From: tvr@broadbandindiaforum.in
To: "Akhilesh Kumar Trivedi" <advmn@trai.gov.in>
Sent: Tuesday, June 20, 2023 4:51:06 PM
Subject: BIF Response to the TRAI Consultation Paper on Definition of International Traffic

Date: 20th June, 2023

To,
Shri Akhilesh Kumar Trivedi,
Advisor (Networks, Spectrum and Licensing),
Telecom Regulatory Authority of India,
Government of India.

Dear Sir,

Please find enclosed BIF response (Word and PDF copy) to the TRAI Consultation Paper on 'Definition of International Traffic' dated 2nd May 2023.

We earnestly request your kind consideration and support in this regard.

Best regards,

T.V. Ramachandran,

President,
Broadband India Forum
Suites - 215 & 216,DBS Office Business Centre,
1st Floor, World Trade Tower,
Barakhamba Lane, New Delhi-110001.
Mobile: +91-9811919500,
Phone: +91-11-40509200, 45730225 (D), Fax. +91-11-23414740
Email: tvr@broadbandindiaforum.in, tvram.personal@gmail.com
Facebook: https://www.facebook.com/broadbandindiaforum/
Web: www.broadbandindiaforum.in

"*Where the mind is without fear and the head is held high...*

Where words come out from the depth of truth..

Where tireless striving stretches its arms towards perfection..."

BROADBAND INDIA FORUM
"Think Tank for Digital Transformation"

BIF Response to the TRAI Consultation Paper on Definition of International Traffic

Broadband India Forum(BIF) welcomes this opportunity to present comments on the Consultation Paper on Definition of International Traffic (the "Consultation Paper"). At the outset, we are grateful to the Telecom Regulatory Authority of India ("TRAI") for issuing the Consultation Paper, to understand the views of stakeholders on this subject.

We believe that, it is imperative that the relevant regulations provide a clear and unambiguous definition of the terms "International Traffic", "International SMS", and "Domestic Traffic" to ensure widespread adoption of SMS technologies for businesses to reach their customers in India, to prevent ambiguity and arbitrary interpretation.

Apart from the ability to connect people, messages sent by SMS are one of the most effective ways for businesses to reach their customers. Transactional, promotional, and service messages are vital to the growth and operation of all businesses, and especially digital businesses which access customers remotely. Messages are important for businesses to communicate to customers, amongst other things, details of payments, delivery of goods and services, multi-factor authentication for logins, etc. They are also crucial in the larger context of e-governance, payments and banking infrastructure, where messages sent via SMS communicate OTPs, transaction details, etc. Various regulatory bodies including the TRAI, the Reserve Bank of India, and the Ministry of Electronics and Information Technology mandate usage of SMS by various entities, including in the interest of cyber security, spreading awareness, customer education, customer support, and transparency. SMS can be terminated even in areas without the internet, which makes it the most reliable mode of communication for responsible businesses including e-commerce companies, banks, insurance companies, payment gateways and telecom companies.

Response to Questions:

Q1. Whether it would be appropriate to define the term 'international traffic' in the telecommunication service license agreements as 'the international long-distance traffic originating in one country and terminating in another country, where one of the countries is India'? Kindly provide your response with a detailed justification.

BIF Response

We believe the current definition of "international traffic" as suggested by TRAI (which would also, in effect, include international SMS) as *"international long-distance traffic originating in one country and terminating in another country, where one of the countries is India"* may not be feasible in the present context due to the following reasons.

(i) Charges leviable for international and domestic SMS

We understand that the initial representations before TRAI which were forwarded to DoT were in context of domestic and international SMS traffic. Briefly, international termination charges are charges payable by an Indian international long-distance operator ("ILDO") to the Access Service Provider ("ASP") in India, and domestic termination charges are charges payable by one ASP to another for terminating the traffic in its network in India. The charges leviable for international and domestic SMS have been set out in the Short Message Services (SMS) Termination Charges Regulations, 2013 ("SMS Regulation"). While the SMS Regulation does not define 'international incoming SMS' it specifically provides that "*termination charges for international incoming Short Message Service (SMS) shall be under forbearance*".

