



ACCC directions to the Australian
Communications Authority on number
portability -
Commission's reasoning

September 1997

1. Introduction

Under the *Telecommunications Act 1997*, the Australian Competition and Consumer Commission has statutory powers to direct the Australian Communications Authority (ACA) in regard to the portability of allocated numbers¹ (number portability). The ACA cannot put rules about number portability in the numbering plan (the 'Plan') unless directed to do so by the Commission, and any rules the ACA puts in the Plan regarding number portability must be consistent with any directions by the Commission. The numbering plan is the plan for the numbering of carriage services in Australia and the allocation and use of numbers in connection with the supply of such services.

On 30 May 1997, the Commission released for comment draft directions to the ACA on number portability. The directions set out the Commission's preliminary views firstly on the general criteria that solutions to number portability should meet in order to promote competition and achieve any-to-any connectivity and secondly on whether number portability for particular allocated numbers is required in order to promote the long-term interests of end-users.

In response to the Commission's invitation for comments on the draft directions, a total of eight submissions were received. Following consideration of the submissions, the Commission revised the draft directions and released them on 9 September 1997 inviting further comments. Comments provided in all submissions were considered by the Commission in the preparation of the directions to the ACA.

The Commission's directions to the ACA are attached in Appendix B.

The purpose of this paper is to explain the Commission's reasoning underlying these directions and record the process by which the Commission has had regard to whether portability of particular allocated numbers is required in order to promote the long-term interests of end-users users of carriage services or of services supplied by means of carriage services for the purposes of complying with s.458(5) of the *Telecommunications Act 1997*.

2. Legislative Criteria

Sections 455 and 458 of the *Telecommunications Act 1997* set out the main responsibilities of the ACA and the Commission in relation to the portability of allocated numbers.²

Section 455(1) states

“The ACA must, by written instrument, make a plan for :

- (a) the numbering of carriage services in Australia; and

¹ Allocated numbers are those allocated to carriage service providers for use under the numbering plan.

² Allocated numbers are those allocated to carriers or carriage service providers for use under the Plan.

- (b) the use of numbers in connection with the supply of such services.”

Section 455(5)(d) states

“The numbering plan may set out rules about:

- (d) the portability of allocated numbers (including rules about the maintenance of, and access to, databases that facilitate portability).”

Section 458 states:

- (1) The ACA must not make a numbering plan that sets out rules about the matter mentioned in paragraph 455(5)(d) (portability of allocated numbers) unless the ACA is directed to do so by the ACCC under subsection (2).
- (2) The ACCC may give written directions to the ACA in relation to the exercise of the power to determine a numbering plan setting out rules as mentioned in subsection (1).
- (3) In exercising the power conferred by subsection (1), the ACCC must ensure that, at all times when the numbering plan is in force, the plan sets out rules about the matter mentioned in paragraph 455(5)(d).
- (4) The ACA must exercise its powers under section 455 in a manner consistent with any directions given by the ACCC under subsection (2).
- (5) In exercising the power conferred by subsection (2), the ACCC must have regard to whether portability of particular allocated numbers is required in order to promote the long-term interests of end-users of carriage services or of services supplied by means of carriage services.
- (6) For the purposes of this section, the question whether a particular thing promotes the long-term interests of end-users of carriage services or of services supplied by means of carriage services is to be determined in the same manner as that question is determined for the purposes of Part XIC of the *Trade Practices Act 1974*.”

Section 152AB(2) of the *Trade Practices Act 1974* states that

“For the purposes of this Part, in determining whether a particular thing promotes the long-term interests of end-users of either of the following services (listed services):

- (a) carriage services;

- (b) services supplied by means of carriage services;

regard must be had to the extent to which the thing is likely to result in the achievement of the following objectives:

- (c) the objective of promoting competition in markets for listed services;
- (d) the objective of achieving any-to-any connectivity in relation to carriage services that involve communication between end-users;
- (e) the objective of encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied.”

3. Definition of Number Portability

For the purposes of the Directions, portability of allocated number's (also known as 'number portability') means the ability of customers to change their carriage service provider within specified number ranges and retain the same telephone number while allowing carriage service providers to provide services to end-users of carriage services, or of services provided by means of carriage services, of equivalent quality and reliability and allow carriage service providers to provide equivalent services and features independent of whether the end-user is using or calling a number that has been ported from another carriage service provider.

The directions are not intended to preclude the ACA from including in the Plan rules about portability where an customer changes location and retains the same telephone number or service portability (where an customer changes services (eg. fixed phone to mobile) and retains the same telephone number).

In having regard to whether portability of particular allocated numbers is required in order to promote the long-term interests of end-users the Commission focussed on portability on a service by service basis. Evidence suggests that the benefits and costs of number portability to end-users differ by service type. This approach allowed the Commission to develop views as to whether the portability of numbers for specific services is required in order to promote the long-term interests of end-users. Although portability for all services was considered, the Commission focussed most heavily on portability for services that it considered are likely to have the largest effect on the long-term interests of end-users at this time. These are:

- ? *Local Number Portability (LNP)* - Portability of numbers allocated under the Plan to provide geographic services (refer to the service definitions in Appendix B).

- ? *Global Inbound Number Portability (GNP)* - Portability of non-geographic global inbound phone numbers between providers of these services. These services include freephone (1800 numbers) and local rate services (13 numbers). Refer to the service definitions in Appendix B.
- ? *Mobile Number Portability (MNP)* - Portability of numbers between providers of mobile phone carriage services (including portability between GSM providers and between providers using different technologies).
- ? *Universal Personal Telephone (UPT) Portability*- Portability of a single (personal) number (0500 numbers) between providers.

4. The Long-term Interests of End-users

In having regard to whether portability of particular allocated numbers is required in order to promote the long-term interests of end-users, the Commission considered that the long-term interests of end-users will be promoted by, amongst other things, lower prices (that are sustainable), higher quality and greater choice of services.

As stated above, Section 152AB of the *Trade Practices Act 1974* provides that in determining whether a particular thing promotes the long-term interests of end-users, regard must be had of the extent to which the thing is likely to result in the achievement of the following objectives:

- ? the objective of promoting competition in markets for carriage services or services supplied by means of carriage services;
- ? the objective of achieving any-to-any connectivity in relation to carriage services that involve communication between end-users; and
- ? the objective of encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which carriage services or services supplied by means of carriage services are supplied.

Promoting competition in markets for telecommunications services

Competition constrains the market power of individual service providers and creates the incentives for service providers to maximise the benefits to end-users at minimum costs. Competition, and the consequent constraints on the behaviour of service providers is likely to be greater where service providers can easily enter and exit the market place and can compete on their relative merits based on price, quality and the range of services they provide. One factor that will influence the extent to which service providers can compete on their relative merits is the degree to which customers are 'locked-in' to their existing service provider.

