

To,

Dated: March 7, 2013
No.SVR/FY12-13/MNP/FMNP/001

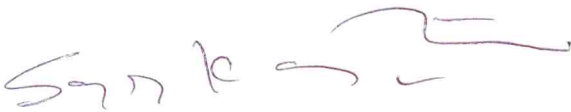
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Mahanagar Door Sanchar Bhawan,
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New Delhi -110002

Subject: Pre-Consultation Paper on Full Mobile Number Portability

Dear Sir,

This is with reference to TRAI's Pre-Consultation Paper on the Subject of **Full Mobile Number Portability**. In this regard, kindly find enclosed our inputs for your kind consideration.

Yours Sincerely,



Sanjay Kasturia,
Syniverse Technologies (India) Pvt. Limited.

Syniverse Response to TRAI pre-consultation paper on Full Mobile Number Portability

Syniverse Technologies welcome the authority's initiative for seeking comments on Full Mobile Number portability. Detailed Response to the pre-consultation paper as follow:

1 - Inputs / comments of the stakeholders on the most optimum method for implementing Inter-Service area porting out of the Three Approaches (discussed in this paper are requested

Syniverse Response:

The most optimum solution to implement Inter-Service area porting out of the three approaches discussed is to have the Recipient operator forward porting requests to the MNP service provider of the zone to which number range holder of the number belongs (Approach 3).

Advantages of Approach 3:

1 - No major changes in the existing architecture of either of the clearing houses which has been a tested and proven one. Solution 3 would save us on time to deployment, shorter testing cycles compared to remaining 2 solutions mentioned in the Pre Consultation Paper.

2 - Respective clearing house would be able to store the history of ported out numbers belonging to its zone. This would help LEA's/Authority to look up for port history of a number in the respective clearing house as is the currently established process..

3 – In the other 2 solution discussed it would be required to establish an interconnection between both clearing houses and a daily exchange of broadcast feed is required. Considering the complexity involved in data synchronization on a daily basis between both clearing houses, it is advisable to avoid any sort of interdependence between the clearing houses. Solution 3 shall keep both clearing houses independent and continue to operate as it is while achieving the objective of providing Pan-India MNP

4 - In the case of other 2 Solutions, for every porting request a look up for the number has to be done at the other clearing house to check for 90 days validation and 3-way porting. This has an outside risk of the Number Portability Service of entire nation coming to halt if incase either of the clearing house is down for any reasons or whatsoever.

5 – Solution 3 will require few changes to the Regulation, the software changes required at both clearing houses and operators end is limited. This solution is easy to implement and can be deployed in quick span of time.

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

Syniverse Response:

MNP Service Provider License (MNPSP) Area: Area of operation will become All India with right to accept porting from number range holder of their current licensed Zone, to enable inter-service area porting across Zones i.e. Pan India MNP. Exclusivity of Zone 1 and Zone 2 over the numbers of their respective number range holder (operator) will remain as per current Zone demarcations.

E.g.

- a. Recipient operator from Tamil Nadu forwards a porting request for a number belonging to number range holder, say Airtel, Delhi, to Zone 1 MNPSP – Syniverse. (Across Zone)
- b. Zone 1 MNPSP Syniverse processes the request with Number Range Holder Airtel, Delhi for disconnection and porting to service area of Tamil Nadu (Across LSA)
- c. All subsequent porting requests for the particular ported number will continue with the MNPSP Zone 1, to which the number range holder already belongs.

Scope of Services: The licensee shall be permitted to provide:

- a) Mobile Number Portability (MNP) across India for numbers of the holder of number range belonging to their respective licensed MNP zone, confirming to centralized All Call Query method that meets the relevant International Telecommunication Union (ITU)/Telecommunication Engineering Center (TEC) of DoT's Technical and Performance standards as applicable.
- b) MNPSP should be allowed to offer Application / Content providers with the ability to download ported number and associated routing information in order to deliver their services to subscribers

The License Period must mandate:

- a. 10 year License period from the effective date of the amended Pan India MNP License and
- b. 5 year exclusivity period from the effective date of amended MNPSP license to provide Pan India Porting or implementation date, whichever is later.

