



COAI response to the TRAI Pre-Consultation Paper on “Full Mobile Number Portability”

Preamble:

The issues with respect to implementation of Full Mobile Number Portability are as listed below:

1) Commercial viability

- a) There has been the very decent uptake of the intra-circle Mobile number portability since its launch on January 20, 2011. In last two years there have been 80 million porting requests which are around 9% of the total subscriber base.
- b) We believe that in case inter-circle porting is allowed **only a fraction of the subscriber** shifting from one circle to another will actually use the inter-circle porting facility. Thus, we are of the view that there is not enough market driven demand for this type of service (nationwide MNP), **and hence this does not appear to be a commercially viable option.**

2) Cost Benefit analysis

- a) While intra-circle MNP was introduced to increase market competition in the service area and provide benefits of competition and choice to the subscriber, the objective of introducing full MNP is only to provide a facility to a subscriber who wants to retain his number in case he shifts from one service area to another. As stated above, we would like to submit that subscribers requiring this facility will be a fraction of the total customer base. Benefits for a few may not justify the capital outlay /cost burden involved for providing this facility.
- b) The proposed detailed consultation paper must dwell upon as to how many subscribers will benefit from this facility and what is the required capital outlay/cost burden on the industry as a whole. **Thus, a detailed cost benefit analysis should be undertaken and included in the proposed Consultation Paper.**

3) Consumer issues/complaints:

- a) TRAI should also keep in mind various customer care issues which will arise upon implementation of full MNP. Technical issues and cost implications around the pre - call announcement will require detailed deliberation and a Pre- call announcement will not be a workable/ feasible option. Thus a calling party will not know that called number has ported and long distance charge is applicable. This will lead to a significant consumer dissatisfaction and customer complaints. The customer complaints from a larger community of subscriber base may be far higher than the benefits which accrue to a few subscribers. **In the proposed detailed consultation paper, this aspect should also be factored in by the Authority in the cost benefit analysis.**

4) Fixed line Number Portability and the Service Number Portability:

- a) We would like to submit that in case TRAI considers implementing the full Mobile Number Portability, the TRAI should also consider implementing fixed line porting along with the nationwide MNP.
- b) Further, we would like to submit that the full MNP and the fixed line number portability should be followed by service MNP i.e. porting should be allowed between the services (mobile to fixed, fixed to mobile etc.)
- c) Detailed cost benefit analysis for the implementation of fixed line and service number portability should be undertaken and should form part of the proposed Consultation Paper.**

In light of the above, decisions pertaining to implementation of full MNP will have far reaching implications for the industry as a whole. **We would like to understand from the Authority its perspective on how the various services and tariffs will be impacted post this initiative.**

We would also like to submit that the results of Cost Benefit analysis should determine further course of action. However since the Authority has directly raised questions related to implementation, our response is as below:

l) Issues Requiring TRAI's consideration :

Q1: Inputs / comments of the stakeholders on the most optimum method for implementing the Inter-Service area porting out of the three approaches discussed in this paper are requested.

COAI Response:

We would like to make the following comments with regard to the benefits and shortcomings of various approaches suggested in the pre-consultation.

1) Approach 1: Recipient Operator forwards the porting request to the MNP service provider of his zone

Advantages:

- a) This is the least disruptive approach from the TSPs/Operators' perspective.
- b) No changes are required in the operators' Number Portability Gateway (NPG) as the recipient operator continues to forward all the porting requests to the MNPO of its zone.

Disadvantage:

- a) Synchronisation issues between the two database's of the MNPO's need to be addressed.

2) Approach 2: Recipient Operator forwards the porting request to the MNP service provider of the zone to which Donor Operator belongs

Disadvantage:

- a) This approach is most disruptive among all the three approaches.
- b) The Operators' NPG will have to be connected to both the MNPOs to handle both the Intra and Inter MNP Zone portability requests.
- c) The NPG must have the intelligence built-in to identify the Intra or Inter circle porting requests across two zones and accordingly forward the porting requests to the appropriate MNPO. **This requires major changes in the NPG and may involve significant cost.**

3) Approach 3: Recipient Operator forwards the porting request to the MNP service provider of the zone to which number range holder of the number belongs.

Advantages:

- a) All porting requests are forwarded to the MNPSP of the number range holder network for processing which has the complete porting history of the subscriber.

