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ALLIANCE LTD

INDUSTRY CODE

C513:2015

CUSTOMER AND NETWORK FAULT MANAGEMENT

C513:2015 *Customer and Network Fault Management* Industry Code

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EXPLANATORY STATEMENT

This Explanatory Statement is to be read in conjunction with the ***Customer and Network Fault Management*** Industry Code (C513:2015), "the Code".

This Explanatory Statement outlines the background, scope, objectives, processes and procedures described in the Code. The anticipated costs and benefits are also discussed.

The Code replaces the registered *Customer and Network Fault Management* Industry Code (ACIF C513:2003).

Expressions used in this Explanatory Statement have the same meaning as in the Code.

Background

One of the objectives of the *Telecommunications Act 1997* (Cth), "the Act", is that telecommunications is regulated in a manner that promotes the greatest practicable use of industry self-regulation and does not impose undue financial and administrative burdens on industry participants. The Act provides that bodies and associations that represent sections of the telecommunications industry may develop Industry Codes.

Since 1 July 1997 when Australia's communications industry became self-regulated, the Australian Communications Industry Forum (ACIF) (now Communications Alliance) was established to develop and administer industry technical and operational arrangements that promote both the long-term interests of users of telecommunication services and the efficiency and international competitiveness of the Australian communications industry.

A Customer and Network Fault Management Working Committee developed the Code to provide the minimum requirements of Carriers and Carriage Service Providers (C/CSPs) to record, track and resolve Customer Faults and Network Faults. It also provides C/CSPs with an agreed minimum process to cooperatively identify and resolve faults.

Previous Regulatory Arrangements

Prior to development of the initial Industry Code, C/CSPs managed faults through the development of Bilateral Agreements. The ACIF Operations Code Reference Panel (OCRP) Working Committee, OCRP/WC05, produced an initial Customer and Network Fault Management Industry Code, (ACIF C513:1998). The Code was published by ACIF in 1999 but was considered to be couched in terms resembling operational language rather than principles that could be applied across the whole of industry, the Code therefore was not registered by the Australian Media and Communications Authority (ACMA).

The original version of the Code did not include fault management principles for Local Number Portability (LNP) and the introduction of Mobile Number Portability (MNP) to the Australian marketplace was soon approaching, therefore the OCRP recommended to the ACIF Board that a new Working Committee be formed to include fault management processes for LNP and MNP. The Working Committee was also directed to review the current Code provisions to ensure it would meet ACMA requirements for registration.

At the request of the OCRP, this Working Committee, OCRP/WC24, was formed in March 2001. A proposal by Telstra Corporation to the OCRP to add FreePhone and Local Rate

Number Portability (FLRNP) fault management principles to the terms of reference was approved after the formation of OCRP/WC24.

Why Previous Regulatory Arrangements were inadequate

Prior to the original published Code being developed, the industry was operating exclusively on Bilateral Agreements between the C/CSPs. These agreements were and continue to be very effective, but only covered the major C/CSPs and do not deal with all aspects of fault management. The OCRP determined that an Industry Code was required to ensure a universal approach to the management of inter-carrier customer and network faults. The introduction of local and mobile Ported numbers has necessitated the need to ensure fault free routing of calls through various Telecommunications Networks. A number of potential points of failure exist across these Telecommunications Networks, any one of which can result in service difficulties for end-customers. Robust and efficient processes have been built into the Code to promptly identify and resolve these inter-carrier faults.

How the Code Built on and Enhanced the Previous Regulatory arrangements

The Code enhanced the regulatory environment by ensuring all industry participants abide to a standard minimum requirement for managing Customer Faults and Network Faults. The Code addresses all aspects of fault management including normal Customer & Network Faults, LNP, MNP and FLRNP faults.

The Code sets minimum acceptable practices including where feasible measurable performance levels which do not necessarily limit industry's ability to improve on the minimum level.

The Code also should not constrain two or more individual industry participants agreeing to different arrangements provided that those arrangements meet the minimum acceptable practices of the Code. Those arrangements must not impact on the ability of other industry participants to interwork with parties to those arrangements in accordance with the minimum acceptable practices.

What the Code Accomplishes

The Code ensures that C/CSPs establish Fault Reporting Centres, which act as the nominated point of contact for the reporting and management of Customer Faults and Network Faults.

The Code will clearly set out the minimum requirements that industry participants will be obliged to adopt when dealing with Customer Faults and Network Faults. A summary of these requirements include:

- Fault Recording;
- Fault Sectionalisation (Reporting C/CSP and Identified C/CSP);
- Fault Reporting;
- Cooperative Testing;
- Fault Rectification and Clearance;
- Fault Report Reconciliation;

- Fault Clearance Reconciliation; and
- Special Investigations.

A distinction exists between Customer Faults and Network Faults which is defined in the Code. Customer and Network fault management procedures follow similar if not identical processes, and as such the Code endeavours to streamline the two processes by amalgamating these principles under the one section, thus avoiding unnecessary duplication.

How the Objectives are Achieved

The objectives of the Code are achieved by firstly outlining the Fault Management Code Rules, which builds the framework for leading into the various fault management clauses of the Code. Each clause clearly specifies the requirements for recording, reporting and tracking a fault with another C/CSP, as well as stipulating the service levels for resolving faults. The auditing of Fault Reports under the Fault Report and Fault Clearance Reconciliation processes ensures that C/CSPs have accountability for all reported or received faults.

Upon registration of the Code all relevant sections of the industry are required to comply with the Code.

Upon being registered, the ACMA will have the ability to use its safety-net enforcement powers under Part 3 where it is satisfied that a participant in a relevant section of the telecommunications industry is breaching or has breached the Code.

Anticipated Benefits to Consumers

From the consumers' perspective, the Code has employed processes to ensure that C/CSPs can manage faults between C/CSPs and therefore minimise the time taken to restore Customer or Network services. The Code will ensure that all Customer Faults will be repaired in a non-discriminatory manner.

Registration of the Code by the ACA will ensure that all telecommunications providers who fall within the established sections of the industry (as set out in section 110 of the Act) are bound by the Code, whether or not the providers have chosen to adopt it voluntarily through the ACIF process. This uniformity will benefit customers, who can be reasonably sure, when choosing a telecommunications provider, that C/CSPs have a process to manage faults with other C/CSPs.

The OCRP/WC24 enhanced the Code by incorporating fault management procedures for LNP, FLRNP and MNP. The LNP During Porting Cat. C process is a good example where effort has been made to ensure the needs of business customers are met. Business customers who elect to Port their Telephone Numbers to another C/CSP demand that the procedure is executed with minimum interruption to their service.

The Code sets out minimum requirements that C/CSPs must adhere to when handling faults relating to a Cat. C Port. The Code also delineates responsibilities to all C/CSPs involved in the Port, including timeframes in which certain tasks are to be completed, in order to ensure the Port is not unduly extended. Faults identified during the Porting process that are deemed to have an extended repair time, or cannot be resolved, may result in an Emergency Return to be declared in order to restore service. Such measures reinforce the industry's commitment to safeguard business customers against unnecessary interruption to their service during the Cat. C Porting process.

Other measures employed in the Code that benefit consumers include the Special Investigation process. Customers who have continuing difficulty with their service that involve C/CSPs other than their own have the reassurance that an escalated fault handling process will be used to resolve the fault.

Anticipated Benefits to Industry

The main benefit to the industry from the implementation of the Code has been development of a uniform approach to fault handling. The use of universal fault symptom codes and detailed fault handling procedures assist to minimise the time taken to report and resolve faults.

A standardised approach to Customer and Network Fault Management enables efficient procedures, thereby reducing operational costs, enhanced network viability, avoidance of anti-competitive behaviour in the marketplace and fewer customer complaints thereby increasing the efficiency of call centre resources.

Anticipated Cost to industry

Costs associated with the establishment and maintenance of the support systems and Bilateral Agreements required to implement the Code. However, these costs are outweighed by the benefits, which are derived by the implementation of a standard industry approach.

Other Public Interest Benefits or Considerations

The needs and expectations of consumers have been taken into account in the formulation of the Code to ensure that broader public interest benefits accrue. The following considerations are therefore central to its framework:

- Equitable access;
- Performance standards that meet the needs and expectations of the Australian community; and
- Appropriate consumer safeguards.

In summary, the Code has been formulated and implemented to ensure that all consumers can be confident of the efficacy and reliability of their telecommunications environment.

2004 Revision

This edition of the Code contained changes to the Explanatory Statement, Section 2.2 and Clauses 1.3.2.1, 5.7.1 and 5.7.2 as agreed by the Working Committee to allow improved and more accurate information to be made available.

The Code was amended to clarify the position of a Reseller in the Code. As this Code covers inter-carrier faults, other faults between a Reseller and its C/CSP-supplier, are consequently not within the scope of the Code. This does not preclude a Reseller, however from raising what it believes to be an inter-carrier fault to its C/CSP-supplier. If this C/CSP believed such a fault too was an inter-carrier fault, it would then follow the provisions of this Code.

Section 2.2 was amended to include the definition of a Reseller. A change was made to Clause 1.3.2.1 so that the management of a fault between a Reseller and the C/CSP from whom the Reseller has acquired the Carriage Service is excluded from the Code. Changes were also made to Clauses 5.7.1 and 5.7.2 to clearly assign the obligation of the Identified C/CSP to rectify a fault reported by the Reporting C/CSP. The Explanatory Statement has had a modification under the title 'Why Current Regulatory Arrangements are inadequate' in order to clarify that industry participants have adopted a universal approach in resolving inter-carrier faults.

2015 Revision

The Code was updated in 2015 to:

- remove duplication of the rule in (previous) clause 8.2.2 that a C/CSP must advise the Customer to contact their own C/CSP where the Customer has reported the fault to a C/CSP other than the Customer's own C/CSP;
- remove processes for faults during Cat. B porting, as Cat. B is no longer utilised in Local Number Portability; and
- denote that this is now a Communications Alliance document.

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1 GENERAL INTRODUCTION

1.1 Introduction and Registration with ACMA

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 Code has been facilitated by Communications Alliance through a Working Committee comprised of representatives from the telecommunications industry, Government regulatory agencies, and consumer groups.

