



MOBILE NUMBER PORTABILITY TO FURTHER INCREASE COMPETITIVE INTENSITY

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Background

Mobile Number Portability (MNP) will be introduced in India in a phased manner starting next year, a move that is expected to further intensify competition in the already crowded mobile services market. With the implementation of MNP, subscribers would get a wider choice and would be able to switch between service providers easily, thereby compelling service providers to offer competitive pricing plans and offer higher service quality to attract and retain subscribers.

A direct fallout of implementation of MNP is the increase in customer churn. Change in mobile number has been a major deterrent in switching service operators in the past, especially for high usage customers; however, with the implementation of MNP, customers can easily switch from one service provider to another without changing their mobile number. Moreover, the low porting charges¹ (maximum of Rs. 19 per porting to be paid by the subscriber) and low porting time (4 days for all circles except Jammu & Kashmir, Assam and North East where the maximum time period for completing the porting process would be 12 days) are expected to drive the adoption of MNP in India. Increase in the churn is expected to increase the customer acquisition and retention costs of operators, which coupled with competitive tariff plans and falling ARPUs is expected to result in a decline in the operating margins of the telecom operators especially in the short term.

As all telecom operators in the market quickly react to match competitor pricing, tariff may not be a differentiating factor in the choice of operator. Hence, the quality of service and customer experience will play an important role in a customer's choice for an operator rather than pricing. ICRA expects that customer retention, especially in the high paying post-paid segment, would become the focus area for operators, as these contribute significantly to revenues, even if they form a small portion of an operators overall subscriber base. Operators would have to increasingly focus on offering differentiated services and improving quality of service (in terms of better customer care and improved network and coverage) in order to attract and retain customers. Offering differentiated services like 3G would also be important for retention of high usage high ARPU customers. Thus, the implementation of MNP would be beneficial for mobile subscribers, as it would provide them with a wider choice (in terms of pricing plans, services, etc.), flexibility to change service operators without losing their mobile number and most likely an improvement in the quality of services offered by operators. Operators with superior quality of service would be the clear winners, while those with less than satisfactory service quality would stand to lose the maximum by way of subscriber churn.

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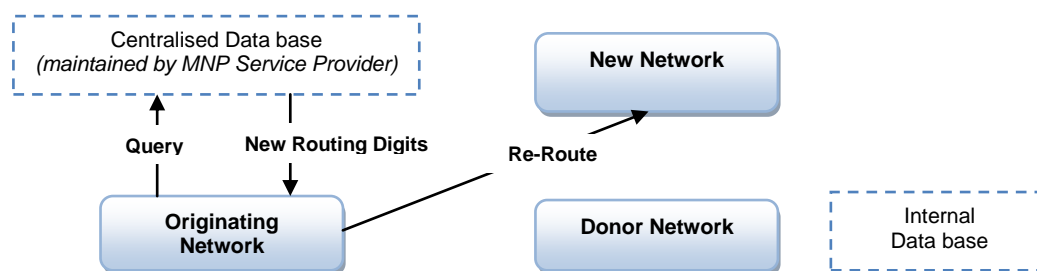
¹ Porting charges means such charge as may be levied by a Recipient Operator from a subscriber for porting his mobile number

Mobile Number Portability (MNP) to be implemented through the 'All Call Query' method in India

Mobile Number Portability (MNP) allows subscribers to retain their existing mobile telephone number when they switch from one Access Provider (Mobile Service Operator) to another, irrespective of the mobile technology. In other words, it enables the subscriber to retain his / her phone number, when switching subscription from one mobile service provider to another.

In India, MNP would be implemented through the 'All Call Query' method, which is technologically the most efficient method of implementing MNP.

Chart 1: All Call Query method



In the 'All Call Query' method, the originating network will first check the location of the dialled number in the central database and then route calls directly to the recipient network. As this method does not place a burden on the donor network, it is the most efficient in terms of call routing.

