



## How to Interconnect with Telstra

A guide outlining the procedures for establishing interconnection to Telstra's network.



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## An overview of implementation procedures

This document provides an overview of the procedures for Carriers and Carriage Service Providers (C/CSPs) wishing to establish interconnection to Telstra's network and to secure access to Telstra's standard Interconnect products and services.

It describes at a high level some of the major activities and typical timeframes associated with establishing interconnect, and is intended to be used as a basis for further discussion and planning between the parties.

If C/CSPs wish to have further discussions in relation to carrier interconnection, they should contact their Telstra Wholesale Account Manager, where they will be referred to a specialist Interconnect Manager.

## Interconnect establishment

The following major steps are essential for interconnect establishment:

### 1 Decision to establish interconnection

There are a number of factors a C/CSP needs to consider in deciding whether to establish interconnection with Telstra, including:

- How many minutes the C/CSP will be originating/terminating? Typically, the volume of traffic needs to be more than 10M minutes per month in order for interconnect establishment to be viable for both parties.
- Within which geographic areas (Call Collection Areas or CCAs) in Australia does the C/CSP intend to establish interconnection? Australia is partitioned by Telstra into 66 CCAs.
- Which interconnect services does the C/CSP require?
- Does the C/CSP require Preselection and/or Override? C/CSPs require a Point of Interconnect (POI) in each CCA where they require Preselection/Override.
- Has the C/CSP purchased a Carrier Access Code (CAC) from ACMA? (This is a pre-requisite for interconnection).

### 2 Interconnect services and architecture

C/CSPs should obtain copies of ACIF G500:2000 - Signalling Specification No. 7 - Interconnect ISUP and ACIF G549:2000 - Specification for Interconnect Implementation Plan from the Communications Alliance/ACIF (refer to the links below) and review these with its switch vendor to ensure that it can be compliant with these Specifications.

[http://www.commsalliance.com.au/Documents/Documents/Specifications/G500\\_2000](http://www.commsalliance.com.au/Documents/Documents/Specifications/G500_2000)

[http://www.commsalliance.com.au/\\_\\_\\_data/assets/pdf\\_file/0004/2578/G549\\_2000.pdf](http://www.commsalliance.com.au/___data/assets/pdf_file/0004/2578/G549_2000.pdf)

The C/CSP should then prepare a list of services it requires to operate across the interconnection. A list of services which can be supported by CCS7 is set out in ACIF G500:2000.

Telstra and the C/CSP then jointly agree upon a final list of services, taking into consideration a range of factors including:

- the C/CSPs requirements and network capabilities;
- the services supported by Telstra's network;
- the C/CSPs proposed network configuration;

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- signalling interconnection arrangements;
- location of Points of Interconnect (POIs);
- customer type (eg: fixed, mobile, international); and
- requirements for preselection, inbound services, etc.

### 3 Interconnect compliance testing

Having agreed specifications for interconnect services and architecture, Telstra and the C/CSP then develop a test plan to verify the required services with Telstra's systems.

The C/CSP is required to undertake interoperability testing (as specified in the test plan) with Telstra's Model Exchange.

The testing schedule may depend on the availability of Telstra's Model Exchange. Telstra will make a tentative booking for the C/CSP once the C/CSP has acquired a 14XY Carrier Access Code, and the interconnect services/architecture has been agreed by Telstra and the C/CSP.

The C/CSP is required to pay the costs of model testing.

Once testing is complete, Telstra will review the test results and, if compliance is achieved, will issue a Notice of Compliance (NOC) certificate.

### 4 The Signalling Plan

As signalling is a critical element for interconnection, Telstra and C/CSPs must arrange signalling implementation and any subsequent signalling augmentations in a co-ordinated and timely manner.

All network rearrangements should be implemented in accordance with Signalling Plans agreed between Telstra and the C/CSP.

The Signalling Plan also details the implementation of minor changes to the inter-carrier signalling network, such as descriptions of any change requests, timing etc.