1.1.3 The Code should be read in the context of other relevant codes and guidelines, including;

(a) *Pre-selection Industry Code* (C515:2015);

(b) *Local Number Portability Industry Code* (C540:2013)

(c) *Mobile Number Portability Industry Code* (C570:2009)

(d) *Mobile Number Portability Operations Manual Industry Guideline* (G579:2015); and

(e) *Business Rules for the Management of Portable Freephone & Local Rate Numbers* 29th September 2000. Amended 3rd February 2003.

1.1.4 The Code should be read in conjunction with related legislation, including:

(a) the *Telecommunications Act 1997* (Cth);

(b) the *Telecommunications (Consumer Protection and Service Standards) Act 1999* (Cth);

(c) the *Privacy Act 1988* (Cth), including the Australian Privacy Principles;

(d) *the Competition and Consumer Act 2010* (Cth); and

(e) the *Telecommunications Numbering Plan 2015*.

1.1.5 If there is a conflict between the requirements of the Code and any requirements imposed on a Supplier by statute, the Supplier will not be in breach of the Code by complying with the requirements of the statute.

1.1.6 Statements in boxed text are a guide to interpretation only and not binding as Code rules.

1.2 Registration by the ACMA

The Code is to be submitted for registration by the Australian Communications and Media Authority under section 117 of the Act.

1.3 Scope

1.3.1 The Code is applicable to the following sections of the telecommunications industry under section 110 of the Act:

(a) Carriers; and

(b) Carriage Service Providers

in relation to the management of Customer Faults and Network Faults.

1.3.2 Exclusions

1.3.2.1 The Code does not cover the management of faults between the Customer/Reseller and the C/CSP to whom a fault is reported.

1.3.3 Other Codes/Guidelines

1.3.3.1 The Code recognises that other Codes/Guidelines may be developed to address the management of faults for specific services such as Unconditioned Local Loop Services (ULLS).

1.4 Objectives

1.4.1 The objectives of the Code are to:

(a) outline the process of recording, managing and resolving Customer Faults and Network Faults between C/CSPs in the most efficient manner to the benefit of users of telecommunications services;

(b) allocate responsibility for the recording, managing and resolving of Customer Faults and Network Faults to the appropriate C/CSP;

(c) establish procedures to address the fault management processes outlined in Section 4; and

(d) establish service levels for fault resolution.

1.5 Code review

1.5.1 The Code will be reviewed every 5 years subsequently after being registered by the ACMA, or earlier in the event of significant developments that affect the Code or a chapter within the Code.

2 ACRONYMS, DEFINITIONS AND INTERPRETATIONS

2.1 Acronyms

For the purposes of the Code:

ACIF	Australian Communications Industry Forum
ACMA	Australian Communications and Media Authority
ASD	Access Service Deliverer
BGBN	Broadcast Give Back Notification
BPCN	Broadcast Port Cutover Notification
BTTN	Broadcast Technology Transfer Notification
CAN	Customer Access Network
Cat. A	Category A Process
Cat. C	Category C Process
Cat. D	Category D Process
CE	Customer Equipment
CLI	Calling Line Identifier
C/CSP	Carrier and Carriage Service Provider
CSP	Carriage Service Provider
DMC	Donor Mobile Carrier
ECA	Electronic Cutover Advice
FLRN	Freephone and Local Rate Number
FLRNP	Freephone and Local Rate Number Portability
FRC	Fault Reporting Centre
GMT	Greenwich Mean Time
INMS	Industry Number Management Services
LNP	Local Number Portability
MC	Mobile Carrier
MNP	Mobile Number Portability
MSN	Mobile Service Number
NP	Network Provider

OASD	Originating Access Service Provider
PLNR	Ported Local Number Register
PMSNR	Ported Mobile Service Number Register
POI	Point of Interconnect
PSD	Prime Service Deliverer
PSS	Portability Service Suppliers
RDC	Records Discrepancy
SNA	Simple Notification Advice
TECA	Transfer Electronic Cutover Advice
TrSD	Transit Service Deliverer
ULLS	Unconditioned Local Loop Service

2.2 Definitions

For the purposes of the Code:

'A' Party

means the end-user that originates a call.

Access Line

means a line connecting a Customer's premises to a Local Exchange.

Access Network

means an ASD's Telecommunications Network.

Access Service Deliverer

means the Carrier to whose Telecommunications Network an Access Line is directly connected.

Act

means the *Telecommunications Act 1997* (Cth).

Activation

means the implementation of a Port.

Allocated Mobile Service Number Register

means a file that contains the completed set of MSN ranges of allocated CSP numbers where that MC is contracted to the CSP (including itself) to supply a Telecommunications Network for carriage of service for those MSNs. This file specifies the Donor default range.

'B' Party

means the end-user whose number is dialed or otherwise transmitted to the ASD by another party as the address to which the call is to be routed.

Bilateral Agreement

means any agreement between two parties.

Broadcast Give Back Notification

means an electronic advice sent from the DMC to the NP or PSSs, to advise them to implement a return of the MSN to the DMC in their Telecommunications Network and operating systems.

Broadcast Port Cutover Notification

means an electronic advice sent from the GMC to other NPs or PSSs, to advise them to implement a Port.

Broadcast Technology Transfer Notification

means an electronic notification sent from a MC to other MCs, NPs and PSSs to advise them that there has been a change in technology for an MSN and to update their Telecommunications Networks and/or databases to implement the technology transfer.

Business Day

means any day from Monday to Friday (inclusive) other than a National Public Holiday.

Business Day (MNP)

means any day from Monday to Saturday (inclusive) other than a day which is defined by the Code as a National Public Holiday (MNP), or as otherwise agreed in a Bilateral Agreement between CSPs.

Calling Line Identifier

means data generated by the Telecommunications Network, which relates to the Carriage Service of the 'A' Party.

Carriage Service

has the same meaning as in the Act.

Carriage Service Provider

has the same meaning as in the Act.

Carrier

has the same meaning as in the Act.

Carrier Licence

means a licence granted under section 56 of the Act.

Category A Process

for the purposes of LNP, means the default process to Port a Telephone Number which is, prior to Porting associated with:

(a) a Simple Telephone Service; or

(b) a non-Simple Telephone Service which the Losing C/CSP has declared can be ready for Porting using an automated process within two business days of receipt of an SNA.

Category C Process

for the purposes of LNP, means the process to Port Telephone Numbers that require project management. This is the default process for Telephone Numbers associated with Complex Telephone Services.

Category D Process

for the purposes of LNP, means the process to Port a Simple Telephone Number in conjunction with an unconditioned local loop request on an existing service where the Telephone Number must have ULLS Call Diversion active.

Completion Advice

for the purposes of LNP, means an advice sent via the Final Cutover Notification Interface which enables the Losing C/CSP, or where applicable the Donor C/CSP, to advise the Gaining C/CSP that the Local Number Portability facility has been implemented.

Complex Telephone Service

means a Local Service which is not a Simple Telephone Service.

Customer

means a person to whom a Freephone Number, a Local Rate Number, a Telephone Number or a MSN is issued.

Customer Equipment

means:

(a) any equipment, apparatus, tower, mast, antenna, other structure or thing that is used, installed ready for use or intended for use on the Customer side of the boundary of a Telecommunications Network; or

(b) any system (whether software-based or otherwise) that is used on the Customer side of the boundary of a Telecommunications Network.

Customer Fault

means a fault that a single Customer experiences with their telecommunications service that is not a Network Fault.

Customer Fault Symptom Code

means an abbreviated code used to describe each fault as set out in Appendix A.

Donor C/CSP

means the C/CSP to which a Telephone Number has been allocated or transferred under the Numbering Plan.

Donor Mobile Carrier

means the Mobile Carrier to which a block of MSNs allocated or transferred to a Donor CSP is assigned for call routing purposes.

During Porting Fault (LNP & FLRNP)

means a reported fault relating to a Freephone Number, a Local Rate Number or a Telephone Number that occurs after the start and prior to the completion of a Porting activity.

During Porting Fault (MNP)

means a routing fault that occurs between the time that a Port is completed and the end of the next Business Day (MNP) after a BPCN/BTTN/BGBN completion advice has been received by the Gaining MC.

Electronic Cutover Advice

for the purposes of LNP, means an advice sent via the Final Cutover Notification Interface from the Gaining C/CSP to the Losing C/CSP to action a Porting request in a SNA.

Emergency Return

means the re-establishment of a service which can be in the form of either the Customer's original service, or if that is not possible, an alternative service. Emergency Return only applies to complex Ports.

Emergency Return Request Period

means the period of time to restore service to Telephone Numbers associated with Ports using the Cat. C Process.

Fault Clearance Code

means an abbreviated code used to describe the resolution of faults as set out in Appendix B and Appendix C (ii) of the Code.

Fault Clearance Report Reconciliation

means the process of ensuring that all Fault Clearance Reports sent by the Identified C/CSP have been received by the Reporting C/CSP.

Fault Clearance Report

means a report that contains details of the fault clearance as specified in Clause 8.7.3.

Fault Report Reconciliation

means the process of ensuring that all Fault Reports that have been sent by the Reporting C/CSP have been received by the intended Identified C/CSP.

Fault Report

means a record which contains, as a minimum, time and date of when the fault occurred and description of symptom or Customer Fault Symptom Code, for use in reporting faults.

Fault Reporting Centre

means the nominated point(s) of contact for that C/CSP for the reporting and management of faults.

Final Cutover Notification

means notification from the Gaining C/CSP to the Losing C/CSP to action a LNP Porting request in a SNA.

Final Cutover Notification Interface

means the electronic interface, which enables C/CSPs to send LNP Porting transactions to each other in a minimum of five minutes.

Freephone and Local Rate Number Portability

means the Porting of Freephone and Local Rate Services.

Freephone Number

means a number used for a Freephone Service.

Freephone Service

means a Carriage Service:

(a) that is capable of voice telephony; and

(b) that, for a call, involves the translation of the Freephone Number dialed in making the call to a Telephone Number that identifies a point of termination for the call; and

(c) that is not a Local Service; and

(d) for which:

(i) the call charge for calls made using a Standard Telephone Service (other than a Public Mobile Telecommunications Service) is zero; and
(ii) a Customer issued with the Freephone Number is charged for calls to that Freephone Number.