MNP to be implemented in India in a phased manner

MNP would be implemented in India in two phases – it is expected to be launched in Metro and Category A Circles by early next year and thereafter in Category B and C Circles. MNP would be governed by the Regulations issued by the Telecom Regulatory Authority of India (TRAI). The salient features of MNP under the Regulations issued by TRAI are given below:

Table 1: Features of MNP in India²

Features of MNP (as per Regulations issued by TRAI)
<ul style="list-style-type: none"> MNP is allowed only within a given licensed service area or telecom circle; subscribers moving from one circle to another are not allowed to port their number
<ul style="list-style-type: none"> Subscribers are allowed to port their numbers only once in every 90 days
<ul style="list-style-type: none"> Subscribers may be required to pay porting charges (if any) to the Recipient Operator subject to a maximum of Rs. 19
<ul style="list-style-type: none"> Prepaid subscribers would lose 'balance talk time', any non-refundable deposit upon porting
<ul style="list-style-type: none"> Post-paid subscribers to clear all bills issued prior to the date of porting request. In case of non-payment of any dues to the Donor Operator, the ported number would be disconnected by the Recipient Operator
<ul style="list-style-type: none"> Recipient Operator should forward porting request to the MNP service provider³ within 24 hours
<ul style="list-style-type: none"> Donor Operator should give clearance to port the number within 24 hours on receiving request from MNP Service Provider
<ul style="list-style-type: none"> On a date decided by the MNP Service Provider, the Donor Operator would be instructed to disconnect the number within one hour; after that, the Recipient Operator would be given one hour for activating the number of the subscriber
<ul style="list-style-type: none"> Maximum time period for completing porting process – 4 days for all circles except Jammu & Kashmir, Assam and North East, where the maximum time period for completing porting process would be 12 days
<ul style="list-style-type: none"> Recipient Operator to pay 'port transaction charge' of Rs. 19 per port to the MNP Service Provider for processing the porting request in respect of a mobile number
<ul style="list-style-type: none"> Operator to pay charges for use of MNP Service Provider's Database for routing of calls; these charges to be mutually negotiated between operators and MNP Service Providers

Source: Mobile Number Portability Regulations, 2009, TRAI Notification

As per the regulations issued by TRAI, a subscriber would be able to port her/his number once in every 90 days (within the same circle). The subscriber may be required to pay a porting charge to the Recipient Operator, which would be subject to a maximum of Rs. 19 per porting. As per the regulations, the maximum time for completing the porting process would be 4 days (for all circles except Jammu & Kashmir, Assam and North East, where the maximum period for completing porting process would be 12 days).

² Refer Annexure for Glossary of terms

³ MNP Service Provider will function as an interconnect exchange that will have the required infrastructure including a database of mobile numbers for seamless implementation of MNP. The functions of an MNP Service Provider will include maintenance of a database of numbers ported, providing access of such database to operators for successful routing of calls, specifying the time and date on which a subscriber's number would be ported and issuing instructions to the Donor Operator for disconnection of mobile number and to the Recipient Operator for activation of the mobile number ported.

Low porting charges and low porting time to drive adoption of MNP in India

Low porting charges and low porting time are critical factors for the successful implementation of MNP. As per the Regulations issued by TRAI, the porting charges to be paid by the subscriber for porting of mobile number would be decided by the recipient operator. However, these would be subject to a maximum of Rs. 19 per porting. Nevertheless, as the porting charge of Rs. 19 is only a ceiling, operators' can offer discounts in porting fees to attract customers.

Table 2: Porting charges in other countries

Country	MNP Implemented	Porting charges
UK	Jan-99	\$14.31-42.92
Germany	Nov-02	\$25.5
Hong Kong	Apr-99	\$0.38
South Africa	Nov-06	Free
India		\$0.41

Source: ICRA Research

The regulations also specify a maximum time of 4 days for porting of mobile numbers (except in the circles of Jammu & Kashmir, Assam and North East, where the maximum time for porting would be 12 days) which is comparable to some of the other developed telecom markets, where MNP has been implemented. The UK example serves to highlight the importance of low porting time for successful adoption of MNP. MNP was introduced in the United Kingdom in 1999. However, the process of shifting from one operator to another took upto seven days and required the subscriber to obtain authorisation from the existing service provider; as a result, only 3% of the total subscribers ported their numbers. Moreover, donor operators were also allowed to charge customers for porting away, which served as a deterrent to subscribers. Thus, low porting charges and low porting time would be major factors driving the increasing usage of MNP in India.

Competitive Intensity to further increase with the introduction of MNP; subscriber churn rates are expected to increase

The Indian mobile services market is highly competitive with six to eight players operating in each of its 22 telecom circles. The intensity of competition has increased in the recent months following the launch of GSM⁴ services by Reliance Communications (RCom) and Tata DoCoMo, CDMA⁵ services by Sistema Shyam; and the continuing pan-Indian GSM rollout by Aircel, Idea Cellular (Idea), and Vodafone Essar (Vodafone). The intensity of competition in the mobile services market is expected to increase further with the launch of mobile services by new players like Unitech Wireless and Datacom over the next few months, which would take up the number of telecom players operating in each circle to 11-12.