The definition of "international traffic" assumes importance because of the difference in charges levied for the termination of an international SMS and a domestic SMS.

Telecom Service Providers ("TSPs") have the discretion to charge the rates that they desire for international SMSs, on account of forbearance shown by the TRAI. As of 2023, we understand that TSPs charge businesses approximately Rs. 4.14 per international SMS (as opposed to roughly 12 paise charged per domestic SMS). There has also been a steady yet steep increase in the rates charged by leading TSPs in the country for international SMSs from 2018 to 2023, which has been as follows: Re. 0.25 (2018), Re. 0.61 (2019), Rs. 1.24 (2020), Rs. 2.48 (2021), Rs. 3.31 (2022) and, as noted above, Rs. 4.14 (2023). **This indicates an approximately 1566% increase in pricing since 2018.**

(ii) Interpretation adopted by telecommunications service providers

Stakeholders face issues in relation to the definition of "international SMS" adopted by the TSPs for levying termination charges.

For instance, the definition of international SMS in the Code of Practice ("CoP") of a TSP[1], as approved by TRAI, is as follows:

> "Any data/application/system/servers etc. which influences, generates, control, facilitate or enable the generation, dissemination/ transmission of messages from a location outside the territory of India will constitute as International messages. Any mirroring solution in India shall not impact and/or change the nature of such International SMS to national SMS."

A similar definition exists in the CoP of another TSP[2]. TSPs have relied on this extensive definition to charge higher prices for such messages, including transactional messages.

The geographic location of a data centre hosting a cloud server should not be the determining factor for charging international rates for messages circulated by businesses. For instance, some of the Indian websites[3] such as are currently charged domestic rates but have their servers located outside India. There are several factors as to why companies locate their cloud servers (hosted in data centres) outside India, which is typically based on a comprehensive assessment of considerations made prior to deciding on the location of data centres.

Advancement of technology has resulted in various solutions, which operate prior to the actual generation of a SMS. These upstream applications or systems do not interact with any telecom network, and do not result in the initiation of SMS, and therefore, it would be very expansive to include within the definition of international SMS "data, application, or systems which influences, generates, control, facilitate or enable".

Given that termination charges for SMS are passed on to the customers, the lack of clarity on "international SMS" and "domestic SMS" allows TSPs to adopt their own interpretation and categorise a message generated by a computer resource/ server located outside India as "international SMS", despite the fact that the origination and termination of the SMS being limited to the network of TSPs in India, to bring it under the scope of forbearance. This has also led to arbitrary interpretation by the TSPs in India, which has resulted in difficulty in carrying out digital businesses. Entities sending SMS to their customers, for better business practices and for regulatory compliance are often subject to higher tariff rates as determined by the TSPs.

---

[1] https://www.airtel.in/business/commercial-communication/assets/documents/Help_Modules/Cop_docs/CoP_Entities_08_11_2018.pdf

[2] https://jep-asset.akamaized.net/jio/regulatory/RJIL_CoP_Entities_May2022.pdf

[3] zomato.com and nykaa.com

(iii) Issues with the proposed definition

While defining "international traffic" is a welcome move in light of the issues mentioned above, the scope of the word "originating" may still cause confusion as it does not clarify where the origination happens. "Originating" should be clarified to mean originating over a network of the TSP. In the absence of this clarification, it could lead to ambiguity and arbitrary interpretation by TSPs.

