

Ref: CP on “Revision of National Numbering Plan” – dated 6th June 2024

To
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Respected Authorities,

Please find herewith the inputs regarding on above subject:

Q7

Refer the points raised in CP at “2.40: Telecom identifiers needs to be efficiently and judiciously reused to avoid any shortages” ; “2.43 One of the possibilities to achieve the same is by withdrawing and promptly recycling numbers that have been suspended for more than 6 months”.

Here raised the point to re-defining of “inactive connection” for mobile services. **But it is also to consider to re-define the process of “re-cycling”**. The justification of same is as follows:

In addition to Telecom System (i.e. Tele-Service-Providers, Telecom-Authorities, users), now there are many other stake-holders around a mobile number, as shown in following fig-1 & Fig-2

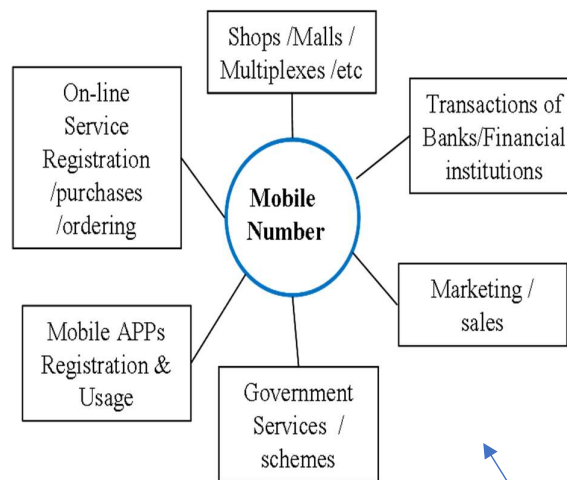
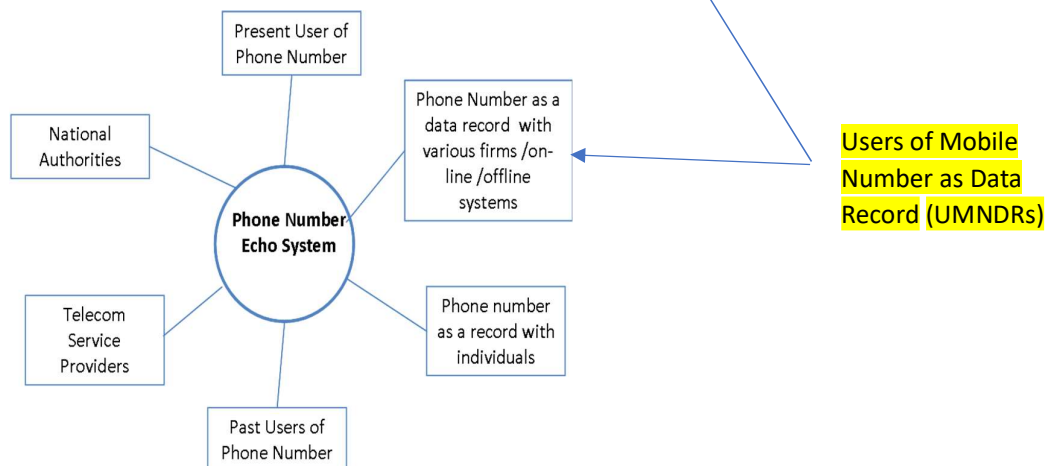
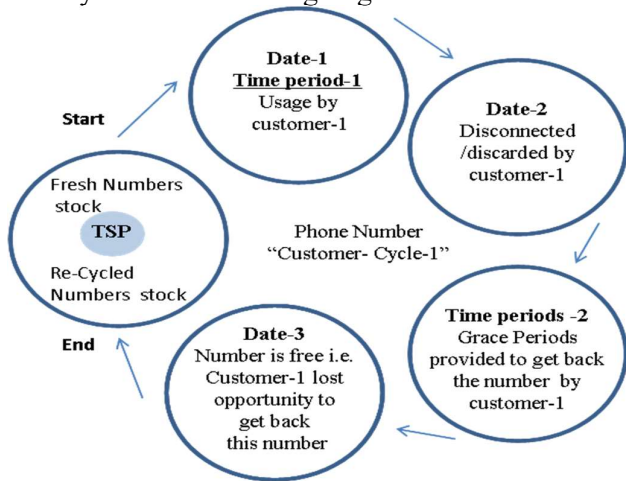


Fig-1 & Fig-2



At present after permanent disconnection of mobile number, a certain period (60 to 90 or 180 days) as a gap is being maintained by TSP's for re-assigning such mobile numbers as new mobile connections.



