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भारत संचार निगम लिमिटेड
(भारत सरकार का उपक्रम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

To,

Shri Akhilesh Kumar Trivedi,
Advisor (Networks, Spectrum and Licensing),
TRAI, New Delhi

(Through email: advmn@trai.gov.in.)

No. BSNLCO-RGLN/25/8/2022-REGLN dated 17.01.2023

Sub: Consultation Paper on Introduction of Calling Name Presentation (CNAP) in Telecommunication Networks.

Sir,

Please find below the comments of BSNL on the Consultation Paper on Introduction of Calling Name Presentation (CNAP) in Telecommunication Networks.

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

BSNL Comments: Yes, the telephone consumers are actively seeking the facility of calling party name presentation on their telephones in the face of the prevalence of spam calls, fraudulent calls, CLI spoofing and Unsolicited Commercial Communications (UCC). There is a need to introduce the Calling Name Presentation (CNAP) supplementary service in the telecommunication networks in India

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

BSNL Comments: No, CNAP should not be made mandatory service at this stage. It should be kept as an optional value added service. In initial phase of implementation CNAP service should be provided as a Value Added Services (VAS) with additional features for subscribers wherein subscribers are allowed to use their preferred name, commercial name, a public institution or non-governmental organization's name, trademark etc. For making the mandatory activation for each subscriber there may be challenges with legacy network elements which may not be capable to provide this facility to all of its customers. These network elements may require the upgradation or in some cases may require the replacement to provide this facility. In case of land line customers a change in customer's telephone instrument may also be required. Therefore, after analysing the response to CNAP value added service, its demand in future and time required to upgrade/ replace the legacy switches, decision regarding activating the CNAP service on each customer may be taken accordingly.

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.

BSNL Comments: In the initial phase of implementation, CNAP service should be provided as a Value Added Services (VAS). Existing Consent mechanism for taking consent for activating/purchasing VAS services by TSP may be used for opting the CNAP service too.

For landline customers consent may be taken by OBD calls. The method to give the consent may also be advertised through monthly bills.

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.

BSNL Comments: Yes, by default, the details provided in CAF may be used. However, option should not be limited to CAF database and additional features may also be offered to subscribers. Subscribers may be allowed to use their preferred name, commercial name, a public institution or non-governmental organization's name, trademark etc. for display. However, respective subscriber must submit document to prove their legitimate right to use these names to concerned TSP and after verification of these documents TSP may allow to display their preferred/ commercial name.

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

BSNL Comments: Various countries implemented different mechanism for implementing CNAP in their telecommunication networks. In USA, terminating service provider performs a lookup on the database maintained by originating service provider or a trusted third party, using the calling party's telephone number for calling party name information. In Canada, the calling party name information is sent over the telecommunication network from the originating service provider to the terminating service providers.

It is suggested that any of the following model may be adopted:

Option A:

Model No. 3 may be adopted. As mentioned in consultation paper, a Central Telecom Subscriber Database System (CTSDS) will be implemented, which will contain information of all telecom subscribers across all TSPs of all LSAs; a Calling Name Identification System (CLNIS) will also be implemented, which will store the name of each subscriber (as per CAF submitted by the subscriber) against the telephone number. The same central database of subscribers developed under CLNIS may be used as centralized CNAP database under the model-3. However, to display the preferred name as suggested in reply of question 4, this database may need to include the preferred/ commercial name too.

Option B:

A third party caller ID application (like true caller etc.) may be developed with an update mechanism from each TSP in respect to their subscribers by TRAI. Subscriber who want the CNAP facility may download the app in his smart phone and at the time of incoming call CNAP will display by this app in subscriber handset.

Option C:

ITU has issued Technical Specification FG DLT D3.1 defining Distributed ledger technology reference architecture. A CNAP database may be established and operated by each TSP in respect of its own subscribers **on permissioned block chain (distributed ledger technology).** Each node of DLT network will have copy of complete databases of all TSP, which will be updated in real time by all TSP from their CNAP database. 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 available at DLT Node.

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?

BSNL Comments: Solution with minimum look-up time (for MNP, DLT platform etc.) is required for implementing CNAP feature in Telecom Network. Centralized CNAP database of subscribers developed by trusted third party will be helpful in ensuring delivery of CNAP to called party without considerable increase in the call setup time. Therefore, it is proposed that CNAP lookup should be done by terminating TSP in single centralized database.

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.

BSNL Comments: No, some of the existing legacy mobile telecom network of BSNL does not support CNAP facility at present. There is challenge in developing CNAP functionality in these legacy network element. These network elements will need to be replaced with new technology elements, which may take quite some time.

With regard to landline networks, this facility is available in switches of all NGN vendors of BSNL which has to be enabled by the vendor (except for M/s C-DoT). M/s C-DoT has to develop a patch to extend the CNAP facility.

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?

BSNL Comments: Issues related to mobile handsets not supporting CNAP feature may be taken care with mobile handset manufacturers by Ministry of Electronics and Information Technology (MEITY) for enabling the CNAP features in their future supplies.

All landline telephone sets in service may not be having this feature. In most of the cases new landline telephone sets may be required to purchase by the customers or be provided by the TSPs.

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

BSNL Comments: Yes, outgoing calls should be permitted from National Toll-Free numbers and CNAP service should be implemented on Toll-Free numbers as well. It will make it easier for the called customers to associate a call received from any Toll-Free number with the relevant business entity.

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.

BSNL Comments: The same model as being adopted for general customers may also be implemented for National Toll-free numbers.

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

BSNL Comments: Yes.

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.

BSNL Comments: Telemarketer call is being setup through DLT technology and allowing the CNAP for these number may require to add extra fields in database for its principal entity, telemarketer etc., however, CNAP of these number are most desirable by the telecom subscriber. If subscriber is able to confirm that this call is from Telemarketer then he will be able to take the informed decision to answer the same or not. Considering the current scenario of spam calls it is suggested that CNAP of telemarketers call must be implemented along with normal subscribers.

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.

BSNL Comments: Yes.

Q14. In case the response to the Q13 is in the affirmative, what rules should govern the implementation of such a facility?

BSNL Comments: CNAP service should be provided as a Value Added Services (VAS) with additional features for subscribers wherein subscribers are allowed to use their preferred name, commercial name, a public institution or non-

governmental organization's name, trademark etc. Respective subscriber must possess official document to prove their legitimate right to use these names. Entity should provide documentary evidence pertaining to preferred name to concerned TSP and after satisfying the concerned TSP may allow the preferred name.

Q15. 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.

BSNL Comments: CNAP should not be made mandatory service and kept as an optional service. However, in initial phase of implementation CNAP service should be provided as a Value Added Services (VAS) with additional features for subscribers with in the ambit of present license condition. It should be made mandatory only after networks are ready to provide it to all the subscribers.

Q16. Whether there are any other issues/ suggestions relevant to the subject? If yes, the same may be furnished with proper justification.

BSNL Comments: Nil.

(17.01.2023)
(Ved Prakash Verma)
DGM (Regulation-II)