

Mobile Number Portability Ordering Process Specification

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1 Scope

This document specifies those aspects of the Mobile Number Portability ordering process that either:

- Involve exchanges between the operators
- Involve actions by one operator that have to be trusted by another operator, for example the customer order validation process

This document does not specify all the details of the internal procedures and processing that each operator will need to undertake to support the required functionality.

This document specifies the different stages of the process from the point when a subscriber requests a new account with 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. The process also allows for a number to be ported to an account that is already active with a number allocated by the recipient operator.

This specification applies to portings

- from the block operator
- back to the block operator
- between operators who are not the block operator.

Some parts of this specification are written at a functional level, for example the actions to be undertaken by one operator and trusted by the other operator, whilst others such as the exchange of messages are written at a detailed technical level to ensure compatibility between the operators.

This document may need to be reviewed when new services are introduced.

This document may not apply where Court Orders are in effect with respect to specific numbers.

The implementation of number portability in the mobile network is specified in a different document.

The document has been written in terms of operators where the operator is assumed to be both service provider and network operator. Section 16 provides guidance on how to apply this specification where the service provider and network operator are separate companies.

2 Definitions

Block Operator: The operator to whom the number block was allocated that contains the number that is being ported.

CLI Check: A check that the person applying for number porting is in possession of an active SIM that is associated with the number.

ID-Bill check: A check by the recipient that the person applying for number porting has an identity card that matches the information on a bill or statement from the donor operator..

Recipient operator: The operator that provides service to a subscriber number after porting and any agents or other parties acting for them.

Donor operator: The operator that provides service to a subscriber number before porting.

Subscriber: The legal holder of the account who is not necessarily the user of the mobile.

3 Abbreviations

ID Identity card number or passport number where the person does not have a Maltese identity card

CLI Calling Line Identity

SMS Short Message Service

MMS Multimedia Messaging Service

MSISDN Mobile Station ISDN Number (telephone number)

SIM Subscriber Identity Module

4 Overview

In the full portability solution, the subscriber:

- opens an account with the new (recipient) operator with a new line but using an existing number that they are already using with the old (donor) operator;
- requests the new operator to close their account with the old operator;
- requests the operators to change their routing arrangements so that calls will be routed to the new operator;

Thus the solution should ensure that incoming communications (calls, SMS, MMS) to the subscriber's number are terminated on their account on the recipient operator.

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

The design minimises the state information that needs to be held by the donor operator and so minimises the problems of re-establishing the process after some unforeseen disruption.

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. The latter case would apply where for example a subscriber want to try out an operator's network before porting their main number to it.

5 Subscriber handling

The recipient operator shall provide a one-stop shop for number portability, which enables the subscriber to order their new account and to order number portability at the same time from the recipient operator. The procedure shall enable the subscriber to appoint the recipient operator as their agent to close their account with the donor operator and to port the number.

The recipient operator shall advise pre-pay subscribers that when they port their number any unused credit remaining with the donor operator will be lost. The recipient operator may compensate the subscriber for this loss but is not required to do so.

The recipient operator shall explain to the Subscriber that they should not attempt to terminate the account with the donor because this will be done automatically for them as part of the porting process.

The recipient operator shall advise pre-pay subscribers that when they port their number, any incoming messages or SMSs or MMSs that have not been retrieved or delivered are likely to be lost.

An operator may offer to:

- Port a number onto a new account
- Porting a number onto an active account thereby replacing an already allocated and activated number with the ported number.

This option gives the subscriber an opportunity to try out a new account before altering their existing established subscription with another operator.

When a number is ported onto an active account the number that is replaced shall be released and returned to the pool of numbers that after an appropriate sterilisation period may be re-used for other subscribers.

In the case of accounts with multiple numbers, a subset of the numbers may be ported with the others remaining with the existing operator.

The subscriber's account with the recipient operator may be of a different type than 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.

Where a subscriber has multiple MSISDN numbers that are related to the same SIM, eg different numbers for telephony and fax and data, then the subscriber shall at least be able to port only the number used for telephony. The arrangements for porting other numbers shall be established on a case-by-case basis. Note: The different operators treat fax and data differently.

All auxiliary services, such as secondary SIM cards, linked to the subscriber's SIM or MSISDN to be ported will be lost when the porting is effected. The recipient operator should advise the subscriber that if they wish to keep these auxiliary services in operation on the donor operator, they should have them converted into full services before requesting number portability. In order to ensure that the subscriber is fully aware and in control of this situation, requests for porting will be refused when such auxiliary services are active.

Number portability applies only where the legal entity who requests number portability from the recipient operator is the same legal entity who holds the account with the donor operator. (Note: Where a change of the legal entity is required, eg from a personal account to a corporate account, this change should be made with the recipient operator after the porting process has been completed).

The procedure is designed to be carried out as quickly as possible. It does not accommodate long delays in the middle of the process. Therefore if the subscriber wishes to arrange for porting to take place at a specific date and time in the future, the recipient operator will need to postpone the start of the process until the time that corresponds to the process being competed at the time desired by the subscriber.

Annex 1 contains a standard porting form to be used by subscribers when requesting number portability. The porting form includes explicit acceptance of the warnings and advice outlined above.

6 Validation process

6.1 Introduction

Validation is the process by which the recipient operator and the donor operator check that the subscriber is entitled to portability. The validation procedures differ for different types of account and subscriber circumstances. The process of validation may be combined with the process of subscriber checking (including any identity checks required by law and any credit checks) that an operator would carry out for all subscribers irrespective of whether they request number portability.

The number portability process is designed to cover porting both to a new account and to an existing account. For porting to a new account, the recipient operator will have to issue a SIM to the subscriber.

The processes of subscriber checking and SIM issue are outside the scope of this document.

6.2 Account classification

For the purpose of number portability, accounts are classified as follows:

- Pre-pay (both single line and multi-line, registered and unregistered, held by a natural person or an entity other that a natural person
- Post-pay (both single line and multi-line) account held by a natural person
- Post-pay (both single line and multi-line) account held by an entity other that a natural person

6.3 Checks

The following sections specify the various checks.

There are four issues to be checked:

- a) That the number to be ported is associated with the account of the subscriber
- b) That the subscriber who claims to have a post-pay account does have a postpay account and so the other checks relevant to post-pay will be applied
- c) That the person who is requesting portability is the subscriber or the legal representative of the subscriber
- d) That the request and the appointment of the recipient operator as agent to close the account with the donor operator is made in a legally valid form.

These issues are handled in a way that accommodates as many as possible of different user circumstances and takes account of the fact that some pre-pay subscribers are unregistered and are in effect anonymous to the networks. The user circumstances need to accommodate situations where the subscriber is present and ones where he is absent and has to arrange porting remotely.

The checks are made wherever possible using the national identity card, or the Passport number for foreign nationals. There are two forms of this check:

- A check made by the recipient operator of the name on the identity card against that on a bill or statement for the number to be ported. This is called the "ID-Bill" check
- A check made by the donor operator against its record of the ID of the subscriber.

