist it in making its Determination.
10. On 26 August, the Commission issued a draft Determination to the parties on the Interconnection Application. The draft Determination was publicly released on 2 September.
11. On 16 and 17 September, the Commission held a conference on the draft Determination. In addition to Telecom and TelstraClear, invitations to the conference were issued to persons considered by the Commission to have a material interest in the Interconnection Application, namely all carriers with interconnection agreements with Telecom, and the Telecommunications Users Association of New Zealand (TUANZ). Submissions were made by Telecom, TelstraClear, WorldxChange Communications Limited, CallPlus Limited, TUANZ, Compass Communications Limited, The Internet Group Limited, Vodafone New Zealand Limited, and Walker Wireless Limited.
12. Between 13 September and 17 September, Telecom and TelstraClear jointly notified the Commission that they had reached agreement on the following issues:
 - the Determination would have effect from 1 June 2002;
 - pure bill and keep for all intra-LICA calls (voice and data), 0867 calls and 0873 calls;
 - use by TelstraClear of 0873 codes;
 - internet traffic terms for 0867 and 0873 calls;
 - route splitting for all 0867 and 0873 calls;
 - interconnect capacity provisioning;
 - activation of access codes (excluding the commercial model for 50XY codes)
 - the commercial model for calls to 090X numbers and other premium rate services;

- non-code access, including the activation charge;
 - dispute resolution and paying for services clauses, except for clause 18.4;
 - rollover of term provisions;
 - contracting parties provisions (including the status of other members of the TelstraClear Group);
 - notification of software and network changes provisions;
 - call handover;
 - payment guarantee.
13. On 9 October, Telecom and TelstraClear jointly notified the Commission that they had reached agreement on forecasting of inter-LICA calls,⁴ and that:
- national transport calls, mobile transit calls, or origination or termination on a mobile network are not covered by the Interconnection Terms;
 - originations and terminations that cross a LICA boundary are only covered by the Interconnection Terms to the extent that the call is handed over in the same LICA Group as it originates or terminates (as applicable); and
 - The agreed terms are contained in the Interconnection Terms.
14. Telecom and TelstraClear have requested that the Interconnection Terms should form part of the Determination in order that the Determination should deal with all matters concerning interconnection between the two networks.
15. The Commission has accordingly included the Interconnection Terms as terms on which interconnection must be supplied.
16. The remaining matters to be decided by the Commission are:
- (a) the scope of the designated access services of interconnection with Telecom's fixed PSTN and interconnection with TelstraClear's fixed PSTN, as they relate to 50XY services, fixed to mobile and mobile to fixed calls, payphones, and calls crossing a LICA boundary;
 - (b) the commercial model for 50XY access codes;
 - (c) the treatment of local bypass calls;
 - (d) the interconnection price payable in respect of toll bypass calls, standard calls, toll-free and payphone calls, and the origination of calls to premium rate services and 50XY services;
 - (e) call attempts, charging increments, whole cent rounding, and flag fall;
 - (f) the application of international best practice in regard to standard access principle 2; and
 - (g) the date of expiry of this Determination.

⁴ Joint letter from Lusk (Telecom) and Forsyth (TelstraClear) to the Commission, 9 October 2002.

THE FRAMEWORK FOR THE DETERMINATION

17. Section 18 provides that the purpose of Part 2 and Schedule 1, under which this Determination is made, 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.
18. Section 5 provides that “end-user” in relation to a telecommunications service, means a person who is the ultimate recipient of that service or of another service whose provision is dependent on that service. The end-user is therefore the ultimate user or consumer of telecommunications services. The end-user includes not simply subscribers but telephone users more generally. Therefore, the Commission must have regard to the long-term benefit of the ultimate consumers of telecommunications services when making an access determination.
19. Section 27 requires that after investigating the matter, the Commission must—
 - (a) prepare a determination; and
 - (b) give a copy of the determination to the parties to the determination; and
 - (c) give public notice of the determination.
20. Section 28 requires that the Commission make reasonable efforts to prepare a determination not later than 50 working days after the date on which it gave written notice to the parties of its decision to investigate. On 26 August, the Commission advised the parties that, despite making reasonable efforts, it was unable to prepare the determination within the prescribed timeframe, but would do so as soon as practicable.
21. Under section 29(a), a determination must, in the opinion of the Commission, be made in accordance with the applicable access principles, any limits on those applicable access principles, any regulations made in respect of the applicable access principles⁵ and any limits on those applicable access principles.
22. Sections 29(b) and (c) respectively provide that a determination must, in the Commission’s opinion, comply with any relevant approved codes,⁶ and in the case of a determination regarding a designated access service, be made in accordance with the applicable initial pricing principle (as affected, if at all, by clause 2 or clause 3 of Schedule 1 of the Act) and any regulations that specify how the applicable initial pricing principle must be applied.
23. Section 30 prescribes the matters to be included in the determination. A determination must include—
 - (a) the terms on which the service must be supplied; and
 - (b) the reasons for the determination; and

⁵ No such regulations have been issued.

⁶ There are no such codes yet in existence.

- (c) the terms and conditions (if any) on which the determination is made; and
 - (d) the actions (if any) that a party to the determination must do or refrain from doing; and
 - (e) the expiry date of the determination.
24. The issues for determination have been narrowed during the process by continuation of appropriate commercial negotiations. The parties have made extensive submissions during the investigation, including submissions in response to the application, cross-submissions in response, and oral and written submissions on the Commission's draft Determination. The parties also had the opportunity to make submissions on the Benchmark Report. Some arguments advanced in respect of benchmarking are recorded and dealt with in the Benchmark Report (attached at Appendix 4). Parties with a material interest in the investigation were given the opportunity to make oral and written submissions on the draft Determination. The Commission has considered all submissions made in relation to the Determination and the Benchmark Report and all information and opinions presented or expressed at any conference or public hearing in relation to the Determination and Benchmark Report, even if not explicitly acknowledged in this Determination.

SCOPE OF THE DESIGNATED ACCESS SERVICE

Origination and termination (and their associated functions)

25. The two designated access services with which this Determination is concerned are:
- origination and termination (and their associated functions) of voice and data calls (including dial-up internet calls) on Telecom's fixed PSTN; and
 - origination and termination (and their associated functions) of voice and data calls (including dial-up internet calls) on a fixed PSTN other than Telecom's.
26. The descriptions of the designated access services in sub-part 1 of Part 2 of Schedule 1 of the Act are functional, which is to be expected in an industry subject to significant and ongoing technological change. Contrary to submissions from Telecom, the Commission considers that the term "origination and termination (and their associated functions)" in the description of service should be read in a broad sense, reflective of the overall intent of the purpose statement.
27. The term "origination and termination" can be read either disjunctively as "origination **or** termination" or conjunctively as requiring both origination and termination. To read the term conjunctively would suggest that only calls involving a toll-bypass operator and a single originating and terminating carrier were regulated. The Commission considers that the disjunctive interpretation is more consistent with the purposes of the Act.
28. Telecom argued that "associated functions" are the functions associated with the originations and terminations themselves and therefore necessarily must be provided in conjunction with call origination and termination. The Commission considers that the term "associated functions" means functions enabling, resulting from or incidental to the origination or termination of calls. The Commission considers that the natural

meaning of the term refers to functions associated as a matter of general industry practice either domestically or internationally with call origination and termination.

Fixed-to-Mobile and Mobile-to-Fixed Calls

29. The Commission considers that the following elements of fixed-to-mobile and mobile-to-fixed calls fall within the designated service:
- the originating leg of a fixed-to-mobile call on a fixed PSTN (i.e. between the calling party and the local switch or equivalent facility); and
 - the terminating leg of a mobile-to fixed call on a fixed PSTN (i.e. between the local switch or equivalent facility and the called party).
30. The terms of origination and termination of such calls will be those terms contained in this Determination. The parties have agreed that the terms and conditions specified for origination of toll bypass calls will also apply to origination of fixed to mobile calls.
31. Telecom sought clarification that the Commission did not intend transit traffic – that is, traffic transiting one network, that originated on another network, and will terminate on a third network – to be within the definition of the designated service. Telecom argued that transit traffic is not regulated because such calls do not originate or terminate on Telecom’s fixed PSTN.⁷ TelstraClear argued that transit necessary to access Telecom’s mobile network was included within the description of service.⁸
32. The Commission has determined that transit traffic is not within the scope of the designated services because it does not transit the fixed PSTN as that term is defined in the Act - that is, it does not transit between the end-user’s building and the local switch or equivalent facilities. Accordingly, the Commission will not set terms for that traffic.

Payphones

33. In its draft Determination, the Commission concluded that the bundle of services provided by payphones is properly within the scope of the Interconnection Application. The Commission accordingly indicated that the inter-carrier charges in respect of payphones should be set on an FLCB basis.
34. Telecom argued that the provision of originating access from payphones is not within the scope of the designated service as a payphone is not an “end user building”. Calls originating from a payphone do not therefore originate “on” the Telecom fixed PSTN.
35. In addition, Telecom states that the service represented by calls from a payphone comprises two services:
- (i) the handing over of the payphone call to the other carrier. This can be compared to the equivalent of toll-free origination – except that the definition of ‘fixed PSTN’ and the reference to ‘end-user building’ in the Act do not cover payphone calls;

⁷ Telecom, Submission in Response to the Interconnection Draft Determination, 9 September 2002, p. 7.

⁸ “So in [TelstraClear’s] view, the concept of termination on the fixed network would include transit carriage across a fixed network which is required by Telecom in order to access a mobile network.” Transcript of the Interconnection Conference, 16 September 2002, Tape 1, p. 32.

- (ii) Telecom provides a place for the customer to make the call and a phone (the payphone box). This can be contrasted with a toll-free call where the customer making the toll call provides a place to make the call (their home or business) and provides the phone itself (they can rent it from Telecom for a separate charge).⁹
36. Telecom argues that by treating both services as within the scope of the Interconnection Application, the Commission is seeking to regulate the call origination function and the service of providing the phone booth and the CPE. The latter service cannot be covered by the Act because the definition of fixed PSTN is specific in not including the end-user's building.
37. TelstraClear argues that originating access from payphones is within the scope of the designated service. Telecom's interpretation of "fixed PSTN" and "end user building" is too restrictive in TelstraClear's view, and will lead to the outcome that a line going into a house would be regulated, but a phone box located outside the house, while connected to the same network and controlled by the same local exchange, would not be regulated. Such a view would lead to "islands of non access" in the local network.¹⁰
38. TelstraClear also argues that the term "end user's building" means no more than the other end of the exchange line, the place or structure within which the person being supplied the service is located when using the service. "Building" is typically given a broad meaning in many legal contexts and the end-user building would also include buildings in which payphones are located such as airports, shopping centres and hospitals. The service provided by Telecom includes a temporary licence to occupy the payphone facility and to use it during the call.¹¹
39. When a call is made from a payphone, the caller is the user of the service of conveyance of the call to the local exchange. The "building" is the location from which the call is made, or the structure in which the telephone is located. The ownership of the "building" is immaterial. The Commission concludes that a payphone is an "end-user's building" when occupied for the purpose of originating a call. Therefore, such a service connects an end-user's building to the local switches or equivalent facilities.
40. The call origination service is a designated access service and the charge for that service will be the Interconnection Price.
41. However, the Commission accepts Telecom's argument that even if the phone booth is an "end-user building", the booth and the CPE are not part of the fixed PSTN. Therefore, the service of providing the phone booth and CPE is not within the scope of the designated access service. This Determination will not set terms for that service.

