

PROCEDURES AND GUIDELINES

FOR

THE PROVISION OF

MOBILE NUMBER PORTABILITY SERVICES

IN

KENYA

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1. Introduction

1.1. Background

The Communications Commission of Kenya (hereinafter referred to as the Commission) was established under the Kenya Communications Act, 1998, No. 2 of 1998 and the Kenya Communications (Amendment) Act 2009, to license and regulate telecommunications, radio communications, postal and broadcasting services in Kenya. The Commission is also responsible for promoting competition, protecting consumers, and ensuring fairness and efficiency within the Communications sector.

Other core functions of the Commission include maintenance and administration of the National Numbering Plan for Kenya including the development of guidelines related to allocation and use of numbers. The Commission has in the past conducted public consultations on the implementation of Mobile Number Portability; with the majority of respondents being in favour of the introduction of the service. Number portability enables consumers to retain their telephone numbers whenever they decide to change service providers enhancing consumer convenience and the competitive environment in the sector.

These Procedures and Guidelines aim at achieving these objectives and shall be observed accordingly.

1.2. Application of the Procedures and Guidelines

These Procedures and Guidelines are issued pursuant to and shall form part of Operator Licence Condition on "NUMBERING AND NUMBER PORTABILITY"

1.3. Effective Date of the Procedures and Guidelines

The Procedures and Guidelines shall be effective from the issue date.

1.4. Amendments to the Procedures and Guidelines

The Commission may amend these Procedures and Guidelines from time to time.

1.5. Commercial Agreements between Licensees on provision of Number Portability Services

The Mobile Network Operators (herein after referred to as the Operators) and the Number Portability Services Provider (herein after referred to as the Central Reference Database) shall, in addition to these Procedures and Guidelines, enter into commercial agreements for the provision of the service and such agreements shall include but not limited to settlement of transaction fees. The said agreement shall subsequently be filed with the Commission.

1.6. Dispute Resolution

All disputes arising from the provision of number portability services shall be settled in accordance with the Act and Regulations.

2. Scope

- 1. These Procedures and Guidelines relate to those aspects of the Mobile Number Portability ordering process that:
 - Involve exchanges between the Operators via the Central Reference Database; or
 - Involve actions by one Operator that have to be relied upon by another Operator including but not limited to Subscriber order validation process.
- 2. These Procedures and Guidelines do not specify all the details of the internal procedures and processes that each Operator shall need to undertake to support the required functionality.
- 3. These Procedures and Guidelines specify the different stages of the process from the point when a Subscriber requests a new Account via number portability to the point when the Subscriber has an active Account on the Recipient network, the Account on the Donor network has been closed and all other Operators have been informed of the number porting.
- 4. These Procedures and Guidelines apply to portings:
 - from the Block Operator;
 - back to the Block Operator; and
 - between Operators who are not the Block Operator.
- 5. Some parts of these Procedures and Guidelines are at a functional level, including actions to be undertaken by one Operator and relied upon by the other Operator, whilst others such as the exchange of messages are detailed technical specifications so as to ensure compatibility between the Operators.

- 6. These Procedures and Guidelines may need to be reviewed when new services are introduced.
- 7. These Procedures and Guidelines may not apply where Court Orders are in effect with respect to specific numbers.

3. Definitions and Abbreviations

3.1. Definitions

In these Procedures and Guidelines, unless otherwise stated the following definitions apply;

- 1. "Act" means the Kenya Communications Act 1998 any successor legislation and any subsequent amendments thereto;
- 2. "Account" means a number(s) held by a single natural person or legal entity;
- 3. "Activation" means that the accepted Request to Port has been acted upon by the Donor Operator and the Recipient Operator and the number is now recognised by all Operators as being active on the Recipient Operator's Network;
- 4. "All Call Query" during the call set-up process an Operator's Routing Database is queried for the correct Network designation for that particular number;
- 5. "Applicant" is any individual or organisation that wishes to enter into a contract with an Operator for acquiring mobile services;
- 6. "Application" is a software package, which performs a set of routines required by the user;
- 7. **"Block Operator"** is the Operator to whom the number block was allocated by the Commission that contains the number that is being ported;
- 8. "Broadcast" means the automatic transmission of routing information from the MNP Administration Service to an Operator managed database;
- 9. "Browser" means an application which is designed to enable users to access systems across the Internet. Microsoft Internet Explorer is one such browser application;

- 10. "Business Day" means Monday to Friday during working hours excluding Saturday, Sunday and Public holidays;
- 11. "Client" means an application provided by a Service provider, which can be installed on hardware located in the user's domain and under the control of the user, which shall provide specific functionality;
- 12. "Commission" means the Communications Commission of Kenya;
- 13. "Cooling Off" means the function that enables a Subscriber to return to the Donor Operator in the case that the Recipient Operator's service fails to meet the Subscriber's expectations, this shall be a period of not more 14 calendar days;

14. Description of the main Messages Used:

- 14.1. "Accept Message" means the Donor Operator has indicated that the request to port may go ahead;
- 14.2. "Authorisation Request Message" is the initial message sent by the Recipient Operator to the Central Reference Database that initiates the porting request. The Authorisation Request contains a) the number(s) to be ported; b) the number to be used to validate the porting request; c) the donor Account type; d) name of the donor network and e) date porting is required;
- 14.3. "Initial Response Message" is the message sent by the Central Reference Database to the Recipient Operator once the Central Reference Database has checked the Authorisation Request and successfully matched the Authorisation Request to the Calling Line Identity of the authorisation Short Message Service /text message received from the Subscriber;
- 14.4. "Authorisation Response Message" is sent by the Donor Operator to the Recipient Operator via the Central Reference Database once the Donor Operator has performed the authorisation checks. The Authorisation Response message indicates whether or not the Donor Operator shall permit the number to be ported;
- 14.5. "Instruction Request Message" is sent by the Recipient Operator via the Central Reference Database to the Donor Operator. The Recipient Operator activates the Subscriber number on their network and sends the Instruction