Gaining C/CSP

means the C/CSP to which a Freephone Number, a Local Rate Number or a Telephone Number has been, or is to be, Ported.

Gaining CSP

means the CSP to which an MSN has been, or is to be, Ported.

Gaining MC

means the Mobile Carrier whose Telecommunications Network will be used by the Gaining CSP for the termination of calls to the MSN which has been or is to be Ported.

Give Back (LNP)

means the return of a Ported Telephone Number from a Gaining C/CSP to the Donor C/CSP.

Give Back (MNP)

means the return of a Ported MSN from a Recipient CSP to the Donor CSP.

Hotline Hours of Operation

for the purposes of LNP, means an extension of Standard Hours of Operation (Standard Time), for fault management purposes, to 7pm on a Business Day, unless otherwise agreed in a Bilateral Agreement.

Identified C/CSP

means the C/CSP suspected as having the fault in its Telecommunications Network as determined by Sectionalisation.

Local Exchange

means the exchange owned or operated by a C/CSP to which a Telephone Number is directly connected.

Local Number Portability

means the Porting of Telephone Number(s) associated with the provision of a Local Service, from a Losing C/CSP Telecommunications Network to a Gaining C/CSP Telecommunications Network (but not any service or features associated with the Telephone Number(s)).

Local Rate Number

means a number used for a Local Rate Service.

Local Rate Service

means a Carriage Service:

(a) that is capable of voice telephony; and

(b) that, for a call, involves the translation of the Local Rate Number dialed in making the call to a Telephone Number that identifies a point of termination for the call; and

(c) that is not a Local Service; and

(d) for which:

(i) the call charge for calls made using a Standard Telephone Service (other than a Public Mobile Telecommunications Service) is equal to, or less than, the highest call charge for local calls; and

(ii) responsibility for the residential charge for calls (if any) lies with the person to whom the Local Rate Number is issued.

Local Service

has the same meaning as in the *Telecommunications Numbering Plan 2015*.

Losing C/CSP

means the C/CSP from which a Freephone Number, a Local Rate Number or a Telephone Number has been, or is to be, Ported.

Mobile Carrier

means a Carrier that operates a Mobile Telecommunications Network.

Mobile Number Portability

means the Porting of MSN(s) from a Losing CSP to a Gaining CSP or from one MC Telecommunications Network to another MC Telecommunications Network.

Mobile Service Number

means a number that has been allocated under the Numbering Plan to a CSP for the provision of a Public Mobile Telecommunications Service.

Modified Category A Process

for the purposes of LNP, means the process to Port Telephone Numbers associated with a Simple Telephone Service which cannot be Ported using the end-to-end Cat. A Process. The Modified Cat. A Process uses the Cat. A Process transactions.

National Public Holiday

means a day on which a public holiday is declared by all States and Territories, or any other day as agreed in Bilateral Agreements.

National Public Holiday (MNP)

means New Year's Day, Australia Day, Good Friday, Easter Day (i.e. Easter Sunday), ANZAC Day and Christmas Day.

NOTE: Not all national public holidays in Australia are non-porting days. MNP will not operate on those specific days that are listed above. There are some national public holidays, for example, Boxing Day where Porting must be available during the Standard Hours of Operation.

Network Facilities

means:

(a) any part of the infrastructure of a Telecommunications Network; or

(b) any line, equipment, apparatus, tower, mast, antenna, tunnel, duct, hole, pit, pole or other structure or thing used, or for use, in or in connection with a Telecommunications Network.

Network Fault

means a fault in a Telecommunications Network that is affecting or has the potential to affect more than one Customer.

Network Provider

means an OASD, a TrSD, a PSS or a PSD.

Numbering Plan

means the Telecommunications Numbering Plan 2015.

Originating Access Service Deliverer

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

Originating Routing Tests

means those tests of a C/CSP's switching, transmission and database resources that indicate whether or not a particular call is being delivered to the POI of the nominated C/CSP.

Point of Interconnect

means the point at which an Access Network connects to a transit network or another Access Network. Carriers interconnect with each other at these points of interconnection.

Port

means the movement of Freephone Numbers, Local Rate Numbers, Telephone Numbers or MSNs between C/CSPs using LNP, MNP and FLRNP processes. The words Porting and Ported have corresponding meanings.

Portability Service Supplier

means a Carrier or CSP or their agent or a contractor who provides supporting services to Carriers and/or Carriage Service Providers in the provision and operation of number portability. For example, Port administration services, Ported number reference databases and network services for call routing.

Ported Mobile Service Number Register

means a file that contains a list of MSNs where the data conditions described in the Allocated Mobile Service Number Register have changed as result of Porting activity. That is, MSNs must be in the PMSNR if they no longer default to the DMCs Telecommunications Network.

Ported Local Number Register

means a file provided on a web site that contains a file with a list of Telephone Numbers that have been Ported away from the Donor C/CSP, or have just returned.

Post Porting Hours of Operation

for the purposes of LNP, means 8am to 5pm (Standard Time) on Business Days, unless otherwise agreed in a Bilateral Agreement.

Post Porting Fault (LNP & FLRNP)

means a Porting fault that occurs on a Ported Freephone Number, a Local Rate Number or a Telephone Number after the During Porting Fault timeframe.

Post Porting Fault (MNP)

means a Porting fault that occurs on a Ported MSN after the end of the next Business Day after the BPCN/BTTN/BGBN completion advice has been received by the Gaining MC.

Prime Service Deliverer

means in respect of a Standard Telephone Service, the C/CSP selected by the Customer for the carriage of all pre-selectable calls originating from that Standard Telephone Service.

Public Mobile Telecommunications Service

has the same meaning as in the Act.

Recipient CSP

for the purposes of MNP, means the CSP holding an MSN which has been Ported.

Recipient MC

means the MC holding an MSN that has been Ported.

Records Discrepancy

means that records indicate that this Freephone Number, Local Rate Number, Telephone Number or MSN should not be Ported to the Gaining C/CSP, i.e. the Port has not completed or there is no valid Port request in place.

Re-direction Tests

for the purposes of LNP, means tests of Customer re-direction data for routing of Ported Telephone Numbers.

Reporting C/CSP

means a C/CSP who sends the Fault Report to the Identified C/CSP.

Reseller

means a Carriage Service Provider who acquires a Carriage Service from another Carriage Service Provider for the purpose of supplying that service to a Customer.

Sectionalisation

means a process undertaken by a C/CSP to determine if a fault lies in their Telecommunications Network or another C/CSP's Telecommunications Network. Sectionalised has the corresponding meaning.

Service Identifier

means a unique set of characters that is used by a C/CSP to identify a particular Carriage Service supplied to a Customer.

Sequence Number

means a series of numbers, which is used to uniquely identify Fault Reports.

NOTE: Some C/CSPs may use alpha characters as a prefix or suffix to the Sequence Number.

Simple Notification Advice

means an advice contained within a Porting notification order which provides the details required for a Telephone Number to be Ported using the Cat. A, Modified Cat. A or Cat. D Process.

Simple Telephone Service

means a service which comprises a:

(a) Standard Telephone Service; and

(b) Telephone Number,

where there exists a one to one relationship between the Telephone Number and the relevant Access Line to the Standard Telephone Service.

Special Investigation

means the process of conducting a further and/or more detailed investigation into a reported fault at the request of a C/CSP, and the response to this request.

Standard Hours of Operation

are 8am to 5pm (Standard Time) on Business Days unless otherwise agreed in a Bilateral Agreement.

Standard Hours of Operation (MNP)

on a Business Day means 8am to 8pm (Standard Time) from Monday to Friday, and 10am to 6pm (Standard Time) on Saturday, Easter Monday, Queens Birthday and Boxing Day unless otherwise agreed in a Bilateral Agreement, between Mobile Carriers and Network Providers.

Standard Telephone Service

has the same meaning as in the *Telecommunications (Consumer Protection & Service Standards) Act 1999*.

Standard Time

means:

(a) Australian Eastern Standard Time (GMT +10 hours); or

(b) Eastern Daylight Savings Time (GMT +11 hours) where in effect in any eastern seaboard State.

Telecommunications Network

has the same meaning as in the Act.

Telephone Number

means a geographic number that is defined in the Numbering Plan.

Transfer

means the activity by the Donor C/CSP to change the redirection of calls from the Losing C/CSP to the Gaining C/CSP, where the Donor C/CSP is neither the Gaining C/CSP or the Losing C/CSP. Transferred has a corresponding meaning.

Transfer Electronic Cutover Advice

means an advice sent via the Final Cutover Notification Interface for a third party Port. This enables the Gaining C/CSP to advise the Donor C/CSP to implement a Transfer. A TECA can only be used for a Cat. A Port.

Transit Service Deliverer

means a CSP that connects or interconnects with other CSPs.

Trending

means the collation of similar fault symptoms to identify a fault pattern.

ULLS Call Diversion

means an exchange based facility that enables calls to a Telephone Number to be diverted to another number (for example, a Telephone Number or MSN) for a period of up to 30 calendar days.

Void

means a Fault Report classification that is given when the Identified C/CSP reasonably believes it is unable to action the Fault Report based on the information provided.

2.3 Interpretations

In the Code, unless the contrary appears:

(a) 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;

(b) words in the singular includes the plural and vice versa;

(c) words importing persons include a body whether corporate, politic or otherwise;

(d) a reference to a person includes a reference to the person's executors, administrators, successors, officer, employee, volunteer, agent and/or subcontractor (including but not limited to, persons taking by novation) and assigns;

(e) if a period of time is specified and dates from a given day or the day of an act or event, it is to be calculated exclusive of that day; and

(f) a reference to a day is to be interpreted as the period of time commencing at midnight and ending 24 hours later.

3 GENERAL

3.1 Non-Discrimination

3.1.1 In implementing the Code, each MC or C/CSP must act in a competitively neutral and non-discriminatory manner.

3.2 Privacy and Use of Information

3.2.1 A C/CSP who receives any type of information as described in the Code may use this information only in accordance with Part 13 of the Act and the *Privacy Act 1988* (Cth).

