GENERAL NOTICE

NOTICE 1322 OF 2005

I C A·S A

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

NOTICE OF INTENTION TO MAKE REGULATIONS IN RESPECT OF THE ORDERING SYSTEM SPECIFICATION FOR MOBILE NUMBER PORTABILITY

The Independent Communications Authority of South Africa ("the Authority) hereby gives notice that it intends making the following regulations in terms of section 96 (1) (4) of the Telecommunications Act, (Act No 103 of 1996).

This draft Mobile Number Portability Ordering System Specification is made pursuant to Government Notice No R 964 under Regulation Gazette No 28091 of 30 September 2005 specifically regulation 4 (4) and 4 (5). The Authority is obliged under regulation 4 (8) to publish the ordering system specification in a government gazette to afford interested parties an opportunity to comment thereon.

Interested persons are hereby invited to submit written comments or written representations with regard to the proposed regulations, to be received by no later **than 16h00 on** 27 December 2005 by e-mail, post, hand delivery or facsimile transmission for the attention of Mr Harrish Kasseepursad, Independent Communications Authority of South Africa, Private Bag X10002, Marlboro, 2063; Block C, Pin Mill Farm, 164 Katherine Street, Sandton; telephone (011) 321 8311, Facsimile (011) 321 8583 or e-mail: hkasseepursad@icasa.org.za, / lxaba@icasa.org.za

PARIS MASHILE
CHAIRPERSON

Mobile Number Portability

Ordering System Specification

1   Introduction

Mobile Number Portability (MNP) enables Subscribers of one mobile network operator (MNO) to become Subscribers of another **MNO** without having to forego their MSISDN.

The purpose of this document is to:

- Define the agreed industry process for **MNP.**
- Specify **the** procedures by which a Recipient Service Provider (SP), a Recipient MNO, a Donor MNO, and a Donor SP exchange information between each other in order to provide **MNP** to a subscriber, including the information to be sent, the format of the information, the means of communication, the times when communications may be sent, the time limits for responses and the handling of error conditions.

The basis of this document is the **ICASA** Regulation on **MNP** [Document No. **28091, 30** September 2005, Vol. 483]. This document does _not_ address call routing issues save for matters directly relating to use of the **CRDB.**

Unless otherwise specified in this document the normal commercial and business rules of the MNO OF SP will apply to the Subscriber connection and disconnection.

The intended readership of this document is **ICASA,** MNOs, fixed network operators, network operators that mute calls to **MNOs, SPs,** parties connected **to** the Central Reference Database **(CRDB)** and other interested parties.

MNP applies to MSISDN ranges that have been or will be allocated for use by MNOs and SPs and includes the following **MSISDN** ranges -

072,073,076,082,083 and **084**

MSISDNs within those ranges referred to above that are used for:

1. On-net short codes
2. Community Service Telephones
3. Voicemail **message** retrieval by the subscriber to whom the message is sent
4. MSISDNs that **are** not reachable from outside the network that serves the MSISDNs

are excluded from the scope of MNP.

A Subscriber will initiate a port by contacting the Recipient The Recipient will obtain authorisation from the Donor. Having obtained authorisation, the Recipient will instruct the Donor of the desired Porting Time. All communication between the Recipient and the Donor passes through the CRDB. The CRDB will inform all other MNOs and connected parties of the scheduled port.

The CRDB has three functions in the context of MNP namely:
1. To act as an interface between the Recipient and Donor during the porting process i.e. all Messages between the Recipient and Donor (as well as Messages to the other Operators and connected parties) will be passed through, or sent by, the CRDB.
2. To provide a single database of all ported MSISDNs and the MNO to which the ported MSISDNs belong.
3. To consolidate porting information and forward such information to ICASA as required by Regulation. Such information shall also be made available to MNOs for auditing purposes.

The CRDB is <u>only</u> an administration database and is <u>not</u> a routing database. In order to update routing tables, the MNOs will each keep a local copy of the CRDB for call routing purposes. All originating calls on a MNO will be routed directly to the MNO serving the called Subscriber, by first interrogating its local copy of the CRDB / routing database. This method is referred to as Direct Routing or All Call Query (ACQ). Calls received from international destinations, or from network operators excluded from MNP, may be routed to the Block Operator of that MSISDN. This method is referred to as Indirect Routing or Onward Routing. The Block Operator will then be responsible for routing the call to the MNO currently serving the called Subscriber.

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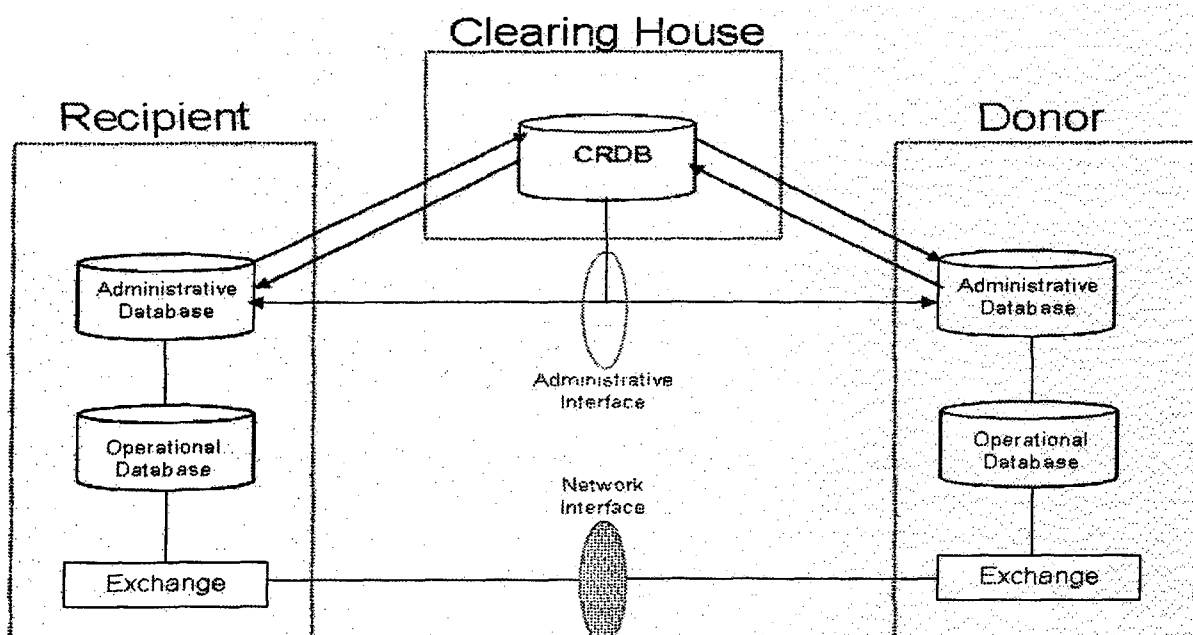
2   General Information

2.1   The Processes

1. Communication between any party and the CRDB to effect Port Request and Activation, Port Time Change, Port Cancellation and Port Reversal processes can only be handled at times agreed between the SPs and MNOs but shall include at least the following times:
   a. Monday to Friday   9:00 – 17:00
   b. Saturday   9:00 – 13:00
2. The **Port** Request and Activation, Port Time Change, Port Cancellation and Port Reversal processes will not be handled on the following days:
   a. Sundays
   b. Public Holidays

3. Activation and deactivation on the network and updating of routing tables shall only take place during Network Synchronisation Time (22h30 – 23h30) on all days except Public Holidays.

4. There are no limitations on a Subscriber requesting any MNP process in any outlet outside of these hours. However, the communication between any party and the CRDB to engage in Port Request and Activation, Port Time Change, Port Cancellation and Port Reversal processes can only be invoked and completed during the times specified above.

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2.1.1   Port Request and Activation

1. Subscribers are not allowed to port again within 2 months of a successful port, measured from the Porting Time. After the two months have lapsed, a new port can be requested and a new Port Request and Activation process can be invoked.

2. Subscribers who currently have a certain status with the Donor, i.e. Prepaid or Postpaid, and want to change their status on the Recipient MNO have the option to request the activation by the Recipient to be changed. The activation by the Recipient is treated as a new activation. The information used to request the port must indicate the current status at the Donor. This information is used to validate the Subscriber by the Donor.

3. It shall be possible to reject a single MSISDN in a Port Request message which contains more than one MSISDN.

2.1.2   Porting Time Change

1. Once a Port order has been agreed, the Porting Time can only be changed if there is agreement between the Recipient and Donor parties and the Subscriber. This process is

most likely to be requested by the Donor or Recipient where the requested Porting Time cannot be honoured.

2. There are certain time limitations on changing the Porting Time. These are discussed under the Porting Time Change process.

2.1.3 Port Cancellation

1. Once a Port order has been agreed the Port can only be cancelled if there is agreement between the Recipient and Donor Parties and the Subscriber.

2. There are certain time limitations on cancelling the Port. These are discussed under the Port Cancellation process.

2.1.4 Port Reversal

1. In certain cases Ports can be reversed. These would normally be when Ports happened maliciously, unlawfully, or where the wrong **MSISDNs** have been **ported** as a result of data entry errors.

2. Once a Port has happened it can only be reversed if there is agreement between the Recipient, the Donor Parties and the Subscriber.

3. There are certain time limitations on reversing the Port. These are discussed under the Port Reversal process.

2.1.5 Return to Block Operator

1. When a MSISDN is no longer used on a network, the last Recipient Network must return the MSISDN to the Block Operator.

2. The last Recipient Operator's internal business rules are applicable to decide whether the MSISDN is no longer used on the network and such rules may differ between **MNOs.**

3. The Block Operator shall quarantine the MSISDN for at least **3** months from the date of receipt of the MSISDN from the last Recipient Network.

2.1.6 CRDB Download

1. In the event that a connected party requires a complete download or to synchronise a corrupt local database, this process will be used.

2. The download information shall only be used in the context of Number Portability.

2.1.7 Emergency Notification

1. Where either a Recipient or Donor is experiencing technical problems during the Port Request and Activation or the Port Reversal process, such party may invoke the Emergency Notification Process.

2.1.8   Escalations

1. Error handting and fault management of all the MNP processes are documented under Notification and Escalation Procedures attached hereto as Annexure A.

2.2   Subscriber Options / Responsibilities

2.2.1   Placing the Port Request

1. A Subscriber wishing to port must lodge the request to port with the Recipient. The Recipient can be any Service Provider, a Network Operator or any outlet or any other point of contact with such Service Provider or Network Operator.

2. Porting can be requested to take place as soon as possible or at a date not later than 30 days after the Port Request.

3. Once a Subscriber has ported to the Recipient, the Subscriber may only request a subsequent port two months after the Porting Time.

4. The Recipient must advise the Subscriber of the terms and conditions applicable to the port and the new services provided by the Recipient. These will be stipulated on the application form to be completed at the Recipient. The porting terms and conditions are stipulated in the Consumer Guidelines and the Sales and Marketing Code of Practice.

5. The Recipient may charge the Subscriber for a successful port and'the Subscriber may be liable to the Recipient for such charge.

6. A porting does not cancel an existing contract and the Subscriber may be liable for any outstanding contract amounts owed to the Donor.

2.2.2   Service around Porting Time

1. The Subscriber will always be able to make and receive calls. The Subscriber will be active on the Recipient Network before being deactivated on the Donor Network.

2. Activation and deactivation of subscribers on the networks shall only take place during Network Synchronisation Time.

3. Subscribers will be liable for any usage costs on either network prior to and after the Porting Time.

4. Due to the nature of porting, certain services (e.g. VMS messages, SMS messages, etc.) may be Lost

2.3 **Recipient's Obligations**

1. The Recipient shall not issue a Port Request on behalf of a Subscriber unless it has received a request from the Subscriber. The Recipient must be in a position to provide proof of such Port Request. The Recipient may issue a Port Request on behalf of the Subscriber without consent being in writing, however to issue a Port Notification for a postpaid porting, the Recipient must be able to provide a written request / Power of Attorney signed by the Subscriber. No consent in writing is required to issue a Pori Notification for a prepaid port.

2. The Recipient will endeavour to ensure that the Subscriber requesting the port is the legitimate owner or their authorised representative. This shall be done by at least performing a CLI validation for a Prepaid Subscriber and an Account Number validation for a Postpaid Subscriber prior to issuing a porting request.