- Request to the Donor Operator instructing them to deactivate the number on its network and apply onward routing for any incoming calls;
- 14.6. "Instruction Response Message" is sent by the Donor Operator to confirm the Subscriber number has been deactivated from their network and the porting operation is completed.
- 15. "Donor Network" means the network the Subscriber intends to port from;
- 16. "Donor Operator" means the Operator that was providing service for the Subscriber's number before Porting;
- 17. "Deferred Porting" means the function that enables a Subscriber to define or set a porting date at a future date not more than 60 calendar days from the date that a porting request is made;
- 18."E164" is an International Telecommunications Union Recommendation which defines the international public telecommunication Numbering Plan;
- 19. **"File Transfer Protocol (FTP)"** is a standard network protocol used to copy a file from one host to another over a TCP/IP based network, such as the Internet;
- 20. "Graphical User Interface (GUI)" is a type of user interface item that allows people to interact with programs in more ways than typing such as computers;
- 21. "Identification Document" means any of the following documents:
 - 21.1. Kenya national identity card;
 - 21.2. Valid passport;
 - 21.3. Military identity card;
 - 21.4. Work permit;
 - 21.5. Alien card;
 - 21.6. National identity card issued by parent country;
 - 21.7. Valid driving licence;
 - 21.8. Student Card from an accredited educational institution;
 - 21.9. Certificate of incorporation;
 - 21.10. Certificate of Registration or
 - 21.11. Enabling legislation or Gazette notice.
- 22. "IMSI" is the International Mobile Subscriber Identity;

- 23."MNP" means Mobile Number Portability;
- 24. "Network" means the infrastructure deployed by an Operator which provides mobile services to their Subscribers;
- 25. "Number Portability" means the ability to retain an existing mobile Subscriber number when transferring basic mobile call and SMS/MMS services from one Operator to another Operator;
- 26. "Numbering Plan" means the number blocks which have been assigned to Operators in Kenya;
- 27."Onward Porting": means a subsequent porting requests made by a subscriber to a new Recipient Operator;
- 28.**Onward Porting Restriction**": means a limitation on Onward Porting request made within a period of less than or equal to 60 calendar days from a previous successful port on the same number;
- 29."**Per Port Charges**" means the fee charged for porting a number from the Donor Operator to the Recipient Operator and is usually charged to the Subscriber;
- 30."**Porting**" means the act of initiating a request to a Donor Network for approval to transfer a number from their Network to the Recipient's Network, the subsequent receipt of an answer from the Donor Network, and the act of informing all Operators that a number has been successfully transferred and is now active on the Recipient Network;
- 31. "Porting day" means a Business Day;
- 32. "Porting Window" means the Central Reference Database porting time between 0830-1730Hours on Business Days;
- 33. "Post pay Account" means an Account held by a Subscriber for mobile services which is paid after services are offered in accordance with contractual arrangement between the two parties;

- 34. "Pre pay Account" means an Account held by a Subscriber for mobile services which is paid in advance;
- 35. "Recipient Network" means the network the Subscriber intends to port;
- 36. "Recipient Operator" means the Operator that is to start serving the number that is being ported and any sales Agents or other parties acting for them;
- 37. "Reference Database" means an electronic storage medium that contains information used in the execution of the MNP Administration Service;
- 38. "Regulations" means all regulations promulgated under the Act;
- 39. "Reject" means the Donor Operator or Central Reference Database has indicated that the Request to Port may not go ahead;
- 40. "Retailer (Agent)" means an entity which enters into contractual arrangements with a mobile Network Operator, in accordance with its licensing conditions, to provide retail services;
- 41. "Routing" means linking a number that is to be ported with the relevant Operator code of the Recipient Network, storing the linked information in a reference table and delivering the calls to appropriate Operator;
- 42. "Subscriber Identity Module (SIM)" is small electronic card inserted into cell phones, which provides a unique identity to a phone such as the Subscriber number and Operator network;
- 43. "Subscriber" mean any natural person or legal entity who or which has an Account with an Operator;
- 44. "Time" as used in these Procedures and Guidelines refers to the time in Kenya (+3 GMT)'
- 45."Win-back" means where the Donor Operator initiates contact with a subscriber who has either requested number portability, or who has already ported their number(s).

3.2. Abbreviations

ACK	Acknowledge the message		
ACQ	All Call Query		
CLI	Calling Line Identity		
CRDB	Central Reference Database		
FTP	File Transfer Protocol		
GUI	Graphical User Interface		
HTTPS	Hypertext Transfer Protocol Secure		
ID	Identification Document.		
KPI	Key Performance Indicator		
MMS	Multimedia Messaging Service		
MNP	Mobile Number Portability		
SIM	Subscriber Identity Module		
SLA	Service Level Agreement		
SMPP	Short Message Peer-to-Peer		
SMS	Short Message Service		
SMSC	Short Message Service Center		
TCP/IP	Transmission Control Protocol/Internet Protocol		

4. Overview

4.1. General

In number portability:

- i). the Subscriber opens an Account with the new (Recipient) Operator and pays the Per-Port Charge;
- ii). the Subscriber installs a new SIM that has the number that they are already using with the old (Donor) Operator;
- iii). the Subscriber requests the new Operator to close their Account with the old (Donor) Operator;
- iv). a request is made to all Operators to change their routing arrangements so that calls can be routed directly to the new Operator;
- v). the total turnaround time in the porting process is a maximum two (2) porting days including all stages; and
- vi). any porting process beyond two porting days shall be recorded by the CRDB and shall also form part of the KPI reporting.

Ultimately the process shall ensure that incoming communications including but not limited to calls, SMS, MMS, to the Subscriber's number are terminated on their Account with the new (Recipient) Operator.

4.2. Design Concept

The design of this porting process is asynchronous and sequential; a sequence of actions is specified with each action starting only after completion of the previous action. The design:

- i). maximises the checking that can be performed automatically by the CRDB in order to reduce the workload on the Operators; and
- ii). limits the information on the MNP process that needs to be held by the CRDB and the Recipient Operator therefore minimising problems associated with the

re-establishing the process after some unforeseen disruption. If problems occur and the porting transaction is failed, the Subscriber and/or the Recipient and Donor Operator shall take the necessary actions to resolve the problem. A new porting transaction may then be initiated.

iii). the process allows for a number to be ported to both a new Account and to an Account that is already active, with a number allocated by the Recipient Operator.

4.3. Validation

Validation is the process by which the Recipient Operator, the CRDB and the Donor Operator check that the Subscriber is qualified to port a number. The validation procedures differ for different types of Accounts. The process of validation may be combined with the process of Subscriber checking (including any identity checks required by Law) that an Operator would carry out for all Subscribers irrespective of whether they request number portability.

The following are the main elements of the validation checks:

- i). The Recipient Operator verifies and records the identity of the Subscriber's ID information;
- ii). The CRDB checks the possession of the number to be ported; this requires the Subscriber to send an SMS message to the CRDB which in turn checks the CLI of number requesting for porting against the Authorisation Request sent by the Recipient Operator; and
- iii). The Donor Operator checks the number requesting porting and necessary Account information held against this number.