The provision of number portability can potentially lower the costs incurred by customers when changing from one carriage service provider to another and thereby promote competition. In the

absence of number portability, competing carriage service providers may have to offer significantly lower prices and/or provide significantly higher quality services than the customer's existing service provider in order to compete effectively. This disincentive may discourage efficient entry and retard the promotion of competition more generally. Number portability, by reducing the costs to customers associated with changing carriage service providers, may therefore promote competition.

In the majority of the submissions to the Commission it was argued that the absence of number portability for specific services is a substantial barrier to competition. In these submissions it was claimed that the incumbent service provider has a significant advantage over its rivals as customers are reluctant to change service providers if such a change requires a change of phone number.

These arguments are substantiated by Australian and international studies that estimate the propensity of customers to change carriage service providers with and without portability. The findings of these studies, as well as their strengths and weaknesses, are summarised in Appendix A. The main finding, consistent across nearly all studies, is that the absence of number portability substantially increases the reluctance of customers to change service providers. These studies suggest that the extent to which customers are reluctant to change carriage service providers differs depending on the nature of the service and the identity of the customer (residential or business).

In one submission it was argued that these studies are flawed and out-dated. However, the consistency of the findings across all studies provides strong evidence that number portability for specific services promotes competition. No evidence was provided that would invalidate this conclusion.

In the same submission it was argued that even with number portability there may still be costs associated with changing carriage service providers and that there may be alternative means for customers to reduce the costs of changing carriage service providers. The Commission considers that such arguments do not alter the view that the absence of number portability increases the cost to customers of changing service providers for particular services. No evidence was provided to suggest that this is not the case.

Having regard to:

- ? **the Commission's understanding of the process of promoting competition in telecommunications markets;**
- ? **the submissions received and each submission therein; and**
- ? **the findings of the studies set out in Appendix A,**

the Commission is of the general view that, for specific services, number portability will promote competition in the supply of services to end-users.

Any-to-any connectivity

As stated in s. 152AB(8) of the *Trade Practices Act 1974*

“...the objective of any-to any connectivity is achieved if, and only if, each end-user who is supplied with a carriage service that involves communication between end-users is able to communicate, by means of that service, with each other end-user who is supplied with the same service or a similar service, whether or not the end-users are connected to the same telecommunications network.”

Any solution to number portability should be consistent with achieving any-to-any connectivity. In particular, number portability should not impair the availability, quality, reliability and convenience of existing call features and services, such as emergency services and operator assisted services, which promote any-to-any-connectivity.

Having regard to:

- ? **the Commission’s understanding of the achievement of any-to-any connectivity; and**
- ? **the submissions received and each submission therein,**

the Commission is of the view that number portability is compatible with the achievement of any-to-any connectivity.

Encouraging economically efficient use of, and investment in, telecommunications infrastructure.

The economically efficient use of, and investment in, infrastructure involves many elements. Firms should have the appropriate incentives to invest, innovate, improve the range and quality of services, increase productivity and lower costs through time. Firms should also have the appropriate incentives to produce services at least cost, and production activities should be distributed between firms such that industry-wide costs are minimised. Further, firms should employ resources to produce goods and services that provide the maximum benefit to society.

Promoting competition and encouraging the economically efficient use of, and investment in, telecommunications infrastructure are in many cases consistent objectives.

As stated above, number portability, by reducing the costs incurred by customers when changing carriage service providers, will promote competition in the provision of carriage services. The ability of customers to move more freely between carriage service providers reduces the ‘lock-in’ effect providers can have over customers and increases the pressures on firms to compete against each other in the provision of carriage services. This will most likely result in the more efficient use of telecommunications infrastructure by encouraging innovation and higher productivity. Number portability also will increase the ability of more efficient (lower costs) sources of supply being able to displace less efficient sources. The provision of number portability, by encouraging entry and

competition, also reduces the ability of suppliers to maintain artificially high prices, resulting in the more efficient use of telecommunications infrastructure.

Another issue in regard to whether number portability will encourage the economically efficient use of, and investment in, telecommunications infrastructure, is whether the benefits of number portability to end-users are greater than the costs of implementing and maintaining number portability.

The benefits of number portability include:

- ? lower costs incurred by parties who change providers;
- ? lower costs incurred by parties in locating the number of an end-user who has changed providers;
- ? higher productivity and greater range of services available through increased competition; and
- ? greater ability of end-users to choose their provider based on price, quality and service.

The costs of number portability consist of:

- ? Development costs - development and testing of solutions to number portability;
- ? Deployment costs - capital and operational costs to make number portability available in a particular area or for a particular service;
- ? Transportation costs - additional costs of call set-up (depending on the solution there may be additional costs for each call made or just to ported calls); and
- ? Transfer costs - costs of transferring ported numbers between carriage service providers.

The Commission has examined the available Australian and international empirical evidence of the costs and benefits of number portability for various services. The findings of the studies and their strengths and weaknesses are summarised in Appendix A. The evidence covers five countries and all four services (detailed above). Some studies estimate the benefits of number portability (by service type), while others undertake a cost-benefit analysis. The studies find that the benefits to end-users of number portability for each of the four services are large. In the cost-benefit studies it was found that for local and mobile services, the benefits of number portability significantly exceed the costs.

A number of points can be made about the relative benefits and costs of number portability:

- ? all the available studies generally conclude that the benefits of number portability outweigh the costs;
- ? this conclusion holds under a wide range of sensitivity scenarios;

- ? the Commission is not aware of any evidence which would indicate that the costs of number portability for local and mobile services outweigh the benefits;
- ? numerous jurisdictions around the world including the US, UK, European Union and Hong Kong are working actively to implement, or have already implemented number portability for specific services;
- ? the experience of these jurisdictions and the rationale used by them to support number portability is directly relevant to the Australian environment.

Having regard to:

- ? **the Commission's understanding of the achievement of the economically efficient use of, and investment in, telecommunications infrastructure;**
- ? **the submissions received and each submission therein, and**
- ? **the findings of the studies set out in Appendix A,**

the Commission is of the view that for specific services, there is sufficient evidence and information to assess whether number portability will promote the economically efficient use of, and investment in, telecommunications infrastructure. Further, this evidence and information supports the view that, for specific services, number portability will promote the economically efficient use of, and investment in, telecommunications infrastructure.

In one submission it was argued that:

- ? the evidence used by the Commission to support its conclusions regarding the impact of number portability on the long-term interests of end-users is minimal, dated and irrelevant;
- ? the Commission has not sufficiently analysed whether number portability is consistent with encouraging economically efficient use of, and investment in, infrastructure because -
 - no analysis has been carried out of the costs associated with providing number portability for particular numbers;
 - the Commission has not undertaken robust analysis of the impact of number portability on dynamic and productive efficiency.

The Commission has considered these arguments in detail. However, the Commission is of the view that, on the basis of the above, sufficient evidence is available to assess whether number portability for specific services is required in order to promote the long-term interests of end-users. Further, this evidence and information supports the view that, for specific services, number portability is required in order to promote the long-term interests of end-users.

5. Requirements of Number Portability

The Commission is of the view that the technical solution used to provide number portability should be determined by industry players in conjunction with industry bodies such as the Australian Communications Industry Forum.