Calls crossing a LICA boundary

42. Telecom argues that the designated access service does not include calls that originate in one LICA Group for handover to another LICA Group and calls which are handed

⁹ Telecom, Reply Submission – Interconnection Conference 16 and 17 September 2002, 17 September 2002, p. 4.

¹⁰ TelstraClear, Section 25: Response to Telecom Submission on Investigation into Application for Determination of Designated Access Services (Interconnection), 19 July 2002, pp. 21-2.

¹¹ *Ibid.*, p. 22.

over in one LICA Group for termination in another LICA Group.¹² Such calls are not local distance calls, and require transport beyond the originating LICA Group.

43. TelstraClear has established points of interconnect in virtually all LICA Groups. In the case of those few instances where calls are carried by Telecom beyond the originating LICA Group, the parties have reached agreement on the terms of service.¹³ As a practical matter, the parties agree on the scope of the determination as it affects calls which cross a LICA boundary.
44. Therefore, for the purposes of this Determination, the scope of the interconnection service extends to calls within a LICA Group. It is not necessary for the Commission to decide whether its jurisdiction extends to include national transport services.

50XY Services

45. Telecom and TelstraClear have been unable to agree terms for 50XY calls and request a determination from the Commission. The commercial model and associated charges (if any) are in dispute between the parties.
46. TelstraClear is not currently interconnected with Telecom for the 50XY access code. TelstraClear, in its submission on access codes and numbers at the interconnection workshop, proposed an origination model where the carrier originating the call is the access provider, and the terminating carrier is the access seeker. The caller would make a call as though it were a local call irrespective of the location of the called party, and would be charged at the applicable local call rate regardless of the location of the called party (for residential customers that would in most cases be zero). The carriers would each bill their own customers, but the terminating carrier would be entitled to the revenue generated from both customers.
47. Under TelstraClear's proposal, in exchange for originating the call and for billing and collecting the revenue from the access provider's customer, the access provider would be paid:¹⁴
 - (i) The standard origination charge;
 - (ii) A billing and collection charge of 2 cents per call;
 - (iii) A bad debt contribution, which will be adjusted periodically in light of the access provider's actual experience in collection charges for calls to the access seeker's service; and
 - (iv) The access provider's charge for calls to 50XY would be matched to local call charges.
48. Telecom, in its cross submission dated 19 July 2002, argued that building on the toll-free construct, which employs an origination model, is the appropriate commercial model for 50XY calls. The carrier originating the call receives an origination payment from the carrier terminating the call to the 0800 number, and collects and retains the revenue (if any) from its customer. The terminating carrier bills, collects and retains the revenue from its customer.

¹² Telecom, Reply Submission – Interconnection Conference 16 and 17 September 2002, 17 September 2002, p. 3.

¹³ Joint letter from Lusk (Telecom) and Forsyth (TelstraClear) to the Commission, 9 October 2002.

¹⁴ TelstraClear, Submission on Access Codes and Numbers, Interconnection Workshop, 1 & 2 August 2002.

49. On 23 October, Telecom provided a more detailed submission on 50XY. Telecom proposed that neither party should charge the other for call origination or termination, i.e. bill and keep, with each carrier setting charges to its own customer, billing and retaining the customer revenue. Importantly, Telecom argued that the access provider should set the charge paid by the caller.
50. Telecom raised a number of objections to the commercial model suggested by TelstraClear for 50XY:¹⁵
- it relies on the parties agreeing (or the Commission determining) the price that will be charged to the caller, i.e. the local call charge. Telecom does not consider it appropriate for the parties to agree retail prices, and does not consider that the Commission has jurisdiction to determine retail prices;
 - it widens the impact of Telecom's TSO obligations, as it provides a further set of numbers that are free to residential callers;
 - it requires the development of a billing capability for those calls; and
 - it has a high transaction cost because it requires pass-through of revenue when tiny sums are involved.
51. The Commission is not persuaded by Telecom's argument that bill and keep is a suitable commercial model for 50XY. Rather, the Commission considers it is appropriate that the access seeker receive the charge billed to the calling party (the *A end charge*) as it is part of the total return for providing the service and so for undertaking the entrepreneurial activity and bearing the commercial risk of creating the service. The access provider is not providing the service; it is providing origination, and billing and collection, for which it is entitled to receive cost based remuneration.
52. The appropriate commercial model for 50XY is, therefore, similar to the Premium Rate Service, agreed by the parties in respect of 090X calls and described at clause 11, Appendix B of the Interconnection Terms. 50XY has characteristics and a cost structure analogous to the parties' agreed terms for Premium Rate Services. In both cases the access seeker is entitled to the A end charge. Both, therefore, require the transfer of revenue from the access provider to the access seeker. Billing for 090X and 50XY involve substantially the same functions in the operations of the access provider. Both utilise an origination commercial model, and the function of origination is the same for both services.
53. Telecom argues that 50XY is different to 090X in an important respect: while with 090X calls a uniform rate is charged to all callers, under TelstraClear's proposed terms for 50XY, different categories of caller would be charged at different rates. The Commission agrees with Telecom that this is a clear difference between 090X and 50XY.
54. However, this does not indicate that the agreed terms for Premium Rate Services are not a valid comparator for determining terms for 50XY. As the access seeker is entitled to the A end charge or charges for 50XY, the amount at which that charge is set, or whether that charge is differentiated according to customer categories, is

¹⁵ Telecom, Submission on 50XY (Nationwide Number Service), 23 October 2002, para. 10.

immaterial to the access provider. Further, differentiated prices are not uncommon in the telecommunications industry, and Telecom states in its proposed model for 50XY (where the access provider sets the A end charge) that it may choose to set geographically differentiated rates or different rates from Telecom payphones.¹⁶ As the provider of the service, TelstraClear is in the best position to determine the prices for its service. Should Telecom consider the 50XY prices set by TelstraClear to be uncompetitive, it has the commercial recourse of providing a competing service.

55. The retail price charged by the access seeker would not be set by the Commission. Telecom argued in its submission of 23 October¹⁷ that the Commission does not have jurisdiction to determine a retail price; that is, the A end charge. Under the terms for Premium Rate Services, which the Commission considers a useful comparator in setting terms for 50XY, the A end charge is set by the access seeker. The Commission determines that a similar term is appropriate for 50XY; that is, the access seeker is entitled to set the A end charge, and may set differential charges according to categories of customer.
56. Telecom also argues that TelstraClear's commercial model for 50XY would widen the impact of Telecom's TSO obligation.¹⁸ The Commission is not persuaded by this argument, as Telecom would be able to recover the reasonable cost of providing origination from the access seeker through the origination charge. There is no evidence that adopting such a commercial model would necessarily have an impact on the TSO.
57. Telecom further argues in its 23 October Submission, that high transaction costs of billing and collection and the relatively complex pass-through of revenue of such a commercial model, favour the adoption of bill and keep. However, transaction costs, such as billing and collection, are a cost of business, provided they are passed through to the access seeker. If transaction costs are too high, the carrier offering the service will not be able to price it at a reasonable price, customers will not purchase the service and ultimately the carriers will not offer it. Whether 50XY is a viable service is a matter for the market to determine, not the Commission.
58. Therefore, the Commission will determine the origination charge, and other terms for the associated functions of the 50XY service, namely billing and collection; and provision for bad debt.
59. Under the initial pricing principles for interconnection with Telecom's fixed PSTN, and interconnection with TelstraClear fixed PSTN¹⁹, the Commission is required to benchmark the origination charge. As the origination of 50XY is functionally the same as the origination of toll bypass calls, the Commission determines that the Interconnection Price is the correct price for originating access of 50XY calls.
60. In submissions received prior to the interconnection conference on 16 and 17 September, and at that conference, TelstraClear argued that setting charges for 50XY services constituted charges that were a "price payable for the supply of the service" which were required to be determined in accordance with the initial pricing principle,

¹⁶ Telecom, Submission on 50XY (Nationwide Number Service), 23 October 2002, para. 31.1.

¹⁷ *ibid.*, para. 10.1.

¹⁸ *ibid.*, para. 10.2.

¹⁹ Telecommunications Act 2001, Schedule 2, Part 2, subpart 1.

and therefore had to be benchmarked. In a later submission on 25 October, TelstraClear acknowledged that benchmarking is not necessary or appropriate.

61. The 50XY charges for billing and bad debt are within the terms of this determination by virtue of being functions associated with origination and termination of voice and data calls on Telecom's fixed PSTN. Although it is arguable that pricing aspects of such services should be dealt with by benchmarking, the Commission considers the obligation is limited to benchmarking the price payable for origination and termination of calls.
62. Therefore, the Commission does not consider that the terms of the statute compel benchmarking in respect of this service. In practical terms, this conclusion is reinforced by the views expressed by TelstraClear in its letter of 25 October²⁰, and the absence of any submission from Telecom on the need to benchmark the functions associated with the origination of 50XY calls.
63. As the functions for billing and collection of 50XY and 090X calls are substantially the same, the Commission determines that the terms for billing and collection, and the provision for bad debt agreed by the parties for Premium Rate Services are appropriate to be determined for the 50XY service. The Commission, accordingly, determines that the following terms shall apply to 50XY calls. In a billing period, the access provider may deduct from the revenue from calls to 50XY received from its customers:
 - (i) Origination charges at the Interconnection Price;
 - (ii) A billing and collection charge of 2 cents per call for those customers whom the access seeker sets a charge above zero; and
 - (iii) An allowance for partial or non payment of 50XY charges, including the retrospective application of part or non payment of 50XY charges.
64. The A end charge or charges shall be calculated in accordance with a schedule of 50XY A end Charges notified from time to time by the Access Seeker and, for each billing period, the access provider shall pay to the access seeker the revenue from its customers pertaining to calls to the access seeker's 50XY numbers less the deductions described in paragraph 63.
65. If in any billing period the sum of the revenue from calls to 50XY obtained by the access provider from all its customers is less than the sum of the charges described in paragraph 63, including the retrospective application of the provision for bad debt, the access seeker will pay the sum of the difference to the access provider.
66. Telecom argues that it will have to develop billing capability to provide this service. The Commission notes that Telecom and TelstraClear are committed to agreed terms for the development of a similar billing functionality for 0900 calls. The Commission anticipates that the incremental costs to Telecom and TelstraClear of the additional billing requirement associated with 50XY calls will be relatively low, and should be able to be agreed between the parties.

²⁰ "From a practical perspective, TelstraClear would agree a charge of 2 cents per call for 50XY is appropriate and consistent with the billing and collection charge agreed between the parties in relation to Premium Rate Services in clause 3b. of Appendix B of the Agreed Terms. The functions involved are substantially the same." Letter from Forsyth (TelstraClear) to the Commission, 25 October 2002, p. 4.

67. The cost of implementing billing functionality for 50XY calls will be calculated according to the following process:
- (i) If the parties are unable to agree on the charge to be paid for billing functionality for 50XY calls, either party may trigger a resolution process in order to calculate the charge.
 - (ii) In such an event, the access provider will be required to provide to the access seeker detailed cost information which specifies the basis on which the charge is set.
 - (iii) This information must be provided to the access seeker within 20 working days of triggering the resolution process.
 - (iv) The parties should employ that cost information in determining an FLCB charge. If the parties are unable to agree on the FLCB charge within a further 20 working days, either party may apply to the Commission to have the charge set.
68. It is agreed between the parties that, in the event the Commission determines terms for 50XY, activation of 50XY codes will be included in clause 6 of the Interconnection Terms. As the Commission determines such terms, 50XY codes are included in clause 6 of the Interconnection Terms.