3. If the Subscriber is a Corporate Entity the Recipient shall ensure that the Corporate Entity has signed the consent form. The signed consent must be available on request.

4. The name and address of the Subscriber is not allowed to be passed between the Recipient and the Donor, i.e. this information cannot be used to validate a Subscriber.

5. The Recipient shall inform a Subscriber wishing to port of the terms and conditions. These will include the following:

    a. The Subscriber must collect any messages and information stored by the Donor. These can be lost during the pod process.

    b. Any remaining credit and unused usage allowances is not transferable from the **Donor.**

    c. The Subscriber must also be informed that the Recipient may not support services available from the Donor and certain services may not be available from the Recipient.

    d. The Recipient shall inform the Subscriber that he/she will be liable for any usage costs on either network prior to and after the Porting Time.

6. Should the Port Request be rejected by the Donor, the Recipient shall inform the Subscriber of the reason for the rejection.

7. When service on a ported-in MSISDN is terminated, the last Recipient Operator shall return the number to the Block Operator. Ported-in numbers may not be re-issued to new Subscribers by any MNO other than the Block Operator.

a. The current method to activate a Subscriber between a Service Provider and a Network Operator will still be used to activate a porting Subscriber.

2.4   Donor Obligations

1. The Donor is not allowed to contact the Subscriber requesting a port to engage in winback activities. For clarification please note that the winback period of two months shall commence from the Port Request.

2. Deactivation of a Subscriber may only take place after confirmation is received by the Donor from the Recipient (via the CRDB) that the Subscriber is active on the Recipienf network.

3. A Port Request may be rejected by the Donor only for the reasons listed in the Port Request and Activation process.

4. The Donor may not reject a Port Request because the Subscriber still owes money, nor may the Donor delay the port until the debt is collected, unless the Subscriber is already subject to suspension of outgoing or incoming calls because of failure to pay a bill.

5. The Donor shall not charge a Subscriber when the Subscriber ports their number.

6. The current method to deactivate a Subscriber between a Service Provider and a Network Operator will stili be used to deactivate a porting Subscriber.

2.5   CRDB Obligations

1. All Messages between the Recipient and the Donor shall pass through the CRDB. Such Messages will be validated according to the corresponding CRDB validation rules.

2. Should a Message be invalid, the CRDB returns an error to the sender. The sender will fhen rectify the error and resend the Message for the process to continue.

3. The CRDB keeps a list of all ported numbers across all Mobile Network Operators. This list shall only contain the MSISDN and the MNO currently serving the MSISDN.

4. The CRDB must provide the facility to enable a download of the entire database or a delta from a start date to an end date.

5. The CRDB will be considered as the "master version" of the porting status of a MSISDN.

6. The CRDB must maintain, verify and update the status of each MSISDN during any process.

2.6   Block Operator Obligations

1. The Block Operator shall quarantine the MSISDN for a period of at least 3 months when the MSISDN is returned.

2. A MNO is not allowed to re-issue a MSISDN from another Block Operator to a new Subscriber.

2.7 **Connected Parties Obligations**

1. Each connected party is responsible for maintaining their own subset of information as required, with the information broadcasted by the CRDB.

2. Any downloads from the CRDB must be requested by the connected parties, as and when required, using the CRDB download process.

3 **MNP Processes**

The MNP Processes consist of the following separate processes:

1. Port Request and Activation
2. Port Time Change
3. **Port** Cancellation
4. Port Reversal
5. Return to Block Operator
6. CRDB Download
7. Emergency Notification

The schematic illustrations included in each process detail where the Message starts and ends, i.e. at the Donor or the Recipient. Each process also includes a detailed process description with associated business rules, and escalation procedures.

There are slight differences in the validation procedures, and the content and destination of the Messages within the porting process, when porting a Subscriber who is currently a Prepaid or a Postpaid Subscriber, or a Corporate Entity. These differences do not necessitate separate sub-processes and are dealt with in the process steps.

For a description of how the various sub-processes interlink, refer to section 7 - Overview of the processes and Messages.

3.1   Port Request and Activation Process

3.1.1   General Description

1. The Port Request and Activation Process is invoked when a Subscriber requests to move to another MNO while retaining his/her MSISDN.

2. The Port Request and Activation Process may, where the respective MNO and SPs agree, also be invoked when a Subscriber requests to move to another SP but remain on the same MNO, retaining his/her MSISDN.

3. The Subscriber approaches the Recipient to request a port. The Recipient can be a Service Provider or a Mobile Network Operator.

4. A Port Request can only be sent once a CLI check [Prepaid Subscriber) is done to ensure possession of the MSISDN by the subscriber, or when the Account Number (Post-paid Subscriber) has been obtained from the Subscriber.

5. Should the Recipient not be able to activate a subscriber on the network during Network Synchronisation Time, the Recipient must invoke the Port Time Change process.

3.1.2   Schematic illustration
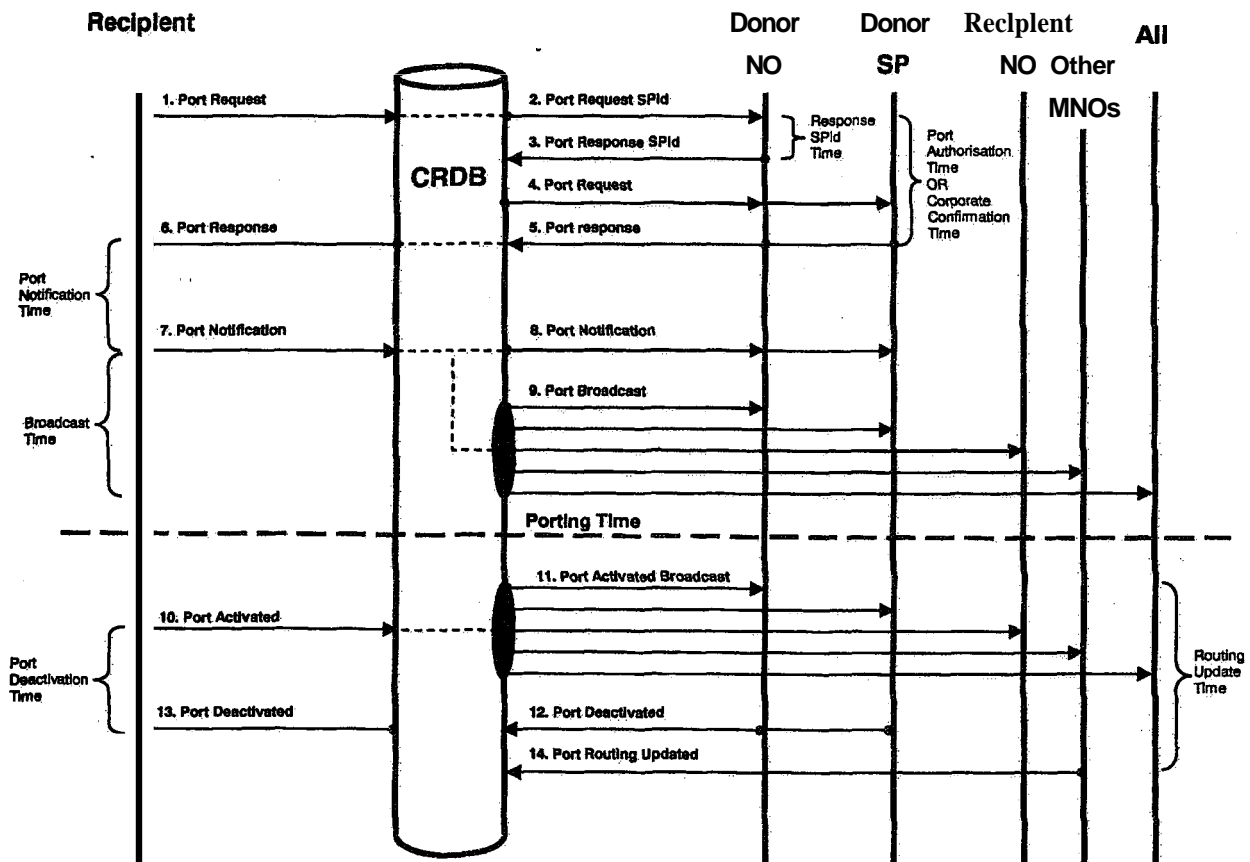
NB, Message **4** will <u>only</u> be sent to either the Donor NO (prepaid) or Donor SP (postpaid) and Messages 5 and 12 will <u>only</u> be sent by either the Donor NO (prepaid) or Donor SP (postpaid),

3.1.3   Port Request and Activation Steps

Message 1 – Port Request

1. The Recipient shall not issue a Port Request Message on behalf of a Subscriber unless it has received a request from the Subscriber.

2. The Recipient shall perform a CLI (Prepaid Subscriber) check of possession of the MSISDN or obtain the Account Number and Account Holder Identification Number (Postpaid Subscriber) from the Subscriber prior to issuing a Porting Request. Where the Account Holder is a Corporate Entity, the Recipient shall obtain the MSISDN, Identification Number of the Requestor, Account Number and Corporate Registration Number.

3. As per sections **4.4** and **4.5** of the Functional Specification, the Recipient shall advise the Subscriber, who has requested a port, of the following:

   a. The Subscriber must collect any messages and information stored by the Donor. These may be lost during the port process.

   b. Any remaining credit and unused usage allowances is not transferable from the Donor.

   c. That the Recipient may not support services available on the Donor and therefore certain services may not be available on the Recipient.

4. The Recipient sends a Port Request Message to the CRDB.

5. As per sections **4.6** of the Functional Specification, the name and address of the Subscriber must not be passed between Recipient and Donor.

6. A Subscriber may not subsequently port their MSISDN within two months of the Porting Time.

7. The CRDB does a check if the MSISDN has been previously ported.

Message 2 – Port Request SPid

1. The CRDB forwards the Port Request SPid (Service Provider ID) Message to the Donor Operator, to determine the current Donor SP.

2. The CRDB is responsible for forwarding the Port Request SPid Message to the MNO currently serving the Subscriber.

Message 3 – Port Response SPid

1. A Port Response SPid Message is sent to the CRDB within the Response SPid Time indicating the Service Provider of the Subscriber requesting a port. The Donor Operator will send this Message to the CRDB in the case where the Donor Operator is also the Donor Service Provider indicating itself as the Service Provider with the SPid.

2. Should the MSISDN not belong to the Donor Operator the Donor Operator will still send Message 3 to the CRDB indicating the error code and error explanation (MSISDN is not valid on the Donor Network). The CRDB will then have to manually escalate.

Message 4 – Port Request

1. The CRDB forwards the Port Request Message to the Service Provider as indicated in the SPid. The Service Provider can also be a Network Operator.

2. The Port Request Message is only sent to either a MNO or a SP. The destination of the Message is the current owner of the Subscriber requesting a port.

Message 5 – Port Response

1. The Donor (either a MNO or a SP) validates the Port Request Message according to the corresponding validation rules and sends a Port Response Message to the CRDB within the Port Authorisation Time either authorising or rejecting the requested port. Should the Donor reject a requested port, a valid rejection code must be provided with the Port Response Message.

2. A Port Request may be rejected only for the following reasons:

    a. The MSISDN is not a valid number on the donor operator's network

    b. The MSISDN is excluded from number portability

    c. For a Postpaid Subscriber; the MSISDN, Account Number and Account Holder Identification Number do not match

    d. The classification of the account does not match, example a request is made under the pre-pay procedure for a post-pay account

    e. Subscriber is already subject to suspension of outgoing or incoming calls because of failure to pay a bill

    f. MSISDN is already subject to a porting process

g. MSISDN has already been ported in the last two months

h. MSISDN not valid on SP

i. For a Corporate Entity; the MSISDN, Account Number and Corporate Registration Number do not match, or the Port Request is unauthorized

j. Any other reason agreed to by the Authority and notified to the operators in writing

3. If the MSISDN(s) is/are held by a Corporate Entity the Donor shall:

a. Within the Port Authorisation Time, send a Port Response advising the Recipient that the MSISDN(s) is/are held by a Corporate Entity

b. Within the Corporate Confirmation Time, send a Port Response authorising or refusing the port.

4. As per section **4.11** and **4.12** of the Functional Specification, the Donor may not reject a Port Request because:

a. The Subscriber's terminal is locked to the Donor's Network;

b. The Subscriber still owes money, nor may the Donor delay the Port until the debt is collected, unless the Subscriber is already subject to suspension of outgoing or incoming calls because of failure to pay a bill.