4.4. Retail Flexibility

This procedure allows considerable flexibility over the retailing of mobile services and minimises the tasks that need to be carried out by Retailers. The procedure allows:

i). All actions in relation to application of MNP to be carried out in one visit to an appropriately equipped Retailer;

- ii). The Retailer to assist the Subscriber in sending the porting request by SMS to the toll free short-code number, in particular providing assistance to the elderly and persons with disabilities; and
- iii). Subscribers may request number portability without visiting a Retailer subject to use of secure means and terms and conditions of the Recipient Operator. This function shall be provided without prejudice to provisions of these Procedures and Guidelines

4.5. Reporting

The Operators shall submit quarterly reports to the Commission on the following KPI:

- i). The number of Authorization Requests received by each Donor Operator;
- ii). The number of Authorization Requests accepted by each Donor Operator;
- iii). The number of Authorization Requests refused by each Donor Operator;
- iv). The number of ports not effected within 2 Porting Days;
- v). The total ported numbers served by each Operator;
- vi). The total number of ported requests served by each Operator for selected towns/cities of the country; and
- vii). Any other information that the Commission may request from time to time.

4.6. Overview of Procedure

The "front end" of the procedure involving the Recipient Operator and the Subscriber is specified only where it is essential to ensure that the whole Porting process works reliably and without prejudice to provisions of these Procedures and Guidelines. The following procedure applies for both Pre pay and Post pay Accounts:

i). The Subscriber is given information about the porting process and the implications thereof;

- ii). The Subscriber requests to port their number to the Recipient Operator through their Retailer by filling the Number Porting Request Form (Annex 1) and submitting the prerequisite ID;
- iii). The Recipient Operator through their Retailer verifies the Subscriber's ID;
- iv). The Subscriber signs the Number Porting Request Form as the legal instrument appointing the Recipient Operator as their Agent to close their Account with the Donor Operator;
- v). The Recipient Operator through their Retailer assists the Subscriber to initiate the porting process by sending the word "PORT" or "HAMA" to 1501 toll free short-code number from their existing (Donor Operator) number. This shall be possible even if the Subscriber has no top-up balance. The SMS is sent to the CRDB by the SMSC of the Donor Operator using the SMPP protocol over the Internet;
- vi). The Recipient Operator sends an Authorisation Request message to the CRDB;
- vii). The CRDB checks the Authorisation Request and against the CLI of the number used by the Subscriber to send the SMS. Other checks include but are not limited to the verifying that the number is in Numbering Plan, the Donor Operator, the number is not subject to an existing porting request, that porting request is not within the Cooling off Period and does not have an Onward Porting Restriction;
- viii). The CRDB sends an Initial Response message to the Recipient Operator and informs the Subscriber by SMS if the basic checks of the porting requested have been passed or failed;
 - ix). If the CRDB rejects the request, then the problem shall be resolved by the Recipient Operator in collaboration with the Donor Operator through the appropriate contacts as provided in <u>Section 21</u> within reasonable time to ensure conformance with the porting hours as provided in <u>Section 4.10</u>. The procedure may be started from the beginning;
 - x). The Donor Operator performs the authorisation checks and sends the Authorisation Response indicating whether the number can or cannot be ported;

- xi). If the Donor Operator rejects the Authorisation Request then the problem shall be resolved within reasonable time to ensure conformance with the porting hours as provided in <u>Section 4.10</u> and the procedure started from the beginning;
- xii). The Recipient Operator then activates the ported number on its network and sends the Instruction Request to the CRDB. The CRDB sends an SMS to tell the Subscriber to change their SIM and then forwards the Instruction Request to the Donor Operator. The Donor Operator deactivates the number on its network and applies onward routing for any incoming calls;
- xiii). CRDB instantaneously broadcasts to all Operators of the new routing; and
- xiv). On receipt of broadcast message from CRDB, all Operators shall update their routing information immediately or within a maximum of 30 minutes from the time of receipt of the broadcast message.

4.7. Account Classification

For the purpose of number portability, both single line and multi-line Accounts are classified as follows:

- i). Pre pay Account held by a natural person (personal) or an entity other than a natural person (non-personal);
- ii). Post pay Account held by a natural person (personal); and
- iii). Post pay Account held by an entity other than a natural person (non-personal).

4.8. Treatment of Accounts

- i). Non-personal Pre pay Accounts number(s) porting requests shall be handled in the same way as personal Pre pay Accounts.
- ii). Non-personal Post pay Accounts number(s) porting requests shall be accompanied by a letter of authority on letterhead paper of the organisation. The letter shall be signed by an authorised signatory and shall explicitly authorise the porting and the closure of the Account with the Donor Operator. For such Accounts there are two cases:
 - a) An Account with an authorised signatory; and

- b) An Account with delegated authorisation.
- iii). Only the following authorisation combinations may be accepted:

Table 1: Authorised Signatory Option

	Porting arranged	Authorisation letter	Number Porting Request	
	by	signed by	Form signed by	
Option A	Authorised	Authorised signatory	Authorised signatory	
	signatory			
Option B	Delegated authority	Authorised signatory Delegated authority		
		and Countersigned by		
		delegated authority		

A template Letter of Authorisation is provided at <u>Annex 4</u>.

4.9. Treatment of Multiline Accounts

Operators shall apply the following two approaches in the treatment of multiple numbers held under the same Account with the Donor Operator:

- i). Port each number separately as separate transactions using the same procedure as for a single number Account; or
- ii). Port numbers as a contiguous or non-contiguous subset or a total set of numbers in an Account with any one of the numbers being selected for matching the CLI of SMS with the numbers to be ported in the Authorisation Request. If the Donor Operator refuses to port any number out of a subset or a total set of numbers then the whole transaction is refused;
- iii). to ensure Subscriber convenience, the Recipient Operator may coordinate multiline Account portings with the Donor Operator through the appropriate contacts as provided in <u>Section 21</u>; and
- iv). Multiline Account porting shall be handled through the CRDB in the same way as single number portings.