However, any solution used to provide number portability must meet a number of requirements in order to promote competition. If number portability is to promote competition in the provision of carriage services, then the technical solution used to provide number portability must allow carriage service providers to provide services to end-users of equivalent quality and reliability, and allow carriage service providers to provide equivalent services and features, independent of whether the end-user is using or calling a number that has been ported from another carriage service provider. If there are any differences in the quality and reliability and the services and features that can be provided by carriage service providers to ported and non-ported numbers (such as greater post-dialling delay or lower transmission quality) these differences must not be apparent to end-users to the extent that they may affect the choice of carriage service provider by customers. Such differences would be a barrier to competition and not promote the long-term interests of end-users.

It is likely to be in the long-term interests of end-users for limited number portability to be provided during the period until 'full' number portability is technically feasible. Limited number portability provides the capability for customers to change their carriage service provider and retain their telephone number, but may not fully meet one or more of the requirements of number portability. In particular limited number portability may not necessarily allow carriage service providers to provide to end-users services of equivalent quality and reliability and/or may not allow carriage service providers to provide equivalent services and features independent of whether the end-user is using or calling a number that has been ported from another carriage service provider. In this sense, limited number portability provides the fundamental feature of number portability (that is the ability for customers to change their carriage service provider and retain the same number), but may not meet all the requirements of 'full' number portability.

Given the benefits of number portability to end-users and the fact that the provision of 'full' number portability for some services may not be practicable for some time, it is likely to be in the long-term interests of end-users that limited number portability be provided during the transition to 'full' number portability.

Should the directions specify terms and conditions?

In a number of submissions to the Commission, it was argued that the directions should include directions relating to the terms and conditions under which number portability is provided. It was argued that this would provide some certainty in commercial negotiations over these terms and conditions.

The Commission has considered whether this is appropriate. Consistent with the general objectives of the post-1997 telecommunications regime and the *Telecommunications Act 1997*, the

Commission is of the view that the terms and conditions under which number portability is provided should be determined through commercial negotiation and, failing this, through arbitration as specified in s.462 of the *Telecommunications Act 1997*.

The Commission is therefore of the view that it is inappropriate for the directions to the ACA to include directions pertaining to the terms and conditions upon which number portability is provided. The Commission will consider publishing guidelines detailing the approach it may follow when meeting its responsibilities to arbitrate disputes concerning the terms and conditions of number portability as specified in the *Telecommunications Act 1997*.

6. Number Portability for Specific Services

In making these directions the Commission examined in detail the four services specified above and considered whether number portability for these services is required in order to promote the long-term interests of end-users.

Local Number Portability (LNP)

The Commission considers that local number portability is required in order to promote the long-term interests of end-users. There are a number of reasons for this.

First, competition in the provision of geographic phone carriage services is currently restricted by the lack of number portability. Australian and international evidence suggests the costs to residential and particularly business customers of changing carriage service providers of these services in the absence of number portability are significant. As most businesses use their geographic phone number as their main contact point, many businesses are very reluctant to change their provider if it requires changing their phone number. As new entrants must offer a significantly lower price and/or higher service quality to gain such customers, the lack of number portability is a significant barrier to entry and competition.

Second, there is currently a lack of competition in the supply of fixed phone carriage services in Australia. In most geographic areas there is no alternative carriage service provider. Local number portability makes entry more attractive and as such will encourage greater competition.

Third, the benefits of local number portability to end-users are substantial and will likely flow to a large number of end-users. Australian evidence indicates the gains to end-users may be in the vicinity of \$2,108 million per annum (refer to Appendix A).

In one submission to the Commission it was argued that the Australian evidence is dated and irrelevant. The Commission recognises that there may be some deficiencies in the Australian evidence and these deficiencies may have resulted in an over-estimate of the benefits to end-users of local number portability. However, similar deficiencies are not apparent in international studies and these studies confirm the benefits to end-users of local number portability are substantial.

Fourth, the available studies comparing the costs and benefits of local number portability indicate that the benefits of LNP far outweigh the costs. Cost-benefit studies of local number portability in the UK and Hong Kong estimate that the benefits of local number portability are in the vicinity of two or three times the size of the costs. This is a substantial difference. Even if the benefits of LNP are imprecisely estimated (as suggested in some reviews of these studies and in one submission to the Commission), the Commission is not aware of evidence that suggest that the studies are sufficiently imprecise to reject the conclusion that the benefits of LNP exceed the costs.

Finally, the implementation of local number portability in the UK and Hong Kong and the phase in of LNP in the US is, at least partially, based on the view that LNP will promote competition.

On the basis of the above reasons, the Commission is of the view that local number portability is required in order to promote the long-term interests of end-users.

Local number portability may not immediately be technically feasible in Australia. This is likely to delay the significant benefits of local number portability to end-users. The provision of limited number portability is a way in which many of the benefits of local number can be brought forward. Currently, some industry players are developing a solution to local number portability (known as ‘facility re-direct’) that may meet the requirements of limited number portability. As such it may be technically feasible for limited local number portability to be provided well in advance of local number portability. If this is the case, and given that the benefits of local number portability far outweigh the costs, the provision of limited local number portability during the interim period will promote the long-term interests of end-users.

The Commission is of the view that if local number portability is not technically feasible in the near future, it is in the long-term interests of end-users that limited number portability during the interim period be provided as soon as it is technically feasible.

Global Number Portability (GNP)

Of the range of global services, the Commission is of the view that number portability for freephone and local rate global services is required in order to promote the long-term interests of end-users. These are a number of reasons for this.

First, many large business use freephone and local rate global phone numbers as their main point of contact. As such the costs of changing carriage service providers are large. This currently locks many customers into their existing provider. The absence of the portability of these numbers is a barrier to competition.

Second, evidence in Australia suggests that the benefits of portability of freephone and local rate numbers to end-users are significant. Estimates in Australia indicate that the benefits to end-users from portability of freephone and 13 numbers could be in the vicinity of \$146 million per annum (refer to Appendix A).

Although there have been no cost-benefit studies of number portability for these services, evidence suggests that the benefits of portability of freephone and local rate numbers exceed the costs. This includes:

- ? In Australia an Intelligent Network (IN) based solution has been developed by the industry. Legal arrangements for the establishment of the Independent Body (IB) to administer and manage global numbers and a central database for GNP have been largely completed. This has recently been substantiated by the Australian Communications Industry Forum.
- ? Portability of '800' freephone numbers, which uses an independently-administered advanced IN technology database, has been available in the US since 1993.³

The fact that a solution to portability of freephone and local rate numbers has been developed by the industry and will be available in the near future, together with the current deployment of portability of 800 numbers in the US provides evidence that the benefits exceed the costs.

For the above reasons the Commission is of the view that number portability for freephone and local rate global services is required in order to promote the long-term interests of end-users.