3.2.2 Information provided in Fault Reports between C/CSPs for the purposes of the Code can only be used for the routing of calls in association with the delivery of Carriage Services, Customer Fault and Network Fault management and complaint handling, but must not be used for any other purposes. Any other purposes include marketing purposes.

3.2.3 A C/CSP who collects any personal information as described in the Code must also handle this information in accordance with the Australian Privacy Principles in the *Privacy Act 1988* (Cth).

3.2.4 Where there is any inconsistency between the Code and Part 13 of the Act or the *Privacy Act 1988* (Cth), Part 13 or the *Privacy Act 1988* (Cth) prevails.

3.3 General Requirements

3.3.1 C/CSPs and all industry participants involved in the routing of calls must implement sufficient processes and provide sufficient resources to enable resolution of faults in accordance with the Code.

3.4 Performance Levels

3.4.1 The Identified C/CSP receiving a Fault Report must provide a response to the Reporting C/CSP as specified in Sections 5, 6, 7 and 8.

3.5 Bilateral Agreements

3.5.1 C/CSPs may enter into Bilateral Agreements to support their requirements under the Code, provided that those arrangements meet the minimum acceptable practices of the Code, and that those arrangements do not impact on the ability of other industry participants to inter-work with parties to those arrangements in accordance with the minimum acceptable practices.

4 FAULT MANAGEMENT PROCESS OVERVIEW

Dependant on the nature of the fault, fault management is a process that will incorporate some, or all, of the following steps:

(a) fault recording; see Clause 5.2;

(b) fault Sectionalisation; see Clauses 5.3 and 5.5;

(c) fault reporting; see Clause 5.4;

(d) cooperative testing; see Clause 5.6;

(e) fault rectification and clearance; see Clause 5.7

(f) Fault Report Reconciliation; see Clause 5.8;

(g) Fault Clearance Report Reconciliation; see Clause 5.9; and

(h) Special Investigation; see Clause 5.10.

5 FAULT MANAGEMENT CODE RULES

5.1 Fault Management Principles

5.1.1 In implementing the Code, each MC or C/CSP must act in a competitively neutral and non-discriminatory manner.

5.1.2 The Customer's C/CSP must perform Sectionalisation as specified in Clause 5.3, to determine the source of the fault (examples of the source may be CE, CAN or Telecommunications Network).

5.1.3 When a C/CSP reasonably believes that the source of a fault is within the Telecommunications Network owned or operated by another C/CSP, then the C/CSP must advise the now Identified C/CSP of the fault details as set out in Clause 5.4.3, and where practicable inform the Customer reporting the fault that this has been done.

NOTE: this advice should be forwarded by the Reporting C/CSP to the Identified C/CSP by the close of the next Business Day.

5.1.4 A C/CSP who becomes aware of a fault in its own Telecommunications Network which may affect interconnected Telecommunications Networks must inform those C/CSPs affected by the fault, including the fault status, repair, progress and estimated restoration time.

5.1.5 If a C/CSP effects a temporary repair of a fault in its Telecommunications Network, those interconnected C/CSPs affected by that fault must be informed and advised of the timetable for permanent repairs.

5.1.6 Where a C/CSP undertakes planned activity that is likely to affect C/CSPs of interconnected Telecommunications Networks, it must advise those C/CSPs affected by that activity to enable them to take remedial action.

5.1.7 Each C/CSP must make available, on request from other C/CSPs, contact details of their FRC(s) for the reporting and management of Customer Faults and Network Faults. The FRC(s) must be available 24 hours a day, 7 days a week.

5.1.8 An Identified C/CSP who receives a Fault Report must seek to rectify the fault to which the Fault Report relates unless it identifies that the source of the fault is not within its own Telecommunications Network.

5.1.9 All Customer Faults must be repaired in a non-discriminatory manner.

5.1.10 Network Faults with the greater Customer impact may be given higher priority, however wherever possible, all Network Faults must be repaired in a non-discriminatory manner.

5.1.11 Restoration of service must take priority over equipment repair.

5.1.12 Communications with Customers regarding faults, where appropriate, must indicate the cause(s) of the fault rather than particular Telecommunications Networks and their operators.

5.2 Fault Recording

Fault recording is the process of capturing from the Customer any relevant information for the purpose of fault rectification.

5.2.1 Where a Customer reports a fault to their C/CSP the following information must be captured:

(a) 'A' Party Service Identifier;

(b) 'B' Party Service Identifier;

(c) Customer's name;

(d) Customer's contact Telephone Number or MSN;

(e) fault description;

(f) results of any tests undertaken by the Customer;

(g) date and time of Customer Fault; and

(h) any other additional information.

5.2.2 Where the Customer has reported the fault to a C/CSP other than the Customer's own C/CSP then that C/CSP must advise the Customer to contact their own C/CSP.

5.3 Fault Sectionalisation

Sectionalisation is the process a C/CSP uses to determine if a fault lies in their Telecommunications Network or another C/CSP's Telecommunications Network.

Sectionalisation may involve testing, duplicating a fault and cooperative testing, where appropriate.

5.3.1 The C/CSP must perform Sectionalisation of the fault before reporting a fault to the Identified C/CSP.

5.3.2 As part of Sectionalisation, the C/CSP must identify if the Freephone Number, Local Rate Number, Telephone Number or MSN is in the process of being Ported. If so, refer to the relevant number portability fault management clauses in this document.

5.4 Fault Reporting

5.4.1 Once a fault has been Sectionalised to another C/CSP's Telecommunications Network, the Reporting C/CSP must send the fault in a Fault Report to the Identified C/CSP's nominated FRC by fax, unless otherwise agreed in a Bilateral Agreement.

5.4.2 Fault Reports must be sequentially numbered.

5.4.3 Fault Reports must include the following information:

(a) Reporting C/CSP contact details (e.g. name and Telephone Number);

(b) Reporting C/CSP Fault Report Sequence Number;

(c) date and time of when the Fault Report was sent to other C/CSP;

(d) 'A' Party Service Identifier (where applicable);

(e) 'B' Party Service Identifier (where applicable);

(f) Customer name (where applicable);

(g) Customer contact Telephone Number or MSN (where applicable);

(h) a fault description using the:

(i) Customer Fault Symptom Codes (refer to Appendix A) for Customer Faults. For Customer Faults this must also include additional indicators to identify whether the fault is intermittent or frequent, and whether the fault is experienced by the 'A' Party or 'B' Party. Additional information in the comments field may be included; or

(ii) description of the Network Fault symptoms for Network Faults (refer to Appendix C).

(i) additional information in the comments field as set out in Appendix A may be included; and

(j) results to tests undertaken by the Customer or any C/CSP.

5.4.4 Fault Reports must not be hand written.

5.4.5 The Reporting C/CSP must provide a single Fault Report for each unique Service Identifier. However, faults associated with a single Customer must be reported on a single Fault Report and contain all affected Service Identifiers.

5.4.6 The Identified C/CSP must, as soon as practicable, provide the Reporting C/CSP with the following information:

(a) Identified C/CSP Fault Report Sequence Number;

(b) response or estimated rectification date and time;

(c) action taken; and

(d) Identified C/CSP's contact details.

5.4.7 The Identified C/CSP investigating the fault must keep the Reporting C/CSP advised of progress.

5.5 Fault Sectionalisation by the Identified C/CSP

Sectionalisation is the process used by the Identified C/CSP to determine if the fault lies in its Telecommunications Network.

Sectionalisation may involve testing, duplicating a fault and cooperative testing, where appropriate.

5.5.1 The Identified C/CSP must perform Sectionalisation of the fault before providing the Reporting C/CSP with a Fault Clearance Report.

5.5.2 As part of Sectionalisation, the Identified C/CSP must identify if the Freephone Number, Local Rate Number, Telephone Number or MSN is in the process of being Ported. If so, refer to the relevant number portability fault management clauses in this document.

5.5.3 If the Identified C/CSP reasonably believes that the fault does not lie in its own Telecommunications Network, then it must advise the Reporting C/CSP as soon as practicable with the relevant Fault Clearance Code.

5.6 Cooperative Testing

5.6.1 A C/CSP must perform cooperative testing where reasonably required by another C/CSP for the purpose of Sectionalising and/or rectifying a fault.

NOTE: Cooperative testing processes may be agreed upon in Bilateral Agreements.

5.7 Fault Rectification and Clearance

5.7.1 Customer Faults must be rectified by the Identified C/CSP by the end of the next Business Day after receipt of the Fault Report.

5.7.2 Network Faults must be rectified by the Identified C/CSP as soon as practicable.

5.7.3 Following the rectification of the fault, the Identified C/CSP must advise the Reporting C/CSP of the following information:

(a) Reporting C/CSP Fault Report Sequence Number;

(b) Service Identifier;

(c) date and time received;

(d) date and time cleared;

(e) Customer Fault Symptom Code (refer to Appendix A) where applicable;

(f) Fault Clearance Code (refer to Appendix B & C); and

(g) a field to accommodate a Fault Report which has been marked as Void and a section to provide comments as to why the Fault Report was Void.

5.7.4 The Identified C/CSP must provide these details by Fault Clearance Report:

(a) at the time of rectification; or

(b) no later than the next Business Day.

5.7.5 The Identified C/CSP must be provide a Fault Clearance Report on each Business Day to the Reporting C/CSP, unless otherwise agreed in a Bilateral Agreement and include details (a) to (f), above, for each of the faults cleared since the previous Business Day.

NOTE: C/CSPs who provide the Network Clearance Code of T (Trending) as the action undertaken, (see Appendix C) should collate Fault Reports of similar symptoms.

5.7.6 If a fault pattern is identified by "Trending" (see appendix C), the Identified C/CSP must undertake further action to resolve the identified Network Fault.

5.8 Fault Report Reconciliation

5.8.1 Fault Reports sent between C/CSPs must be reconciled on a monthly basis unless otherwise agreed in a Bilateral Agreement.

5.8.2 The Reporting C/CSP must retransmit Fault Reports identified during Fault Report Reconciliation as not being received by the Identified C/CSP.

