



COMMERCE COMMISSION

**Draft determination on the multi-party application for
determination of 'local telephone number portability service' and
'cellular telephone number portability service' designated
multinetwork services**

Draft determination under section 36 of the Telecommunications Act 2001 ('the Act') in the matter of an application for determination for designated multi-network services under section 31 of the Act by:

**TELSTRACLEAR LIMITED
CALLPLUS LIMITED
COMPASS COMMUNICATIONS LIMITED
IHUG LIMITED
WORLDXCHANGE COMMUNICATIONS LIMITED**

The Commission: Douglas Webb
Donal Curtin
Shaan Stevens

Summary of Application: TelstraClear Limited, Callplus Limited, Compass Communications Limited, Ihug Limited and Worldxchange Communications Limited jointly applied for a determination, under section 31 of the Act, in regard to (i) local telephone number portability service, and (ii) cellular telephone number portability service.

Date of Draft Determination: 6 December 2004

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LIST OF TERMS AND ABBREVIATIONS¹

ACA	Australian Communications Authority
ACCC	Australian Competition and Consumer Commission
Access Provider	Every person who operates- (a) a PSTN to which numbers have been allocated; and (b) a telephone service that relates to that number portability service
Access Seeker	Any person who- (a) operates a PSTN to which numbers have been allocated; and (b) operates a telephone service that relates to that number portability service; and (c) seeks access to that number portability service
API	Applications Programming Interface
BT	British Telecom Plc
CSP	A Carrier Service Provider is an entity that (1) operates a public switched telephone network (or a functionally equivalent system) that originates, transits or terminates calls; and (2) provides a local or mobile service to a customer who has the billing relationship with the carrier.
DNO	Donor Network Operator
FCC	Federal Communications Commission
HLR	Home Location Register
IN	Intelligent Network
IPMS	Industry Portability Management System
IPMSWG	Industry Portability Management System Working Group
LMNP	Local and Mobile Number Portability
LMNP Code	A telecommunications access code prepared by the TCF under Schedule 2 of the Act which provides for procedures, requirements and other matters, not inconsistent with the Act, in respect of the implementation of local and mobile number portability in New Zealand
LNP	Local Number Portability

¹ Where a term or abbreviation is defined in the Telecommunications Act, the statutory definition is adopted for the purposes of this list.

MMC	Monopolies and Mergers Commission (United Kingdom)
MNP	Mobile Number Portability
NAD	Numbering Administration Deed
NP	Number Portability
NPMS	Number Portability Management System
OFCOM	Office of Communications (United Kingdom)
OFTA	Hong Kong Telecommunications Authority
OFTEL	Office of Telecommunications (United Kingdom) now merged into OFCOM
OPTA	The Netherlands Telecommunications Authority
PSTN	Public Switched Telephone Network. A dial-up telephone network used, or intended for use, in whole or in part, by the public for the purposes of providing telecommunication between telephone devices
RNO	Recipient Network Operator
SRF	Signalling Relay Function
TCF	Telecommunications Carriers Forum

EXECUTIVE SUMMARY

- (i) Number portability is a facility that enables customers to keep their existing telephone number when changing their local or mobile access and calling supplier. Number portability will enable customers to switch service providers while maintaining their existing telephone numbers.
- (ii) On 26 March 2003, the Commission received a multiparty application for determination in respect of local and cellular telephone number portability. The application requested that the Commission develop a formula for allocating the cost of delivering the number portability service between the access seekers and all access providers of the service.
- (iii) Parallel with the application, the Telecommunications Carriers' Forum ('TCF') has been independently developing the functions that must be performed by a system for delivering the service and the standard to which those functions must be performed. The application does not request that the Commission determine these matters.
- (iv) The Commission is satisfied for the purpose of this draft determination that the TCF's draft code development work provides an adequate description of the functions and standards of the local and cellular telephone number portability services.
- (v) In developing a formula for the allocation of costs, the Commission is required to ensure that the formula will serve to promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand.
- (vi) The Commission has identified four classes of costs arising from the implementation of number portability: industry common set-up costs, operator specific set-up costs, per-line set-up costs, and additional call conveyance costs.
- (vii) The Commission's view is that:
 - *Industry common set-up costs* of local and cellular number portability should be allocated amongst all providers of local and/or cellular telephone services respectively in line with market share, measured by subscriber numbers.
 - *Operator specific set-up costs* should be borne by each operator, providing incentives for each operator to minimise costs while maintaining the ability and incentive to compete.
 - *Per-line set-up costs* should be recoverable by a donor network operator from a recipient network operator. The donor network operator should not seek to recover any part of those costs from the out-porting customer.
 - Each operator should bear its own *additional call conveyance costs*. Additional call conveyance costs are minimal using an Intelligent Network system to provide number portability. To the extent that there are any

additional call conveyance costs, an allocation rule requiring each operator to bear its own costs will provide appropriate incentives for operators to minimise those costs.

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 multinetwork services. Subject to sections 32 and 33, applicants may make an application to the Commission under section 31 for a determination of all or some of terms on which a designated multinetwork service must be supplied during the period of time specified in the Determination.
3. The Local Telephone number portability and Cellular Telephone number portability services are both designated multinetwork services under the Act. The Commission considers that a determination on the cost allocation of the local and cellular number portability service will give effect to the purpose of Part 2, as set out in section 18.
4. The provision for Local and Cellular number portability services in the Act is based on the premise that number portability will provide long-term benefit to end-users, by enabling customers to switch service providers while maintaining their existing telephone numbers. Switching costs are generally detrimental to welfare because they make entry more difficult and markets less competitive. The absence of number portability hinders the competitive process by imposing significant switching costs on customers when they change telecommunications providers. Number portability removes this impediment to the development of competitive telecommunications markets by lowering switching costs. The benefits of number portability include:
 - The benefits to customers who retain their telephone number when switching suppliers (internal benefit);
 - The benefits to all end-users through enhanced competition made possible by number portability (external benefit); and
 - The benefits of fewer misdialled calls and fewer calls to directory enquiries (external benefit).
5. The provision of number portability in New Zealand will remove a current barrier for end-users wanting to change service providers. This will increase service providers' incentives to compete for new customers and retain existing customers, resulting in increased competition, delivering long-term benefit to end-users in New Zealand.

Commission process and timetable

6. The Commission invites submission from interested parties on this draft determination not later than 7 February 2005.

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.

7. To promote an open and transparent process, the Commission intends to publish the submissions received on its website. The Commission discourages requests for confidentiality over submissions on the draft determination, as it is desirable to test all the information as fully as possible in a public manner. The Commission is unlikely to agree to any request that submissions in their entirety remain confidential.
8. Where it is necessary to include confidential information in written submissions, the material should be clearly marked as confidential, and preferably be included in an appendix to the submission or enclosed in square brackets []. In addition to the confidential copy, submitters should provide the Commission with a public copy of such submissions, which is clearly marked as public, with the confidential material deleted or amended appropriately so it is suitable for release in both electronic and hard copy form.
9. The Commission will shortly release a confidentiality order which will apply to confidential information provided by interested parties submitting on the draft determination. Those parties wishing to access another party's confidential information must comply with the requirements of the confidentiality order.

Address for submissions

10. Submissions on the draft determination should be sent to:

chris.abbott@comcom.govt.nz

Number Portability Draft Determination
Commerce Commission
PO Box 2351
Wellington

Enquiries: (04) 924 3673
Fax: (04) 924 3700

THE APPLICATION

11. On 26 March 2003, TelstraClear Limited ('TelstraClear'), CallPlus Limited ('CallPlus'), Compass Communications Limited ('Compass'), ihug Limited ('ihug'), and Worldxchange Communications Limited ('Worldxchange') (together the 'Applicants') jointly filed an application for determination of designated multinet network services under section 31 of the Act (the 'Application'). A letter supporting the Application was also received from Econet Wireless Limited ('Econet').
12. The Application sought a determination by the Commission in regard to:³
 - a. the local telephone number portability service; and
 - b. the cellular telephone number portability service.
13. Under section 31, an access seeker of a designated multinet network service may, subject to sections 32 and 33, apply to the Commission for a determination of:
 - a. the functions that must be performed by a system for delivering the service and the standard to which those functions must be performed; and
 - b. the formula for how the cost of delivering the service must be apportioned between the access seeker and all access providers of the service.
14. The Application sought a determination in relation to part (b) only; that is, the formula for how the cost of delivering the local and cellular telephone number portability services is to be apportioned between 'participants in Number Portability Services'.⁴

³ Application for Determination for Number Portability, 26 March 2003, paragraph 1

