



VIL Comments to the TRAI Consultation Paper on “Introduction of Calling Name Presentation (CNAP) in Telecommunication Networks”

At the outset, we are thankful to the Authority for giving us this opportunity to provide our comments to the TRAI Consultation Paper on “Introduction of Calling Name Presentation (CNAP) in Telecommunication Networks” dated 29.11.2022.

In this regard, our comments on the said Consultation Paper are as below:

Executive Summary

1. **CNAP should be introduced in telecommunication networks in India as an optional service and it should not be mandated upon TSPs to launch it.**
2. **The need to introduce CNAP has to be looked at holistically, with detailed examination of intricate areas related to technical, privacy and other issues, cost-benefit analysis, alternate way to meet the objective and existing regulatory norms for achieving the objective.**
3. Following **technical concerns** will pose challenges in implementation of CNAP:
 - a. **CNAP is generally a LTE feature and there are no standards for its implementation over 2G and 3G networks.**
 - b. **Nodes of our legacy networks (supporting 2G/3G) are on the verge of end of service and end of life. Such nodes may not support CNAP development and deployment.**
 - c. **CNAP over telecommunication network would work only on IP-Interconnect and not on TDM interconnects.** Presently, large proportion of traffic in between private TSPs is served through TDM interconnect and entire traffic with PSU is served through TDM interconnect.
 - d. **CNAP implementation would involve huge development in Network and IT systems and processes and would touch upon circle level and node level architecture.** Thus, its development, deployment and integration would take considerable time and effort.



- e. CNAP has **critical dependency on handset specifications, its manufacturer as well as operating software and user interface providers**. Latest smartphone handsets may not support CNAP display feature by default and they may require software update to enable the same. Huge number of feature phone handsets and landline devices may not be able to display CNAP. There is a need to have detailed information in this regard from handset manufacturers / OS providers as well as from landline device manufacturers.
4. **Considering the fact that data of consumers would be used for implementation of CNAP, it is important to that this proposal adheres to data privacy laws**. Concerns related to data availability to OS / handset manufacturers / application providers will have to be thoroughly examined and addressed.
5. **All the four Models would result in increasing switching time/processor load, latency, delay in call setup time and huge costs for TSPs**. Model No. 1 will require most extensive circle-wise set-up. Model No. 2 to 4 will require every TSP to maintain a local database as well as central database which will have to work in sync. Model No. 3 and 4 involves third party, resulting in serious privacy risks in exposure of subscriber database.
6. **We recommend alternate way of providing caller name information to consumers i.e. a Common Mobile App (CMA) which can be built by a trusted party like C-DOT and it will integrate the subscriber name database from all TSPs in a secured way**. Only the consumer who downloads the app will be able to see the name of the caller, as provided in the KYC database. Privacy features can be integrated in this app which will disallow storing/saving/sharing of this information with any other 3rd party app or OS provider.
7. **Various solutions being implemented under TCCCP Regulation, 2018 (Digital Consent Acquisition, Voice Solution, UCC Detect) will address the inconvenience caused to the consumers from spam calls/SMSs being received from unknown numbers. Therefore, there will not be any substantial objective left to be achieved through CNAP**.
8. Considering CNAP involves lot of technical complexities, consumers at large and stakeholders from handset industry, **the Authority should carry out Regulatory Impact Assessment before recommending introduction of CNAP through any of its four models**.
9. Given the financial stress, it is not possible for us to provide for separate expense for this service, which otherwise would be at the cost of rolling out 5G networks or expansion of 4G networks. **In case TRAI decides for implementation of CNAP, even in possible technologies like 4G, the Government or TRAI should bear the expense of implementing the same**.



