



Australian Government

**Department of Communications,
Information Technology and the Arts**

Discussion Paper

Use of IPND information to provide Location Dependent Carriage Services (LDCS)

July 2007

Contents

1. Introduction.....	3
1.1 Purpose	3
1.2 Making a submission.....	3
2. Background	5
2.1 What is the IPND	5
2.2 What is the IPND Scheme.....	5
2.3 What are LDCS.....	5
2.4 How do LDCS work.....	5
3. Provision of LDCS without access to the IPND	6
4. Access to the IPND for the provision of LDCS	6
4.1 Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997 (CLCs).....	6
4.2 The Telecommunications Act (1997) (the Telco Act).....	7
4.3 The Issue	7
5. Options.....	8
5.1 Option 1 – No Change to existing arrangements.....	9
5.2 Option 2 – Permit CSPs to access IPND information to provide LDCS.....	9
5.3 Option 3 – Permit both CSPs, and non-CSPs acting on their behalf, to access IPND information to provide LDCS	11
6. Other Issues	14
6.1 Should unlisted numbers be able to be used for the provision of LDCS?.....	14
6.2 Disclosure of personal information, including unlisted number information, to the called business	16
6.3 Updating look-up tables for listing status and changes of address.....	17
6.4 Any other issues?	17
7. Acronyms.....	19

1. Introduction

1.1 Purpose

This paper is intended to facilitate discussion in relation to clarifying the use of the Integrated Public Number Database (IPND) for the provision of Location Dependent Carriage Services (LDCS).

1.2 Making a submission

This paper invites comments from interested stakeholders on the arrangements for using IPND information to provide LDCS.

Submissions must fully identify the names of the parties making the submissions or comments and the organisations they represent, if relevant, as well as contact details, including email addresses, if applicable.

Submissions should be forwarded to:

The Manager
IPND, Numbering and ACMA Liaison Section
Department of Communications, Information Technology and the Arts
GPO Box 2154
CANBERRA ACT 2601

Or lodged electronically at:

LDCS@dcita.gov.au

Queries regarding this consultation should be directed to:

Tracey Smith
Assistant Manager, IPND, Numbering and ACMA Liaison Section
Telephone: (02) 6271 1470

The closing date for comments and submissions is **Tuesday 14 August 2007**.

All submissions and comments, or parts thereof, will be treated as non-confidential information unless specifically requested to be kept confidential and acceptable reasons accompany requests. Note that submissions or comments will generally be subject to freedom of information provisions. Email disclaimers will not be considered sufficient confidentiality requests.

Persons making submissions should be aware that submissions will be made publicly available on the Department of Communications, Information Technology and the

Arts website. Those persons who do not wish their submissions to be made public will need to clearly mark their submissions “in confidence”.

However, the Department reserves the right not to publish any submission, or part of a submission, which in the view of the Department contains potentially defamatory material.

2. Background

2.1 What is the IPND

The IPND, or Integrated Public Number Database, is an industry-wide database of all residential and business phone numbers (both listed and unlisted) and associated customer information, including name and address information. The IPND was established, and is maintained, by Telstra as a condition of its carrier licence.

IPND information can be disclosed and used for a range of purposes including: the provision of emergency services, assisting law enforcement agencies and safeguarding national security, providing directory assistance services and operator assistance services, publishing and maintaining telephone directories and conducting public interest research.

2.2 What is the IPND Scheme

On 15 May 2007 the IPND Scheme¹ came into operation. The IPND Scheme is a scheme for the granting of authorisations to access IPND information by public publishers of telephone directories and those conducting research of a kind specified by the Minister in the *Telecommunications (Integrated Public Number Database – Permitted Research Purposes) Instrument 2007 (No. 1)*. The IPND Scheme is administered by the Australian Communications and Media Authority (ACMA).

2.3 What are LDCS

A LDCS is a carriage service in which calls to businesses which subscribe to these services are automatically routed to the appropriate store or branch location of the business, depending on the location of the caller. In other words, a customer calls a business' 13 or 1300 number (for example) and is automatically connected to the business' store or office which is closest to the customer's home. Services provided using LDCS include pizza delivery services and taxi services.

