

Regulatory Framework on Local Number Portability



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1. INTRODUCTION

- 1.1 The Telecommunications Act (the Act) and its Bylaw (the Bylaw) require each service provider to develop an implementation plan to deploy number portability and to have the capability to deliver calls from its network to ported numbers in other networks anywhere in the Kingdom of Saudi Arabia (KSA).
- 1.2 The Communications and Information Technology Commission (CITC) intends to promote competition in the fixed services market by ensuring that all users in the Kingdom are able to keep their existing telephone numbers when changing their Locations or Service Provider within their Local Calling Area (LCA).
- 1.3 As a part of the Number Portability (NP) regulation, Mobile Number Portability (MNP) has been implemented in the KSA using a national clearing house solution and a database maintained by the CITC.
- 1.4 This “Regulatory Framework on Local Number Portability (LNP)” addresses the number portability issues relating to Local Number Portability (LNP) for Fixed services.

2. DEFINITIONS AND DESCRIPTIONS

- 2.1 The words and expressions defined in the Commission Statutes shall have the same meaning when used in this regulatory framework. The following words and expressions shall have the meaning assigned to them below, unless the context requires otherwise.
- 2.2 “Database” means the storage of ported numbers with their relevant routing numbers.
- 2.3 “Donor Network (DN)” means the initial network where a number was located before being ported.
- 2.4 “Donor Service Provider” means the Fixed FBP from whom the number was initially ported.
- 2.5 “E.164” means the E.164 numbering structure as defined by the International Telecommunication Union - Telecommunication Standardization Sector (ITU-T).
- 2.6 “Facilities Based Provider (FBP)” means a service provider who builds, owns and operates a public telecommunication network.
- 2.7 “Fixed FBP” means FBP who provides fixed services.
- 2.8 “Fixed Services” are defined as electronic communications services between fixed or nomadic apparatus or stations.
- 2.9 “Geographic Number (GN)” means an E.164 number which corresponds to a discrete geographic area.

- 2.10 “KSA” means the Kingdom of Saudi Arabia.
- 2.11 “Local Calling Areas (LCAs)” means the specific geographic areas as defined in the National Numbering Plan. The specific locations of the LCAs and their relationships to numbering zones are also defined in the National Numbering Plan.
- 2.12 “Local Number Portability (LNP)” means the facility by which a Subscriber can retain an existing number without significant variation of quality, reliability, or convenience when changing service provider, location, or service types within the LCA.
- 2.13 “Location Portability” means the ability for a Subscriber to retain the same E.164 number, without impairment of quality, reliability, or convenience when moving from one location to another.
- 2.14 “Non-Geographic Number” means an E.164 number which has no geographic significance such as a mobile number.
- 2.15 “Number Portability (NP)” means the facility by which the Subscriber can retain an existing number without significant variation of quality, reliability, or convenience when changing service provider, location or service types.
- 2.16 “National Numbering Plan” means the Numbering Plan issued by CITC and is published on the CITC website.
- 2.17 “Originating Network / Exchange” means the network / exchange serving a calling Subscriber.
- 2.18 “Ported Number” means the Subscriber’s E.164 number that has been subject to number portability.
- 2.19 “Recipient Network (RN)” means the network where a number is located after being ported.
- 2.20 “Recipient Service Provider (RSP)” means the Fixed FBP to whom the number is ported.
- 2.21 “Service Portability” means the ability for the Subscriber to retain their existing telephone number without impairment of quality, reliability or convenience when changing from one type of service to another, e.g. from Public Switched Telephone Network to Integrated Services Digital Network and vice versa.
- 2.22 “Service Provider Portability” means the ability for the Subscriber to retain the same number when changing from one Fixed FBP to another while the Subscriber to the same set of services. This can apply to both “geographical” and non-geographical” specific number.
- 2.23 “Subscriber” means any person or any entity that is a party to a contract or other similar arrangement that is in force with a service provider for the supply of ICT service(s).

- 2.24 “Subscriber Number” means the E.164 number used by the calling party to establish a call to another Subscriber.
- 2.25 “Transit Network / Exchange” means a network / exchange that connects Originating Network with the Recipient Network.