⁴ *ibid*, paragraph 9

THE FRAMEWORK FOR THE DETERMINATION

15. Section 18 provides that the purpose of Part 2 and Schedule 1, under which this Draft Determination is made, is to promote competition in telecommunications markets for the long-term benefit of end-users⁵.
16. Section 36(1) requires the Commission must make reasonable efforts to do the following things not later than 60 working days after giving written notice of its decision to investigate under section 35(b):
 - a. prepare a draft determination; and
 - b. give a copy of the draft determination to all the parties to the determination; and
 - c. give public notice of the draft determination; and
 - d. include in the public notice-
 - (i) the closing date for submissions, which must not be earlier than 20, and not later than 40 working days after the date of publication of the draft determination; and
 - (ii) if a public hearing is to be held under section 38, the date of the public hearing.
17. Section 36(2) requires that, if, despite making reasonable efforts, the Commission is unable to do all the things set out in 36(1) within the time limited specified in that subsection, the Commission must give to the parties concerned written reasons for not meeting that time limit. On 10 October 2003, the Commission advised the parties that, despite reasonable efforts, it was unable to prepare the draft determination within the prescribed timeframe.⁶
18. Section 37 sets out the matters to be included in a draft determination. Section 37(1) requires that, subject to section 37(2), the draft determination must include –
 - a. a description of the functions that must be performed by a system for delivering the service and the standard to which those functions must be performed; and
 - b. the formula for how the cost of delivering the service must be apportioned between the parties to the determination and every person who becomes an access seeker; and
 - c. the reasons for the determination; and
 - d. the terms and conditions on which the determination is proposed to be made; and
 - e. the actions (if any) that a party to the determination must do or refrain from doing; and
 - f. the proposed expiry date of the determination.

⁵ “The end-user is the ultimate user or consumer of telecommunications services. It is not restricted to subscribers, but extends to telecommunications’ users generally”, Commerce Commission Determination on the TelstraClear Application for Determination for Designated Services, Decision 477, 5 November 2002, p.10

⁶ Letter to access seekers from the Commission (Borthwick), *Number Portability Application, Description of Process*

19. Section 37(1)(a) applies only to the extent that the matters referred to in that paragraph have not already been provided for in an approved code. There are no approved codes relating to the multi-network services that are the subject of this application. Accordingly, section 37(2) does not apply.

Section 37(1)(a) A description of the functions that must be performed by a system for delivering the service and the standard to which those functions must be performed

20. Section 37(1)(a) requires that the draft determination must include a 'description of the functions that must be performed by a system for delivering the service and the standard to which those functions must be performed'. Section 40(1)(a) in contrast requires that the determination must include 'the functions that must be performed by a system for delivering the services and the standard to which those functions must be performed'.
21. The Commission considers that it may release a draft determination prior to the approval of a local and mobile number portability code. The determination is only required to include a "description" of the functions and standards under section 37(1)(a). The difference between section 37(1)(a) and section 40(1)(a) suggests less detail on the functions and standards is required in the draft determination in comparison with the final determination.
22. Telecom submitted that there are "difficulties inherent in deciding issues related to cost apportionment when prior questions related to functions and standards have not been resolved"⁷. Telecom argues that:

...if functions and standards are not settled, or do not at least form part of the application, a determination relating to cost apportionment becomes at best "academic" and, at worst, susceptible to outcomes contrary to the stated purpose of the Act. For example, how could the Commission assess whether a proposed cost apportionment will promote competition for the long-term benefit of end-users when that mechanism is to be applied in respect of an unknown cost? In addition, determining the costs in advance of the solution provides strong incentives for the parties to game the eventual solution to drive costs to the other parties.

23. TelstraClear submitted that section 40(2) is only intended to prevent a section 40 determination from overriding an existing approved code and is not a specific direction to the Commission to wait until a code is approved if the current application before the Commission does not directly request that the Commission determine the functions and standards of LMNP.
24. One of the aims of section 40(2) is to prevent a section 40 determination from overriding an existing approved code. If a code on LMNP is approved and relates to all functions and standards of LMNP, section 40(2) directs that the Commission is not required to determine the functions and standards for LMNP in those circumstances. In the absence of an approved code dealing with the functions and standards of LMNP, or a further application under section 31(a), the Commission will not issue a final determination in relation to the Application.

⁷ Telecom New Zealand: *Submission on Number Portability*, 18 August 2004, Pg. 2.

Relevant access seekers and access providers

25. The Commission is required to determine the eligibility of both the access seekers and access providers of the services.
26. In its Decision to investigate the Application, the Commission found that it needed only to be satisfied that one or more of the Applicants qualified as an access seeker of the designated multinet service. The Commission found that TelstraClear met the specified requirements of an access seeker.⁸ The Commission noted that “[t]he Commission reserves its entitlement to consider the point prior to issuing a draft Determination with respect to the number portability services and will undertake further evaluation and analysis during the course of the investigation in order to ascertain whether all Applicants meet the access seeker criteria.”⁹
27. On 19 March 2004, the Commission issued a preliminary statement¹⁰ on eligible access seekers and access providers, following the assessment of the access seekers individually, and the assessment of other telecommunications providers who may be eligible access seekers under the Act. The purpose of that statement was to provide preliminary advice to the telecommunications industry of the status of access seekers and access providers for the local telephone number portability service and cellular telephone number portability services under the Act.
28. Having considered the recent submissions received from Telecom¹¹ and TelstraClear¹² on the eligibility of access seekers and access providers, the Commission has upheld its preliminary view. The underlying analysis is set out in Appendix 1. The Commission determines the status of access seekers and access providers as follows:
- Telecom – Access provider of local and cellular telephone number portability services
 - Vodafone – Access provider of cellular telephone number portability service
 - TelstraClear – Access seeker and access provider of local and cellular telephone number portability services
 - CallPlus – Access seeker and access provider of local number portability services
 - Compass Communications – Access seeker and access provider of local number portability services
 - IHUG – Access seeker and access provider of local number portability services
 - WorldxChange – Access seeker and access provider of local number portability service
26. The Commission is aware that there is potential for entry into the local and cellular voice telephony market, and will continue to monitor the eligibility of parties throughout the

⁸ Application for Determination for Number Portability, 29 July 2004, paragraph 58, p. 8.

⁹ *ibid*, paragraph 59, p.8.

¹⁰ Commerce Commission, *Application for determination of “Local telephone number portability service” and “cellular telephone number portability service”, Preliminary statement on eligibility of access seekers and access providers*, 19 March 2004.

¹¹ Telecom New Zealand: *Submission on Number Portability*, 18 August 2004

¹² TelstraClear Limited: *Submission on Local and Mobile Number Portability*, 18 August 2004

period of the determination, in order to ensure that an accurate register of access seekers and access providers is maintained.

DESCRIPTION OF THE FUNCTIONS AND STANDARDS OF A NUMBER PORTABILITY SOLUTION

29. The TCF has prepared two draft codes (each an 'LMNP code') which will provide the functions and standards that must be performed by a system for delivering a local and mobile number portability service and the standard to which those functions must be performed. Copies of the codes are attached as Appendices 2 and 3. Neither code has yet been approved by the Commission under Schedule 2.

IPMS Code

30. The Portability Specification Working Party (PSWP) was established by the TCF in October 2003 to develop a code to specify the functional requirements of an IPMS for long-term (cellular and local telephone) number portability in New Zealand, and to undertake all the tasks necessary to implement the IPMS.¹³
31. The draft IPMS code describes the key attributes of the IPMS as follows¹⁴:

The centralised architecture will comprise:

- a) A Ported Number database containing the Ported Number Register;
- b) A Number Portability Management System, containing the business rules, logic and systems for managing port requests;
- c) An applications programming interface (API) for a consistent transactional interface with Carriers and Service Providers to the IPMS;
- d) A Web Server providing HTTP service interface for browser based sessions using the same rules and capabilities that the API uses; and
- e) Management applications, reporting, logging, and security reports.

Access may be either via a dedicated leased line or secure internet connection.

Network Code

32. The Network Code Working Party (NCWP) was set up by the TCF to prepare a code covering the network requirements for local and cellular number portability, and to oversee the implementation of any network changes required as a result. The project scope notes that the draft code must also be consistent with the IPMS Code that is being developed by the PSWP.¹⁵
33. The purpose of the draft Network code is the documentation of the minimum standards for carriers in the development of their own portability solutions and specifies the

¹³ Telecommunications Carriers Forum: *Final Version Portability Specification Project Scope* (approved by TCF Board), 30 September 2004.

¹⁴ Telecommunications Carriers Forum, *Telecommunications Industry Code for Local and Mobile Number Portability in New Zealand "LMNP Code"*, 24 May 2004.

¹⁵ Telecommunications Carriers Forum, *Project for the development of a Telecommunications Access Code(s) defining the network aspects of a Local Telephone Number Portability Service and Cellular Telephone Number Portability service*, 5 April 2004.

requirements necessary between networks.¹⁶

34. The draft Network code sets out the following objectives¹⁷:
- a) Set out procedures between Carriers to enable voice calls to and from Ported Numbers and short messages to and from Mobile Ported Numbers to be routed to or from the Host Carrier's Network, even though the relevant Number range containing the Number will still be held by the Donor Carrier;
 - b) Set out competitively neutral and non-discriminatory principles for the implementation and operation of LMNP in relation to Voice Services and Short Message Services; and
 - c) Set out procedures to ensure Equivalent Service for Voice Services and Short Message Services.

