

# **Syniverse Reply Comments Responses to TRAI Consultation Paper on Review of Mobile Number Portability Process**

Response to:



17 May 2018

## Proprietary and Confidentiality Notice

THIS MATERIAL IS THE PROPRIETARY PROPERTY OF AND CONFIDENTIAL TO SYNIVERSE TECHNOLOGIES, LLC AND/OR ITS SUBSIDIARIES (SYNIVERSE). DISCLOSURE OUTSIDE OF SYNIVERSE IS PROHIBITED EXCEPT BY LICENSE AGREEMENT OR OTHER CONFIDENTIALITY AGREEMENT.

THE INFORMATION CONTAINED HEREIN IS NON-BINDING AND PROVIDED FOR BUDGETARY PURPOSES ONLY. NOTWITHSTANDING ANYTHING IN THE RFP (IF APPLICABLE) TO THE CONTRARY, THE FINAL TERMS AND CONDITIONS GOVERNING THE ACTUAL SERVICES AND PRODUCTS TO BE PROVIDED, AS WELL AS THE RIGHTS AND OBLIGATIONS OF THE PARTIES, SHALL BE COVERED BY A SEPARATE AND DISTINCT AGREEMENT TO BE NEGOTIATED BY THE PARTIES. NOTHING HEREIN SHOULD BE CONSTRUED AS OBLIGATING EITHER PARTY TO THE OTHER FOR ANY PURPOSE WHATSOEVER.

THE PROVISION OF ANY NETWORK ELEMENTS, COMPONENTS AND/OR SERVICES DEFINED IN THIS PROPOSAL, IS SUBJECT TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, STATUTES, RULES, AND REGULATIONS.

INFORMATION CONTAINED IN THIS PROPOSAL, INCLUDING BUT NOT LIMITED TO PRICING AND EXCLUDING HARDWARE CONFIGURATION (IF APPLICABLE), IS VALID FOR NINETY (90) DAYS FROM THE DATE SET FORTH ON THE FRONT OF THIS PROPOSAL.

THE FOLLOWING ARE SERVICES, SOFTWARE PRODUCTS, SERVICE MARKS, AND/OR TRADEMARKS OF SYNIVERSE TECHNOLOGIES, LLC:

ACCESS <sup>®</sup>	LATALINK <sup>SM</sup>
ACCESSIBILITY <sup>®</sup>	SYNIVERSE <sup>®</sup>
CROSSROADS <sup>SM</sup>	SYNIVERSE LOGO <sup>®</sup>
FRAUDX <sup>®</sup>	SYNIVERSE SPARK DESIGN <sup>®</sup>
INLINK <sup>®</sup>	SYNIVERSE TECHNOLOGIES <sup>®</sup>
INPACK <sup>SM</sup>	UNIROAM <sup>®</sup>
INPORT <sup>®</sup>	VISIBILITY <sup>®</sup>
IVDRS <sup>®</sup>	WE MAKE MOBILE WORK. <sup>®</sup>

® DENOTES REGISTRATION IN THE UNITED STATES

ALL OTHER COMPANIES' MARKS AND NAMES ARE THE TRADEMARKS OR SERVICE MARKS OF THE RESPECTIVE COMPANY.

© SYNIVERSE TECHNOLOGIES, LLC

ALL RIGHTS RESERVED UNDER U.S. AND INTERNATIONAL COPYRIGHT LAWS.



## Table of Contents

<b>1</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
1.1	UPC Generation.....	1
1.2	KYC Verification of Subscriber .....	4
1.3	Challenges in the Proposed MNP Process .....	4
1.4	Compensation of the MNPSP for Generation and Delivery of UPCs .....	5
1.5	Mandatory Obligations of the MNPSP .....	6
1.6	UPC Delivery when a Network has Shut Down .....	6
1.7	Prepaid Balance Transfer from DO to RO .....	7
1.8	UPC Structure.....	8
1.9	Withdrawal of Porting Requests .....	8
1.10	Subscriber Reconnection after Disconnect .....	8
1.11	May MNPSPs Charge for Ancillary Services .....	9
<b>2</b>	<b>ABOUT SYNIVERSE .....</b>	<b>10</b>

## Table of Figures

Figure 1-1: Proposed Alternate Logical Flow for UPC Generation..... **Error! Bookmark not defined.**

## 1 Executive Summary

Syniverse is pleased to present Telecom Regulatory Authority of India (TRAI) with our reply comments to other interested and involved parties' responses to the Consultation Paper on Review of Mobile Number Portability (MNP) process dated 6 April 2018. Initial comments from 12 providers were made by 3 May 2018 with Reply (counter) Comments due by 17 May 2018.