3. CONSIDERATIONS

- 3.1 In order to encourage competition between Fixed FBPs it is important to remove major barriers associated with changing from one service provider to another. A number change is seen as one such significant barrier to changing service provider. The introduction of LNP will remove this barrier.
- 3.2 Increased competition enabled by LNP should therefore provide the following benefits to Subscribers:
- 1.2.1 Removes a significant obstacle to Subscribers changing Fixed FBPs.
 - 1.2.2 Subscribers do not have to incur costs and administrative charges of changing stationary and fewer wrong numbers are dialed.
 - 1.2.3 Encourages innovation, raises quality and drives down prices. Competition enhanced through LNP is likely to result in a greater variety of products and services as Fixed FBPs seek to differentiate themselves in the marketplace. Fixed FBPs are also likely to discover what Subscribers are willing to pay for, and seek to more actively meet their Subscribers’ needs.
- 3.3 The CITC has also reviewed and assessed the comments received from the concerned parties in response to the Public Notice No. (8/1427) dated 15/04/1427H (13/05/2006G) on the Proposed Policies Related to Fixed and Mobile Service Licensing in the KSA.

4. REGULATORY FRAMEWORK

Location Portability

- 4.1 Location Portability shall be implemented by all Fixed FBPs within the LCA. National Location Portability is not required at this time. However, the CITC may require this capability at a future date.

Service Provider Portability

- 4.2 Service Provider Portability shall be implemented by all Fixed FBPs, within the LCA.

Service Portability

- 4.3 Service Portability is not required at this time. However, the CITC may require this capability at a future date.

Technical Solution

- 4.4 Fixed FBPs shall implement an IN based solution to provide LNP. However FBPs may agree on an alternate solution provided CITC's prior approval is obtained.

Database Responsibility

- 4.5 The existing centralized database solution used for mobile number portability (with the CITC maintaining the database) shall be used to support the IN based LNP implementation.

Cost Recovery

- 4.6 Set-up costs and Additional Conveyance costs: To be borne by each Fixed FBP provided an IN solution is implemented.

- 4.7 Set-up costs are the costs incurred by the Fixed FBP in order to establish the technical and administrative capability to provide portability. It includes the cost of:

4.7.1 Establishing and maintaining the database that contains information on ported numbers.

4.7.2 Making network and system modifications, configurations or reconfigurations, operation, maintenance including adapting or replacing software and billing system.

4.7.3 Testing functionality within the applicable systems and in conjunction with any other service provider's systems.

- 4.8 Additional conveyance costs are the additional costs for conveyance of an individual call to a ported number. This would include look up of the ported number and prefix addition. It does not include any conveyance or transit costs which would normally be incurred for a call to a non-ported number from one network to another. Additional conveyance costs for LNP are associated with:

4.8.1 resources used in setting up of each ported call and

4.8.2 resources used for the duration of each ported call

- 4.9 Administrative Cost: The administrative costs are those costs that are incurred by one Fixed FBP to process a Subscriber's application to port their number to another Fixed FBP. This is the only cost the Donor Service Provider may collect from the Subscriber, unless the Recipient Service Provider elects to bear the cost on behalf of the Subscriber.

4.10 The LNP rates will be subject to the CITC's approval.

Fixed-Mobile Portability

4.11 Number Portability from a Fixed FBP to a Mobile FBP is not required at this time. However, the CITC may require this capability at a future date.

Implementation Timeframe

4.12 LNP shall be implemented in the KSA within two years starting from the date of the commercial launch of the first Fixed FBP licensee after the issuance of this Regulatory Framework.

LNP Guidelines

4.13 A fixed telephone number should be ported only if the number is still in operation. Telephone numbers that have been disconnected may not be ported.

4.14 LNP shall support all services unless the CITC determines that support is not applicable.

4.15 Calling Line Identification Presentation (CLIP) shall be portable.

4.16 Connected Line Identification Presentation (COLP) shall be portable.

4.17 The routing arrangements for ported numbers shall be defined and implemented by the relevant service providers.

4.18 LNP shall not affect the carrier selection function.

4.19 The ported number shall be enough to route the call. Callers should continue to dial the same Subscriber Number (Ported Number) and nothing more should be necessary to set up a call to a ported Subscriber.

4.20 All network-related services associated with the donor network shall expire automatically when porting takes place, as shall data stored for these services e.g. Mailboxes.

4.21 Mailbox numbers for voice, fax or data cannot be ported. Mailbox numbers cannot continue to exist as independent numbers and hence shall be disconnected upon porting the main number.

4.22 After the Donor Service Provider has carried out the cancellation in the network, the Subscriber will no longer be able to make calls until the Recipient Service Provider has activated the service.

4.23 If a call is in progress at the time when the porting takes place, this call may be cut off for technical reasons.



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