Description of the functions and standards of a number portability solution

35. The Commission is satisfied that the draft codes provide, to a reasonable degree of specificity, a description of the functions that must be performed by a system for delivering the local and mobile number portability service and the standard to which those functions must be performed.

¹⁶ *ibid*

¹⁷ Telecommunications Carriers Forum, *Telecommunications Industry Network Code for Local and Mobile Number Portability in New Zealand "Network Code"*, July 2004.

TECHNOLOGICAL SOLUTIONS FOR NUMBER PORTABILITY

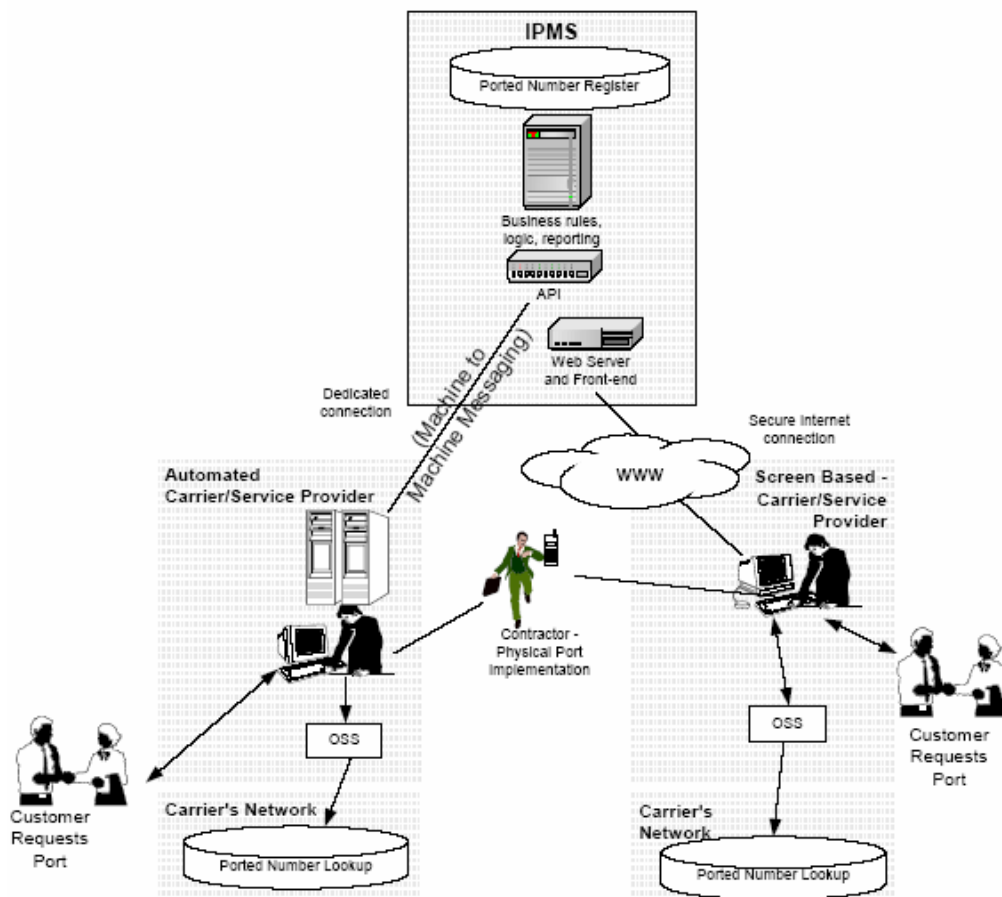
36. Number portability requires a method of determining, every time a customer makes a call, whether the called customer has switched to an alternative supplier and, if so, to which supplier. This requires a modification of the underlying network infrastructure, and, depending on the chosen solution, additional conveyance of calls.
37. The technical solutions used for effecting local number portability can be grouped into either 'on-switch' or 'off-switch' solutions.
38. In many cases, number portability was introduced using on-switch solutions, which rely on information in the donor local exchange (the exchange where the subscriber was initially located). Depending on the solution chosen, calls to a customer who has ported a number from one network operator to another might be routed to the local exchange to which the customer was originally connected. At the local exchange the call is recognised as a call to a ported number, and transferred back to the calling party's operator via traditional interconnection routes. This approach is referred to as 'tromboning' or call redirection. Alternatively, the local exchange passes a signal to the trunk exchange which indicates that the call is to a ported number rather than setting up a new circuit back from the local exchange. The call is then routed to the new operator (call re-routing or drop-back).
39. The advantage of such on-net solutions is that they are relatively easy to implement. The obvious disadvantage is that considerable network capacity might be used for additional conveyance of calls to ported numbers. In particular in the long term, with the scope for a large proportion of numbers having been ported, the additional conveyance requirements may be significant, resulting in inefficient use of network capacity.
40. Most of the additional conveyance requirements are avoided through the use of off-switch solutions that use Intelligent Network (IN) techniques to transfer the portability information into one or several external databases. These databases are then accessed by all network operators for queries to determine to which operator a particular number is currently connected. Off-switch solutions lead to the most direct routing of the call towards the final destination.
41. The total 'Intelligent Network' solution is the most sophisticated solution to date. It involves setting up a database held outside the switches which then allows the call to be completed by supplying the switches with the necessary information to port the call. The database can either be distributed or centralised.
42. Similar solutions exist with regard to cellular number portability. The main difference, however, is that a call to a mobile number requires a routing enquiry to a Home Location Register (HLR) to determine where the subscriber is. Mobile number portability is commonly provided through a so-called Signalling Relay Function (SRF) - akin to onward routing for landlines – where information about ported numbers is held in the HLR, and a call to a ported number is transferred from the donor network to the recipient for treatment.

43. Number portability has been introduced in various countries at different times, and using various technologies. A range of countries, including the UK, the US, Australia and Hong Kong, have introduced local number portability, initially using on-switch solutions. Since then, some have sought to move to intelligent network solutions. Mobile number portability was introduced shortly after local number portability, using similar solutions.

The New Zealand Solution

44. The draft codes under development by the TCF provide for an off-switch IN solution. The role of the IPMS will be to provide reliable message transport, process tracking, coordination, and management. However, it is not envisaged that the IPMS will handle call routing. Management of the porting process would involve the IPMS maintaining a database of ported numbers with all carriers synchronising their systems with the IPMS. It will be the responsibility of the operators themselves to update their own networks to ensure calls to ported numbers are correctly routed. Figure 1 below shows how the codes anticipate the IPMS will operate.

Figure 1: Number Portability Overview of IPMS Architecture¹⁸



¹⁸ Telecommunications Carriers Forum, *Telecommunication's industry code for local and mobile number portability in New Zealand; TCF draft code for public consultation*, March 2004.

45. The IPMS will comprise:
- a Ported Number Database containing the Ported Number Register;
 - a Number Portability Management System (NMPS), containing the business rules, logic and systems for managing port requests;
 - an Applications Programming Interface (API) for a consistent transactional interface with Carriers and Service Providers to the IPMS;
 - A web server for browser based sessions using the same rules and capabilities that the API uses; and
 - Management applications, reporting, logging, and security reports.

COSTS ASSOCIATED WITH NUMBER PORTABILITY

46. The development of a formula for allocating the cost of delivering number portability requires a classification of the costs associated with number portability. From an economic point of view, costs fall into a limited number of categories, each of which can be separately analysed and allocated differently. Some costs associated with number portability are fixed and do not vary with the take-up of number portability while others vary directly with the number of customers switching operator.
47. For the purpose of this determination, the Commission has identified the following cost categories:
- industry common system set-up costs;
 - per-operator set-up costs;
 - per-line set-up costs; and
 - additional conveyance costs.

System set-up costs

48. System set-up costs include the initial set-up of the IN database, the adaptation of information systems necessary to make the IN work effectively, putting in place the mechanisms for the operators to access the system and setting up a maintenance system. They comprise the upfront costs of the common industry platform and the costs of any third party engaged in developing the technical specifications, the building and testing of the common platform to those specifications, as well as ongoing maintenance costs (i.e. the cost of operating, maintaining and managing the common industry platform as well as software licensing, expansion, growth and upgrades of the common platform).

Per-operator set-up costs

49. The operator specific set-up costs include the upfront costs of an operator, programming its switches in order to ensure compatibility and developing processes to access the NP database, and the cost of ongoing maintenance of these systems (similar to the ongoing

maintenance of the common IN platform). Operator system set-up costs also include costs of establishing and maintaining routing databases, upgrading network switches and modifying existing software.