10. **The purpose of distinct identification would get fulfilled through the Voice Solution being implemented under TCCCP Regulation, 2018 where industry has sought separate series for Service Calls and Transactional calls, similar to the separate 140xx series allocated for Promotional calls or 1800 allocated for toll-free numbers. Implementing outgoing calls from National Toll Free Numbers will have challenges.**
11. **CNAP service is not required to be implemented for 140-level numbers allocated to registered telemarketers as majority of the subscribers are aware that 140 is a Telemarketing call.**
12. **The Authority should issue Draft Recommendations for further wider consultations with Consumers, TSPs, handset manufacturers and OS providers, for comments and inputs before finalizing recommendations on this matter.**
13. **Suitable exemptions will have to be carved out for QoS performance thresholds as regulated by the Authority for implementation of CNAP. Further, suitable inclusions will also be required in the draft Digital Personal Data Protection Bill, 2022, draft Indian Telecommunication Bill, 2022.**

Further, we would like to submit our question-wise detailed comments as given below for Authority's kind consideration:

Question-wise Comments

Q1. Whether there is a need to introduce the Calling Name Presentation (CNAP) supplementary service in the telecommunication networks in India?

VIL Comments to Q. No. 1

1. **In our view, CNAP should be introduced in telecommunication networks in India as an optional service and it should not be mandated upon TSPs to launch it. Considering detailed comments given below which include technical, privacy, costs, existing mechanism etc., it would be most appropriate that launching CNAP in telecommunication networks is left to the choice of TSPs.**
2. **The Consultation Paper highlights Department of Telecommunication's (DoT) reference which states that it has been desired to examine the feasibility of Calling Name**



Presentation (CNAP) in Indian Telecommunication Network. The reference defines Calling Name Presentation (CNAP) as:

“The CNAP is the supplementary service which enables the called party to receive the calling name information of the calling party. This supplementary service provides the ability to indicate the name information of the calling party to the called party at call set-up time for all incoming calls.”

3. Through the background Note enclosed with DoT letter dated 11.07.2022, aim to introduce CNAP has also been provided by DoT, given as follows:

*“that the introduction of CNAP facility in telecommunication networks aims to empower subscribers to take an informed decision while receiving an incoming call, **and to reduce the harassment of subscribers from unknown/ spam callers;**”*

4. The Consultation paper also captures the need for CNAP as follows:

*“Telephone consumers, at various fora, have raised a concern that in absence of the calling party name presentation facility, they prefer not to attend calls from unknown telephone numbers, **as most of such calls are unsolicited commercial communications (UCCs) from un-registered telemarketers.** As a result, even genuine telephone calls go unanswered.”*

5. We agree with the view that if consumers are empowered to take an informed decision while receiving an incoming call, it would reduce the harassment of subscribers from unknown/spam callers.
6. However, in our view, the need to introduce CNAP has to be looked at holistically, with detailed examination of intricate areas related to technical, privacy and other issues, cost-benefit analysis, alternate way to meet the objective and existing regulatory norms for achieving the objective. Our detailed inputs on all these intricate areas, are explained below.
7. **Technical Areas:** There are various technical concerns which will pose substantial challenges to an effective implementation of CNAP, given as below:
 - a. CNAP is generally a LTE feature and there are no standards for its implementation over 2G and 3G networks. Therefore, any implementation of CNAP over 2G and 3G networks is full of uncertainty and would need detailed testing before implementation. Any solution being deployed without any global or Indian standards,



would need suitable exemption from the license provisions as well as from QoS norms of TRAI.

