# COMMUNICATIONS ALLIANCE LTD



**INDUSTRY GUIDELINE** 

G604:2013

MOBILE NUMBER PORTABILITY ONGOING TEST PLAN FOR VOICE, FAX AND DATA SERVICES

# G604:2013 Mobile Number Portability Ongoing Test Plan for Voice, Fax and Data Services Industry Guideline

First published as ACIF G604:2002

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### INTRODUCTORY STATEMENT

The Mobile Number Portability Ongoing Test Plan for Voice, Fax and Data Services Industry Guideline (G604:2013) replaces the Mobile Number Portability Ongoing Test Plan for Voice, Fax and Data Services Industry Guideline (ACIF G604:2002).

The purpose of the changes are to:

- Reflect changes to mobile networks in Australia (e.g. the shutdown of CDMA networks, consolidation of networks); and
- Update references from "ACIF" to "Communications Alliance".

This document was originally prepared by the ACIF Network Testing Sub-Group (NTSG) for Mobile Number Portability (MNP) to describe the recommended MNP network testing to be performed by new Prime Service Deliverers (PSDs) and Mobile Carriers.

James Duck Chair

MNP Network Test Plan Revision Working Committee

**JUNE 2013** 

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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.
- 1.1.3 The Guideline should be read in the context of other relevant codes, guidelines and documents.
- 1.1.4 The Guideline should be read in conjunction with related legislation, including the Act.
- 1.1.5 If there is a conflict between the requirements of the Guideline and any requirements imposed on a PSD or Mobile Carrier by statute, the PSD or Mobile 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 and not binding as Guideline rules.

#### 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 The Guideline applies to PSDs and Mobile Carriers.
- 1.2.3 The Guideline does not apply to the testing of a Short Message Service (SMS).

NOTE: The testing of SMS is expected to be covered through bilateral agreements between a new Mobile Carrier and existing Mobile Carriers.

### 1.3 Objectives

The objectives of the Guideline are to describe the recommended MNP network testing to be performed by new PSDs and Mobile Carriers.

# 1.4 Guideline review

The Guideline will be reviewed after every 5 years, 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:

#### **ACCC**

means the Australian Competition and Consumer Commission.

#### **ACIF**

means Australian Communications Industry Forum.

#### **ACMA**

means the Australian Communications and Media Authority.

#### C/CSP

means Carrier or Carriage Service Provider.

#### CAC

means Carrier Access Code.

#### **CTrSD**

means Contracted Transit Service Deliverer.

#### **DTrSD**

means Donor Transit Service Deliverer.

#### **MNP**

means Mobile Number Portability.

#### NTSG

means Network Testing Sub-Group.

#### **PMG**

means Project Management Group.

#### **PSD**

means Prime Service Deliverer.

#### SMS

means Short Message Service.

#### 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.

#### **Mobile Carrier**

has the meaning given by section 52A (1) of the Emergency Call Service (Telecommunications) Determination 2009 (Cth).

#### **Public Mobile Telecommunications Service**

has the meaning given by section 32 of the Act.

### 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 INTRODUCTION

#### 3.1 Overview

- 3.1.1 MNP was implemented by all PSDs and Mobile Carriers on 25 September 2001.
- 3.1.2 This network test plan has been developed by the Communications Alliance Network Reference Panel to define the ongoing MNP specific testing recommended to be performed by new PSDs and Mobile Carriers.

# 3.2 MNP Routing

- 3.2.1 There are three methods of routing that are addressed by this document:
  - (a) Donor/Mobile Carrier Direct Routing;
  - (b) PSD Donor Routing; and
  - (c) PSD Direct Routing.
- 3.2.2 Refer to Figure 1 for an illustration of MNP routing methods.

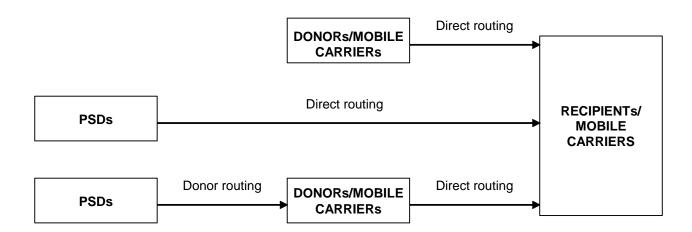


FIGURE 1
MNP Routing Methods

# 4 TESTING

# 4.1 Test Objectives

The objective of the MNP testing is to test the network conditioning implemented by a new PSD or Mobile Carrier to ensure that calls are routed in accordance with the MNP Network Plan for Voice, Fax and Data Services (refer to G565).