Table 2: Analysis of Accounts Treatment by the Recipient Operator

	Single porting		Multiline porting	
Account Type	Pre pay	Post pay	Pre pay	Post pay
Personal	Basic process	Basic process	Basic process	Basic process
		Check Donor Operator Bill		Check Donor Operator bill
Non personal	Basic process	Basic process	Basic process	Basic process
	Letter of Authorisation	Check Donor Operator bill	Letter of Authorisation	Check Donor Operator bill
		Letter of Authorisation		Letter of Authorisation

Figure 1: Overview of Porting Process

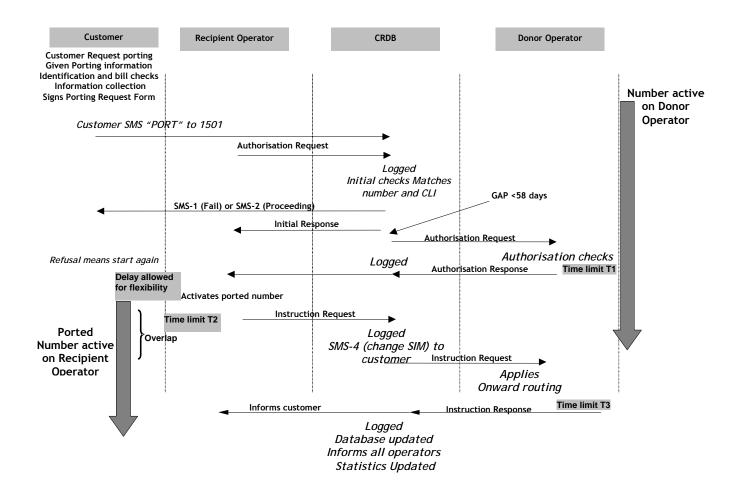


Table 3: Porting Deadlines

Time	Description
T1	1100Hours on Porting day 2
T2	1400Hours on Porting day 2
Т3	1600Hours on Porting day 2

Table 4: List of SMS Messages used in the Porting Process

Message	Text	
SMS-1	Your porting request has failed. Please contact your new	
	Operator.	
SMS-2	Thank you for your SMS. Your porting request is being processed	
SMS-3	Porting error. Please contact your new Operator	
SMS-4	This Account will be closed soon please use your new SIM from	
	your new Operator	

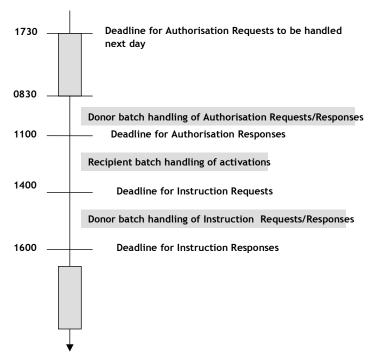
^{*}SMS text may be sent in the language matching the initial port request

4.10.Porting Hours, Batch Processing and Batch Limits

In the following sections all references to time refer to time within the Porting Window on Business days, which are the common porting hours.

- i). The Porting Window in the CRDB is currently set to 0830Hours to 1730Hours.
- ii). The Recipient Operator may accept requests for porting at any time and may store the requests for later action or may send an Authorisation Request to the CRDB at any time.
- iii). The Donor Operator shall respond by 1100Hours on the next porting day to any Authorisation Request that it receives by 1730Hours on a porting day.
- iv). Where the Recipient Operator has received an Authorisation Response that accepts the porting by 1100Hours, the Recipient Operator shall send the corresponding Instruction Request by 1400Hours on the same porting day.
- v). If the Subscriber specifically requests for Deferred Porting the Recipient Operator shall send the Authorisation Request two porting days before porting is required.
- vi). The Donor Operator shall respond by 1600Hours to any Instruction Request that it receives by 1400Hours on a porting day.
- vii). This arrangement ensures that any porting started on one porting day before 1730Hours shall be completed by the end of the following porting day.

Figure 2: Porting Hours, Batch Processing and Batch Limits



Note 4.10: Notwithstanding the porting hours, the CRDB shall be available 24 Hours 7 days a week (24/7).

5. Subscriber Handling and Initial Validation

5.1. Introduction

- i). The Recipient Operator has considerable flexibility in organising the number portability retailing function and shall be responsible for ensuring that Retailers follow the procedures specified in these Guidelines.
- ii). The Subscriber's Account with the Recipient Operator may be of a different type from that with the Donor Operator. For example the Account with the Recipient Operator may be Post pay whereas the Account with the Donor Operator was Pre pay, and vice versa.
- iii). Number portability applies only where the legal entity who requests number portability from the Recipient Operator is the same legal entity that holds the Account with the Donor Operator. Where a change of the legal entity is required, for example from a personal Account to a non

personal Account, this change shall be made with the Recipient Operator after the porting process has been completed.

iv). The procedure is designed to be carried out as quickly as possible and within a maximum of 2 porting days in conformance with the porting hours.

5.2. Special Cases

The arrangements for porting numbers other than Subscriber numbers may be established on a case-by-case basis with the agreement of all Operators and approval by the Commission.

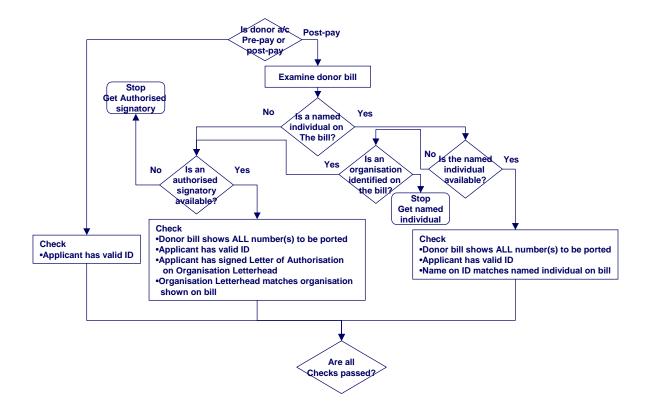
5.3. Requirements on the Recipient Operator when taking a porting request

- R1: The Recipient Operator or their Agent shall advise Subscribers who are requesting number portability that:
 - i). A porting request shall be declined if the Subscriber gives incorrect information about their Account;
 - ii). any outstanding top up balance shall be lost;
 - iii). they shall take the necessary action to retrieve any funds in a money transfer Account held against the number to be ported;
 - iv). the porting request shall be rejected for non payment of moneys owed for mobile services subscribed to on the number to be ported in accordance with the terms and conditions of their contract with the Donor Operator;
 - v). all services of existing Operator shall be lost including but not limited to any incoming messages or SMSs or MMSs that have not been retrieved or delivered. In addition contacts saved on the Donor Operator's SIM are likely to be lost;