PRICING

Initial Pricing Principle

69. The Commission's Determination must be made in accordance with the relevant initial pricing principle. Schedule 1, Part 2, subpart 1 of the Act provides that the initial pricing principle for origination and termination (and their associated functions) of voice and data calls (including dial-up internet calls) on Telecom's fixed PSTN is:
- benchmarking against interconnection prices in comparable countries that result from the application to networks that are similar to the access provider's fixed PSTN of:
 - (a) a forward-looking cost-based pricing method; or
 - (b) if the Commission considers that a forward-looking cost-based pricing method does not best give effect to the purpose set out in section 18, whichever of the following methods that the Commission considers best gives effect to that purpose:
 - i. A pure bill and keep method; or
 - ii. A pure bill and keep method applied to two-way traffic in balance (or to a specified margin of out-of-balance traffic) and a forward looking cost-based pricing method applied to out-of-balance traffic (or traffic beyond a specified out-of-balance margin).
70. In applying the initial pricing principle, the Commission must consider: (a) incentives to terminate dial-up internet traffic and other similar one-way traffic streams must be efficient; and (b) the effect of any obligation under the TSO to provide price-capped unlimited calls.²¹ The Commission may also choose different pricing principles for different call types of voice and data calls, including dial-up internet data calls or calls with significantly different characteristics for designated interconnection access services. As a result of the agreement reached by the parties that all intra-LICA voice and data calls, 0867 calls and 0873 calls will be subject to bill and keep, the matters referred to in (a) and (b) above do not require additional attention by the Commission in this Determination.

²¹ Telecommunications Act, Part 2 of Schedule 1, sub-part 1, interconnection with Telecom's fixed PSTN and interconnection with a fixed PSTN other than Telecom's.

Interconnection with TelstraClear's fixed PSTN

71. For interconnection with a fixed PSTN other than Telecom's, the Commission must apply the initial pricing principle that is either:
- i. the price determined by the Commission for interconnection with a network of Telecom's that corresponds most closely in nature to the access provider's network, or
 - ii. benchmarking against interconnection prices in comparable countries that result from the application to networks that are similar to the access provider's PSTN of a forward-looking cost-based pricing method or bill and keep.
72. The parties have agreed that all intra-LICA voice and data calls, 0867 call and 0873 calls originating or terminating on TelstraClear's fixed PSTN will be subject to bill and keep. For Toll Bypass Calls, Standard Calls and Toll-Free Calls, the Commission has decided that the price will be the same price determined by the Commission for interconnection with Telecom's fixed PSTN. There is no evidence to indicate that the costs of origination and termination on TelstraClear's fixed PSTN are materially different than the cost of the same services on Telecom's fixed PSTN.

Pricing of Local Interconnection

73. On 13 September, the parties notified the Commission that they had agreed terms for local interconnection or intra-LICA calls. The parties agreed that all intra-LICA voice and data calls, 0867 calls and 0873 calls will be subject to bill and keep. Those terms are attached in Appendix 2 to this Determination at clause 6 of Schedule 4 of the Interconnection Terms. Under bill and keep, call traffic between networks is exchanged without charge.

Pricing of Toll Free Calls

74. The Commission's Interconnection Pricing Methodology paper²² proposed that interconnection for toll-free calls should be FLCB, with the toll provider paying the caller's access provider the interconnection charge. This was justified on the grounds that it allowed the caller's access provider to recover its efficiently incurred costs. Both Telecom and TelstraClear in their submissions on the draft Determination concurred that the FLCB benchmark rate is the appropriate standard for the pricing of interconnection of toll-free calls.
75. The Commission determines that the Interconnection Price will apply to interconnection for toll-free calls and will be paid by the toll provider to the caller's access provider.

Pricing of Toll Bypass and Standard Calls

76. The Commission considers that an FLCB price is appropriate in respect of that traffic and will allow the access provider to recover efficiently incurred costs. The

²² Interconnection Pricing Methodology, Discussion paper, 5 April 2002

Interconnection Price will accordingly apply to each of the originating and terminating services for those calls. The cost of transport between switches within a LICA Group is recouped through the Interconnection Price.

Calls to 50XY numbers and Premium Rate Services

77. The Commission has decided to apply the Interconnection Price to interconnection for calls to 50XY numbers and premium rate services, with the access seeker paying the access provider the interconnection charge.

Call Attempts

78. The Commission notes that call attempt charges are inconsistent with current New Zealand retail pricing for the related end-user services. As retail customers are not charged for call attempts, an interconnection charge for call attempts will not impact on the call behaviour of end-users and, therefore, will not improve efficiency in end-customer phone usage.
79. A separate call attempt charge might be justified if one network operator had an unreliable network, which imposed costs associated with failed call attempts on the other carrier's network. The Commission is of the view that this does not apply to either party to this Determination.
80. The Commission determines that there will not be a separate interconnection charge for unsuccessful call attempts.²³

Charging Increments

81. Internationally, the two most common charging increments for call duration above any minimum call charge are minutes and seconds. Some overseas regulators have mandated price structures where call duration (above any minimum usage) at both the wholesale and retail levels is billed on a per minute basis, while others stipulate per second charging at both levels.
82. The interconnection agreements between Telecom and TelstraSaturn, and Telecom and Clear Communications provided for a minimum interconnection charge of one minute with subsequent increments of one minute for chargeable calls.
83. Given that retail telecommunications services can be priced by the second, an efficient interconnection pricing structure should permit network operators to compete at a retail level by offering alternative charging increments which enable customers to select the option which best meets their needs. If a network operator is billed for interconnection by the minute (rounded up), it will be disadvantaged in relation to a vertically integrated operator which incurs costs for the time of the call (i.e. per second). A vertically integrated operator has complete flexibility to offer per second or per minute charging at the retail level. If an operator were required to purchase interconnection on a per minute basis, it would be at a competitive disadvantage in offering a retail per second charge.

²³ Other jurisdictions do not have separate rate elements for call attempts in their interconnection charges. Therefore the cost of call attempts are likely to be reflected in the charge for calls. To add a call attempt charge on top of FLCB benchmark charge would result in the originating operator over-recovering cost.

84. Pricing by the second could also deliver benefits to end-users in terms of lower average call charges for any given per minute rate (assuming a random distribution, on average a customer being charged by the minute would have only used 30 seconds of the last billed minute). Given that the average duration of a voice call used in the Benchmark Report is 3.73 minutes (equalling 4 minutes if per minute billing is used) rounding up to the next minute could increase the interconnection charge for calls by approximately 7.2%.
85. Call billing in one second increments after the first minute is efficient and consistent with a forward-looking cost-based price as a means of recovering call set-up costs. The fact that the parties already bill retail customers on single second charging increments indicates that a major adjustment to current billing systems will not be required to bill wholesale customers in first minute and then per second increments. Therefore, in circumstances where minimum call duration charges are permissible (i.e. where there is no flag fall charge), the Commission determines that call billing will be in one second increments after the first minute.

Flag Falls

86. Call set-up charges are charges in addition to duration charges for connected calls. They can represent a material proportion of a call's costs, particularly for short duration calls. In a forward-looking cost-based regime, these call set up charges can be recovered by several approaches:
- flag falls;
 - minimum per call interconnection charges (e.g. a minimum interconnection charge for a call of one minute); and
 - including a share of the call set up costs in the interconnection charge.
87. Hence, the existence of a flag fall can be seen as a reason for a low minimum call usage charge (e.g. 1 second) and vice versa. The presence of both a flag fall and a minimum call usage charge results in over recovery of call set up costs for calls of a shorter duration than the average call usage period.
88. The interconnection agreements between Telecom and TelstraSaturn, and Telecom and Clear Communications, commencing in August 2000 and October 2000 respectively, have flag fall charges for several call types including toll bypass and toll-free calls.²⁴ For other call types these agreements have a minute plus second call structure where there is a minimum interconnection call charge of one minute.
89. The Interconnection Price includes the efficient call set up costs. As noted in paragraph 85, the Commission considers that call billing with a minimum usage charge of one minute followed by second charging is an efficient way of recovering call set up costs. However, should the parties choose to do so, the Commission determines that they may provide for the recovery of the call set up costs through:
- (i) usage charges; or
 - (ii) a flag fall charge; or

²⁴ See sections 6 and 7 of the Telecom-TelstraClear October 2000 agreement.

(iii) a minimum call duration charge; or

(iv) a combination of (i) and (iii) above or (i) and (ii) above, but not both.

90. Where there is a minimum call duration charge of one minute, the Commission determines that a flag fall charge is not permitted. Similarly, where there is a flag fall charge, then a minimum call duration charge is not permitted.
91. If the parties choose to adopt a structure for the recovery of call set up costs, the following calculation must be true for the prices:

$$\text{Determined rate} \geq (3.73 * \alpha + \beta) / 3.73$$

Where “Determined rate” is the per minute rate set by the Commission, α is the per minute rate chosen by the carriers, and β is the fixed price per call.

Whole Cent Rounding

92. On 9 October 2002, the parties requested the Commission to decide whether call charges ought to be rounded up or down to the nearest cent for any chargeable call, or for either each call or the sum of charges for a certain call type.²⁵
93. Telecom proposed that a carrier may round its charges to the other carrier for any call, or its total charges for all calls of a particular type on any invoice, either up or down to the nearest whole cent, so long as the basis of call rounding is the same as either the standard basis on which retail charges for business calls are rounded or where the other carrier is applying whole cent rounding at an inter-carrier level. TelstraClear proposed that there should be no whole cent rounding at a call level, and instead rounding at the level of all calls of a particular type on any invoice.
94. As noted in paragraph 85, the Commission considers that call billing in one second increments after the first minute is efficient and consistent with a forward-looking cost-based price as a means of recovering call set-up costs. Per second charging after the first minute is incompatible with whole cent rounding per call, and would increase the per minute weighted average price of an average duration call above the Interconnection Price. The Commission, accordingly, determines that whole cent rounding will only apply to the rounding of total charges for each call type.

Benchmarking

95. The Benchmark Report identified a number of countries and US states as relevant comparators for the purposes of the initial pricing principle, on the basis of:
- comparability to New Zealand;
 - the use of FLCB interconnection pricing; and
 - similarity of networks to Telecom’s fixed PSTN.

²⁵ Joint letter from Lusk (Telecom) and Forsyth (TelstraClear) to the Commission, 9 October 2002.

96. The comparators were Australia, Canada, France, Ireland, Netherlands, United Kingdom, Switzerland and the US states of Nevada, Colorado, Arizona, Utah, Missouri, Minnesota, West Virginia, Oregon, Oklahoma, and Arkansas/Kansas.
97. For the reasons set out in the Benchmark Report, the Commission was not satisfied that Japan, Luxembourg, Finland, Austria, Portugal, Germany, Denmark, Belgium, Greece, Spain, Sweden, Norway or Italy were relevant comparators.
98. The Benchmark Report provided a range of interconnection prices in terms of network elements – local, single tandem and double tandem - reflecting the nature and extent of the use of switching and other network facilities. For example, a benchmark “local” price reflected the use of a local switch component (or an equivalent cost in jurisdictions which expressed their prices in terms of geographic zones), whereas a “single tandem” price also reflected the use of a higher level “tandem” switch and transport between the local and tandem switch. Benchmarked jurisdictions typically set out their interconnection charges in these terms.
99. If the Commission were to fix prices on the basis of network elements, the parties would be obliged to change the pricing structure prevailing in New Zealand to one based on network elements in order to correspond to the regulated price structure. The current price structure is based on LICAs and their relationship to the access seeker’s point(s) of interconnection. The Commission has not received any evidence as to the costs and benefits of a change in the LICA pricing structure. Nor were any submissions received requesting such change. Such a step may require that consequential changes be made to interconnection billing systems and to network signalling protocols. Accordingly, the Commission is unwilling to impose such a change as a consequence of the use of benchmark data.
100. As in the Benchmark Report, a benchmark range will be used in this Determination, expressed as weighted averages of the disaggregated benchmarked prices for each network element (local, single tandem and double tandem). The benchmark range will be based on the Benchmark Report (which was itself the subject of submissions from the parties), with the following changes:
- (a) Benchmark prices have been updated as at 18 October 2002. The revised data was provided to Telecom and TelstraClear for their comment on 21 October 2002. Comments were received from both companies on 25 October, and have been taken into account in the finalisation of the range. The complete data is annexed as Appendix 1 to this Determination.