Per-line set-up costs

50. Per-line set-up costs are the incremental costs incurred when customers change providers and port their number from one operator to another, e.g. the costs associated with modifying subscriber data in the corresponding databases. Per-line set-up costs are incurred mainly by the donor networks (i.e. those operators who lose customers to other networks).
51. In the case of subsequent porting the Commission understands that the original donor network does not incur any cost while the new donor network operator, i.e. the original recipient donor network, incurs the same type of costs as those associated with first-time porting.

Call conveyance costs

52. These are the costs associated with the additional conveyance of calls to ported numbers. Costs of carrying calls to ported numbers also include commercial transit service costs, where applicable. Such costs would be incurred by any operator originating calls to ported numbers. However, as the IN solution proposed allows for the most direct call routing, these costs are likely to be negligible, and limited to the cost of querying the database in order to establish the most appropriate route to the called number.
53. Table 1 below summarises the incidence of costs and indicates the relative magnitude of such costs under the IN solution.

Table 1: Types of costs and who incurs them

Cost	Fixed/variable	Industry	DNOs	RNOs
Industry common system set-up costs	Fixed	Medium to high		
Operator-specific set-up costs	Fixed		High	High
Per-line set-up costs	Varies with the number of porting customers		Low	Very low
Call conveyance costs	Varies with the number of calls made.		Negligible	Negligible

Question 1: Has the Commission identified correctly the costs associated with number portability and who incurs them in the porting and subsequent porting process?

Question 2: Is the Classification of costs appropriate?

Question 3: Are the cost drivers and the magnitude of individual costs accurate?

OBJECTIVES AND PRINCIPLES IN ALLOCATING COSTS

54. The overriding objective that the Commission must pursue in making a draft determination on the allocation of costs of number portability is the promotion of competition for the long term benefit of end-users. In making a draft determination, the Commission is required to have regard to Section 18 of the Act:
- (1) The purpose of this Part and Schedules 1 to 3 is to promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand by regulating, and providing for the regulation of, the supply of certain telecommunications services between service providers.
 - (2) In determining whether or not, or the extent to which, any act or omission will result, or will be likely to result, in competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand, the efficiencies that will result, or will be likely to result, from that act or omission must be considered.
(...)
55. In relation to this determination, the Commission needs to consider specifically the impact of allocating costs incurred in the provision of number portability to the various market participants on:
- the incentives of operators to compete with each other for customers;
 - the switching costs faced by customers, i.e. the cost to a customer of porting a number.
56. By defining a cost allocation methodology, the Commission will determine which costs are borne by each market participant, which may be distinct from who incurs the cost in the first instance. The two extreme positions in this regard are that each operator bears all the costs it incurs, and that an operator can fully recover the costs it incurs through inter-operator transfers.
57. The Commission considers it should take into account the following principles:
- Cost minimisation: the cost allocation mechanism should provide an incentive to operators to minimise the cost of providing number portability;
 - Cost causation: the cost allocation mechanism should result in charges to porting customers that send the appropriate price signals on how much porting should be consumed. In other words, cost causation implies that those customers who cause costs should pay those costs;
 - Alignment of costs with benefits: the cost allocation mechanism should provide for the recovery of costs from both customers who are porting their numbers and those who are not, as number portability generates industry-wide benefits as well as benefits that accrue only to porting customers.
 - Practicality: the cost allocation mechanism should be both easy to implement and to enforce.

BENEFITS OF NUMBER PORTABILITY

58. The purpose of Part 2 of the Act is to promote competition in telecommunications markets for the long-term benefits of end-users. The absence of number portability hinders the competitive process by raising the switching costs that customers must incur in order to change operator. Switching costs are generally detrimental to welfare because they make entry more difficult and markets less competitive.¹⁹ The ability for consumers to retain their telephone numbers when switching between telecommunications operators therefore removes an impediment to the development of competitive telecommunications markets by lowering switching costs.
59. It should be noted, however, that the percentage of customers porting their numbers is only a partial indicator of the benefits and effect of number portability. The pro-competitive effect of number portability may in fact not be reflected in high switching rates. For example, because number portability eases customers switching, operators may undertake greater efforts to lower prices, improve their quality of service, and expand the range of services offered. To the extent that they are successful in doing this, actual switching rates may not increase dramatically following the introduction of number portability.
60. Number portability brings benefits to porting customers, other customers and telecommunications operators. Those benefits fall into three broad categories²⁰:
- **Type 1 Benefits:** These are the benefits which accrue to customers porting their numbers. They are the internal benefits taken into account when making the decision whether to port one's number. These benefits include cost savings to business users through avoiding changes to advertising material, and improvements to price and service features that may be provided by competing service providers.
 - **Type 2 Benefits:** These benefits correspond to efficiency improvements, price reductions and greater variety of products and services resulting from increased competitive pressures induced by the introduction of number portability. Because number portability facilitates switching and lowers its cost, it reinforces market competition. The benefits of overall improvements in the level of competition will accrue to all users in those markets. Additionally, all operators also derive benefits from number portability as it makes it easier to compete for each others customers.
 - **Type 3 Benefits:** This last category of benefits consist of the convenience and cost savings available to all users as a result of fewer numbers being changed (fewer misdialled and directory enquiry calls).
61. The relative magnitude of the different types of benefits depends on the level of competition in the market. Where the market is not competitive, the external benefits are likely to be greater than the internal benefits: the increased competitive pressure might

¹⁹ See Motta, M. 2004, *Competition Policy. Theory and Practice*. New York: Cambridge University Press, p81 and Klemperer, P. 1995 Competition When Consumers Have Switching Costs: An Overview, *Review of Economic Studies*, pp. 515-539.

²⁰ Monopolies and Mergers Commission, *Telephone Number Portability: A Report on a reference under section 13 of the Telecommunications Act 1984*, 1995.

bear on prices and service quality even without much actual switching and porting of numbers.²¹ Type 1 and Type 3 benefits directly depend on the number of lines ported, and might therefore be higher in a competitive market where customers face more choice and where switching between operators is perhaps more common.

62. Estimation of benefits undertaken in regulatory proceedings is suggestive of the relative magnitude of different types of benefits depending upon the degree of competition in the relevant markets. A cost benefit analysis carried out for OFTEL by NERA in 1994 found that Type 2 benefits were by far the largest. Type 2 benefits accounted for 69 per cent of total benefits, whereas Type 1 benefits accounted for 30 percent and Type 3 benefits for only one per cent of the total.²² By contrast, looking at the costs and benefits of cellular number portability in Hong Kong, NERA and Smith concluded that Type 1 benefits were very high relative to the Type 2 and Type 3 benefits, accounting for 93% of total benefits (with Type 2 benefits accounting for only 2% and Type 3 benefits for 5% of the total).²³ This distribution of benefits may be explained by the fact that the mobile market in Hong Kong is already very competitive and the group that gains the most are customers that do port their numbers.²⁴

²¹ The Type 2 benefits associated with NP should take into account only the increase of competition (and hence efficiency and innovation benefits associated with number portability) rather than the impact of competition as a whole.

²² NERA (1994), *Cost-Benefit Analysis of Number Portability*, a Report for OFTEL, London: NERA.

²³ NERA and Smith System Engineering (1998) *Feasibility Study & Cost Benefit Analysis of Number Portability for Mobile Services in Hong Kong*, A Report for OFTA, London.

²⁴ The Hong Kong mobile telecommunications market is one of the most competitive in the world and at the time of the MNP introduction (1999) there were seven network operators and eleven digital networks.

ALLOCATION OF COSTS

63. The Commission does not consider that there are significant differences in the nature of costs between local and mobile telephone number portability. Accordingly, this draft determination does not make a distinction between the two types of number portability and the proposed cost allocation methodology will apply to both.
64. The cost allocation determination will apply to those future entrants at such time as they become an eligible access provider or access seeker under the act.
65. Through the determination of a cost allocation regime, the Commission seeks to promote competition for the long-term benefits of end-users. It specifically aims at providing adequate incentives for operators to compete with each other for customers and incentives for customers to switch between suppliers and retain their telephone numbers. The Commission also seeks to strike an appropriate balance between the cost causation, cost minimisation, alignment of benefits with costs and practicality principles.
66. The nature of the benefits and costs associated with number portability calls for a recovery of variable costs associated with porting numbers from porting customers and a recovery of fixed and other costs (i.e. costs incurred to enable number portability) from all consumers.
67. In assessing various cost allocation mechanisms, the Commission recognises that the cost incurred by, or allocated to, the various operators will ultimately be recovered from end-users. Costs could be recovered either directly from the customers who port their number, or from the customer base of each network through a mark-up over the prices of services. In practice, cost recovery can be expected to combine both means and thereby reflect the nature of benefits and costs arising from number portability.
68. Cost allocation may impact on the market place in two main ways. First, how costs are allocated has an impact on the incentives for cost minimisation. If an operator can pass on the costs it incurs to another operator or to its customers without any effective constraint (either by regulatory control or through competition), there is little incentive for that operator to undertake efforts to reduce the level of costs. Through inter-operator charges, an operator would be able to raise its rivals' costs and thereby undermine their ability to compete. As a result, an allocation mechanism that does not provide any incentives for cost minimisation implies that the costs of providing number portability are potentially higher than they would need to be, and that therefore the benefits from number portability are lower.
69. Secondly, cost allocation can affect the incentives for operators to compete for customers switching from other operators. If a receiving network operator were required to bear a large proportion of the total costs of number portability, those costs would be likely to be large in relation to the economic benefit of attracting an in-porting customer. Such a result would in turn weaken the incentives to compete for in-porting customers. This suggests that allocating all the costs associated with number portability on the basis of ported numbers will not enhance competition.
70. The experience of European Union countries suggests that the success of number portability is directly linked to the charge imposed by the incumbent operator for porting

numbers. In those countries where LNP is making significant progress, the charge does not exceed € 10 (NZ\$26). On the other hand, in Ireland, Austria and Sweden, where the fee is above € 17 (NZ\$44), very few numbers are ported.²⁵