- vi). they shall take the necessary action to ensure that they have met contractual obligations with the Donor Operator for mobile services subscribed to;
- vii). the Subscriber shall be required to set up the details of their Account with the Recipient Operator as no details or arrangements shall be passed across from the Donor Operator to the Recipient Operator. In particular, the Recipient Operator is obliged to register a ported Subscriber in accordance with the Commission's Subscriber registration requirements;
- R2: The Recipient Operator or their Agent shall verify and obtain copies of ID submitted by the Subscriber.
- R3: The Recipient Operator or their Agent shall ask the Subscriber if their Account with the Donor Operator is Pre pay or Post pay.
- R4: If the Account is Post pay, the Recipient Operator or their Agent shall ask the Subscriber to present them with a copy of the latest bill for the number to be ported.
 - i). If the Account is personal or non-personal but bears the name of the authorised signatory then the Recipient Operator shall check the ID of the person requesting porting against the information on the bill. If there is a reasonable match then the process may proceed, if not, then the porting request shall be declined.
 - ii). If the Account is non-personal and does not bear the name of the authorised signatory, then the Recipient Operator shall require the Number Porting Request Form to be signed by an appropriate legal representative of the organisation. The Recipient Operator shall check the identity of the representative and letter of authorisation proving that they are the legal representative. If there is a reasonable match then the process may proceed, but if not then the porting request shall be declined.

- iii). The Recipient Operator shall check that:
 - a) The Donor Operator bill submitted shows all the numbers to be ported;
 - b) The organisation name shown as the Account holder on the Donor Operator bill submitted matches the organisation name on the letterhead;
 - c) The signatures on the Number Porting Request Form and the letter of authority conform to option A or option B in Table 1 match; and
 - d) The person requesting the porting matches the photograph on the ID and the name on the ID match the Authorised signatory in the case of option A or the Delegated authority in the case of option B.

Figure 3: Process of checking Donor Operator Bills for Post pay Accounts



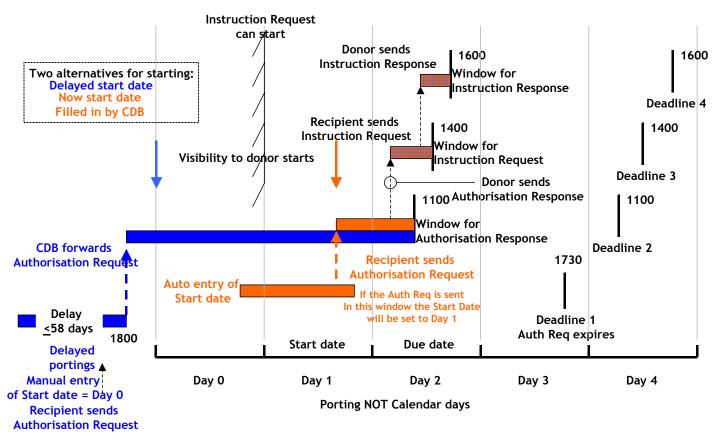
- R5: The Recipient Operator or their Agent shall require the Subscriber to sign a standard Number Porting Request Form (Annex 1) appointing the Recipient Operator to act as their agent and to close their Account with the Donor Operator and to port the number.
- R6: The Recipient Operator shall retain copies of the following documents for a period of at least twelve (12) months:
 - i). the signed Number Porting Request Form;
 - ii). all ID submitted and checked;
 - iii). in the case of Post pay Account, the latest bill from Donor Operator;
 - iv). evidence of the legal representative of a non-personal Subscriber including a letter of authority; and
 - v). a record of the person who made the identity check, the time and date when this check was made.
 - R7: The Recipient Operator or their Agent shall assist and instruct the Subscriber to send an SMS message containing the word "PORT" or "HAMA" depending on the language preferred by Subscriber. This SMS shall be sent from a terminal using the SIM card of the Donor Operator associated with the number to be ported to the CRDB to the 1501toll-free short-code number.
 - i). The ability to send the SMS message shall demonstrate that the number is active on the Donor Operator's network.
 - ii). The CLI shall be relayed to the CRDB using SMPP and should not be affected by the Subscriber's use of CLI restriction.
 - iii). Where a block of numbers is being ported, the SMS shall be sent from the number specified for this purpose in the Number Porting Request Form and Authorisation Request.

- R8: When all the above requirements have been met, the Recipient Operator shall send the Authorisation Request to the CRDB with information including but not limited to:
 - i). Number to be ported;
 - ii). Porting request number;
 - iii). Porting Start Date; and
 - iv). Account type.

5.4. Deferred Portings and CRDB Timings

- i). If the Subscriber requests for Deferred porting, the Recipient Operator may either:
 - a) Record the Deferred porting request date specified on the Number Porting Request Form and advise the Subscriber to send porting request by SMS to the toll free short-code number; 1501, on the Deferred porting date to initiate the porting process; or
 - b) Assist the Subscriber to send the porting request by SMS to the toll-free short-code number; 1501, on the date that the porting request is made and send the Authorisation Request immediately specifying the Deferred porting date. If the CRDB response is successful, the CRDB shall store the request and forward it to the Donor Operator two porting days from the Deferred Porting date. This is the preferred option.
- ii). In handling Deferred porting orders the Recipient Operator shall take into Account of the current CRDB timings of the Start Date and Due Date. Where the CRDB is recording and storing a Deferred port, the Authorisation Request is sent to the Donor Operator two porting days before Start Date. The Deferred porting process is illustrated in the *Figure 4*.

Figure 4: Deferred Porting and CRDB Timings



6. Checks performed by the CRDB on the Authorisation Request

The checks performed by the CRDB when it receives an SMS requesting for porting from the Subscriber shall include but not limited to the following:

- i). The CRDB shall attempt to match the CLIs of received SMSs with the numbers to be ported in the received Authorisation Requests. If the check fails, the CRDB shall send an appropriate error message to the Recipient Operator. The Recipient Operator may resend a corrected Authorisation Request if an error is established on its part in the previous request or SMS-3 sent to the Subscriber. In this case the porting request may be restarted.
- ii). When the CRDB has received an SMS where the CLI matches the number to be ported in an Authorisation Request, and if the Subscriber has not requested Deferred porting, the CRDB shall send:
 - a) an Initial Response message to the Recipient Operator confirming that the porting is proceeding; and
 - b) the Authorisation Request to the Donor Operator
 - c) the text message SMS-2 to the Subscriber.
- iii). If an SMS is not matched with the CLI in the Authorisation Request by 1730Hours of porting day 2, then the CRDB shall:
 - a) send a Time Out Message to the Recipient Operator;
 - b) discard the Authorisation Request; and
 - c) send SMS-1 to the CLI of the SMS
- iv). If the Authorisation Request is received before the end of the Porting Window, then the CRDB shall set the Due Date parameter in the Authorisation Request to be the next porting day unless Deferred porting has been requested.