The Commission may consider making directions for the portability of 1900 numbers in the future.⁴

Mobile Number Portability

The Commission is of the view that mobile portability is likely to promote the long-term interests of end-users in the near future. There are a number of reasons for this:

- ? a growing number of businesses (particularly small businesses) use their mobile phones as their main contact point;
- ? the absence of mobile number portability 'locks in' mobile phone customers to their current provider;
- ? mobile portability will particularly provide benefits to mobile phone customers who have already chosen a service provider;
- ? Australian evidence suggests that the benefits of mobile number portability to end-users are significant;
- ? international studies for the UK and Hong Kong estimate that the benefits of mobile number portability substantially exceed the costs.

³ The US Number Administration and Services Centre manages an advanced intelligent network for 800 number portability. Providers of the 800 service interrogate an independent database in order to find out which long-distance carrier to direct an 800 call to.

⁴ 1900 numbers provide customers with access to various forms of information services such as recorded audio, live advice, human interaction and fax.

However, at this time the Commission has not formed a view as to whether number portability within the GSM network or across all digital networks is required in order to promote the long-term interests of end-users. Issues the Commission are further considering are:

- ? solutions to number portability (in particular solutions that will provide for portability across mobile technologies);
- ? the extent of competition in the supply of mobile phone services after the forthcoming auction of spectrum; and
- ? the implications of the phase-out of analogue AMPS.

Solutions to number portability

Currently there is debate in the industry as to whether a solution to mobile number portability should accommodate portability across mobile phone technologies or be GSM-specific. There is also debate concerning the process the industry should follow in developing a solution to mobile number portability.

In one submission concern was expressed that mandating mobile portability before a technical solution has been developed in Europe may be costly to the industry and end-users. Specifically it was stated

“...strongly supports the position that Australia’s focus should be on encouraging the emergence of a standard solution to GSM portability from the European Telecommunication Standardisation Institute (ETSI). ETSI is the body that controls all standards for GSM. Any unique Australian solution for GSM number portability could isolate Australia from mainstream GSM developments and force carriers to pay for Australian adaptation of standard products from their vendors. This adaptation may be required prior to the release of each enhancement of the GSM service in Australia and could add significantly to carriers’ and customers’ costs.”

Phase-out of analogue AMPS

Currently there are about 2.5 million end-users on the analogue AMPS network (of about 4.5 million mobile phone users). The Government has legislated the gradual phase-out of analogue AMPS by the year 2000. There is debate in the industry as to how the market will develop once AMPS is phased-out.

Auction of Spectrum

The auction of spectrum in the 800 & 1800 Mhz ranges will affect competition in the supply of mobile phone services in the future. In particular, there is debate in the industry as to:

- ? whether existing or new carriers will purchase the spectrum; and

? the services that carriers that purchase the spectrum will supply.

The likely benefits of a technology-neutral solution to number portability may not be fully apparent until after the auction of the spectrum when there will be greater clarity concerning the services that may be offered using this spectrum.

Although these uncertainties need not be resolved before the Commission can necessarily form a view on the appropriate form of mobile number portability, further information on the possible technical solutions for mobile portability would assist the Commission.

The Commission is of the preliminary view that, in the near future, mobile number portability will likely be required in order to promote the long-term interests of end-users. The Commission currently plans to re-visit mobile number portability in the very near future when more information is available. The Commission will write to the ACA asking the ACA to, in consultation with industry, provide the Commission with a report on the technical options for mobile number portability, including the options that will support number portability within and across digital mobile technologies.

UPT Portability

As described above, UPT is an amalgam of geographic fixed phone, paging and mobile phone services. UPT allows the end-users to be contacted on the same phone number independent of their location or network.

There is no specific evidence on the relative costs and benefits of UPT portability. However, as UPT is a developing service with very few users the benefits of UPT portability are currently small. Until the pool of users grows the benefits from number portability may not be large. However, there may be advantages to signalling to the industry that number portability for UPT is required early in its development to assist in industry planning.

The ACA has allocated numbers to carriers for UPT services on the basis that they would make number portability available within 12 months of another carrier or carriage service provider offering a like service.

At this stage, UPT portability does not seem to be a high priority in terms of promoting the long-term interests of end-users. Mandating a date for the availability of UPT portability may divert resources devoted to portability for other services. However, as solutions of the portability for other services develops it may be advisable for such solutions to be able to accommodate and facilitate UPT portability in the future.

The Commission is of the view that portability of UPT numbers is not required to promote the long-term interests of end-users at this time. However, the Commission will write to

the ACA, asking the ACA to, in consultation with industry, regularly update the Commission on solutions that can provide the portability of UPT numbers.

Appendix A

Empirical Evidence of Number Portability and the Long-term Interests of End-users

The Commission, in making the directions, had regard to whether number portability for particular allocated numbers is required in order to promote the long-term interests of end-users. Part XIC of the *Trade Practices Act 1974* indicates that, in determining whether a thing promotes the long-term interests of end-users, regard must be had to whether the thing promotes the objectives of:

- ? promoting competition in telecommunications markets;
- ? achieving any-to-any connectivity; and
- ? promoting the economically efficient use of, and investment in, infrastructure.

As stated in the body of the paper, the Commission formed views on whether number portability is required in order to promote the long-term interests of end-users for specific services based on a range of information and evidence. One source of information was empirical studies that provide evidence of the likely effects of number portability on competition and the economically efficient use of, and investment in, infrastructure. These studies assess the likely effects of number portability in both Australian and overseas markets.

The purpose of this Appendix is to summarise the main findings of these studies and to briefly discuss some of their strengths and weaknesses.

Number portability and promoting competition

Two types of empirical studies are useful in assessing the likely effects of number portability on competition.

First are studies designed to assess whether the absence of number portability is a significant impediment to end-users changing carriage service providers. The more significant the impediment, the larger the potential detriment to competition. These studies are based on surveys questioning end-users of the importance of a range of factors (including the absence of number portability) on their decision to change carriage service providers.

Second are studies that estimate the proportion of end-users who are likely to change carriage service providers with and without number portability. These studies are also based on surveys of end-users.

Local number portability

Most of the studies assessing the effect of number portability on competition examine local number portability.

Australian evidence

The most substantial work for Australia has been conducted by STM Consulting.⁵ STM Consulting estimated the percentage of customers who would change their fixed phone carriage service provider with and without portability. These estimates, based of surveys of business and residential customers, were made for different hypothetical reductions in the customer's telephone bill (from changing service provider). The results are detailed in Table A1.

TABLE A1

Percentage of customers who would change service provider - Fixed phone service

	Without Number Portability				With Number Portability			
<i>Percentage price reduction</i>	2.5	5	7.5	10	2.5	5	7.5	10
Business	3	9	14	20	25	32	39	46
Residential	2	7	13	18	19	23	28	32

For all hypothetical price reductions, STM Consulting estimated that between 22 and 26 per cent more business customers will change service providers with number portability (compared to without portability). This is a considerable percentage of the market. For residential customers, between 14 and 17 per cent more customers will change service providers with number portability.

There have been some criticisms of the STM Consulting study, particularly in relation to the small sample size.⁶ However, the results are consistent with international evidence on the effect of number portability on the propensity for fixed phone users to change carriage service providers.