2.4 How do LDCS work

In order for automatic routing to occur, a routing table is required which situates a phone number within particular geographic boundaries (eg. postcodes, Census Collection Districts, standard zone units, exchange areas etc). This routing table could be created using the IPND, which provides a comprehensive source of customer phone number and address information.

¹ Information on the IPND Scheme can be obtained from ACMA's website at http://www.acma.gov.au/WEB/STANDARD//pc=PC_101035

The identifying information associated with a phone number in the IPND (eg. the name and address information) is not included in the routing table. The routing table consists of phone numbers and the geographic boundary information associated with those numbers.

When a call comes into the carrier on a LDCS client's number, the database or routing table is examined and the geographic boundary information associated with the caller's phone number is matched with the geographic boundary data corresponding to a local store or branch of the business the caller is contacting. The call is then automatically routed to the phone number of the store or branch in the appropriate location.

Automated call routing effectively replaces a manual call centre that would ask a customer for their location, and then redirects the call to the closest store or branch.

3. Provision of LDCS without access to the IPND

Automated routing can be implemented via a number of processes, with or without the use of IPND information. The different processes offer varying degrees of granulation in terms of the size of the boundaries within which the phone numbers are situated and therefore the degree of accuracy with which a call can be routed to the correct store/business. Generally, the smaller the area covered by a boundary, the more accurate and effective call routing becomes. Use of IPND information enables a higher degree of granularity than methods that do not utilise IPND information.

The Department is aware that some Carriage Service Providers (CSPs) may currently provide LDCS without sourcing information from the IPND for this purpose, using other sources of phone number and geographic boundary information.

LDCS may also be provided for callers using mobile telephones, utilising the Mobile (origin) Location Indicator (MoLI) system which determines a caller's location based on the cell site their call originates from. However, because mobile calls are not always serviced by the base station to which the caller is physically closest, this location information can be considered only an approximation of location.

4. Access to the IPND for the provision of LDCS

4.1 Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997 (CLCs)

The *Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997* (CLCs) require Telstra to establish and maintain the IPND for use in connection with a range of activities including provision of LDCS.

Paragraph 10(1)(d) of the CLCs states:

10 Integrated public number database

(1) *The licensee must establish and maintain an industry-wide integrated public number database to provide information for purposes connected with the following activities:...*

(d) *providing location dependent carriage services;...*

The term 'location dependent carriage service' is defined in clause 3 of the CLCs to mean a carriage service that depends for its provision on the availability of information about the street address of the caller.

The CLCs also permit carriers and Carriage Service Providers (CSPs) to access information contained in the IPND for a number of purposes, including LDCS.

Paragraph 10(7)(d) of the CLCs states:

10(7) *If a carriage service provider asks for access to information from the database, the licensee must give access only for the purpose of helping the provider:...*

(d) *to provide its own location dependent carriage services;...*

It is clear from the way the CLCs are worded that it was intended for the IPND to be used to provide LDCS.

4.2 The Telecommunications Act (1997) (the Telco Act)

There may be a need to clarify the provisions in the Telco Act regarding the use of the IPND for LDCS.

Section 291 in Part 13 of the Telco Act permits disclosure of IPND information to CSPs for the business needs of carriers and CSPs. This may include for the provision of LDCS, but only to a limited extent.

Under the Act, CSPs which provide LDCS are only permitted to access IPND information pertaining to their own current or former customers in order to provide LDCS, not the information of all customers contained in the IPND. This effectively means that it may not be possible under the Telco Act to use IPND information to provide LDCS on a large scale (i.e. to all customers).

The key rationale for accessing IPND information to provide LDCS is to enable the provision of LDCS on a large scale by providing access to phone number and address information of customers on all networks, and therefore enabling routing of calls to customers on all networks.

4.3 The Issue

As indicated above there may be a need to clarify provisions of the Telco Act for the use of IPND information to provide LDCS.

Further, it is unclear whether customer information associated with unlisted numbers is permitted to be used for this purpose. Under the CLCs, unlisted numbers include silent numbers and mobile phone numbers (unless a customer specifically requests their mobile number to be listed)².