Moreover, the traffic carried by ILDOs include voice, SMS, and data. Data packets generated by the services in the application layer uses the network layer provided by TSPs, for the purposes of application to application ("A2A") messaging, emails, VoIP calls, etc. Such services are used by customers at large, as well as businesses and other service providers (OSPs), etc. The proposed definition of "international traffic" may be incorrectly interpreted to potentially include all traffic originating through computer servers and delivered to another computer server, where either of the computer server is located in India. Further, there is scope of automated messages originating as data packets outside India to be misconstrued as international SMS, despite such message originating and terminating as SMS on the network of an ASP in India. TRAI needs to consider all the implications while framing such definition.

Therefore, it is imperative to amend the telecommunication service license agreements to define "international traffic" and "domestic traffic", and provide a clear definition which is specific to telecom networks.

Q2. In case your response to the Q1 is in the negative, kindly provide an alternative definition along with a detailed justification.

BIF Response

To remedy the issues highlighted above, we suggest that the TRAI considers the following alternative definition for international traffic:

> *"International traffic shall mean international long-distance traffic originating* ***from the telecommunication networks of a telecommunication service provider*** *of one country and terminating* ***in the telecommunication networks of a telecommunication service provider*** *in another country, where one country is India."*

The above definition of "international traffic" clarifies that the traffic should originate from and terminate over the network of a telecom service provider. However, this would include any voice, SMS, and data packet carried by ILDOs. Therefore, it must be ensured that the termination charges are levied only on calls and SMS, in accordance with the regulatory framework as applicable.

Imposition of termination charges

As mentioned above in our response to Q.1, the stakeholder concerns are primarily with regard to wrongful categorisation of 'domestic SMS' as 'international SMS' and the levy of higher charges. Termination charges are broadly regulated in India by the Telecommunication Interconnection Usage Charges Regulation 2003 ("IUC Regulation") for calls, and the SMS Regulation and Telecom Commercial Communications Customer Preference Regulations, 2018 ("TCCCPR") for SMS. While the IUC Regulations clarify when an international termination charge is payable for calls, the SMS Regulation does not mention the same. Therefore, it must be ensured that a broad definition for international and domestic traffic should not give leeway to

TSPs to misclassify A2A messages/A2P messages originating as a data prompt outside India, as international SMS.

Hence, we recommend that the TRAI should define the term international SMS as:

> "*The term international SMS shall mean international traffic delivered using SMS which originates on the* ***PSTN/PLMN network of a telecom service provider*** *of one country and terminates* ***in the PSTN/PLMN networks of a telecommunication service provider*** *in another country, where one country is India."*

This definition may either be added in the license agreements or issued as a direction under the SMS Regulation to further clarify the scope of the term international SMS. Please note that this is also part of the original reference from the DoT. Unless this definition is also not brought out clearly, ambiguity and arbitrary interpretation may continue to exist.

Introducing a price ceiling on the tariffs for international transactional SMSes charged by TSPs

In addition, we also urge the TRAI to consider introducing a price ceiling on the tariffs for international SMSs charged by TSPs to a maximum of 2x (i.e., double) of existing domestic tariffs.[4] This is necessitated largely by the exponential increase in prices implemented by TSPs for international SMSs, as highlighted above. International SMS rates remain high even where the licensed Indian carrier performs no additional transmission service, such as carrying the traffic via subsea cable to the landing point in India, indicating that the excesses of international SMS pricing have little to nothing to do with cost of providing service.

Q3. Since the terms 'Inter circle traffic' and 'Intra circle traffic' are already defined in the telecommunication service license agreements, whether there is still a need to define the term 'domestic traffic' in the telecommunication service license agreements? If yes, what should be the definition of the term 'domestic traffic'? Kindly provide your response with a detailed justification.

BIF Response

Yes. While the terms "inter-circle traffic" and "intra-circle traffic", which essentially makes up domestic traffic is well defined in the telecommunication service license agreements, defining domestic traffic is also imperative. This will help in establishing a framework for differentiating domestic traffic from international traffic, enabling effective oversight and ensuring compliance with applicable regulations. Further, a clear understanding of domestic traffic is crucial for policy development and implementation. By explicitly defining domestic traffic, TRAI can also protect consumers from unfair practices.