Message 6 – *Port* Response

1. The CRDB forwards the Port Response Message to the Recipient.

Message 7 – *Port Notification*

1. The Recipient sends a Port Notification Message to the CRDB either ordering (including a Porting Time) or declining the port.

2. The Recipient must send the Port Notification Message within the Port Notification Time. Failing this, the CRDB will send the Port Notification Message to both the Recipient and Donor indicating that the process has been terminated.

3. Should the Recipient decide not to order the port for the Subscriber, it shall immediately send a Port Notification Message declining the port.

4. Should the Recipient send a Port Notification Message declining the Port, the **process** continues with Message 8 and is then terminated.

5. Should the Recipient send a Port Notification Message ordering the port, the process continues.

6. The Porting Time shall not be at a time earlier than the next Network Synchronisation Time.

Message 8 – Port Notification

1. Should the Port Notification Message indicate that the Recipient declines the port, the **CRDB** forwards the Port Notification Message to the Donor and the port process is terminated. The MSISDN then becomes available for another Port Request.

2. Should the Port Notification Message indicate that the Recipient orders the port, the **CRDB** forwards the Port Notification including the desired Porting Time to the Donor SP, and the process continues with Message 9.

3. Although Regulation does not include Inter-SP porting, the MNO and their respective SPs can decide to use the **CRDB** for Inter-SP porting. In this case the process will stop after Message 8 has been sent, since no changes are required to routing information.

Message 9 – Port Broadcast

1. Should the Port Notification Message indicate the Recipient orders the port, the **CRDB** forwards a Port Broadcast Message to all parties connected to the CRDB. This includes the DNO, DSP; the other **MNOs, RNO** and any other party required to have the porting information.

2. The CRDB must send the Port Broadcast Message within the Port Broadcast Time.

Message 10 – Port Activated

The Recipient Network Operator must have the Subscriber active on its network and have updated its routing tables at the Potting Time.

1. At the Porting Time, the Recipient sends a Port Activation Message to the **CRDB** confirming that the Subscriber has been activated on the Recipient Operator Network and its routing tables have been updated.

2. The Subscriber will also be active on the Donor Network.

3. Should the Recipient not be able to activate a subscriber on the network during Network Synchronisation Time, the Recipient must invoke the Port Time Change process.

Message 11 – Port Activated Broadcast

1. The CRDB sends the Port Activated Broadcast Message to all parties connected to the CRDB.

2. From this time forward the Subscriber is considered to be ported.

3. On reception of the Port Activated Broadcast Message, the Donor takes the necessary steps to deactivate the Subscriber from its network and update its routing tables,

4. The DNO shall not deactivate the Subscriber from its network before this Message is received from the Recipient.

5. As per section **4.17** of the Functional Specification for MNP, the Donor shall deactivate the Subscriber on its network and update its routing tables as soon as possible after receiving this Message 11, but not more than one hour thereafter.

6. As per section **4.14** of the Functional Specification for MNP, the deactivation of a Subscriber may only take place after confirmation is received by the Donor from the Recipient (via the CRDB) that the Subscriber is active on the Recipient's network.

7. On reception of the Port Activated Broadcast Message, all MNOs shall update their routing tables accordingly. This update must be completed within the Routing Update Time.

Message 12 – Port Deactivated

1. Once the Donor has deactivated the MSISDN and updated its routing tables, the Donor sends a Port Deactivated Message to the CRDB within the Port Deactivation Time.

Message 13 – Port Deactivated

1. The CRDB forwards the Port Deactivated Message to the Recipient.

Message 14 – Port Routing Updated

1. All other MNOs send a Port Routing Updated Message within the Routing Update Time to the CRDB confirming that they have updated their routing tables.

2. The CRDB will verify that all Operators responsible for routing have sent this Message.

3.2   Port Time Change Process

3.2.1   General description

1. Should the Recipient or the Donor have a need to change the porting time, the Time Change Process can be invoked. In order to initiate this process the Recipient and the Donor first have to agree that the porting time must be changed.

2. The Recipient and Donor must contact each other in order to come to an agreement. Only when agreement has been reached between the Donor and the Recipient, the Recipient issues a Time Change Request.

3. The Time Change process can only be initiated after the Recipient has sent the Port Notification Message and up to Port Time Change Limit.

3.2.2   Schematic illustration – Port Time Change Process
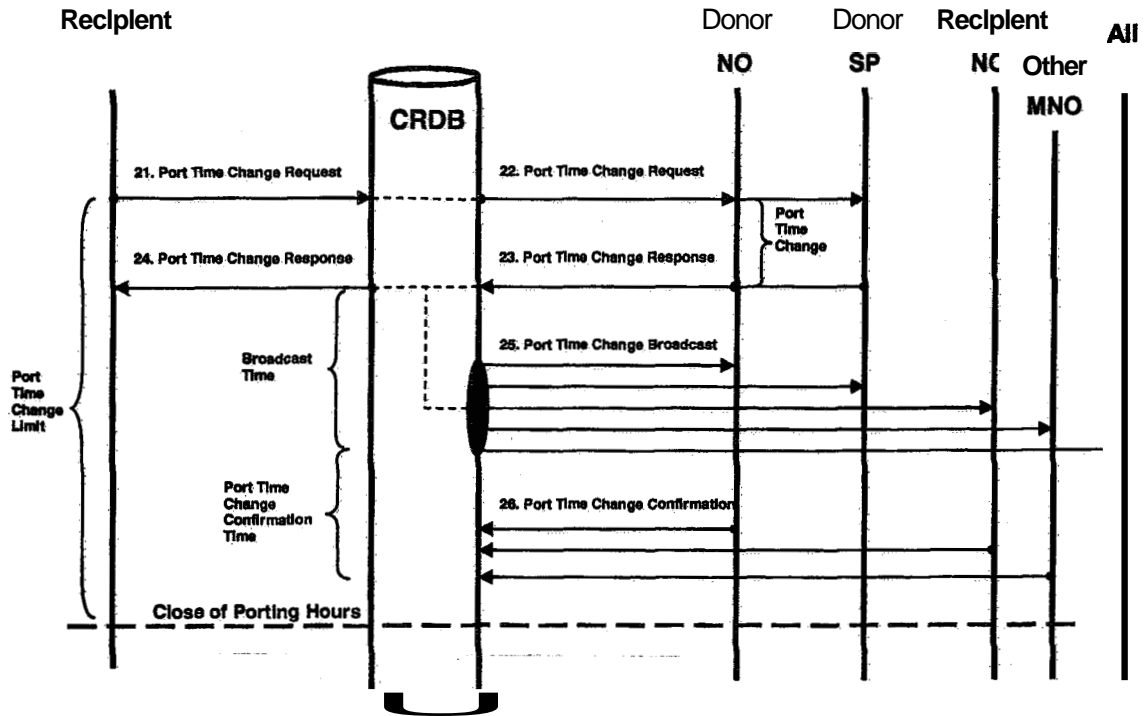
3.2.3   Port Time Change Steps

Message 21 – Port Time Change Request

1. The Recipient sends a Port Time Change Request Message containing a new Porting Time to the CRDB

Message 22 – Port Time Change Request

1. Should the Port Time Change Request Message be valid, the CROB forwards the Port Time Change Request Message to the Donor. The Donor is indicated by the same Spid as in the original Port Request.

2. The Recipient may not issue a Port Time Change Request for a new porting time later than the Deferred Porting Time

3. The Port Time Change Request can only be initiated before the Port Time Change Limit.

4. Should the Port Time Change Request be sent later than Port Time Change Limit, the Port Time Change Request will be rejected by the CRDB.

Message 23 – Port Time *Change Response*

1. The Donor validates the Port Time Change Request Message according to –corresponding validation-rules, then sends a Port Time-Change Response-Message to the CRDB, within the Port Time Change, authorising the change of Porting Time

2. On receipt of the accepted Port Time Change Response, the CRDB shall update the Porting Time for the corresponding porting

Message 24 – Port Time *Change Response*

1. The CRDB forwards the Port Time Change Response Message to the Recipient.

2. Should the Port Time Change Response be rejected then the Port Request and Activation process continues as per normal.

Message 25 – Port Time Change *Broadcast*

1. The CRDB sends a Port Time Change Broadcast Message, within the Port Broadcast Time, to all MNOs and Connected Parties advising that the Porting Time has been changed.

Message 26 – Port Time Change Confirmation

1. All MNOs send a Port Time Change Confirmation Message to the CRDB, within the Port Time Change Confirmation Time, confirming that their routing tables will be updated at the new Porting Time.

Porting Process continues as per normal from Message 10 in the Port Request end Activation process

3.3 Port Cancellation Process

3.3.1 General Description

1. Should there be a need for cancelling a requested port which has not yet been carried out, the Cancellation Process can be invoked. In order to initiate this process the Recipient and the Donor first have to agree that the porting must be cancelled.

2. The Subscriber approaches the Donor or the Recipient to cancel the port. The Donor or Recipient wishing to cancel the port must contact its counterpart in order to come to an

agreement. Only when agreement has been reached between the Donor and the Recipient can the Recipient issue a Cancellation Request.

3. The Cancellation Process can only be initiated after the Recipient has sent the Port Notification Message and up to Port Cancellation Limit before the requested Porting Time.

3.3.2   Schematic Illustration– Port Cancellation Process
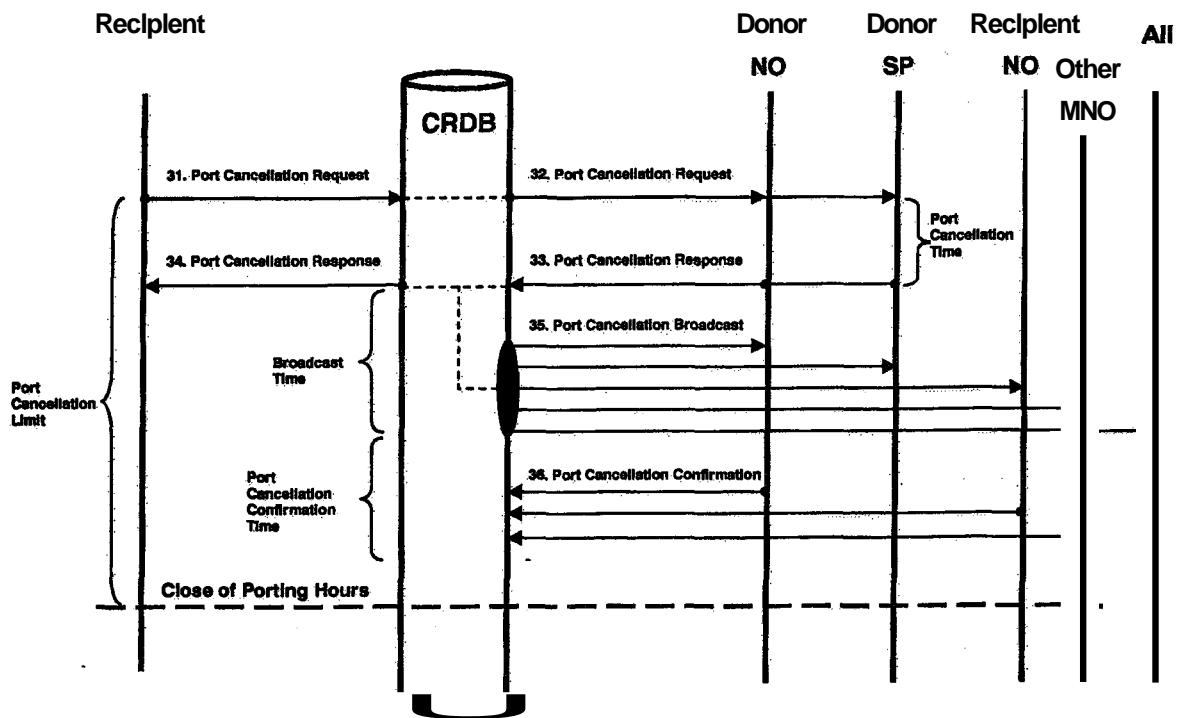
3.3.3   Port Cancellation Steps

Message 37 – Port Cancellation Request

1. The Recipient sends a Port Canceltation Request Message to the CRDB.

2. The Port Cancellation Request can only be initiated prior to the Port Cancellation Limit.

3. Should the Port Cancellation Request be initiated later than the Port Cancellation Limit, the Port Cancellation Request will be rejected by the CRDB.