Date-1 to Date-2 : Customer-1 usage time
Date 2: Customer-1 discontinued or discarded this phone number from this date.
Date-2 to Date-3: Customer -1 has the opportunity to get back the same number back.
After Date-3: The phone number will be vacant and under the control of Tele-service Provider (TSP)

Fig.3: Present system of phone number cycle

This practice (as in Fig.3) may be fit for the periods when people use to note down the contact phone numbers in their diary, and offices maintain phone numbers in their register books as well using phone services only for voice calls.

But, now, even to login into any 2FA on-line system, OTP is to be received on their mobile number, to do bank transaction / to book tickets / to register for any mobile app / to order food/product/services, or take business orders or to have any social media account and many more..... a mobile number is crucial in the present where-in **wrong communication** affects adversely either personal or business levels.

Taken an example of a case: In a span of about (say) 1500 days from the first allotment of a fresh mobile number PN1, first time issued to **customer-1** on day 1, after 1st recycling, this number PN1 provided to **Customer-2** on day 450,and so on, after pth recycling, the mobile number PN1 provided to **Customer-n** on day 1500 as described in below Fig: 4:

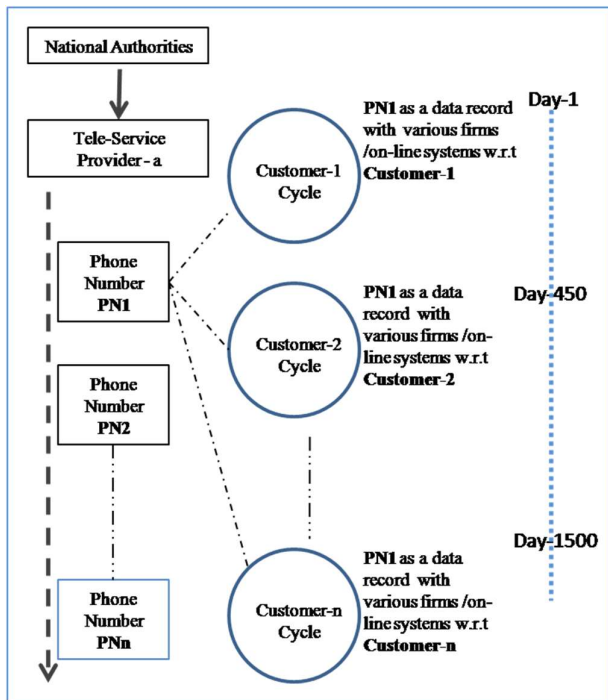


Fig-4: Time-line of a mobile number 'PN1'

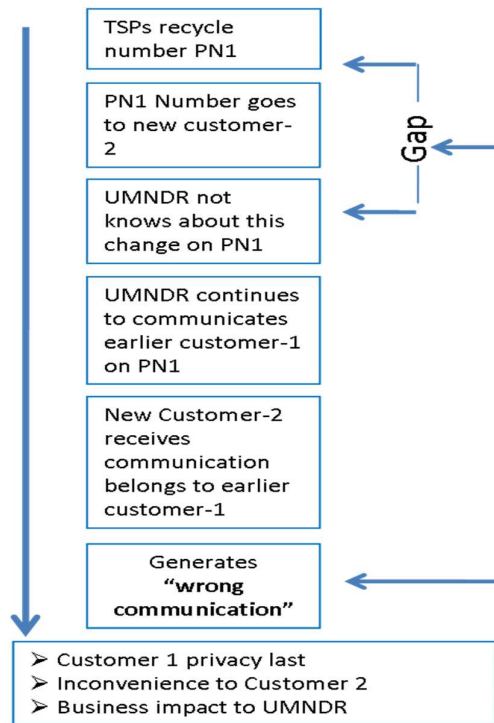


Fig-5: Wrong communication & Challenges that arise due to re-cycling of mobile numbers