Note: The procedure is designed to avoid having to send names and addresses of subscribers between recipient operator and donor operator as this can lead to disputes over spelling errors etc.

Note: To date, the specifications include a CLI Check by the recipient operator that the subscriber is able to make a call from the number to be ported. In the case of unregistered pre-pay accounts this is the only check possible. In July 2009 a requirement was added for the recipient operator to ask the subscriber to send a blank SMS message to an on-net free text number 1811at the donor operator before sending the Authorisation Request. The donor operator shall ensure that the SMS message is terminated and may opt to check the CLIs of the SMS messages received on this number against the number to be ported in the Authorisation Requests and refuse the Authorisation Request unless a match is found. The implementation of these checks would be optional for the donor. The effect of the check would be both to confirm possession of the number to be ported and eliminate the problem of data entry errors that can result in a third party's account being terminated without warning and can cause serious problems especially if the user is roaming abroad. Since it is optional for the donor operators to process the SMS check, the CLI check shall be retained

The recipient operator shall verify that the Calling Line Identity presented on a call from the subscriber is the number to be ported. (NB: Where the subscriber has CLI Presentation Restriction applied to their account this service will have to be disabled for the CLI check to be carried out. In many cases this should be possible by entering a service control code into the mobile.) The person who made the CLI check shall sign a record that the test has been carried out and passed. In the case of pre-pay, a CLI check is not possible if the subscriber has no remaining credit or the time window has expired.

6.4 Procedures

The following shows how the checks identified above may be applied by the recipient operator and processed by the donor operator.

The procedures take account of the fact that the subscriber may not know whether they are registered or not with the donor operator, if they are a pre-pay subscriber, nor, if they are registered or are a post-pay subscriber, whether the donor operator has a record of their ID. Thus the procedures are based on the recipient operator doing the maximum validation and information collection and the donor operator using whichever information is available and relevant.

The procedures also take account of the following:

- Not all subscribers will have an ID as some may be foreign nationals, but foreigners should have a passport.
- Validation based on an ID or passport number is the best validation. Operators are encouraging subscribers to register their IDs or passport numbers and if an ID is registered with the donor operator then this is a form of protection and security for the subscriber. Consequently porting should not proceed unless the ID of the applicant matches that registered with the donor operator.
- IDs and Passport numbers are not confidential and may be discovered easily.

In general:

- Signatures do not have to be made in the presence of the recipient operator and signed forms may be sent by fax or mail.
- Copies of identity cards, passports and bills may be sent by mail or fax to the recipient operator, inspection of the originals is not necessary.
- A signature may be given by an authorised representative under a power of attorney provided that the recipient operator checks the power of attorney and the identity of the person signing under the power of attorney through checking their identity card.
- For foreigners, a passport number shall be used if they do not have an identity card.
- Where a subscriber loses a SIM or has it stolen, they must obtain a replacement SIM from the donor operator before they may port their number.

Persons under 18 years of age may not order number portability, but their legal representative may order it on their behalf.

Donor operators shall not change the credit limit or the time allowed for paying bills for subscribers who request portability with the intention of enabling them to refuse the porting request for reasons related to credit or payment. (Note: If there are claims of such practices the MCA will require extensive reporting in order to investigate the claims as an anti competitive practice.)

The recipient operator shall then ask which of the following categories describes the account:

- Pre-pay account
- Personal post-pay account
- Non-personal post-pay account (held by an entity other than a natural person)

For post-pay accounts the recipient operator shall ask if the account is single or multi-line.

The treatment of post-pay accounts differs from pre-pay because:

- In most cases the subscriber will have a bill or statement that links their name to the number
- All post-pay accounts are registered with the donor operator, but for some accounts the donor operator may not know the ID of the subscriber, even though they know their name and address.

The following procedures shall be applied depending on their answer.

6.4.1 Pre-pay accounts

The following procedure applies to both personal pre-pay accounts and accounts held by non-personal entities. Because the central principle is that if there is registration, then an ID should be registered and there must be a match of IDs between the donor operator and the applicant, the same procedure applies to both personal and non-personal subscribers.

It is possible that there may be multiple legal representatives of the non-personal subscriber. This case is likely to be uncommon. If it occurs then the applicant should be advised that the subscriber should either:

- Have the application made by the person who is recognised by the donor operator as the legal representative, or
- Contact the donor and update the registration to include the ID of a legal representative who can handle the application for porting. In case of a non-personal entity account, the donor operator can verify the identity of the legal representative against the MFSA database.

The subscriber or legal representative does not have to visit the premises of the recipient operator but may send the necessary documents by fax or mail or via another person.

In some cases there may be a registration but no record of the ID or passport number and so an ID check by the donor against the registered ID is not possible.

If the SIM is lost, damaged or stolen, then porting is not possible until a replacement SIM has been obtained from the donor operator.

Actions by the recipient operator

The recipient operator shall ask the subscriber or their representative to show or send in a copy of the subscriber's identity card or passport (if they do not have an identity card).

The recipient operator shall perform a CLI check and asks the subscriber to send a blank SMS from the number to be ported to 1811.

If either:

- The CLI check is not passed, or
- A copy of the subscriber's identity card or passport is not obtained
- The subscriber does not send the SMS check to 1811

then the recipient operator shall not proceed with the porting.

The recipient operator shall obtain a signed porting form or letter from the subscriber requesting the porting for the number and shall retain the form for audit purposes for three months.

The recipient operator shall send the donor operator:

- The number to be ported
- The subscriber's ID or passport number
- An indication that the account is pre-pay.

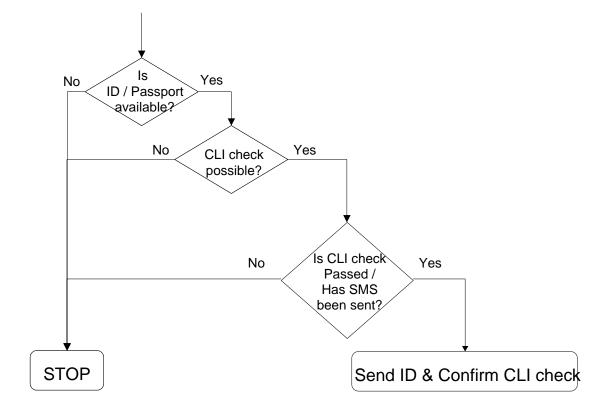


Figure 1 shows the logic to be applied by the recipient operator.

Figure 1: Recipient operator logic for pre-pay accounts

Initially it was required that each week, the recipient operator should send the donor operator a set of copies of the signed porting forms used during the previous week so that the donor has records of the requests. This requirement has been discontinued and the recipient is now required to send the porting form only if specifically requested by the donor, eg if a problem has arisen about the porting.

Actions by the donor operator

On receiving the Authorisation Request, the donor operator shall:

Check that an ID and a Confirm CLI check have been received and if either has not been received shall reject the request.

The donor operator shall then check its records for the number to be ported.