Message 32 –Port Cancellation Request

1. The CRDB forwards the Port Cancellation Request Message to the Donor. The Donor is indicated by the same SPid as in the original Port Request.

Message 33 – Port Cancellation Response

1. The Donor validates the Port Cancellation Request Message, according to corresponding validation rules, then sends a Port Cancellation Response Message to the CRDB, within the Port Cancellation Authorisation Time, authorising the cancellation of the port.

2. Should the Port Cancellation Response be rejected then the Port Request and Activation process continues as per normal.

Message 34 – Port Cancellation Response

1. The CRDB forwards the Port Cancellation Response Message to the Recipient.

2. On receipt of the Port Cancellation Response, the CRDB shall remove the MSISDN from the "to be ported" list.

Message 35 – Port Cancellation Broadcast

1. The CRDB sends a Port Cancellation Broadcast Message to all MNOs and Connected Parties, within the Port Broadcast Time, advising that the port has been cancelled.

Message 36 – Port Cancellation Confirmation

1. All MNOs send a Port Cancellation Confirmation Message to the CRDB, within the Port Cancellation Confirmation Time, confirming that the port will not be carried out.

3.4   Port Reversal Process

3.4.1   General description

1. Should there be a need to reverse a port which has already been carried out, the Reversal Process can be invoked. In order to initiate this process the Recipient and the Donor first have to agree that the porting must be reversed.

2. The Subscriber approaches the Donor or the Recipient to reverse the port. The Party wishing to reverse the port must contact its counterpart in order to come to an agreement. The Recipient may only issue a Port Reversal Request when agreement has been reached between the Donor and the Recipient.

3. The Port Reversal Process can only be initiated after the porting has been carried out and during the Port Reversal Limit after Porting Time.

3.4.2   Schematic Illustration – Port Reversal process
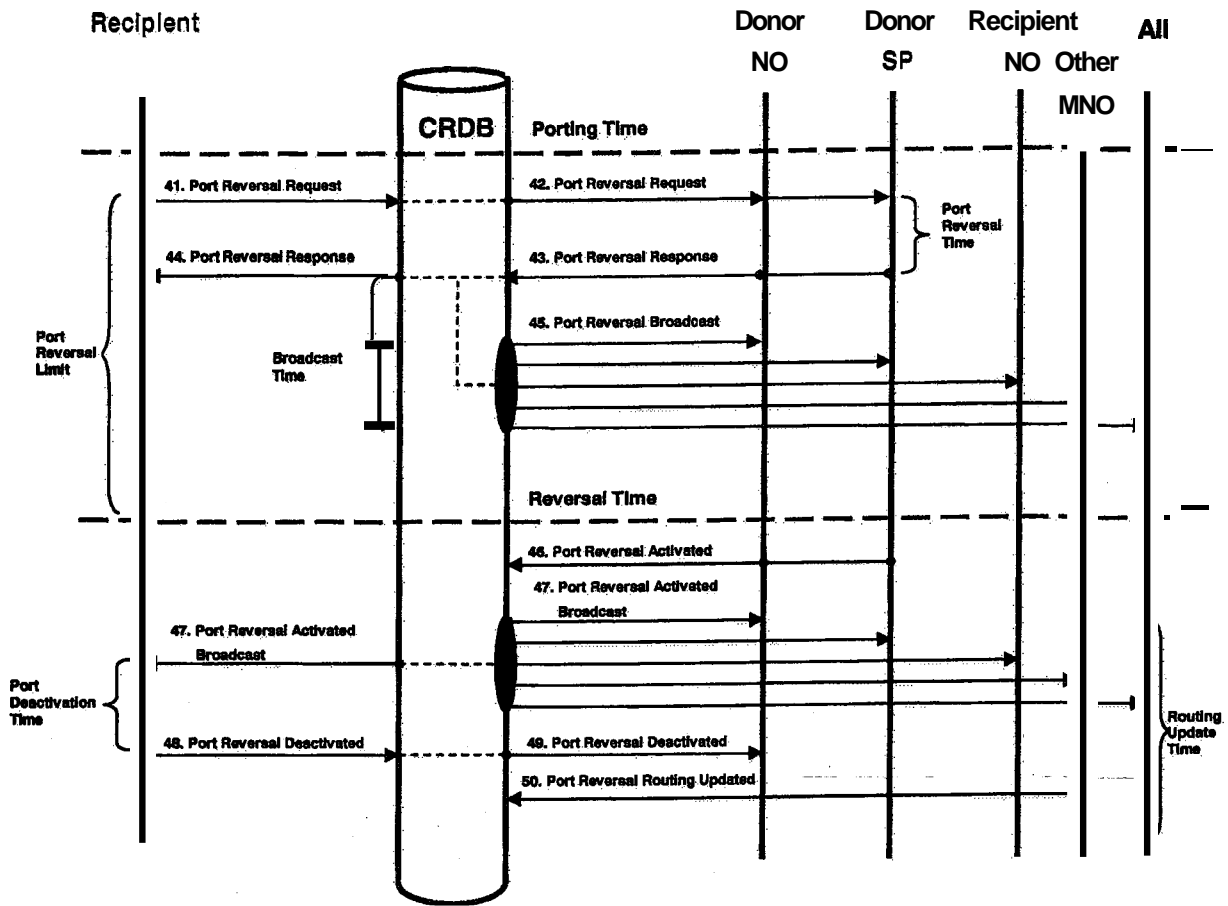
3.4.3   Port Reversal Steps

Message 41 – Port Reversal Request

1. The Recipient sends a Port Reversal Request Message containing a Reversal Time to the CRDB.

2. The Port Reversal Request can only be initiated within the Port Reversal Limit.

3. Should the Port Reversal Request be sent **before** or after the Port Reversal Limit, the Port Reversal Request will be rejected by the CRDB.

Message 42 – Port Reversal Request

1. The CRDB **forwards** the Port Reversal Request Message to the Donor.

Message 43 – Port Reversal Response

1. The Donor validates the Port Reversal Request Message according to, corresponding validation rules, then sends a Port Reversal Response Message, to the CRDB within the Port Reversal Time authorising the reversal of the port.

Message 44 — Port Reversal Response

1. The CRDB forwards the Port Reversal Response Message to the Recipient.

Message 45 — Port Reversal Broadcast

1. The CRDB sends a Port Reversal Broadcast Message (including the Reversal Time) to all **MNOs** and Connected Parties, within the Port Broadcast Time, advising that the port should be reversed.

Message 46 — Port Reversal Activated

The Donor Network Operator must have the Subscriber active on its network at Reversal Time and routing tables updated

1. At Reversal Time, the Donor sends a Port Reversal Activation Message to the CRDB confirming that the Subscriber has now once again been activated on the Donor Operator Network and its routing tables have been updated.

2. The Subscriber will also be active on the Recipient Network.

Message 47 — Port Reversal Activated Broadcast

1. The CRDB send the Port Reversal Broadcast Message to all connected parties.

2. On receipt of the Port Reversal Activation, the CRDB shall return the MSISDN to the previous status.

3. From this time forward the port is considered to be reversed and the Donor Network provides services to the Subscriber.

Message 48 — Port Reversal Deactivated

1. On receipt of the Port Reversal Broadcast, the Recipient deactivates the subscriber in the Recipient Network and updates its routing tables. This must be carried out within Port Deactivation Time.

2. The Recipient sends a Port Reversal Deactivation Message to the CRDB confirming that the Subscriber has been deactivated on the Recipient Operator Network and has updated its routing tables.

Message 49 – Port Reversal Deactivated

1. The CRDB forwards the Port Reversal Deactivation Message to the Donor as indicated by the initial SPid.

Message 50 – Port Reversal Routing Updated

1. All other MNOs send a Port Reversal Routing Updated Message to the CRDB, within the Routing Update Time, confirming that they have removed the previously ported number from their ported numbers routing table.

3.5   Return to Block Operator Process

3.5.1   General description

1. As per section 6.9 of the Functional Specification for MNP, when service to a ported MSISDN is terminated, the Last Recipient who was serving the MSISDN shalt return the MSISDN to the Block Operator concerned.

2. Therefore when the MSISDN is no longer active on the last Recipient's network, the last Recipient follows its normal procedures regarding not-active MSISDNs and when the last Recipient considers the MSISDN to be completely inactive on its network, the last Recipient returns the MSJSDN to the Block Operator. The Block Operator then quarantines the MSISDN for the Quarantine Time, before the MSISDN can be re-issued.

3. The Return to Block Operator Process is invoked by the last Recipient in order to return the previously ported MSISDN to the Block Operator i.e. the operator holding the block of MSISDNs wherein the ported MSISDN belongs.

4. This process is invoked when service is ceased on a ported MSISDN without the MSISDN being ported again, i.e. when the Subscriber has cancelled the subscription on the ported MSISDN (Postpaid) or *if* the MSISDN no longer is in service (Prepaid).

3.5.2　Schematic Illustration ▬ Return to Block Operator process
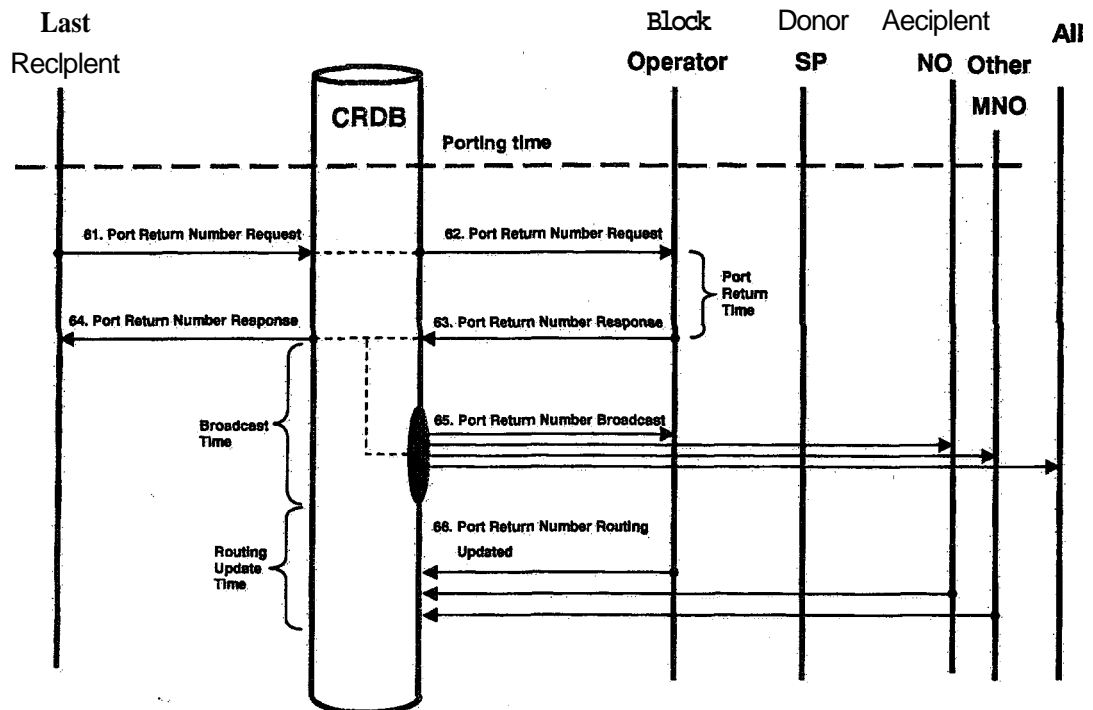
3.5.3　Return To Block Operator Steps

Message 61 ▬ Port Return Number Request

Service to MSISDN ceased as per Last Recipient's internal rules

1. The Last Recipient sends a Port Return Number Request Message to the CRDB requesting that the MSISDN be returned to the Block Operator.

Message 62 ▬ Port Return Number Request

1. The CRDB forwards the Port Return Number Request Message to the Block Operator.

Message 63 ▬ Port Return Number Response

1. The Block Operator validates the Port Return Number Request Message according to corresponding validation rules and then sends a Port Return Number Response Message, to the CRDB within the Port Return Time confirming the return of the MSISDN.