5.8.3 Information required for reconciliation must include:

(a) date and time of Fault Report sent;

(b) Reporting C/CSP Fault Report Sequence Number;

(c) 'A' Party Service Identifier; and

(d) fields to categorise the nature of fault.

5.9 Fault Clearance Report Reconciliation

5.9.1 The Identified C/CSP must retransmit Fault Clearance Reports identified during Fault Clearance Report Reconciliation as not being received by the Reporting C/CSP. Fault Clearance Reports sent between C/CSPs must be reconciled on a monthly basis unless otherwise agreed in a Bilateral Agreement.

5.9.2 Information required for Fault Clearance Report Reconciliation must include the:

(a) date and time Fault Clearance Report was sent;

(b) Reporting C/CSP Fault Report Sequence Number;

(c) 'A' Party Service Identifier;

(d) Fault Clearance Code (as per Appendix B); and

(e) a field to accommodate a Fault Report which has been marked as Void and a section to provide comments as to why the Fault Report was Void.

5.10 Special Investigation

A Special Investigation may be requested but is not limited to, when:

(a) there is a re-occurrence of a fault where an initial Fault Clearance Code has been provided to the Reporting C/CSP; or

(b) a C/CSP reports repeated occurrences of Network Faults relating to any Telecommunications Network component; or

(c) a Network Fault is causing interruption or degradation to service; or

(d) the Reporting C/CSP believes that the fault has not been sufficiently resolved using the fault management procedures.

5.10.1 When there is a re-occurrence of a fault, where an initial Fault Clearance Code has been provided to the Reporting C/CSP, a Special Investigation must be initiated within ten (10) Business Days from the receipt of the initial Fault Clearance Report.

5.10.2 To initiate a Special Investigation, the Reporting C/CSP must provide the following information to the Identified C/CSP. This information must include, but is not limited to, the following:

(a) Reporting C/CSP unique Special Investigation Fault Report Sequence Number;

(b) date and time the Special Investigation was initiated;

(c) 'A' Party Service Identifier;

(d) 'B' Party Service Identifier;

(e) Customer name (where applicable);

(f) Customer contact information (where applicable);

(g) fault description using the:

(i) Customer Fault Symptom Codes (refer to Appendix A) for Customer Faults. For Customer Faults this must also include additional indicators to identify whether the fault is intermittent or frequent, and whether the fault

is experienced by the 'A' Party or 'B' Party. Additional information in the comments field may be included; or

(ii) description of the Network Fault symptoms for Network Faults (refer Appendix C).

(h) reference to the Reporting C/CSP's original Fault Report Sequence Number, and

(i) results of any retesting undertaken by the Customer or any C/CSP.

5.10.3 Special Investigation Fault Reports must not be hand written.

5.10.4 Each Service Identifier or a group of Customer associated Service Identifiers must be reported by the Reporting C/CSP on a separate Special Investigation Fault Report.

5.10.5 The Identified C/CSP must provide to the Reporting C/CSP an acknowledgment of receipt of the Special Investigation Fault Report on the day the report is received. This acknowledgment must contain the Identified C/CSP's Fault Report Sequence Number and also refer to the Reporting C/CSP's Fault Report Sequence Number.

NOTE: Identified C/CS's should endeavour to resolve Special Investigations within three (3) Business Days after receipt of the Special Investigation Fault Report.

5.10.6 If a fault cannot be resolved within three (3) Business Days, the Identified C/CSP must contact the Reporting C/CSP and advise the reasons for the delay and the expected time frames for resolution.

5.10.7 The Identified C/CSP must advise the Reporting C/CSP if there is any subsequent revision to the estimated resolution timeframe.

5.10.8 Following resolution of the Special Investigation, the Identified C/CSP must advise the Reporting C/CSP as soon as possible or no later than the end of the first full Business Day. This advice must be in a typed Special Investigation Fault Clearance Report and must include, but is not limited to, the following:

(a) Identified C/CSP Fault Report Sequence Number;

(b) Reporting C/CSP Fault Report Sequence Number;

(c) response date and time;

(d) response action taken;

(e) Fault Clearance details as set out in Appendix B & C; and

(f) Identified C/CSP's contact details.

6 LOCAL NUMBER PORTABILITY FAULT MANAGEMENT

This Section outlines the fault management procedures to support Local Number Portability.

6.1 LNP Fault Management Procedures

6.1.1 The Gaining C/CSP must initiate the investigation of faults reported on Ported Telephone Numbers during and after Porting.

6.1.2 If a Customer calling a Ported Telephone Number reports a fault to their C/CSP, then that C/CSP must investigate and resolve the fault as per their normal fault management procedures.

6.1.3 Faults reported during Porting must be dealt with in accordance with Clauses 6.4.1 and 6.5.

6.1.4 Faults reported post Porting must be dealt with in accordance with Clause 6.6.

6.1.5 Before a Gaining C/CSP reports a fault to the Identified C/CSP the Gaining C/CSP must conduct the initial steps detailed in Clause 6.2.

NOTE: For the purposes of these procedures, a Cat. A Port and a Modified Cat. A Port is deemed to have been completed by 7pm of the day of Porting when a valid ECA / TECA has been provided by the Gaining C/CSP to the Losing C/CSP / Donor C/CSP, unless otherwise agreed in a Bilateral Agreement.

6.2 Fault Sectionalisation

6.2.1 Standard Testing

6.2.1.1 Before reporting a fault to another C/CSP, the Gaining C/CSP must ensure that the:

(a) activation time for Porting has expired;

(b) Customer Equipment is correctly terminated;

(c) dial tone or an outgoing call capability is available on the Gaining C/CSP's service;

(d) test calls from within the Gaining C/CSP's Telecommunications Network are successful; and

(e) test calls from other C/CSP's Telecommunications Network are unsuccessful.

6.2.1.2 Each C/CSP whilst diagnosing a fault must use sufficient analysis (including testing via different Telecommunications Network and reference to the PLNRs) to identify which C/CSP's Telecommunications Network may be causing the fault. This process is referred to as Sectionalising the fault.

6.2.1.3 After the Gaining C/CSP has Sectionalised the fault it must then direct the Fault Report to the now Identified C/CSP in the first instance.

6.2.2 Additional Tests for Complex Ports

6.2.2.1 In the case of a Cat. C Port, the Gaining C/CSP must conduct the tests described in Clauses 6.2.1.1 (b) to (e). However in the case of tests described in Clauses 6.2.1.1 (d) and (e) the Gaining C/CSP does not need to test all Telephone Numbers if there are more than 20 Telephone Numbers associated with a service which are in a sequential number range. In the case where there are more than 20 sequential numbers, the Gaining C/CSP must apply tests in Clauses 6.2.1.1 (d) and (e) for the following Telephone Numbers:

(a) the first Telephone Number in the range;

(b) the last Telephone Number in the range;

(c) a selection of Telephone Numbers in the range representing an even spread of the range, such that five Telephone Numbers or 3% of the range (whichever is greater) are tested, ensuring that testing includes a minimum of three Telephone Numbers in each 100 number block.

6.2.2.2 When the Gaining C/CSP lodges a fault relating to a number range, the first number of the number range must be recorded as the 'A' number and a statement may be included in the comments outlining the number range that is believed to be affected.

6.3 Customer Fault Symptom Codes

6.3.1 The following Customer Fault Symptom Codes must be used by the Reporting C/CSP to indicate that the problem is a LNP problem.

PRH LNP problem During Porting Fault.

POR LNP problem Post Porting Fault.

6.4 Fault Reporting

6.4.1 During Porting Fault

6.4.1.1 Each participating C/CSP must maintain a nominated telephone line ("Hotline") at its nominated Fault Reporting Centre that must be used by participating C/CSPs for the direct reporting of faults occurring during Porting and within Hotline Hours of Operation.

6.4.2 Post Porting Fault

6.4.2.1 Post Porting Faults must be reported using existing fault reporting methods as defined in Clause 5.4 of the Code.

6.5 Response during Porting

6.5.1 During Porting Fault Cat. A, Modified Cat. A and Cat. D

If the Gaining C/CSP becomes aware of a During Porting Fault the Gaining C/CSP may call the Losing C/CSP/ Donor C/CSP's Hotline to report the fault after the Gaining C/CSP has completed the tests described in Clause 6.2.

If the Losing C/CSP/ Donor C/CSP receives a call from the Gaining C/CSP on its Hotline it may maintain contact with the Gaining C/CSP, while its FRC checks the validity of the Port request associated with the fault identified by the Gaining C/CSP.

(a) If the Port request is invalid or a Completion Advice has not been sent then:

(i) The fault must be classified as Records Discrepancy (RDC); and

(ii) The call may be voice switched to the Losing C/CSP/Donor C/CSP LNP provisioning centre for resolution.

(b) If the Port request is valid, Re-direction Tests must be initiated by the Losing C/CSP/ Donor C/CSP. The Gaining C/CSP's staff member may either hold for the results of the Re-direction Tests or arrange for the Losing C/CSP to call back with the results within four hours.

(c) If Re-direction Tests do not identify the existence of a fault then the Losing C/CSP/Donor C/CSP must:

(i) advise Gaining C/CSP accordingly and the call concluded; and

(ii) record the fault as RWT in the Fault Clearance Report.

(d) If Re-direction Tests identify the existence of a fault, then the Losing C/CSP/Donor C/CSP must:

(i) advise the Gaining C/CSP as soon as possible of the fault;

(ii) rectify the fault

A. within four hours if it is a fault that can be rectified by a change in Customer data; or

B. as soon as possible if it is any other type of fault determined at this time; and

(iii) report clearance details, using the Clearance Code of XTRS, back to the Gaining C/CSP by fax, unless

otherwise agreed in a Bilateral Agreement, as soon as possible and must add details to the next LNP Fault Clearance Report.

6.5.2 During Porting Fault Cat. C

(a) During Standard Hours of Operation and subject to Clauses 6.5.2 (h) and (i), from the time that the Port has commenced, the Gaining C/CSP has four (4) hours, unless otherwise agreed in a Bilateral Agreement, to test whether the Port has been successfully completed.

(b) If, during the Port, it is identified that there is a problem with the Losing C/CSP / Donor C/CSP Port activities (subject to testing described in Clause 6.2) then the Gaining C/CSP must lodge a During Porting Fault, by the agreed method, with the nominated contact.