In the initial consultation comments were received from both MNP Service Providers (MNPSPs), five Telecom Service Providers (TSPs) and five associations/advocacy groups

Stakeholders Name (abbreviation)	Type
Bharat Sanchar Nigam Limited (BSNL)	Telecom Service Provider
Cellular Operators Association of India (COAI)	Association/advocate
Consumer Protection Association, Himmatnagar (CPA)	Association/advocate
Federation of Consumer and Service Organization (FCSO)	Association/advocate
Idea Cellular Ltd. (Idea)	Telecom Service Provider
MNP Interconnection Telecom Solutions (MITS)	MNP Service Provider
Reliance JIO Infocomm Limited (Reliance Jio)	Telecom Service Provider
Syniverse Technologies (Syniverse)	MNP Service Provider
TATA Teleservices Ltd. (TTL)	Telecom Service Provider
UpphoktaSankrashan and Kalyan Samiti (CAG)	Association/advocate
Virtual Network Operators Association of India (VNOAI)	Association/advocate
Vodafone (Vodafone)	Telecom Service Provider

Before giving its question wise reply comments, and as stated in our original response on 3 May 2018, Syniverse wishes to submit that overall, in this consultation paper, TRAI has suggested a far bigger role of MNPSP in the porting process. For implementing the suggested methodology, both the MNPSPs will have to spend considerable amount of CAPEX and OPEX and time in installation and testing of required infrastructure. This may also require amendment to the MNPSP Licence and reviewing the charges which the MNPSP will get for carrying out the additional activities. Syniverse has already requested TRAI vide its letter dated April 24, 2018 for keeping in abeyance its recent tariff order till renewal of our licence. It is submitted that the new regulation because of this consultation paper should also come into effect from the renewal date. Therefore, our response is conditioned on the following:

- 1) That TRAI and the MNPSPs shall agree to a price that fairly compensates the MNPSP for the greatly expanded role requested in this consultation paper according to the final regulations.
- 2) That price shall be guaranteed for a specific number of years agreed to between TRAI and the MNPSPs and that any future price adjustments must be negotiated in good faith and/or further conditioned on objective and public milestones that allow prediction and estimation of future business plans
- 3) TRAI will need to enforce the rules with the operators so that the proposed regulatory changes documented herein below can be implemented effectively. Without compelling operators to support the process fully some of the proposed process improvements cannot be implemented successfully.

Our question wise reply comments are as follows:

### 1.1 UPC Generation

**Question 1: Would it be appropriate that MNPSP be assigned the task of generating and communicating the Unique Porting Code (UPC) to the subscriber intending to port his mobile number as proposed in the consultation paper?**



**Question 2: If you agree to assign the task of UPC generation to MNPSPs, whether the revised process outlined in the consultation paper is appropriate to address the relevant issues being faced in the existing MNP process?**

**Question 3: Do you suggest any other methodology which can address the issues being faced in the existing MNP process? Elaborate your answer.**

Syniverse's viewpoint is that the end user communications are best left to the DO and RO, while letting the MNPSP generate the UPC.

Syniverse agrees with comments made by some stakeholders that issues with UPC mismatch and expiration will not go away if the MNPSP generates the UPC. A manual process to enter a manually entered 8-digit character UPC is inherently prone to human data entry errors. The issue however, is that currently the subscriber may not know that he has sent a wrong UPC, until the DO response arrives which currently may be up to four days later. Though, this can be tackled by reducing the timeline for the DO response, still it will not address the issue of getting a timely response if a DO delays its response until the last possible moment to try to save the customer.

But if the UPC is generated by the MNPSP upon request by the DO via API, the MNPSP will have a record of the UPC and corresponding MSISDN. The MNPSP can then provide an immediate reply via API upon receipt of a port request from the RO so that the subscriber may be immediately informed and can easily take corrective action. Likewise, with knowledge of the UPC creation date, the MNPSP becomes ideally suited to determine immediately upon receipt of the porting request that the UPC validity has expired and inform the RO of this so the subscriber may immediately request a new UPC from the DO and resubmit the request. Thus, the subscriber will immediately have visibility into the initial port request acceptance or rejection while he is still actively engaged in the porting process and can make corrections instantly. This will improve the porting process from the consumer viewpoint considerably.