We understand that LDCS are valuable services that customers are accustomed to and understand. Removing the current access to IPND information for the provision of LDCS would likely result in inconvenience to customers, as routing of calls to these services would again be a two-step process. There would also likely be a negative revenue impact on carriers that currently use IPND information to provide LDCS and on the business customers that subscribe to LDCS.

5. Options

There are a number of options for addressing this issue:

1. No change to existing arrangements;
2. Permit CSPs only to access IPND information to provide LDCS; or
3. Permit both CSPs, and non-CSPs acting on behalf of CSPs, to access IPND information to provide LDCS.

The last two options could be addressed through implementation of regulations under section 292 of the Act, or via a legislative amendment.

This discussion paper also seeks stakeholder views on a number of related issues that may be addressed as part of this process. They include:

- whether the issue of secondary disclosure and use of IPND information provided to CSPs (and those acting on their behalf should this be permitted) for the provision of LDCS should be specifically addressed;
- whether persons seeking access to IPND information to provide LDCS should be subject to the IPND scheme;
- whether unlisted numbers, including silent numbers and mobile numbers, should be made available to provide LDCS;
- whether there is any potential for personal information to be disclosed to the called business or parties other than CSPs (or those acting on their behalf if this were to be permitting) through the provision of LDCS; and
- the feasibility of updating routing tables once automatic routing of LDCS is implemented.

The first two dot points above will be discussed under Options 2 and 3 of Section 5 of this paper. The remaining issues will be discussed in Section 6.

We are seeking stakeholder views on which of the above options is preferred.

² The 'listed' and 'unlisted' status of a number refers to whether or not the number can be listed in a telephone directory or made available through directory assistance services.

5.1 Option 1 – No Change to existing arrangements

Is the ‘no change’ option a viable option for industry and consumers?

Under this option it would continue to be the case that only limited use of IPND information for the provision of LDCS would be permitted. CSPs that are currently using IPND information for this purpose would likely be required to cease using IPND information that does not pertain to their own current or former customers.

This option may result in CSPs routing fewer calls automatically, or where calls can be routed automatically, routing may be less accurate than customers and CSPs desire, thereby impeding the efficiency and increasing the cost of provision of these services. As noted above, this is likely to inconvenience both businesses and customers and may result in reduced revenue for both carriers and the businesses that utilise LDCS.

The ‘no change’ option also means that the potential ambiguity as to whether the disclosure of IPND data for LDCS provision on a large scale is permitted will likely remain, continuing the current uncertainty in the minds of carriers and CSPs as to the legality of otherwise of their activities into the future. However, those CSPs currently providing LDCS without accessing information from the IPND could continue to do so.

We are interested in stakeholder views as to whether the ‘no change’ option is a viable option for industry and consumers.

5.2 Option 2 – Permit CSPs to access IPND information to provide LDCS

Should CSPs be permitted to access IPND information to provide LDCS?

Given the limited ability of the Telco Act to prevent unauthorised secondary disclosure and use of IPND information by CSPs:

1. is the IPND Code and potential liability of the IPND Manager sufficient to protect people’s personal information should it be disclosed to a CSP to provide LDCS; or
2. is making the IPND Manager liable for unauthorised disclosure and use of IPND information by CSPs through regulations sufficient to adequately protect the personal information contained in the IPND; or
3. is a legislative amendment necessary?

Should CSPs seeking to access IPND information to provide LDCS be made subject to the IPND Scheme?

Are there any other issues in relation to CSP use of IPND information to assist with the provision of LDCS that should be considered by the Department?

The Telco Act, to the extent that it does permit access to the IPND for the provision of LDCS, does not allow disclosure of IPND information for this purpose to any parties other than CSPs. Currently there are two CSPs accessing IPND information for this purpose.

CSPs have indicated that it is important from a revenue perspective that they continue to be able to provide these services and improve the efficiency of these services. In addition, customers are likely to highly value the convenience of having their calls to businesses such as taxis and pizza delivery services automatically routed as efficiently as possible.

Secondary disclosure and use of IPND information

The primary disclosure and use provisions in Division 2 of Part 13 of the Telco Act require CSPs to protect the confidentiality of people's personal information. Specifically, CSPs are prohibited from disclosing or using any information that relates to the affairs or personal particulars (including any unlisted telephone number or address) of another person, unless one or more of the exceptions in Division 3 applies.