⁵ STM Consulting (1995) *AUSTEL, Study of Consumer Benefits of Number Portability, Final Report*, July

⁶ The STM Consulting study was based on 71 businesses and 15 residential telephone users.

International evidence

United States

A number of studies in the US have provided similar estimates of the propensity of end-users to change carriage service providers with and without number portability.⁷

A national survey commissioned by MCI found that between 33 and 46 per cent additional business customers are likely to change carriage service providers with number portability.⁸ A study commissioned by Pacific Bell estimated smaller percentages of 11 per cent for business customers and 13 per cent for residential customers.⁹

A study commissioned by GTE found that for 17 per cent of residential customers and 29 per cent of business customers number portability would be required for customers to change service providers.¹⁰

United Kingdom

A national survey of 1036 residential customers in the UK for the Consumer Association estimated that the percentage of customers who would change with number portability to be in the range of 0 to 16 per cent depending on the size of the price discount offered by the alternative carriage service provider.¹¹

This is consistent with a study for OFTEL in the UK that indicated 5 percent of residential customers¹² and 16 per cent of business customers indicate the main reason for not changing carriage service providers is that they did not want to change their numbers.¹³

Hong Kong

Finally in Hong Kong a survey for OFTA estimated 68 per cent of subscribers who would change carriage service providers if they could retain their telephone number would not change their service provider if they had to change their number.¹⁴

⁷ These studies have far larger sample sizes than the STM Consulting study. Sample sizes range from about 1000 to over 2000.

⁸ Refer to Rogerson, D. and Grunfeld, H. (1996) *Number Portability, strategies for market, technical and regulatory success*, Ovum Ltd.

⁹ Refer to Rogerson and Grunfeld (1996).

¹⁰ Refer to Rogerson and Grunfeld (1996).

¹¹ Refer to Monopolies and Mergers Commission (1995), *Telephone Number Portability, A report on a reference under section 13 of the Telecommunications Act 1984*, November.

¹² Although about 10 per cent indicated that the difficulty in telling everyone about a new number was the main reason.

¹³ Refer to Rogerson and Grunfeld (1996).

¹⁴ Refer to Ovum (1994) *Feasibility and cost benefit analysis of number portability in Hong Kong, A report to OFTA*, May.

Overall the evidence suggests that number portability is a barrier to end-users changing their fixed phone carriage service provider. This barrier appears to greater for businesses than residential end-users.

Global Inbound, Mobile and Personal Telephone Numbers

Australian evidence

As with fixed phone numbers STM Consulting estimated the percentage of customers who would change their freephone and 13 services, mobile and universal personal telephone service providers with and without number portability. The results are shown in Tables A2 and A3 below.

TABLE A2

Percentage of Customers who would change service provider - freephone and 13 services

	Without Number Portability				With Number Portability			
<i>Percentage Price Differential</i>	2.5	5	7.5	10	2.5	5	7.5	10
Business	5	9	16	22	11	22	40	57

TABLE A3

Percentage of Customers who would change service provider - Digital Mobile and Universal Personal Telephone

	Without Number Portability				With Number Portability			
<i>Percentage Price Differential</i>	2.5	5	7.5	10	2.5	5	7.5	10
Business	13	19	25	31	31	37	43	50
Residential	0	5	20	40	0	40	60	80

As with fixed phone services there seems to be a significantly greater propensity for end-users to change their carriage service provider with portability compared to without portability.

International evidence

The results of a survey of mobile phone users in Hong Kong found a similar propensity for end-users to change their mobile phone service provider with portability as compared to without portability. It was estimated that well over twice as many residential and business users will be willing to change (for various price differences) with portability.

Number portability and the economically efficient use of, and investment in infrastructure

There are a number of empirical studies of the costs and benefits of number portability for various services. Some studies estimate the benefits of number portability (by service type), while others undertake a cost-benefits analysis.

These studies usually identify three types of benefits of number portability.

- ? Type 1 - benefits directly to the consumer who is able to change telephone carrier without having to change telephone number;
- ? Type 2 - benefits flow to consumers of telephone services more generally, and arise from lower general prices due to the increase in competition caused by the provision of local number portability;
- ? Type 3 - benefits flow to inbound callers from being able to more easily locate parties who have changed carrier.

Local number portability

Australian evidence

In Australia, STM Consulting estimated the following annual benefits of local number portability (in 1998):

Type 1 - \$732 million

Type 2 - \$1,367 million

Type 3 - \$9 million

The total benefits from local number portability in 1998 was estimated to be \$2,107 million. STM Consulting estimated that most of these benefits would accrue to medium and small business.

There have been criticisms of the STM Consulting study in other reports¹⁵ and in submissions. The major criticisms are:

- ? the results are based on small sample size;
- ? “...the assessment of benefits is inflated because it is based on the aggregated user benefits rather than national welfare gains taking account of benefit transfers from suppliers to users”¹⁶;
- ? the estimates of the annual benefits of local number portability taken per subscriber line is an order of magnitude higher than similar estimates derived for the UK and Hong Kong.¹⁷

While there may be merit in the criticisms concerning the magnitude of the benefits of LNP, a number of other international studies have concluded that the benefits of LNP far exceed the costs.

¹⁵ Refer to Rogerson & Grunfeld (1996)

¹⁶ Refer to Rogerson & Grunfeld (1996) pg 189.

¹⁷ Refer to Rogerson & Grunfeld (1996)

International evidence

United Kingdom

National Economic Research Associates (NERA) was commissioned by the Director General of Telecommunications in the United Kingdom to carry out a cost-benefit analysis of local number portability in the UK.

The NERA study estimated the following benefits and costs of LNP in the UK over the period 1995-96 to 2004-05:

Type 1 benefits: £487 million
Type 2 benefits: £1,280 million
Type 3 benefits: £19 million
Total costs: £423 million¹⁸

The total net benefits (benefits less costs) of LNP over the period (with a discount rate of 6 per cent) were estimated to be £915 million. That is, the NERA study found a benefit/cost ratio from LNP of at least 3 to 1.

The Monopolies and Mergers Commission (MMC) reviewed the NERA study and concluded that:¹⁹

- ? there were some errors in estimating the Type 1 benefits. Although the errors could affect the estimates in both directions, the NERA figures perhaps underestimated the actual Type 1 benefits
- ? while the Type 2 benefits were likely to be significant NERA had not been successful in accurately quantifying these benefits;
- ? “There is in fact no disagreement with the proposition that NP should be introduced and that its absence is contrary to the public interest. ... We received no evidence disputing NERA’s conclusion that, for all technical solutions except full IN, the benefits of portability would outweigh the costs.”²⁰

Hong Kong

In 1994 OVUM undertook a cost-benefit analysis of local an mobile number portability in Hong Kong.²¹

In terms of local number portability, the study concluded that:

- ? the net present value of providing LNP was positive and could be as high as HK\$1,500 million; and the
- ? the benefit/cost ratio was of the order of 2 to 1.

¹⁸ Based on the lowest cost solution identified by NERA.

