



भारतीय दूरसंचार विनियामक प्राधिकरण

Telecom Regulatory Authority of India

Recommendations on The Definition of International Traffic

(Response to the back reference dated 13.02.2025 received from Department of Telecommunications on the TRAI's recommendations dated 10.12.2024)

18th March, 2025

World Trade Centre, Tower F, Nauroji Nagar, New Delhi-110029

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CHAPTER I: INTRODUCTION AND BACKGROUND

A. DoT's Reference

- 1.1 Department of Telecommunications (DoT), Ministry of Communications, Government of India, through the letter No. 20-405/2013-AS-I dated 30.08.2022 (**Annexure-I**), sent a reference to Telecom Regulatory Authority of India (hereinafter also referred to as "TRAI", or "the Authority") under Section 11(1)(a) of the TRAI Act, 1997. The reference is reproduced below:

"Due to interconnection of PLMN with Internet at different levels like network, devices, application etc. and deployment of the emerging technologies, enterprises use various means for dissemination of information to their customers. In the instant case, telemarketer applications provide an interface between PLMN and Principal Entity (PE) systems, which in turn invariably get connected with internet. Direct or indirect interconnection between PLMN and Internet throw-up policy and regulatory challenges which requires updating the license terms & conditions.

2. *TRAI, vide its letters dated M-7/1/16(37)/2021-QoS dated 25.10.2021, and 30.12.2021 has forwarded requests of M/s XXXXXXXXXXXX and M/s XXXXXXXXXXXX to DoT and asked to investigate whether the messages sent by them to their customers are domestic or international in nature.*

3. *The existing Licensing framework treats domestic & International traffic differently. As per licensing conditions, international traffic should be routed through networks of NLD/ILD operators as reproduced below:*

"6.1 Inter-Circle traffic from one service area to another shall be routed through the network of NLD licensee or the Unified Licensee having authorization of NLD service.

...

"6.3 International Long-Distance traffic should be routed through network of NLD service providers, to the ILD service provider's gateways for onward transmission to international networks subject to fulfilment of any Guidelines/ Orders/ Directions/ Regulation issued from time to time by LICENSOR/ TRAI. However, the Licensee shall not refuse to interconnect with the ILD Service licensee directly in situations where POP of ILD service licensee and Switches of Licensee's (GMSC/ Transit Switch) are located at the same station of Level-I TAX."

Further, as per Clause 2.6 (ii) in Access Service authorization of UL:

2.6 (ii) Calls from International out-roamers shall be handed over at ILD gateway of Licensed ILDOs and International termination charges shall be paid to the terminating Access Service provider Further, calls originated outside the country using Internet telephony shall be routed to ILD gateway like any other international call.

4. Currently, no explicit Domestic and International SMS definition is available in License Agreements. As per TRAI's Telecommunication Interconnection Usage Charges (IUC) Regulations, termination charges on domestic SMS are regulated while termination charges on International SMS are under forbearance. However, the definitions of domestic SMS and International SMS are not provided in TRAI regulations also. Further, as per TRAI's Telecom Commercial Communications Customer Preference Regulations (TCCCPR), 2018, TSPs are required to notify the Code of Practice (COP) for entities and some of the TSPs have defined International SMS under CoPs. Keeping in view the extant licensing framework & TRAI regulations, there is a need to define International SMS and Domestic SMS in the license agreement."

5. *In view of the above, TRAI is requested to provide its recommendations under section 11(1)(a) of TRAI Act,1997 (as amended) on the definition of International SMS and Domestic SMS."*

1.2 Hereinafter, the afore-mentioned reference received from DoT will be referred to as "the Reference dated 30.08.2022".

B. TRAI's Recommendations

1.3 With respect to the Reference dated 30.08.2022, TRAI issued a consultation paper on 'Definition of International Traffic' dated 02.05.2023. After a comprehensive consultation process, the Authority, on 10.12.2024, sent its recommendations on the Definition of International Traffic (hereinafter also referred to as, "the Recommendations dated 10.12.2024") to DoT.

C. DoT's Back-reference

1.4 DoT, through the letter No. 20-1349/2025-LPA dated 13.02.2025 (**Annexure II**) sent a back reference on the Recommendations dated 10.12.2024 (hereinafter, also referred to as "the Back-reference"). In the Back-reference, DoT mentioned, *inter-alia*, as below:

"2. *The recommendations of TRAI on "Definition of International Traffic dated 10.12.2024" have been considered in the Government and all recommendations are accepted in principle. However, a clarification is required from TRAI that whether all types of International SMSs including A2P messages, as explained in recommendation no 3.3, shall necessarily be required to be routed through an ILD gateway."*

D. The Present Response

- 1.5 The present response comprises two chapters. This chapter provides an introduction and background to the subject. The following chapter provides the TRAI's response to the DoT's views on the Recommendations dated 10.12.2024.