In so far as the primary disclosure and use provisions in Division 2 govern disclosure and use of IPND information, they only apply to the IPND Manager (as the CSP responsible for disclosing IPND information). There are criminal offences and penalties that apply if the IPND Manager discloses or uses IPND information for a purpose not authorised by the Telco Act.

Similarly, Division 4 of Part 13 of the Telco Act contains secondary disclosure and use offences and penalties. These apply to CSPs that have IPND information disclosed to them under an exception in Division 3. However, under Division 4 there is currently no secondary disclosure and use provision that would apply to CSPs if they were permitted to access IPND information for the purpose of providing LDCS³.

The effect of this is that, should a CSP be granted access to IPND information and then use that information for an unauthorised purpose, the CSP cannot be prosecuted under the Telco Act.

While this is certainly an issue, it should be noted that, as far as we are aware, there have been no issues with unauthorised use of IPND information by CSPs in such circumstances.

³ There is a secondary disclosure and use provision that relates to disclosures under section 291 in Division 3 of Part 13. Section 291 may currently permit the limited disclosure of IPND information to a CSP for the provision of LDCS but only so far as the information relates to current or former customer of the CSP. There is no secondary disclosure provision that applies if regulations are made under section 292 permitting access to IPND information for this purpose. Similarly, unless specifically provided at the time of making the applicable legislative amendment, there would be no secondary disclosure and use provision that would apply if use of IPND information to provide LDCS were permitted through a legislative amendment.

In addition, CSPs accessing IPND information to provide LDCS would be subject to the Australian Communications Industry Forum (ACIF) C555:2007 Integrated Public Number Database Code (the IPND Code). If ACMA directs a participant in a relevant section of the telecommunications industry to comply with the IPND Code under section 121 of the Telco Act, civil penalties apply for failure to comply with such a direction. Further, the IPND Manager may be committing an offence if it discloses IPND information to a CSP and it becomes aware that this information is being used or disclosed for unauthorised purposes.

It may be possible for regulations to address this issue to some degree, for example, by making the primary discloser of the IPND information liable for any unauthorised use and disclosure of IPND information by the carrier or CSP receiving the information to provide LDCS.

It is also possible for an amendment to the Telco Act to specifically address the issue of secondary disclosure and use of IPND information by CSPs. Arguably a legislative amendment would be the more comprehensive method of addressing the secondary disclosure and use issue.

We are interested in stakeholder views as to whether reliance on the IPND Code and appropriate provisions in any regulations is likely to be sufficient to address potential issues of unauthorised secondary use and disclosure of IPND information where it has been disclosed to CSPs for the purpose of providing LDCS, or whether a legislative amendment is necessary.

The IPND Scheme

The purpose of the IPND Scheme is to provide ACMA with a gatekeeper role in the granting of access to IPND information by non-CSPs. The application process under the IPND Scheme enables greater scrutiny of applicants seeking to access IPND information. Currently CSPs, along with emergency service organisations and law enforcement and national security agencies, apply to access IPND information directly through the IPND Manager.

Requiring CSPs seeking to access IPND information to provide LDCS to be subject to the IPND Scheme would be inconsistent with the current approach whereby CSPs apply directly to the IPND Manager to access IPND information. If CSPs were to be made subject to the IPND Scheme, this would need to be implemented through a legislative amendment.

We are interested in stakeholder views as to whether CSPs seeking to access IPND information to provide LDCS should be made subject to the IPND Scheme.

5.3 Option 3 – Permit both CSPs, and non-CSPs acting on their behalf, to access IPND information to provide LDCS

Should non-CSPs also be permitted to access IPND information on behalf of CSPs to assist CSPs with the provision of LDCS?

If non-CSPs were to be given direct access to IPND information to assist with the provision of LDCS, should they be required to demonstrate that they are acting on behalf of a CSP before access is given?