In its submission of 23 October, NERA, on behalf of Telecom, argued that if the Commission were using these data to set Telecom’s prices retrospectively, then it would be more appropriate to choose benchmark prices that were current at that date.²⁶ However, the parties and not the Commission have decided that the prices shall apply retrospectively from 1 June 2002. NERA also argued that the data used by the Commission should match the period of the Determination. However, it has in general not been possible for the Commission to obtain benchmarks that match with the period of the Determination, as other regulators set interconnection rates in

²⁶ NERA, Accuracy of Benchmark Interconnection Charges, 23 October 2002.

respect of their own timeframes. Therefore, the Commission used the data most current at the time of the Determination.

- (b) The currency conversion methodology used by the Commission to translate prices into New Zealand currency has been revised (refer paragraphs 113-131). The range used in this Determination converts foreign-currency denominated rates into New Zealand dollars based on an average of historical data and forecast exchange rates. This revision has resulted in significant falls in the conversion rates for the European countries.
- (c) The New Zealand switched traffic profile originally supplied by Telecom reflected a single day's traffic. This traffic profile was used to calculate the interconnection rates in the draft Determination. An expanded profile covering two periods of seven consecutive days was subsequently provided by Telecom and is detailed in table 1 below. This updated profile was used in determining the interconnection rates in Table 3.
- (d) The observations for the US states have been disaggregated and appear as individual data points (refer paragraph 131).

101. The profile in Table 1 reflects the interconnection traffic flows between the Telecom and TelstraClear networks.²⁷

Table 1: Telecom's Traffic Profile

	Single Switched	Tandem Switched	Double Switched
Terminating	31.50%	66.10%	2.35%
Originating	36.65%	63.00%	0.30%
Simple Average	34.08%	64.55%	1.33%

102. The Commission anticipates that the parties will be able to agree amongst themselves on the disaggregation of the single Interconnection Price to conform to their desired pricing structure. Should they be unable to do so, either party may apply to the Commission for a reconsideration of this Determination under section 59 of the Act.

Port Charges

103. Telecom has submitted²⁸ that the benchmark prices contained in the Benchmark Report should be adjusted to reflect the fact that some jurisdictions levy separate trunk port charges and others do not. Telecom further contends that, for an accurate comparison, the benchmark prices for the former group should be increased by an amount equal to the discrete port charges.
104. Telecom and TelstraClear confirmed during a meeting with Commission staff that trunk port charges for intra-LICA voice and data calls, 0867 calls and 0873 calls, toll

²⁷ Letter from Parkes (Telecom) to the Commission, 27 September 2002.

²⁸ Telecom, Submission in Response to the Interconnection Draft Determination, 9 September 2002, para. 58.1.

bypass, toll free and standard calls had been agreed. These charges appear as agreed terms in Schedule 4 of the Interconnection Terms.²⁹

105. As a result of that agreement, it is not necessary for the Commission to come to a view on the incidence and level of trunk port charges as between the parties. However, the inconsistent treatment of trunk port charges in the benchmarked interconnection rates does suggest that for those jurisdictions where trunk port charges are recovered through interconnection charges, the rates should be reduced by some amount reflecting those costs.
106. TelstraClear has suggested that such an adjustment should be made where material. The Commission understands that there would be significant difficulties in assessing the exact amount of the adjustment, and hence whether the adjustment would be material. Accordingly, the Commission believes no adjustment should be made to the benchmark prices on account of trunk port charges.

Transport Charges

Distance Bands

107. In its submission dated 9 September 2002, Telecom argued that the use by the Commission of an average tandem transport distance in the US of 7 miles (11.2 km) results in a significant underestimation of call transport costs. In support of this argument, NERA submitted for Telecom that the average local to tandem length in New Zealand is around 100km.³⁰ NERA submitted in relation to transport distances that “ideally the Commission would come to understand all the transport charges in benchmark US states and all the average distances that would apply to these charges in New Zealand”.³¹ However, they also noted that “this is unlikely to be practical” and suggested a number of alternatives.
108. The Commission does not find NERA’s arguments persuasive. In considering the average tandem transport distances within New Zealand the Commission notes the following data supplied by Telecom to Ovum for the purposes of conducting an Interconnect Survey for Telecom:

Figure 2.4 Interconnect traffic distance basket profile³²

0 – 10 km	10 – 30 km	30 – 100 km	100+ km
72 %	19 %	8 %	1 %

109. Given the proportion of interconnect traffic which is within the 0 – 10 km distance band, the Commission considers that it is not unreasonable to assume an average length of 7 miles (11.2 km) when estimating transport costs in the United States. The Commission finds that this approach to setting average tandem transport distance rates is preferable to the proxies suggested by NERA, and produces a more accurate

²⁹ See the Interconnection Terms, Appendix 2 of the Determination, Schedule 4, 4.1d, 4.1e, 5.1d and 5.1e.

³⁰ NERA, Response to the Commerce Commission Draft Determination, 9 September 2002, p. 5.

³¹ *ibid.*, p. 5.

³² Ovum (2002) New Zealand Interconnect Benchmark: A report for Telecom New Zealand, Figure 2.4, p.7, presented in Telecom Corporation of New Zealand Limited’s Submission to the Commerce Commission on International Benchmarking dated 6 May 2002.

outcome. Accordingly, the Commission is satisfied that the adoption of the rates applicable to the 0 – 8 mile distance bands for the states of Colorado, Oregon and Utah is appropriate. The Commission also notes that use of a weighted average for transport costs would not have a material effect.

Direct Trunked Transport

110. NERA states, on behalf of Telecom, that the Commission has omitted “Direct Trunked Transport” (“DTT”) from its benchmarked rates. NERA appears to define DTT charges as charges that apply for transport provided by the access provider to carry traffic from a POI to a tandem or directly to an end office. NERA concludes that “it is equally unambiguous that the Commission’s benchmark study must incorporate DTT – unless TelstraClear intends to supply its own transport facilities within Telecom’s network”.³³
111. Network Strategies on behalf of TelstraClear responded that “the use of these services [UK services that corresponds to DTT] is entirely voluntary . . . and these circuits are part of the dedicated interconnection link between the two operators and not part of the shared network that conveys calls to their destination (terminating customer)”.³⁴
112. The Commission agrees with Network Strategies’ characterisation of these services as part of the dedicated interconnection link between the two operators. As such, they can be self-provisioned by the access seeker or purchased from the access provider or a third party, and are separate and distinct from the interconnection services supplied by Telecom, which include transport within Telecom’s network in the tandem rates. The Commission therefore finds that DTT charges should not be included as part of benchmarked US rates.

Exchange Rates

113. In the Benchmark Report and draft Determination, currency conversion rates were used to express interconnection rates in a common unit of account. These conversion rates were derived from commercial bank estimates of ‘equilibrium’ exchange rates, and weighted average exchange rates which reflected the relative balance of the tradeable and non-tradeable components of providing interconnection.³⁵
114. In the conference on the draft Determination, both TelstraClear and Telecom argued that the Commission should adopt a different approach to exchange rates. TelstraClear submitted that the use of purchasing power parity (PPP) exchange rates is appropriate, as these rates take into account any differences in costs between comparator countries. In a submission on behalf of TelstraClear, Network Strategies argued that:³⁶

At a conceptual level, the fundamental issue is the need to adjust interconnection rates given in different local currencies in order to make a comparison with New Zealand. This means that we need to adjust for the general level of prices. . . . This is provided for by the PPP standard, which is also sometimes called the PPP exchange rate because it relates to the ratio of two currencies.

³³ NERA, Submission on Direct Trunk Transport and Port Changes, 2 October 2002, p. 5.

³⁴ Network Strategies, Response to NERA Memorandum, 14 October 2002, p. 1.

³⁵ The Commission provided a detailed explanation of its approach in deriving these rates in an annex to the draft Determination, dated 9 September 2002.

³⁶ See Network Strategies, A Review of the Commerce Commission’s International Benchmarking Report, 9 September 2002, pages 5-6.

115. Network Strategies also argued that exchange rates do not necessarily reflect relative prices, and that the Commission's discussion of exchange rate theory in the Benchmark Report is not relevant to the question of how to adjust for relative prices between comparator countries.
116. In contrast, Telecom argued that nominal exchange rates should be used, with any cost adjustment taking place as a separate explicit exercise. Telecom has previously suggested that foreign-denominated interconnection rates be converted using monthly average exchange rates³⁷ or spot exchange rates.³⁸ NERA's submission for Telecom at the conference on the draft Determination referred to their previous position which:³⁹
- ... strongly advocated the adoption of nominal spot rates for currency conversion (and specific adjustments for differences in interconnection factor costs) ...
117. A more recent submission by Telecom discusses the use of current nominal exchange rates or alternatively an average of historical and forecast exchange rates covering the period of determination.⁴⁰
118. With respect to the use of PPP rates to convert foreign currency-denominated interconnection rates, the Commission set out the basis for its concerns in Appendix B of the Benchmark Report. While TelstraClear has disputed the relevance of these types of considerations to the benchmarking exercise, and notes that many overseas regulators have used PPPs, the Commission believes, for the reasons set out in the Benchmark Report, that a PPP rate does not provide the most appropriate currency conversion rate for the benchmarking analysis.
119. The role of benchmarking in the current context is to set interconnection prices. From the evidence presented to the Commission, only a small number of benchmarking studies conducted by overseas regulators have been used to set interconnection prices. Network Strategies has previously referred the Commission to a number of telecommunications benchmarking studies.⁴¹ Of the approximately 18 studies referred to, the majority used PPP rates, although a number used both PPP rates and exchange rates. However, only a limited number of those studies focused on interconnection rates, and in those cases, two studies used exchange rates (*EC Seventh Report on the Implementation of the Telecommunications Regulatory Package* (November 2001); National Telecom Agency (Denmark) *Tele Danmark's prices for switched interconnection* (October 1999)), and two studies used PPP rates (*Ovum Interconnect in Switzerland* (December 1997); Office of Utilities Regulation (Jamaica) *Interconnection in Telecommunications* (March 1999)).
120. The Benchmark Report considered the use of spot exchange rates, and concluded that the use of spot rates is inappropriate due to their volatility and dependence on factors that are unrelated to relative prices and costs. The Commission remains of the view that spot rates are not suitable for currency conversion in the context of the benchmarking analysis.

³⁷ See NERA submission, Review of CostQuest Associates' Benchmarking Survey, May 2002, Figure 4.1.

³⁸ See CRA submission, PPP in Telecommunications Benchmarking, May 2002, page 15.

³⁹ See NERA submission, Response to Commerce Commission Draft Determination, September 2002, page 8.