Message 64 –Port Return Number Response

1. The CRDB forwards the Port Return Response Message to the last Recipient.

Message 65 – Port Return Number Broadcast

1. The CRDB sends a Port Return Number Broadcast Message to all MNOs and Connected Parties, within the Port Broadcast Time, advising that the number has been returned to the Block Operator.

Message 66 – Port Return Number Routing Update

1. All MNOs send a Port Return Number Routing Updated Message to the CRDB, within the Routing Update Time, confirming that the previously ported number will be removed from their ported numbers routing table.

2. The Block Operator shall quarantine the MSISDN for the Quarantine Time.

3.6 CRDB Download Process

3.6.1 General Description

1. The CRDB must provide the facility to enable a download of

   (a) the entire database, or
   (b) a delta from a start date and time to an end date and time.

2. This could be in the case of a connected party requiring a complete download or sync a corrupt local database.

3. The download information shall only be used in the context of Number Portability.

3.6.2   Schematic Illustration – **CRDB** Download Process
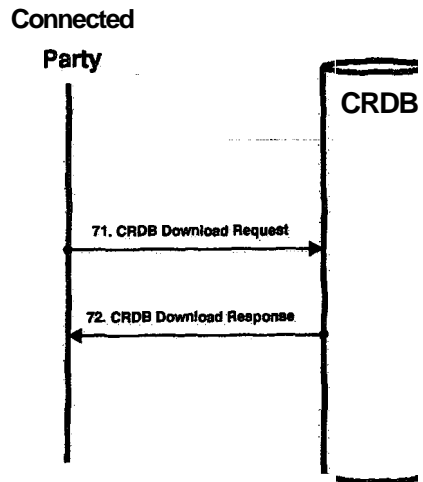
3.6.3   CRDB Download Steps

Message 71 – CRDB Download Request

1. The connected party requiring the download sends the CRDB Download Request to the CRDB indicating if it is a full download or a delta download. In the case of a delta download, the start and end date and-time must also be included. The connected party must also indicate the media type for the download to be provided (FTP, CD etc).

Message 72 – CRDB Download Response

1. The CRDB will notify the connected party that the request has been received and will notify the connected party when and where the information can be accessed.

3.7   Emergency Notification Process

3.7.1   General Description

1, Where either a Recipient or Donor is experiencing technical problems during the Port Request and Activation or the Port Reversal process, prior to Message 10 or 46, such party may invoke the Emergency Notification Process.

2. The Recipient must contact the Subscriber as soon as possible regarding the technical problem.

3. The Port Request and Activation or the Port Reversal process will be temporarily stopped. When the technical problem has been resolved, such party will send the Restore Notification to the CRDB immediately.

4. If the technical problem results in the MSISDNs not being ported during the Network Synchronisation Time, the Recipient must invoke the Port Time Change process during Porting Hours the following day.

3.7.2   Schematic Illustration – Emergency Notification Process
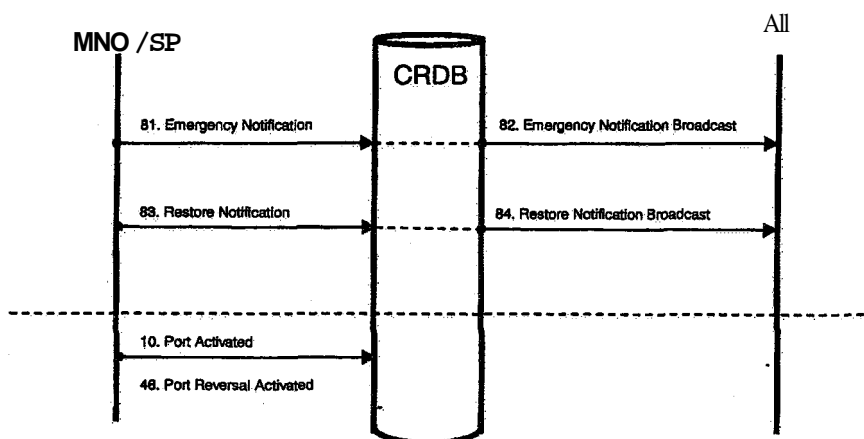
3.7.3   Emergency Notification Process Steps

Message 81 – Emergency Notification

1. The MNO / SP shall send a Message to the CRDB advising of a technical problem or other emergencies which will result in the MNO / SP's inability to complete the Port Request and Activation or the Port Reversal Processes.

Message 82 – Emergency Notification Broadcast

1. The CRDB will broadcast this information to all the connected parties.

Message 83 ⁼ Restore Notification

1. The MNO / SP shall send a Message to the CRDB advising that the technical problem or other emergencies which has been resolved and the MNO / SP is able to complete the Port Request and Activation or the Port Reversal Processes.

Message 84 ⁼ Restore Notification Broadcast

1. The CRDB will broadcast this information to all the connected parties.

4   validation Rules

The validation rules are contained in the matrix attached hereto as Annexure C.

The Messages, passed between the parties and the CRDB in each **process,** will be validated by the party receiving such Message (i.e. depending on the Message the receiving party may be the CRDB, the Donor, the Recipient, All Connected Patties, Block MNO and Other **MNOs).**

The Validation Rules are not intended to be a complete list of all checks and validations which will be performed each time a party receives a Message but they are based on the relevant business rules applicable to the particular process or Message. Further, it is assumed that for the purpose of this matrix the relevant validation is only indicated as being made by the first party required to make such validation.

5 CRDB Porting Statuses

These porting statuses are only pertaining to the CRDB. Each party can, for their internal processes, introduce additional statuses as required.

NAME	OCCURS
Port Request Pending	When a Port Request (Message 1) has been received by the CRDB from has been changed due to Message 3 or 5.
Port Accepted	When the Donor has consented to the porting (Message 5). This status changed due to Message 7.
Port Rejected	When the Donor has rejected the porting (Message 5). The CRDB lock MSISDN returns to the previous status (i.e. Not Ported or Ported)
Port Ordered	When the Recipient has ordered the port (Message 7). The CRDB keeps the lock on the MSISDN until the status has been changed due to Message 11.
Port Declined	When the Recipient has declined the port (Message 7). The CRDB lock preventing another request to port the MSISDN is removed.
Ported Locked	When the MSISDN has been successfully activated on the Recipient after two months.
Ported	This happens when the CRDB has removed the Ported Locked status on the MSISDN.
Time Change Requested	When a Port Time Change Request has been issued by the Recipient (Message 2t) to the CRDB. To issue a Port Time Change Request, the status of the MSISDN must be Port Ordered. The CRDB keeps the lock on the MSISDN until the status has been changed due to Message 23.
Time Change Accepted (i.e. Port Ordered)	When the Donor has accepted the change to the Porting Time (Message 23). The status of the porting is then updated to Time Change Accepted (i.e. Port Ordered).
Time Change Rejected (i.e. Port Ordered)	When the CRDB / Donor has rejected the Time Change Request. The status of the MSISDN is then updated to Time Change Rejected (i.e. Port Ordered).
Cancellation Requested	When a Port Cancellation Request has been issued by the Recipient (Message 31). To issue a Port Cancellation Request, the status of the MSISDN must be Port Ordered, Port Time Change Accepted or Port

NAME	OCCURS
	Time Change Rejected.
Port Cancelled *(i.e. Not Ported or Ported)*	When the Donor has accepted the cancellation (Message 33). Once the porting has been cancelled, the status of the porting must be updated to Port Cancelled and the MSISDN returns to the previous status (i.e. Not Ported or Ported).
Cancellation Rejected *(i.e. Port Ordered)*	When the CRDB / Donor has rejected the Port Cancellation Request. The status of the MSISDN is then updated to Cancellation Rejected (i.e. Port Ordered).
Reversal Requested	When a Port Reversal Request has been issued by the Recipient (Message 41). To issue a Port Reversal Request, the status of the MSISDN must be Ported Locked.
Reversal Accepted	When the Donor has accepted the Port Reversal Request (Message 43).
Reversal Rejected *(i.e. Ported Locked)*	When the CRDB / Donor has rejected the Port Reversal Request. The status for the MSISDN is then updated to Reversal Rejected (Ported Locked).
Port Reversed *(i.e. Not Potted or Ported)*	Once the porting has been reversed, the status of the porting must be updated to Port Reversed.
Not Ported *(i.e. MSISDN not in the CRDB)*	a) When the MSISDN has never been Ported b) When the MSISDN has been Ported and the MSISDN has been returned to Block Operator

6   Port Timers

NAME	VALUE	DESCRIPTION
Corporate Confirmation Time	16 business hours	The maximum time the Donor may take to obtain confirmation that the porting is authorized, measured from the time of the Port Response.
Deferred Porting Time	30 calendar days	The maximum deferred porting time. Calculated from when the Recipient sends the Port Notification.
Network Synchronisation Time	1 hours	Means the hours of low network traffic (22h30 – 23h30 during all days excluding Public Holidays) when the MNOs will update their networks to activate and deactivate porting subscribers.
Port Authorisation Time	1 hour	The maximum time between the CRDB sending the Port Request to the Donor and the CRDB receiving the Port Response from the Donor.
Broadcast Time	1 minutes	The maximum time between the CRDB receiving a Message and the CRDB sending a Broadcast Message to all MNOs and Connected Parties.
Port Cancellation Confirmation Time	15 minutes	The maximum time between the CRDB sending the Pod Cancellation Broadcast and when all MNOs must have sent a Port Cancellation Confirmation Message to the CRDB confirming that the port will not be carried out
Port Cancellation Limit	1 hour	1 hour before close of Porting Hours.
Port Cancellation Time	15 minutes	The maximum time between the CRDB sending the Port Cancellation Request to the Donor and the CRDB receiving the Port Cancellation Response from the Donor
Port Deactivation Time	1 hour	The amount of time specified to remove a Subscriber from active service on a network. Measured from when the CRDB sends the Port Activated Broadcast Message 11 or the Port Reversal Broadcast Message 47.
Port Notification Time	1 business day	The maximum time between the Recipient receiving the Port Response (Message 6) and the Recipient sending the Port Notification
Port Reversal Limit	Porting Hours to 2 months	A Port Reversal Request can be issued by the Recipient during Porting Hours but not more than 2 months after the Porting Time.
Port Reversal Time	15 minutes	The maximum time between the CRDB sending the Port Reversal Request to the Donor and the CRDB receiving the Port Reversal Response from the Donor.
Port Time Change	15 minutes	The maximum time between the CRDB sending the Port Time Change Request to the Donor and the CRDB receiving the Port Time Change Response from the Donor.

NAME	VALUE	DESCRIPTION
Port Time Change Confirmation Time	15 minutes	The time between the CRDB sending the Port Time Change Broadcast and when all MNOs must have sent a Port Time Change Confirmation Message to the CRDB confirming the new Porting Time
Port Time Change Limit		**1** hour before close of Porting Hours.
Response SPid Time	5 minutes	The maximum time in which the Donor Operator responds with the Service Provider Identification to the **CRDB**
Routing Update Time	**1** hour	The maximum time in which all **MNOs** must confirm to the Message **11** or the Port Reversal Broadcast Message 47.