Entry Fee: Rs 1 crore entry fee has already been paid by the MNPSP in 2009 at the time of signing the License. The implementation was in Jan 2011 and hence MNP services are in existence for only 2 years. With the additional mandate to provide pan India MNP, upgradation of our systems and additional testing costs for inter-service porting will be an additional cost burden on the MNPSP hence no additional entry fee is warranted.

License Fee: For the reasons given regarding Entry Fee, the License Fee of 1% of the AGR should be retained. Moratorium of 2 years should be provided from the implementation date of the new amended pan India MNPSP license (and not from the effective date of the License)

3. 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 J&K service area.

Syniverse Response: No comments

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

Syniverse Response: No comments

5 - As the present regulations are formulated for porting of mobile numbers within service area, inputs may be provided regarding modifications required in the MNP regulations

Syniverse Response:

Regulation should mandate Recipient operator to forward the port requests to the MNP Service provider of the zone to which number range holder of the number belongs.

Operators should be "mandated" to submit a port order to the MCH when a user is ported from one LSA to another LSA within the Same Operator.

The regulation should allow:

- Allow Same Operator-Different LSA Porting
- Allow Different Operator-Different LSA Porting

But the following should be rejected:

- Same Operator-Same LSA Porting

Donor Operator to reject any port out requests which they receive from clearing house of the zone to which number range holder of the number do not belong. This would stop either of the clearing houses to process numbers that do not belong to the number range holder of respective zone.

6 - Minimum Possible testing scenarios covering the various possibilities of porting.

Syniverse Response:

Comparison chart of MNP Processes that would require changes on the flow and testing as follows:

MNP Process Flow	Approach 1	Approach 2	Approach 3
Number Porting Process	✓	✓	✓
Cancellation Process	✓	✓	Not Required
Rejection Process	✓	✓	Not Required
Non Payment Suspension	✓	✓	✓
Non Payment Termination	✓	✓	✓

Comparison of Test Scenario for all 3 NTP Approaches:

MNP Process Flow	Approach 1 Process Impacted	Approach 2 Process Impacted	Approach 3 Process Impacted
Number Porting Process	<ul style="list-style-type: none"> Port request accept cross LSA with different TSP or same TSP 3 way porting 90 days validation for ported MSISDN. 	<ul style="list-style-type: none"> Port request accept cross LSA with different TSP or same TSP 3 way porting 90 days validation for ported MSISDN. 	<ul style="list-style-type: none"> Port request accept cross LSA with different TSP or same TSP Port requests should be rejected at Clearing house end if the number series belong to other MCH
Cancellation Process	<ul style="list-style-type: none"> Cancellation request accept cross LSA with different TSP's or same TSP's 	<ul style="list-style-type: none"> Cancellation request accept cross LSA with different TSP's or same TSP's 	<ul style="list-style-type: none"> Not required
Rejection Process	<ul style="list-style-type: none"> Rejection request accept cross LSA with different TSP's or same TSP's 	<ul style="list-style-type: none"> Rejection request accept cross LSA with different TSP's or same TSP's 	<ul style="list-style-type: none"> Not required

Non Payment Termination	<ul style="list-style-type: none"> Termination request accept cross LSA with different TSP or same TSP 	<ul style="list-style-type: none"> Termination request accept cross LSA with different TSP or same TSP 	<ul style="list-style-type: none"> Termination request accept cross LSA with different TSP or same TSP
Non Payment Suspension	<ul style="list-style-type: none"> Suspension request accept cross LSA with different TSP or same TSP 	<ul style="list-style-type: none"> Suspension request accept cross LSA with different TSP or same TSP 	<ul style="list-style-type: none"> Suspension request accept cross LSA with different TSP or same TSP

Positive Test cases to be executed for 3 different approaches discussed :

Testing efforts	Approach 1	Approach 2	Approach 3
Total Test cases	Total Operator*(Total Operator-1)*7*22= 24024 test cases	Total Operator*(Total Operator-1)*7*22= 24024 test cases	Total Operator*(Total Operator-1)*4*22= 13728 test cases