In ICRA's view, with the introduction of MNP, mobile service providers are likely to face higher competitive pressures, especially in the initial phase, as subscribers scout for better wireless deals, thereby raising the costs of subscriber acquisition and retention. As customers get a wider choice and are able to switch between service providers easily, mobile service providers would need to offer more competitive pricing plans and offer higher quality services to attract and retain subscribers.

Mobile operators spend substantial resources to add customers; and thus, customer retention is critical for them. One of the biggest challenge for the Indian mobile service industry is that the churn rate, which is already high, could increase even further with the introduction of MNP. This would lead to a drop in revenues and increase in costs for telecom operators, thereby affecting their financials.

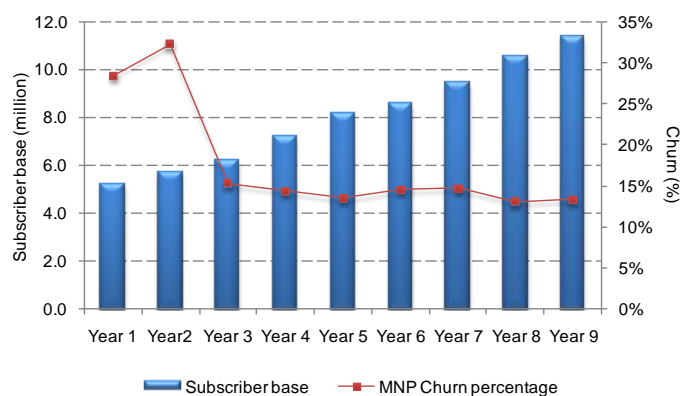
⁴ Global Systems for Mobile Communications

⁵ Code Division Multiple Access

Case Study: Hong Kong

Experience shows that the rate of churn can increase significantly with the introduction of MNP. In Hong Kong, for instance, nearly 1.5 million mobile phone customers, or 28% of the market, ported their numbers in the year after number portability was introduced. However, after the initial flurry post-MNP, the portability-driven churn rate in Hong Kong decreased to around 13% by Year 9.

Chart 2: Subscriber base and Churn Rate in Hong Kong

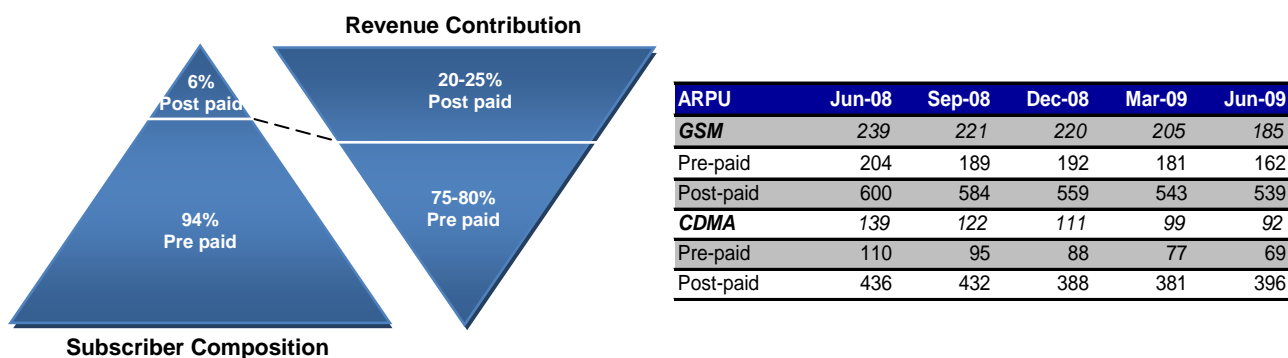


Source: Office of the Telecommunications Authority, Hong Kong

Operators to increase focus on customer retention especially in the lucrative post paid segment

As *Chart 3* demonstrates, post-paid subscribers are typically high usage customers and generate higher ARPUs. The ARPU from a post-paid subscriber is about 3-4 times that of a pre-paid subscriber. Post paid subscribers also account for a disproportionately large share of a telecom operator's overall revenues. While around 6% of the mobile subscribers in India are post-paid, they contribute around 20-25% of the revenues of telecom operators. Moreover, the increasing share of low ARPU subscribers (from semi-urban and rural areas) in the total mobile subscriber base and the tariff wars have resulted in sharp decline in the APRUs of mobile operators, which underscores the importance of the retention of high paying post-paid subscribers.