7 Overview of the processes and Messages
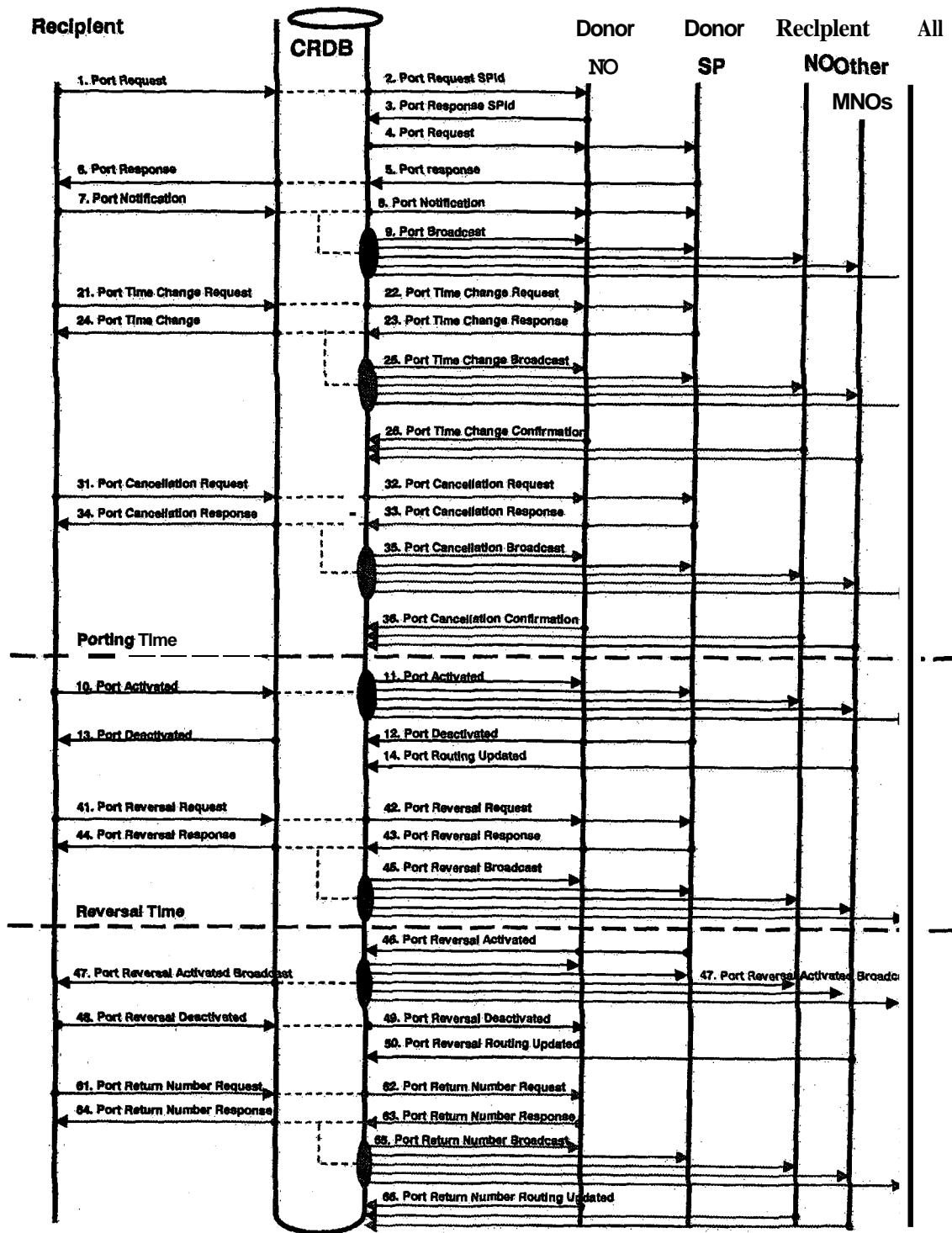
8 Glossary of Terms

TERM / ACRONYM	DEFINITION
Account Number	The account number of a Subscriber held by the Donor Service Provider.
Activate Subscriber	The process that the Recipient follows to provision the Subscriber on the Recipient mobile network.
Block Operator	Means the network operator that has been allocated a MSISDN block that is subject to mobile number portability.
Broadcast	Is the process where the CRDB updates all mobile network operators, relevant SPs and connected parties with the relevant information.
Central Reference Database (CRDB)	The clearing house and database which will facilitate and manage the porting processes between relevant parties.
Connected Parties	All entities that are connected to, or interface with, the CRDB.
Corporate Entity	A juristic person with a registration number .). τ ρ close ▯ › trust
Deactivate ; r	ne process τr the Donor ᴧ ; to disconnect a Subscriber from the Donor mobile network.
Deferred Port	A port that will be effected at a porting date, up to 30 days subsequent to the Port Request being accepted by the Recipient
Donor Mobile ᴧ ɾ<	Means a network operator that is ceasing to serve a MSISDN that is being ported.
Donor Service Provider	Means a Service Provider that is ceasing to serve a MSISDN that is being ported.
ICASA	The Independent Communications Authority of South Africa is the regulator of telecommunications and the broadcasting sectors.
Identification Number	South African Identification Number or Passport Number
Message	Electronic means of communication to and from the CRDB to convey information required by another party to effect MNP.
Mobile Network Operator (MNO)	The licensed entity that supplies telecommunications services.
Mobile Number Portability (MNP)	Mobile Number Portability is the ability of a mobile Subscriber *to* transfer their MSISDN from one MNO to another.
MSISDN	Mobile Station Integrated Service Digital Network Number. The unique number which identifies a Subscription Use Contract (Subscriber) in the GSM *Network*. The MSISDN is the telephone number that is allocated. This is the telephone number that is assigned to a Subscriber to allow use (usage] or activation.
Ordering System Specifications (OSS)	Means a specification of the procedures by which a recipient service provider, a recipient operator, a donor operator, and a donor service provider exchange information between each other in order to provide number portability to a subscriber, including the information to be sent, the format of the information, the means of communication, the times when communications may be sent, the time limits for responses and the handling of error conditions.

TERM / ACRONYM	DEFINITION
Outlet	An outlet of a MNO or SP which provides MNP services.
Port or Porting	The transfer of a MSISDN from one mobile network operator to another mobile network operator allowing a Subscriber to retain their MSISDN.
Porting Hours	The times during which Subscribers may request a port, being 9am to 5pm Monday to Friday and 9am to 1pm on Saturdays, excluding Sundays and public holidays.
Porting Time	The date and time when the Port must take place which shall fall within the Network Synchronisation Time.
Postpaid	Means the Subscriber payment type where the Subscriber pays for usage in arrears.
Prepaid	Means the Subscriber payment type where the Subscriber pays for usage in advance.
Quarantine Time	The period during which the Block Operator shall quarantine a MSISDN which has been returned by the Last Recipient
Recipient	Means a network operator or Service Provider that is acquiring the Subscriber and therefore porting in the Subscriber's MSISDN.
Recipient Mobile Network Operator	Means a network operator that is acquiring the Subscriber and therefore porting in the Subscriber's MSISDN.
Recipient Service Provider	Means a Service Provider that is acquiring the Subscriber and therefore porting in the Subscriber's MSISDN.
Reversal Time	The agreed time when the port shall be reversed.
Service Provider (SP)	Means an entity that sells to a Subscriber the ability to make or receive telephone calls. A Service Provider may also be a network operator or may buy network services from a network operator and resell these services to its Subscribers.
SIM	Subscriber Identification Module.
SMS	Short Message Service
Subscribers	Means any person or entity that is a party to a contract or another similar arrangement that is in force with a Service Provider or other operator for the supply of telecommunications services. The term includes in addition any caller who makes or receives calls that are the subject of such contract or arrangement.
Validation Rules	Validation rules as contained in the matrix attached hereto as Annexure C.
VMS	Voice Mail Services
Winback	Winback' means a Donor Network Operator or Donor Service Provider contacting Subscribers to offer discounts, free services or other inducements in order to convince those Subscribers not to change operators or to revert back to their original operator in the first 2 months after requesting Number Portability. Offers made to the generality of Subscribers that do not refer to number portability or the individual subscriber's current or past services are not included in the definition of Winback.

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9   Message Contents

Below each Message between the CRDB and the connected patties is outlined. Each Message will consist of two parts, one Message Header with mandatory fields which are common to all Messages, and one Message Body which is individual to each Message. The left column indicates the name of the Message and the fields in the Message, the middle column ('type') indicates the type of the Message (M = Mandatory field, O = Optional field, C = Conditional) and the third column is used for additional explanations and comments.

9.1   General Message Header

This Message Header will be included in all Messages between the CRDB **and** the connected parties.

MESSAGE NAME / FIELD	TYPE	COMMENT
Reference / Porting ID	M	YYYYMMDD+hhmmss+SP/NOID+MSISDN+ SeqNr Populated by the party that triggers the first Message in the process and used through out the porting process. MSISDN is the first MSISDN in the range of numbers in the Port Request.
Transaction Time	M	Time of sending the Message (time stamp) YYYYMMDDhhmmss
Sender of Message	M	ID of the party sending the Message
Receiver of Message	M	ID of the party receiving the Message
Resend Flag	M	Yes / No

1 PORT REQUEST	TYPE	COMMENT
Number (n) of MSISDNs	M	Number up to n
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field
Account Number	C	Only one Account Nr per Port Request
Account Holder / Requestor Identification Number	C	If Postpaid then M For Corporate, no validation must be performed on this parameter
Pre-paid / Post-paid	M	For Donor validation
Consumer / Corporate	M	

1. PORT REQUEST	TYPE	COMMENT
Corporate Registration Number	C	If Corporate then M
Corporate Contact Person	O	If Corporate then M
Corporate Contact Phone Number	O	If Corporate then M
Batch ID	O	

2. PORT REQUEST SPid	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

3. PORT RESPONSE SPid	TYPE	COMMENT
SPid	M	Id for the SP currently 'owning' the subscriber

4. PORT REQUEST	TYPE	COMMENT
Same as Message 1		

5. PORT RESPONSE	TYPE	COMMENT
Port Response	M	Yes, No, Corporate
Number (n) of Rejected MSISDN	M	Mandatory if Port Response = No
Rejected MSISDN 1	C	Mandatory if Port Response = No
↓	C	Repetitive field
Rejected MSISDN n	C	Mandatory if Port Response = No
Rejection Code 1	C	Mandatory if Port Response = No
↓	C	Repetitive field
Rejection Code n	C	Mandatory if Port Response = No
Rejection Reason	C	Free field
SPid	M	Recipient needs to know the SPid should the Donor SP reject the Port Request with "MSWDN not valid on S P

6. PORT RESPONSE	TYPE	COMMENT
Same as Message 5		

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7. PORT NOTIFICATION	TYPE	COMMENT
Porting Time	M	YYYYMMDDhhmmss
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

8. PORT NOTIFICATION	TYPE	COMMENT
Same as Message 7		

9. PORT BROADCAST	TYPE	COMMENT
Porting Time	M	YYYYMMDDhhmmss
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field
Recipient Network	M	
Donor Network	M	
Recipient SP	C	For Postpaid only
Donor SP	C	For Postpaid only

10. PORT ACTIVATED	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

11. PORT ACTIVATED BROADCAST	TYPE	COMMENT
Same as Message 10		

12. PORT DEACTIVATED	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
1	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

13. PORT DEACTIVATED	TYPE	COMMENT	
Same as Message 12			

14. PORT ROUTING UPDATED	TYPE	COMMENT	
Number (n) of MSISDNs	M		
Number 1 (MSISDN)	M		
↓	C	Repetitive field	
Number n (MSISDN)	C	Repetitive field	

ADDITIONAL MESSAGES			
Messages 15 – 19 are not used but reserved for future use.			

9.3   Port Time Change Process

21. PORT TIME CHANGE REQUEST	TYPE	COMMENT	
New Porting Time	M	YYYYMMDDhhmmss	
Number (n) of MSISDNs	M		
Number 1 (MSISDN)	M		
↓	C	Repetitive field	
Number n (MSISDN)	C	Repetitive field	
Port Time Change Reason Code	O	For future usage (e.g. reporting issues)	
Port Time Change Reason Explanation	O	Free text (future usage)	

22. PORT TIME CHANGE REQUEST	TYPE	COMMENT	
Same as Message 21			

23. PORT TIME CHANGE RESPONSE	TYPE	COMMENT	
Response	M	Yes / No	
Number (n) of MSISDNs	M		
Number 1 (MSISDN)	M		
↓	C	Repetitive field	
Number n (MSISDN)	C	Repetitive field	

24. PORT TIME CHANGE RESPONSE	TYPE	COMMENT
Same as Message 23		

25. PORT TIME CHANGE BROADCAST	TYPE	COMMENT
New Porting Time	M	YYYYMMDDhhmmss
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field
Recipient Network	M	Sanity check
Recipient SP	M	Sanity check
Donor Network	M	Sanity check
Donor SP	M	Sanity check

26. PORT TIME CHANGE CONFIRMATION	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

ADDITIONAL MESSAGES		
Messages 27 – 29 are not used but reserved for future use.		

9.4   Port Cancellation Process

31. PORT CANCELLATION REQUEST	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field
Port Cancellation Reason Code	O	For future usage (e.g. reporting issues)
Port Cancellation Reason Explanation	O	Free text (future usage)

32. PORT CANCELLATION REQUEST	TYPE	COMMENT
Same as Message 31		

33. PORT CANCELLATION RESPONSE	TYPE	COMMENT
Response	M	Yes / No
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

34. PORT CANCELLATION RESPONSE	TYPE	COMMENT
Same as Message 33		

35. PORT CANCELLATION BROADCAST	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field
Recipient Network	M	Sanitycheck
Recipient SP	M	Sanitycheck
Donor Network	M	Sanitycheck
Donor SP	M	Sanitycheck

36. PORT CANCELLATION CONFIRMATION	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

ADDITIONAL MESSAGES		
Messages 37 – 39 are not used but reserved for future use.		