¹⁹ Refer to Monopolies and Mergers Commission (1995)

²⁰ Refer to Monopolies and Mergers Commission (1995) pg. 41.

²¹ Refer to Ovum (1994).

Ovum undertook extensive sensitivity analysis and found that only under particularly pessimistic views of the sizes of the costs and the benefits of LNP could the costs exceed the benefits.

Global number portability

Australian evidence

STM Consulting have estimated the following annual benefits of freephone and 13 services in Australia in 1998.

Type 1 - \$34 million

Type 2 - \$112 million

Type 3 - \$1 million

The total benefits from local number portability in 1998 were estimated to be \$147 million. STM Consulting estimate that most of these benefits will accrue to medium and small business.

The same criticisms of the estimates of the benefits of local number portability by STM Consulting apply to these findings.

Mobile Phone Portability

Australian evidence

The STM Consulting study estimated the following annual benefits from providing digital (GSM) mobile portability for 1998.

Type 1 benefits: \$54 million

Type 2 Benefits: \$105 million

Type 3 Benefits: \$1 million

Total benefits: \$160 million.

The same criticisms of the estimates of the benefits of local number portability by STM Consulting apply to these findings.

International evidence

Hong Kong

A study of mobile number portability in Hong Kong by Ovum found that the total benefits of portability for both analogue and digital mobile telephony from 1995 to 2010 (6 per cent discount rate) was estimated to be HK\$2,249 million.²² The total costs over this period were estimated to be HK\$920 million.

²² Refer to Ovum (1994).

Thus the net present value of providing portability for mobile services during this period was estimated to be HK\$1,329 million. When subject to sensitivity analysis the net present value of mobile portability was positive in all cases except the worst credible cost scenario.

United Kingdom

OFTEL completed a study of the cost/benefits of introducing mobile portability in 1996.²³ The study also took account of much of the MMC discussion (and any criticisms) of the NERA study on local number portability.

The study found the net benefits (benefits minus costs) of introducing mobile portability over a 10 year period for the UK economy to be £98 million.

On the assumption of lower than expected growth rates in mobile usage the net benefits fall to £44 million, but increase to £146 million with higher than expected growth rates.

OFTEL concluded: “there have to be substantial changes in the underlying assumptions before the net present value comes close to zero. We therefore conclude that the economic case for mobile NP is robust, and that its introduction will be of overall benefit to the UK.”²⁴

UPT services

Australian Evidence

STM Consulting have estimated the following annual benefits of freephone and 13 services in Australia in 1998.

Type 1 - \$39 million

Type 2 - \$73 million

Type 3 - \$3 million

The total benefits from local number portability in 1998 was estimated to be \$115 million STM Consulting estimate that most of these benefits go to medium and small business.

The same criticisms of the estimates of the benefits of local number portability by STM Consulting apply to these findings.

²³ Refer to OFTEL (1997), *Economic Evaluation of Number Portability in the UK Mobile Telephony Market*, Issued by the Director General of Telecommunications, July.

²⁴ Refer to OFTEL (1997), Chapter 6, pg. 16.

Appendix B

1. **Directions to the ACA under s.458(2) of the *Telecommunications Act 1997***
2. The Australian Competition and Consumer Commission (ACCC) directs the Australian Communications Authority (ACA) to set out rules in the numbering plan about the portability of allocated numbers (including rules about the maintenance of, and access to, databases that facilitate portability).
3. In making the numbering plan, the ACA must ensure that the numbering plan:
 - a) **(requirement of number portability)** requires carriage service providers to provide number portability for each portable number held by that carriage service provider in relation to the customers of each other carriage service provider.
 - b) **(services for which number portability is to be provided)** specifies that each of the following services is a 'Declared Portable Service':
 - i) local services;
 - ii) freephone services; and
 - iii) local rate services.
 - c) **(number portability not to be provided in relation to other services)** prohibits the ACA from specifying any service (other than the services listed in Direction 2(b)) as a 'Declared Portable Service'.
 - d) **(power to declare Implementation Dates)** requires the ACA to specify, in respect of each Declared Portable Service, a date (Implementation Date) by which each carriage service provider must provide number portability for relevant portable numbers in relation to the customers of each other carriage service provider. The numbering plan must require that, in specifying the Implementation Dates, the ACA must:
 - i) consult with the ACCC; and
 - ii) specify, in respect of each Declared Portable Service, the earliest practicable date as the Implementation Date having regard to:
 - I) the technical feasibility of requiring number portability in accordance with the numbering plan by that Implementation Date; and

II) any other matters the ACA considers relevant.

- e) **(power to specify an Interim Date for limited number portability for local services)** requires the ACA, if the Implementation Date in respect of local services is later than 1 July 1998, to specify a form of limited number portability for local services and a date (Interim Date) by which that form of limited number portability must be provided by each carriage service provider in relation to the customers of each other carriage service provider for local services. In making the numbering plan, the ACA must ensure that the numbering plan requires that, in specifying the form of limited number portability and the Interim Date, the ACA must:
- i) consult with the ACCC; and
 - ii) specify the earliest practicable date as the Interim Date having regard to:
 - I) the technical feasibility of requiring the form of limited number portability for local services in accordance with the numbering plan by that date; and
 - II) any other matters the ACA considers relevant.
- f) **(report to the ACCC)** requires the ACA to:
- i) inform the ACCC of each Implementation Date and any Interim Date;
 - ii) regularly report to the ACCC on progress toward achieving number portability by each Implementation Date and limited number portability by any Interim Date; and
 - iii) advise the ACCC on the failure by any carriage service provider to provide the relevant number portability or limited number portability in relation to the customers of each other carriage service provider by any Implementation Date or Interim Date.
- g) **(power to grant exemption orders)** empowers the ACA to issue written orders exempting a particular carriage service provider, or class of carriage service providers from some or all of their obligations to provide number portability or limited number portability (exemption order). In making the numbering plan, the ACA must ensure that an exemption order may be:
- i) in relation to a particular Declared Portable Service or Services;
 - ii) in relation to the customers of a particular carriage service provider or class of carriage service providers;
 - iii) in relation to particular allocated numbers under the numbering plan;

- iv) in relation to non-equivalent quality or reliability of the services and the services and features that can be provided to the customers of each other carriage service provider using ported and non-ported numbers; and/or
 - v) expressed to be of limited duration or otherwise limited in effect as specified in the notice, including expressed to be conditional (or revocable on any condition or circumstance) as specified in the notice.
- h) **(grounds for an exemption order)** requires the ACA, in deciding whether to grant an exemption order, to:
- i) consult with the ACCC; and
 - ii) have regard to:
 - I) whether the ACCC is of the view that granting the exemption order is required in order to promote the long-term interests of end-users of carriage services or of services provided by means of carriage services;
 - II) the technical feasibility of requiring number portability or limited number portability in accordance with the numbering plan if the exemption order were not granted; and
 - III) any other matters the ACA considers relevant.

