

Integrated Public Number Database - IPND Connecting to the IPND

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1. PURPOSE

This document is designed to provide prospective IPND Carriage Service Providers / Data Providers and Data Users the process for registration and obtaining access to the IPND.

2. SCOPE

The scope of this document is designed to assist prospective Carriage Service Providers / Data Providers and Data Users through the process of user setup to securely access the IPND.

3. ACTIONS

This document addresses the Entry Strategy for registered IPND Data Providers and Data Users to the IPND.

The Entry Strategy for IPND Data Providers and Data Users has been divided into four main components that will be discussed in detail for each:

- Document Distribution
- Authorisation
- Test Phase
- Initial Production Phase



3.1 Entry Strategy of IPND Data PROVIDERS

3.1.1 Document Distribution

The IPND Manager will upon a request from a prospective Carriage Service Provider / Data Provider, provide a link to the IPND Manager website: https://www.telstra.com.au/consumer-advice/ipnd

The 'How to become an IPND Data PROVIDER' (TAB) contains all the necessary information and documentation to assist the prospective Carriage Service Provider / Data Provider with registration and gaining access to carry out transactions with the IPND.

It is an ACIF code requirement that this information to be provided to all parties who submit enquiries to the IPND Manager within 30 days of the request being received.

The IPND Manager will assist all parties who submit enquiries via the contact The IPND Manager section of the IPND HomePage.

3.1.2 Authorisation

The IPND Data Provider Information Pack located in the 'How to become an IPND Data PROVIDER' (TAB) contains an <u>Application of Intent to Provide data to the IPND</u> form. This must be completed and emailed to the IPND Manager: <u>IPND.Manager@team.telstra.com</u>. This is a formal application by the prospective Carriage Service Provider / Data Provider and is the first step to becoming a registered Data Provider of the IPND.

Once the IPND Manager receives a completed and signed copy of <u>Application of</u> <u>Intent to Provide data to the IPND</u> form from the prospective Data Provider / Carriage Service Provider it is reviewed and processed.

The IPND Manager will then register the applicants details in the IPND as a new Data Provider to the IPND.

The IPND Manager will reply to the Data Provider and confirm their registration in the IPND as a Data Provider and provide them a unique CSP Code.

If the applicant nominated a Data Provider Agent as their Technical Communications Details Contact to act on their behalf, the IPND Manager will include the relevant Filesource and Data Provider Codes for the Data Provider Agent in the applicants' confirmation email. All further interaction for this Data Provider will be done via their Data Provider Agent moving forward, as no direct access to the IPND is required.

If the applicant advised they wish to upload their own data and access the IPND, the IPND Manager will provide them a new Filesource and Data Provider Codes, along



with their new CSP Code in the applicants' confirmation email. The email will also include the next steps required by the new Data Provider:

- 1. Review the <u>Data Users and Data Providers Technical Requirements for IPND</u> document and understand the formatting and rules required to create a Customer Record IPND Upload file.
- 2. Deomonstrate understanding of the file formatting requirements by providing the IPND Manager via email a Comprehension file for validation. The Comprehension file should contain a text editor example of the Customer Record IPND Upload file. The example must include a header, 10 data records using dummy service numbers and address details and a footer.

NOTE: The IPND Manager does not provide a format / template / example for the comprehension file as this would defeat the purpose of the file.

The Comprehension file must not contain actual customer data. Use fictional names, service numbers and address details.

The purpose of the Comprehension file is to confirm the Data Providers understanding of the Customer Record IPND Upload file format as outlined in the Technical Requirements.

The IPND Manager will forward the Comprehension file to the IPND Support team for validation. Post validation, the IPND Manager will respond to the Data Provider with the results and feedback if the file failed validation.

Upon successful validation of a correct Comprehension file the IPND Manager will authorise the IPND Support team to commence the Test Phase of the IPND Entry Strategy process.

3.1.3 Test Phase

The Test Phase of the IPND Entry Strategy involves two components: User Setup & User Testing.