- b. Also, nodes of our legacy networks (supporting 2G/3G) are on the verge of end of service and end of life. The OEMs have no roadmap or support systems for development on these nodes. Therefore, such nodes may not support CNAP development and deployment. These nodes will be replaced over a period of time, due to huge cost implications.
- c. Most importantly, it has been observed that CNAP over telecommunication network through model-1 would work only on IP-Interconnect and not on TDM interconnects. Presently, large proportion of traffic in between private TSPs is served through TDM interconnect and entire traffic with PSU is served through TDM interconnect.
- d. As per assessment by our technology teams including OEMs, all the models of implementation of CNAP given in the paper, would involve substantial latency. Thus, this facility will certainly impact call set-up time, due to extra time required to fetch the information and display on called party's device.
- e. Each time a call gets processed in the network, there are various checks done like routing MSC/customers, MSC/IN Profile of caller and called party, Pre Call Announcements etc. While all this happens in very less time, however at times there are delays, impacting customer experience. Adding an additional layer of name check from a data base, is expected to put forth delay and create bad experience for customers. This delay will accentuate customer problems in case of calls made for emergency purposes.
- f. CNAP also has dependency on the handset specifications, its manufacturer as well as operating software and user interface providers. For different types of handsets, the dependency can be categorized as follows:
 - i. **Latest smartphone handsets:** As per understanding from discussions with one of the reputed smartphone manufacturer, their latest smartphone handsets do not support CNAP display feature by default and it would require an OTA software update to enable the same.
 - ii. **Smartphone handsets:** There would be a challenge to enable CNAP on the smartphone handsets, which have crossed software update cycle (2 or 3 years generally) committed by the handset manufacturers to consumer while selling the handset.



- iii. **Feature phone handsets:** Huge number of feature phone handsets may not be able to display CNAP.
- g. Therefore, before introducing CNAP in the telecommunication networks, it needs to be assessed in detail that how many handsets which are already being used, support CNAP facility.
- h. Further, the fixed line networks will also have challenge in displaying CNAP, as the feature is also dependent on end device system (home landline, EPABX etc.)
- i. CNAP implementation would involve huge development in both Network and IT systems and processes. Its implementation would touch upon circle level and node level architecture and thus, its development, deployment and integration would take considerable amount of time and effort, almost 3 to 4 quarters atleast.
- j. The paper also lists down examples of few countries where CNAP has been implemented like US, Canada and Turkey. However, none of these countries have number of subscribers and diversity of handsets, technologies to the extent it is in India. If mandated to be provided to all subscribers, it would require it would be a humongous exercise requiring large scale set-up. Due to size of subscriber database and incremental changes, maintaining, integrating and updating the database in between TSPs on any frequency, would be a huge challenge.
- k. CNAP facility is not available as a standard feature across the world (name presentation in case of international calls), therefore, it may increase CLI spoofing cases from international locations, especially under Model 2, 3 and 4 as mentioned in the Paper.
- l. Moreover, CNAP also has dependency on the implementation of Voice solution (as explained at point no. 6. b above) under TCCCP Regulation, 2018 so that the Service calls and Transactional calls can be distinctively identified from the spam calls being made from 10 digit numbers. Till voice solution is implemented and stabilized, CNAP may not provide any relief to consumers.

8. **Concerns related to Privacy:**

- a. Privacy of entire database: Subscriber data is a confidential information and considering the fact that the data of the consumers would be used for the implementation of the CNAP feature, it is important to keep in mind that this proposal needs to adhere to the data privacy laws. Further, in case any database solution involving third party is implemented, then data leakage due to availability of data with



foreign OS / handset manufacturers / application providers will be akin to storage of Aadhaar database.

- b. Privacy of individual customer: Though CNAP will be a step towards protecting the right of the called party to identify the caller against spamming, it will conflict with the privacy concern of the calling party who may not want to flash his/her name on to the screen of the called party. Name is a confidential piece of data for a subscriber and there would be segment of consumers who may not want their names to be shared. You would agree with the fact that the caller's name along with the number is a strong piece of personally identifiable information, and if the same is shared, then all the data protection and privacy concerns hold good and the subscriber should be the one to decide how and whether his/her name should be displayed.

