Dr. J.S. Sarma
Chairman
Telecom Regulatory Authority of India
Mahanagar Door Sanchar Bhavan
Jawahar Lal Nehru Marg
New Delhi – 110002

Date: 5th March 2010

Dear Sir,

I would like to take this opportunity to congratulate you for bringing this consultation paper on efficient utilization of numbering resources. There cannot be a better timing for this, as India is growing at a pace of 15 to 18 Million customers/ Month and have crossed over 500 Million Mobile users.

The National Numbering Plan 2003 was formulated for taking care of the requirement in the numbering scheme till the year 2030. This assumed 50% tele-density with 300 Million fixed and 450 Million mobile users. However the current situation is totally different with fixed continuing around 40 Million but mobile base increasing to 500 Million and growing at the rate of 18 Million per month. Thus urban mobile density has already crossed 100% but rural is around 20%. Based on efforts being made for rural development the anticipated tele-density is 120% leading to about 2b mobile users by the year 2030.

The current numbering plan suffers from two drawbacks.

1. The existing National Numbering Plan is influenced by Fixed line business and has several levels for Fixed Line services where as levels for mobile services is less than 2.

2. Further the fixed line numbering and routing is based on SDCA/ SDCC numbering plan, wherein the subscribers have to remember so many area codes, and operators have to create so may point of interconnection with BSNL. This is a sheer waste of national resource as we belong to an era of death of distances, and the charging for long distances is no more dependent on distances.

We firmly believe that in the medium to long term the integrated service area based numbering scheme is the right path forward. Given that growth of mobile services has far outstripped that of fixed line – and it is quite likely that this trend will continue in the future – and the fact that the principle of technology neutrality has been implemented in many other areas (eg via the shift to UASL licenses), a shift to an integrated numbering scheme would be desirable from several perspectives.

This would also set the ground for introduction of fixed to mobile number portability, which is the logical next after mobile number portability. A uniform numbering scheme would be extremely beneficial for subscribers to switch from a fixed to a mobile connection, without surrendering their existing phone numbers.

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A **Sistema Shyam** Company

While ease and uniformity of dialing would be good from a subscribers' perspective, an integrated scheme would also enable efficient utilization of numbering resources. A large part of the numbering capacity would be freed up for allocation to services that require them the most.

We request TRAI to come up with a time table for implementing integrated service area based numbering scheme and till such time compress all fixed lines in two or three levels and vacate the rest of the levels meant for fixed line and use them for Mobile and other services.

We are herewith enclosing our point wise reply for your kind perusal.

Thanking you

Yours faithfully
For **Sistema Shyam TeleServices Ltd.**

T. Narasimhan
Dy. Chief Executive Officer.

Answer to Questionnaire

Q1) Do you believe that 10 digit numbering scheme should be continued? If yes, what method do you suggest to make adequate resources available for next 5 years 2014 and beyond?

i. Yes. We agree that 10 digit-numbering scheme should be continued for mobile as well as fixed users including area code.

ii. We also agree with the Authority's view that there are many levels allocated for fixed line services, viz, levels 2, 3, 4, 5, 6 & 7 with capacity close to 6b against present customer base of less than 40m which is further going down. Thus, we recommend that only 2 or 3 levels be reserved for fixed services. The number change is expected to cause least disturbance in view of small number of fixed users.

iii. On the other hand mobile users, which are currently allocated only the level'9 'and part of level'8', should be progressively allocated 6 levels - leaving 0 and 1 for special services.

iv. '0' dialing for inter circle calls should be avoided so that complete levels are available without any conflict with the existing STD codes. Please note that additional allocation of levels '8' and '7' alone yield 2b numbers, which allows 1.2m customers, based on 60% utilization criterion.

v. The problem of large spare number capacity with incumbent mobile operators based on 60% criterion for eligibility to ask for additional codes maybe modified in terms of quantity of spare numbers to suit new mobile operators which are struggling for numbers.

vi. Considering the fact that MNP does away with GSM and CDMA based numbering distinction and future developments will incorporate LTE, we recommend that mobile technology based numbering should be discontinued.

vii. We understand that countries like China have gone for 11 digit numbering , however one important factor that needs to be considered is in China there has been a balanced growth for both Mobile and Fixed telephony, which is not the case in India. The fixed line business has de grown in India and Mobile has surpassed all records to growth.

Q2) Comment on the advantages and disadvantages of accessing intra service mobile from the fixed line by dialing '0' for generating number resource for mobile services?

We believe that '0' dialing for intra service area calls to mobile numbers is not useful as the practice would prevent use of all the sub-levels which are presently allocated for SDCA codes.

Q3) Do you believe that the only solution to the number resource problem is to migrate to an 11 digit numbering scheme for mobile and retaining 10 digits numbering scheme for fixed line? What kind of problems do you foresee in having a mixed numbering scheme?