Before recycling mobile numbers, TSPs need to enable “Users of Mobile Number as Data Records” (UMNDRs) to update/correct their contact database by providing an extra time gap before recycling. This extra time gap (May be about 30 to 45 days) can be named as "*Cooling Period*". I.e. UMNDRs will “clean” their contact lists whereas TSPs will “cool” their recycled numbers. So, **the process of recycling of mobile numbers can be re-defined** through introducing an extra time gap namely *cooling period* as diagrammatically shown in Fig.6

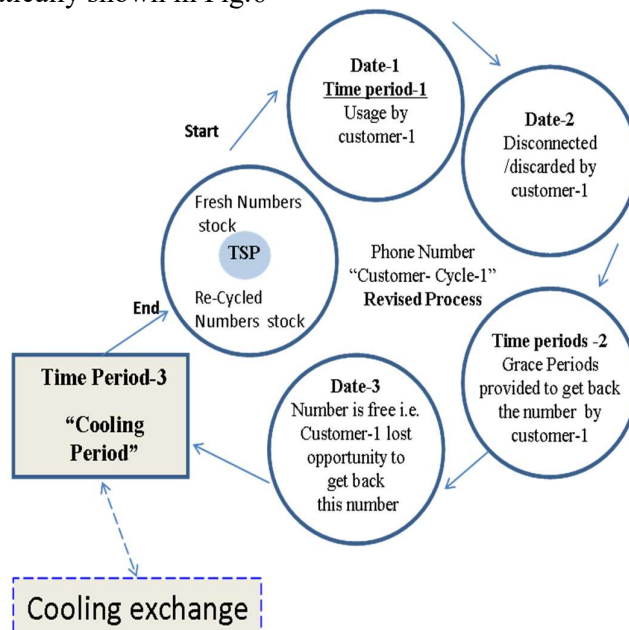


Fig-6: Solution for the challenges to re-define the recycling process by introducing “cooling period” & Cooling Exchange

I.e. TSPs should have the ability to provide new connections by optimally utilizing their numbering resources without losing their new customers at the same time taking all possible steps to minimize the adverse effects of using a mobile number as data record by various firms/organizations/on-line services. And also take care of the interests of previous/present mobile customers.

For full details on this concept/architecture of **cooling exchange system**, refer the full article “Mobile Numbers Echo System & Cooling Exchange Solution Addressing the challenges of Recycled Mobile

Numbers” published in an International Journal WAJES in Sep 2020 (URL of the article: https://www.isroset.org/pdf_paper_view.php?paper_id=2075&1-ISROSET-WAJES-03931.pdf). On this concept a patent applied & patent published.

Q8.

Refer the points at 2.50 & 2.51.

Mobile number is not simply a number, it is National Asset. Till date, this asset is being provided at free of cost to end user. So that, this facility is being exploited by a considerable part of users by taking/discarding multiple mobile connections. Such practice is the one of the main reasons for draining/locking of mobile numbering resources. This practice is also one of the reasons of present cybercrimes/frauds. So, this is the time to workup and do necessary action for providing this National asset, i.e. mobile number/s **with certain restrictions**.

It is learnt that, some condition prevails that a person can have maximum of 9* (mobiles/SIMs) numbers (in few areas the limit is 6*). Now it is required to ascertain about **“how many phone/mobile numbers that one person can have at free of cost”**.

For example, one person is allowed to have 1 or 2 phone/mobile numbers at free of cost and chargeable for every additional number. Regarding for various entities, basing on the size of the company/entity, number of employees, etc. they can be permitted a limit of “n” numbers at free of cost and over that it should be chargeable. This nature of tariff is to be fixed. End user is to be charged.

As the numbering resource is National asset, the amount collected (i.e. for the additional numbers over the permissible free limit) is to be shared among TSP & Government. So, it is beneficial to the user, TSP & Government. This results not only additional revenues but also exploitation of numbering resources by users can be reduced/minimized.