9. Cost to Implement CNAP:

- a. CNAP will require huge cost of implementation besides complexities, latency and technical challenge over legacy nodes and 2G/3G technologies. Our preliminary assessment indicates cost to be close to INR 100 crores. Further, there is no foreseeable revenues which can get generated from this service.
- b. Given the financial stress, it is not possible for us to provide for separate expense for this service, which otherwise would be at the cost of rolling out 5G networks or expansion of 4G networks. **In case CNAP is required to be implemented, even in possible technologies like 4G, the Government or TRAI should bear the expense of implementing the same.**
- c. Further, considering the huge cost being incurred for implementation of TCCPR, 2018 which will address the concern of spam from unknown numbers, **it is essential that detailed Regulatory Impact Assessment (cost benefit analysis) is undertaken for CNAP before deciding its implementation.**

10. Alternate ways to fulfill the objective:

- a. Existing Mobile apps fulfill the objective: There are various apps already available in the market for free which provides name of the caller to the receiving party, like Truecaller, Whoscall, CallApp, Showcaller, etc. Out of these, Truecaller is quite popular and it provides information on crowd sourced basis. There are other native apps also provided by OS/UI providers, which also work in a similar but, more integrated way over a smartphone.



- b. In our view, this information on crowd sourced basis would be the closest match to the real user and their names with which they are known to their friends, family and social/professional circles. Also, TRAI has also launched few apps that work on information gathered on crowd-sourced basis.
- c. Therefore, in our view, there is no need for introduction of CNAP through telecommunication networks. The existing apps in market fulfill the purpose of knowing the name of the caller, to make an informed decision about accepting or rejecting the call.
- d. Besides, these apps also take user information on particular callers being spammers and thus, being blocked. They also display and provide information to call recipient about the caller being in SPAM/Blocked Numbers category. Thus, they provide more clear and meaningful information to consumers for making an informed choice about accepting or rejecting a call from unknown number.
- e. Alternative to the models suggested by TRAI: The major reason indicated in the paper to use calling name presentation through CNAP over telecommunication networks and not through such Native/3rd party apps, is that such solutions may provide unreliable name information. Relevant extract of the paper is given below:

“Though the smartphone users may technically make use of the native apps and third-party apps for identification of calling party name, such solutions are fraught with the perils of unreliable name information.”
- f. In this regard, we would like to recommend an alternate way of providing caller name information to consumers which is similar to existing 3rd party apps i.e. through a **Common Mobile App (CMA) which will integrate the subscriber name database from all TSPs in a secured way. Only the consumer who downloads the app will be able to see the name of the caller, as provided in the KYC database. Privacy features can be integrated in this app which will disallow storing/saving/sharing of this information with any other 3rd party app or OS provider.** In 4G VoLTE networks, the consumer can access internet even during the call and hence, this solution will work satisfactorily on a long term basis. **A trusted party like C-DOT can be entrusted to develop CMA.** They have also developed a similar solution/platform (Central Equipment Identity Register – CEIR) for addressing the loss of handsets.
- g. **Implementing CMA would be far more efficient and reliable, will not involve latency and delay in call-set up time, less intrusive and complicated and also takes care of the privacy and cost concerns.**



- h. **If TRAI decides that a separate solution is required to provide caller name information to the receiving party other than existing mobile apps then, we most humbly request TRAI to accept and recommend CMA as a solution considering its advantages over CNAP.**

11. Existing Mechanism under TCCCP Regulation 2018:

- a. In our view, the aim highlighted by DoT i.e. “to empower subscribers to take an informed decision while receiving an incoming call, and to reduce the harassment of subscribers from unknown/ spam callers” is going to be met through implementation of Telecom Commercial Communications Customer Preference Regulations, 2018 (TCCCP, 2018) and it does not require introduction of any additional mandatory implementation like CNAP. This is explained in points below.
- b. Through the TCCCP Regulation, 2018, the Authority has followed a first of its kind co-regulatory approach thereby, prescribing a flexible and forward looking regulation. There are few modules under this regulation, which have been developed and deployed by VIL (and other TSPs) and couple of others which are under advanced deliberations for development, in the industry under guidance from TRAI. Details of these are given as follows:
 - i. **Digital Consent Acquisition:** This solution provides for taking consent of the customer by Principal Entities (brands) for sending Service Messages (explicit consent), through a verifiable, robust and revocable consent acquisition mechanism using Distributed Ledger Technology (DLT). This solution will work for A2P SMS as well as voice calls from registered telemarketers (once Voice solution, as explained below in point b is implemented) **thereby, removing any unsolicited service message being sent to the consumer, without their consent.**
 - ii. **Voice Solution:** Presently, a separate numbering series (140xx) has been granted to TSPs to identify only the voice calls with promotional content. These calls are dipped into DND database and all such calls being made to DND subscribers are being filtered out. Similarly, a separate numbering series is required to distinctively identify service calls as well as transactional calls. A high level solution in this regard has been presented to TRAI in an industry meeting and agreed between all stakeholders for building end to end solution and development. Once implemented, the service and transactional calls will get separately identified to the consumer and they can pick/drop the call as per their



