

**COMMUNICATIONS
ALLIANCE LTD**



INDUSTRY GUIDELINE

G577:2025

MOBILE NUMBER PORTABILITY-
NETWORK TESTING FOR VOICE SERVICES AND SMS

G577:2025 Mobile Number Portability – Network Testing for Voice Services and SMS Industry Guideline

First published as ACIF G577:2001

Second edition as G577:2009

Third edition as G577:2025

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INTRODUCTORY STATEMENT

The **Mobile Number Portability – Network Testing for Voice Services and SMS** Industry Guideline (G577:2025) supersedes and replaces the following Industry Guidelines:

1. **Mobile Number Portability Testing Strategy for Voice, Data and Fax Services** Industry Guideline (G577:2009), and
2. **MNP Ongoing Test Plan for Voice Fax and Data Services** Industry Guideline (G604:2013).

Reasons for replacing the two documents with one, merged document include:

- Technology evolution – SIP/IP based inter-working links between carriers have replaced legacy circuit switched networks;
- Service obsolescence– Mobile networks no longer support in-band data services and fax services; and
- Change of purpose – the original documents were created to support the (one-off) introduction of Mobile Number Portability (MNP). Now the document can inform network testing between existing Mobile Network Operators (MNOs) and a potential new entrant.

Refer to Appendix A for a list of historical documents.

The **Mobile Number Portability – Network Testing for Voice Services and SMS** Guideline (G577:2025) describes the recommended joint network testing for voice services and SMS to be conducted by Originating Access Service Deliverers (OASDs) and Mobile Carriers for Mobile Number Portability (MNP).

The purpose of the changes is to:

- Align with the revised **Mobile Number Portability** Industry Code (C570:2024);
- Reflect changes in the underlying mobile network technology e.g. the closure of 3G networks, the introduction and operation of 5G networks, a move from ISUP to SIP interconnection; and
- Reflect the changes in services carried via mobile networks e.g. cessation of fax services and voiceband data services.

James Duck
Chair
MNP Network Testing **Working Committee**

APRIL 2025

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1 GENERAL

1.1 Introduction

- 1.1.1 Section 112 of the *Telecommunications Act 1997* (the Act) sets out the intention of the Commonwealth Parliament that bodies and associations representing sections of the telecommunications industry develop industry codes relating to the telecommunications activities of participants in those sections of the industry.
- 1.1.2 The development of the Guideline has been facilitated by Communications Alliance through a Working Committee comprised of representatives from the telecommunications industry and Government regulatory agencies.
- 1.1.3 The Guideline should be read in the context of other relevant codes, guidelines and documents including the:
- (a) Mobile Number Portability Industry Code (C570); and
 - (b) Session Initiation Protocol (SIP) Interconnection Industry Guideline (G672).
- 1.1.4 The Guideline should be read in conjunction with related legislation and regulation, including:
- (a) the Act; and
 - (b) the *Telecommunications Numbering Plan 2025* (the Numbering Plan).
- 1.1.5 If there is a conflict between the requirements of the Guideline and any requirements imposed on a Carrier by statute, the Carrier will not be in breach of the Guideline by complying with the requirements of the statute.
- 1.1.6 Compliance with this Guideline does not guarantee compliance with any legislation. The Guideline is not a substitute for legal advice.
- 1.1.7 Statements in boxed text are a guide to interpretation only.

1.2 Scope

- 1.2.1 The Guideline applies to the Carriers section of the telecommunications industry under section 110 of the Act.
- 1.2.2 It deals with the following telecommunications activities as defined in section 109 of the Act:
- (a) carrying on business as a Carrier.
- 1.2.3 The Guideline applies to network testing for voice and SMS services, including:
- (a) OASD to Mobile Carriers;

- (b) CTrSD to Mobile Carriers; and
- (c) Error cases where applicable to ported mobile numbers.

1.3 Objectives

1.3.1 The objectives of MNP industry testing are:

- (a) to test the network conditioning implemented by each OASD and Mobile Carrier for MNP prior to launching commercial service to ensure that calls are routed in accordance with the Mobile Number Portability – Network Plan for Voice Services and SMS (refer to G561); and
- (b) to have no impact on end customers.

NOTE: At the time of publication of this document, the Australian Communications and Media Authority recently remade the Telecommunications Numbering Plan 2025. Changes in the Telecommunications Numbering Plan 2025 may or may not require a revision of this document.

1.4 Guideline review

The Guideline will be reviewed 5 years after publication and every 5 years subsequently, or earlier in the event of significant developments that affect the Guideline or a chapter within the Guideline.

2 ACRONYMS, DEFINITIONS AND INTERPRETATIONS

2.1 Acronyms

For the purposes of the Guideline:

CSP

means Carriage Service Provider.

CTrSD

means Contracted Transit Service Deliverer

MNP

means Mobile Number Portability.

OASD

Originating Access Service Deliverer

2.2 Definitions

For the purposes of the Guideline:

Act

means the *Telecommunications Act 1997 (Cth)*.

Carriage Service Provider

has the meaning given by section 87 of the Act.

Carrier

has the meaning given by section 7 of the Act.

Contracted Transit Service Deliverer

means a Carrier/CSP that connects with and passes call traffic from the OASD to another Transit Service Deliverer or the Terminating Access Service Deliverer.

Mobile Carrier

has the meaning given by C570.

Mobile Number Portability

has the meaning given by C570.