1. User Setup

User Setup involves the IPND Operations Manager / IPND Support team engaging the new Data Provider to walk them through the steps required:

a. The IPND Operations Manager / IPND Support Team will ask the Data Provider to read the <u>IPND Data Users & Data Providers Access to Internet Interface</u> <u>Service (IIS)</u> document and carry out user setup. This includes the Data Provider downloading and installing the necessary access and encryption clients listed in the IIS document onto their systems.

Note: The Data Provider is responsible for obtaining these applications at their own cost.



The Data Provider is also responsible for ensuring the required client software for each application are maintained to guarantee the ongoing security and access to the IPND.

Failure to ensure the required client software is up to date with the application developers recommended client version may result in the user being unable to establish a connection and access to the IPND.

- b. The Data Provider will exchange copies of Public gpg and ssh keys with the IPND Support team via email to: <u>IPND-Support@logicaltech.com.au</u>.
- c. Upon receipt of the gpg & ssh Public keys, the IPND Operations Manager / IPND Support Team will initiate voice contact with the Data Provider and verify the finger-prints for the keys and also provide the Data Provider their credentials for establishing a secure VPN connection and access to the IPND User-Test Environment.
- d. Once the Data Provider has completed the user setup as per the <u>IPND Data</u> <u>Users & Data Providers Access to Internet Interface Service (IIS)</u> document and they have successfully established VPN connection and access to the IPND User-Test Environment they are ready to commence User Testing.

2. User Testing

User Testing is a test of the users / Data Providers communications link, and the ability to send Customer Record IPND Upload files and download files within the especially developed IPND User-Test Environment.

User testing involves the Data Provider successfully demonstrating their ability to:

- Create a Customer Record IPND Upload file in the correct format (using test data)
- Encrypt the Customer Record IPND Upload file
- Send the Customer Record IPND Upload file
- Download / retrieve the error (.err) file
- Decrypt the error file

In addition to the above basic actions, we also suggest that the Data Provider carry out the following:

- Create a series of Customer Record IPND Upload files containing a range of errors: hard errors, soft errors, out of sequence errors as outlined in the <u>Data Users and Data Providers Technical Requirements for IPND</u> document.
- Download the corresponding error reports (.err files) for each Customer Record IPND Upload file and verify the contents of the files.



• Create subsequent Customer Record IPND Upload files to remediate / correct the records containing the respective errors.

The purpose of this is to give the Data Provider the opportunity to practice the process for creating and sending Customer Record IPND Upload files and to check their internal processes for validating error files and remediating the errors.

The IPND Operations Manager / IPND Support team will monitor the progress of Data Providers during User Testing and will be available for contact to assist the Data Provider with identifying and troubleshooting any issues encountered. This includes issues with regards to user connection, and support required for Customer Record IPND Upload files, including errors encountered at a file level and errors encountered at a record level.

When the Data Provider has completed the test schedule and demonstrated that they have been able to send 2 sequential Customer Record IPND Upload files with no more than 10 records each with NO Hard or Soft Errors, the IPND Operations Manager / IPND Support team will inform the IPND Manager of the user test progress and test results.

The IPND Manager will provide authorisation for the Data Provider to be given access to the IPND Production Environment. The IPND Operations Manager / IPND Support team will provide the Data Provider access to IPND Production thereby ending the User Test process.

3.1.4 Initial Production Phase

When the IPND Manager gives authorisation for the Data Provider to proceed to Production, the IPND Operations Manager / IPND Support team will initiate contact with the Data Provider to provide them IPND Production credentials.

The IPND Operations Manager / IPND Support team will also assist the Data Provider with the first upload of live data to the IPND.



3.2. Entry Strategy of Data USERS

3.2.1. Document Distribution

The IPND Manager will upon a request from a prospective Data User, provide a link to the IPND Manager website: <u>https://www.telstra.com.au/consumer-advice/ipnd</u>

The 'How to become an IPND Data USER' (TAB) contains all the necessary information and documents to assist the prospective Data User with registration and gaining access to the IPND.

It is an ACIF code requirement that this information to be provided to all parties who submit enquiries to the IPND Manager within 30 days of the request being received.