9.5   Port Reversal Process

41. PORT REVERSAL REQUEST	TYPE	COMMENT
Reversal Time	M	Time for the reversal (YYYY MMDDhhmmss)
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

Port Reversal Reason Code	O	For future usage (e.g. reporting issues)
Port Reversal Reason Explanation	O	Free text (future usage)

42. PORT REVERSAL REQUEST	TYPE	COMMENT
Same as Message 41		

43. PORT REVERSAL RESPONSE	TYPE	COMMENT
Response	M	Yes / No
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

44. PORT REVERSAL RESPONSE	TYPE	COMMENT
Same as Message 43		

45. PORT REVERSAL BROADCAST	TYPE	COMMENT
Reversal Time	M	Time for the reversal (YYYYMMDDhhmmss)
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field
Recipient Network	M	
Recipient SP	M	
Donor Network	M	
Donor SP	M	

46. PORT REVERSAL ACTIVATED	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

47. PORT REVERSAL ACTIVATED BROADCAST	TYPE	COMMENT
Same as Message 46		

48. PORT REVERSAL DEACTIVATED	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

49. PORT REVERSAL DEACTIVATED	TYPE	COMMENT
Same as Message 48		

50. PORT REVERSAL ROUTING UPDATED	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

ADDITIONAL MESSAGES		
Messages 51 – 59 are not used but reserved for future use.		

9.6 Return to Block Operator Process

61. PORT RETURN NUMBER REQUEST	TYPE	COMMENT
Return Time	M	Time for the reversal (YYYYMMDDhhmmss)
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field
Last Recipient SP	M	
Last Recipient NO	M	

62. PORT RETURN NUMBER REQUEST	TYPE	COMMENT
Same as Message 61		

63. PORT RETURN NUMBER RESPONSE	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field

63. PORT RETURN NUMBER RESPONSE	TYPE	COMMENT
Number n (MSISDN)	C	Repetitive field

64. PORT RETURN NUMBER RESPONSE	TYPE	COMMENT
Same as Message 63		

65. PORT RETURN NUMBER BROADCAST	TYPE	COMMENT
Return Time	M	Time for the reversal (YYYYMMDDhhmmss)
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field
Block Network Operator	M	

66. PORT RETURN NUMBER ROUTING UPDATED	TYPE	COMMENT
Number (n) of MSISDNs	M	
Number 1 (MSISDN)	M	
↓	C	Repetitive field
Number n (MSISDN)	C	Repetitive field

ADDITIONAL MESSAGES		
Messages 67 – 69 are not used but reserved for future use.		

9.7   CRDB Download Process

71. CRDB DOWNLOAD REQUEST	TYPE	COMMENT
Download type	M	Full or Delta download required
Start date and time	C	Mandatory if Delta download
End date and time	C	Mandatory if Delta download
Media type	M	For example FTP, CD, DVD etc

72. CRDB DOWNLOAD RESPONSE	TYPE	COMMENT
Date and Time	M	
Location/link	M	The link to the actual data if electronic **or** **location** where data can be collected.
Contact details	M	Person to be contacted regarding the collection of the data.

ADDITIONAL MESSAGES		

*Messages 73 – 79 are **not used but reserved** for future **use.***

9.8 Emergency Notification Process

81. EMERGENCY NOTIFICATION	TYPE	COMMENT
Problem Code	M	
Problem Code Explanation	M	
Party experiencing problem	M	Recipient or Donor MNO / SP

82. EMERGENCY NOTIFICATION BROADCAST	TYPE	COMMENT
Problem Code	M	
Problem Code Explanation	M	
Party experiencing problem	M	Recipient or Donor MNO / SP

83. RESTORE NOTIFICATION	TYPE	COMMENT
Party restored	M	Recipient or Donor MNO / SP

84. RESTORE NOTIFICATION BROADCAST	TYPE	COMMENT
Party restored	M	Recipient or Donor MNO / SP

ADDITIONAL MESSAGES		

Messages 85 – 89 are not used but reserved for future use.

9.9 General Messages

98. REMINDER MESSAGE	TYPE	COMMENT
Expected Message	M	Message Id
Time of expiration	M	Time when the timer expires

99. ERROR MESSAGE	TYPE	COMMENT
Error Code	M	
Error Explanation	M	

ADDITIONAL MESSAGES		

Messages 91 – 97 are not used but reserved for future use.

ANNEXURE A

1 Notification and Escalation Procedure

1.1 Introduction

Problems and delays may occur in the processing of ports that will hinder the porting process and these problems and delays will-be escalated in accordance with these procedures.

Such problems and delays may essentially be divided into technical problems and port authorisation problems. The technical problems will be due to system and process faults. The port authorisation problems will arise as a result of disputes as to the reasons given for port refusals by the Donor. The escalation procedures will be split accordingly,

The escalation paths will be available during the times as defined in the QSS to which these procedures are appended.

1.2 Scope and Assumption

The aim of this chapter is to document the porting escalation procedures that apply to and between **MNOs** and SPs. The roles and responsibilities of each of the parties in the porting process are set out in detail in the OSS.

The rationale behind these escalation procedures is to proactively create solutions and resolution measures for problems that may arise within the normal porting process. The intention is not to provide a comprehensive service level agreement ("SLA"). A comprehensive SLA will be entered into between the CRDB and each party connected to the **CRDB** and a further SLA will be entered into between the CRDB Company and the vendor of the CRDB solution.

These escalation procedures are therefore based on the following assumptions:

 a. The signing of a comprehensive SLA between the CRDB and all connected parties

 b. The signing of a comprehensive SLA between the CRDB and **the CRDB** solution vendor

1.3 Porting Support Team and Porting Authorisation Representative

Each SP and MNO will establish a Porting Support Team ("PST") which will handle all technical porting related issues and send and receive all notifications and a Porting

Authorisation Representative **("PAR")** which will handle and resolve all port authorisation related issues.

1.4 Technical Fault Notification

Where the SP or MNO is experiencing any technical problem which will impact on its ability to perform porting functions during porting hours, the PST of such **MNO** or SP shall, immediately on becoming aware of such technical problem, via e-mail / SMS / telephone or other suitable contact media, notify the PSTs of all other SPs and MNOs. Such notification shall include details as to the nature of the technical problem and the estimated time during which porting will be affected.

1.5 Technical problems Notification and Escalation Channels

1.5.1 Notification

15 minutes before the expiry of a port timer, the CRDB will send a notification to the **PST** of the relevant party, which has not responded to the applicable Message

Notification shall be given in respect *of* the following Messages:

a. Port Response

b. Port Routing Updated

c. Port Cancellation Response

d. Port Cancellation Confirmation

e. Port Reversal Response

f. Port Reversal Routing Updated

g. Port Time Change Response

h. Port Time Change Confirmation

i. Port Return Number Response

j. Port Return Number Routing Updated

1.5.2 Technical Escalation Path 1

1. Notification sent by the CRDB to the PST of the Donor or Recipient which is to receive a Message immediately after the time for the sending of such Message has lapsed, that such Message has not been received by the CRDB.

2. Escalation Path **1** shall be followed in respect of the following Messages:

    a. Port Response

    b. Port Cancellation Response

    c. Port Reversal Response

    d. Port Time Change Response

    e. Port Return Number Response

3. The PST of the Donor or Recipient (which is waiting to receive a Message or a response) may, having received a notification from the CRDB manually escalate the non-conformance by contacting the relevant PST of the Donor or Recipient in the Operator and Service Provider Contact List.

4. The Team Leader of the PST of the Donor or Recipient may, having not received the Message or a response 30 minutes after the required time has elapsed, manually escalate the non-compliance by contacting the Team Leader of the PST of the relevant PST in the Operator and Service Provider Contact List.

1.6   Port authorisation escalation path

A Port Request may be refused because:

    a. The MSISDN is not a valid number on the donor operator's network

    b. The MSISDN is excluded from number portability

    c. For a Postpaid Subscriber; the MSISDN, Account Number and Account Holder Identity Number do not match

    d. The classification of the account does not match, example a request is made under the pre-pay procedure for a post-pay account

    e. Subscriber is already subject to suspension of outgoing or incoming calls because of failure to pay a bill

    f. MSISDN is already subject to a porting process

    g. MSISDN has already been ported in the last two months

    h. MSISDN not valid on SP

    i. For a Corporate Entity; the MSISDN, Account Number and Corporate Registration Number do not match, or the Port Request is unauthorized

    j. Any other reason agreed to by the Authority and notified to the operators in writing

The reasons for refusal are, save for reasons e and **i,** essentially self evident or objective. The Recipient should be able to resolve the problem. If the Recipient is unable to resolve the

issue, the PST of the Donor should be able to resolve these problems. The reasons given for refusal in e and i are likely to give rise to disputes of fact and may require intervention from sates and account management staff of the Recipient and Donor.

Therefore, having received a Port Response from the Donor which indicates that the Subscriber cannot port, the Recipient shall inform the Subscriber of the reasons for the refusal. Should the reason be:

- a reason other than e or i above;
- the Subscriber believes the reason given is incorrect: and
- the Recipient is unable to resolve the problem itself;

then the Recipient shall follow the Port Authorisation Problem Escalation Path 1.

If,however, the Recipient receives a Port Response from the Donor which indicates that the Subscriber cannot port for the reasons given in e or i above, the Recipient shall inform the Subscriber of the reasons for the refusal. Should the Subscriber dispute the reason given then the Recipient shall follow the Port Authorisation Problem Escalation Path 2.

1.6.1   Port Authorisation Escalation Path 1

The Recipient may, having received a notification from the CRDB that the Donor refuses the port for a reason other than e or i in the-table above and the Recipient or the Subscriber believes such reason is incorrect, manually escalate the refusal by contacting the Donor's PST at the numbers listed in the Operator and *Service* Provider Contact List.

Should the Donor's PST fail to resolve the problem within 1 working day of receiving the request from the Recipient, the Recipient may escalate the issue to the Team leader of the PST at the numbers in the Operator and Service Provider Contact List.

1.6.2   Port Authorisation Escalation Path 2

The Recipient may, having received a notification from the CRDB that the Donor refuses the part for the reasons listed in e or i in the Port Authorisation in 1.4 above, and the Subscriber disputes such reason, manually escalate the refusal by contacting the Donor's PAR to resolve the issue. The Donor's PAR can be contacted at the numbers in the Operator and Service Provider Contact List.

Should the Donor's PAR fail to resolve the problem within 1 working day of receiving the request from the Recipient, the Recipient may escalate the issue to the Donor's National Sales Manager at the numbers in the Operator and Service Provider Contact List.

1.7 Monthly Reports

The CRDB will provide the parties with monthly porting time statistics. The reports should be divided in Consumer and Corporate reports and should include a monthly average of failures / breaches.

1.8 Monthly Meetings

The Team Leaders of the PST and the PAR of ea& Operator and Service Provider shall after the implementation of MNP, meet a minimum of once a month (unless agreed otherwise by the Team Leaders and PARs) to review the porting time statistics, with a view to resolving any technical issues impacting on porting response times.

1.9 Method of remedy

Penalties to be discussed.

1.10 Dispute Resolution Procedures

Where no response is received, or the issue is not resolved to the satisfaction of the aggrieved patty having followed the above Escalation Procedures, the aggrieved party may, within 14 days, declare a dispute as provided for in clause 2 below.

1.11 Review of Escalation Procedures

These Escalation Procedures shall be reviewed every six months by the Inter-Operator MNP Steering Committee to ensure they remain valid and up to date.

2 DISPUTE RESOLUTION

1. Should any dispute arise between the Parties in connection with -

   a. The porting of any MSISDN;

   b, The refusal by the Donor to authorise a port;

   c. The payment of any fees or charges arising form the porting of any **MSISDN or** MSISDNs;

d. Any provision of this OSS, or any of its annexures, or the Mobile Number Portability Consumer Guidelines;

e. or which relate in any way to any matter affecting any SP or Operator in relation to Mobile Number Portability,

f. that dispute shall, unless resolved amicably between the Parties,

such dispute shall be dealt with in accordance with the provisions of this chapter.