If non-CSPs were given direct access to IPND information to provide LDCS and, given the limited ability of the Telco Act to prevent unauthorised secondary disclosure and use of IPND information by non-CSPs:

1. is the IPND Code and potential liability of the IPND Manager sufficient to protect people's personal information should it be disclosed to a non-CSP to provide LDCS; or
2. is making the IPND Manager liable for unauthorised disclosure and use of IPND information by non-CSPs through regulations sufficient to adequately protect the personal information contained in the IPND; or
3. is a legislative amendment necessary?

Should non-CSPs seeking to access IPND information on behalf of CSPs to assist with the provision of LDCS be subject to the IPND Scheme?

Are there any other issues in relation to non-CSP use of IPND information to assist with the provision of LDCS that should be considered by the Department?

As noted above, the Telco Act currently only permits CSPs to access IPND information to provide LDCS in limited circumstances. When developing the arrangements which will explicitly allow access to the IPND for the purpose of providing LDCS, an option could be to allow direct access to IPND information not only by CSPs, but also by other parties that CSPs may contract with to assist them to provide LDCS. For example, the contracted organisation may undertake geocoding⁴ of IPND information for the CSP.

In order for this to occur, it may be necessary for this third party to have direct access to IPND information on behalf of the CSP.

The Department is aware that non-CSPs are interested in seeking direct access to IPND information for the purpose of assisting CSPs to provide LDCS.

Non-CSPs to demonstrate that they are acting on behalf of a CSP

If access by non-CSPs were to be contemplated, it may be appropriate for non-CSPs to demonstrate as part of their applications (i.e. prior to the granting of access) that they are working on behalf of a CSP, for example by demonstrating that contractual arrangements are in place, to assist the CSP with the provision of LDCS.

⁴ Geocoding is the process of assigning x and y coordinates to each IPND entry, using the phone number and address information, in order to situate the phone number within particular geographic boundaries (eg. postcodes, Census collection districts, standard zone units, exchange areas etc).

This would act as evidence of the bona fides of the non-CSP and provide a clear link between its access to IPND information and the provision of LDCS.

Secondary disclosure and use of IPND information

As with CSPs, the secondary disclosure and use offences contained in the Telco Act will not apply to non-CSPs if they are permitted to access IPND information to assist CSPs provide LDCS.

The Department is aware of reports of non-CSPs using IPND information in recent years for purposes not authorised by the Telco Act, such as debt collection, data cleansing, identity verification and marketing. There is a risk that non-CSPs that obtain access to IPND information to assist with the provision of LDCS on behalf of a CSP, may seek to use the information in other aspects of their businesses.

However, it may be possible for non-CSPs to be made subject to the IPND Code by making an instrument under section 110 of the Telco Act determining such organisations to be part of the telecommunications industry. This would be a matter for ACMA. As noted above, civil penalties apply for contravention of the IPND Code if ACMA directs a participant in a relevant section of the telecommunications industry to comply with the Code under section 121 of the Telco Act. Further, the IPND Manager may be committing an offence if it discloses IPND information to a non-CSP to assist with the provision of LDCS and it becomes aware that this information is being used or disclosed for unauthorised purposes.

As with CSPs, it may be possible for regulations to address this issue to some degree, for example, by making the primary discloser of the IPND information liable for any unauthorised use and disclosure of IPND information by the carrier or CSP receiving the information to provide LDCS.

Similarly, it is also possible for an amendment to the Telco Act to specifically address the issue of secondary disclosure and use of IPND information by non-CSPs.

We are interested in stakeholder views as to whether reliance on the IPND Code and appropriate provisions in any regulations is likely to be sufficient to address potential issues of unauthorised secondary use and disclosure of IPND information where it has been disclosed to non-CSPs for the purpose of assisting CSPs to provide LDCS, or whether a legislative amendment is necessary.

The IPND Scheme

As noted above, the purpose of the Scheme is to provide ACMA with a gatekeeper role in the granting of access to IPND information by non-CSPs. The application process under the IPND Scheme enables greater scrutiny of applicants seeking to access IPND information. Currently CSPs, along with emergency service organisations and law enforcement and national security agencies, apply to access IPND information directly through the IPND Manager.

If non-CSPs were to be permitted to seek access to IPND information to assist with the provision of LDCS, there may be a case for making these non-CSPs subject to the IPND Scheme. This could only be implemented via a legislative amendment.