- v). If the Authorisation Request is received after the end of the Porting Window on a porting day or at any time on a non-porting day, then the CRDB shall set the Due Date parameter in the Authorisation Request to be the next but one porting day unless Deferred porting has been requested.
- vi). If Deferred porting has been requested then the CRDB shall set the Due Date parameter in the Authorisation Request to be the date requested by the Subscriber and shall forward the Authorisation Request to the Donor Operator at the end of the porting day, two porting days before the chosen porting date. Deferred dates in the Authorisation Request sent by the Recipient Operator more than 60 calendar days ahead of the current date shall be rejected by the CRDB.
- vii). The CRDB shall carry out the checks including but not limited to the following criteria. If these checks are not met the CRDB shall generate appropriate error codes:
 - a) The number to be ported is valid on the Numbering Plan and Donor Network number ranges and is therefore inconsistent with the number ranges held by the CRDB;
 - b) The number to be ported is not already subject to an existing porting process;
 - c) The number to be ported is in the Cooling off period;
 - d) The Deferred porting date is within 60 calendar days of the current date;
 - e) The number was previously ported in more than 60 calendar days;

7. Actions by the Donor Operator on receiving an Authorisation Request

7.1. Introduction

The provisions of this section apply separately for each transaction.

7.2. Requirements

The following requirements apply on receipt of an Authorisation Request.

- i). The Donor Operator shall authorise the porting unless one or more of the requirements (R9 R14) have been failed. If the porting is refused the Donor Operator shall indicate the results of each check that it has performed. Where a block of numbers is being ported and a refusal reason relates to a specific number then the Donor Operator shall indicate which number the refusal reason relates to. The Donor Operator may omit any checks that it wishes, but cannot reject porting requests that have been rejected due to the checks that have been omitted.
- ii). All checks shall be performed and all refusal reasons shall be given. This means that the Donor Operator shall not send the Authorisation Response after it has encountered one reason for refusal but before it has completed all the checks.
- R9: The Donor Operator shall handle all Authorisation Requests in the order in which they were received.
- R10: The Donor Operator shall check that the number to be ported is not a number for which the SIM is blocked as stolen or lost.
- R11: The Donor Operator shall check that the Account classification matches its records. That is check whether the Account is Pre pay or Post pay.

- R12: The Donor Operator shall check that the payment status of the number to be ported.
- R13: The Donor Operator shall check that the Subscriber is not already subject to suspension of any service for reasons unrelated to payment.
 - If the Donor Operator refuses the port for such reasons then follow the procedure in <u>Annex 3</u> shall be followed.
- R14: The Donor Operator shall send an Authorisation Response message to the Recipient Operator via the CRDB by 1100Hours on the porting day specified by the Due Date parameter in the Authorisation Request received either authorising or refusing the porting.

8. Activation by the Recipient Operator

The following applies separately for each transaction:

- i). In a multiline Account where each number is ported as separate transactions; the porting of each number shall be independent of any other number in the Account. That is, if an Authorisation Request is rejected for one number in the Account, porting of other numbers continues.
- ii). In multiline Account where numbers are ported as subset or total set of numbers in an Account in a single transaction; the porting shall continue only if an Authorisation Request is not rejected for any one of the numbers in the subset or total set. The Recipient Operator may initiate a separate new porting transaction for the numbers for which the Authorisation Request has been accepted.
- iii). If the porting has been accepted, the Recipient Operator shall activate the ported number(s) on its network, and send the Instruction Request message via the CRDB to the Donor Operator. For Authorisation Responses received by 1100Hours, the Recipient Operator shall send the Instruction Request by 1400Hours of the second porting day.

iv). If the Recipient Operator is unable to send the Instruction Request within the expected timescale, it may send the Instruction Request at any time up to 1400Hours on the second porting day after the porting day when the Authorisation Response was received by 1100Hours. If the Recipient Operator does not send the Instruction Request by this deadline then the CRDB shall abort the porting and the Recipient Operator may restart the porting process if appropriate.

For clarity, if the Authorisation Response is received between 1100Hours on porting day 1 and 1100Hours on porting day 2, then the Instruction Request shall be sent by 1400Hours on porting day 2 in conformance with the porting hours. Failing this, the Instruction Request shall be sent by 1400Hours on porting day 4 to avoid the porting from being aborted.

- v). If the Authorisation Request has been refused, the Recipient Operator may consult the Subscriber to resolve the problem and may submit a revised Authorisation Request. After two refusals for the same number the Recipient Operator shall not submit further requests for the same number until it has resolved the problem with appropriate Donor Operator contacts as provided in Section 21.
- vi). If the Authorisation Request is accepted and the Recipient Operator receives the Authorisation Response, then at this stage:
 - a) originating calls can be made from the Recipient Operator's SIM;
 - b) calls originating from Subscribers on the Recipient Operator shall be received on the Recipient Operator's SIM; and
 - c) the Subscriber still has full service on the Donor Operator's network and so calls from other Operators shall be received on the Donor Operator's SIM.

vii). Until Recipient Operator sends the Instruction Request message, it may send an Abort message to the Donor Operator via the CRDB to abort porting. On receipt of an Abort message, the Donor Operator shall terminate its processes in relation to the porting.

9. Checks Performed by the CRDB on the Instruction Request

- i). The CRDB shall perform the following checks on the Instruction Request message:
 - a) the number to be ported is the subject of an Authorisation Request made by the same Recipient Operator and the Instruction Request has been sent within the correct time window;
 - b) the number is not currently subject to a porting process; and
 - c) an Instruction Response has not already been sent.
- ii). If any of these checks fail, the CRDB shall inform the Recipient Operator with the relevant error code. The Recipient Operator may resubmit the Instruction Request.
- iii). If all the checks are passed the CRDB shall send SMS-4 to the number to be ported. The CRDB shall then forward the Instruction Response to the Recipient Operator.

10.Actions by the Donor Operator on receiving an Instruction Request Message

- i). The following requirements apply on receipt of an Instruction Request. They apply separately for each number that a Instruction Request is received;
- R15: The Donor Operator shall handle all Instruction Requests in the order in which they were received.