A diagram of the improved process is below.

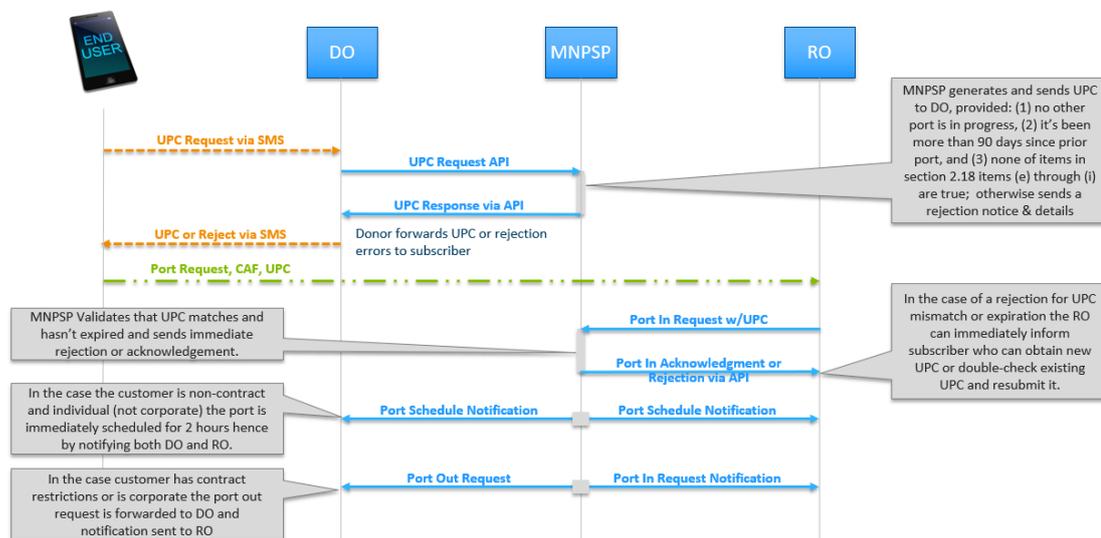


Figure 1 – UPC Request and Porting Flows

As stated by some respondents, the MNPSP license and MNP regulations will need to be modified to permit and require this process by the MNPSP. An SLA for response time by the MNPSP could ensure that in the normal course of business the MNPSP generates the UPC and transmits it back to the DO within a few seconds. This revised process would become very similar to the process employed in the United Kingdom by Syniverse where we typically generate and transmit well over 99% of the UPCs within 1 second every month. In addition,

there are methods employing keep-alive messages to ensure the network connections remain active even when API calls are infrequent. Alarms can be generated based on these keep-alive messages so that any service issues are detected and resolved quickly.

As pointed out by one respondent, any downtime expected by any of the TSPs can be broadcast to the MNPSP in advance. Likewise, any planned maintenance by the MNPSP can also be broadcast to the TSPs so the DO and RO may know in advance that the MNPSP is off line and the DO can queue up UPC requests and the RO can queue up port requests (and other messages) to be sent when the MNPSP comes out of maintenance.

The Authority will be able to get auditable logs of UPC requests and response times from the MNPSP relative to each operator to ensure that the MNPSP is both meeting its SLA requirements and treating all TSPs fairly.

Syniverse does recognize that the TSPs have invested considerable time and effort in developing software to generate UPCs. In fact, Syniverse believes in most cases (excepting cases of network closure or unexpected outages) UPCs are usually generated in a reasonable amount of time. For example, one response stated it generated 1.52 Mn UPCs in the month of March 2018 in an average of 7 seconds. However, Syniverse believes the issue is not in the delay in UPC generation, but in the porting process which has led to high error rate for UPC mismatch and expired UPCs. This can be resolved by the process we have outlined above where by the DO sends a request for a UPC to the MNPSP along with relevant information and the MNPSP generates and replies to the request with a UPC automatically.

Putting the UPC generation and validation in the hands of the MNPSP whilst keeping the subscriber interaction in the hands of the TSPs is the best solution. The MNPSP wants no part of running a public call centre to answer questions and resolve issues.