- If the account is registered and if the ID or Passport number sent matches their records, the validation shall be passed.
- If the account is registered and if the ID or Passport number sent does not match their records the validation shall be failed, even if the CLI check has been passed.
- If the account is registered and if the ID or Passport number is not sent by the recipient operator the validation shall be failed, even if the CLI check has been passed
- If the account is registered but if the ID or Passport number sent cannot be matched because the donor operator does not know them, then, even if the CLI check has been passed, the validation shall be failed. In this case, the

recipient operator should advise the subscriber to contact the donor operator to add their ID to the registration information and then the Authorisation Request can be sent again.

- If the account is unregistered, if the recipient operator has confirmed that the CLI check has been passed, then the validation shall be passed.
- If the account is unregistered, and if the recipient operator has not confirmed that the CLI check has been passed, then the validation shall be failed, even if an ID has been sent.

The logic to be applied by the donor operator is included in figure 2.

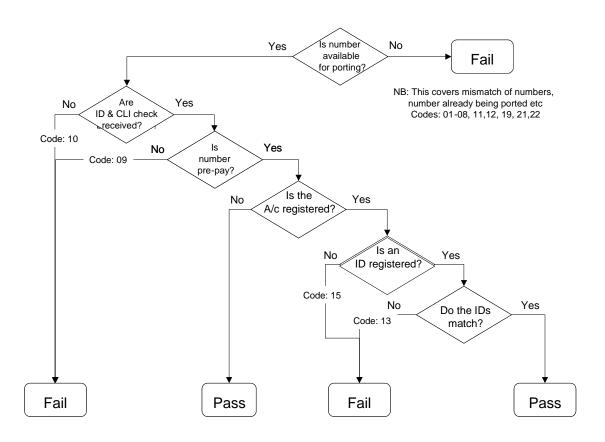


Figure 2: Donor operator logic for pre-pay accounts

The donor shall ensure that SMSs received on 1811 are terminated correctly.

The donor operator may check that the number to be ported in the Authorisation Request matches the CLI of an SMS received by the number 1811. If the donor opts to implement this check then it shall refuse the porting if a match is not achieved. The donor operator may delete unmatched SMS messages after they have been stored for 2 days. This is to allow for Authorisation Requests to be delayed or resubmitted if problems occur.

Where a pass has been achieved, the donor operator shall accept the request.

The procedure specified above has been described for a single line account but the procedure is also applicable to multi-line accounts. With multi-line accounts, each number has to be ported separately.

6.4.3 Personal post-pay accounts

Account is taken of the following:

- The subscriber may not be able to produce a bill or statement (they may be lost or never kept)
- The address of the subscriber may have changed.

The subscriber does not have to visit the premises of the recipient operator but may send the necessary documents by fax or mail or via another person.

Actions by the recipient operator

The recipient operator shall ask the person requesting porting to show or send in a copy of:

- The identity card or passport of the subscriber, and
- A bill or statement for the number to be ported issued within the three months prior to the date of the porting request.

The recipient operator shall ask the person requesting porting if the account is single line or multi-line. Experience has shown that subscribers may not always give correct answers to this question and therefore it is recommended that operators should indicate the account classification (single line vs multi-line, personal vs non-personal) on all invoices.

If an identity card, or passport for a foreigner, is not available then the recipient operator shall not proceed with the porting.

If a bill or statement is available, the recipient operator shall check the name on the identity card against the name on the bill or statement.

- If the identity card name matches the bill and the bill shows the number to be ported then the ID-Bill test has been passed.
- If they do not match except for the following cases, the recipient operator shall not proceed with the porting:
 - The applicant is female and her maiden surname has changed.
 - The applicant has second names that do not match or initials are omitted.
 - There are minor spelling mistakes.

If a bill or statement is not available, the recipient operator shall perform a CLI check if the account is single line. If it is multi-line the recipient operator shall not proceed with the porting. The recipient operator shall also ask the subscriber to send a blank SMS from the number to be ported to 1811.

Note: The MCA has decided that the bill or statement shall not be required in all circumstances for a personal post pay single-line account as some subscribers may not retain their bills and statements.

The recipient operator shall obtain a porting form signed by the subscriber. In the case of the applicant being the subscriber's representative, a letter from the subscriber authorizing the latter to request porting for the number is required.

The recipient operator shall send to the donor operator the following information:

- The ID of the subscriber,
- The account number from the bill or statement if available but always required for multi-line
- An indication whether the ID-Bill check has been passed
- An indication whether a CLI check has been passed.

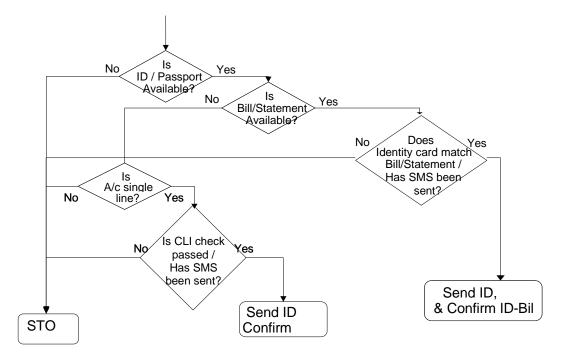


Figure 3 shows the logic to be applied by the recipient operator.

Figure 3: Recipient operator logic for personal post-pay accounts

In parallel the recipient operator shall fax or send by email or other agreed electronic method a scan of:

- The signed porting form, including the indication whether the CLI and/or ID-Bill checks have been passed.
- Copy of the applicant's identity card or Passport number
- Letter of authorization (LOA), if applicable

Note: The MCA will review the way in which this information is handled by the donor operator. If many unjustified refusals occur, the MCA may reduce or remove the sending of these documents.

Actions by the donor operator

On receiving this information, the donor operator shall check its records for the number to be ported.

Note: The operators know the ID of the subscriber for over 99% of personal post-pay accounts.

The donor operator shall check that the number is available for porting and that the number is on a post-pay account. If these checks pass then:

- If the ID number or Passport number sent and the account number match their records, and either the ID-Bill check or the CLI check has been passed, the validation shall be passed.
- If the ID number or Passport number sent does not match their records the validation shall be failed.

- If the ID number or Passport number matches the records but the account number is not sent (because the subscriber did not present a bill), and if the CLI check has been passed, the validation shall be passed.
- If the subscriber's ID number or Passport number cannot be matched because the donor operator does not know them, then if the account numbers match and the recipient operator has confirmed that the ID-Bill check has passed, the validation shall be passed.

In the very small number of cases where the donor operator does not know the ID of the subscriber, the signature shall be checked against the records and the signature matches the validation shall be passed.

The logic to be applied by the donor operator is shown in figure 4.