choice. Further, the service calls will dip into the consent database as created under point no. a above and will rule out any unsolicited calls to the consumer where consent has not being given. **This will effectively take care of any inconvenience to customers from voice calls being made by telemarketers.**

- iii. **UCC Detect:** Besides calls and messages from telemarketers, it has been observed that consumers get spam calls and messages from unregistered telemarketers (UTM) using ten digit individual numbers. Under TCCCP Regulation, TSPs have to implement various steps to proactively identify and curb UCC from such individual numbers used by UTM. We have deployed various steps to identify and restrict UCC over SMS route from such UTM and have seen substantial reduction in complaints against UTM – SMS. Further, once the Voice solution is implemented along with separate series identifying service and transactional calls made by registered telemarketers, the UCC detect system for voice will also kick in and help reduce the inconvenience to consumers from voice calls made by UTMs. **This UCC detect system will effectively take care of any inconvenience to consumers from voice calls being made by unregistered telemarketers.**

12. In our view, the above explained solutions under TCCCP Regulation, 2018 will holistically address the inconvenience caused to the consumers from spam calls/SMSs being received from unknown numbers. Therefore, there is not much substantial objective left to be achieved through CNAP. At best, this CNAP facility will provide feel good experience and not any other major objective.

13. Further, as the industry is already spending huge cost, time and resources to deploy above solutions and processes under TRAI's TCCCP Regulation, 2018, hence, it would be unfair to spend more cost, time and resources into a new solution without establishing the success of these existing solutions.

Q2. Should the CNAP service be mandatorily activated in respect of each telephone subscriber?

And

Q3. In case your response to the Q2 is in the negative, kindly suggest a suitable method for acquiring consent of the telephone subscribers for activation of CNAP service.



VIL Comments to Q. No. 2 and 3

1. Kindly refer to our comments to question number 1 above.
2. In our view, implementation of CNAP in telecommunication networks should be left to the choice of TSPs and no mandate should be issued in that regard.
3. All the four models given in the consultation paper have serious disadvantages including latency etc. and we do not support either of them.
4. While we support consent to be taken from consumers for activation of CNAP and also for display of their name, however, seeking consent of consumers for CNAP will lead to another set of check during the call processing for display of name and would further add to complexity in the overall architecture and delay in call set-up time.
5. In our view, if Authority still wants CNAP facility to be given to consumer, then, it should look for the alternate solution mentioned above at point no. 10.f. i.e. Common Mobile App. This alternate solution will take care of all the concerns and will only be available to those customers who download the app.

Q4. Should the name identity information provided by telephone consumers in the Customer Acquisition Forms (CAFs) be used for the purpose of CNAP? If your answer is in the negative, please elaborate your response with reasons.

VIL Comments to Q. No. 4

1. Kindly refer to our comments to question number 1 above.
2. In our view, implementation of CNAP in telecommunication networks should be left to the choice of TSPs and no mandate should be issued in that regard.
3. If Authority still wants CNAP facility to be given to consumer then, it should look for the alternate solution mentioned above at point no. 10.f. i.e. Common Mobile App. This alternate solution will take care of all the concerns and will only be available to those customers who download the app. Under such CMA solution, name available in Customer Acquisition Forms (CAFs) can be used as it is backed by a proof of identity of the subscribers.