In line with our alternative definition for international traffic, we suggest that domestic traffic should be defined as:

> "*Domestic traffic shall mean 'inter-circle traffic' or 'intra-circle traffic' originating and terminating on the telecommunication networks of telecommunication service providers within the territorial boundary of India*."

---

[4]In this regard, it may be noted that as per the Telecom Commercial Communications Customer Preference Regulations, 2018, the TRAI has prescribed 5 paise as the termination charge for domestic transactional messages. Thus, the 2x price ceiling for international transactional messages may be calculated accordingly.

This will ensure ample clarity to the definitions, and leave no room for interpretation within the framework, thereby ensuring that all traffic falls within the ambits of either domestic traffic, or international traffic.

This will also ensure that messages which originate over the network of an ASP in India and terminate on the network of a terminating ASP in India are construed as a domestic SMS.

Q4. Whether there are any other issues/ suggestions relevant to the subject? If yes, the same may kindly be furnished with proper justification.

BIF Response

Yes. To give full effect to the new definitions introduced in the telecommunication service license agreements, ASPs should be directed to align their CoPs with the definitions under the telecommunication service license agreements.

Under Regulation 8 of TCCCPR, ASPs are required to '*develop Code(s) of Practice to establish system and make arrangements to govern the specified activities*'. Regulation 16 provides that the ASPs must submit their CoP to TRAI. Regulation 17 allows the TRAI to direct ASPs to make changes to the CoP, and Regulation 18 mandates that ASPs adhere to the CoPs.

In light of the proposed definitions of international and domestic traffic being considered to be included in the telecommunication service license agreements, and the inclusion of a definition of international SMS, TRAI must also direct ASPs under Regulation 17 of the TCCCPR to align their CoPs with such definitions.

Separately, TRAI must reconsider the current scope of the tariff regime for international SMS. We believe that the TRAI ought to revisit its policy of forbearance vis-à-vis international SMSes.[5] As noted above in our response to Q. 1, the absence of a regulatory definition for international SMS allows TSPs to give a very broad definition, such that even messages originating and terminating on networks of telecom operators in India are included within the scope of international SMS, and rates for such messages can be set by the TSPs under forbearance. This is compounded by the fact that there is an increasing reliance on the internet for improving connectivity across the globe, including for enabling last mile delivery of text messages, thus blurring the line between 'international' and 'domestic' further.

TSPs charge significantly higher rates for such messages when compared to domestic SMS, even when they do not incur any additional expense. The industry also saw an upshot in the rates per international SMS over the years, which is contrary to the global market trends for the same. Such practices are not in line with the Government's push to encourage digital businesses in India, and for customers as businesses may increasingly opt-out of sending important communications to customers through SMSs. Businesses, including start-ups and small businesses may choose to house their servers overseas for multiple reasons, and we believe that alone is not sufficient factor for determining if SMSs sent by such organizations are international in nature.

As mentioned in our response to Q2, TRAI must consider imposing a price ceiling for international messages. This will alleviate existing regulatory uncertainty on the subject. A separate consultation can be held in this regard to understand the views of the stakeholders, including ILDOs, ASPs, and organizations and businesses that rely on SMS.

---

[5] Refer to the TRAI's observation in a Consultation Paper on 'Review of Policy of Forbearance in Telecom Tariffs' dated 6 February, 2012 wherein the TRAI noted that "*as and when substantial reversal in the (downward) trend of tariff takes place and/or there are evidences of inadequate competition in any segment leading to high prices, the Authority would be fully justified to intervene and even to set the prices for various telecommunication services*."

Lastly, any disputes regarding points of difference/ any grievance faced by the subscriber in this regard must be included with the Telecom Consumer Complaints Monitoring System ("TCCMS") grievance redressal framework under TCCCPR.

****