However, it should be noted that currently non-CSPs applying to access IPND information on behalf of CSPs for the provision of directory assistance services, under section 285 of the Telco Act, are not subject to the IPND Scheme. This is on the basis that it should be a relatively simple matter for the IPND Manager to check whether a non-CSP is acting on behalf of a CSP in this instance.

We are interested in stakeholder views as to whether or not non-CSPs seeking to access IPND information on behalf of a CSP to assist it to provide LDCS should be subject to the IPND Scheme.

6. Other Issues

6.1 Should unlisted numbers be able to be used for the provision of LDCS?

Should unlisted numbers, including silent numbers and mobile numbers, be able to be used in the provision of LDCS?

Do stakeholders have concerns about their unlisted numbers being disclosed to CSPs to provide LDCS, that cannot be addressed through the enforcement mechanisms outlined under 5.2 above?

Would stakeholders have concerns about their unlisted number information being disclosed to non-CSPs to assist with the provision of LDCS, that cannot be addressed through the enforcement mechanisms outlined under 5.3 above?

Would stakeholders consider the benefits, in terms of the convenience of having their calls to taxis and pizza stores routed automatically, justify disclosure of their unlisted number information to CSPs or non-CSPs for this purpose?

How valuable, in terms of coverage and cost savings, is the use of unlisted numbers in the routing of LDCS to CSPs and their LDCS customers?

How necessary or effective is it to use IPND information to route LDCS calls from mobile numbers?

There is some ambiguity as to whether the disclosure of unlisted number data for the purposes of LDCS provision is permitted. The automated process outlined under section 2.4 may not be permitted in instances where the customer's number is unlisted (i.e. when a customer has a silent number or other unlisted number, for example a mobile number where a customer has not consented to the number being

listed)⁵. This is because carriers, CSPs and non-CSPs may not be provided with access to unlisted number information contained in the IPND for the purpose of providing LDCS.

Under those circumstances, when a call originates from an unlisted number the call would first be routed to a central location where it would be answered by an operator and the caller asked for their address. The call would then be manually routed to the business closest to the customer, according to the information supplied by the customer.

It would be possible to explicitly permit the automated routing of calls from unlisted numbers if carriers and CSPs (and potentially non-CSPs) were permitted to be supplied with the unlisted number information in the IPND for this purpose.

CSPs have indicated to the Department that use of unlisted number information substantially increases the coverage of LDCS, making these services more attractive to business customers. Automatic routing of these calls may also result in cost savings to carriers and CSPs and the businesses that utilise LDCS.

Furthermore, consumers may consider that the ease and convenience of having their calls to businesses such as taxis and pizza delivery services automatically routed is worth disclosure of their unlisted number information to CSPs (and potentially non-CSPs) for this purpose.

Arguably, disclosure of unlisted information to carriers and CSPs for the purpose of routing LDCS is consistent with the existing exceptions under Division 3 of Part 13 of the Telco Act dealing with the business needs of carriers, CSPs and their contractors. For example, section 279 of the Telco Act permits disclosure of personal information (including unlisted number information) by employees of carriers, CSPs and their contractors for the performance of their duties and section 291 permits carriers and CSPs to disclose unlisted number information in some limited circumstances connected with the supply of carriage services.

However, we recognise that having an unlisted number is an important privacy protection that customers value, and in some cases it may also be important to protect the personal safety of an individual. In the case of silent numbers, customers pay their telecommunications provider for this service. We are interested in stakeholder views as to whether provision of LDCS services to calls originating from unlisted (including silent) numbers compromises these protections.⁶

Concern exists that where unlisted numbers and the customer information attached to them in the IPND is disclosed to carriers and CSPs (and potentially non-CSPs) for the provision of LDCS, there is a risk that this information may potentially be disclosed or used for unauthorised purposes.

⁵ Unlisted numbers are numbers that are not published in a public number directory. Examples of unlisted numbers include mobile phone numbers (unless the customer and CSP that provides the service to the customer agree to its publication) and silent numbers.