Disadvantages:

- a) The Operators' NPG must have connectivity with both the MNPOs as the porting request will have to be forwarded to different MNPOs based on the number range.
- b) The NPG must have intelligence built-in to forward the porting request to different MNPOs based on the identity of the number range holder network. **This requires major changes in the NPG and may involve significant cost.**

Summary of the Impact analysis of all the approaches for the mobile operators are as given:

Impact Analysis Matrix

Area	Approach 1	Approach 2	Approach 3
Complexity of changes	Minor	Medium	Major
Changes in IT Systems along with integration	Minor	Medium	Major
Testing Efforts with respect to changes	Minor	Major	Major
Stabilization time with respect to changes	Minor	Major	Major
Documentation Changes	Minor	Medium	Medium
User / Operation training efforts with respect to required changes	Minor	Major	Major
The efforts required to keep configuration updated post deployment with respect to approach	Not required	Medium	Medium

Our Recommendation:

- 1) In light of the above we request TRAI to rule out Approach No. 2 & 3 for the reasons mentioned above.

2) In the interest of avoiding complexity and ensuring minimum possible changes to the prevailing stable MNP architecture, TRAI may consider adopting Approach 1 for implementation of Full MNP. Given the complexities and time required in the implementation, we recommend Approach 1 as the best alternative which could be adopted.

Q2: Inputs may also be provided on amendments required in the existing license conditions of the MNP service license, relating to scope of work, entry fee, license fee, exclusivity period etc.

COAI Response:

- 1) We would like to submit that in case TRAI considers implementing the full Mobile Number Portability, the consumer should not be burdened with an increase in porting fee.
- 2) We would like to submit that the amendments of the MNPO's will be required due to following points:
 - a) Synchronization of the Databases of MNPO's
 - b) Security of the database due to the synchronization
 - c) Process related SLA's between the MNPO's
 - d) Interconnectivity between the MNPO's etc.

Q3. Comments may be provided on issues related to generation of UPC by a roaming subscriber outside his service area, including generation of UPC for the subscriber desiring to/from porting in the J&K service area.

COAI Response:

- 1) We would like to inform TRAI that there are no technical challenges with regards to the SMS based generation of the UPC by a Roaming subscriber outside his service area. **However, we would like to submit that in case the subscriber generates the UPC outside its service area, he would be charged applicable roaming rates for such SMS.**
- 2) With regard to the issue pertaining to the out-roamers of Donor operators of J & K service area, we would like to suggest that subscribers can make a call to 1900 instead of sending SMS while on roaming to another service area. This call to 1900 could be routed by the operator to the subscriber's home Donor network i.e. J&K, via a new long code to be provided by the Donor Operator to its domestic roaming partners. **We would again like to highlight that in this case as well, subscriber would be charged with applicable roaming charge for such a call.**
- 3) In case of J&K prepaid number, the UPC generation request has to be submitted while in home network only, since pre-paid customers in J&K are not permitted to roam in rest of India. Similarly, since a prepaid customer from any other circle in India cannot roam in J&K, he/she has to raise a UPC generation request in the home network only.

Q4. Comments may be provided on the mechanism to be adopted for routing of calls if the number has undergone inter-service area porting.

COAI Response:

Identification of inter-service area (STD) calls

- 1) In case the subscriber is directly storing or saving the mobile number:
 - a) TRAI has suggested that in this scenario a clear distinction in the announcements between *"number does not exist"* and *"number has been ported to other service area"* will have to be made.
 - b) We would like to make the following submission in this regard:
 - i) Each MSC/MSS will have to maintain a separate LRN Table/B-Number Table for Intra and Inter-Circle Ported out cases for the purpose of determining whether the LRN returned from the MNP dipping belongs to the same service area or a different service area and play the announcement in the latter case.
 - ii) It will be a humongous task to maintain such tables in each and every MSC/MSS in view of the huge space consumed and the resulting increased memory/processing required for call processing.
 - iii) The onus lies with the customer to dial the number in the correct dialling format i.e. with 0 or +91.
 - iv) In any case, with full MNP, the subscribers may be educated to dial the numbers in the +91 format which is the standard dialling format.
 - v) **It is therefore recommended to either simply release the calls or play the standard announcement "number does not exist".**
- 2) In case the subscriber is storing the mobile number with prefix 00 or "+91"
 - a) In case subscriber makes a call with "0" or "+91", the call will be successful but a caller will be charged at STD as the number has been ported out to other Service Area.
 - b) We would like to make the following submission in this regard:
 - i) In most of the cases, caller may already be aware that called party has changed the location and the onus should lie on the calling party to bear the STD charges, if applicable.
 - ii) The STD rates today have plummeted to almost the same as local call rates and we recommend that there is no need for additional requirements in case of Inter-Service area ported out cases.
 - iii) At the same time, we recommend that TRAI, DoT should create adequate publicity & awareness amongst the common masses about the features of Full MNP.