Mobile Service Number

has the meaning given by C570.

Originating Access Service Deliverer

means a Carrier/CSP that provides outgoing services to Customers that connect to other telecommunications services.

Port

has the meaning given by C570.

Public Mobile Telecommunications Service

has the same meaning given by section 32 of the Act.

Terminating Access Service Deliverer

means a Carrier/CSP that provides outgoing and incoming services to Customers using Mobile Service Numbers that connect to other telecommunications services.

2.3 Interpretations

In the Guideline, unless the contrary appears:

- (a) headings are for convenience only and do not affect interpretation;
- (b) a reference to a statute, ordinance, code or other law includes regulations and other instruments under it and consolidations, amendments, re-enactments or replacements of any of them;
- (c) words in the singular includes the plural and vice versa;
- (d) words importing persons include a body whether corporate, politic or otherwise;
- (e) where a word or phrase is defined, its other grammatical forms have a corresponding meaning;
- (f) mentioning anything after include, includes or including does not limit what else might be included;
- (g) words and expressions which are not defined have the meanings given to them in the Act; and
- (h) a reference to a person includes a reference to the person's executors, administrators, successors, agents, assignees and novatees.

3 NETWORK TESTING

3.1 Overview

- 3.1.1 For a new carrier interconnect being established, each Mobile Carrier may setup mobile test numbers for a period of time and arrange for some test numbers to be available.
- 3.1.2 Such carriers will then be able to make test calls to these numbers to confirm correct network conditioning has been implemented for ported mobile numbers (via MNP).
- 3.1.3 Prior to the start of the testing period, each participating OASD or Mobile Carrier will implement the required network conditioning to handle calls to ported numbers.

3.2 Test Calls

- 3.2.1 Test scenarios will cover arrangements made by OASDs in accordance with the options as defined in G561. These may include the following types of calls:
 - (a) Direct Routing;
 - (b) Routing via CTrSD.
- 3.2.2 Call types will include cases to confirm error treatments.

4 TESTING

4.1 Test Objectives

The objective of the MNP testing is to test the network conditioning implemented by a new OASD or Mobile Carrier to ensure that calls are routed in accordance with G561.

4.2 Test Numbers

- 4.2.1 Mobile Carriers have setup MNP test numbers so that new OASDs and Mobile Carriers can make test calls to these numbers to confirm their network conditioning is correct for MNP.
- 4.2.2 These test numbers have been setup so that the calls to them are answered automatically (e.g. voice mail box) in a manner that demonstrates successful routing.
- 4.2.3 The MNP test numbers will be advised by the individual Mobile Carriers through their bilateral agreements with new entrants.

5 TEST MANAGEMENT

5.1 Fall Back Approach

- 5.1.1 No fall back strategy should be necessary since testing will not involve "live" customer services.
- 5.1.2 If problems are encountered with testing, the OASD or Mobile Carrier experiencing the problem will advise the other impacted OASD or Mobile Carrier via usual bilateral operational processes.

5.2 Fault Resolution Process

Normal inter-carrier fault resolution processes are to apply subject to bilateral agreement.

6 REFERENCES

Publication	Title
Industry Codes	
C570:2024	Mobile Number Portability Industry Code https://commsalliance.com.au/Documents/all/codes/c570
Industry Guidelines	
G561:2025	Mobile Number Portability – Network Plan for Voice and SMS https://commsalliance.com.au/Documents/all/guidelines/g561
Legislation	
	<i>Telecommunications Act 1997</i> https://www.legislation.gov.au/C2004A05145/latest/text
	<i>Telecommunications Numbering Plan 2025</i> https://www.legislation.gov.au/F2025L00409/latest/text

APPENDIX

A HISTORICAL DOCUMENT LIST

- A.1.1 This document was created from a document revision that supersedes and replaces both:
- (a) **Mobile Number Portability Testing Strategy for Voice, Data and Fax Services** Industry Guideline (G577:2009); and
 - (b) **MNP Ongoing Test Plan for Voice Fax and Data Services** Industry Guideline (G604:2013).
- A.1.2 G577 was previously published in September 2000, December 2000, March 2002 and December 2009.
- A.1.3 G604 was previously published in February 2001, December 2009 and October 2018.

PARTICIPANTS

The Working Committee that developed the Guideline consisted of the following organisations and their representatives:

Organisation	Membership	Representative
Australian Communications and Media Authority (ACMA)	Non-voting	Vivian Tee
Optus	Voting	James Dam
Optus	Non-voting	Monica Liem
Optus	Non-voting	Nick Nicolaou
Telstra	Voting	Adrian Virdun
Telstra	Non-voting	Geoff Gerrand
Telstra	Non-voting	Kirk Read
TPG Telecom	Voting	Albert Chittenden

This Working Committee was chaired by James Duck of Communications Alliance who also provided project management support.

Communications Alliance was formed in 1997 to provide a unified voice for the Australian communications industry and to lead it into the next generation of converging networks, technologies and services.

In pursuing its goals, Communications Alliance offers a forum for the industry to make coherent and constructive contributions to policy development and debate.

Communications Alliance seeks to facilitate open, effective and ethical competition between service providers while ensuring efficient, safe operation of networks, the provision of innovative services and the enhancement of consumer outcomes.

It is committed to the achievement of the policy objective of the *Telecommunications Act 1997* - the greatest practicable use of industry self-regulation without imposing undue financial and administrative burdens on industry.



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