(c) The Losing C/CSP/ Donor C/CSP must respond and advise on the progress of fault rectification to the Gaining C/CSPs nominated contact within two (2) hours of receiving the fault notification.

(d) When notification of a fault is received, the Losing C/CSP / Donor C/CSP must record the fault and determine if the fault exists in its Telecommunications Network. If the Losing C/CSP / Donor C/CSP establishes that the fault does not exist in its Telecommunications Network, the Losing C/CSP / Donor C/CSP must advise the Gaining C/CSP as soon as practicable.

(e) If investigation by the Losing C/CSP / Donor C/CSP identifies the existence of a fault, the Losing C/CSP / Donor C/CSP must advise the Gaining C/CSP of the estimated timeframe for resolution. If this estimated timeframe is acceptable to the Gaining C/CSP, the Losing C/CSP / Donor C/CSP must commence fault resolution activities and must take suitable action to ensure that the fault is resolved as soon as practicable. The Port is considered complete when both the Gaining C/CSP and the Losing C/CSP / Donor C/CSP agree that the Port has been successful.

(f) If the estimated timeframe for resolution is not acceptable to the Gaining C/CSP based on the Customer's requirements, or the fault cannot be resolved, the Gaining C/CSP may initiate an Emergency Return subject to Emergency Return requirements.

(g) When a During Porting Fault is lodged, the Emergency Return Request Period extends for four (4) hours from the time that the initial response on the During Porting Fault is received by the Gaining C/CSP. If the Emergency Return Request Period extends beyond Standard Hours of Operation it must be subject to the conditions in Clauses 6.5.2 (h & i).

(h) A C/CSP may enter into Bilateral Agreements covering fault management or the continuation of fault management outside Standard Hours of Operation.

(i) Subject to Clause 6.5.2(j), C/CSPs must offer fault management, or the continuation of fault management, outside Standard Hours of Operation if requested to by another C/CSP.

(j) A C/CSP is not obliged to offer fault management, or the continuation of fault management, outside Standard Hours of Operation unless a Bilateral Agreement is in place between the participating C/CSPs that provides the terms and conditions for fault management or continuation of fault management, outside Standard Hours of Operation.

NOTE: The offer of fault management, or the continuation of fault management, outside Standard Hours of Operation is subject to the provisions of section 462 of the Act. A simple request to a C/CSP to provide fault management other than during Standard Hours of Operation is not a sufficient criteria for the provision of fault management outside Standard Hours of Operation. A Bilateral Agreement must be in place before a C/CSP is required to provide fault management or the continuation of fault management outside Standard Hours of Operation.

6.6 Response Post Porting

6.6.1 If the Gaining C/CSP becomes aware of a fault after Porting or Give Back where the Customer is not receiving calls from one or more Telecommunications Networks and it is particular to that Customer (i.e., not a Network Fault), the Gaining C/CSP must complete the tests described in Clause 6.2 and send a Fault Report by fax, unless otherwise agreed in a Bilateral Agreement, to the Identified C/CSP's nominated FRC.

6.6.2 When a Fault Report is received by the Identified C/CSP's nominated FRC staff, they must:

(a) record the fault and

(b) establish whether the Fault Report is valid or not, (ie because the fault has already been reported or because the Telephone Number to which the report relates does not exist or it is not a Ported Telephone Number); then,

(i) if the Fault Report is valid, Re-direction Tests must be initiated by the Identified C/CSP; or

(ii) if it is not a valid Fault Report then the fault must be recorded as Void in the LNP Fault Clearance Report.

6.6.3 Where Re-direction Tests identify the existence of a fault (i.e. calls are not terminating properly on the Gaining C/CSP's Telecommunications Network), then the Identified C/CSP must:

(a) Investigate the fault;

(b) rectify the fault by the end of the first full Business Day after receipt of the Fault Report from the Gaining C/CSP; and

(c) record the appropriate clearance details, including the clearance code of XTRS, in the next LNP Fault Clearance Report, and send by fax, unless otherwise agreed in a Bilateral Agreement, to the Gaining C/CSPs nominated representative.

6.6.4 If Re-direction Tests do not identify the existence of a fault, the Identified C/CSP must:

(a) advise the Gaining C/CSP by fax, unless otherwise agreed in a Bilateral Agreement as soon as possible or no later than by the end of the first full Business Day; and

(b) record the fault as RWT in the LNP Fault Clearance Report.

The Gaining C/CSP may then raise a Special Investigation or a Network Fault if it believes that a fault still exists.

6.6.5 All non-Network Faults must be rectified within the timeframes required in the Code after receipt of the Fault Report by the Identified C/CSP. Advice that a fault has been rectified must be provided to the Gaining C/CSP's nominated FRC by the Identified C/CSP in the LNP Fault Clearance Report.

6.7 LNP Reporting

6.7.1 Each C/CSP must provide to the other C/CSP by 10am on each Business Day, unless otherwise agreed in a Bilateral Agreement, an LNP Fault Clearance Report, which must include clearances for all Porting faults, reported on the previous Business Day.

6.7.2 The LNP Fault Clearance Report must include all reported Porting faults, including those that were cleared or classified as Void, since and including the last Business Day.

6.7.3 Where a fault is classified as Void the reason why it was Void must also be included.

6.7.4 If an LNP Fault Clearance Report is not received by the Gaining C/CSP by the specified time, the Gaining C/CSP must notify the Identified C/CSP who must transmit or re-transmit the report as required.

6.7.5 An LNP Fault Clearance Report must be provided by fax unless otherwise agreed in a Bilateral Agreement.

6.8 Guide to LNP Fault Management Timetable

The following table summarises the service levels that apply to fault resolution as specified in Clauses 6.5, 6.6, and 6.9.

Event	Service Level
Cat. A, Modified Cat. A, and Cat. D; resolution of During Porting Faults	On the initial phone call or no longer than four (4) hours
Time for the Gaining C/CSP to test that a Cat. C Port has been successfully completed.	Four (4) hours from the commencement of the Port but before 5pm
Time for the Losing C/CSP /Donor C/CSP to respond to a During Porting Fault for Cat. C Port	Two (2) hours
Post Porting Faults	End of the first full Business Day
Resolution of Special Investigations	Three (3) Business Days

6.9 Special Investigation

The Gaining C/CSP may request the Identified C/CSP to undertake a Special Investigation when a further or more detailed investigation into a reported fault is required. For complete procedures for Special Investigations refer to Clause 5.10.

7 MOBILE NUMBER PORTABILITY FAULT MANAGEMENT

This Section outlines the fault management procedures to support Mobile Number Portability.

7.1 MNP Fault Management Procedures

7.1.1 During Porting the Gaining CSP must initiate the investigation of faults reported on Ported MSNs.

7.1.2 Post Porting the Recipient CSP must initiate the investigation of faults reported on Ported MSNs.

7.1.3 If a Customer calling a Ported MSN reports a fault to their CSP, then that CSP may investigate and resolve the fault as per their normal fault management procedures.

7.1.4 For the purpose of the Code, a Port is deemed to have been completed when all BPCN/BTTN/BGBN Completion Advices have been received by the Gaining CSP.

7.1.5 During Porting Faults (MNP) must be dealt with, in accordance with Clause 7.5.

7.1.6 Post Porting Faults (MNP) must be dealt with in accordance with Clause 7.6.

7.1.7 Before a Gaining MC reports a fault to a Carrier, the Gaining MC must conduct the initial steps detailed in Clause 7.2.

7.2 Fault Sectionalisation

7.2.1 If a C/CSP identifies that there are difficulties in receiving calls for a Ported MSN, the following steps must be carried out by the C/CSP before reporting the fault to the Identified C/CSP.

(a) The handset has been configured correctly (e.g. using correct SIM card or CDMA handset programming completed);

(b) Test calls are made from other Carriers Telecommunications Network to determine any originating Carrier that is not successfully terminating calls to the Ported MSN. Further test calls from the Gaining MC's own Mobile and fixed (if applicable) Telecommunications Network are made to ensure that the fault is not occurring as a result of the Gaining MC's Mobile or fixed Telecommunications Network; and

(c) Confirm the Porting status of the MSN within the reporting party's systems to confirm it has been subject to Porting.

7.2.2 If the Gaining MC identifies that no calls are being received from any other Carrier then the Gaining MC must recheck the tests in Clause 7.2.1 above.

7.3 Customer Fault Symptom Codes

The following Customer Fault Symptom Codes must be used by MCs to indicate that the problem is a MNP problem:

PRH Port problem during Porting

POR Port problem post Porting

7.4 Fault Reporting

7.4.1 During Porting Fault

(a) Each participating C/CSP must maintain a nominated telephone line ("Hotline") at its nominated Fault Reporting Centre that must be used by participating C/CSPs for the direct reporting of faults occurring during Porting and within Standard Hours of Operation.

(b) During Porting Faults must be sent to the nominated reporting centre during Standard Hours of Operation.

7.4.2 Post Porting Fault

(a) Faults that occur after the end of the first full Business Day (MNP) after completion of the Port must be reported using methods as defined in Clause 7.6.

(b) The fault must be reported to the nominated reporting centre of the Identified C/CSP.

(c) Carriers may put in place Bilateral Agreements such that Post Porting Faults are treated as Network Faults.

7.5 Response During Porting

7.5.1 If the Gaining MC becomes aware of a fault after the Port has been completed, it must complete the tests described in Clause 7.2. If these tests identify that a C/CSP may not be delivering A Party calls, then it may call the Identified C/CSP's nominated contact to report the fault.

7.5.2 An Identified C/CSP receiving such a call to report a fault from the Gaining MC may maintain contact with the Gaining MC, while its reporting centre checks the validity of the Port request associated with the fault identified by the Gaining MC.

7.5.3 If the Port has not been completed or the BPCN/BTTN/BGBN have not been received, then the Identified C/CSP must refer the Gaining MC to the appropriate centre and the fault must be cleared with the appropriate Fault Clearance Code (refer Clause 7.7.1 and the "Missing and Delayed Transaction process" in the *Mobile Number Portability* Operations Manual (G579:2015).