71. The effects of cost allocation in the market place are complex. If there were no industry-wide benefits associated with number portability, it would be efficient to charge customers porting their numbers the corresponding costs. Porting customers would pay a charge that covers all variable costs (per-line set-up costs and ongoing conveyance costs), and includes a contribution to the fixed costs of providing NP (industry and operator-specific set-up costs and ongoing maintenance costs).
72. However, number portability does not only produce benefits to those porting their number, but also generates external benefits (Type 2 and Type 3 benefits). Therefore, the cost causation principle and the objective to promote competition imply that porting customers should not have to bear the full costs associated with number portability but only those that are incurred because of their decision to switch operator, i.e. per-line set-up costs. Other costs would then be spread across the entire customer base of each operator. This cost recovery would reflect the alignment of costs with benefits and cost causation principles.
73. Consistent with the objective to promote competition and the principles adopted for the allocation of costs, porting customers should face the variable cost they cause while fixed costs (i.e. system set-up costs and operator specific set-up costs which enable portability) should be recovered from contributions from all customers. Thus, as operator specific set-up costs are largely driven by the relative size of operators, a rule which requires each operator to bear its own set-up costs, and that shares industry common system set-up costs in line with the relative size of operators, is appropriate. Operators would then spread these costs across their entire customer base. This would produce an outcome in which all customers contribute directly or indirectly towards the fixed costs of providing number portability. With regard to the allocation of per-line set-up costs, the respective incentives of donor and recipient networks to charge porting customers for those costs implies that these costs should be recovered by DNOs from RNOs.

Industry common set-up costs

74. Industry common set-up costs should be allocated between operators on the basis of market share measured by active numbers. Like per-operator set-up costs, industry common set-up costs are largely fixed with regard to the number of customers eventually porting their number. They are incurred in order to enable portability.
75. Industry costs can be shared using a variety of methods, which differ with regard to their impact on the incentives to compete, and the way in which costs are ultimately recovered from the beneficiaries of number portability.
76. A first method is the allocation of industry common costs by number of ported customers. Using this method would result in an allocation where industry common costs are shared between operators in proportion to their share of ported-in customers. This might be desirable in the case where external benefits are small, and most of the benefits from

²⁵ European Commission, *9th Report on the Implementation of the EU Electronic Communications Regulatory Package*, SEC(2003) 1342.

number portability are Type 1 benefits. However, given the potentially significant size of Type 2 benefits and the cost causation principle, such an allocation key is not appropriate. Moreover, under such an allocation method, it would be mostly smaller market players and new entrants who are more likely to have porting-in customers, who would contribute to industry common costs. This could discourage smaller market players and new entrants from competing aggressively with incumbents for existing customers, and could to a large extent neutralise the pro-competitive effects of number portability.

77. A second method is an even split of industry common costs. However, when operators differ significantly with regard to their customer base, an even split of industry common costs would violate both the cost causation and alignment of costs with benefits principles. Industry common set-up costs are incurred to enable number portability from which all customers derive benefits. Therefore these costs should be allocated on a basis that reflects the relative size of market participants. An even split of these costs does not satisfy this condition.
78. A third method is allocating industry common costs in line with market shares. Costs allocated in line with each operator's share of the market would result in an allocation that better reflects the external benefits of number portability, which accrue to all customers rather than just those porting their numbers. In addition, as these costs would not be avoided if no customers subsequently ported their number, the principle of cost causality implies that they should not be recovered through charges to porting customers but spread across all consumers. Furthermore, as this method allocates cost on a proportional basis of market participants' size, it maintains a competitive playing field.
79. TelstraClear argued that common cost apportionment based on active numbers would be appropriate, given that apportioning industry common costs based on revenue or allocated number ranges would involve a more complex and controversial calculation. Telecom submitted that costs should be allocated based either on market share, or on the number of ports initiated by each operator.
80. By contrast, Vodafone argued that the common initial set-up costs should be split evenly amongst all participants, and that common operational costs should be covered by a set fee split equally amongst participants plus an extra charge based on the number of ports initiated by each participant.
81. The Commission considers that allocating industry common set-up costs amongst operators on the basis of market share defined by the number of subscribers to local and mobile access respectively will best fulfil the objectives of cost allocation and the cost allocation principles. This methodology is straightforward to implement, and reflects the benefits derived by all subscribers from the availability of number portability. The allocation key will apply to both annual amortization charges (see below) and on-going annual operational and maintenance costs.
82. Most industry common set-up costs are nonrecurring costs. These costs will be financed initially by operators in proportion to their market shares. To prevent new entrants from free-riding on the investment made at the time of the introduction of number portability, contributions to initial investment cost by new entrants need to be defined.

83. The Commission supports an allocation of annual depreciation charge of the asset based on the market share of the new entrant once it becomes an eligible access seeker. A similar allocation will apply to recurring costs. Inland Revenue Guidelines should form the basis for the definition of the parameters of asset depreciation. The use of these guidelines will limit controversy and provide market participants with the required certainty over future payments.
84. Under the proposed cost allocation regime, the same rules will therefore apply to new entrants at the time they become eligible access providers. In order to maintain a competitive level playing field and prevent inefficient entry, this approach ensures that there is no discrimination in favour of new entrants in terms of the contribution they make to industry common set-up costs while at the same time not overly burdening them. New entrants will therefore contribute to annual depreciation charges, and the annual on-going costs of the IPMS on the same basis as existing operators once they have entered the market.

Per-operator set-up costs

85. The Commission considers that each operator should bear its own set-up costs. Per-operator set-up costs are largely fixed with regard to the number of customers who will ultimately wish to port their number. The Commission understands that per-operator set-up costs constitute the bulk of total set-up costs, and that these costs vary with the size of an operator.
86. The Commission is satisfied this allocation rule is consistent with the objective of promoting competition and the principles adopted for cost allocation. First, operator-specific costs are incurred in order to enable number portability (i.e. they are not related to any individual customer's decision to port his number) and thus facilitate customer switching, which in turn generates industry-wide benefits shared by all consumers. Consequently, the Commission expects these costs to be recovered by operators from all end-users. Second, they are incurred roughly in proportion to operators' market shares. Third, this rule provides a strong incentive to minimise costs. Fourth, it maintains a competitive playing field with new entrants, as they will incur these costs in the same manner as incumbent operators.
87. Telecom submitted that if initial set-up costs are allocated on this basis, the burden of providing number portability will fall most heavily on Telecom; and that allocating costs on these grounds will not reflect the benefits arising from number portability²⁶. The Commission disagrees with this view, and considers that requiring operators to bear their own set-up costs takes into account the Type 2 and Type 3 benefits associated with an efficient number portability service. All operators will have to incur these costs which vary with the size of each operator's customer base.
88. Telecom argues that if it is not compensated for its costs, it will be induced to do the minimum required to satisfy regulatory criteria. The Commission considers that adherence by operators to the service functions and standards as defined in approved industry codes would satisfy section 18. If at a later date the Commission changes its view on the

²⁶ Telecom New Zealand: *Submission on Number Portability*, 18 August 2004, pg. 4.

appropriateness of this threshold, it could initiate an amendment to the LMNP code by means of section 13 of Schedule 2.