CHAPTER II: RESPONSE TO THE BACK REFERENCE

A. The Recommendations dated 10.12.2024

2.1 Through the Recommendations dated 10.12.2024, TRAI made the following recommendations to DoT:

“

3.1 The Authority recommends that the term 'International Traffic' should be defined in the relevant telecommunication service licenses and authorisations as below:

"INTERNATIONAL TRAFFIC means the traffic originating in one country and terminating in another country, where one of the countries is India."

3.2 The Authority recommends that the term 'International SMS Message' should be defined in the relevant telecommunication service licenses and authorisations as below:

"INTERNATIONAL SMS MESSAGE means the international traffic delivered using SMS."

3.3 The Authority recommends that the following explanation should be included under the definition of international SMS in the relevant telecommunication service licenses and authorisations:

"Any incoming application to person (A2P) SMS message, shall be treated as an international SMS message, if it cannot be generated, transmitted or received without the use or intervention of any electronic device, computer system or computer application located outside India."

3.4 The Authority recommends that the term 'Domestic Traffic' should be defined in the relevant telecommunication service licenses and authorisations as below:

"DOMESTIC TRAFFIC means the traffic originating and terminating within India."

3.5 The Authority recommends that the term 'Domestic SMS' should be defined in the relevant telecommunication service licenses and authorisations as below:

"DOMESTIC SMS means the domestic traffic delivered using SMS."

B. DoT's views on the Recommendations dated 10.12.2024

2.2 Through the Back-reference, DoT has mentioned, *inter-alia*, as below:

"2. The recommendations of TRAI on "Definition of International Traffic dated 10.12.2024" have been considered in the Government and all recommendations are accepted in principle. However, a clarification is required from TRAI that whether all types of International SMSs including A2P messages, as explained in recommendation no 3.3, shall necessarily be required to be routed through an ILD gateway."

C. Response of TRAI w.r.t. the DoT's views on the Recommendations dated 10.12.2024

2.3 Through the Back-reference, DoT has requested TRAI to clarify as to whether all types of International SMS messages including A2P SMS messages require to be routed through an ILD gateway. The DoT's query may be divided into two parts viz.

- (a) Whether all outgoing international SMS messages require to be routed through an ILD gateway?
- (b) Whether all incoming international SMS messages require to be routed through an ILD gateway?

2.4 The above questions are being dealt with separately in the following sub-sections.

(1) Whether all outgoing international SMS messages require to be routed through an ILD gateway?

2.5 Clause 6.3 of Chapter VIII (Access Service) of Unified License mandates that an access service provider should route its international long distance traffic, either directly or through an NLD service provider's network, to the ILD service provider's gateway for onward transmission to international networks. The said clause is reproduced below:

"6.3 International Long Distance traffic should be routed through network of NLD service providers, to the ILD service provider's gateways for onward transmission to international networks subject to fulfillment of any Guidelines/ Orders/ Directions/ Regulation issued from time to time by LICENSOR/ TRAI. However, the Licensee shall not refuse to interconnect with the ILD Service licensee directly in situations where POP of ILD service licensee and Switches of Licensee's (GMSC/ Transit Switch) are located at the same station of Level-I TAX."

2.6 The method of routing of international traffic, as prescribed in Unified License, may be depicted through the following diagram:

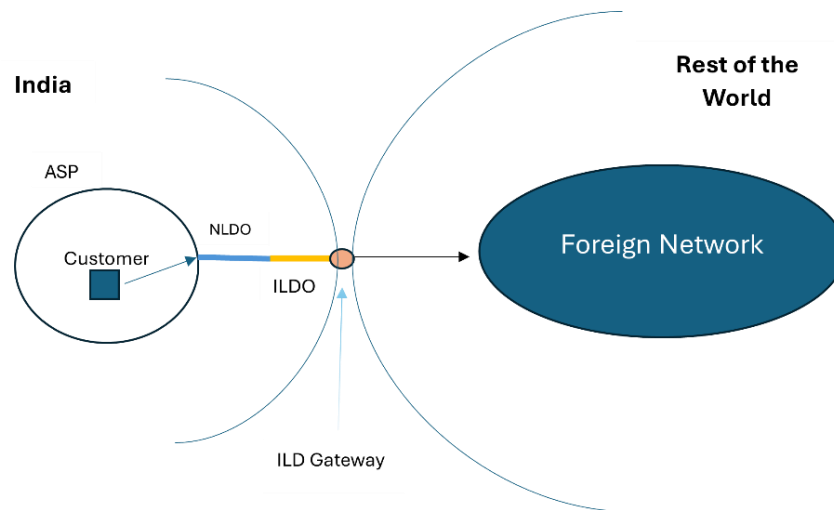


Figure 2.1: Method of Routing International traffic prescribed in the Unified License¹