Q5. Which among the following models should be used for implementation of CNAP in telecommunication networks in India?

- a) Model No. 1, in which a CNAP database is established and operated by each TSP in respect of its subscribers and the name information is sent by the originating TSP to the terminating TSP during the process of call set up; or
- b) Model No. 2, in which a CNAP database is established and operated by each TSP in respect of its own subscribers. The terminating TSP dips into its MNP database to determine the originating TSP of the calling party and then performs a CNAP lookup on the CNAP database of the originating TSP; or
- c) Model No. 3, in which a centralized CNAP database is established and operated by a third party with an update mechanism from each TSP in respect to their subscribers; the terminating TSP performs CNAP lookup from the centralized CNAP database at the time of receiving a call; or
- d) Model No. 4, in which a centralized CNAP database is established and operated by a third party, and individual CNAP databases are established by all TSPs; the TSPs keep a copy of the centralized database and perform local CNAP lookup at the time of receiving a call; or
- e) Any other suitable model for implementation of CNAP along with a detailed description of the model.

And

Q6. What measures should be taken to ensure delivery of CNAP to the called party without a considerable increase in the call set up time?

VII Comments to Q. No. 5 and 6

- 1. Kindly refer to our comments to question number 1 above.
- 2. In our view, implementation of CNAP in telecommunication networks should be left to the choice of TSPs and no mandate should be issued in that regard.
- 3. Regarding the four models suggested in the consultation paper, we would like to submit as follows:
 - a. All the four Models would result in increasing switching time/processor load, latency, delay in call setup time and huge costs for TSPs.



- b. Model No. 1 will not be able to address the calls from International locations (including Indian customers roaming outside India) and no caller name would be presented to the recipient of the call. Also, this model would require most extensive circle-wise set-up.
 - c. Model No. 2 to 4 will require every TSP to maintain a local database as well as central database which will have to work in sync. Further, it will also give rise to cases of frauds and spams due to CLI spoofing from international locations.
 - d. Model No. 3 and 4 involves third party, resulting in serious privacy risks in exposure of subscriber database.
4. Hence, as mentioned in our response to question no. 1 at point 10.f., we would like to recommend an alternate way of providing caller name information to consumers which is similar to existing 3rd party apps i.e. a Common Mobile Application (CMA) can be built which will integrate the subscriber name database from all TSPs in a secured way. Rather than creating a telecom network solution, we can create an APP based solution (Telco Directory) which customers who wish to avail CNAP services can download through the APP store. This will provide flexibility to the customers as only the consumer who download the app will be able to see the name of the caller, as provided in KYC database. Privacy features can be integrated in this app which will disallow storing/saving/sharing of this information with any other 3rd party app or OS provider. In 4G VoLTE networks, the consumer can access internet even during the call and hence, this solution will work satisfactorily on a long term basis.
5. Implementing CMA would be far more efficient and reliable, will not involve latency and delay in call-set up time, less intrusive and complicated and also takes care of the privacy and cost concerns. This solution would have only one disadvantage that it would not work on the feature phones and landline however, the technical concerns explained above indicate that CNAP over telecommunication networks would also have similar disadvantage.
6. If a separate solution is required to provide caller name information to the receiving party other than existing mobile apps, we most humbly request TRAI to accept and recommend CMA as a solution considering its advantages over CNAP.



Q7. Whether the existing telecommunication networks in India support the provision of CNAP supplementary service? If no, what changes/additions will be required to enable all telecommunication networks in India with CNAP supplementary service? Kindly provide detailed response in respect of landline networks as well as wireless networks.