Per-line set-up costs

89. The Commission considers that a DNO should be permitted to recover the per-line set-up costs they incur when one of their customers is switching to another operator. Per-line set-up costs are driven exclusively by the number of customers porting their numbers. The cost causation principle implies that individuals whose actions cause a cost should pay this cost.
90. Per-line set-up costs could be recovered from porting customers either through a porting-out fee levied directly by the DNO or by allowing the DNO to recover the costs from the RNO, which could then levy a porting-in charge. The former option is not appropriate because if the DNO was able to recover the cost incurred directly from porting customers, it would have a strong incentive to overstate its costs and charge customers an inflated fee in order to deter customers from switching.
91. The recovery of per-line set-up costs through a transfer from the RNO to the DNO is preferable for the following reasons:
- It reduces the transaction costs involved in the porting process and makes switching process simpler for customers.
 - It is easier for a RNO to ensure that per-line set-up costs are not inefficiently high as RNOs are in a better position to scrutinise the level of such costs, and have a stronger incentive and a better ability to negotiate down payments to an efficient level than any individual customer.
 - It provides RNOs with the flexibility to choose between charging porting-in customers for the costs paid to DNOs, absorbing those costs, or passing them on to all their customers.
92. In the case of subsequent porting, i.e. when a customer who has previously ported his or her number ports again, the past RNO will be compensated for the costs it incurs by the new RNO.
93. TelstraClear argues that ‘the costs of each operator’s portability reassignment systems should be signalled to end users through the operator’s charges’²⁷, and that per-line set-up costs should not be recoverable from the RNO. For the reasons discussed above, the Commission considers that it is preferable that DNOs recover per-line set-up cost from RNOs.
94. TelstraClear further states that allowing operator’s to recover the cost of a line set-up will reduce any incentives to minimise this cost. The Commission acknowledges that the cost recovery mechanism does not provide incentives to the DNO to minimise the cost of porting a number. However, the Commission is satisfied that this allocation rule best serves the objectives of cost allocation and strikes an appropriate balance between the charging principles adopted given its regulatory powers in the context of this

²⁷ TelstraClear Limited: *Submission on Local and Mobile Number Portability*, 18 August 2004, pg.30.

determination.

95. The Commission considers that the donor network should recover only the efficiently incurred per-line set-up costs from the recipient network. The Commission expects that the level of these inter-operator charges will be negotiated among network operators, and will be reciprocal.
96. The Commission is considering whether it should, in making a final determination, exercise its power under s 40(1)(g) to require parties to the determination to charge per-line set-up costs on a reciprocal basis as between pairs of networks. Such a requirement could ensure that a particular operator (A) would recover from a particular RNO (B) a set-up charge at the same level as the latter operator (B) would recover from the former operator (A) if the customer were porting in the opposite direction. The Commission is also considering whether a final determination should prohibit the imposition of porting-out charges by DNOs on customers porting to other operators.

The Commission seeks comment as to whether each such requirement is necessary or desirable. Comments might address whether such requirements would be consistent with the requirement that charges be “efficiently incurred”; whether any such rule would have any foreseeable adverse effect on efficient pricing and service provision; and any other matter considered pertinent.

Question 4: Which mechanism could be implemented to provide an incentive for the minimisation of per-line set-up costs?

Conveyance costs

97. The Commission considers that each operator should bear the additional conveyance costs it incurs. Additional conveyance costs are incurred by all networks originating calls to customers who have ported their numbers. The allocation of these costs is of particular concern where they are significant, i.e. where an on-switch solution has been chosen, and where cost allocation may strongly affect the incentives of operators to migrate to an off-switch solution.
98. However, the Commission understands that the additional conveyance costs of number portability using an IN are negligible. Given that such costs are minimal, are incurred by all operators in proportion to their relative size (in terms of call origination), and are associated with having a system that allows numbers to be ported rather than the actual porting, the Commission considers that each operator should bear its own conveyance costs.

CONCLUSION

99. In allocating the costs associated with number portability, the Commission is guided by the promotion of competition for the long-term benefits of end-users by lowering the switching costs incurred by consumers when changing telecommunications providers. The Commission has adopted four principles governing the allocation of cost, namely: cost minimisation, cost causation, alignment of costs with benefits and practicality. On this basis, the Commission has concluded that:
- *Industry common set-up costs* should be allocated amongst all providers of local and/or cellular telephone services in line with market share, measured by subscriber numbers, in respective markets.
 - *Operator specific set-up costs* should be borne by each operator, providing incentives for each operator to minimise costs while maintaining the ability and incentive to compete.
 - *Per-line set-up costs* should be recoverable from a recipient network operator. The donor network operator should not seek to recover any part of those costs from the out-porting customer.
 - Each operator should bear its own *additional call conveyance costs*. *Additional call conveyance costs are minimal using an Intelligent Network system* to provide number portability. To the extent that there is any additional call conveyance costs, each operator bearing its own costs will provide appropriate incentives for operators to minimise those costs.

DATE OF INCEPTION AND EXPIRY OF THE DETERMINATION

Date of Inception

100. The date of the determination is the appropriate date of inception.

Date of Expiry

101. The Commission's preliminary view is that the date of expiry of the Determination should be consistent with the time during which an entrant could enter the market and be liable for a share of the industry-wide costs (five years).
102. Under section 65, designated and specified services expire 5 years from the date on which the service came into force, unless otherwise extended. The relevant multinet network designated services of local telephone number portability and cellular telephone number portability came into force on 20 December 2001, and are due to expire on 19 December 2006.
103. Accordingly, the Commission considers that the date of expiry should be 19 December 2006, or such later date within the period of any extension of the designated service and being five years after the date in this determination.

DATED this 6th day of December 2004

A handwritten signature in black ink, appearing to be 'D. Webb', written over a horizontal line.

Douglas Webb
Telecommunications Commissioner

CONSOLIDATED LIST OF QUESTIONS

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APPENDIX ONE

Eligibility of Access seekers and providers

A1 The definitions of “access provider” and “access seeker” for the designated services of “local telephone number portability service” and “cellular telephone number portability service” are:

Access provider: Every person who operates -
 (a) a PSTN to which numbers have been allocated; and
 (b) a telephone service that relates to that number portability service

Access seeker: Any person who -
 (a) operates a PSTN to which numbers have been allocated; and
 (b) operates a telephone service that relates to that number portability service; and
 (c) seeks access to that number portability service

A2 Paragraph (a) of both definitions requires that an access seeker or provider must operate a PSTN to which numbers have been allocated. In order to “operate” a PSTN, the Commission considers that an access seeker or provider must control the working of, or manage or direct the operation of, an element of a PSTN to which numbers have been allocated.

A3 In assessing the eligibility of access seekers for both the local telephone number portability service and the cellular telephone number portability service, the Commission considers that an access seeker is required as at the date of the application, to operate rather than merely intend to operate a PSTN to which numbers have been allocated.

Industry allocation of telephone numbers

A4 The current number allocation rules²⁸ state that

Rule 1.1.1 The Number Administrator will allocate Code Blocks for use within New Zealand public switched telephone networks under the Number Administration Deed according to these rules.

Rule 1.1.2 These rules apply to the allocation of Code Blocks, and do not imply any obligation on any other party to activate allocated numbers or route calls. Nor do they imply any obligation to pass calls from one Party’s network to another Party’s network.

Rule 1.2.1 A Code Block may only be allocated to a Service Provider. Service Providers will not be entitled to receive allocations if the Independent Chair has suspended such rights under clause 8.4(c)

A5 ‘Service Provider’ and ‘Carrier’ are defined in the number allocation rules²⁹ as

²⁸ M-Co, *Telecommunications Numbering Plan Number Allocation Rules*, Version 1.3 (3rd Operational Version), 12 November 2003

²⁹ *ibid*

Service Provider means a person providing, or intending to provide, Public Switched Telecommunications Services in New Zealand, who qualifies under the Numbering Administration Deed for the allocation of numbers in accordance with these Rules. A Service provider may, or may not, be a Carrier.

Carrier means any person operating a PSTN for providing services

- A6 Blocks of telephone numbers are provided to service providers who may or may not be a carrier operating a PSTN. The number allocation rules enable a service provider to be allocated numbers in contemplation of the future supply of a relevant service with that allocated telephone number range. It does not require that the service provider is, or intends to be, a carrier in its own right.

Eligibility of access providers and access seekers over the duration of a determination

- A7 The Commission notes the assessment of applicants as access seekers, and other industry participants as access providers, has been undertaken at a fixed point in time.
- A8 The number allocation rules enable a service provider to be allocated numbers in the expectation that these numbers may become active at a future period for use with a telephone service relating to the relevant number portability service. Until such time as a service provider activates numbers within that range, the Commission notes that the service provider would not be an eligible access seeker or access provider for that service.
- A9 This assessment of telecommunications industry participants as eligible access seekers and access providers has been considered at a fixed point in time, namely the date of application. The eligibility status of any access seeker or access provider can change over the duration of a Commission's determination process. The local telephone number portability service and cellular telephone number portability service descriptions provide for the ongoing assessment of eligibility of any access seeker or access provider.
- A10 Industry participants are obliged to notify the Commission when they consider their status as an access seeker or access provider has changed where the Commission has an application for a relevant designated multinet network service before it, or a determination for a relevant service is active.