- 2.7 It is worth mentioning that the Authority, through the recommendations on 'the Framework for Service Authorisations to be Granted Under the Telecommunications Act, 2023' dated 18.09.2024, recommended *inter-alia* as below for the routing of international long distance traffic:

"International Long Distance traffic should be routed through the network of Long Distance Authorised Entity/ NLD service provider, to the gateway of Long Distance Authorised Entity/ ILD service provider for onward transmission to international networks subject to fulfilment of any Guidelines/ Orders/ Directions/ Regulations issued from time to time by Central Government/ TRAI. Further, the Authorised Entity shall not refuse to interconnect with the Unified Service Authorised Entity/ Long Distance Authorised Entity/ ILD Service provider, having an ILD gateway, directly in situations where point of presence (POP) of Unified Service Authorised Entity/ Long Distance Authorised Entity/ ILD Service provider and switches (GMSC/ Transit Switch) of the Authorised Entity are located at the same station. " [Technical condition No. 6(5) in

¹ Full forms of the acronyms given in the diagram-

ASP: Access Service Provider, NLDO: National Long Distance Operator, ILDO: International Long Distance Operator, ILD Gateway: International Long Distance Gateway

Chapter VIII (Access Service Authorisation) on page No. 544 of the recommendations dated 18.09.2024]

- 2.8 In essence, any outgoing international long distance traffic from India should necessarily pass through an ILD gateway. Considering the above, **access service providers should route all outgoing international SMS messages through the ILD gateway for onward transmission to international networks.**

(2) Whether all incoming international SMS messages require to be routed through an ILD gateway?

- 2.9 It may be recalled that DoT, in the Reference dated 30.08.2022, had mentioned, *inter-alia*, that "[d]ue to interconnection of PLMN with Internet at different levels like network, devices, application etc. and deployment of the emerging technologies, enterprises use various means for dissemination of information to their customers. In the instant case, telemarketer applications provide an interface between PLMN and Principal Entity (PE) systems, which in turn invariably get connected with internet. Direct or indirect interconnection between PLMN and Internet throw-up policy and regulatory challenges which requires updating the license terms & conditions."
- 2.10 In this regard, the Authority, in the Recommendations dated 10.12.2024, noted that "one can, potentially, originate an A2P message in a foreign country, transport it through the internet/ leased lines to India, and then send it through a telemarketer to the PLMN of a telecom service provider. By using this method, an international SMS message may be camouflaged as a domestic SMS message, and thereby the levy of a legitimate international SMS termination charge may be avoided. To prevent such a camouflage, it would be appropriate to treat any incoming A2P SMS message as international SMS message if it cannot be generated, transmitted or received without the use or intervention of a computer system or application located outside India".

2.11 In essence, with a view to prevent the attempt of foreign entities and/ or telemarketers in India to camouflage an incoming A2P SMS message (which originated in a foreign country, was transported through the internet/ leased lines to India, and was passed through a telemarketer application located in India) as a domestic SMS message and thereby avoid the levy of the legitimate international SMS termination charge² on such a message, the Authority through the recommendation No. 3.3 recommended that any A2P SMS message, which cannot be generated, transmitted or received without the use or intervention of any electronic device, computer system or computer application located outside India should be treated as an international SMS message. **Any A2P SMS message delivered to access service providers by telemarketers in India should not be routed through an ILD gateway. However, all incoming international SMS messages (P2P SMS messages, and A2P SMS messages) originating in the PSTN/ PLMN of foreign carriers should be routed through ILD gateways for onward transmission to access service providers in India.**

² The Short Message Services (SMS) Termination Charges Regulations, 2013 issued by TRAI on 14.05.2013 provides, *inter-alia*, as below:

"Termination charges for Short Message Services (SMS):-----

Every Originating Access Provider shall pay to the Terminating Access Provider a termination charge of Re. 0.02 (paise two only) for each Short Message Service (SMS) terminated by it on the network of Terminating Access Provider;

Provided that termination charges for international incoming Short Message Service (SMS) shall be under forbearance."

DOT'S REFERENCE DATED 30.08.2022

F. No.20-405/2013-AS-I
Ministry of Communications
Department of Telecommunications
(Access Service Wing)
20, Ashoka Road, Sanchar Bhawan, New Delhi

Dated the 30th August, 2022

Subject: Issues related to definition of International SMS and Domestic SMS-seeking recommendations of TRAI.

Due to interconnection of PLMN with Internet at different levels like network, devices, application etc. and deployment of the emerging technologies, enterprises use various means for dissemination of information to their customers. In the instant case, telemarketer applications provide an interface between PLMN and Principal Entity (PE) systems, which in turn invariably get connected with internet. Direct or indirect interconnection between PLMN and Internet throw-up policy and regulatory challenges which requires updating the license terms & conditions.