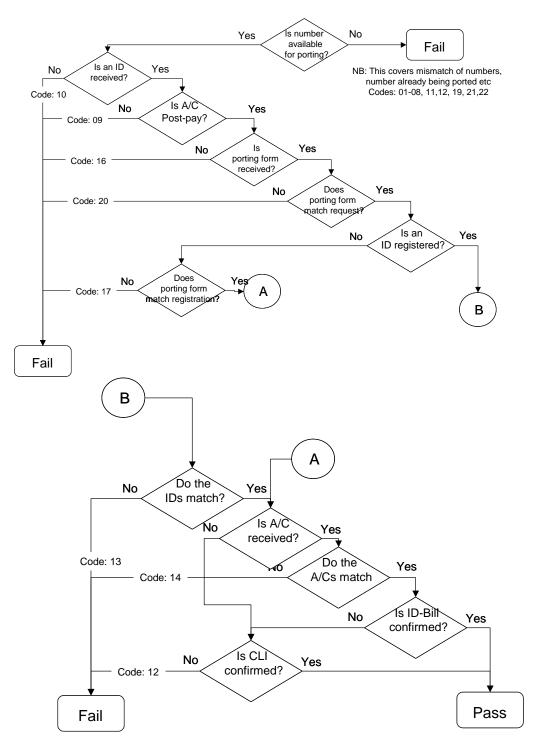


Figure 4: Donor operator logic for personal post-pay accounts

The donor shall ensure that SMSs received on 1811 are terminated correctly.

The donor operator may check that the number to be ported in the Authorisation Request matches the CLI of an SMS received by the number 1811. If the donor opts to implement this check then it shall refuse the porting if a match is not achieved. The donor operator may delete unmatched SMS messages after they have been stored for 2 days. This is to allow for Authorisation Requests to be delayed or resubmitted if problems occur.

If the validation has been passed the recipient operator shall check that the copy of the signed porting form or letter of authorization, if applicable, has been received and if it has, and, if there is not a severe mismatch with any signature held by the donor operator, the whole validation shall be passed.

The procedure specified above has been described for a single line account but the procedure is also applicable to multi-line accounts in which case an authorization request, including the account number, for each number will be sent by the recipient operator and the availability of each number for porting will be checked separately.

6.4.4 Non-personal post-pay accounts

Non-personal accounts differ from personal ones because the recipient operator has to deal with a legal representative of the non-personal entity that holds the subscription.

The legal representative does not have to visit the premises of the recipient operator but may send the necessary signed documents by fax or mail or via another person.

Actions by the recipient operator

The recipient operator shall ask the person requesting porting to show or send in a copy of:

- The identity card of the legal representative of the non-personal entity and
- A bill or statement issued within the last three months for the number to be ported.
- A letter of authorization (LOA) in case of a representative.

(Note: It is assumed that the legal representative of a non-personal entity will normally have an identity card because they are likely to be resident in Malta.)

If either:

- an identity card ; or
- a bill or statement

is not available then the recipient operator shall not proceed with the porting.

Where the entity is a company then the recipient operator shall check that the name and address on the ID is that of a legal representative of the company requesting porting as published by the Malta Financial Services Agency. If it is not then the recipient operator shall not proceed with the porting.

Where the entity is a not a company then the recipient operator shall check that the name and address on the identity card appears as a responsible person eg partner, trustee, councillor, on some formal documentation for the entity. If it does not then the recipient operator shall not proceed with the porting.

The recipient operator shall check the name of the non-personal entity shown on the bill (if available) matches with reasonable accuracy the name of the entity requesting porting for which the identity of the legal representative has been checked.

- If there is a match, the recipient operator shall confirm to the donor operator that the ID-Bill check has been passed.
- If there is not a match for example because the name of the entity has changed or because the entity has moved, the validation may still continue but the recipient operator shall not confirm that the ID-Bill check has been passed.

The recipient operator shall also ask the subscriber or legal representative to send a blank SMS from the number to be ported to 1811.

The recipient operator shall obtain a signed porting form. In case of a representative, a letter of authorization from the legal representative requesting the porting for the number is required.

The recipient operator shall send to the donor operator the following information:

- The ID of the subscriber, or the legal representative of a non-personal entity
- The account number from the bill or statement
- An indication whether the ID-Bill check has been passed.

In parallel the recipient operator shall fax or send by email or other agreed electronic method a scan of:

- The signed form or letter to the donor operator and the ID or passport of the subscriber indicating whether the ID-Bill check has been passed.
- Copy of the applicant's identity card or Passport
- Letter of authorization (LOA), if applicable

Figure 5 shows the logic to be applied by the recipient operator.

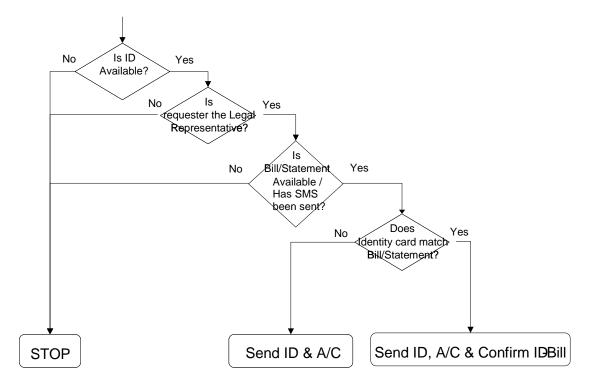


Figure 5: Recipient operator logic for non-personal post-pay accounts

Actions by the donor operator

On receiving this information, the donor operator shall check its records for the number to be ported.

The donor operator shall check that the number is available for porting and that the number is on a post-pay account. If these checks pass then:

• If the ID sent matches their records, and if the account number sent matches their records validation shall be passed.

If the donor operator does not have the ID of the current legal representative, then in order to do the above check it shall attempt to obtain the number:

- In the case of a company, from the database of the Malta Financial Services Agency
- In the case of another type of non-personal entity, from any relevant authoritative source.

If the ID cannot be obtained and matched the donor operator shall refuse the porting but the recipient operator should advise the subscriber to update its registration so that a match can be achieved, and then apply again.

The logic to be applied by the donor operator for company accounts is shown in figure 6.

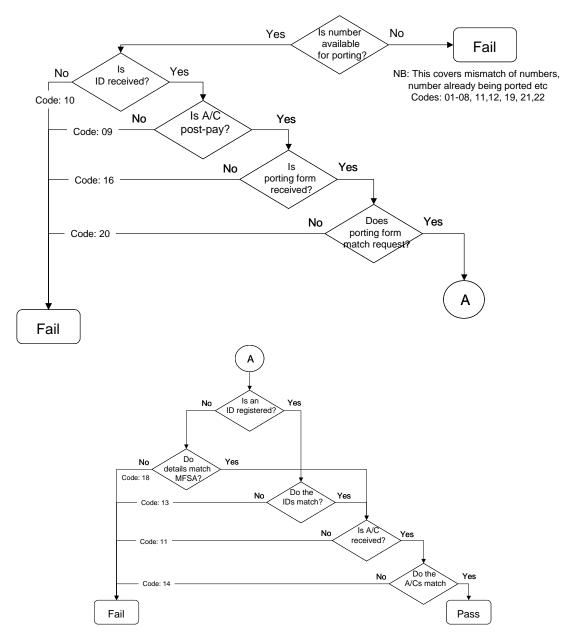
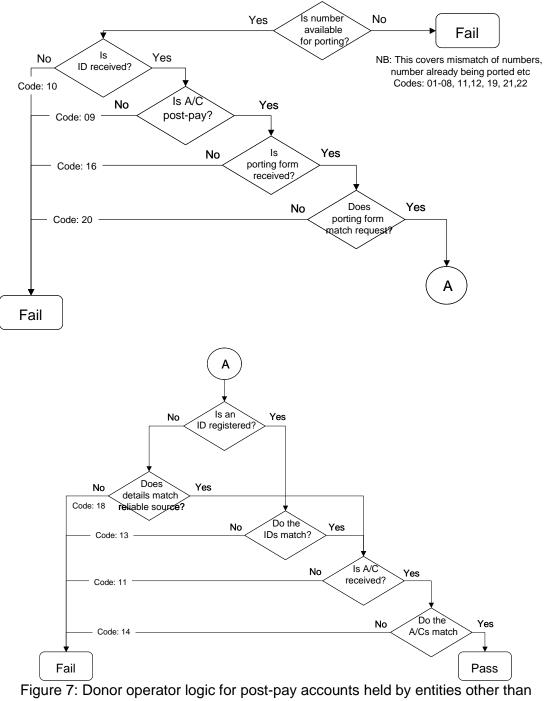