In addition, making the MNPSP responsible for a public-facing call centre would drive immense costs back to the operators. The TSPs are already doing this function today and thus no new costs would be borne by them. The only shift in cost is to have the MNPSP generate the UPCs by setting up new API calls and software logic.

Several respondents also expressed a desire or preference for recipient led porting. This is also viewed favourably by Syniverse although we did not ourselves propose this as it is a much bigger change in porting process which would cause all existing software to be radically revised rather than updated. However, in a recipient-led model, the subscriber would go to the RO (or submit the SMS to a unique short code maintained by the RO), submit a CAF and KYC to the RO. The RO would send the relevant information to the MNPSP who would then issue a request to the DO to obtain necessary information such as age on network, prepaid/post-paid status, corporate vs. individual account, etc. and then generate the UPC or provide a negative acknowledgement (i.e. reason for denial of UPC) to the RO within a few seconds. Or, the DO could generate the UPC itself. In this case, the DOs would have an SLA towards the MNPSP to respond immediately. As mentioned above, the DOs and MNPSPs would need to have set scheduled maintenance periods and notify other stakeholders about such maintenance windows.

A recipient-led process would minimize or eliminate some concerns about sharing information with the MNPSPs as in this case such information would be retained by the DO. The DO would just need to reply with UPC and date when port could be executed (either in 2 or 24 hours).

The MNPSP could produce reports showing each operators performance in terms of median, average and maximum response times, or distribution frequency analysis of response times



(e.g. the percent of responses in 5 seconds or less, 5.01 to 10 seconds, 10.01 to 20 seconds, etc.) for TRAI's use in gauging DO performance and responsiveness.

Finally, on this subject, the operators and MNPSPs will require some time to design, develop, test and deploy new software required to adapt to the new process. The six months mentioned by one respondent would be more than adequate for this purpose.

## 1.2 KYC Verification of Subscriber

**Question 4: How can KYC information available with DO be verified during the MNP process to avoid fraudulent porting? Please elaborate.**

Syniverse approaches KYC verification cautiously as do many of the other stakeholders and other respondents.

Several respondents indicated Aadhaar information is best as it is a known number easily compared without vagaries of alternate spelling of names or and unique unlike date of birth and gender comparisons. In other countries, like the United States where last names and street names were once used to validate ports, there were so many issues that these approaches had to be abandoned quickly. However, with the 1<sup>st</sup> May 2018 publication by UIDAI stating that Aadhaar should not be used and instead a virtual ID should be used the prospect of Aadhaar-based verification seems remote.

Syniverse notes with interest a proposal to use a consumer-set PIN set up by the donor. This could ensure the security of a phone number quite easily, but only if the consumers set up the PIN and remember it when they wish to port. However, we urge caution even in this regard because our experience has shown some operators in other countries, have assigned random operator-set PINs and notified customers about the PIN, ostensibly in the interest of protecting them, but what it really did was increase the difficulty in porting which has led to higher error rates.

One carrier's idea of the DO provisioning an operator-set KYC ID if the subscriber has completed KYC and then requiring the KYC ID to be in the port out request. While this may help preserve consumer privacy as no subscriber name, date of birth or gender needs to be transmitted from RO to DO via the MNPSP, it still does not prove that the person making the request to the RO is the same person on account at the RO. If the KYC is sent to the mobile device, it proves that the person making the request has control of the mobile device only. In the event of a lost or stolen handset the illicit user would have control of the device and would be in receipt of the KYC ID. This makes it no more than a second UPC. Still it does prevent some other party from porting a number away from a business rival or individual to high-jack other accounts. So, this idea is not without merit entirely.

Syniverse is not in favour of the MNPSP comparing KYC information from the DO and the RO to make a judgment as this would expose the MNPSP to security concerns with the storage of this information. We could support a passthrough of the information encrypted on a bi-lateral basis so that each TSP had a unique encryption key for each other TSP. In this way the KYC information would be processed by the MNPSP without knowing the actual data.

