

COMMUNICATIONS
ALLIANCE LTD



INDUSTRY GUIDELINE
MOBILE NUMBER PORTABILITY-
TESTING STRATEGY FOR SMS
G578:2009

G578:2009 Mobile Number Portability – Testing Strategy for SMS

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ABOUT THIS DOCUMENT

This document describes the joint network testing to be conducted by the CSPs for Communications Alliance Mobile Number Portability for SMS and was prepared by The Communications Alliance Network Testing Sub-Group (NTSG). This is separate to and in addition to any internal testing conducted by any CSP.

Audience

This document is intended for:

- (a) Communications Alliance MNP – Network Testing Sub-Group for information and approval;
- (b) Communications Alliance MNP –PMG for information;
- (c) Communications Alliance for information; and
- (d) Mobile Carriers.

Distribution

- (a) Communications Alliance MNP – Network Testing Sub Group;
- (b) Communications Alliance MNP – PMG; and
- (c) Mobile Carriers.

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1 INTRODUCTION

1.1 Overview

- 1.1.1 Mobile Number Portability was required to be implemented by all PSDs and Mobile Carriers by the 25th September 2001.
- 1.1.2 The network test strategy has been developed by the Communications Alliance MNP NTSG to define the testing of the network conditioning for SMS services implemented by each mobile carrier.
- 1.1.3 The network testing was agreed to be completed by 24th August 2001 to allow end to end testing to commence on 25th August 2001.
- 1.1.4 The testing of voice, fax and data is the subject of a separate Communications Alliance MNP NTSG test strategy.

1.2 Test Objectives

- 1.2.1 The objective of the joint industry testing is to test the network conditioning implemented by each Mobile Carrier for Communications Alliance Mobile Number Portability for SMS prior to launching the commercial service to ensure messages are routed in accordance with the MNP Network Plan for SMS.
- 1.2.2 The testing will have no impact on end customers.

1.3 In Scope

- 1.3.1 The Network testing for SMS services will include where applicable for each participant:
 - (a) Direct Routed SMS;
 - (b) Donor Routing for International SMS; and
 - (c) Error Treatments.

1.4 Out of Scope

- 1.4.1 Items considered out of scope of this testing are:
 - (a) Testing of the Operational porting process;
 - (b) Testing of the IT component of MNP;
 - (c) Testing of voice, fax and data; and
 - (d) Testing of equivalent service criteria.

1.5 Assumptions

1.5.1 The following assumption has been made by the Communications Alliance MNP NTSG:

Normal message charges will apply

1.6 2009 Revision

In 2009, the Mobile Number Portability Code was revised. At that time all associated Mobile Number Portability documents were republished as Communications Alliance documents to reflect the change of organisational name from ACIF. Where relevant any references to other documents have also been updated.

2 ACRONYMS

2.1 Acronyms

ACCC

Australian Competition and Consumer Commission

ACIF

Australian Communications Industry Forum

ACMA

Australian Communications and Media Authority

CAC

Carrier Access Code

C/CSP

Carriers and Carriage Service Providers

CTrSD

Contracted Transit Service Deliverer

DTrSD

Donor Transit Service Deliverer

GSM

Global Service for Mobile

MNP

Mobile Number Portability

MSISDN

Mobile Subscriber ISDN Number

NTSG

Network Testing Sub-Group

PMG

Project Management Group

PSD

Prime Service Deliverer

SMS

Short Message Service

3 TEST STRATEGY

3.1 Overview

- 3.1.1 Each Mobile Carrier will set up MNP test numbers for a period of time. All Mobile Carriers will then be able to send test messages to these numbers to confirm correct network conditioning has been implemented for MNP.
- 3.1.2 Prior to the start of the testing period, each participating Mobile Carrier will implement the required network conditioning to handle ported numbers.

3.2 Test Calls

- 3.2.1 Test scenarios will cover arrangements made by mobile carriers in accordance with the options defined in the Communications Alliance MNP Network Plan for SMS. They may include the following types of calls:
 - (a) Direct Routing for National SMS;
 - (b) Donor Routing for International SMS; and
 - (c) Error testing.
- 3.2.2 National Roaming is not impacted by Mobile Number Portability and so will not be included.
- 3.2.3 These test cases will be documented in detail in the Detailed Test Plan.