Figure 6: Donor operator logic for post-pay accounts held by companies

The logic to be applied by the donor operator for non-personal accounts held by entities other than companies (eg churches, clubs, embassies, Government departments) is shown in figure 7.



companies

The donor shall ensure that SMSs received on 1811 are terminated correctly.

The donor operator may check that the number to be ported in the Authorisation Request matches the CLI of an SMS received by the number 1811. If the donor opts to implement this check then it shall refuse the porting if a match is not achieved. The donor operator may delete unmatched SMS messages after they have been stored for 2 days. This is to allow for Authorisation Requests to be delayed or resubmitted if problems occur.

If the validation has been passed the donor operator shall check that the copy of the signed porting form or letter has been received and if it has, and, if there is not a severe mismatch with any signature held by the donor operator, the whole validation shall be passed.

The procedure specified above has been described for a single line account but the procedure is also applicable to multi-line accounts in which case an authorization request for each number will be sent by the recipient operator and availability of each number for porting will be checked separately.

Where the non-personal account is a multi-line account, the donor operator may contact the legal representative of the non-personal entity to seek confirmation that the request is properly authorised. The donor operator may refuse the request if it receives an indication in writing, fax, email, recorded conversation or other agreed electronic method that the request is not correctly authorised.

6.4.5 Summary of information sent by the recipient operator to the donor operator

The following table summarises the information to be send by the recipient operator to the donor operator for the different cases.

	Pre-pay	Post-pay personal	Post-pay non- personal
Electronic messaging	- Subscriber's ID or passport number - An indication that the account is pre- pay	 Subscriber's ID or passport number The account number from the bill or statement if available for single line and mandatory for multi-line. An indication whether the ID-Bill check has been passed An indication whether a CLI check has been passed. 	 Subscriber's ID or passport number The account number from the bill or statement An indication whether the ID-Bill check has been passed
Fax/email/other agreed electronic method	None. Except for Cases where the subscriber is registered at the donor without an ID/Passport No, when the donor operator may request a copy of the Porting form.	 Signed porting form Subscriber's identity card or passport Letter of authorization, if applicable 	 Signed porting form Subscriber's identity card or passport Letter of authorization, if applicable
Mail (to be sent weekly after the portings have taken place)	Batch of copies of the signed porting forms (if requested by the donor)	None	None

6.4.6 Documents

The recipient operator shall retain the following documents for a minimum of twelve months or until a dispute about the porting is resolved, which ever is the later, provided that the subscriber remains a subscriber of the recipient operator:

- A copy of any identity card or passport used
- A copy of any bill used
- The original of the signed porting form and the letter of authorization, if applicable
- A record of the person who made a CLI check and the time when it was made.

The donor operator shall retain any porting forms that it receives for at least 2 months but shall not retain them for more than 3 months.

Document images may be stored electronically. There is no requirement to store paper copies.

6.4.7 Other considerations

Many subscribers have complex contractual agreements with their network operator involving benefits and a minimum period of contract. Subscribers may be uncertain of the details of these agreements such as the termination date of the contract and the penalty payable for early termination.

Wherever possible it is recommended that operators should print the termination date of the contract and the current level of penalty for early termination on the subscriber's invoices.

Recipient operators may request information on the termination date of the contract and the penalty payable for early termination from the donor operator on behalf of the subscriber and with his consent, and the donor operator shall answer these requests as effectively and quickly as possible.

If a recipient operator wishes to pay an early termination penalty to the donor operator on behalf of a porting subscriber with the subscriber's consent, the donor operator shall accept such payment.

Donor operators are not allowed to refuse to port a number until the subscriber has paid any early termination penalty that may be owing to the donor. However operators may agree voluntarily between each other not to accept as a new subscriber a person who has not paid their termination penalty to the donor.

If an Authorisation Request has been refused, but the problem causing the refusal has been resolved and the subscriber wishes the operator to resubmit the request, the recipient operator is not required to ask the subscriber to sign a new porting request form or resubmit their documents unless more than a month has elapsed since the previous form was signed. A new transaction ID should be used for the resubmission.

7 Porting process

The porting process consists of four phases:

- Preparation Phase
- Authorisation Phase to establish that the number can be ported
- Activation Phase
- Instruction Phase

These phases may follow each other in close succession. After completion of the process the recipient operator informs all the other operators, fixed and mobile, of the porting so that they can update their number portability databases if they wish (see section 8).

The validation activities by the recipient operator take place in during the Preparation Phase.

The validation process is spread across both the Preparation Phase, and the Authorisation Phase.

Figure 8 shows the phases.

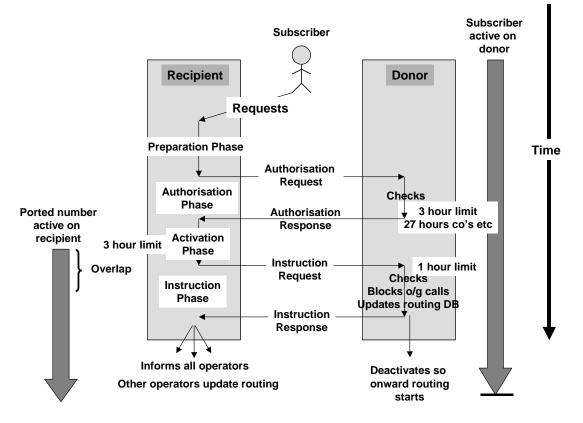


Figure 8: Overview of procedure

In the following sections all references to time refer to time within the hours

- 0900-1800 on weekdays
- 0900-1300 on Saturdays

excluding Sundays and public holidays.

The request phase shall be started only after:

a) the recipient's part of the validation process has been completed satisfactorily, and b) the recipient operator's own qualification checks (eg identity check, credit check) for the subscriber have been completed satisfactorily.