#### 4.2 Test Numbers

- 4.2.1 Mobile Carrier have setup MNP test numbers so that new PSDs 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 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.

#### 4.3 Test Calls

- 4.3.1 Section 5 shows the various combinations of test scenarios possible for MNP.
- 4.3.2 The recommended minimum set of test cases for each routing scenario is as follows:
  - (a) Donor/Mobile Carrier Direct Routing refer to section 6.1.
  - (b) PSD Direct Routing refer to section 6.1.
  - (c) PSD Donor Routing refer to section 6.2.

# 5 MATRIX OF PORTING SCENARIOS

# 5.1 Test Objectives

5.1.1 Refer to Table 1 for a matrix of porting scenarios.

# TABLE 1 Matrix Of Porting Scenarios

|                          |                                    | Gaining Mobile Carrier |         |                                    |
|--------------------------|------------------------------------|------------------------|---------|------------------------------------|
|                          |                                    | Optus                  | Telstra | Vodafone<br>Hutchison<br>Australia |
| <u>a</u>                 | Optus                              | 1.1                    | 2.1     | 3.1                                |
| Aobi                     | Telstra                            | 1.2                    | 2.2     | 3.2                                |
| Losing Mobile<br>Carrier | Vodafone<br>Hutchison<br>Australia | 1.3                    | 2.3     | 3.3                                |

NOTE: Shaded boxes indicate non-ported test numbers made available by the recipient for error case testing.

# **6 ROUTING TEST CASES**

# 6.1 Direct Routing Test Cases

6.1.1 Refer to Table 2 for a set of direct routing test cases.

# TABLE 2 Direct Routing Test Cases

| Test Case                                  | Test Case   |  |  |
|--|---|--|--|
| Calls to Optus as Recipient Mobile Carrier |   |  |  |
| 1.2  | Direct Routed Call to Telstra number ported to Optus                        |  |  |
| 1.3  | Direct Routed Call to Vodafone Hutchison Australia number ported to Optus   |  |  |
| Calls to Telstro                           | Calls to Telstra as Recipient Mobile Carrier                                |  |  |
| 2.1  | Direct Routed Call to Optus number ported to Telstro                        |  |  |
| 2.3  | Direct Routed Call to Vodafone Hutchison Australia number ported to Telstra |  |  |
| Calls to Voda                              | Calls to Vodafone Hutchison Australia as Recipient Mobile Carrier           |  |  |
| 3.1  | Direct Routed Call to Optus number ported to Vodafone Hutchison Australia   |  |  |
| 3.2  | Direct Routed Call to Telstra number ported to Vodafone Hutchison Australia |  |  |

# 6.1 Donor Routing Test Case

6.1.1 Refer to Table 3 for a set of donor routing test cases.

# TABLE 3 Donor Routing Test Cases

| Test Case | Test Case   |  |
|-----------|---|--|
| 2.1       | Donor Routed Call to Optus number ported to Telstra                           |  |
| 3.2       | Donor Routed Call to Telstra number ported to<br>Vodafone Hutchison Australia |  |
| 1.3       | Donor Routed Call to Vodafone Hutchison Australia number ported to Optus      |  |

# 7 CONTACTS

# 7.1 Test Cases

- 7.1.1 For information on MNP specific contacts on:
  - (a) Testing refer to bilateral agreements.
  - (b) Fault Reporting refer to interconnect operational agreements.

# 8 REFERENCES

| Publication  | Title   |  |  |
|--|---|--|--|
| Industry Guidelines  |   |  |  |
| G565:2009  | Mobile Number Portability – Network Plan for SMS          |  |  |
|  | http://commsalliance.com.au/Documents/all/guidelines/g565 |  |  |
| Legislation and Regulation   |   |  |  |
| Telecommunications Act 1997  |   |  |  |
| http://www.comlaw.gov.au/Series/C2004A05145                          |   |  |  |
| Emergency Call Service (Telecommunications) Determination 2009 (Cth) |   |  |  |
| http://www.comlaw.gov.au/Series/F2009L04720                          |   |  |  |

# **PARTICIPANTS**

The Working Committee responsible for the revisions made to this Guideline consisted of the following organisations and their representatives:

| Organisation                    | Membership | Representative       |
|---------------------------------|------------|----------------------|
| Paradigm.One                    | Non-Voting | Dev Gupta            |
| SingTel Optus                   | Voting     | Sam Mangar           |
| Telstra                         | Voting     | Guy di Paola         |
| Vodafone Hutchison<br>Australia | Voting     | Alexander R. Osborne |

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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