3.3 Test Entry Criteria

TABLE 1
Test Entry Criteria

Criteria for Entering Test (applicable to Communications Alliance MNP NTSG)
1. Communications Alliance MNP Network Test Strategy for SMS Services agreed and published
2. Communications Alliance MNP NTSG Detailed Test Plan for SMS signed-off).
3. Network conditioning completed and ready for testing (i.e. test numbers operational)
4. Participating Mobile Carrier Fault Management Centres advised.

3.4 Test Exit Criteria

TABLE 2
Test Exit Criteria

Criteria for Exiting Test (applicable to individual Communications Alliance MNP NTSG participants)
100% of test calls made by the participating Mobile Carrier meet the anticipated outcome.

3.5 Future Testing

- 3.5.1 If there is a need for future testing, it will be agreed between the relevant carriers.

4 DELIVERABLES

The following table lists the documents related to the MNP testing for SMS.

TABLE 3
Documents Related To the MNP Testing For SMS

Document	Description
Test Strategy	This document will define the test strategy, scope and environment.
Detailed Test Plan (DTP)	This document will evolve from the Test Strategy and include detailed test cases and test numbers. This will include a template test call log for calls made.
Test Summary Report (TSR)	A report will be produced by the Communications Alliance MNP NTSG to summarise testing results measured against the test objectives.

5 ROLES AND RESPONSIBILITIES

5.1 Roles and Responsibilities

- 5.1.1 The Communications Alliance MNP NTSG is responsible for developing the testing strategy for the introduction of Mobile Number Portability.
- 5.1.2 The participants in the Communications Alliance MNP NTSG will then be required to meet the test entry criteria detailed above and conduct their own testing in accordance with the agreed time table.

6 SCHEDULE

The following table is the draft schedule for completion of testing by 24/8/2001.

TABLE 4
Network Testing Contacts (As At 30 March 2001)

Activity	Start Date	End Date
Test Plan Agreement	In Progress	31/3/2001
Pre-conditioning for Test	In progress	6/7/2001
TESTING PERIOD *	23/7/2001	17/8/2001
Cleanup	20/8/2001	24/8/2001
Sign-off on test completion		24/8/2001

* The start date for SMS testing will begin on or after the completion of Stage 1 of the voice testing.

7 TEST ENVIRONMENTS

7.1

- 7.1.1 Each mobile carrier will be required to configure the following in their network for testing purposes:
- (a) A non-ported test mobile number (for error case testing);
 - (b) A test 'ported' number to each other mobile carrier (where direct interconnection exists);
 - (c) A test 'ported' number from each other mobile carrier (where direct interconnection exists);
 - (d) Provide a means to verify messages to MNP numbers (i.e. via a handset); and
 - (e) A 'not set up' test ported number to each other mobile carrier (for error testing). 'Not set up' meaning the recipient has not set up the number as ported in.

8 TEST MANAGEMENT

8.1 Fall Back Approach

- 8.1.1 A fall back approach is not necessary since testing will not involve "live" customers.
- 8.1.2 If problems are encountered with testing, the Mobile Carrier experiencing the problem will advise the impacted Mobile Carrier via the contact list.

8.2 Fault Resolution Process

- 8.2.1 Normal inter-carrier fault resolution processes are to apply.
- 8.2.2 Escalation of any faults for resolution will be via the Communications Alliance MNP NTSG.

8.3 Process & Reporting

- 8.3.1 The SMS test messages will be sent over a two day period. Over these two days, each carrier will need to send the messages defined in the Detailed Test Plan.
- 8.3.2 These messages are agreed to be sent between the hours of 8am and 4pm.
- 8.3.3 By 5pm each day, each carrier will send a mail to each other carrier detailing the messages it sent and received.
- 8.3.4 In the event of a failing test case, the involved carriers will reschedule the test.
- 8.3.5 A test Coordinator will be nominated by the Communications Alliance MNP NTSG to coordinate the collection of results and compile the final Test Summary Report.

9 REFERENCES

Publication	Title
Industry Codes	
C570:2009	Mobile Number Portability
Industry Guidelines	
G538:1999	Interconnection Model
G549:2002	Interconnection Implementation Plan
G561:2009	Mobile Number Portability - Network Plan for Voice, Data and Fax Services
G565:2009	Mobile Number Portability - Network Plan for SMS
Industry Documents	
<i>Telecommunications Numbering Plan 1997</i>	

PARTICIPANTS

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

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This Working Committee was chaired by Alexander R. Osborne. Visu Thangavelu of Communications Alliance provided project management support.

Communications Alliance was formed in 2006 to provide a unified voice for the Australian communications industry and to lead it into the next generation of converging networks, technologies and services.

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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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