VIL Comments to Q. No. 7

1. The latest technologies like IMS and VOLTE support CNAP fully. However, legacy nodes in 2G and 3G network, it would not be fully supported.
2. CNAP was neither part of our requirement in the RFC to vendors nor was part of TEC GR requirements. Therefore, even if it is supported in some of the 2G/3G nodes, it has not been tested and may bring up complications in system/processes as well as performance experience to consumers.
3. Many of the legacy networks are in end of life or end of service category where OEMs have stopped development for these nodes. Therefore, it would not be possible to implement CNAP on these nodes.
4. Further, fixed line networks would also pose serious challenge to CNAP implementation as the end user landline devices and EPABX may not support CNAP.
5. Therefore, existing networks partially support provision of CNAP facility and that too is strictly subject to testing. No performance benchmark should be established for CNAP. Further, relaxation in QoS parameters and other licensing norms (related to implementing service without Global/Indian standards) would be required for CNAP implementation.

Q8. Whether the mobile handsets and landline telephone sets in use in India are enabled with CNAP feature? If no, what actions are required to be taken for enabling CNAP feature on all mobile handsets and landline telephone sets?

VIL Comments to Q. No. 8

1. Kindly refer to our detailed comments provided to question number 1 above.
2. In our view, CNAP has critical dependency on the handset specifications, its manufacturer as well as operating software and user interface providers. For different types of handsets, the dependency can be categorized as follows:



- a. **Latest smartphone handsets:** As per understanding from discussions with one of the reputed smartphone manufacturer, their latest smartphone handsets do not support CNAP display feature by default and it would require an OTA software update to enable the same.
 - b. **Smartphone handsets:** There would be a challenge to enable CNAP on the smartphone handsets, which have crossed software update cycle (2 or 3 years generally) committed by the handset manufacturers to consumer while selling the handset.
 - c. **Feature phone handsets:** Huge number of feature phone handsets may not be able to display CNAP.
3. Further, in case of landline user end devices, most of the individual user end devices (non-premium) may not support CNAP. Also, user end EPABX devices would also not support except next generation devices like CISCO etc.

Q9. Whether outgoing calls should be permitted from National Toll-Free numbers? Please elaborate your response.

And

Q10. In case the response to the Q9 is in the affirmative, whether CNAP service should be activated for National Toll-Free numbers? If yes, please provide a mechanism for its implementation.

VIL Comments to Q. No. 9 and 10

1. In our view, implementing outgoing calls from 1800xx i.e., National Toll Free Numbers (NTFN) will have challenges and complexities given as below:
 - a. Under TCCCP Regulation, 2018, for voice solution to be implemented for service and transactional calls, industry has sought separate series for Service Calls and Transactional calls, similar to the separate 140xx series allocated for Promotional calls. This will ensure distinct identification of service and transactional calls and subscribers at large can make an informed decision for accepting or rejecting the calls. Thus, there will not be any need left for implementing outgoing calls from NTFN. Most



importantly, outgoing calls from NTFN will have major dependency on scrubbing with consent framework, which is being implemented under TCCCP Regulation, 2018.

- b. The routing architecture for NTFN are based on IN. Calls to NTFN are routed after dipping into IN network whereas other fixed line calls are taken through MSCs and GMSCs.
- c. Length of NTFN varies from 8 digits to 13 digits and if we prefix country code '91' to it, then it may vary from 10 to 15 digits. Currently, number length in our networks is fixed to 12 digits.
- d. If we prefix country code '91' to NTFN then, in case of callback/missed call scenario, calls will get routed towards Panipat SDCA (180 is STD code of Panipat, a district in Haryana). If we do not prefix 91 then, it will clash with the country code of USA.
- e. Further, NTFN have always been inbound and hence, the billing architecture has always been built upon to bill the call receiving party and not as regular to originating caller party. Allowing outgoing from NTFN would require base level change in the billing architecture, which will be complicated and costly to implement.
- f. Furthermore, there would be another challenge for outgoing implementation in scenarios where NTFN is configured as a virtual number with TSP-A whereas the solution (SIP, PRI, etc.) has been provided by TSP-B thus, calls made on NTFN are terminated on TSP-B.
- g. Available inventory in 1800 is also very limited while service/transactional calls are very DID intensive.