Chart 3: Revenue contribution of post paid and pre paid subscribers; ARPUs of post paid and pre paid subscribers



Source: ICRA Research, TRAI

Increase in marketing costs and introduction of attractive tariff schemes to affect operating margins

Increasing competitive intensity, drop in ARPUs and increase in customer acquisition and retention costs have impacted the operating margins of telecom operators over the last few quarters⁶. With the implementation of MNP, these factors will play out in an even more pronounced manner. ICRA believes that higher customer acquisition and retention costs coupled with declining tariffs is likely to affect the profitability of telecom operators post implementation of MNP.

⁶ Refer to ICRA's note on 'Impact of Increased Competition on Mobile Service Industry'

Operators to increasingly focus on improving quality of service

The Indian telecom industry continues to witness buoyant growth with around 14.15 million new subscriber additions per month (average from January 2009 to October 2009). However, there is room for improvement in the quality of service offered by mobile service operators. Spectrum constraints in metros and category A circles results in frequent call drops and network congestion. Almost all the major GSM and CDMA operators are facing spectrum congestion in the Metro circles, and have crossed the upper limit on the number of subscribers per MHz as recommended by DoT. This has affected quality of service and has also led to sub-optimal customer experience.

With tariffs in India already the lowest in the world, there is limited scope to compete on the pricing front. Moreover, as all players in the market quickly react to match competitor pricing, tariffs will not be a differentiating factor in the long term. Hence, the quality of service and customer experience will play an important role in a customer's choice for an operator rather than pricing.

Operators would have to increase their focus on improving customer care and network quality and coverage –

- **Customer care:** customer care is an area where service providers can gain competitive advantage. As competing telecom offerings tend to be similar in price and scope, customer care will become even more important post-portability, as that will be seen as a key differentiator between operators. Thus, operators would need to set high standards to ensure customer satisfaction. Further, with the competitive intensity increasing, the success of customer acquisition and customer retention strategies (especially, for heavy users) would hinge on understanding customer demographic characteristics, lifestyle behaviours, and purchase preferences — factors that drive customers to change or retain the existing operator.
- **Network quality and coverage:** equally important to customer acquisition and retention efforts is the level of network service and coverage provided to current customers. Prior to MNP, the prospect of change in mobile number served to deter customers from switching between service providers. With Number Portability, mobile operators that do not meet customer satisfaction benchmarks for network availability, billing and coverage will be affected significantly.

Conclusion

The implementation of MNP would be beneficial for mobile subscribers, as it would provide them with a wider choice (in terms of pricing plans, services, etc.) and flexibility to change service operators without losing their mobile number. However, for mobile service operators, the churn that invariably follows MNP implementation represents both a threat and an opportunity. Post the implementation of MNP, some operators are likely to witness the erosion of their customer base and the resultant decline in profitability, however, for some other operators, MNP can provide an attractive opportunity to gain market share and target high ARPU customers.

Thus, managing churn, especially one involving premium customers, is crucial in the initial years, as during this period customers are more likely to switch because of:

- Past dissatisfaction over quality of service
- Innovative pricing plans, freebees and new offerings by competitors
- Moreover, the inertia to change operator usually increases after the initial switchover

In ICRA's view, MNP would result in higher competitive intensity, increase in churn, pressure on ARPUs and margins in the short term and telecom operators would have to increase their focus on improving service quality and offering differentiated services in order to attract and retain subscribers in the long term. ICRA believes that, operators with superior quality of service would be the clear winners, while those with less than satisfactory service quality would stand to lose the maximum by way of subscriber churn.

Annexure**Glossary**

- **Porting** means the process of moving of a subscriber's mobile number from one mobile service provider to another or from one mobile technology to another of the same or other mobile service provider.
- **Porting charges** means such charge as may be levied by a Recipient Operator from a subscriber for porting of mobile number.
- **Recipient Operator** means a mobile service provider who will be providing mobile telecommunication service to the subscriber after porting
- **Donor Operator** means a mobile service provider to whose network the mobile number belongs at the time the subscriber makes a request for porting.
- **MNP Service Provider** means an entity who has been granted a license for providing Mobile Number Portability Service. Such an entity will function as an interconnect exchange that will have the required infrastructure including a database of mobile numbers for seamless implementation of MNP. The functions of an MNP Service Provider will include maintenance of a database of numbers ported, providing access of such database to operators for successful routing of calls, specifying the time and date on which the subscriber's number would be ported and issuing instructions to the Donor Operator for disconnection of mobile number and to the Recipient Operator for activation of the mobile number ported.
- **Per Port Transaction charge** means the charge payable by the Recipient Operator to the MNP Service Provider for processing the porting request in respect of a mobile number



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