(*The reason/argument behind for allowing a person to have maximum of 9 or 6 SIMs is not known)

Regarding **vanity numbers**, auctioning is to be with concerned TSPs. A part of maximum 50% (say) of auctioned amount on each such vanity number is to be shared to the Government, as the number is being a national asset. If, auction is taken by Government, it will lead to additional administration/governance/platform expenditure. So, auctioning can be with TSPs (as such they have already certain mechanism in place) and Government can simply get the share from such auctions.

Just opposite to “Vanity numbers”, it is also to be noted that, in the point of many customers, who have lot of sentiments, there are few **“Un-Lucky Numbers”** and those people dislikes to have such numbers, resulting un-used numbers exists in every series/lot and they will be vacant/un-assigned for longer periods.

Q14.

Refer the point at 2.74: Each LSA one LRN. In this regard, for effectively addressing LRN future needs, it is suggested to merge all LSAs in to one National LSA (NLSA). One Nation, one License. No boundaries of states. Simply, all India is one license area. This may solve the problem.

Q15:

Refer the point at “2.78: “0900” IN- premium rate service”. During voice era, such services might be required, now-a-days, in data/internet era such service are not relevant. Hence suggested to with-draw “premium-rate-services” and so the level “0900” can be vacant and that level can be utilized for some other purposes.

Q17:

- 1) No country/nation is comparable with Bharath. So, we have to create a new way of doing things, then rest of world follow our “Bharath” practices.

- 2) Re-Define the re-cycling process of mobile numbers as explained above. Please refer inputs provided under Q7.
- 3) Need to establish User/Customer uniqueness platform across TSPs. This enables the stakeholders to have grip/control on the allotment/assignment/utilization of tele-numbering/indicator resources.
- 4) Social media applications such as WhatsApp are presently depending on TSPs, as they utilizing the mobile number resources as their major identity of their user/subscription. The burden of KYC, thus avoided by such social media firms. At present such social media APPs are replacing all the communication needs of the end user, at the cost & affords of TSP. In place of mobile coverage, if there exists internet coverage/access, all the major communication needs of a user are full-filling. Hence, it is also required to identify/consider such APPs also as a new era's "Soft-TSP" and introduce such licensing and allot numbering resources for them (similar to M2M numbering series), so that, such APPs can directly enroll new users with-out depending on mobile numbers of TSPs, and concerned Soft-TSPs do prescribed KYC process to enroll new users by utilizing their numbering resources.
- 5) While issuing new connections, TSPs needs to keep informed the customer that this number is allotted from fresh number lot or from re-cycled number lot. If it is from re-cycled number lot, it is also to mention that "n" number of persons earlier used that number.
- 6) If, a person wants to hide, they can simply discard the mobile number, that's all. This is one of the weaknesses found in present usage of mobile numbers. A person can take any number of connections as well they can discard any number of mobile numbers (even after satisfying the conditions of 9 SIMs by a person at a time). This is one of the main root causes of cyber-crimes, online / financial frauds, as well other frauds/crimes happening in the present society. As well, w.r.t. TSPs, this practice causing damage to the availability of mobile numbers, resulting draining of numbering resources. To overcome this, (say) first 2 mobiles numbers by a single individual are to be allotted at free of cost, from 3rd number on wards, it should be charged and such charges are to be multiplied for every additional number taken by that Individual person. This system helps to decrease the cyber-crimes/fraud. The weakness in the present system, once identified, is to be properly addressed and solved in a timebound nature.
- 7) **Evolving "terminology" Standards:** Please go through the article "Mobile Numbers Echo System & Cooling Exchange Solution Addressing the challenges of Recycled Mobile Numbers" https://www.isroset.org/pdf_paper_view.php?paper_id=2075&1-ISROSET-WAJES-03931.pdf wherein explained details about the requirement of uniform processes/terminology across various Nations in regard of mobile numbers. Hence, Standardization across various nations/TSPs is required on certain items that are required to taken-up by international standardization bodies (say, ITU) to have better-synchronized operations in this echo system across the globe. A few of the major items that are required to be considered for standardization and proposed standards on each such item are as follows:

Item1:

Mobile number is being used by many entities (business entities, on-line/off-line product suppliers/service providers Government, Individuals, etc.) as a data record in their database for their reference/communication purpose. So, there is a need to call all those entities with a common name.