## 1.3 Challenges in the Proposed MNP Process

**Question 5: What are the challenges in implementing the proposed MNP processes / framework on the part of stakeholders' viz. TSP (as DO and RO) and MNPSP? Elaborate your answer.**

Several respondents and stakeholders raised valid concerns with the proposed process. Namely:



- Current regulations and MNPSP licenses do not permit or authorize the expanded role of the MNPSP as proposed. This can easily be addressed by the Authority by altering the regulation and licenses accordingly through due process.
- That porting would take place 24x7. This is a common process throughout the global environment. Many countries perform ports in less than one-hour 24x7. Of course, there are some permitted downtimes at industry level. For example, in the US the operators and the centralized MNP database vendor agree on a schedule of 2 Sundays a month. In the United States there is an industry maintenance window every Sunday. Operators and the various vendors involved are expected to make their changes during these windows. This provides a chance to keep systems in order and upgrade them regularly. It also provides operators with a known schedule, so they can advise customers that their port will be completed a few hours later. Typically, these windows are in a period where ports are minimal. In the case of India, this would be important so that the MNPSP does not have to routinely generate UPCs when the DO is in maintenance.
- Some operators have said that having the break-then-make take place 24x7 during day-light hours would cause increased subscriber inconvenience. However, in a tightly administered break-then-make model this can be minimized. In a make-then-break model this issue can be avoided entirely. Syniverse favours the make-then-break model where the RO activates the number on its network and allows the subscriber to originate calls and messages and receive calls and messages from other subscribers on its own network first, while calls and messages from outside of the network are still delivered to the device on the donor network. In the age of many Dual-SIM devices this is not a hardship on the subscriber. Otherwise, the subscriber may carry two devices for a short time until the port is executed and the MNPSP broadcasts the LRN to other TSPs and ILDOs.
- One carrier asserts that it will be difficult for the MNPSPs to handle the voluminous traffic with the current resources. Syniverse would agree that an upgrade of the systems would be as necessary as the software changes.

#### 1.4 Compensation of the MNPSP for Generation and Delivery of UPCs

##### **Question 6: Whether MNPSP should be compensated towards the cost of generation and delivery of UPC to the subscriber through SMS? If yes, what mechanism can be adopted?**

On the question of MNPSP compensation for UPC generation and delivery several respondents opposed to any additional fees for the MNP SP. Whereas other respondents including, of course, Syniverse were in favour of some reasonable price to cover the costs and allow a fair profit.

The truth is the current price of 4 Rs. is not sufficient for continued operations of the MNPSPs. The cost of a porting transaction exceeds the price per port because some costs were arbitrarily and incorrectly eliminated from the cost calculations, and other deductions were taken without explanation. Meanwhile ports in the denominator of the calculation included not only ports that were exceptional in nature but also those that were both successful and non-successful. In addition, some management, accounting, bad debt and collection costs of the MNPSP are covered at a corporate level-only and are not included in the audited financials for the India MNP service. This has led to a tragic miscalculation by TRAI. Both MNPSP find themselves in a sudden catastrophic situation of losing money and have served notice that should the 4 Rs. continue they will both turn in the license to TRAI rather than continue losing additional money.



As to the new responsibilities proposed, the idea that the MNPSP would make expensive software and hardware changes without additional compensation is without merit entirely.

Instead the MNPSP should be fairly compensated for any new responsibilities at a level that makes the business sustainable and allows for re-investment to refresh technology over time to make the service stable and responsive to carrier and consumer needs. The amount of compensation is highly dependent on the new roles. We urge the Authority to take the decision that the MNPSP should create the UPC upon request by the donor network as outlined by Syniverse above. This would leave the communication with the end subscriber with the TSPs who already have that relationship. The fees for the UPC generation can be added to the per port fee paid by the RO in ratio with the overall number of UPCs to ports. For example, if there are 2 UPCs requested for every port then the price for two UPC requests can be added to price per port request.

## 1.5 Mandatory Obligations of the MNPSP

### Question 8: What could be the mandatory obligations on part of the MNPSP?

We believe as stated in section 1.1 that the Donor Operator should continue to be involved in receiving the SMS and communicating with the end user. The DO should pass a request for a UPC to the MNPSP and the MNPSP should respond quickly. Syniverse believes there should be a complaint redressal mechanism between the DO and the MNPSP only.

## 1.6 UPC Delivery when a Network has Shut Down

### Question 9: In the event of large scale disruption or sudden shutdown of network, what could be the appropriate alternative mechanism to ensure delivery of UPC and completion of porting process?

Several respondents pointed out that in the event a network shuts down suddenly without a fair chance for the subscribers to arrange a port out that a web site could allow the subscribers to obtain a UPC. While this approach would bypass the lack of a network to send and receive SMS it lays open the possession of a number to anyone with a web browser – especially if the donor network is unable to validate the account information.