2. TRAI, vide its letters dated M-7/1/16(37)/2021-QoS dated 25.10.2021, and 30.12.2021 has forwarded requests of M/s and M/s to DoT and asked to investigate whether the messages sent by them to their customers are domestic or international in nature.

3. The existing Licensing framework treats domestic & International traffic differently. As per licensing conditions, International traffic should be routed through networks of NLD/ILD operators as reproduced below:

"6.1 Inter-Circle traffic from one service area to another shall be routed through the network of NLD licensee or the Unified Licensee having authorization of NLD service.

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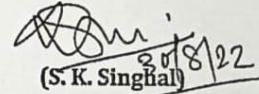
6.3 International Long Distance traffic should be routed through network of NLD service providers, to the ILD service provider's gateways for onward transmission to international networks subject to fulfilment of any Guidelines/ Orders/ Directions/ Regulation issued from time to time by LICENSOR/ TRAI. However, the Licensee shall not refuse to interconnect with the ILD Service licensee directly in situations where POP of ILD service licensee and Switches of Licensee's (GMSC/ Transit Switch) are located at the same station of Level-I TAX."

Further, as per Clause 2.6 (ii) in Access Service authorisation of UL:

2.6 (ii) Calls from International out-roamers shall be handed over at ILD gateway of Licensed ILDOs and International termination charges shall be paid

to the terminating Access Service providers. Further, calls originated outside the country using Internet telephony shall be routed to ILD gateway like any other International call.

4. Currently, no explicit Domestic and International SMS definition is available in License Agreements. As per TRAI's Telecommunication Interconnection Usage Charges (IUC) Regulations, termination charges on domestic SMS are regulated while termination charges on International SMS are under forbearance. However, the definitions of domestic SMS and International SMS are not provided in TRAI regulations also. Further, as per TRAI's Telecom Commercial Communications Customer Preference Regulations (TCCCPR), 2018, TSPs are required to notify the Code of Practice (CoP) for entities and some of the TSPs have defined International SMS under CoPs. Keeping in view the extant licensing framework & TRAI regulations, there is a need to define International SMS and Domestic SMS in the license agreement.
5. In view of above, TRAI is requested to provide its recommendations under Section 11 (1) (a) of TRAI Act, 1997 (as amended) on the definition of International SMS and Domestic SMS.
6. This is issued with the approval of Hon'ble MoC.


(S. K. Singhal) 8/8/22

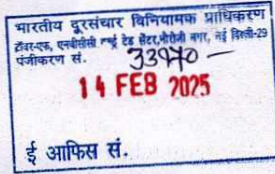
Deputy Director General (AS)
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To

The Secretary
Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhawan,
Jawaharlal Nehru Marg (Old Minto Road), New Delhi - 110002.

ANNEXURE-II

DOT'S BACK-REFERENCE DATED 13.02.2025



F. No. 20-1349/2025-LPA
Government of India
Ministry of Communications
Department of Telecommunications
(Licensing Policy Wing)
20-Ashoka Road, New Delhi-110001

Dated: 13.02.2025


Subject: Back reference on TRAI recommendations dated 10.12.2024 on "Definition of International Traffic" dated 10.12.2024"

This is in reference to the TRAI recommendations dated 10.12.2024 on "Definition of International Traffic" dated 10.12.2024".

2. The recommendations of TRAI on "Definition of International Traffic" dated 10.12.2024" have been considered in the Government and all recommendations are accepted in principle. However, a clarification is required from TRAI that whether all types of International SMSs including A2P messages, as explained in recommendation no. 3.3, shall necessarily be required to be routed through an ILD gateway.

3. Accordingly, as per Section 11(1) of the TRAI Act, 1997 (as amended), TRAI is requested to provide its clarification/recommendations within 15 days of receipt of this back reference.

4. This has the approval of the competent authority.


(Sunil Kumar Singh)
Deputy Director General (Licensing Policy)
Phone: 23036836

To,
The Secretary
Telecom Regulatory Authority of India
7th Floor, Tower-F,
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ACRONYMS

Acronym	Particulars
A2P	Application/ Advertiser to Person
CoP/ COP	Code of Practice
DoT	Department of Telecommunications, Government of India
GMSC	Gateway Mobile Switching Center
ILD	International Long Distance
ILDO	International Long Distance Operator
IUC	Interconnection Usage Charges
NLD	National Long Distance
P2P	Person to Person
PE	Principal Entity
PLMN	Public Land Mobile Network
PoP	Points of Presence
PSTN	Public Switched Telephone Network
QoS	Quality of Service
SMS	Short Message Service
TCCCPR	Telecom Commercial Communications Customer Preference Regulations
TRAI	Telecom Regulatory Authority of India
TSP	Telecom Service Provider
UL	Unified License