R16: The Donor Operator shall perform the following actions:

- a) deactivate the number on its network;
- b) close all services associated with the Subscriber number from the Donor Operator.
- c) update its routing information so that calls originating from Subscribers on the Donor Operator's network and from other Operators are routed directly to the Recipient Operator; and
- d) send an Instruction Response via the CRDB to the Recipient Operator.
- ii). Where the Instruction Request was sent by 1400Hours, these actions shall be completed by 1600Hours. If the Instruction Response is not sent by 1600Hours in response to an Instruction Request received by 1400Hours then it shall be sent as soon as possible up to 1600Hours on the next but one porting day otherwise the porting shall be aborted.

11. Updating of the CRDB

When the CRDB receives a positive Instruction Response, it shall:

- a) update its records of the Operator that is serving the ported number;
- b) forward the Instruction Response to the Recipient Operator; and
- c) send an E164Ported message to all other Operators.

12.Actions by the Recipient Operator on receiving an Instruction Response message

The following requirement applies on receipt of an Instruction Response;

R17: On receiving an unsuccessful Instruction Response, the porting is cancelled and the Recipient Operator shall inform the Subscriber and deactivate the number that was being ported.

On receiving a successful Instruction Response, no further action is needed by the Recipient Operator.

Note 12:

The Subscriber and Recipient Operator may restart the process after resolving the reasons for the failure.

13. Actions by the Operators on receiving an E164Ported Message

The following requirement applies on receipt of an E164Porting Message;

R18: On receiving an E164Ported message, all Operators shall use ACQ routing to immediately or within a maximum of 30 minutes from the time of receipt of the E164Ported message update the routing information and apply direct routing.

14. Subsequent Porting

14.1.Portings to the Block Operator

Subject to the Onward Porting Restriction, where the Subscriber requests for a subsequent port, back to the Block Operator, in which case the Recipient Operator is the block Operator, the normal porting procedure shall apply with the following exceptions:

- a) The CRDB shall remove the number from the list of ported numbers; and
- b) The Recipient (Block) Operator shall remove any onward routing applied to support previous portings.

14.2.Portings where neither Donor Operator nor Recipient Operator is the Block Operator

Subject to the Onward Porting Restriction, where the Subscriber requests porting where neither Donor Operator nor Recipient Operator is the Block Operator, the normal porting procedure specified shall apply but the Donor Operator shall not apply onward routing.

15.CRDB Logs and Reporting of Late Responses

- i). At 1800Hours each porting day, the CRDB shall make available to each Operator involved as either Donor Operator or Recipient Operator, a list of the actions that have:
 - a) exceeded their time limits and remain active but incomplete; and
 - b) exceeded their time limits and have been aborted on that day.
- ii). In each case the data shall include:
 - a) The porting reference number;
 - b) The number to be ported;
 - c) The code for the Recipient Operator;
 - d) The code for the Donor Operator;
 - e) Current state of porting if active or indication that the porting has been aborted appropriately numbered or named for ease of reference; and
 - f) Date and time that the porting process entered current state or when the process was aborted.

16. Termination of Service

The objective this section is to return a ported number to the Block Operator when the provision of service to a ported number ceases.

- The Recipient Operator send an E164Terminated message to the CRDB either immediately or within a maximum of 60 calendar days, after the provision of service to a ported number have been ceased.
- ii). If, before sending the E164Terminated message, the former Recipient Operator receives a request from the same Subscriber to re-activate the Account and the number, then the Recipient Operator may re-activate it.
- iii). On receiving the E164Terminated message, the CRDB shall:
 - a) remove the number in the database of ported numbers; and
 - b) send a copy of the E164Terminated message to all Operators.
- iv). If, after sending the E164Terminated message but before 60 calendar days have elapsed, the former Recipient Operator receives a request from the same Subscriber to re-activate the Account and the number, then:
 - a) the Recipient Operator may reactivate the number; and
 - b) the Recipient Operator shall send an E164Reactivate message to the CRDB; and
 - c) on receipt of the E164Reactivate message the CRDB shall remove the number from the queue of numbers to be terminated.
- v). An Operator shall not allocate a number that is not from a block of numbers allocated to it by the Commission. This means that an

Operator may not reallocate a ported number even if services to the Subscriber have terminated.

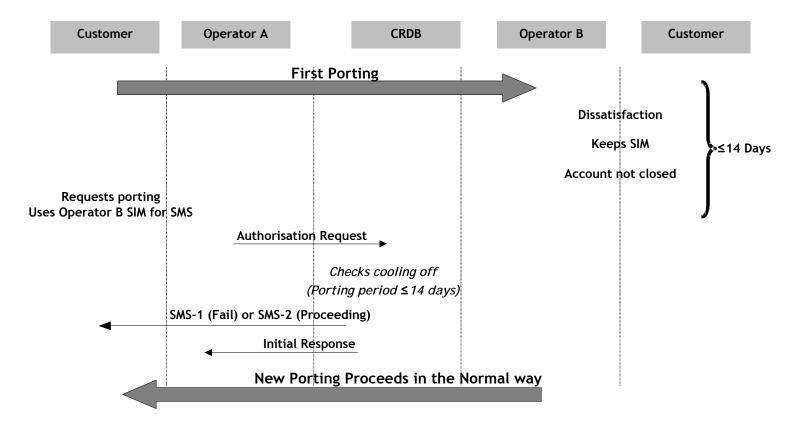
vi). On receipt of an E164Terminated message, the Block Operator concerned shall apply its normal quarantine rules before reallocating the number.

17. Clarification on Cooling off Periods

Subscribers shall be allowed a Cooling off period in relation to their new Account with the Recipient Operator as follows:

- i). Cooling off period shall be a period of not more than 14 calendar days from the date of porting from the Donor Operator.
- ii). Where Cooling off applies to a Subscriber that has entered into a contract with the Recipient Operator, the Subscriber shall have the right to cancel this contract without early termination charges, but does not remove the Subscribers obligations to pay for call charges.
- iii). The following Cooling off procedure applies:
 - a) the Subscriber shall contact the current Operator (old Recipient Operator) and state their intention to port back after the Cooling off.
 - b) the Subscriber shall make a porting request to the Recipient Operator (old Donor Operator), whom they are rejoining. This porting transaction shall follow the procedure of a normal porting transaction.

Figure 5: Cooling Off Process



18. Clarification on Win Back

Win back is not allowed.