Likewise, if the donor network is not available having the MNPSP pre-generate millions of UPCs is valid but unfortunately, again without a donor network to send the UPCs via SMS there is no practical way of getting them into the hands of the subscriber. While the issue of getting it to the subscriber can be bypassed by using an alternate phone number for a trusted party or email address (although this does increase complexity and costs) it still leaves numbers opened to unauthorized seizure by anyone who can request the number.

One of the more interesting ideas was allowing for inter-circle roaming on a short-term basis which allows sending a request for the UPC via SMS but no way to validate it with the DO in the scenario where the DO has suddenly shut down and locked its doors.

One respondent suggested that the operator (Operator “A”) shutting its doors would proactively generate many UPCs using spare, unassigned operator codes and provide them to another operator (Operator “B”) who would port in all the subscribers. Presumably the Operator “B” would proactively send the UPCs to subscribers who could then present them to the Operator “B” or another operator (operator “C”) if they did not want to obtain service from Operator “B”. This may work if in addition to the UPCs Operator “A” provided some basic KYC and other information so that that port request could be validated by Operator “B” to



ensure that the person submitting the port request is the person who currently has the service.

One respondent said that the donor network must be brought back on-line for 10 to 15 days to enable subscribers to request a UPC and port out. However, this presumes that the former employees can be convinced to bring the system back online. This would be problematic in some cases as they would want to know who is paying them, authorization may be unclear, etc.

Perhaps the best suggestion was that TRAI must enforce mandatory license provisions that obligate TSPs to maintain their network through a notice period. This should in most cases prevent a network from shutting down unexpectedly and would allow time for the network and/or TRAI to notify subscribers of the impending closure giving subscribers time to arrange a port out.

## 1.7 Prepaid Balance Transfer from DO to RO

**Question 10a: Do you agree with the process for transfer of the prepaid balance to the subscriber's account as described in the consultation paper? What changes do you envisage in licensing/ regulatory framework to enable the provision? Please elaborate your answer.**

**Question 10a: If the above process is not agreeable, please suggest alternate mechanism.**

**Question 11: What should be the regulatory requirements to monitor efficacy of the provision of transferring the unspent pre-paid balance? Please elaborate your answer.**

Most TSP stakeholders were against the idea of the balance transfer citing various reasons including cost/benefit and the difficulty in assessing how many minutes talk time to transfer.

While Syniverse agrees that the cost/benefit does need a thorough assessment it should be noted that because many subscribers already know that their balance is forfeited they may be drawing down the balance to a very low level before submitting the UPC and Port request. It might be found that subscribers would like the idea of not having to wait to draw down the balance before porting.

As to the matter of talk-time conversions between networks, Syniverse finds this irrelevant. If a subscriber has deposited 5,000 Rs. with a TSP that buys a certain amount of talk time, data and messages. Operators today will be able to tell a subscriber how much of the 5,000 Rs. remains on account after each transaction. If there's still 3,000 Rs. on the account at the time of transfer which on the DO earns unlimited talk time, "X" messages and "Y" data usage then upon porting only the 3,000 Rs is transferred to the RO. It is between the RO and the subscriber to settle how many minutes, messages and megabytes of data that entitles the subscriber to on his or her new network.

Several operators have stated that it would be hard to describe and explain to a subscriber why instead of the full balance a few Rs. or few percentage points of the balance were retained by the donor and not transferred. This presumes that the donor is paying for the transfer via the MNPSP. The full balance could transfer to the RO, but the RO may have to pay a fee to the MNPSP to facilitate the transfer. Thus, the subscriber would obtain the full balance of his or her prepaid account at the DO with the RO, and the RO could view the price of the balance transfer as a cost of customer acquisition or explain to the subscriber that an administrative fee is being withheld for the convenience of arranging the balance transfer. This is like how technically the RO may charge the subscriber for the port but chooses not to do so because it is in their best interest to bear the costs.