⁴⁰ See CRA submission, Currency Conversion Rates in Interconnection Benchmarking: A Response, September 2002.

⁴¹ See Network Strategies, Currency conversion for telecommunications benchmarking, 5 June 2002, pages 13-23.

121. In the Benchmark Report, the Commission indicated a preference for currency conversion rates that are based on independent estimates of ‘equilibrium’ or ‘fair value’ exchange rates as well as weighted measures of exchange rates. However, following the conference on the draft Determination, the Commission has reviewed and modified its approach to currency conversion for a number of reasons.
122. First, the Commission believes that it is appropriate to derive an exchange rate that relates to a period corresponding to the investment decisions associated with interconnection. The Commission understands that such a period may be upwards of five to ten years, given the long-lived nature of interconnection assets. For example, the ACCC has used asset lives of 10 years for local access switches; 10 years for remote switching units; and 9 years for transit switch ports and processors. Other asset types such as trenches and cables have been assigned longer asset lives.⁴² While the Commission at this stage has not placed any particular weight on the asset lives used by the ACCC, they do suggest that a 10-year period may be reasonable. NERA has previously used a 10-year period over which to average exchange rates, as this reflects the purchase schedule of interconnection assets:⁴³
- ... the approach we have taken is to assume that the use of the market exchange rate is the appropriate currency conversion for telecommunications and electronic equipment (averaged over the last 10 years to reflect the purchase schedule of the assets).
123. Second, the modified approach is more transparent to the parties and easier for them to replicate. Improved transparency and replicability of Commission decisions are likely to enhance the prospects that parties will be able to resolve future disputes without recourse to the Commission’s determinative powers.
124. The period over which exchange rates are averaged will have a non-trivial impact on the resulting figure. This is due to the large cycles observed in time-series data on exchange rates. As an indication of this sensitivity, a 5 year period has also been calculated. The analysis shows that the US, UK, Canadian and Swiss rates are sensitive to the period change. The Commission has nonetheless decided to use a 10 year period as more accurately reflecting the investment lives of major capital purchases for a fixed PSTN.
125. In setting the 10-year period, the Commission has used both historical exchange rate data and the results of surveyed forecasts out to September 2003. Specifically, the average exchange rates presented and used below incorporate 36 quarters of historical data and 4 quarters of projected data.
126. Under this modified approach, the exchange rates used to convert foreign currency-denominated interconnection rates into New Zealand dollars (NZD) are based on an average of historical data and forecast exchange rates. Interconnection rates collected for the Benchmark Report were expressed in the following currencies: Australian dollar (AUD), United States dollar (USD), British pound (UKP), Swiss franc (SFR), Canadian dollar (CAD), Euro and the Irish punt (IRP). However, recent data from the Irish regulator expresses interconnection rates in Euros.

⁴² See ACCC, A report on the assessment of Telstra’s undertaking for the Domestic PSTN Originating and Terminating Access services, July 2000, Table A5.1-Asset lives.

⁴³ See NERA, The Comparative Efficiency of BT: A Report for OFTEL, July 2000, page 20.

127. Time-series data was sourced from OANDA, a Swiss company which maintains a large historical currency database.⁴⁴ Exchange rates for each of the above currencies⁴⁵ against the NZD were obtained and averaged over the nine years to September 2002. For ease of use, the historical data was tabulated in quarterly form.
128. In the case of the Euro, exchange rate data is only available from 1 January 1999, when the euro was formally adopted by member states. For the period prior to January 1999, the Commission has used the fixed conversion rate between the French franc and the Euro (set at 6.55957 francs to the Euro) and applied this to the franc/NZD time-series. Similar exercises were conducted using the Dutch guilder (2.2037 guilders to the Euro) and the Irish punt (0.787564). The resulting pre-1999 Euro proxy rates were on average very similar, although some divergences appear in the early part of the period. An average of the three proxies was taken in order to derive a full set of historical data for the Euro covering the period from the December quarter (Q4) 1993 to the September quarter (Q3) 2002.
129. In addition to the historical rates, the Commission has used the results of an independent survey of institutional forecasts of exchange rates as of September 2003.⁴⁶ The forecast rate at September 2003 was interpolated back across the intervening quarters to complete the series.
130. The resulting exchange rates are presented in Table 2, along with a comparison with the exchange rates used in the Benchmark Report:

Table 2: Exchange Rates

	Average of ten year period rates	Benchmark Report Rates	Variance
USD	0.5518	0.55	0.3%
AUD	0.8436	0.83	1.6%
UKP	0.3537	0.36	-1.8%
Euro	0.5036	0.56	-10.1%
CAD	0.7951	0.77	3.3%
SFR	0.7926	0.95	-16.6%

131. The average interconnection rates for each benchmark jurisdiction, following the adjustments described in paragraph 100, are presented in Table 3 and Figure 1 below.

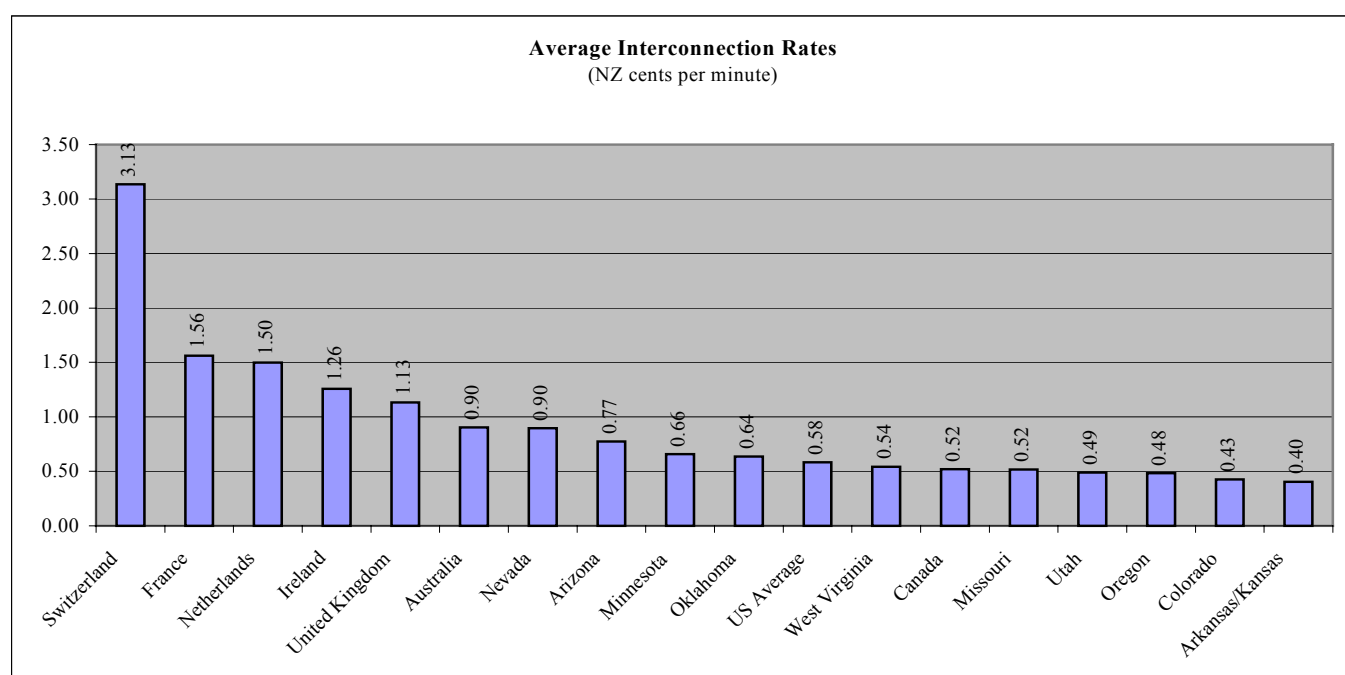
⁴⁴ Exchange rate data was extracted from www.oanda.com/convert/fxhistory.

⁴⁵ As noted in the preceding paragraph, the Irish interconnection rates are now expressed in euros.

⁴⁶ Forecasts have been sourced from Consensus Economics, a UK-based international economic survey organisation. The Consensus Economics surveys are based on monthly polls of over 250 forecasters and cover more than 90 currencies. The set of forecasts used in this determination are taken from the September 9, 2002 survey.

Table 3: Average Interconnection Rates

Country	NZ cents/min
Switzerland	3.13
France	1.56
Netherlands	1.50
Ireland	1.26
United Kingdom	1.13
Australia	0.90
<i>Nevada</i>	<i>0.90</i>
<i>Arizona</i>	<i>0.77</i>
<i>Minnesota</i>	<i>0.66</i>
<i>Oklahoma</i>	<i>0.64</i>
<i>US Average</i> ⁴⁷	<i>0.58</i>
<i>West Virginia</i>	<i>0.54</i>
Canada	0.52
<i>Missouri</i>	<i>0.52</i>
<i>Utah</i>	<i>0.49</i>
<i>Oregon</i>	<i>0.48</i>
<i>Colorado</i>	<i>0.43</i>
<i>Kansas/Arkansas</i>	<i>0.40</i>

Figure 1

⁴⁷ This is an average of ten of the US states. Arkansas and Kansas are bracketed as a single data point, in the light of evidence that the Kansas rate was adopted by the Arkansas public utility commission.

Price Point

132. Having identified the benchmark range, the next issue is the selection of the appropriate price. In this respect, Telecom has argued that so long as the access price proposed by Telecom in negotiations with TelstraClear, or other carriers, is within the benchmark range, the Commission should not choose another price. The benchmarking of interconnection prices under the initial pricing principle can only produce a reliable range of reference prices. It is not designed to produce a single price that would apply as the outcome of the initial pricing exercise. Telecom says that:

“The significance of this focus on “reliable range” pricing as against “single point” pricing is that it underpins Telecom’s primary pricing submission: that is, provided Telecom’s proposed pricing is within a reliable and efficient range, and reflects the outcomes of earlier commercial negotiations, the Commission need not and, indeed, should not seek to calculate some other price which may be more advantageous to the access seeker.

In other words, the purpose of regulation here is to avoid concerns that the pricing sought by Telecom for interconnection with its PSTN may be outside a reliable and efficient pricing range, as established by (initially) valid benchmarking. If Telecom’s offered pricing is within such a range, there is no basis for the Commission running the regulatory risks involved in attempting to second-guess the pricing at which Telecom will contract...⁴⁸

“The Commission has carried out a benchmarking exercise as required by the Act, and established the New Zealand price is not “out of line”. The only principled conclusion is to confirm Telecom’s proposed price of 2.65 cents.”⁴⁹

133. While this approach would remove the risk of regulatory expropriation, it assumes that the Commission’s task is to determine whether the price proposed by Telecom in its negotiations with TelstraClear is within the benchmark range. The scheme of the Act is that application to the Commission for a determination of the terms of supply of a designated access service such as interconnection may include “the price payable” by the access seeker for the service (section 20(2)(a)). Having decided to investigate the application, the Commission must prepare a determination that includes the terms on which the service must be supplied (section 30(a)). If a determination is made regarding price, a party may apply for a review of that part of the determination “that relates to the price to be paid for the service” (section 42(1)).
134. The Commission therefore considers that it has a broad discretion to decide upon the price payable for the service, having regard to the purpose set out in section 18 and in accordance with the initial pricing principle requiring benchmarking against interconnection prices in comparable countries. The Commission does not accept that it is constrained in deciding on an initial price by the pricing proposals of either party made during negotiations preceding the application. In a negotiation, parties may be expected to propose prices that for a variety of reasons differ from a cost-based price.