19. Complete Data Download, Cleansing and Resolution

- i). Every porting day the CRDB will make available by 0800Hours on the FTP section, a file containing the complete set of ported numbers with the identity code of the Operator that serves each number. Operators may however at any time download this file from the CRDB reports section or from a defined FTP section and:
 - a) extract the set of numbers associated with their identity code and compare this set with their own set of served numbers; and
 - b) extract the set of numbers from their own number block and compare this set with their own set of served numbers.
- ii). This comparison exercise may result in the following error situations:
 - a) Ported numbers that Operator is serving may be missing from the CRDB list;
 - b) Numbers in the database list that are associated with the Operator concerned but that they are not serving; or
 - c) Numbers from the Operator's own number block which the Operator is serving but which the CRDB list shows are served by another Operator.
- iii). The Operator shall as far as is possible, check its internal records to see if its records contain errors that may resolve these issues;
- iv). Where these errors cannot be resolved, each Operator shall send by email the list of numbers affected to the CRDB Operator by 1700Hours on the following Monday. The CRDB shall check its logs, attempt to resolve the errors and discuss them as necessary with the Operators;
- v). The CRDB shall report on the errors and classify as affecting one or more Operators:

- a) Where an error is between only one Operator and the CRDB, then the Operator may contact the Subscriber if necessary to help resolve the error;
- b) Where an error involving two Operators, for example a number that is active on more than one network, then the two Operators shall attempt to resolve the issue by comparing documentation signed by the Subscriber. If necessary the Operator with the latest relevant document signed by the Subscriber may contact the Subscriber to help resolve the issue. In such cases the Subscriber shall have the final decision on which Operator they wish to use in the future.

20.Directory Services

Directory services shall be provided vide the relevant Operator Licence condition.

21.Contact Information

Operators and the CRDB shall each provide at least two contact persons for facilitation of MNP services. The contact information to be provided shall at minimum include the details in Table 5:

Table 5: MNP Contact List

Operator	Position	Office	Mobile	Email
		Number	Number	
Main Contact	1			
	2			
Legal Contact	3			
	4			
Process Contact	5			
	6			
Technical Contact	7			
	8			

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Director General	Date	
Communications Commission of Kenya		

ANNEX 1: NUMBER PORTING REQUEST FORM

NUMBER PORTING REQUEST FORM {Operator's Logo}

MOBILE NUMBER PORTING REQUEST FORM

Subscriber Details				
Customer Name* (Letter of Authority to be att	ached if neces	sary)		
Postal Address	y			
Contact Telephone*				
Email				
Porting Details				
Number(s) to be ported* (separate sheet may be used	l for multiple i	numbers)		
Number for SMS check*				
Name of current Operator*				
Tick where applicable				
Current Account type* (Copy of the latest Post pay	Pre pay bill required)		Post pay	
Type of Account to be ported to*	Pre pay		Post	
Porting Date *				
Town/City where this Porting Request is made*				

^{*}I declare that the information given is correct, and that I as current Subscriber of the number(s) to be ported appoint <**Operator Name**> to close

my Account with my current Operator and to port my number(s), and that:

- 1. I understand that any unused top-up balance shall be lost;
- 2. I have taken the necessary actions to retrieve any funds in my money transfer Account held against the number(s)to be ported;
- 3. I understand that the porting request shall be rejected for non payment of moneys owed for mobile services subscribed to in accordance with the terms and conditions of my contract with my current Operator.
- 4. I understand that all services of my existing Operator shall be lost;
- 5. I understand that I shall be solely liable to any contractual obligations not met with my current Operator;

Signature*
Date(DD/MM/Y)

*Required

FOR OFFICIAL USE **Verification of Subscriber Identification ID** Inspected Type and ID/No. Operators reference Number New SIM Card Number (IMSI) Date Time Order taken By: I confirm that I have checked and retained copies the Customer ID and authorisation letter, where applicable: Name Signature

Date

ANNEX 2: LIST OF MESSAGES

The following is a list of messages used in these Guidelines and Procedures:

- 1. Authorisation Request
- 2. Initial Response
- 3. Authorisation Response
- 4. Abort
- 5. Instruction Request
- 6. Instruction Response
- 7. E164Ported
- 8. E164Terminated
- 9. E164Reactivate
- 10.Time out

ANNEX 3: PROCEDURES FOR RESOLVING REFUSALS TO PORT ON GROUNDS OF SUSPENSION

- 1) If the Donor Operator refuses to port because the Subscriber requesting porting is subject to suspension of any service for reasons unrelated to payment, the Donor Operator shall, within 24 hours of refusing the port, contact the Commission's Number Portability contact person and shall, at a minimum provide the following information;
 - (i) identify the Subscriber;
 - (ii) specify when the porting request was received;
 - (iii) specify when the porting request was refused;
 - (iv) identify the requesting Recipient Operator;
 - (v) provide a detailed explanation of the reasons why the porting request was refused; and
 - (vi) identify any confidential information that cannot be shared with the requesting Recipient Operator.
- 2) Promptly upon receipt of this information from the Donor Operator, the Commission shall notify the requesting Recipient Operator.
- 3) The requesting Recipient Operator shall, within 24 hours, send a response and shall provide reasons why the port should be allowed. The requesting Recipient Operator shall specifically identify any confidential information that cannot be shared with the Donor Operator. The requesting Recipient Operator shall also notify the Subscriber in question that the porting request is under review by the Commission.
- 4) Within seven (7) calendar days after the response period for the requesting Recipient Operator has expired, the Commission shall determine whether the porting request shall be refused or allowed. The determination of the Commission shall be sent to both the Donor Operator and the requesting Recipient Operator, setting forth the decision and the reasons thereof.

- 5) Upon receipt of this determination both the Donor Operator and the requesting Recipient Operator shall comply. Any aggrieved party may appeal to the Commission in accordance to the Act.
- 6) If within fourteen (14) calendar days no appeal is launched, and the Commission's determination was that the Subscriber may port, then the Recipient Operator may resubmit the port and the Donor Operator shall not refuse the port request.

ANNEX 4: TEMPLATE LETTERS OF AUTHORISATION

Option A: Letter of the authorised signatory

I am an authorised signatory for <organisation>.

I authorise;

- the opening of an Account with <Recipient Operator>;
- the porting of numbers currently allocated to us in accordance with the accompanying Number Porting Request Form signed by myself; and
- the closure of our Account with <Donor Operator> for the numbers listed in the Number Porting Request Form.

Signed

< Authorised signatory>

Option B: Letter of delegated authority

I am an authorised signatory for <organisation>.

I authorise;

- the opening of an Account with <Recipient Operator>;
- the porting of numbers currently allocated to us in accordance with the Number Porting Request Form signed by <delegated authority >; and
- the closure of our Account with <Donor Operator> for the numbers listed in the Number Porting Request Form.

Signed

< Authorised signatory>

Signed

<delegated authority >