## 1.8 UPC Structure

**Question 13: Whether it would be appropriate to review the existing structure of UPC? Please elaborate your answer with justification.**

**Question 14: If you agree to above, does the proposed structure as discussed above adequately serve the purpose or would you suggest any other mechanism? Please elaborate your answer with justification.**

Most TSPs indicated there is little need to change the structure of the UPC. Syniverse agrees. However, if the UPC is ever modified a check bit algorithm should be included to help eliminate data entry and transcription errors at the point of data entry. Such a check bit algorithm would employ one or two extra digits that help detect these kinds of errors. This is commonly built into other numbers such as MEIDs, Universal Price Code bar codes, and other forms of numeric data.

## 1.9 Withdrawal of Porting Requests

**Question 15: Should the provision of withdrawal of porting request be done away with in the revised MNP process? Please state your answer with justification.**

Syniverse would favour a process that allows a subscriber to cancel the request via SMS. As a best practice, it is always advisable to have the actor who benefits carry out the action as they have incentive to perform the action promptly. This means the SMS to cancel the port should go to the DO. If the SMS is sent to the DO and the DO informs the MNPSP promptly the porting process could be stopped up to the point of broadcasts or perhaps just before. The MNPSP would then inform the RO that the port has stopped at the subscriber's request.

In this model the only winner is the DO and the subscriber. The MNPSP who has in good faith performed work to prepare the port to occur would be left with nothing to show for it. In this case the MNPSP should be compensated for a porting transaction by the DO. If the port had proceeded and been ported back the DO would pay such a fee anyway. If they want, they can charge a stop port fee to their subscriber or elect to absorb that fee as a cost of doing business and retaining the subscriber.

A port cancellation should be tracked so that the RO and/or TRAI can assess the TSPs acting as DOs to validate that there is a subscriber request to cancel the port. The TRAI should require TSPs (as the DO) to retain this information for an adequate amount of time to ensure records can be audited in case the subscriber later complains that he or she did not request to cancel the port.

We would also note that if the proposed time frame of two hours is implemented, since most numbers are prepaid there will be only a short time to cancel the port. However, allowing a carrier to fight to retain its subscribers would, in fact, increase competition and consumer power.

## 1.10 Subscriber Reconnection after Disconnect

**Question 17: Due to the difficulty envisaged, should the subscriber be allowed to reconnect his mobile number even after number return process is initiated? If yes, what could be the criteria? Please elaborate suitable method.**

Most respondents were in favour of this as an extension of a grace period. Syniverse is also in favour of a second chance or extended grace period provided the restoration of a port after disconnecting should be treated as a new port request and the retaining operator should pay a porting transaction fee to the MNPSP. The process must be automated or else the fee may be much higher than a normal porting fee.



### 1.11 May MNPSPs Charge for Ancillary Services

**Should the MNPSPs be allowed to charge for the ancillary services such as number return and bulk database download by TSPs? Please provide your comments with justifications.**

The MNPSPs must be allowed to charge for any ancillary services such as NPD, Number Returns and Bulk Data Downloads. While some operators point out that the MNPSPs have been performing these tasks since porting began and haven't been compensated in the past that is only true on the surface. First, the volume of these will only increase as the volume of ports increase. Ultimately all ported numbers will disconnect at some point – no one lives (or needs a phone number) for ever. Thus, the volumes of these activities will grow. Secondly, in the past, the MNPSPs were compensated at a level that allowed them to graciously cover other processes such as Non-Payment Disconnect and Number Return, but with the price per port at a level below the costs of the MNPSP this is no longer possible to be sure.

## 2 About Syniverse

Syniverse is the leading global transaction processor that connects more than 1,500 mobile service providers, enterprises, ISPs and OTTs in nearly 200 countries and territories, enabling seamless mobile communications across disparate and rapidly evolving networks, devices and applications. We deliver innovative cloud-based solutions that facilitate superior end-user experiences through always-on services and real-time engagement. For more than 25 years, Syniverse has been simplifying complexity to deliver the promise of mobility – a simple, interoperable experience, anytime, anywhere.

As a pioneer in mobile innovations since the dawn of the mobile industry, Syniverse is at the forefront of creating solutions for LTE, revenue management and mobile engagement, reach, protection and engagement. Syniverse reaches more than 6 billion mobile end users globally and has more than 500 customer-facing IPX connections.

Based at our global headquarters in Tampa, Florida, U.S.A., our multi-lingual support includes English, Spanish, Portuguese, French, Mandarin, and Chinese. We also have regional technical support offices around the world. Syniverse's approach to handling Production Issues and Service Request encompasses a multi-level customer support model.