And

Q4) If your preference is 11 digit numbering scheme for mobile services then please comment on the advantages and disadvantages of such a scheme?

With recommendations made against Q1 we believe that there is no need for migrating to 11 digit numbering scheme for mobile number while retaining 10 digit numbering scheme for Fixed. The migration also suffers from following disadvantages effecting more than 500m customers.

i. The current 10 digit routing arrangements within and outside India will need to be modified.

ii. Incorporation of 11 digit number will require considerable change in IN / HLR / MSC-VLRs / SMSC devices. Change is also expected in operations and billing support systems like provisioning, mediation and CRM.

iii. Currently all applications including Banking, Rail booking, Airline booking and others are configured for 10-digit numbers. With change to11digit, all these applications / services will need to be adapted / re-developed to accept 11 digits.

iv. 11 digit numbers will necessitate change of SIM for all the 500m users.

v. 11 digit number change will necessitate manual change of mobile numbers stored in mobile phone directory. This will affect all the 500m mobile users.

vi. A large number of Caller Line Identification (CLI) display devices in India are capable of displaying 10 digits CLI only. With mixed numbering there may be erroneous display.

vii. Service providers have several roaming agreements with operators all across the world. The roaming agreements are governed by IR21 Regulation of GSMA, wherein the length of numbers is declared as 10. In case of change to 11 digits, amendment will be required with performance testing. Based on expected perform testing of 15 to 20 roaming partners in a month, full testing may take 18-24 months.

Q5) Comment on advantages and disadvantages of migrating to integrated service area based scheme for fixed and mobile. If this scheme is adopted what should be the time frame for migration?

i. Currently separate numbering schemes for fixed and mobile services are used to facilitate charging of regulatory levies and taxes. Linked numbering scheme with SDCA code also facilitates local dialing with 6 to 8 digits against 10 digits which will be required uniformly for all fixed and mobile calls.

ii. However, in the medium to long term the integrated service area based numbering scheme is the right path forward. Given that growth of mobile services has far outstripped that of fixed line – and it is quite likely that this trend will continue in the future – and the fact that the principle of technology neutrality has been implemented in many other areas (eg via the shift to UASL licenses), a shift to an integrated numbering scheme would be desirable from several perspectives.

iii. While ease and uniformity of dialing would be good from a subscribers' perspective, an integrated scheme would also enable efficient utilization of numbering resources. A large part of the numbering capacity would be freed up for allocation to services that require them the most.

iv. This would also set the ground for introduction of fixed to mobile number portability, which is the logical next after mobile number portability. A uniform numbering scheme would be extremely beneficial for subscribers to switch from a fixed to a mobile connection, without surrendering their existing phone numbers.

v. There are several other constraints in the system on account of the current numbering system that would be removed with an integrated numbering scheme. Operators would be free to deploy innovative products, which drive fixed/mobile substitution and therefore increase competition in the market.

vi. The area based numbering plan will also ease POI as connectivity at SDCA level would be avoided.

vii. While planning integrated service area based scheme, path breaking course correction may be made for future services like BWA, VOIP.

Q6) Do the present criteria for allocation of the numbers ensure efficient utilization of numbering resources or would you suggests some other criteria?

We agree with March 2009 recommendation of TRAI as quoted below.

"It is felt that the present practice of allotting new block(s) of numbers to the existing service providers may be continued. However, in case of new service providers, it is recommended that new blocks of numbers may be allotted after demonstrating 50% utilization of numbers, at least for initial one or two allocations, so that they can build up appropriate level of numbers in stock and to have continuity of service."

Q7) With reference to para 3.3.1, comment on the need to file a numbering return to the numbering plan administrator for monitoring and ensuring efficient utilization of the numbers?

i. The existing format under which the numbering resource details being submitted to DoT and TRAI is adequate for planning of numbering resources. It would be preferable to consider DoT's forecast of subscriber numbers for any analysis that is to be done by either DoT/ TRAI.

ii. DOT has rigid control over the allotment of new numbers. DOT allocates only 1m mobile numbers in one lot to the operator for a circle. The process followed by DOT while allocating the new numbers checks on the utilization of the already allocated resources. TERM Cell is being deputed on need basis to verify the HLR figures reported while applying for a numbering lot. The existing format under which the numbering resource details are submitted is adequate for planning of numbering resources and this "new return" would be a duplication of efforts and should be avoided.

Q8) Give your views on pricing of numbering resources? If pricing is implemented, what should be the method adopted for such pricing.

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Q9) If pricing is implemented should it be for all resources held by the service providers or only for future allocations?

We don't agree with the conclusion of the research team regarding pricing of the numbers allocated to the operators. The fast growth of the Indian Telecommunication Industry owes a lot to the affordability of services being offered. Any new charges proposed would defeat this goal.