The IPND Manager will assist all parties who submit enquiries via the <u>contact The</u> <u>IPND Manager</u> section IPND HomePage.

3.2.2. Authorisation

The prospective Data User must first gain authorisation from the ACMA. If approved, The ACMA will inform the IPND Manager in writing of the approval and for which purpose.

The IPND Data User Information Pack located in the 'How to become an IPND Data USER' (TAB) contains an <u>Application of Intent to Use IPND</u> form. This form must be completed and emailed to the IPND Manager: <u>IPND.Manager@team.telstra.com</u>

This is a formal application to become a Data User of the IPND.

Once a completed and signed <u>Application of Intent to Use IPND</u> has been received by the IPND Manager a <u>IPND Data Access Agreement</u> is drafted and sent to the prospective Data User for signature. This is then returned to the IPND Manager.

The IPND Manager creates a unique filesource code which is provided to the new Data User via email.

The IPND Manager forwards a copy of the applicants completed <u>Application of</u> <u>Intent to Use IPND</u> form and their new filesource code to the IPND Operations Manager via email to commence the Test Phase of the IPND Entry Strategy process.

3.2.3. Test Phase

The Test Phase of the IPND Entry Strategy involves two components: User Setup & User Testing.

1. User Setup

User Setup involves the IPND Operations Manager / IPND Support team engaging the new Data User to walk them through the steps required:



a. The IPND Operations Manager / IPND Support Team will ask the Data User to read the <u>IPND Data Users & Data Providers Access to Internet Interface Service</u> (IIS) document and carry out user setup. This includes the Data User downloading and installing the necessary applications and user clients listed in the IIS document onto their systems.

Note: The Data User is responsible for obtaining these applications at their own cost.

The Data User is also responsible for ensuring the required client software for each application are maintained to guarantee the ongoing security and access to the IPND.

Failure to ensure the required client software is up to date with the application developers recommended client version may result in the user being unable to establish a connection and access to the IPND

b. The Data User will exchange copies of Public gpg and ssh keys with the IPND Operations Manager / IPND Support team via email to:

IPND-Support@logicaltech.com.au.

- c. Upon receipt of the gpg & ssh Public keys, the IPND Operations Manager / IPND Support Team will initiate voice contact with the Data User and verify the fingerprints for the keys and also provide the Data User their credentials for establishing a secure VPN connection and access to the IPND User-Test Environment.
- d. Once the Data User has completed the user setup as per the <u>IPND Data Users &</u> <u>Data Providers Access to Internet Interface Service (IIS)</u> document and they have successfully established VPN connection and access to the IPND User-Test Environment they are ready to commence User Testing.

2. User Testing

User Testing is a test of the Data Users communications link, and the ability to download data within the especially developed IPND User-Test Environment.

User testing involves the Data User successfully demonstrating their ability to:

- Establish a secure connection to the IPND and access data available in their directories
- Download a selected file from the Download directory in the IPND
- Decrypt the file
- Access the data contained in the file

The IPND Manager is notified that the new Data User has successfully established VPN connection and access to the IPND User-Test Environment they are ready to commence User Testing and provides authorisation for test data to be sent to the Data User Download directory.



The IPND Operations Manager / IPND Support team provides the file details to the Data User.

The IPND Operations Manager / IPND Support team will monitor progress of the Data User during User Testing and will be available to assist them with identifying and troubleshooting any issues encountered. This includes issues encountered with regards to user connection, and support required for downloading files, and accessing file content.

When the Data User has completed their test schedule and demonstrated that they have been able to download 2 files, decrypt the files and extract the records without issues the IPND Operations Manager / IPND Support team will inform the IPND Manager of the user test progress and test results.

The IPND Manager will provide authorisation for the Data User to be given access to the IPND Production Environment. The IPND Operations Manager / IPND Support team will provide the Data User access to IPND Production thereby ending the User Test process.

3.2.4. Initial Production

When the IPND Manager gives authorisation for the Data User to proceed to Production, the IPND Operations Manager / IPND Support team will initiate contact with the Data User to provide them IPND Production credentials.

