



## **Mobile Number Portability**

འབྲུག་གི་འཕྲིན་དྲིལ་བུ་དང་མཐོ་སྒྲིལ་གྱི་འཕུལ་བུ་འཕྲིན་དྲིལ་བུ་འཕྲིན་ལྷན་ཁང་།

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## **1. Introduction**

Mobile Number portability(MNP) is a service in which the customers retain their original mobile number when switching from one provider of mobile telecommunications services to another. In absence of number portability, customers have to surrender their number and must switch to a new one when they switch operators. Without MNP, customers have to bear the switching costs associated with informing people about changing their number, printing new business cards, missing valuable calls from people that do not have the new number, etc.

Mobile Number Portability offers the subscriber the flexibility to retain his mobile number even when he switches to another operator in a service area. Number portability is a feature that allows a mobile subscriber to use the same number across different service providers. The person/user has the liberty to opt for any service provider without the time-consuming exercise of letting the rest of the world know about the change of number.

## **2. Purpose of the Consultation Paper**

As the implementation of MNP requires up-gradation of the network capacity of the mobile operators, before introduction of MNP, the Authority would like to undertake a thorough consultation with the stakeholder about their views and suggestions

## **3. Objective**

The main objective of number portability is to promote competition among the service providers by reducing barriers to switch to a different service provider and consequently, improving the overall quality of service.

Provide customers the right to choose the service provider of their interest and still access the network of both the operators in the country while retaining the same number.

To make proper utilization of the mobile number resources.

## **4. The Need for Number Portability**

Currently, Bhutan has two service providers because of which subscribers have SIM for different operators but it has not offered the right of choice to the subscribers. Moreover, in order to improve the quality of service, there is a need for MNP in the country.

Mobile Number Portability (MNP) is an important concept enabling subscribers to preserve their numbers while switching to a different mobile network. This gives subscribers flexibility in the quality, price and variety of telecommunications services they choose to purchase. MNP thus promotes competition between telecommunications service providers which leads to lower telephone prices and improved quality of service. It ultimately reduces switching costs.

Switching cost here can be considered to include not just the amount paid by the subscriber to switch to another operator but a broader definition including the cost of changing numbers on business cards, web sites, repainting business vans because of changed numbers, etc.

## **5. Benefits of Number Portability**

Number portability is a winning proposition for all key stakeholders - regulators, service providers and subscribers.

### **Benefits to the Subscribers:**

Due to the inconvenience and cost of informing others of the change, most users are reluctant to switch service providers, even when they become dissatisfied with the service. With number portability, it allows subscribers to keep their existing mobile numbers when they change service providers. It offers freedom to choose and switch service providers while maintaining their valuable identity — their mobile numbers. Further, the MNP can benefit subscribers by reducing discrimination based on off-net and on-net calls and SMS.

Moreover, the numbering plan is a national resource and it should benefit consumers. The operator does not pay for the numbering plan and so it is a public service.

### **Benefits to the Regulator:**

Number portability provides two powerful following benefits to the regulator:

- a) An efficient approach to allocate limited numbering resources; and
- b) Promote and level the competitive playing field. The number portability will reduce the cost of changing suppliers, thereby improving the disciplinary effect of the competitive market.
- c) The service providers are forced to improve their customer care, quality of service, and coverage. The number portability can boost productivity and competitiveness.

### **Benefits to the Service Providers:**

For service providers, the number portability presents opportunities to acquire customers and generate higher Average Revenue per User (ARPU) through introduction of new services.

Though there are understandable concerns about the costs of implementation and the risks of greater churn, number portability can:

1. Promote growth in subscribers and revenue for service providers
2. Delivering high quality services,
3. Bring innovative marketing, service features, and pricing models

## 6. International Experiences

Since the mid-1990s, many countries have been implementing number portability as their telecommunications markets are opened to competition.

### a. North America

- The United States and Canada support number portability for subscribers of fixed and mobile services since 2002 onwards.

### b. Europe

- The European Union (EU) mandated its member states to support number portability (Directive 2002/22/EC, Article 30) in July 2003, although many EU countries had already implemented portability well before the mandate.
- The UK implemented number portability in 1999 and adopted a donor-led porting solution without a centralized database. However, by late 2006, the porting time of more than one week, choice of wrong solution, and lack of awareness on number portability resulted in switching to MNP solution. Failing to properly review the MNP solution based on cost and benefit led to problems after the MNP implementation.