Q5. As the present regulations are formulated for porting of mobile numbers within service areas, inputs may be provided regarding modifications required in the MNP regulations.

COAI Response:

Please refer to our response to Q7.

Q6. Minimum Possible testing scenarios covering the various possibilities of porting.

COAI Response:

We would like to make the following submissions with regard to the testing scenarios:

1) Call Routing IOT & Testing:

- a) Present MNP Process works on the principle of All Call Query (ACQ). All calls to mobiles are queried by originating network and routed with LRN information. The transit networks between the originating end and terminating end, including the NLDs/Transits, utilize the LRN information available for the routing of the calls.
- b) To verify the correct routing of calls for a new category of the inter-circle ported subscribers following are test cases which could be adopted. A sample testing between networks to check call origination and call termination success may be conducted with a matrix such as by taking one X-Y pairing per LSA:-

S.No	Originating Network X	Terminating Network Y
	Type : Voice Call	
1)	A Sub Inter-Circle Ported from Y Network	B Sub Inter-Circle Ported from X Network
2)	A Sub Inter-Circle Ported from Y Network	B Sub Non-Ported Subscriber
3)	A Sub Non-Ported Subscriber	B Sub Inter-Circle Ported from X Network
	Type : SMS	
1)	A Sub Inter-Circle Ported from Y Network	B Sub Inter-Circle Ported from X Network
2)	A Sub Inter-Circle Ported from Y Network	B Sub Non-Ported Subscriber
3)	A Sub Non-Ported Subscriber	B Sub Inter-Circle Ported from X Network

2) Process Testing: The same will depend on the workflow once the same is finalized.

3) Significant cost and resources would be incurred by the operators for testing as well.

Q7. Comment on any other relevant point related to full number portability may be provided

COAI Response:

We would like to highlight some process related issues for the kind consideration of TRAI:

1) SMS based cancellation process through MNPO's

- a) In the past there have been various deliberations and meetings of the industry with the TRAI to resolve issues related to smooth implementation of MNP to enhance customer experience.

- b) One of the key issues which were highlighted by the industry in these deliberations was regarding the electronic- SMS based withdrawal of the porting request of the subscriber. Industry had also highlighted three options for this electronic based cancellation of porting request to TRAI.
- c) In this regard, we would like to submit that there is pressing need to streamline the process of cancellation of port-in request which is a right given to the customer as per the existing regulations.
- d) **Hence, we again request TRAI to review our proposal and make necessary amendments in the regulations so that a customer friendly process can be adopted.**

2) Porting window for 95% of the request

- a) This refers to the Mobile Number Portability (Fourth Amendment) Regulation, 2012 dated 19th September, 2012, which provides for levy of “financial disincentive” on service providers for non-compliance of Regulation 11(4) and Regulation 11(6) viz. inability to port-in or port-out within 2 hours of instructions from Mobile Number Portability Service Provider.
- b) It is submitted that it is extremely difficult and almost impossible to comply to the extent of 100% with the Regulation. We had highlighted both technical and IT related issues/challenges to comply to the extent of 100% with the said Regulation in our letter no. RSM/COAI/231 dated November 15, 2012.
- c) In this regard, we again request TRAI to kindly review the said Regulation and make it more practical and workable. Thus we request that the said the Regulation may be modified, insofar as the financial disincentive part is concerned, that no financial disincentive will be levied if the service providers are able to comply 95% of request within 2 hours of instruction from MNPSP and such 2 hours should also exclude any downtime of network / IT nodes due to upgradations in operator’s infrastructure.
- d) This would facilitate in attaining the desired objective of port-in/port-out in the shortest possible time without compromising the rigor of financial deterrence envisaged for willful default in complying with the Regulation.
- e) We have also submitted the data highlighting this issue /problem.

3) Increase in the timelines of 24hrs for RO to submit the porting request to MNPO, due to change in subscriber verification timelines.

4) Separate rejection criteria in case of expiry of UPC.