⁴⁸ Telecom, Submission under Section 25(1)(d) Telecommunications Act 2001 – TelstraClear Limits Applications for ‘Interconnection’ Determination, 3 July 2002, paras.3.6-3.7

⁴⁹ Telecom, Submission in Response to Interconnection Draft Determination, 9 September 2002, para.57. The rate is an average of a combination of a flagfall charge, port charges, and a range of per minute charges relating to Telecom’s Local Interconnect Calling Areas, weighted by traffic distribution (Telecom submission 3 July 2002, para.5.1).

This could, for example, be the case where a party has market power, such as in negotiations for access to a fixed local loop telephony network.

135. The benchmark range is the outcome of a process whereby the Commission has selected countries or states considered to be comparable to New Zealand and has made a number of adjustments in an effort to provide a consistent basis for comparison. Access deficit contributions have been removed, average per minute rates have been estimated, geographically differentiated rates have been converted, and time of day pricing has been adjusted for. The resulting prices have been converted to New Zealand currency equivalents, using exchange rates averaged over an assumed asset investment life of 10 years. Notwithstanding these efforts to develop a benchmark range using consistent principles and an exchange rate conversion methodology designed to minimise exchange rate volatility, the range is wide (from 0.40 cents to 3.13 cents).
136. In submissions to the Commission both on the Benchmark Report and the draft Determination, Telecom has argued that if prices in other jurisdictions were to be used as proxies for the cost of interconnection in New Zealand then it was important that those prices be adjusted for known cost differences between that jurisdiction and New Zealand. NERA on behalf of Telecom proposed that the Commission should attempt to adjust the benchmark prices for:
- economies of scale in traffic density;
 - differences in the cost of labour; and
 - differences in the cost of capital.

The goal of such adjustments would be to derive a range of prices adjusted to account for cost differences between New Zealand and other jurisdictions.⁵⁰

137. The consequence of this approach would be that if a cost element is less expensive in another jurisdiction than in New Zealand, the interconnection price in that jurisdiction should be either discounted by the cost difference, or the Commission should adopt a higher interconnection price to compensate for that difference.
138. Though the Commission has selected comparator jurisdictions that have adopted forward-looking cost-based pricing methods, there is considerable diversity in those methods and potentially their application by different regulators. The breadth of the benchmark range itself is highly suggestive that, even as between countries where cost elements might be thought to be similar, the differences in prices are unlikely to be explained entirely or even primarily by different cost levels. In addition, even were it to be assumed that cost differences between countries are correlated to the resulting interconnection prices, it would not be justifiable to select out for adjustment only those cost differences that move in one direction. Instead, each major cost element in each country would need to be analysed to determine whether it is more or less costly than the same element in New Zealand. This would elevate the use of benchmarked prices as a tool for setting an initial price to a more elaborate process than the final pricing review itself. The scheme of the Act in contrast is that the initial price should be derived by reliance on a benchmark range to provide a less refined solution, leaving

⁵⁰ NERA, *Benchmarking of International Interconnection Costs Against New Zealand Cost Conditions*, July 2002, para.11.

the parties with the option of accepting that initial price or requesting a price review based on the application of a TSLRIC methodology to identify the long-run forward-looking incremental costs of the interconnection service in New Zealand.

139. The Commission has nonetheless examined a number of cost drivers in order to learn whether they have the potential to materially deviate from New Zealand conditions. In the Benchmark Report, the Commission considered a range of cost drivers suggested by the parties as having a material impact on underlying costs of interconnection. Those cost drivers were: depreciation; cost of capital; cost of labour; cost of material; taxes; and network density. The Commission concluded that there was no evidence that network density in the US states was materially different to New Zealand. Depreciation; cost of capital; cost of labour; cost of material; and taxes were all potentially material. However, given the tendency of the drivers to offset one another (i.e. some appeared to raise and others to lower costs), the Commission concluded that no adjustments for these factors were warranted. In submissions on the draft Determination, Telecom argued that the Commission's conclusion on network density was incomplete, in that it was based solely on a comparison of network density in the US states selected for benchmarking and did not address the impact of network density in the other comparators. The Commission has therefore reviewed the relevance of network density across the non-US jurisdictions.

Network Density

140. NERA on behalf of Telecom concurred with the Commission's conclusion that no adjustment is required for network density differences, with the proviso that this conclusion is restricted to US states and local (and maybe single tandem) switching costs. NERA noted however that "with the exception of Australia and Canada all the other countries [other than the US] in the sample have significantly higher population density than does New Zealand...this will, depending on traffic profiles, generally result in lower average (local and tandem) switching costs per minute and will certainly result in lower average transmission lengths (which account for 15 to 20 percent of total interconnection costs in the UK)"⁵¹. NERA provided to the Commission a table containing adjustments to the benchmarked prices NERA considered were appropriate to account for differences in network density.
141. While the Benchmark Report identified the potential significance of network density, the benchmarked prices did not show any clear relationship to the indicators of network density. The jurisdictions in which lower network density indicators were present consistently had lower prices when compared to those in which higher network density indicators were present. For example, the Netherlands with a population density of 385 people per square kilometre has higher prices than any of the US states, which have much lower population densities.⁵² Within the benchmarked US states

⁵¹ NERA, A Response to Commerce Commission Draft Determination, September 2002, para.63.

⁵² NERA reported that Telecom tends to have greater traffic through local switches than a number of European countries. For example, Telecom has approximately 50% more minutes per local exchange concentrator compared to British Telecom. NERA noted that higher traffic volumes per switch lead to lower unit costs of switching. NERA's conclusion was that economies of scale in New Zealand local switching relative to European countries would result in lower costs in New Zealand for local switching. However, this outcome is reversed for tandem switching (op. cit. fn 50). This offsetting effect as between local and tandem switching may help to explain the lack of correlation between higher network density in European countries and access prices. NERA reached a different conclusion in a report dated September 2002, contending that both local and tandem switching per minute costs in France, the UK and the Netherlands tend to be lower than in New Zealand.

themselves, there was also no consistent correlation between price levels and network density.

142. In the absence of the expected relationship between network density and price in the benchmark data, adjustment to take account of the factors cited by NERA becomes problematic. After making the adjustments suggested by NERA, it would still be the case that jurisdictions with lower network density, such as the US states, would have lower prices when compared to those with higher network density. Australia, which NERA considers would have higher costs than New Zealand, would following such an adjustment have lower prices than the Netherlands, the United Kingdom and France, all countries which NERA considers would have lower costs than New Zealand. If the adjustments do not produce any hierarchy of prices that correlates with network density, it is questionable whether the adjustments are correcting the data in any systematic way.
143. For the reasons given above, the Commission does not consider that cost drivers should be used for directly adjusting the raw benchmark prices.

Selecting a Price Point

144. The Commission is therefore faced with exercising a judgement to select a price from the benchmarking range. There is no specific guidance in the Act as to the method to be followed in doing so, beyond conforming with the purpose statement in section 18. The Commission is required to consider the purpose statement, and to make a decision that it considers best gives, or is likely to best give, effect to that purpose. The Commission has accordingly evaluated outcomes as to their ability to promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications services, having regard to the efficiencies that will or are likely to result. The preferred outcome should be one that:
- promotes efficient entry in the access market;
 - promotes competition in downstream retail markets;
 - benefits end-users in downstream retail markets;
 - promotes economic efficiency; and
 - provides a high degree of predictability to the industry to inform negotiations in future periods and thereby reduces transaction costs.
145. One method suggested by TelstraClear is to select the median of the benchmark range:
- “TelstraClear believes that an appropriately cautious approach is to set the interim charge at the median in the benchmark range:
- This is the most statistically valid way of selecting a point within a range to balance the risks of being too high or too low;
 - Therefore, this most fairly balances the concerns about the impacts on dynamic efficiency of too low a price with the adverse impacts on competition and consumers of too high a price; and
 - The approach still incorporates the factors which the US Supreme Court identified as erring, in practice, on the access provider’s side.”⁵³

⁵³ TelstraClear submission, 9 September 2002, paras.3.9 and 3.19. The US Supreme Court was dealing with a challenge by incumbent local exchange carriers to a decision by the FCC to adopt a Total Element Long-Run Incremental Cost pricing model. The Court concluded that those models gave rise to factors that work in favour

146. The median point of the range is 0.66 cents, incorporating each of the US states as a separate price point.⁵⁴ Telecom argued that in dealing with the US states, the Commission should give the same weight to the entirety of the US observations as it gives to each single observation in the other countries.⁵⁵ Failure to do so would result in the analysis being biased downwards by virtue of undue weight being given to the common legislative/regulatory approach to costing methodology employed in the United States as against the different approaches taken in other jurisdictions.
147. Schedule 1 Part 2, sub-part (1) of the Act defines the initial pricing principle as benchmarking against interconnection prices in comparable countries. In preparing the Benchmark Report, the Commission considered whether the United States as a whole should be accepted as a comparator, or alternatively whether individual states should be used. The United States as a federal jurisdiction has both state and national telecommunications regulatory agencies. The Federal Communications Commission prescribes rules to guide the establishment of state-level interconnection rates. The state-level public utility commissions retain considerable discretion in setting rates within the broad parameters set by the FCC. The level of discretion is demonstrated in the wide variation in the level of interconnection charges between states. The Commission concluded that it was reasonable to select states as comparators based on the same comparability standards applied in the selection of the European countries, Australia and Canada.
148. The Commission has accordingly decided that separate US states identified as suitable comparators should be included in the benchmarking. It is noted that both Telecom and TelstraClear have followed the same approach in their own benchmarking exercises, and have supported the use of individual US states as suitable comparators while disagreeing about particular states.
149. The Commission considers that the median point of the benchmark range is a reasonable starting point for the choice of the interim price. The median point gives equal weight to each data point in the range and therefore, in contrast to the mean point, is not biased by the extent to which any individual price deviates significantly from its comparators. Nonetheless, though the median provides a starting point, additional factors could, having regard to section 18, be taken into account in the selection of the interim price. Two factors identified by the parties are examined below. Where in the Commission's view a factor is relevant, consideration is given to an adjustment to the median. The factors are:
- a) the risk of regulatory error;
 - b) commercially negotiated interconnection prices.

of incumbents and offset any risk to infrastructure investment. Those factors were: the use of a "scorched node" network model rather than a "scorched earth" model; the presence of built-in lags to price adjustments; and the requirement that any optimisation of the incumbent's network be based on technologies currently available both to the incumbent and to competitors.

⁵⁴ Though the range includes an average of the prices of the comparator states (described as "US Average"), that average has been disregarded in identifying the median of the range.

⁵⁵ Closing submission to the interconnection conference, page 10. NERA suggested that an alternative to a separate price point for each US state would be to group the bottom, middle and top third of states together.