Eligibility of Access Seekers

- A11 This section sets out the Commission's preliminary view as to the eligibility of each applicant as an access seeker for the services of "local telephone number portability service" and "cellular telephone number portability service" respectively.
- A12 In considering the eligibility of each applicant as an access seeker, the Commission notes that where an applicant is determined to be an eligible access seeker for a number portability service, that eligible access seeker is also an access provider for the same service.

Status of TelstraClear as access seeker

- A13 In its decision to investigate the number portability application, the Commission found that TelstraClear met the specified requirements of an access seeker in respect of both local telephone number portability and cellular telephone number portability.³⁰ In reaching its decision, the Commission noted that the Commission reserved its entitlement to undertake further evaluation and analysis during the course of the investigation in order to ascertain whether all applicants meet the access seeker criteria.³¹
- A14 The Commission remains satisfied that TelstraClear operates a PSTN to which local telephone numbers have been allocated and operates a local telephone service, and accordingly is an eligible access seeker, and also an eligible access provider, for the designated multinet network services of local telephone number portability and cellular telephone number portability under the Act.
- A15 Following the release of the decision to investigate, Telecom restated its concern that many of the applicants fail to qualify as access seekers in relation to either or both of the local telephone number portability service or cellular telephone number portability service.³²
- A16 Telecom noted that it was unable to provide a detailed view as to whether the arrangements by which TelstraClear resells Vodafone's cellular service is sufficient for TelstraClear to qualify as an access seeker of cellular telephone number portability. The Commission sought further information from TelstraClear on its eligibility as an access seeker of the cellular telephone number portability service.³³
- A17 In response, TelstraClear advised that it has been issued with 029 and 023 numbering ranges, which are designated for cellular mobile services.³⁴ TelstraClear notes that cellular services are provided on the Vodafone network. TelstraClear is responsible for the allocation of numbers from TelstraClear's 029 number range, allowing TelstraClear to allocate cellular numbers to its customers which match their fixed PSTN numbers.³⁵
- A18 Telecom submitted that 'a 'pure' reseller would not qualify as an access seeker of Cellular NP [Number Portability] primarily because, in terms of paragraph (a) of Schedule 1, Part 2, Subpart 2 of the Telecommunications Act 2001, resellers do not operate a PSTN to which numbers have been allocated.'³⁶

³⁰ Application for Determination for Number Portability, 29 July 2003, paragraph 58, p. 8

³¹ *ibid*, paragraph 59, p. 8

³² Letter from Telecom (Blackett) to the Commission (Borthwick), *Number Portability: Submissions on Certain Matters relating to the Commission's decision to investigate*, October 2003

³³ Letter from the Commission (Borthwick) to TelstraClear (Forsyth), *Number Portability Application: Eligibility of TelstraClear as an Access Seeker for Cellular Number Portability*, 20 February 2004

³⁴ Letter from TelstraClear (Forsyth) to the Commission (Borthwick), *Number Portability*, 27 February 2004

³⁵ *ibid*

³⁶ Letter from Telecom (Blackett) to the Commission (Borthwick), *Number Portability: Submissions on Certain Matters relating to the Commission's decision to investigate*, October 2003

- A19 Telecom submitted that ‘a ‘reseller’ that provides no additional functionality to the service ‘resold’ would not be the ‘provider’ of a ‘cellular telephone network service’ – rather, that ‘reseller’ can be said to have nothing more than a billing relationship with the end-user’.³⁷ Telecom also submitted that it will be crucial that that the porting of all cellular number codes is achieved, including 029 codes and to achieve this it is not necessary to hold that “resellers” are access seekers³⁸. For example, the Commission could include a condition that as part of any number portability determination made in accordance with section 40(1)(f) that access providers must ensure that resellers also make their numbers portable.
- A20 The Commission is of the view that an access seeker or access provider must exert an element of control over a PSTN in order that an access seeker or access provider can be said to operate a PSTN to which numbers have been allocated.
- A21 The Commission is satisfied that TelstraClear, through the use of its 029 number range, exerts some element of control over the Vodafone 2G network. The 029 numbers are unique to TelstraClear and are assigned by TelstraClear to customers. These numbers operate on Vodafone’s network, and are specifically conditioned within the Vodafone network. TelstraClear accordingly operates a cellular telephone service and seeks access to the cellular telephone number portability service.
- A22 TelstraClear submitted that ‘[i]f TelstraClear is not treated as an access seeker because it does not ‘operate’ a cellular network, it would follow that TelstraClear for the same reasons would not qualify as an access provider. The result would be that the TelstraClear number range falls outside the number portability arrangements defeating the whole purpose of the cellular telephone number portability service to achieve full portability access [to] all cellular number ranges.’³⁹
- A23 The Commission acknowledges that an outcome where a telecommunications provider has numbers under its exclusive control and use of that provider and is unable to port such numbers, while other providers are able to do so, would be inconsistent with the purpose of number portability; namely that end-users are able to port their numbers from one service provider to another. It is therefore appropriate that TelstraClear qualifies as an access seeker. The same result could not be achieved if the Commission were to impose a condition under section 40(1)(f) that access providers must ensure, in respect of numbers belonging to any resellers, that resellers also make their numbers portable.
- A24 The Commission confirms that TelstraClear is an eligible access seeker, and also an eligible access provider, for the designated multinet service of cellular telephone number portability under the Act.

Status of CallPlus as access seeker

- A25 CallPlus has advised that it operates a fixed PSTN to which local telephone numbers have been allocated, that numbers within this allocated range are active on its PSTN

³⁷ *ibid*

³⁸ Telecom’s submission of 19 August 2004 on number portability cost allocation principles.

³⁹ Letter from TelstraClear (Forsyth) to the Commission (Borthwick), *Number Portability*, 27 February 2004

and that it operates a telephone service relating to the local telephone number portability service.⁴⁰

- A26 The Commission is satisfied that CallPlus is an eligible access seeker, and also an eligible access provider, for the designated multinetwork service of local telephone number portability under the Act.
- A27 CallPlus has advised that it does not operate a cellular PSTN. Callplus has been allocated cellular number ranges. However no numbers within these ranges are currently active and accordingly CallPlus does not exert any control over a cellular PSTN to which numbers have been allocated.
- A28 The Commission is satisfied that CallPlus is not an eligible access seeker or access provider for the designated multinetwork service of cellular telephone number portability under the Act.

Status of Compass as access seeker

- A29 Compass has submitted that it is ‘an ‘access provider’ in respect of the designated multinetwork service local telephone number portability, and specifically that Compass does operate a PSTN to which numbers have been provided in Auckland, Wellington and Christchurch.’⁴¹ Compass operates a local telephone service and seeks access to the local telephone number portability service.
- A30 The Commission is satisfied that Compass is eligible as both an access provider and an access seeker for the local telephone number portability service under the Act.
- A31 Compass has advised that it does not operate a cellular PSTN to which numbers have been allocated.⁴² The Commission is satisfied that Compass is not an eligible access seeker or access provider for the designated multinetwork service of cellular telephone number portability under the Act.

Status of The Internet Group as access seeker

- A32 The Internet Group has advised that it ‘operates a PSTN and has had allocated to it local numbers in accordance with the Number Administration Deed. At present we are operating local service only on a trial basis...’⁴³ The Commission notes that although the Internet Group offers the service on a trial basis only, the Internet Group satisfies the criteria that it operates a telephone service that relates to the local telephone number portability service and seeks access to the local telephone number portability service.
- A33 The Commission is satisfied that the Internet Group is eligible as both an access provider and an access seeker for the local telephone number portability service under the Act.

⁴⁰ Discussion with CallPlus (Cooper) and the Commission (Abbott), 11 March 2004

⁴¹ Letter from Compass (Hussona) to the Commission (Mosby), *Number Portability*, 10 October 2003

⁴² Discussion with Compass (Hussona) and the Commission (Abbott), 15 March 2004

⁴³ Letter from The Internet Group (Diprose) to the Commission (Borthwick), *Request for submission*, 7 October 2003

A34 The Internet Group has advised that it does not offer a cellular telephone service that relates to the cellular telephone number portability service.⁴⁴ The Commission is satisfied that The Internet Group is not an eligible access seeker or access provider for the designated multinetwork service of cellular telephone number portability under the Act.

Status of Worldxchange as access seeker

A35 Worldxchange considers that it is an access seeker for the local telephone number portability service under the Act. '[Worldxchange] do have local number ranges permanently assigned to us under the National Number Plan, [Worldxchange] does operate a PSTN, [Worldxchange] does have local services running over this PSTN'.⁴⁵ Worldxchange says that, although it is using local number ranges allocated under the National Numbering plan, those numbers are not Worldxchange local numbers, but TelstraClear numbers that have been assigned by TelstraClear to Worldxchange in perpetuity.⁴⁶

A36 The Commission considers that the permanent reassignment of local numbers from TelstraClear to Worldxchange for use on Worldxchange's PSTN network satisfies the criteria that it operates a PSTN to which numbers have been allocated.