Proposed standard name & abbreviation:

"User of Mobile Number as a Data Record (UMNDR)"

Item 2:

"Providing a permanently disconnected mobile/phone number again as a new connection" is being called with different names/notation as "*Second-hand number, Re-use of the number, re-allotting number, re-cycling numbers, re-assigning numbers, etc*". This is to be standardized across nations/TSPs.

Proposed standard name & abbreviation:

*"Re-Cycling of Mobile number (RC MN)" Or
"Re-cycling of Phone Number" (RC PN)"*

Item 3:

The period of the time gap, i.e. the period between permanently disconnected date and re-cycling dates that is being followed by various TSPs is to be standardized and this period (say 90 days) is to be called with the standard name.

Proposed standard name, abbreviation & Period in days:

“Cooling Period (CP), 90 days”

Item 4:

A common platform among various stake-holders of the mobile number echo system to clean their data base (during Cooling Period) is to be called with a standard name.

Proposed standard name & abbreviation:

“Cooling Exchange for Mobile Numbers (CE MN)”

The structure of the cooling exchange, i.e. “Single Cooling exchange across all Nations”

Or “Network of National Cooling exchanges” is to be evolved through wide consultation by the Global standardization bodies (Say ITU).

- 8) Observing the scenario of point 2.43, it is required to **re-ascertain** the Market share of each TSP.
- 9) In absence of uniqueness of the customer/person/user among TSPs, how the Tele-Density figure is being calculating? Such formula may be shared while publishing periodic tele-subscription reports. Is that formula in use is relevant in the present contest of simultaneous utilization of multiple SIMs by a person from various TSPs?
- 10) **Numbering resources to be provided basing on the allowed Market Share to each TSP:** Check, the recent hikes of mobile tariff by TSPs in our nation. The allowed maximum market share of individual TSPs is to be able to monitor by the authorities with-out depending up on the figures/data provided by TSPs. Such system is required with the national authorities. It is required to fix a maximum Market share that a TSP can have. To protect competition and to see that users are not being exploited, fixing of this maximum market share is to be properly included. For example: Maximum market share of 25 to 35% per TSP, this is to be prescribed. Numbering resources is to be allotted to each TSP basing on the allowed market-share.
- 11) **Blocking:** “If persons/entities, are continuously acquiring new mobile numbers/connections and discarding them after usage for some period”**such persons/entities should be blocked.** Conditions for this purpose are to be prescribed. As well such conditions are to be incorporated in terms & conditions of the application form (CAF).
- 12) **Name SMS:** Send name SMS to every mobile connection. I.e. each and every mobile user an SMS is to be send (periodically) by respective TSPs as follows:

“This <mobile number> is on the name of <customer name> with the <Address>, if found matched give a missed call to <phone number1>, if **not** matched/changed contact for updating <help line number>

This is a sample text. TSPs may do any other format to make their customer data base corrected/updated.

- 13) **Safe Custody:** The cost of mobile phone is sufficiently high to a common person. Once a mobile phone got faulty, lost, beyond repair, etc., the user needs to purchase a new mobile phone. Due to the financial position of the user, they may not able to purchase new mobile instrument immediately. In that case, the user cannot do any “activity”. In such case, if the number got disconnected and re-allotted to someone else, it will be a trouble to such users. In that situation, there should be a provision, that the user able to keep that number with him by paying an amount for a period of 6 to 12 months after grace periods. Such numbers to be named as “**mobile numbers under safe custody**”. The permissible period for such safe custody is to be prescribed. After getting new mobile instrument, the user can bring out

that number from safe custody by any of the activity on that number or paying some amount or recharge with an appropriate voucher.

Few persons carry one of their mobile phone numbers while going abroad (Ex: particularly parents, who stay about 6 months in US) and remaining will be kept idle in Bharat. So mobile number safe-custody helps such group of persons also.

With Best Wishes

Vas KSS