Regulatory Risk

150. At the initial price determination stage, the Commission is required to base the selection of the price point on the benchmarked forward-looking cost-based prices from comparable countries. This does not involve any network model to derive a cost-based price. Though the parties have presented evidence of the incidence and scope of various cost factors, this has not been a rigorous and comprehensive attempt to assess the costs faced by Telecom in New Zealand.
151. Since price setting based on benchmarks does not draw directly on information as to cost structures in New Zealand, there is a significant possibility that the initial access price will be more or less than the optimal cost-based price. The Commission must therefore consider whether the resultant risks to innovation and investment are balanced or asymmetric. If the risks are balanced, there is strong justification for the adoption of the median price. If however the risks are asymmetric, the selected price should lie beyond the median price.
152. The Commission has been repeatedly warned by Telecom of the risk of regulatory error and its negative impact on the incentives for investment in the fixed PSTN if the selected price is too low. Conversely, TelstraClear has suggested that a proper consideration of the purpose of the Act would cause the Commission to deliberately err on the low side:
- “Section 18 requires the Commission to take the end-user’s perspective. The Commission must protect consumers’ interests by encouraging competition. So, if the Commission is to be cautious, it must take the approach which best protects the interests of consumers and promotes competition. Consumers benefit from lower prices and, as access charges payable to the incumbent form such a large percentage of new entrant’s costs, the Commission clearly should err, all other things being equal, on the low side in setting interim prices.”⁵⁶
153. The Commission has previously acknowledged the importance of dynamic efficiency to the long-term benefit of end-users.⁵⁷ A low price may produce some static efficiency improvements and benefits for end-users in the short-run, but may have an adverse impact on the incentives for investment and innovation in infrastructure in the longer term.
154. The Commission has also recognised the risks associated with regulatory intervention.⁵⁸
- These risks can arise from:
- the administrative and other costs that industry participants will face from complying with the Act and the Commission’s role under it;
 - the Commission making decisions on the basis of imperfect information, including uncertainty about the level and structure of efficient access prices;
 - the Commission making decisions on the basis of imperfect information as to the implications for the market of emerging technologies; and
 - gaming of the Commission’s processes by market participants.

⁵⁶ TelstraClear submission 9 September 2002, para. 3.5

⁵⁷ Commerce Commission, A Guide to the Role of the Commerce Commission in making Access Determinations under the Telecommunications Act, 28 May 2002, page 17.

⁵⁸ *Ibid.*

155. While the Commission does not intend to underprice or overprice interconnection, the uncertainties inherent in setting a regulated price are such that the actual price set is likely to diverge to some extent from the “optimal” interconnection price. That being the case, and given the tension between dynamic and static forms of efficiency, the Commission is of the view that it is appropriate to place relatively more weight on dynamic efficiency considerations. In other words, if it were the case that setting prices too low would significantly jeopardize incentives for investment in access networks, the trade-off between higher prices and more investment on the one side and lower prices and short-term consumer gains on the other would be resolved by the Commission in favour of the former.
156. The effects of access pricing on investment are difficult to predict. In the case of Telecom, lower returns as a result of regulation may be assumed to have some impact on the choices it will make as to its capital investment programme. At the same time, Telecom has strong incentives to continue to make investments in the fixed network. Telecom’s 2001-2002 Annual Report shows that Telecom’s fixed line (both voice and data) and value added telephony services generated revenue of \$2,792 million and EBITDA of \$1,578 million. Telecom will need to continue to maintain and upgrade the fixed network in order to maintain these revenues.⁵⁹ Telecom has also agreed with the Crown in the TSO Deed of December 2001 to maintain high service quality levels in the network for local residential voice and data services, and faces sanctions should quality levels fail to be met. Telecom did not provide any evidence to the Commission as to the sensitivity of its capital investment programme to access price levels.
157. Interconnection revenue is a very small contributor to Telecom’s overall revenue, around 2.5%⁶⁰. However, the implications of the regulated interconnection price on Telecom’s incentives to invest and innovate in relation to the interconnection service are likely to be more significant than is suggested by the relative size of the contribution of interconnection revenue to Telecom’s overall operating revenues. The Australian Productivity Commission noted that by itself, the share of interconnection revenue is largely irrelevant to the risk posed by access prices that are too low to encourage investment in the access network:⁶¹
- “For example, if downstream markets were perfectly competitive, and access prices had been set at a level insufficient to recover the fixed costs of the network, then the incumbent would be forced to set its own internal access prices to the low regulated access price in order to compete in final markets. In this case, the incumbent might have a large market share in the final market and low interconnection revenue – but future investment would definitely be in jeopardy.”
158. In other words, although the regulated access price may only explicitly apply to a relatively small proportion of revenues, downstream competitive conditions may be such that the access provider is forced to effectively adopt that price internally and thus magnify the extent to which cost is not being recovered in the access network. This effect will be greater the more competitive are the downstream markets. In this

⁵⁹ Telecom expects to make capital expenditure of approximately \$340 million in its wireline business in the year ended 30 June 2003 (2001/2002 Annual Report), up from \$221 million for the prior year.

⁶⁰ Including interconnection revenue from Telecom Mobile for termination of cellular calls on the fixed network. See Telecom Annual Report, 2001-2002, Management Commentary 5.1, 5.7 and 6.3. Available at <http://www.telecom.co.nz/content/0,3900,200632-1563,00.html>.

⁶¹ Productivity Commission 2001, Telecommunications Competition Regulation, Report No. 16, AusInfo, Canberra, Australia, page 402, fn. 34.

regard, competitive conditions in both the access market and the downstream retail markets will be relevant.

159. At the same time, the risk of under-investment in the wake of access prices that are too low is ameliorated by the relatively short period of one year of this determination. In addition, should evidence of a marked fall-off in investment occur, or a deterioration in service levels emerge, the Commission will become aware of this fact and may have the opportunity to correct towards a higher price either through reconsideration of this determination under section 59 of the Act, or through a fresh application for determination.
160. In the case of TelstraClear, high access prices may stimulate investment in its fixed network, and thereby increase the prospects for efficient competition with Telecom to the benefit of end-users. The history of investment in areas where costs are low relative to revenues, such as CBDs, shows that competing carriers will invest in new infrastructure when the balance of risk and reward is favourable. However, other factors suggest limitations to the incentives to invest faced by TelstraClear. First, investment in competing infrastructure outside CBDs will often not be economically viable regardless of the level of access prices. Second, high access prices may increase the attractiveness of wholesaling Telecom services as an alternative to infrastructure investment and may not therefore achieve the claimed outcome.
161. Telecom has argued that there is an asymmetric and greater (if more insidious) risk to dynamic efficiency in regulatory pricing that is too low within a reliable range.⁶² Charles River Associates (Asia Pacific) Ltd in a paper prepared for Telecom, say that:

“The costs of the erroneously under-pricing of wholesaled services will exceed the costs of erroneously over-pricing. Where the price proves to be too low, it will tend to stimulate the entry of arbitrageurs, and reduce the incentives for investment in new infrastructure. It is in the latter effect that the main costs of under-pricing are to be found. This will also reduce the incentives for business to compete on facilities and technology, while increasing the incentives to simply gain access to existing infrastructure for re-sale. ...

Conversely, where the prices of wholesaled products prove to be too high, it will generally be less costly to producers and consumers in the long-term. This is because the valuable incentive to compete on facilities, with attendant incentives to innovate and introduce new technologies, is preserved by the higher price of access to existing facilities. Furthermore, there is no incentive for the entry of resellers (i.e. purchasers of wholesale) on the back of an artificially low wholesale price. This avoids inefficiently incurred fixed entry and operating costs.”⁶³

162. TelstraClear questions the relevance to this Determination of the parties’ long-range investment decisions:

“Networks are planned and deployed over a period of years. This interim determination will expire in less than 8 months⁶⁴. Either or both parties will probably request a final determination. Telecom, acting rationally, is unlikely to cease deploying network during the period in which this interim determination applies. If adverse effects on dynamic efficiency do emerge, the Commission will be able to act relatively quickly to correct the situation before the effects are irreversible.”⁶⁵

⁶² Telecom submission 3 July 2002, para.3.10

⁶³ CRA, Setting Interconnection Prices from a Benchmark Range, 3 July 2002, p. 5.

⁶⁴ The Commission’s draft Determination proposed a date of expiry of 12 months following the date of Determination. At the time of TelstraClear’s comment that the Determination would expire in less than 8 months, the Commission’s Determination would have actually expired in approximately 14 months.

⁶⁵ TelstraClear, Section 36: Response to Draft Determination of TelstraClear Application for Determination of Designated Access Services – Interconnection Services, 9 September 2002, para.3.11.

163. The Commission accepts in principle that the risk to dynamic efficiency of a low access price is asymmetric and that the balance of risk favours setting a price that errs on the high side. However, the level of access prices is only one of a number of factors that are likely to influence Telecom's decisions to invest in its fixed network, and it is not possible to attribute any particular weight in the decision making process to relative price levels. As noted above, the Commission has no information on the sensitivity of Telecom's capital investment programme to access price levels. The risks to innovation and investment are also constrained by the fact that this determination will be in effect for only one year.

Commercially negotiated prices

164. Telecom has argued that the Commission should give weight in selecting an interim price to the existence of interconnection prices that have been commercially agreed since the passage of the Telecommunications Act. Telecom has in particular referred to an agreement reached between Telecom and Vodafone New Zealand Limited earlier this year and has suggested that the Commission should refer to the prices in that agreement for origination and termination of calls on the Telecom fixed network. Telecom notes that Vodafone is the local arm of the Vodafone Group, one of the largest telecommunications companies in the world, and is therefore well aware of interconnection prices achieved in other countries. Such a commercially negotiated price, it was argued, is likely to be superior to any price a regulatory agency such as the Commission could discover.
165. The suggestion that the Commission should give weight to the price agreed with Vodafone appears to misconstrue the function of the Commission in setting an interim price through benchmarking. The task is not to compare New Zealand negotiated prices against overseas prices and to make a comparison between them. The Benchmark Report does not attempt such a comparison.
166. Even if New Zealand prices were thought to be potentially relevant, the Commission would need to satisfy itself that the prices were the outcome of normal commercial negotiation rather than the exercise of market power. It would also be necessary to look at the balance of price and non-price terms in the agreement, recognising that negotiations typically result in trade-offs between price and non-price terms. It is difficult to see how the Commission could do so without a wide-ranging inquiry, which appears well beyond the scope of what is appropriate at the initial pricing stage. There would also be considerable problems in providing TelstraClear with a reasonable opportunity to contest a conclusion as to relevance.⁶⁶
167. The Commission has concluded that the terms of any interconnection agreements reached between Telecom and other carriers are not relevant to the selection of an initial price in this Determination.

Conclusion - Pricing

168. In summary, the Commission concludes that the median point of the benchmark range is the appropriate starting point for the pricing decision and that an adjustment should

⁶⁶ Vodafone in submissions to the Commission noted that the interconnection agreement was commercially confidential.

be made to reflect the asymmetric nature of the risk to dynamic efficiency of a low price. On the assumption that the benchmarking exercise has identified appropriate comparators for New Zealand and therefore captures the effects of regulatory pricing based on the forward-looking costs of those networks, the resulting price should approximate a cost-based price in New Zealand. Such a price will promote competition in the access market, as both Telecom and TelstraClear will receive the correct pricing signals in relation to investment in their respective networks. It will also promote competition in retail markets, as Telecom will be unable to cross-subsidize retail prices from excess profits earned through above-cost interconnection prices. The resulting enhanced competition based on sustainable interconnection pricing should benefit end-users through improvements in the intensity of price and product competitive offerings. The efficiency adjustment referred to above will so far as the Commission is able to judge ensure that the correct balance is struck between the risks of either too high or too low a price. Finally, since the price is derived from a replicable approach to the benchmark prices presented in the range, carriers will, within a bounded level of uncertainty as to the quantum of the efficiency adjustment, be able to predict the likely outcome of future price determinations.