The porting process is organised on a per-number basis and not as a batch process.

7.1 Support of inter-operator communications

In general, the communications between the operators involved in the porting process shall be made by using the Webservice described in the Webservice Specification. The format of the messages referred to in this specification are defined in the Webservice Specification.

In addition to the operation of the webservice, each operator shall provide a number Portability Support Desk with telephony and email contact that shall be staffed continuously by appropriately trained staff during the porting hours specified in section 7 and the operators shall exchange the contact details with each other.

7.2 Authorisation Phase

7.2.1 Authorisation Request

At any time the recipient operator may send an Authorisation Request to the donor operator for the porting of a number. Where a subscriber has more than one number a separate Authorisation Request shall be sent for each number and each number shall be handled as a separate porting.

The format of the Authorisation Request is given in the Webservice Specification.

7.2.2 Authorisation Response

The donor operator shall reply within three hours by sending an Authorisation Response. Where the subscriber is:

- a company with a multi-line account or
- a non-personal legal entity other than a company with a single or multi-line account,

the period for reply shall be extended by one working day.

The format of the Authorisation Response is given in the Webservice Specification.

Without prejudice to the above, if the recipient operator does not receive an Authorisation Response within the specified time limit, the recipient operator should contact the donor and the donor should explain the reason to the recipient. The recipient operator may wait to receive a late Authorisation Response from the donor operator or may terminate the process and start it again later if necessary. The failure to respond in time should be logged for the statistics to be reported to the MCA.

The receipt of the Authorisation Response by the recipient operator marks the end of the Authorisation Phase.

During the Authorisation Phase (but not the Instruction Phase), the recipient operator may send an Abort message to the donor operator to abort the porting. The circumstances in which such a message would be sent include the detection that a wrong MSIDN was sent in the Authorisation Request.

On receipt of an Abort message, the donor operator shall terminate its processes in relation to the porting.

7.2.3 Quota

Donor operators are encouraged to handle all the Authorisation Requests they receive however they are permitted to refrain from processing these requests for valid technical limitations as provided under Decision 9 of the NP Decision subject to the following conditions:

- 1. In the period up to 1200hrs each day the Donor Operator shall process Authorisation Requests on a first come first served basis until the number of Authorisation Requests processed from any individual operator reaches the Individual Recipient Operator Authorisation Request Limit (see definition below);
- 2. Once the <u>Individual Recipient Operator Authorisation Request Limit</u> is reached, the Donor Operator is not required to process further requests from the Recipient Operator concerned until 1200hrs but instead shall store the remaining Authorisation Requests for after 1200hrs;
- 3. After 1200hrs, the Donor Operator shall process the remaining requests together with the Authorisation Requests received after 1200hrs in the order in which they were received until a total of 240 Authorisation Requests has been processed during that day;
- 4. After 240 Authorisation Requests have been processed, the Donor Operator that opted to utilise this quota shall treat any subsequent Authorisation Requests as if they were received the following working day and treat them as new Authorisation Requests as part of the *Individual Recipient Operator Authorisation Request Limit* of the following day. Such requests should be treated with a response code 24 indicating to the recipient operator that they are being processed the following day.

<u>Definition of *'Individual Recipient Operator Authorisation Request Limit'*: 240 (two hundred and forty) divided by the total number of operators that may request a porting from the Donor Operator.</u>

On Saturdays:

- the time of 1200hrs shall be replaced by 1100hrs
- the Individual Recipient Operator Authorisation Request Limit shall be halved
- the limit of 240 shall be replaced by 120.

The MCA will analyse statistics pertaining to response code 24 from time to time and when it deems necessary.

The quota applies only to Authorisation Requests and not to Instruction Requests.

7.3 Activation Phase

The following applies separately for each number for which porting is requested.

Where a multi-line account is being ported, it applies separately to each number for which porting is requested. Consequently some numbers on the account may continue with the porting but others may not if they have been refused.

If the porting has been accepted (responseCode = 00), the recipient operator shall activate the ported number on its network, and no routing changes are applied at this stage, and then proceed to the instruction phase.

If the recipient operator does not proceed to the instruction phase within three hours of receiving a successful authorisation response, then the recipient operator shall not continue to the instruction phase but may restart the porting process if appropriate.

If the porting 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 until it has resolved the problem with the donor operator.

At this stage, while originating calls can be made from the recipient's SIM, the subscriber still has full service on the donor's end.

During the Activation Phase, the recipient operator may send an Abort message to the donor operator to abort the porting. The circumstances in which such a message would be sent include the detection that a wrong MSIDN was sent in the Authorisation Request.

On receipt of an Abort message, the donor operator shall terminate its processes in relation to the porting.

7.4 Instruction Phase

7.4.1 Instruction Request

The recipient operator shall send an Instruction Request to the donor operator.

The format of the Instruction Request is given in the Webservice Specification.

Instruction Requests shall only be sent for numbers for which the porting has been accepted within the last three hours.

Instruction Requests shall only be sent for numbers that have been activated on the recipient operator.

7.4.2 Instruction Response

The following applies separately for each number for which porting is instructed. The donor operator shall send the Instruction Response within one hour of receiving the Instruction Request.

Unless the Instruction Request is to be rejected because:

- The number to be ported is not the subject of a request made and accepted NB: This includes the number not being a valid number) responseCode 32
- the number has already been ported under the same acceptance (ie the instruction has been sent twice in error) responseCode 33
- service on the number to be ported has been suspended due to debt problems since the request was accepted responseCode 34
- the SIM for the number to be ported has been stolen since the request was accepted responseCode 35
- Instruction rejected because the Instruction Request was received more than three hours in the porting period after the Authorisation Response was sent responseCode 36
- other reasons apply that require discussion between the operators responseCode - 37
- Instruction rejected because the recipient operator is not the same as in the Authorisation Response responseCode 38
- Instruction rejected because the donor operator is not the same as in the Authorisation Response responseCode 39
- Instruction rejected because the transaction ID is a duplicate, ie the instruction has already been sent responseCode 40

the donor operator shall perform the following actions as one atomic transaction:

- deny subscriber from performing Location Update from the number being ported
- update its routing tables meaning that that calls originating from subscribers on the donor's network and from other operators using the donor for indirect routing are routed to the recipient operator
- send an Instruction Response with response code 00.

On receiving a successful Instruction Response, the recipient shall update its routing database. This will ensure that incoming calls originating from the recipient's network are handled appropriately.

Where the donor has sent a positive Instruction Response, the donor shall after 2200 on the same day

- deactivate the number on its network. This results in incoming calls, SMS messages and MMS messages to the ported number being onward routed in accordance with the network specification
- close any mailboxes with the loss of any messages stored in them and any other services attached to the ported number.

Note

The reason why the deactivation of the number on the donor network is delayed by several hours after the time when the instruction response is sent is to allow time for those other networks to update their databases. This is necessary because a potential problem arises where the donor receives an incoming call or SRI_SMS with a prefix already added. This case will arise where either:

- The originating operator uses ACQ, or
- The donor is not the block operator and the call or signalling has been onward routed.