7.5.4 If the Port has been completed and there is a routing problem within the first full Business Day (MNP) of the Port, then the

Identified C/CSP must confirm that the fault is valid (preferably during the same phone call).

7.5.5 The Identified C/CSP must resolve the fault and clear back to the Gaining MC with the appropriate Fault Clearance Code (refer Clause 7.7.1) within four hours.

7.5.6 If the Port has been completed and there is no routing problem, then the Identified C/CSP must confirm that there is no fault by providing the appropriate Fault Clearance Code to the Gaining MC (refer Clause 7.7.1) preferably during the same phone call but no longer than four hours from the receipt of the fault.

NOTE: In reaching its conclusion that there is no routing problem the Identified C/CSP should have at least based its analysis on Originating Routing Tests.

7.6 Response Post Porting

7.6.1 If the Recipient MC becomes aware of a fault after Porting (but before a Give Back) where the Customer is not receiving calls from one or more Telecommunications Network the Recipient MC must:

(a) complete the tests outlined in Clause 7.2.1; and

(b) send a Post Porting Fault Report to the Identified C/CSP.

7.6.2 When a Post Porting Fault Report is received by the Identified C/CSP, their nominated reporting centre must:

(a) record the fault; and

(b) establish whether the Fault Report is valid or not.

7.6.3 If the Identified C/CSP establishes that it is not a valid Fault Report (ie, because the fault has already been reported or because the MSN to which the report relates does not exist or it is not a Ported MSN) then it must:

(a) advise the Recipient MC, by fax, unless otherwise agreed in a Bilateral Agreement, as soon as possible but no longer than by the end of the first full Business Day (MNP); and

(b) the fault must be recorded as Void.

7.6.4 If the Fault Report is valid, the Identified C/CSP must initiate Originating Routing Tests.

7.6.5 If Originating Routing Tests identify the existence of an MNP fault (i.e. calls on their Telecommunications Network are not terminating properly on the Gaining MC's Telecommunications Network), then the Identified C/CSP must:

(a) rectify the fault by the end of the first full Business Day (MNP) after receipt of the Fault Report by that Carrier;

(b) record the fault with the appropriate Fault Clearance Code (refer Clause 7.7.1); and

(c) following rectification, report clearance details back to the Recipient MC by fax unless otherwise agreed in a Bilateral Agreement.

7.6.6 If Originating Routing Tests do not identify the existence of an MNP fault, then the Identified C/CSP must:

(a) advise the Recipient MC of this, by fax, unless otherwise agreed in a Bilateral Agreement, as soon as possible but no later than by the end of the first full Business Day (MNP); and

(b) record the fault with the appropriate Fault Clearance Code (refer Clause 7.7.1).

7.7 Customer Fault Clearance Codes

7.7.1 The following Fault Clearance Codes must be used by the Carriers to indicate the type of fault found, unless otherwise agreed in a Bilateral Agreement.

Routing Problem	XTRS
Non Routing Problem	NFF
Invalid Fault	VOID
Port Not Complete	RDC

7.8 Guide to MNP Customer Fault Management Timetable

The following table summarises the service levels that apply to fault resolution as specified in Clauses 7.5, 7.6 and 7.9.

Event	Service Level
During Porting Faults	On the initial phone call or no longer than four (4) hours
Post Porting Faults	End of first full Business Day (MNP)
Resolution of Special Investigations	Three (3) Business Days
NOTE: All service levels may be improved by Bilateral Agreement.	

7.9 Special Investigation

The Gaining MC may request the Identified C/CSP to undertake a Special Investigation when a further or more detailed investigation into a reported fault is required. For the complete procedures for Special Investigation refer to Section 5.10.

8 FREEPHONE AND LOCAL RATE NUMBER PORTABILITY

This Section outlines the fault management procedures to support Freephone and Local Rate Number Portability.

8.1 Freephone and Local Rate Number Portability Fault Management procedures

8.1.1 If a Customer calling a Ported Freephone Number and/or Local Rate Number reports a fault to their C/CSP, then that C/CSP must investigate and resolve the fault as per their normal fault management procedures.

8.1.2 Faults reported during Porting must be dealt with, in accordance with Clause 8.4.1.

NOTE: For the purposes of these procedures, Activation of a Port is deemed to have been completed on the expiry of the time periods set out in the Business Rules for the Management of Portable Freephone and Local Rate Numbers as amended from time to time.

8.2 Fault Sectionalisation

8.2.1 If during Porting testing of a Freephone Number and/or Local Rate Number identifies there is a difficulty in receiving calls on this service, the Gaining C/CSP before reporting the fault to any other C/CSP, must check that:

(a) the agreed maximum Activation time for Porting has expired as per the Business Rules for the Management of Portable Freephone and Local Rate Numbers;

(b) calls to that Ported service are being correctly terminated on the appropriate 'C' service; and

(c) appropriate test calls are made from other C/CSPs' Telecommunications Network to determine if any C/CSP is not originating calls to the Ported service, including the Gaining Carrier's own Telecommunications Network.

8.3 Customer Fault Symptom Codes

8.3.1 The following Customer Fault Symptom Code must be used by C/CSPs to indicate that the problem is a during Porting problem:

PRH Port problem during Porting.

8.4 Fault Reporting

8.4.1 Each participating C/CSP must maintain a nominated telephone line ("Hotline") at its nominated Fault Reporting Centre that must be used by participating C/CSPs for the direct reporting of faults occurring during Porting and within Standard Hours of Operation.

8.5 Response

8.5.1 If the Gaining C/CSP becomes aware of a fault during Porting, it must complete the Sectionalisation tests described in Clause 8.2.

8.5.2 Where the tests completed by the Gaining C/CSP in accordance with Clause 8.5.1 identifies the C/CSP not delivering 'A' party calls correctly, the Gaining C/CSP may call the Identified C/CSP's Hotline to report the fault.

8.5.3 If the tests indicate that no calls are being received from any other C/CSPs, the Gaining C/CSP must recheck the validity of the Port request and the transmission of the correct Completion Advice. Note: this is another check of the results of Clause 8.2.

8.5.4 If the Identified C/CSP receives a call from the Gaining C/CSP on its Hotline it must maintain contact with the Gaining C/CSP, while its Fault Reporting Centre checks the validity of the Port request associated with the fault identified by the Gaining C/CSP.

8.5.5 If the Port request is invalid or the Completion Advice has not been received, then:

(a) the Identified C/CSP and the Gaining C/CSP must work together to solve the records discrepancy, and

(b) the fault must be classified as Records Discrepancy (RDC).

8.5.6 If the Port request is valid, Originating Routing Tests must be initiated by the Identified C/CSP and the Gaining C/CSP advised of the results of the tests within four hours of the tests being commenced.

NOTE: The Gaining C/CSPs staff member may either hold for the results of this test or arrange for the Identified C/CSP to call back with the results as soon as possible.

8.5.7 If Originating Routing Tests do not identify the existence of a fault then the Identified C/CSP must:

(a) advise the Gaining C/CSP accordingly; and

(b) must record the fault as RWT in the Fault Clearance Report.

8.5.8 If Originating Routing Tests identify the existence of a fault, then the Identified C/CSP must:

(a) advise the Gaining C/CSP accordingly;

(b) rectify the fault:

(i) within one (1) hour, if it is a fault caused by the non/wrong interpretation or application of a received Completion Advice; or

(ii) as soon as possible, if it is any other type of fault determined at this time; and

(c) report clearance details, with the Fault Clearance Code of XTRS, back to the Gaining C/CSP by fax, unless otherwise agreed in a Bilateral Agreement, as soon as possible.

8.6 Faults Post Porting

8.6.1 Faults found after a successful Port has been completed must be handled by C/CSPs in accordance with the normal inbound network investigation process for Freephone and Local Rate Numbers. This network investigation process is described in Clause 4.7.

8.7 Network Investigation

A network investigation may comprise (but is not limited to) the following:

- Network dimensioning.
- Network database checks.
- C party line and equipment.

8.7.1 Prior to a C/CSP issuing a network investigation request the C/CSP must:

(a) verify ownership of the FLRN by reference to the INMS or equivalent database; and

(b) verify that calls to the FLRN from their Customers are being correctly offered to the owning C/CSP.

8.7.2 The owning C/CSP, as identified in Clause 8.7.1(a), upon receiving a request for a network investigation from another C/CSP must:

(a) verify that the FLRN has been correctly configured and operating in their Telecommunications Network;

(b) ensure that live traffic is being received correctly from all origins (including their own Customers); and

(c) verify that live traffic is being correctly offered to the C parties associated with the FLRN.

8.7.3 If the tests undertaken by the owning C/CSP in Clause 8.7.2 identifies a fault in its Telecommunications Network, it must resolve the fault as soon as practicable and advise the Reporting C/CSP.

8.7.4 When the owning C/CSP identifies a fault in the connecting of calls to the C party in another Telecommunications Network, it must:

(a) send the fault to the C party's C/CSP;

(b) inform the C/CSP originating the request for network investigation that the fault has been referred to the C party's C/CSP; and

(c) advise the C/CSP that originated the request for the network investigation of the results of the investigation into the C party's Telecommunications Network.

8.8 Guide to Freephone and Local Rate Number Portability Fault Management Timetable.

The following table summarises the service levels that apply to fault resolution as specified in Clauses 8.5.6, 8.5.8 and 8.7.3.

Event	Service Level
Identified C/CSP During Porting Fault investigation	On the initial phone call or no longer than four hours
Rectification of During Porting Fault	One (1) hour
Resolution of Network Investigations	As soon as practicable
Resolution of Special Investigations	Three (3) Business Days

8.9 Special Investigation

8.9.1 The Gaining C/CSP may request the Identified C/CSP to undertake a Special Investigation when a further or more detailed investigation into a reported fault is required. For the complete procedures for Special Investigation refer to Clause 5.10.