169. The Commission has been unable to identify any rigorous and quantifiable means of accounting for the risk to dynamic efficiency, while recognising that the risk should induce the Commission to set a price at a level that minimises the possibility of undershooting. The Commission has accordingly decided to shift the price point from the median point of the range to the 75th percentile of the range. Having regard to the considerations discussed at paragraphs 156-163, and the residual uncertainty as to the extent of the dynamic efficiency risks of this pricing decision, this adjustment is a sufficient allowance for the risk. It is also consistent with the Commission's preliminary view in the draft Determination that the price point should fall within the third quartile of the benchmark range.
170. The selection of the 75th percentile as the price point will place New Zealand at the same price as in the UK, and at a price near to that of Australia. Both countries have over a number of years utilised bottom-up TSLRIC/LRIC pricing methodologies to set interconnection prices, a methodology widely recognized as reliable for regulatory purposes and reflected in the final pricing principle for interconnection pricing under the Act.
171. The placement of New Zealand at the same price as the UK and at a price near to Australia underpins the Commission's conclusion as to the appropriateness of the price point. While the Commission has concluded that relative costs should not be used to directly adjust benchmark prices, cost information and costs relativity informs the Commission's choice in deciding upon the price point.
172. Australia has an FLCB framework, based on the TSLRIC standard, which was introduced under a new regulatory regime in July 1997. Telecom has noted that the cost environment in Australia is unlikely to be markedly dissimilar to that in New Zealand. For example, at the conference on the draft Determination, NERA noted that Australia is likely to be a slightly higher cost environment in which to supply interconnection services than New Zealand.⁶⁷ This is based on comparative network density and transmission links. The Commission therefore believes that interconnection prices set in Australia, while not determinative by themselves, are

⁶⁷ Transcript, Conference on Draft Interconnection Determination, 16-17 September 2002, page 129.

likely to provide a useful guide to the ‘reasonableness’ of prices set within a New Zealand context.

173. In accordance with the initial pricing principle in subpart 1 of Part 2 to Schedule 1 of the Act, the Commission fixes a GST exclusive price of 1.13 cents per minute as an average weighted price for the origination and termination of toll-free calls, toll bypass calls, standard calls, payphone calls, calls to premium rate services and 50XY services on Telecom’s fixed PSTN and TelstraClear’s fixed PSTN.

LOCAL BYPASS CALLS

174. The parties have requested that the Commission decide whether to exclude from the scope of the services covered by this Determination a type of call conveniently described as a “local bypass”. Clause 3.1c of the schedule of services⁶⁸ provided to the Commission by the parties would exclude such calls.
175. The effect of clause 3.1c is to prevent TelstraClear from terminating on Telecom’s network, a call originating on Telecom’s network from a number within the same LICA. Such a call would be a “local bypass” call, originating on the Telecom network, handed off to TelstraClear, then transiting the TelstraClear network, before being handed back to Telecom for termination at a number within the LICA where the call originated.
176. As TelstraClear puts it in its letter of 16 October: “The call case which Telecom seeks to prohibit involves an access seeker separately acquiring origination and termination and combining those services with switching to provide an end to end local call.” TelstraClear proposes that the originating leg of such a call should be treated as a Toll Bypass call, and the termination leg as a Standard call. Provided that the aggregate of those origination and termination charges, and TelstraClear’s costs of switching and carriage of the call, is less than Telecom’s local business call charge, TelstraClear will be able to offer a competing local business call service. The result would likely be a reduction in business local call charges as any excess margins are competed away.
177. Telecom argues that such calls are highly inefficient, in that they are not conveyed through the lowest cost path, and can be profitable only if the access price regulated by the Commission allows a margin relative to the costs of wholesale prices for local access.⁶⁹
178. It is unclear to what extent local bypass will occur in the absence of clause 3.1c. Telecom has submitted that it has “formed the view that the ‘local bypass’ arbitrage will not be exploited because of commercial and technical restraints.”⁷⁰ If local bypass were to prove both commercially and technically feasible, the Commission considers that it would have two offsetting impacts on efficiency: both an increase in costs that would reduce productive efficiency, and lower prices that would increase allocative efficiency. The magnitude of these efficiencies depends on the price elasticities of business calls (or to what extent the volume of business local calls is

⁶⁸ See clause 3.1c of Schedule 3 of the Interconnection Terms.

⁶⁹ Letter from Lusk (Telecom) to the Commission, 16 October 2002, pp. 3-5

⁷⁰ *ibid.*

responsive to the change in price), the expected reduction in prices of local calls, and the respective market shares of Telecom and Telstraclear for business local calls.

179. The expected losses from productive inefficiency would occur because TelstraClear would be supplying the local bypass call at a higher cost than an equivalent end to end call provided solely by Telecom. This welfare loss would be the sum of the additional cost of each call supplied by TelstraClear. The anticipated gain in allocative efficiency would result from the increase in welfare of more calls being made due to lower charges. This increase would not be equal to the sum of the price reduction on each call, as the benefit of the price reduction on existing calls is simply a transfer from the producer to consumer and would not result in a change to overall welfare.⁷¹ The welfare gain would be the sum of the consumer and producer surplus of the additional calls made due to the lower prices.
180. Demand for business local calls is generally considered to be price inelastic, so the increase in calls would be proportionally less than the reduction in price. This may imply that the loss arising from the productive inefficiency (or the higher costs) will be greater than the allocative efficiency gains from lower prices. However, the productive efficiency losses would only occur on calls supplied by TelstraClear. For calls supplied by Telecom, allocative efficiency would improve without any corresponding losses in productive efficiency. Therefore, the impact on welfare would be determined by the parties' market shares. The Commission understands that Telecom currently provide most business local calls. If Telecom retained most of their customers, productive efficiency losses would be modest, and allocative efficiency gains might outweigh productive efficiency losses.
181. The Commission has considered whether it is appropriate to prohibit local bypass on the grounds of the loss of productive efficiency. It is reasonable to argue that if the Commission sets the appropriate interconnection charge (i.e. recovering the efficiency cost of the access provider), the Commission should leave the decision whether to purchase interconnection services or to build out infrastructure to provide services, to the market. CRA have made similar arguments on behalf of Telecom:
- “An overly narrow focus on static efficiency and static technology could lead to misplaced concerns about “inefficient duplication” or “efficient duplication” of all or parts of the incumbent’s fixed PSTN. The Commission should aim to preserve the incentive property of interconnection prices by setting prices at a level that allows a reasonable return. So long as market signals are not distorted, access seekers or other investors can and are in a better position to make their ‘build-or buy’ decision.”⁷²
182. The Commission considers this argument has some merit in these circumstances, as the Commission has given particular weight to dynamic efficiency in the selection of the interconnection charge. Therefore, the Commission considers that TelstraClear would face an efficient build/buy decision for local calls in the event of the exclusion of clause 3.1c.
183. The Commission considers that incentives to invest may be affected by not prohibiting local bypass calls. However, the impact is likely to be limited as the provision of business local calls is only one of the services influencing decisions on network investment. For example, the Commission considers that bill and keep arrangements

⁷¹ Provided consumer and producer surplus are valued equally

⁷² CRA, TSLRIC Pricing – A response to the Commission’s discussion paper, 16 August 2002.

for local interconnection, and FLCB for origination and termination of toll bypass calls, will also have an affect on network investment. To the extent that local bypass does affect network investment, there are likely to be two offsetting affects: local bypass would increase the incentives for TelstraClear to roll out network to the local exchange level, but diminish the incentives to roll out access networks beyond the local exchange.

184. Therefore, the Commission does not consider that there is sufficient evidence regarding the loss of efficiency associated with local bypass to justify the inclusion of clause 3.1c in the Interconnection Terms; that is, the Commission does not consider that the exclusion of clause 3.1c is inconsistent with the purpose statement set out in section 18. While there may be some cost associated with a reduction in productive efficiency, there will likely be some gains in efficiency from the potential reduction in prices of business local calls. The Commission determines that the origination leg of a local bypass call will be treated as a toll bypass call, and the termination leg will be treated as a standard call.

INTERNATIONAL BEST PRACTICE

185. The Act establishes three standard access principles that apply to designated access services and specified services:⁷³
- (a) *principle 1*: the access provider must provide the service to the access seeker in a timely manner:
 - (b) *principle 2*: the service must be supplied to a standard that is consistent with international best practice:
 - (c) *principle 3*: the access provider must provide the service on terms and conditions (excluding price) that are consistent with those terms and conditions on which the access provider provides the service to itself.
186. In its Guidelines Paper⁷⁴, the Commission notes that:
- In considering whether or not a standard is provided in accordance with international best practice the Commission will have regard to:
- appropriate international benchmarks (to be determined for each designated and specified service), including:
 - any relevant standards specified in any approved codes. The Industry Forum might be invited by the Commission to consider best practice for the supply of the designated and specified services. However, care should be taken to ensure that the codification of standards does not reduce the potential for future innovation and efficiency through finding different and better ways to meet the needs of end-users.
187. Telecom has proposed that the access principles and the limits on those principles set out in paragraph 6 of Part 1 of Schedule 1 of the Act, should be included in the Determination. As a general approach, this is a convenient method of bringing together the Interconnection Terms and the access principles. Both parties however seek to expand the statutory wording by the inclusion of additional concepts. Telecom proposes the inclusion of a definition of “international best practice” from access principle 2, by reference to the Interface Specification developed in accordance with recommendations of the International Telecommunications Union. TelstraClear does

⁷³ Clause 5 of Schedule 1 of the Act.

⁷⁴ Commerce Commission, A Guide to the Role of the Commerce Commission in Making Access Determinations Under the Telecommunications Act, 28 May 2002, p. 21.

not agree with the proposed definition and instead proposes an expansion of principle 3 by the specification of service levels for the key functions or processes for interconnection and a measurement and review process.

188. The Commission is not persuaded that there is a need for the expansion or clarification of the statutory access principles. Should the parties wish to gain further precision concerning the application of the principles to their network, the Industry Forum would be a suitable vehicle for the development of a telecommunications access code consistent with the access principles. The Forum may prepare such a code on its own initiative or the Commission may invite it to do so.
189. For these reasons, the Commission declines to include in the Determination a definition of international best practice.

DATE OF INCEPTION AND EXPIRY OF THE DETERMINATION

Date of Inception

190. On 13 September, TelstraClear and Telecom jointly advised the Commission that the parties would treat the Commission's interconnection and wholesale Determinations as taking effect from 1 June 2002.⁷⁵
191. The Commission is not required to decide a date of inception, as the parties have agreed it will be 1 June 2002.

Date of Expiry

192. The Commission sets an expiry date for its Determination of 5 November 2003, being one year from the date of this Determination.

COSTS

193. Section 55 provides that the Commission's costs are to be borne by the parties as directed by the Commission in writing.
194. Section 56 enables the Commission to determine whether one party should contribute to the other party's costs, if in the opinion of the Commission, either party has materially contributed to any costs or unreasonable delay.
195. In the Commission's *Guide to the Role of the Commerce Commission in Making Access Determinations under the Telecommunications Act* the Commission noted:
- "The Commission intends to recover determination costs on a progressive basis. The Commission will, therefore, regularly invoice parties to an application as the application proceeds. After a determination is completed the Commission will determine whether one party should contribute to another party's costs and the amount of the contribution. The Commission will take into account a variety of factors."
196. During the determination, the Commission directed that the parties pay the Commission's costs in equal proportions. The Commission will direct that the parties pay the remaining Commission's costs in equal proportions and will notify the parties of the amounts due following completion of the determination.

⁷⁵ Letter from Telecom and TelstraClear to the Commission, 13 September 2002.

197. As to whether the Commission should order one party to contribute to the other party's costs, the Commission encourages the parties to reach agreement. If the parties are unable to reach agreement, they are to provide submissions on costs by 5 December 2002.

DATED this 5th day of November 2002

Douglas Webb
Telecommunications Commissioner