4. In these Directions:

- a) ‘Declared Portable Service’ means each carriage service required to be specified under the numbering plan as such by the ACA as contemplated by Direction 2(b).
- b) ‘Implementation Date’ means, in respect of a Declared Portable Service, the date specified by the ACA as contemplated by Direction 2(d), being the date by which number portability is required to be provided for relevant portable numbers under the numbering plan as contemplated by Direction 2(a).
- c) ‘portability of allocated numbers’ (also known as ‘number portability’) means the ability of customers to change their carriage service provider within specified number ranges and retain the same telephone number while allowing carriage service providers to provide services to end-users of carriage services, or of services provided by means of carriage services, of equivalent quality and reliability and allow carriage service providers to provide equivalent services and features independent of whether the end-user is using or calling a number that has been

ported from another carriage service provider. 'Ported numbers' and 'non-ported numbers' have corresponding meanings.

- d) 'portable number' means a number which, under the numbering plan, is held for use in connection with the supply of a Declared Portable Service and in respect of a Declared Portable Service a 'relevant portable number' means a number which, under the numbering plan, is held for use in connection with the supply of that Declared Portable Service.
- e) services are of 'equivalent' quality and reliability and the services and features that can be provided are 'equivalent' if, and only if, any differences are not apparent to end-users to the extent that such differences may affect the choice of carriage service provider by customers. 'Non-equivalent' has the contrary meaning.
- f) 'limited number portability' means the ability of customers to change their carriage service provider within specified number ranges and retain the same telephone number without necessarily allowing carriage service providers to provide services to end-users of carriage services, or of services provided by means of carriage services, of equivalent quality and reliability and/or without necessarily allowing carriage service providers to provide equivalent services and features independent of whether the end-user is using or calling a number that has been ported from another carriage service provider.
- g) 'Interim Date' means, in respect of local services, the date specified by the ACA as contemplated by Direction 2(e), being the date by which limited number portability is required to be provided for relevant portable numbers under the numbering plan as contemplated by Direction 2(a).
- h) For the purposes of Direction 2(b) the following service definitions apply:

Local service means a carriage service which:

- i) is capable of voice telephony; and
- ii) is provided for receiving incoming calls at, wholly or principally, one fixed location where that location:
 - I) is in an area identifiable, by the carriage service provider with which the call originates, from the number called; and
 - II) is any of the following:
 - a switching facility; or
 - the premises occupied or used by a customer; or
 - in the immediate vicinity of those premises.

Local service excludes paging services.

Freephone service means a carriage service in which:

- i) a subscriber issued a number is charged for calls to the number; and
- ii) the call charge for calls made from a standard telephone service (other than a public mobile telecommunications service) is zero.

Local rate service means a carriage service:

- i) which:
 - I) is not a local service;
 - II) is capable of voice telephony; and
 - III) for a call, involves the translation of the number dialled in making the call to a number which identifies a point of termination for the call; and
- ii) for which:
 - I) the call charge for calls made using a standard telephone service (other than a public mobile telecommunications service) is equal to, or less than, the call charge for local calls; and
 - II) responsibility for the residual charge for calls (if any) lies with the person to whom the number is issued.

Call charge means the charge, if any, incurred by a customer for using a carriage service to make a call.

- i) each other term has the same meaning as defined in the *Telecommunications Act 1997*.

EXPLANATORY STATEMENT

Under the *Telecommunications Act 1997*, the Commission has statutory powers to direct the Australian Communications Authority (ACA) in regard to portability of allocated numbers. The ACA cannot include rules about the portability of allocated numbers ('number portability') in the numbering plan it makes under s.455 of the *Telecommunications Act 1997* (the 'Plan') unless directed to do so by the Commission, and any rules regarding number portability the ACA includes in the Plan must be consistent with any directions by the Commission. The Plan is the principal instrument governing the numbering of carriage services in Australia and the allocation and use of numbers in connection with the supply of such services.

In fulfilling its responsibilities under the *Telecommunications Act 1997*, the Commission released draft directions on 30 May 1997. In response to the Commission's invitation for comments on the draft directions, a total of eight submissions were received. Following consideration of the submissions the Commission revised the draft directions and released them on 9 September 1997 inviting further comment. In making the Directions, the Commission considered relevant information available to it, including the submissions received. The Commission notes that it can make further directions if it considers it necessary or appropriate.

This statement details the relevant legislative provisions and explains the Directions.

Legislative Provisions

Sections 455 and 458 of the *Telecommunications Act 1997* set out the main responsibilities of the ACA and the Commission in relation to the portability of allocated numbers.²⁵

Section 455(1) states

“The ACA must, by written instrument, make a plan for :

- (a) the numbering of carriage services in Australia; and
- (b) the use of numbers in connection with the supply of such services.”

Section 455(5)(d) states

“The numbering plan may set out rules about:

- (d) the portability of allocated numbers (including rules about the maintenance of, and access to, databases that facilitate portability).”

²⁵ Allocated numbers are those allocated to carriers or carriage service providers for use under the Plan.

Section 458 states:

- (1) The ACA must not make a numbering plan that sets out rules about the matter mentioned in paragraph 455(5)(d) (portability of allocated numbers) unless the ACA is directed to do so by the ACCC under subsection (2).
- (2) The ACCC may give written directions to the ACA in relation to the exercise of the power to determine a numbering plan setting out rules as mentioned in subsection (1).
- (3) In exercising the power conferred by subsection (1), the ACCC must ensure that, at all times when the numbering plan is in force, the plan sets out rules about the matter mentioned in paragraph 455(5)(d).
- (4) The ACA must exercise its powers under section 455 in a manner consistent with any directions given by the ACCC under subsection (2).
- (5) In exercising the power conferred by subsection (2), the ACCC must have regard to whether portability of particular allocated numbers is required in order to promote the long-term interests of end-users of carriage services or of services supplied by means of carriage services.
- (6) For the purposes of this section, the question whether a particular thing promotes the long-term interests of end-users of carriage services or of services supplied by means of carriage services is to be determined in the same manner as that question is determined for the purposes of Part XIC of the *Trade Practices Act 1974*.”

Section 152AB(2) of the *Trade Practices Act 1974* states that

“For the purposes of this Part, in determining whether a particular thing promotes the long-term interests of end-users of either of the following services (listed services):

- (a) carriage services;
- (b) services supplied by means of carriage services;

regard must be had to the extent to which the thing is likely to result in the achievement of the following objectives:

- (c) the objective of promoting competition in markets for listed services;
- (d) the objective of achieving any-to-any connectivity in relation to carriage services that involve communication between end-users;

- (e) the objective of encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied.”

Explanation of the Directions to the ACA

The directions to the ACA are separated into three parts.

Direction 1 contains a direction to the ACA for the purposes of section 458(1), that is, permitting the ACA to make a numbering plan that sets out rules about the portability of allocated numbers (including rules about the maintenance of, and access to, databases that facilitate portability); and

Direction 2 sets out written directions to the ACA in relation to the exercise of the power to determine a numbering plan containing rules about the portability of allocated numbers.