The IPND Operations Manager / IPND Support team will also assist the Data User with the first dowload of live data to the IPND.

The IPND Manager will be informed that the Data User has successfully accessed the IPND and obtained their first batch of records. The IPND Manager will forward this confirmation onto the ACMA per details outlined in Authorisation granted to the Data User.

3.3. Access to IPND User-Test Environment Post-Production

Access to the IPND User-Test environment is made available while the testing phase is active.

When authorisation is given by the IPND Manager to the Production environment the testing account is locked.

If there is a requirement for access to the IPND User-Test environment after this time, a request can be made to the IPND Manager. The request must contain details as to duration of access and whether additional support is required by the IPND Support team while in User-Testing.



4. LIST OF CONTACTS

IPND Manager	Penelope Waite
	IPND.Manager@team.telstra.com
IPND Support	IPND-Support@logicaltech.com.au

5. **DEFINITIONS**

The following words, acronyms and abbreviations are referred to in this document.

Term	Definition		
CSP	Carriage Service Provider		
Customer Record IPND Upload	Transfer of a file from an external party (Data Provider) to the IPND		
Data Provider	Carrier or Carriage Service Provider obliged to provide data to the IPND		
Data Provider Error File	Error File produced by the IPND after a Data Provider sends a Customer Record IPND Upload file to the IPND		
.err file			
File Source Code	A File Source Code is a unique 5-digit code issued to a Data Provider or Data Provider agent by the IPND Manager at registration. The File source code identifies the organisation and their source system which have access to the IPND to send Customer Record IPND Upload files and Download files.		
Information Package	Documents provided to new IPND Data Providers / Users comprising: a) Application of Intent b) IPND Cost Summary c) IPND Technical Requirements d) IPND Access to Internet Interface Service (IIS) e) ACIF IPND code; and f) Any information as the IPND Manager deems appropriate from time to time.		
IPND	Integrated Public Number Database		

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IPND Manager	Organisation that manages, maintains and administers the IPND. Currently, Telstra Corporation Pty Ltd		
IPND Operations	Organisation that manages the operational aspects of the		
Manager	IPND. Logical Technologies Pty Ltd		
IPND Support	Organisation providing IPND systems and operations support		
Mandatory File	A file level error that results in the Upload File being		
Error (MF)	rejected. This may result from a missing or incorrect		
	header or trailer record field.		
Mandatory Hard	A transaction record level error that results in the record		
Error (MH)	being rejected. This may result from a missing or		
	incorrect mandatory transaction record field.		
Mandatory Soft	A transaction record level error that does not results in		
Error (MS)	the record being rejected. The record will be processed		
	but will be tagged as needing correction.		
PNCD	Public Number Customer Data. Each PNCD is a record		
	included in a Customer Record IPND Upload file.		

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6. DOCUMENT CONTROL SHEET

Contact for Enquiries and Proposed Changes

If you have any questions regarding content in this document, contact:Name:Penelope WaiteDesignation:IPND ManagerEmail:IPND.Manager@team.telstra.com

If you have a suggestion for improving this document, complete and forward a copy of *Suggestions for Improvements to Documentation* (form 000 001-F01).

Record of Issues

Issue No	Issue Date	Nature of Amendment
1	2000 January	Initial
1.1	2005 February	Updated IPND support number.
1.2	2011 May	Updated to include new Item 3.3 Access to Test Environment Post Production, update to Item 3.1.3.1 Test of System Design to reflect current process and Item 4 Contact List to reflect current stakeholders and contact numbers. (Updated by Lorrnie Seneviratne – IPND Operations)
1.2	2016 November	General tidy up.
1.2	2018 February	Updated to include the new secure IP connection (IIS).
1.2	2019 July	General update
1.3	2021 November	General revision / update
1.3	2022 July	General revision / update
1.4	2022 October	General revision / update
1.5	2023 June	Update Telstra Legal Structure & Brand
1.6	2023 October	General revision / update

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