2. All disputes arising, as provided for in 1 above, shall be referred promptly for determination by the Executive Head of Sales (the person ultimately responsible for Sales) of each of the Parties, at the instance of either of the Parties.

3. Should the Parties fail to resolve any dispute between themselves or should the Executive Head of Sales of the Parties fail to reach agreement in the determination of any dispute referred to them as provided above, within 7 days of such referral, the Aggrieved Party may refer the matter to arbitration in accordance with the remaining provisions of this clause relating to arbitration. Such referral shall be means of a written notice ("Arbitration Notice") faxed to the other party or parties using the relevant fax number listed in the Operator and Service Provider Contact List.

4. Notwithstanding anything to the contrary confained in this clause, neither Party shall be precluded from obtaining interim relief from a court of competent Jurisdiction pending the decision of an arbitrator appointed in terms of this clause.

5. The arbitration shall be held -

- mutatis mutandis in accordance with the provisions of the High Court Act 59 of **1959,** the tules made in terms of that Act and the practice of the Witwatersrand Local Division of the High Court;
- in Johannesburg;
- with only the legal and other professional representatives of the Parties present;
- in terms of the Arbitration Act, No. 42 of **1965,**
- it being the intention of the Parties that the arbitration shall be held and completed as soon as possible.

6. The arbitration shall be, if the matter in dispute is principally -

- a legal matter, a practising senior advocate or attorney of Johannesburg of at least 10 years **standing;**
- an accounting matter, a practising chartered accountant of Johannesburg of at least **10** years standing:

- **a telecommunic**ations matter, an expert in the field of telecommunications of at least **10 years standing;**

- **any other matter**, an independent person who is an expert **in the field** in which the **dispute has arisen,**

- **agreed upon** between the Parties to the dispute,

provided that if the arbitrator is not a practising lawyer, he **or** she shall during the arbitration **proce**edings be assisted by a practising lawyer of his or her choice.

7. Should the Parties to the dispute fail to agree whether the dispute is principally a legal, accounting, telecommunications, or other matter **within** 2 days after receipt by **the** other party of the Arbitration Notice, the matter shall be deemed to be a **legal matter.**

8. Should the Parties **fail** to agree on an **arbitrator** within 7 days after the date of the receipt of the Arbitration Notice, the arbitrator shall be appointed at the **request of either** Party to the dispute by the Chairperson for the time being of the Bar Council **of** Johannesburg **(or** any successor body).

9. The decision **of** the arbitrator shall be final and binding on the Parties **and** may be made an order of the court at the instance of either of the Parties.

10. The Parties hereby consent to the jurisdiction of the High Court of South **Africa** (Witwatersrand Local Division) (or its successor).

11. The Parties agree to keep the arbitration, including the subject matter of the **arbitration** and the evidence heard during the arbitration, confidential and not to disclose it to anyone except for the purpose of **an** order to **be** made.

12. The provisions of this clause ▬

- constitute **an** irrevocable consent by the Parties to any proceedings in terms of this clause and neither Party shall be entitled to withdraw therefrom or claim at any such proceedings that **it** is not bound by such provisions;

- are severable from the rest of the OSS and shall remain in **effect despite the** termination of or invalidity for any reason of the **OSS,** or any part of this **OSS.**

3 Force Majeure

1. If either Party ("the Affected Party") is prevented or restricted directly or indirectly **from** carrying out all or any of its obligations under this Agreement by reason of **events** beyond the control of such Affected Party, which makes it impossible **or** illegal for such Affected Party to perform, including (but not limited to) strike, lock-out, fire, explosion, floods, riot, **war**, accident, **act** of God, **embargo,** legislation, shortage of or a breakdown in

transportation facilities, civil commotion, unrest or disturbances, cessation of labour, government interference or control, or any other cause OF contingency beyond the reasonable control of the Affected Party, the Affected Party shall be relieved of its obligations hereunder during the period that such event and its consequences continue but only to the extent so prevented and shall not be liable for any delay or failure in the performance of any obligations hereunder or loss or damages either general, special or consequential which the other Party may suffer due to or resulting from such delay or failure, provided always that written notice shall forthwith be given of any such inability to perform by the Affected Patty within **3** (fhree) Business Days from the date the Affected Parties experienced the delay or failure.

2. The Affected Parties shall upon termination of the event giving rise to the force majeure forthwith give written notice thereof to the other Party.

3. The Affected Party shall always endeavour to continue to perform its obligations as far as reasonably practical,

Governmental inaction or failure or refusal to approve shall not be regarded as a force majeure event where the Party has failed to fulfil all of its obligations to enable such governmental authorities to issue any approvals.

Annexure B

MNP Operator and Service Provider Contact List

MNP PST Contact Information (Escalation 1)			
Operator	**E-Mail**	**Telephone**	**Cell Phone**
Cell C	Tba	Tba	Tba
Cell C SP	Tba	Tba	Tba
MTN	Tba	Tba	Tba
MTN SP	Tba	Tba	Tba
Vodacom	Tba	Tba	Tba
Vodacom SP	Tba	Tba	Tba
CRDB	Tba	Tba	Tba
Autopage	Tba	Tba	Tba
Nashua Mobile	Tba	Tba	Tba
Global Telematics	Tba	Tba	Tba
Orion	Tba	Tba	Tba
Smartcom	Tba	Tba	Tba
Smartcall	Tba	Tba	Tba
I-Talk	Tba	Tba	Tba
		.	

MNP PST Team Leader Contact Information (Escalation 2)			
Operator	E-Mail	Telephone	Cell Phone
Cell C	Tba	Tba	Tba
Cell C SP	Tba	Tba	Tba
MTN	Tba	Tba	Tba
MTN SP	Tba	Tba	Tba
Vodacom	Tba	Tba	Tba
Vodacom SP	Tba	Tba	Tba
CRDB	Tba	Tba	Tba
Autopage	Tba	Tba	Tba
Nashua Mobile	Tba	Tba	Tba
Global Telematics	Tba	Tba	Tba
Orion	Tba	Tba	Tba
Smartcom	Tba	Tba	Tba
Smartcall	Tba	Tba	Tba
I-Talk	Tba	Tba	Tba

MNP PRR Contact Information			
Operator	E-Mail	Telephone	Cell Phone
Cell C	Tba	Tba	Tba
Cell C SP	Tba	Tba	Tba
MTN	Tba	Tba	Tba
MTN SP	Tba	Tba	Tba
Vodacom	Tba	Tba	Tba
Vodacom SP	Tba	Tba	Tba
CRDB	Tba	Tba	Tba
Autopage	Tba	Tba	Tba
Nashua Mobile	Tba	Tba	Tba
Global Telematics	Tba	Tba	Tba
Orion	Tba	Tba	Tba
Smartcom	Tba	Tba	Tba
Smartcall	Tba	Tba	Tba
I-Talk	Tba	Tba	Tba

National Sales Manager Contact Information			
Operator	E-Mail	Telephone	Cell Phone
Cell C	Tba	Tba	Tba
Cell C SP	Tba	Tba	Tba
MTN	Tba	Tba	Tba
MTN SP	Tba	Tba	Tba
Vodacom	Tba	Tba	Tba
Vodacom SP	Tba	Tba	Tba
CRDB	Tba	Tba	Tba
Autopage	Tba	Tba	Tba
Nashua Mobile	Tba	Tba	Tba
Global Telematics	Tba	Tba	Tba
Orion	Tba	Tba	Tba
Smartcom	Tba	Tba	Tba
Smartcall	Tba	Tba	Tba
I-Talk	Tba	Tba	Tba

Operator	Fax Number
Cell C	Tba
Cell C SP	Tba
MTN	Tba
MTN SP	Tba
Vodacom	Tba
Vodacom SP	Tba
CRDB	Tba
Autopage	Tba
Nashua Mobile	Tba
Global Telematics	Tba
Orion	Tba
Smartcom	Tba
Smartcall	Tba
I-Talk	Tba

Annexure C

Validation Rules Matrix

1 = Critical mor, manual escalation and abort the process
2 = The process aborted and send error message back (automatic)
3 = Write to report log, process continues

Message Number	Message	Party	MSISDN not valid on Donor Network	MSISDN excluded from NP	MSISDN Account No and/or Account Holder ID does not match	Classification of subscriber payment type (Prepaid/Postpaid)	Subscriber in error	MSISDN Account No and corporate flag do not match	MSISDN recently subject to porting	MSISDN already been ported less two months	Port outside time, is NOT within Desired Porting Time	Message NOT sent within tolerance time	MSISDN(s) not valid on SP	Incorrect Owner of Recipient Service Provider
1	Port Request	CRDB		2					2	2				
		Recipient												
2	Port Request SP ID	CRDB												
		Donor	2	2										
3	Port Response SP ID	CRDB										3		
		Donor												
4	Port Request	CRDB												
		Donor		2	2	2	2	2					2	
5	Port Response	CRDB										3		
		Donor												
6	Port Response	CRDB												
		Recipient												
7	Port Notification	CRDB							2	2				
		Recipient												
8	Port Notification	CRDB												
		Donor												
9	Port Broadcast	CRDB										3		
		All												
10	Port Activated	CRDB										3		
		Recipient												
11	Port Activated Broadcast	CRDB										3		
		All												
12	Port Deactivated	CRDB										3		
		Donor												
13	Port Deactivated	CRDB										3		
		Recipient												
14	Port Routing	CRDB										3		

Message Number	Message	Party	MSISDN not valid on Donor Network	MSISDN excluded from NP	MSISDN, Account Nr and Account Holder ID do not match	Classification of subscriber payment type does not match (Prepaid/Postpaid)	Subscriber already subject to disconnection	MSISDN, Account Nr and Corporate Reg Nr do not match, or the Port Request is unauthorized	MSISDN already subject to porting	MSISDN already been ported last two months	Porting Time is NOT within Deferred Porting Time	Message NOT sent within relevant time	MSISDN not valid on SP	No agreement between Recipient & Donor	Number was not previously ported
	Updated	Other MNOs													
	Port Time Change Request	CRDB									2	2			
		Recipient													
	Port Time Change Request	CRDB													
		Donor												2	
	Port Time Change Response	CRDB										3			
		Donor													
	Port Time Change Response	CRDB													
		Recipient													
	Port Time Change Broadcast	CRDB										3			
		All													
	Port Time Change Confirmation	CRDB										3			
		All													
	Port Cancellation Request	CRDB										2			
		Recipient													
	Port Cancellation Request	CRDB													
		Donor												2	
	Port Cancellation Response	CRDB										3			
		Donor													
	Port Cancellation Response	CRDB													
		Recipient													
	Port Cancellation Broadcast	CRDB										3			
		All													
	Port Cancellation Confirmation	CRDB										3			
		All													
	Port Reversal Request	CRDB										2			
		Recipient													
	Port Reversal Request	CRDB													
		Donor												2	
	Port Reversal Response	CRDB										3			
		Donor													
	Port Reversal Response	CRDB													
		Recipient													
	Port Reversal Broadcast	CRDB										3			
		All													

Message Number	Message	Party															
46	Port Reversal Activated	CRDB											3				
		Donor															
47	Port Reversal Activated Broadcast	CRDB															
		All															
48	Port Reversal Deactivated	CRDB											3				
		Recipient															
49	Port Reversal Deactivated	CRDB															
		Donor															
50	Port Reversal Routing Updated	CRDB											3				
		Other MNOs															
61	Port Return Number Request	CRDB															2
		Recipient															
62	Port Return Number Request	CRDB															
		Block MNO	1														
63	Port Return Number Response	CRDB											3				
		Block MNO															
64	Port Return Number Response	CRDB															
		Recipient															
65	Port Return Number Broadcast	CRDB											3				
		All															
66	Port Return Nr Routing Updated	CRDB											3				
		All															
71	CRDB Download Request	CRDB															
		Connected Party															
72	CRDB Download Response	CRDB															
		Connected Party															
81	Emergency Notification	CRDB											2				
		MNO / SP															
82	Emergency Notification Broadcast	CRDB											3				
		All															
83	Restore Notification	CRDB											3				
		MNO / SP															
84	Restore Notification Broadcast	CRDB											3				
		All															