Those written directions are as follows:

Direction 2(a) requires that the ACA must make a numbering plan which obliges carriage service providers to provide number portability with respect to each relevant portable number that the carriage service provider holds under the numbering plan. This obligation extends to the customers of each other carriage service provider.

Direction 2(b) defines certain services to be Declared Portable Services. Under Direction 2(b), the ACA must ensure that in the numbering plan, the ACA specifies local services, freephone services and local rate services as Declared Portable Services.

Directing that local services be Declared Portable Services requires that carriage service providers provide local number portability for the services of the type predominantly supplied using numbers in the (02), (03), (07) and (08) number ranges under the National Numbering Plan as at 22 September 1997 (excluding paging services). Directing that freephone and local rate services be Declared Portable Services requires that carriage service providers provide global inbound number portability for services of the type supplied using numbers in the 1800 and 13 number ranges under the National Numbering Plan as at 22 September 1997.

Direction 2(c) prohibits the ACA from specifying any other services as Declared Portable Services.

The Commission may issue further directions adding to the list of Declared Portable Services.

At this time, the Commission has not directed that mobile phone and Universal Personal Telephone (UPT) services be Declared Portable Services. However, the Commission makes the following comments.

The Commission is of the preliminary view that, in the near future, mobile number portability will likely be required in order to promote the long-term interests of end-users. The Commission currently plans to re-visit mobile number portability in the near future when more information is available. The Commission will write to the ACA asking the ACA to provide the Commission with a report on the technical options for mobile number portability, including the options that will support number portability within and across digital mobile networks.

The Commission is of the view that portability of UPT numbers is not required in order to promote the long-term interests of end-users at this time. However, the Commission will write to the ACA, asking the ACA to regularly update the Commission on solutions that can provide the portability of UPT numbers.

Direction 2(d) directs the ACA to include in the numbering plan an obligation to specify, in relation to each Declared Portable Service, a date (known as the ‘Implementation Date’) by which time each carriage service provider must provide number portability with respect to that service (ie. portability of numbers allocated to that service under the numbering plan) in relation to the customers of each other carriage service provider. The ACA must consult with the ACCC in setting Implementation Dates, and those dates must be specified by the ACA to ensure the provision of portability at the earliest practicable date, having regard to technical feasibility and any other relevant matters. It is possible that the ACA may set different dates for different Declared Portable Services.

Direction 2(e) directs the ACA to specify a form of limited number portability and an Interim Date from which carriage service providers are required to provide that form of limited number portability for local services. If the Implementation Date for number portability for local services is after 1 July 1998, the ACA is required to specify a form of limited number portability and an Interim Date. The purpose of this provision is to require the temporary provision of limited number portability for local services until the Implementation Date.

Limited number portability provides the capability for customers to change their carriage service provider and retain their telephone number, but may not fully meet one or more of the requirements of number portability. In particular limited number portability may not necessarily allow carriage service providers to provide to end-users services of equivalent quality and reliability and/or necessarily allow carriage service providers to provide equivalent services and features independent of whether the end-user is using or calling a number that has been ported from another carriage service provider. However, any lowering of these thresholds should not be substantial. The ACA must specify a form of limited number portability consistent with this definition. The solution for local number portability known as ‘facility re-direct’ will likely meet the requirements of limited number portability for local services.

This direction envisages that it may be technically feasible to provide limited number portability for local services before it is technically feasible to provide (full) number portability for local services.

The definition of limited local number portability is not designed to preclude carriage service providers from implementing a solution that fully meets the requirements of number portability. In other words a carriage service provider can meet its obligations to provide limited number portability by the Interim Date by providing number portability by that date.

Direction 2(f) directs that the ACA be required under the numbering plan to report to the ACCC on specified Implementation Dates and any Interim Date, and the progress achieved towards number portability or limited number portability in respect of each Declared Portable Service by the relevant Implementation Date or Interim Date (including reporting to the ACCC concerning any failure by carriage service providers to meet their obligations with respect to number portability or limited number portability). This requirement reflects the importance the legislation attaches to number portability as a competition issue, as well as providing a mechanism for establishing information flows and regulatory harmony between the ACA and the ACCC.

Direction 2(g) provides that the ACA must empower itself to grant written orders exempting certain carriage service providers from some or all of their obligations in relation to number portability or limited number portability.

In granting an exemption order the ACA may use any one or more of the categories set out in Direction 2(g)(i) to (v), such as particular services, carriage service providers or classes of providers, numbers (which could include, for example, geographic area codes) or timing factors (for example, granting relief - in the form of an extension of time - to a particular carriage service provider from an Implementation Date for a limited time).

Exemptions can also be granted to a carriage service provider or class of carriage service providers to provide number portability by an Implementation Date that does not allow each other carriage service provider to provide to end-users equivalent services and features independent of whether the end-user is using or calling a number that has been ported, where such differences are not detrimental to competition.

Exemptions can be granted for both the obligation to provide number portability and to provide limited number portability.

Direction 2(h) sets out the grounds the ACA must set out in the numbering plan for the granting of exemption orders. In so doing, the ACA must, in consultation with the ACCC, take into account whether the ACCC considers that granting the exemption order is required in order to promote the long-term interests of end-users, technical feasibility, and any other relevant matters.

In relation to an exemption order pertaining to non-equivalent quality and reliability of services and the services and features that can be provided to end-users by each other carriage service provider using ported and non-ported numbers, the ACCC will consider, in forming a view on whether granting an exemption order is required to promote the long-term interests of end-users, whether any differences are, or are likely to be, detrimental to competition.

Examples of the reasons for an exemption order might include the lack of competition or likely competition in an area or whether the provision of number portability would constitute a barrier to entry to a telecommunications market by a new carriage service provider.

Direction 3 provides a guide to interpreting the terms used in the Directions.

For the purposes of the Directions, ‘Portability of allocated numbers’ (also known as ‘number portability’) means the ability of customers to change their carriage service provider within specified number ranges and retain the same telephone number while allowing carriage service providers to provide services to end-users of equivalent quality and reliability and allow carriage service providers to provide a equivalent services and features independent of whether the end-user is using or calling a number that has been ported from another carriage service provider. Any differences in the quality and reliability of services and the services and features that can be provided to end-users must not be apparent to end-users in a way that may affect the choice of carriage service provider by customers. For example, a greater post-dialling delay for calls to ported and non-ported numbers that is perceptible to end-users may not provide for equivalent quality. ‘Intelligent network’ based solutions may meet the requirements of number portability.

‘Ported numbers’ and ‘non-ported numbers’ have corresponding meanings.

The technology used to provide number portability must allow each other carriage service provider to provide equivalent services and features to end-users independent of whether the number has been ported. This is not to imply that all carriage service providers must provide the same services and features. Rather the technology used to provide number portability must not prevent carriage service providers from offering equivalent services and features independent of whether the end-user is using or calling a number ported from another carriage service provider.

The Directions are not intended to prevent the ACA from including rules in the Plan about portability where a customer changes location or service portability (where an end-user changes services (eg. fixed phone to mobile) and retains the same telephone number).