If a prefix is present on the incoming call or signalling and if the number is not active on the donor HLR that is identified by the prefix, the communications will fail and be treated as if the subscriber is unknown. This may deter a caller from making subsequent attempts to communicate and will result in lost messages. (As a security measure against endless loops that could arise from inaccurate routing data, operators are not allowed to programme their systems to replace or update prefixes.)

By keeping the number active until all the other operators have updated their routing information, these communications will be treated as if the subscriber is unavailable (callers are given a message and SMSs are repeated). This handling of the incoming communications is much more appropriate.

·····

The format of the Instruction Response is given in the Webservice Specification.

7.4.3 Resubmission of a request

The resubmission functionality allows an operator to resend a request or response that has been refused using the same transaction ID, with possibly certain parameters changed. In particular, all parameters can be modified except for the following:

- Recipient Operator
- Donor Operator

This functionality is only applicable under specific conditions as defined below:

Authorisation Phase

The RO can resubmit an authorization request when:

• The RO sends an initial authorisation request to the DO, and the latter replies back with an authorization response code 01, 15 or 16.

The DO can resubmit an authorization response when:

• The DO originally replies back to the RO with an authorization response, and the latter specifies a return code other than 0,1 or 2.

If the resubmission is made more than 2 days after the original submission then the RO should ask the subscriber to send the blank SMS to the donor again.

Instruction Phase

The RO can resubmit an instruction request when:

- The RO initially sends an instruction request to the DO, and the latter replies back with an instruction response code 31.
- The RO initially sends an instruction request to the DO, and the latter specifies a return code other than 0,1 or 2.

The DO can resubmit an instruction response when:

• The DO originally replies back to the RO with an instruction response, and the latter specifies a return code other than 0,1 or 2.

For both phases, when the same request or response is resubmitted more than two times, the operator is only allowed to resubmit again after an interval agreed on by the operators involved, and as required by the circumstances. For instance, in the case the DO responds with system unavailable twice consecutively, the latter should advise the RO on the expected downtime of the system and hence agree on the next resubmission.

7.5 Cancellation of a request

The subscriber may not cancel porting by contacting the donor operator.

8 Porting Announcement and data publication

The objective is to provide all other operators with a list of the active ported numbers that are currently served by each mobile operator.

Each recipient operator shall send a Porting Announcement message to each other operator within 60 seconds of receiving a positive Instruction Response that completes the porting.

The recipient operator should deliver the announcement message to all operators. If any operator does not responds with successful return code, the recipient operator is obliged to resubmit the porting announcement to the respective operator according to retry scheme defined in Webservice specification.

The format of the Porting Announcement message is given in the Webservice Specification.

9 Subsequent portings

9.1 Portings back to the block operator

Where the subscriber requests porting back to the block operator (ie where the recipient operator is the block operator), the porting procedure specified in sections 5-8 shall apply with the following exceptions:

- The donor operator shall not apply onward routing.
- The donor operator shall remove the number from the list of ported numbers made available under section 8.
- The recipient (block) operator shall not add the number to the list of ported numbers made available under section 8.
- The recipient (block) operator shall remove any onward routing applied to support previous portings.

9.2 Portings where neither donor operator nor recipient operator is the block operator

Where the subscriber requests porting where neither donor operator nor recipient operator is the block operator, the porting procedure specified in sections 5-8 shall apply with the following exceptions:

- The donor operator shall not apply onward routing.
- The donor operator shall remove the number from the list of ported numbers made available under section 8.

10 Winback

In accordance with the Decision of the MCA donor operators are not allowed to initiate contact with the subscriber during the porting or within two months of the completion of the porting or within one week of a porting request being refused, with the exception that exit surveys may be sent in writing to subscribers selected for such surveys on a random basis.

Commencing as from the signing of the application form, recipient operators shall not accept requests from other operators or the subscriber to cancel the porting request, or port the respective number again, until two months have elapsed from when the porting is functional.

Where the recipient operator becomes aware of an alleged breach of this requirement, the recipient operator shall obtain the consent of the subscriber affected before making any complaint to the MCA about the donor operator or otherwise properly substantiate the complaint with tangible evidence.

11 Termination of service

The objective is to inform the donor so that onward routing can be ceased when the provision of service ceases on the ported number. Because data entry errors can be made when entering a request for termination resulting in the wrong number being terminated, the recipient operator should postpone informing other operators for 3 days to allow time for a subscriber whose service has been incorrectly terminated to contact them and have the service re-instated without needing to involve the other operators.

The recipient operator shall not re-allocate a ported number that has been terminated to another subscriber even after a quarantine period but shall return it to the block operator using the e164Terminated message.

Each mobile recipient operator shall send an e164Terminated message to each other operator when the operator ceases to supply service on that number and the number is not ported to another operator. The effect of the e164Terminated message is both to update the list of ported numbers and to inform the block operator that the number is being returned to them.

The e164Terminated message shall be sent not sooner than 3 days after the time when the service is terminated on the network of the recipient operator.

The recipient operator shall send the e164Terminated message to all operators. If any operator does not responds with successful return code, the recipient operator is obliged to resubmit the e164Terminated message to the respective operator according to retry scheme defined in Webservice specification.

The format of the e164Terminated message is given in the Webservice Specification.

To facilitate early detection of incorrect terminations, the MCA recommends that the recipient operator should send an SMS to the number being terminated with the following message: "Your account for <this number> is being terminated as requested. If this is not correct please call customer services as soon as possible."

Under clause 12, section 5.2 of the Revised Numbering Conventions of June 2006, operators are required: "Whenever use of a number by a subscriber ceases, not reallocate the number to another subscriber for a period of at least three months". This requirement shall apply to the block operator after the number has been returned to them, ie after they have received the e164Terminated message.

12 Transaction Status

Each operator shall cooperate with the other operators in sharing status information on porting transactions.

When an operator receives a GetTransactionStatus, it shall respond with a GetTransactionStatus Response within sixty seconds.

The format of the GetTransactionStatus is given in the Webservice Specification.

13 Logging of Messages and actions

Each party shall maintain a up-to-date log of the messages received and sent and make it available for the other party for reconciliation.

When an operator receives a GetTransactions, it shall respond with a GetTransactions Response within sixty seconds.

The format of the GetTransactions is given in the Webservice Specification.

14 System performance and handling of major failures

All operators shall record the occurrence and duration of failures in the webservice or the support systems used by the number portability process. These records shall be available on request to the MCA.

Where the automated porting system is unavailable for more than one day the operators shall use their best efforts to provide an alternative manual system so that number porting may be continued.

15 Reporting of statistics

Each operator shall report to the MCA at the end of each quarter the following:

- The number of requests received as recipient for the porting of individual numbers, with the figures shown separately for prepay and post-pay (recipient operator reports),
- The number of requests for porting made by the recipient operator that have been rejected by the donor operator, with the figures shown separately for prepay and post-pay (recipient operator reports, separate figures for each donor operator),
- Two most common reasons for the donor operator to reject requests for portings (recipient operator reports),
- The number of portings where faults occurred or where responses were not received or actions were not effected within the time limits specified in this (recipient operator reports separate figures for each donor operator).