### 5 Network planning and rollout

Planning for implementation and rollout of network interconnection should begin as early as possible. The planning process is based on the C/CSP's initial forecast requirements for:

- interconnect transmission links (2 Mbit/s links);
- interconnection services (signalling links and synchronization);
- interconnect capacity (2 Mbit/s switchports);
- network conditioning (14XY Access Code, Multi-Carrier Preselection, etc.); and
- any requirements for inter-capital or regional transmission.

These forecasts must include estimates for quantity, timing and geographic coverage, and should project 6, 12 and 18 months into the future.

### 6 Lead times

There are various time frames to keep in mind when making a decision on whether or not to interconnect with Telstra, some of the key ones are set out below.

**Initial discussion:** Evaluation of C/CSP requirements and interconnect compatibility are discussed prior to engagement of other groups within Telstra. The timeframe for this phase is dependent on the C/CSP's understanding of interconnect requirements, and the commercial and technical readiness to proceed with interconnection.

**Agreement (CRA):** If the C/CSP is a new customer, a Customer Relationship Agreement (CRA) must be agreed and signed prior to provisioning any interconnect services. If the C/CSP is an existing customer of Telstra, then a variation to the C/CSPs existing CRA will be necessary to include the relevant Service Schedules.

**Switchports:** The current lead time for provision of switchports is six months (minimum).

**TEBA/Transmission:** Switchports can be delivered to the C/CSP's equipment located in Telstra's exchanges (in which case a separate order for Telstra Equipment Building Access (TEBA) is required), or they can be delivered to the C/CSP's nominated premises (in which case a separate order for transmission service/s is required).

Where switchport delivery in TEBA is required, the C/CSP will need to have ordered TEBA and have their TEBA equipment installed before switchports can be ordered and provisioned. TEBA lead-times vary depending on a number of factors, including availability of space and infrastructure, as well as the number of customers in the queue.

**Network conditioning:** Provision of network conditioning typically requires about six months lead time (this work can be undertaken largely in parallel with switchport provisioning). Network conditioning implementation will commence once an Interconnect Service Definition (ISD) has been signed by Telstra and the C/CSP. An ISD describes the network/signalling requirements for the connection of calls across POIs.

**IT systems interworking:** For some Interconnect services, a data link must be established between Telstra and the C/CSP. The typical lead time for establishing IT Systems Interworking is approximately 4-6 months. Examples include:

- multi-carrier preselection;
- local number portability; and
- exchange of Inter-carrier Call Charge Records for end-customer billing.

**Billing systems:** Loading of interconnect rates in Telstra systems is required for billing and validation. This activity can commence once the CRA between Telstra and the Customer detailing these interconnect rates has been executed. The timeframe for loading Telstra's billing systems is typically 6-8 weeks (minimum).

## 7 Interconnect products and services

Once a C/CSP has established interconnection with Telstra's network, it can access a range of Telstra's interconnect products and services, including:

- PSTN/ISDN Originating Access;
- PSTN/ISDN Terminating Access, including Local Call Interconnect (LCI);
- Mobile Terminating Access;
- Mobile Transit; and

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- Operator Services Terminating Access (Emergency (000) and Directory Assistance (1223) Terminating Access).

The Telstra Wholesale website provides more detailed information in relation to Telstra's interconnect products and services: <http://telstrawholesale.com/products/voice/Interconnect/interconnect.htm>.

## More information

For more information about establishing interconnect with Telstra:

- Existing Telstra Wholesale customers should contact their Account Manager;
- Prospective Telstra Wholesale customers can submit an online new customer enquiry via the following link: <http://telstrawholesale.com/dobusiness/become-a-customer/customer-enquiry-form.htm>;
- The C/CSP should ensure they have the information outlined in the section above - "Decision to Establish Interconnection" prior to contacting Telstra. Once initial contact has been made by either of the alternatives mentioned above, C/CSPs will be referred to a specialist Interconnect Manager for further discussions.

**NOTE:** The purpose of this document is only to provide an overview of some of the key issues concerning the interconnect process and give an indication of average lead times. These processes and lead times are subject to change. Other terms and conditions will apply and will need to be agreed by the parties prior to commencement of supply.

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