Q11. Whether CNAP service should be implemented for 140-level numbers allocated to registered telemarketers?

And

Q12. If your answer to Q11 is in the affirmative, then kindly elucidate the technical considerations for implementing CNAP service for registered telemarketers so that the name identity of the principal entity may be presented to the called party.



VIL Comments to Q. No. 11 and 12

1. CNAP service is not required to be implemented for 140-level numbers allocated to registered telemarketers as majority of the subscribers are very well aware of the fact that 140 is a Telemarketing call.
2. There is a scrubbing already implemented for calls received from 140xx series, vide which calls to DND registered subscribers are filtered out.
3. Thus, there is no concern related to identification of a name of entity in case of calls coming from 140xx series. Instead, it may be counter-productive as display of name may confuse the subscriber and they may not focus on the CLI being received as 140xx and thus, may not recognize that it is a promotional call from 140xx series, resulting in hampering their informed choice. However, the way CNAP has been described in the consultation paper under four models, it would not be possible technically to restrict presenting name of callers from 140xx series.
4. Most importantly, we request the Authority to consider the alternate way of providing calling name presentation facility to the receiving party, as mentioned above at point no. 10.f. of our comments to question no. 1. Said solution can take care of this requirement.

Q13. Whether the bulk subscribers and National Toll-free numbers should be given a facility of presenting their 'preferred name' in place of the name appearing in the CAF? Please elaborate your response.

And

Q 14. In case the response to the Q13 is in the affirmative, what rules should govern the implementation of such a facility?

VIL Comments to Q. No. 13 and 14

1. Kindly refer to the detailed comments given above to question no. 9 and 10. Once Voice Solution with separate series for Service/Transactional calls is implemented under TCCCP Regulation, 2018 then, there will not be any need left for outgoing calls through NTFN.
2. In cases of bulk subscribers, we would like to state that there should be a facility to change the display name to a name preferred by them in place of name mentioned on CAF. This



can be easily integrated in the alternate solution of Common Mobile App mentioned by us at various places in our comments to preceding questions.

3. However, the challenge would be to identify bonafide 'preferred name'. As TSP, we would not have any mechanism to check its bonafide and would have to rely on bulk user's declaration. It may cause misleading to receiving party and risks of spam/frauds.

Q 15. Whether there is a requirement of any amendment in telecommunication service licenses/ authorizations in case CNAP is introduced in the Indian telecommunication network? Please provide a detailed response.

VIL Comments to Q. No. 15

1. In case CNAP is to be implemented through any of the four models mentioned at question no. 5, suitable amendments would be required as per below:
 - a. Telecommunication service licenses/ authorizations will need to be amended for adapting a service without global or Indian standards over 2G/3G.
 - b. Suitable exemptions have to be carved out for QoS performance thresholds as regulated by the Authority.
 - c. Suitable provisions have to be mentioned in the draft Digital Personal Data Protection Bill, 2022, draft Indian Telecommunication Bill, 2022 to ensure the stakeholders like handset manufacturers / OS providers are also aligned and they neither store CNAP information nor extend its access to native / mobile apps.

Q 16. Whether there are any other issues/ suggestions relevant to the subject? If yes, the same may be furnished with proper justification.

VIL Comments to Q. No. 16

1. Considering CNAP involves lot of technical complexities, consumers at large and stakeholders from handset industry, it is extremely important that:
 - a. Regulatory Impact Assessment is carried out by Authority before recommending introduction of CNAP through any of its four models.



- b. Given the financial stress, it is not possible for us to provide for separate expense for this service, which otherwise would be at the cost of rolling out 5G networks or expansion of 4G networks. **In case CNAP is required to be implemented, even in possible technologies like 4G, the Government or TRAI should bear the expense of implementing the same.**

- c. Draft Recommendations are issued by the Authority for further wider consultations with Consumers, TSPs, handset manufacturers and OS providers, for comments and inputs before finalizing recommendations on this topic.

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