Reporting should be done using the electronic reporting method run by the MCA..

16 Separation of service provider and network operator

The original document has been written in terms of operators where the operator is assumed to be both service provider and network operator. This is no longer necessarily the case and the service provider and network operator may be separate companies. This section explains how this specification should be used in these circumstances.

The porting process takes place at the service provider level where the subscriber information is known and may be checked. The recipient service provider takes the order from the subscriber and it is only the donor service provider that can respond to the Request messages because the response requires knowledge of the subscriber account and this exists only at the service provider level. Therefore the references in the specification to the recipient and donor operators should be taken to apply to the recipient and donor service providers.

Where there are references to the operators that relate to network functionality such as activating and deactivating numbers and applying onward routing these activities can only be undertaken by the operators but should be under the control of the relevant service provider, ie the recipient service provider should request activation by the recipient network operator.

The exact details of the arrangements between the service providers and network operators may vary but the over-riding principle is that the parties should cooperate so that together they comply with this specification. For example in one case the service provider may handle all the process and the webservice and will have its own identity on the webservice, in another case the supporting network operator may handle the webservice as an agent for the service provider.

Operator Logo Mobile	Mobile Number Portability Application Form				
Company Name			C Reg No		
Customer Name		Surname			
Address					
Tel			ID Card No		
Fax					
Request Date//	Request Tin	ne :			
Porting Mobile Number	Single Lin Multi Lin		Prepaid ? Postpaid ?		
Account Number					
	Yes	No	N/a		
ID Check CLI Check	? ?	?	? ?		
Bill Check	?	? ?	? ?		
Terms & Conditions: 1. Customer is rightful owner of the mobile number state 2. In the case of prepaid connections, any unused prepa 3. Any messages on the Voice Mailbox of the Donor Op 4. Any undelivered SMS and MMS on the mobile numbe 5. In the case of postpaid connections, the balance due	aid balance with the Donor Oper erator will be lost. er stated above will be lost after	the porting process is	-		
Data Protection Clause: <operator name=""> processes personal data in line with processed in order to render and/or improve the service permissible according to the law. You have the right to r inaccurate, incomplete or immaterial personal data proc</operator>	the Data Protection Act (2001). you have requested. Personal equire access to your personal essed by <operator b="" name<="">>.</operator>	Personal data provid data shall not be trans data as well as the rig			
	clare that I am the legal owner /	signatory / duly autho	ted on this documnet and am duly authorised to consent orised for the mobile number stated above and that all the ct to the Terms and Conditions stated on this document.		
I also hereby declare that I am aware that a application on my behalf to migrate back t two months after completion of the migrat	o the donor, or to anoth		erator Name> shall not accept another der, using number portability for a period of		
Customer Signature		ID Card No			
For Internal Purposes Only I hereby declare that I have carried out all the necessary of can be ported.	checks related to the mobile nu	mber porting process	in order to verify that the mobile number stated above		
Processed By		Signature			

Annex 1 Porting Form

Annex 2: Response Codes

Annex 2.1 Codes for use in the Authorisation Response

- 00 Request accepted
- 01 The system is currently unavailable. Please try again later.
- 02 Request rejected because number to be ported is not a valid number for a subscriber on the Donor Operator's network. (NB: In the case of prepaid where the subscriber's number is being held under a grace period, porting shall be allowed up to one week before the end of the grace period)
- 03 Request rejected because phone is blocked as stolen or lost
- 04 Request rejected because in the case of post-pay accounts, the subscriber has an outstanding bill or dues on a telephone set that has not been paid within the normal period allowed
- 05 Request rejected because the subscriber is already subject to suspension of outgoing or incoming calls because of failure to pay a bill
- 06 Request rejected because the number is already subject to a porting process
- 07 Request rejected because the number has already been ported in the last two months
- 08 Request rejected because there are auxiliary services still active on the number
- 09 Request rejected because the classification of the account does not match, eg a request is made under the pre-pay procedure for a post-pay account
- 10 Request rejected because for pre-pay the recipient operator did not send both the ID and confirm-CLI, or for post-pay the recipient operator did not send the ID/passport number
- 11 Request rejected because an a/c number was not sent
- 12 Request rejected because CLI check not passed
- 13 Request rejected because the ID/ Passport Number does not match the number held by the donor operator
- 14 Request rejected because account number match fails
- 15 Request rejected because donor does not have and cannot obtain ID/Passport Number to match to ID/ Passport Number sent.
- 16 Request rejected because the necessary documents (authorisation letter, Porting form, Copy of Identity Card) have not been received
- 17 Request rejected because the porting form has been received and is not signed or there is a severe mismatch with the donor's records
- 18 -- Request rejected because the signature / ID is not of the legal representative according to the MFSA.
- 19 Request rejected as a special case requiring discussion (NB: This code is only to be used when there is no other specific code and should be used on very rare occasions)
- 20 Request rejected because electronic details and porting form do not match.
- 21 Request rejected because credit limit for post-paid subscriber has been exceeded
- 22 Duplicate transaction ID (ie request has already been sent)

 23 - Request rejected because the account is the pre-pay account of a person under 18 years old and consent of the parent or guardian is required and has not been given.

24 – Request to be processed during the next working day since MNP Quota has been reached.

25 – Request rejected because the porting form submitted is back dated by more then four weeks.

26 - Request rejected because the donor has not been able to match the number to be ported with the CLI of an SMS received to 1811 Authorisation Request.

Annex 2.2 Codes for use in Instruction Response

- 30 Instruction completed
- 31 The system is currently unavailable. Please try again later.
- 32 Instruction rejected because number to be ported is not the subject of a request made and accepted in the authorization request. (NB: This includes the number not being a valid number)
- 33 Instruction rejected because the number has already been ported under the same acceptance
- 34 Instruction rejected because service has been suspended due to debt problems since the request was accepted
- 35 Instruction rejected because the number to be ported has been stolen/lost since the request was accepted.
- 36 Instruction rejected because 3 hrs elapsed from authorization response
- 37 Instruction rejected for other reasons that require discussion between the operators
- 38 Instruction rejected because recipient operator not the same as in Authorization
- 39 Instruction rejected because donor operator not the same as in Authorization
- 40 Duplicate transaction ID (ie request has already been sent)

Mobile Service Provider	Contact E-Mail	Contact telephone number
Vodafone	internalrequests.mt@vodafone.com	92111340
Go Mobile	<u>billing@go.com.mt</u>	25942671
Redtouch Fone	np.malta@aspidersolutions.com	20900993
Melita Mobile	melitamobilenp@melitaplc.com	27273129
PING	info@ping.com.mt	25965460

Annex 3 MNP Contact Desk Details

The objective is that a problem will either be resolved or a solution agreed within 5 working days of its being first raised, otherwise the issue will be referred informally to the MCA to convene a meeting if necessary to seek a resolution by consensus.