⁶ As noted in section 2.4, name and address information is not included in the routing table for LDCS. The routing table consists of phone numbers and geographic boundary information (eg. postcodes, Census collection districts, standard zone units, exchange areas etc).

As noted above, it may be possible to ensure that enforcement action can be taken in relation to unauthorised discloses or uses of unlisted number information through any regulations made, legislative amendments or via the ACIF IPND Code.

Use of mobile numbers to provide LDCS

A substantial portion of unlisted numbers are mobile numbers. As noted above, use of unlisted numbers, including mobile numbers to route LDCS would substantially increase the coverage of LDCS.

The accurate automatic routing of LDCS calls according to the process outlined in Section 2.4 above relies on phone numbers being located at fixed addresses/locations. Mobile numbers by their nature are portable and may not always be used from the customer's address as contained in the IPND.

In addition, we understand that mobile numbers are currently routed using the MoLI process outlined in section 3 above. It would therefore appear that use of IPND information to route LDCS calls from mobile numbers could be unnecessary and ineffective.

However, we are interested in stakeholder views on whether provision of IPND customer information associated with unlisted mobile numbers, for example name and address and/or geographic boundary information, is necessary or useful for the automatic routing of LDCS calls from these numbers.

6.2 Disclosure of personal information, including unlisted number information, to the called business

Is it possible for the Calling Line Identification (CLI) and other personal information associated with an unlisted number to be disclosed to the business that the customer is calling during the provision of LDCS?

Is it possible for unlisted customer information to be disclosed to any other parties during creation of the routing table or during routing of LDCS calls?

A potential privacy concern is whether any other parties, apart from the CSP (and/or non-CSP acting on the CSP's behalf, should this be permitted), including the called business, could potentially gain access to unlisted number and/or unlisted customer information during the process of creating the routing table and/or routing of LDCS calls.

As described in section 2.4 above, during creation of the database or routing table used to route LDCS, identifying information such as name and address is dropped off and is not contained in the final product. Only the phone number from the IPND (including the unlisted number if access to these numbers is permitted), is used to automatically route calls.

Therefore, it is likely that only the CSP, and/or a non-CSP acting on the CSP's behalf, should this be permitted, that will have access to the personal information connected with the unlisted number.

In addition, we understand that the business that the customer is calling would not have access to the unlisted number. Our understanding is that Calling Line Identification (CLI) is not passed on to the business receiving the call routed using LDCS.

We are interested in hearing from any stakeholders as to whether it would be possible for a caller's unlisted phone number or any other personal information to be passed on to the business receiving the call routed using LDCS or to any other parties in the provision of LDCS.

6.3 Updating routing tables for listing status and changes of address

What are stakeholders' current practices in relation to updating the information used to automatically route LDCS?

IPND information is updated on a daily basis, how practicable is it for CSPs or those acting on their behalf to update the information used to automatically routed LDCS on a daily basis?

What are the consequences for the routing of LDCS if this information is not updated frequently?

It is important that the routing table which is used in the automatic routing of calls is updated frequently, particularly to reflect any changes in the listing status of numbers. For example, if a customer's number changes from listed to unlisted, the number may no longer be able to be used in the automatic routing of calls and may need to be removed from the routing table.

Frequently updating routing tables would be important to keep track of changes of address.

We are interested in hearing from any stakeholders in relation to their current practices for managing this issue or the practicalities of updating routing tables in this way. We are also interested in the consequences for the routing of calls if routing tables are not updated frequently.

6.4 Any other issues?

Are there any other privacy issues that need to be considered by the Department in relation to this proposal?

Are there any other issues that need to be considered by the Department in relation to this proposal?

We are interested in hearing from any stakeholders as to whether there are any other issues, privacy-related or otherwise, that should be considered by the Department in relation to the proposal to permit access to IPND information for the purpose of providing LDCS.

7. Acronyms

ACIF	Australian Communications Industry Forum
ACMA.....	Australian Communications and Media Authority
CLI.....	Calling Line Identification
CSP	Carriage Service Provider
CLCs	<i>Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997</i>
DCITA	Department of Communications, Information Technology and the Arts
IPND	Integrated Public Number Database
LDCS	Location Dependent Carriage Service
Minister.....	Minister for Communications, Information Technology and the Arts