9 REFERENCES

Publication	Title
Industry Codes	
C515:2015	Pre-selection Industry Code
C540:2013	Local Number Portability Industry Code (Incorporating Variation No.1/2015)
C570:2009	Mobile Number Portability Industry Code (Incorporating Amendment No.1/2015)
Industry Guidelines	
	Business Rules for the Management of Portable Freephone & Local Rate Numbers
G579: 2015	Mobile Number Portability Operations Manual Industry Guideline
Industry Documents	
Telecommunications Act 1997 (Cth)	
Telecommunications (Consumer Protection & Service Standards) Act 1999 (Cth)	
Telecommunications Numbering Plan 2015	
Privacy Act 1988 (Cth), including the Australian Privacy Principles	
Competition and Consumer Act 2010 (Cth)	

APPENDIX

A CUSTOMER FAULT SYMPTOM CODES (NORMATIVE)

Symptom Code	Description	Comments Field
BAQ	Barred Access Query – Customer believes they should/should not be able to use a facility or service.	Description of fault and facility, verify access. Includes International Access problems.
BWF	Busy When Free – 'A' Party receives an engaged tone or 'B' Party is idle.	Time, date and frequency of problem experienced.
CON	Congestion – the Customer receives congestion tone or recorded announcement after dialling.	Number called and time of day.
COS	Cut Off Speaking – call drops out or terminates prematurely.	When, how often.
CPE	Customer unable to report faulty Customer Equipment to their ASD.	Fault details, eg no dial tone.
DTP	Data Transmission Problem – data degradation or loss of the transmission path.	Fault details can include: low level transmission, slow response, high bit error rate.
ECF	Enhanced Call handling Feature – the Customer experiences problems with a service which includes call forwarding, calling number display, calling number display blocking, etc.	Full details of feature affected.
ECO	Echo on line.	Which party hears echo, International destination?
ICC	InterCarrier Switching – switching problem typically at a gateway exchange.	Fault details may include protocol or Frame Relay problems.
ICT	InterCarrier Transmission – degradation or failure of Transmission links between Telecommunications Network.	Fault details.
INT	Interference – from multiple connections, noise, crosstalk, clipping, data corruptions.	Fault details to include time of day, 'B' Party number.

Symptom Code	Description	Comments Field
NOP	No Progress – call fails to progress to completion during setup, without receiving a service tone.	Fault details may include International calls.
PDD	Post Dial Delay – Customer receives an extended delay after dialing and before call completion.	Fault details to include length of delay and calling destination. Time of day.
POR	Post Porting Fault – A-Party call not progressing to B-Party, where A-Party and B-Party with different carriers and B-Party has been involved in Porting activity at some time in the past, including a Return or Give Back.	For LNP, fault details may include the number range if the Ported number was associated with a complex service. Refer to Sections 6, 7 and 8 for fault reporting procedures.
PRH	During Porting Fault – Port activity does not appear to be implemented properly in carrier's Telecommunications Network. Calls not progressing from A-Party to B-Party.	Refer to Sections 6, 7 and 8 for fault reporting procedures.
RNA	Ring No Answer – also called ring outs or permanent did not answer. 'A' Party receives ring tones, but 'B' Party claims ring not received.	Time and date.
RVA	Recorded Voice Announcement – a recording was heard when calling a valid number.	Abbreviation of recording and when received.
VTP	Voice Transmission Problem – voice quality problems can include one way transmission, faint transmission, Clipping Speech. Customer may also be unable to make outgoing calls or receive incoming calls.	Detail problems, verify access.
WCS	Wrong Carrier Switched or selected – Customer complains long distance calls have been carried by the wrong carrier. (12711 RVA indicates line is pre-selected to the wrong C/CSP or caller is billed by the wrong C/CSP.)	12711 results
WNT	Wrong Number Terminating – call terminates on the wrong number.	Full description of call, incoming/outgoing.

APPENDIX

B CUSTOMER FAULT CLEARANCE CODES (NORMATIVE)

CPE – Customer or Customer Equipment

Fault has been found in Customer equipment or caused by Customer error.

ICF - Incompatible Feature

Cause of access problems may have been due to, but not limited to, one of the following:

(a) barring at the Customer Equipment.

(b) Customer is not in a conditioned area for pre-selection/override access.

(c) non-CLI capable exchange line group.

(d) service incapable of accessing another C/CSP's Telecommunications Network.

(e) Customer line/service requiring real time charging information.

NFF - No Fault Found

Based on fault information provided, no technical fault could be found.

Pre-selection and Barring Faults

This group of Fault Clearance Codes relate to a more specific Customer Pre-selection and Barring problem.

RS1 Checks show that pre-selection is correct as per the choice on the Fault Report.

RS2 Checks show that pre-selection is correct to another C/CSP.

RS3 Checks showed that the pre-selection was incorrect. Pre-selection has been changed to the C/CSP choice on the Fault Report.

RS4 Checks show that the pre-selection was incorrect. Pre-selection has been changed to another C/CSP.

RS5 Barring was found and has been removed.

RS6 Barring exists and has been left in place at Customer's request.

RS7 Service does not have barring in place.

RS8 Other (Further details to be provided).

RDC - Records Discrepancy

Records indicate that this Telephone Number or MSN should not be Ported to the Gaining Carrier, ie, the Port is not completed or there is no valid Port request in place.

RWT – Right When Tested

Report analysed by technical staff and based on the information available at the time of analysis, no fault could be found.

VOID

Report analysed by technical staff and the Identified C/CSP reasonably believes it is unable to action the Fault Report based on the information provided.

XOON – No specific technical fault found

Report analysed by technical staff and no specific technical fault could be found. A Network Fault is suspected.

XTRS – A fault in data translations (ie. analysis data)

Cause of reported fault is due to a translation or routing error that has since been rectified.

APPENDIX

C NETWORK FAULTS

C1 Network Fault Categories

Network Faults are broadly classified as follows:

(a) Transmission Faults

Typically such faults will be indicated by equipment alarms or in more complex cases as intermittent transmission errors

(b) Signalling Faults

Signalling Faults are those faults affecting the signalling between exchanges. They are typically more complex in nature, have a greater impact and therefore require priority attention.

(c) General Network Faults

Network Faults are those that affect calls between C/CSPs' Telecommunications Networks – symptoms include:

- bad transmission;
- no progress;
- wrong numbers
- Recorded Voice Announcement;
- cutoffs;
- congestion;
- inoperative or impaired circuits;
- busy when free;
- ring outs (or ring no answer or permanent did not answer);
- echo;
- cross talk; or
- faint transmission.

The prime indicators of these Network Faults may be:

- Customer Fault Reports;
- equipment alarms;
- data from Telecommunications Network monitoring equipment; or
- fault reports from equipment maintenance staff.

C2 Network Fault Clearance Codes

Location	Part Of Network	Action	Cause
e.g			
O	**T**	**P**	**H**

LOCATION

T Fault found in own Telecommunications Network

O Fault found in another Telecommunications Network

U Unknown: Cleared while testing or none of the above codes apply

X Fault found in Reporting C/CSP's Telecommunications Network

PART OF NETWORK

S Signalling

C Customer Equipment

P Power

E Switching/Exchange

T Transmission

U Unknown

Z Uncategorised

ACTION

P Patched/Restored

C Educate/instruct Customer

N No corrective action needed

O Passed/referred back to other carrier

R Repaired

T cleared for Trending

Z Uncategorised clearance action (action not covered by above codes).

Full clearance comments must be included in comments field.

CAUSE

H Hardware failure

C Customer/Private Contractor

G Congestion

W Natural causes

N No fault in evidence/No apparent problem

P Power – Commercial supplier or other

R Planned Outages (E.g. Routine Maintenance, Rearrangements)

S Software error

A Activities other than planned outages (E.g. Construction, Maintenance, Accidents)

U Unknown, or fault observed and came clear while testing

D Data Corruption/reset of data equipment

Z Uncategorised clearance cause (cause not covered by above codes)

APPENDIX

D SLA'S FOR CUSTOMER AND NETWORK FAULT MANAGEMENT CODE

Item	SLA	Reference	Notes
Customer Fault rectification	End of the next Business Day	**5.7.1**	General Section
Network Fault rectification	Soon as practicable	**5.7.2**	General Section
Fault Clearance Report	No later than next Business Day	**5.7.4**	General Section
Fault Report Reconciliation	Monthly basis	**5.8**	General Section
Fault Clearance Report Reconciliation	Monthly basis	**5.9**	General Section
Special Investigation initiation on a re-occurring fault	< Ten (10) Business Days from initial fault clearance	**5.10.1**	General Section
Special Investigation resolution	Three (3) Business Days from receipt	**5.10.5**	General Section
Special Investigation Fault Clearance Report	< End of first full Business Day after rectification	**5.10.8**	General Section
Cat. A, Cat. D During Porting Fault rectification for LNP	< Four (4) hours from fault notification	**6.5**	Local Number Portability Section
Cat. C During Porting response time by Losing C/CSP for LNP	Two (2) hours	**6.5.2 (c)**	Local Number Portability Section
Post Porting Fault rectification for LNP	By end of the first full Business Day	**6.6.3**	Local Number Portability Section
During Porting Fault rectification for MNP	Four (4) hours	**7.5.5**	Mobile Number Portability Section
Post Porting Fault rectification for MNP	By end of the first full Business Day	**7.6.5**	Mobile Number Portability Sections

Identified C/CSP During Porting Fault investigation for FLRNP	On the initial phone call or no longer than four hours	**8.5.6**	FLRNP Section
During Porting Fault rectification for FLRNP	One (1) hour	**8.5.8**	FLRNP Section
Resolution of Network Investigations for FLRNP	As soon as practicable	**8.7.3**	FLRNP Section

PARTICIPANTS

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

Organisation	Representative
Foxtel	Chimmy de Silva
iiNet	Leanne O'Donnell
Optus	Xanthe Corbett-Jones
Telstra	Craig McAinsh
Vodafone Hutchison Australia	Alexander R. Osborne

The Working Committee was chaired by Alexander R. Osborne. Visu Thangavelu of Communications Alliance 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.

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COMMUNICATIONS
ALLIANCE LTD

Level 12
75 Miller Street
North Sydney
NSW 2060 Australia

Correspondence
PO Box 444
Milsons Point
NSW 1565

T 61 2 9959 9111
F 61 2 9954 6136
E info@commsalliance.com.au
www.commsalliance.com.au
ABN 56 078 026 507