### c. Asia

- In Asia, Singapore (1997) and Hong Kong (1999) were one of the first countries to implement number portability, followed by Japan (2006) and Malaysia (2008).
- Mexico (2008) was the first Latin American country to have implemented number portability which was then followed by Brazil (2009).
- South Africa (2006) and Egypt (2008) lead the way in Africa.
- Countries in the Middle East, such as Saudi Arabia (2006), Oman (2006), Jordan (2010) and Kuwait (2010) have number portability in place.
- In South Asia, Pakistan (2007) is the first country to implement the mobile number portability (MNP) which was then followed by India (2011) and Maldives (2017).

The international experiences clearly indicate that for successful implementation of the MNP, it is important to:

- a) **Good partnership between regulator and service providers:** Number portability cannot succeed without the kind of regulatory support that represents the public interest. At the same time, it is essential to have a deep understanding of the cost and complexity of the service providers' networks and systems. Therefore, it is very crucial and critical to design the number portability to reflect the concerns and contribution of the both regulator and service providers.

- b) Number portability should not be set-it and forget-it services:** The implementation of the number portability requires constant monitoring and management. The International experiences reveal that, even if things go well at the start, it is important to monitor the ongoing investment requirements as well as other requirements to avoid situations that would dilute the value for the subscribers.
- c) A positive user experience is key to achieving the goals of number portability:** The ease of the porting experience by the user is very important for the success of number portability. The international experience clearly demonstrates that the users normally do not want to wait longer for their number to be ported and also if the process to port number is time-consuming and complicated (complex porting process), the users normally will avoid number porting. Therefore, the time taken to port a number as well as the cost of the user will have a huge impact on the number portability.
- d) Customer experience must be the priority of number portability:** the international experiences clearly demonstrate that, without a good customer experience, the uptake of number portability will be limited. Issues such as complex porting processes including longer porting transactions time will make subscribers turn away from number portability.
- e) Choice of technology and solution:** While implementing number portability, if the choice of technology and approach are made in the name of expediency and cost savings, then such a decision can create more problems than solutions. The design of number portability should be engineered to meet the needs of the subscribers and operators, aiming towards long-term benefits. For instance, the UK followed Singapore's model (Call forwarding or donor network approach) while implementing number portability in 1999. With this approach, they faced lots of problems with the number porting and bad customer experience. To solve all these problems, the UK changed their number portability approach by converting the approach to the Centralized, All Call Query (ACQ) model in 2006-07.
- f) Lock-in policy of the Service Providers:** International experiences also reveal that the lock-in policy of the service providers hampers or discourages subscribers from availing number portability. The lock-in policy means the policy of service providers to subsidize the cost of handset which includes signing contractual obligation by the subscribers for a certain period and avail its service.
- g) Cost of Porting: International experiences show that the number portability's** success will depend on the cost of porting the number. The lower the cost, the higher will be the rate of porting. The cost here refers to the amount that the subscribers need to pay to port their number to some other service provider's network. This all

depends on the regulatory authority that decides who bears the cost of porting. For better success and market competition, it is recommended that the new service provider, who is getting the subscriber, bears the cost of porting.

## 7. Factors determining the success of Number Portability

Based on the international experiences, the success of number portability will depend on the following factors:

- **Subscriber Awareness:** Subscribers need to be aware of Number Portability (NP), its advantages, and how to go about it.
- **Simplicity:** NP success mainly depends on the simplicity of the process. There could be many rules that the regulator may impose. For example, a number can't be ported in the first 6 months of the subscription. Such forced conditions hamper the success of NP.
- **Speed:** Speed is one of the major factors that affect the success of NP. Service level agreements should be stringent enough to minimize the time taken to port the number to another network. This increases the level of customer satisfaction.
- **Cost factor:** NP success also depends on the cost of porting the number. The lower the cost, the higher will be the rate of porting. The cost here refers to the amount that the subscribers need to pay to port their number to some other service provider's network. This all depends on the regulatory authority that decides who bears the cost of porting. For better success and market competition, it is recommended that the new service provider, who is getting the subscriber, bears the cost of porting.

## 8. Conclusions

MNP is a service in telecommunication provided by the telecom operators in which customers can retain their original mobile number when switching from one service provider to another. Moreover, MNP provides customers the right to choose the service provider of their interest and still access the network of both the operators in the country while retaining the same number.