A37 Worldxchange operates a telephone service related to local telephone number portability. The Commission is accordingly satisfied that Worldxchange is eligible as both an access provider and an access seeker for the local telephone number portability service under the Act.

A38 Worldxchange has advised that it is not an access provider of cellular telephone number portability services under the Act as it does not have any cellular services presently operating over any PSTN, and does not have a cellular number range assigned to it under the numbering plan.

A39 The Commission is satisfied that Worldxchange is not an eligible access seeker or access provider for the designated multinetwork service of cellular telephone number portability under the Act.

Eligibility of access providers

Status of BCL as access provider

A40 BCL has submitted that it is not an eligible access provider for either the local telephone number portability service or the cellular telephone number portability service under the Act.

⁴⁴ *ibid*

⁴⁵ Letter from Worldxchange (Clarkin) to the Commission (Webb), *Submission – Eligibility to be a party to Number Portability Determination Request*, 3 October 2003

⁴⁶ *ibid*

- A41 BCL submits that it does not satisfy the requirements of an access provider for the local telephone number portability service. ‘BCL does not operate a PSTN to which numbers have been allocated. BCL does not operate a telephone service that relates to the ‘local telephone number portability service’.’⁴⁷
- A42 BCL also submits that it does not satisfy the requirements of an access provider for the cellular telephone number portability service as ‘[it] does not operate a PSTN to which numbers have been allocated. BCL does not operate a telephone service that relates to the “cellular telephone number portability service.”’⁴⁸
- A43 The Commission is satisfied that BCL is not an eligible access provider for the designated multinet network services of local telephone number portability or cellular telephone number portability service under the Act.

Status of Citylink as access provider

- A44 Citylink has submitted that it is not an eligible access provider for the designated multinet network services of local telephone number portability or cellular telephone number portability. Citylink has advised that it does not operate a PSTN and does not provide a telephone service related to the local telephone number portability service. Citylink has also advised that it does not operate a PSTN and does not provide a telephone service related to cellular telephone number portability.⁴⁹
- A45 The Commission is satisfied that Citylink is not an eligible access provider for the designated multinet network services of local telephone number portability or cellular telephone number portability service under the Act.

Status of Counties Power as access provider

- A46 Counties Power has submitted that it is not at present an access provider for either of the designated multinet network services of local telephone number portability or cellular telephone number portability.⁵⁰
- A47 Counties Power submitted that ‘[we] do operate a telecommunications network which members of the public who are contracted to one of our retail partners will be able to use for the purpose of communicating between telephone devices. While members of the public can dial their own calls across our network, we perform no voice switching on the network. We carry customer voice data to our retail partners who then switch telephone calls within our network or into the PSTN. Similarly no telephone numbers have been allocated by us on our network, however retailers operating on the network allocate telephone numbers that point to devices connected to our network’.⁵¹
- A48 In respect of the local telephone number portability service, Counties Power submits that “we do not operate a telephone service in the ordinary meaning of the words, rather we provide a network which allows retailers to operate telephone services.

⁴⁷ Letter from BCL (Bowron) to the Commission (Borthwick), *Number Portability*, 9 October 2003

⁴⁸ *ibid*

⁴⁹ Email from Citylink (de Wit) to the Commission (Mosby), *Number Portability*, 24 September 2003

⁵⁰ Letter from Counties Power (Lack) to the Commission (Borthwick), *Number Portability*, 2 October 2003

⁵¹ *ibid*

Since the two legs of the ‘access provider’ definition are conjoined it follows that we are not an ‘access provider’, irrespective of whether or not our network is a PSTN to which numbers have been allocated.’⁵²

- A49 The Commission notes that while Counties Power operates a PSTN and numbers are used on that network, local telephone numbers have not been allocated to Counties Power. Rather, local telephone numbers have been allocated to carriers who utilise the Counties Power network.
- A50 The Commission is satisfied that Counties Power is not an eligible access provider for the designated multinet network service of local telephone number portability under the Act.
- A51 In respect of the cellular telephone number portability service, Counties Power submit that the Counties Power network ‘does not presently support cellular telephone services as we understand the term, that is transmissions to and from portable telephones capable of operating throughout the network area and maintaining service while moving between the local areas covered by different base stations. Consequently none of the telephones operating through our network are likely to be allocated cellular numbers so the issue of cellular telephone number portability does not arise.’⁵³
- A52 Counties Power does not operate a PSTN to which cellular numbers have been allocated, or operate a telephone service that relates to the cellular telephone number portability service. The Commission does not consider that Counties Power is an eligible access provider for the cellular telephone number portability service under the Act.
- A53 The Commission is satisfied that Counties Power is not an eligible access provider for the designated multinet network services of local telephone number portability or cellular telephone number portability service under the Act.

Status of Equant as access provider

- A54 Equant says that it is not an access provider for a local telephone number portability service or a cellular telephone number portability service. It does not satisfy either of the criteria to be an access provider. Equant exited the retail switched voice market in New Zealand in January 2003.⁵⁴
- A55 The Commission is satisfied that Equant is not an access provider for the designated multinet network services of local telephone number portability or cellular telephone number portability service under the Act.

⁵² *ibid*

⁵³ *ibid*

⁵⁴ Email from Equant (Goodchild) to the Commission (Mosby), *Number Portability: Equant Response*, 29 September 2003

Status of Tangent / United Networks as access provider

- A56 The Commission received a response from Tangent in respect of United Networks and Tangent, as Tangent Limited acquired United Networks telecommunications network following Vector Limited's purchase of United Networks.⁵⁵
- A57 Tangent has advised that Tangent does not operate a PSTN to which numbers are allocated, and it does not operate a telephone service that relates to local telephone number portability. Tangent has also advised that it does not operate a telephone service that relates to the cellular telephone number portability service or operate a cellular PSTN to which numbers have been allocated.
- A58 The Commission is satisfied that Tangent is not an eligible access provider for the designated multinetwork services of local telephone number portability or cellular telephone number portability service under the Act.

Status of Teamtalk as access provider

- A59 Teamtalk has advised the Commission that it does not meet the conditions as an access provider for the designated multinetwork services of local telephone number portability or cellular telephone number portability.⁵⁶
- A60 The Commission is satisfied that Teamtalk is not an eligible access provider for the designated multinetwork services of local telephone number portability or cellular telephone number portability under the Act.

Status of Telecom as access provider

- A61 Telecom has advised the Commission that it satisfies the requirements of an access provider for both the local telephone number portability service and the cellular telephone number portability service.⁵⁷
- A62 The Commission is satisfied that Telecom is an eligible access provider for the designated multinetwork services of local telephone number portability and cellular telephone number portability under the Act.

Status of Vodafone as access provider

- A63 Vodafone has advised the Commission that it meets the conditions of an access provider for the cellular telephone number portability service but does not meet the conditions of an access provider for the local telephone number portability service.⁵⁸

⁵⁵ Letter from Tangent (Elliott) to the Commission (Borthwick), *Number Portability*, 9 October 2003

⁵⁶ Email from Teamtalk (Brown) to the Commission (Mosby), 8 October 2003

⁵⁷ Letter from Telecom (Blackett) to Telecom (Borthwick), *Number Portability: Submissions on Certain Matters relating to the Commission's Decision to Investigate*, 7 October 2003

⁵⁸ Letter from Vodafone (Talaic) to the Commission (Borthwick), 7 October 2003

- A64 Vodafone notes that it does not currently offer a local calling service to its customers. Telephone numbers have been allocated to Vodafone for local service. However these numbers are not currently allocated to end users. Vodafone submits that ‘[o]n the basis that the Act requires both numbers to be allocated to the PSTN and provision of a service that relates to local telephone number portability, Vodafone does not believe it satisfies the conditions of an access provider for local telephone number portability.’⁵⁹
- A65 Vodafone submits that it satisfies the conditions of an access provider for the cellular telephone number portability service as ‘(a) Vodafone operates a PSTN to which numbers have been allocated; and (b) Vodafone operates a telephone service that relates to that number portability service.’⁶⁰
- A66 The Commission is satisfied that Vodafone is an eligible access provider for the designated multinet network service of cellular telephone number portability service. Vodafone is not an eligible access provider for the local telephone number portability service under the Act.

Status of Woosh Wireless as access provider

- A67 Woosh has advised the Commission that it does not consider that it meets the criteria specified in the Act to qualify as an access provider for either local telephone number portability service or cellular telephone number portability service⁶¹. While Woosh does operate a PSTN, numbers have not been allocated to that PSTN.
- A68 The Commission is satisfied that Woosh Wireless is not an eligible access provider for the designated multinet network services of local telephone number portability or cellular telephone number portability under the Act.

⁵⁹ *ibid*

⁶⁰ *ibid*

⁶¹ Letter to the Commission (Mosby) from Woosh Wireless (Powles), 23 October 2003