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Telecom Regulatory Authority of India
Mahanagar Door Sanchar Bhawan,
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New Delhi-110002

Ref: **ACTO's Response to TRAI's Consultation Paper dated November 8, 2019 on Review of Interconnection Usage Charges and counter response**

Dear Sir,

With reference to the *Consultation Paper on Review of Interconnection Usage Charges* issued by Hon'ble Authority, Association of Competitive Telecom Operators (ACTO), is pleased to provide its response and counter response.

We hope that our response (enclosed as Annexure - I) will merit consideration of the Hon'ble Authority.

Thanking you,
Respectfully submitted

Yours sincerely,
for **Association of Competitive Telecom Operators**

Tapan K. Patra
Director

Encl: As above

Annexure-I

ACTO's response on TRAI Consultation Paper on Review of Interconnection Usage Charges and counter response

ACTO compliments TRAI for initiating consultation process for review of Interconnection Usage charges with respect to International Termination Charges (ITC) in the country. Last review of ITC was made on 12th January 2018 and international long-distance call termination charge was revised to 0.30 Paise per minute & it was effective from 01st February 2018.

ACTO is pleased to submit the following response to the Telecom Regulatory Authority of India (TRAI) in response to TRAI Consultation Paper on Review of Interconnection Usage Charges dated 8th November, 2019.

ACTO respectfully submits that the interconnection regime should be service agnostic and technology neutral, allowing the provision of any telecom service on non-exclusive basis, anytime, anywhere, using any technology within the license area. The interconnection regime should recognize and provide flexibility to embrace future evolving technologies like Cloud Computing, and Machine to Machine (M2M) which represent tremendous opportunities, especially as their roll-out becomes more widespread, as also noted in NDCP-2018.

As technology has evolved and competition has intensified, many forms of interconnection have emerged. All involve the linking of networks to enable customers of one network to communicate with customers of another network or to have access to services offered by another network operator. With the passage of time, the IUC regime per se has also come of age.

While we provide issue wise response, we would like Hon'ble Authority to further reduced ceiling as per the prevailing practice of continued reduction done in the past or consider forbearance. Alternatively the ITC charge needs to be aligned with the domestic IUC charge, i.e., a single charge regardless of international or domestic call.

Q.1 Keeping in view the changes happening in the international telephony market structure, is there a need for change in the regulatory regime for International Termination Charge (ITC) i.e. change the existing regulatory regime from fixing uniform rate of ITC to an alternate approach? Kindly justify your comments with supporting arguments.

ACTO's response:

The existing regulatory regime for IUC, notified vide the Telecommunication Interconnection Usage Charges Regulation, 2003 (4 of 2003) dated 29.10.2003, for outgoing international long-distance calls, the international carriage charges and international termination charges at the foreign end are under forbearance. These charges are mutually agreed between Indian

International Long-Distance Operators (ILDOS) and international carriers or service providers at foreign countries. However, the ITC for incoming international long-distance call in India is regulated and presently fixed @ of Rs. 0.30 per minute. In many countries, with whom India have significant volume of ILD traffic, the international termination charges have been kept under forbearance. It has created asymmetry in two ways.

1. ITC is regulated but outgoing calls are under forbearance in our country. Asymmetry in our country for incoming and outgoing traffic.
2. The countries with whom India have significant volume of ILD traffic, have kept the ITC under forbearance but it is not in India. Asymmetry between our country with other countries.

ACTO suggest that International Termination Charge (ITC) to be further reduced ceiling as per the prevailing practice of continued reduction done in the past or consider forbearance. Alternatively the ITC charge needs to be aligned with the domestic IUC charge, i.e., a single charge regardless of international or domestic call. There are several other reasons to go for it.

ACTO do not suggest for any regulatory intervention for revenue share between access provider and ILDOs in view of prevailing competition in both the categories and thus it best be left to be decided by market forces on mutual agreement basis but an upper ceiling may be determined by TRAI.

It is preferable that international settlement rates be determined through commercial negotiations between the ILDOs that are exchanging traffic. The ILDOs will be in the position to make judgments based on market trends in termination rates for international traffic.

ACTO believes that International voice segment may be left on market forces. The global market for international termination is complex and subject to frequent change, including on a specific route(s). Thus, it is unrealistic to establish regulated levels for international termination on specific routes. ILDOs in India and those elsewhere are to established basis commercial negotiations at different levels for the termination of traffic from rest of the world.

TRAI consultation paper and *the IUC Regulations, 2018 dated 12.01.2018* also recognized the *complexity of international termination due various factors like average price of local and long distance calls in the domestic market, prevalent rates for International Settlement Charges and ITC in the international markets, variations in the forex rates*, which are not in the control of the regulators or Telecom services providers.

“2.9. The Authority prescribed the ITC, after analysing, the relevant factors which include, but are not limited to, cost of terminating the call in the access network, risk of diversion of incoming international voice calls from carrier route to OTT and grey market route, average price of local and long distance calls in the domestic market, prevalent rates for International Settlement Charges and ITC in the international markets, variations in the forex rates, interests of the Indian consumers and services providers etc. All these factors are elaborated in Explanatory Memorandum (EM) to the IUC Regulations, 2018 dated 12.01.2018.”

There is no need to fix a floor for the international carriage charges for incoming traffic, as long as the ILDOs that are exchanging traffic are fully enabled to enter into commercial agreements for such charges. Creating a floor could distort the market and would preclude ILDOs from responding to market trends and expanding the volume of traffic exchanged. It is unclear what the basis for such a floor would be and why its imposition would benefit the sector. If there is evidence of anti-competitive conduct by an access provider or an ILDO, the Authority should be in the position to take action on a case-by-case basis.

Therefore, ACTO suggest that International Termination Charge (ITC) to be further reduced ceiling as per the prevailing practice of continued reduction done in the past or consider forbearance. Alternatively the ITC charge needs to be aligned with the domestic IUC charge, i.e., a single charge regardless of international or domestic call. There are several other reasons to go for it.

The current ITC rate of 0.30 INR was implemented in 2018 after TRAI implemented a reduction. We saw a reduction in call termination rate to India as a result. It is therefore likely that if TRAI reduces the ITC further, the market rate will drop and ensure cost savings at the consumer's end. At a minimum, there is no longer justification to have different rates for ITC (for international) and IUC (for domestic). We also support doing away with the ITC altogether. There is enough competition in the Indian market to keep the rates down.

Q.2 If your response to the Q1 is affirmative, then what should be the alternate approach? Kindly elucidate the alternate approach and benefits of the same vis-à-vis the present approach.

ACTO's response:

ACTO fully supports the TRAI view as mentioned in the consultation paper clause no. 2.26 and 2.27

"Instead of fixing the ITC rate, just like termination charges for outgoing international calls, forbearance regime may be considered for incoming international calls ITC rate i.e. leaving the ITC rates for negotiation between ILDOs and access providers. Since, most of the access service providers operating in India have ILD operations also i.e. they are integrated access cum ILD operators, such negotiations would be between Indian service providers and foreign service providers. Such flexibility given to service providers may provide required space to them for innovation in charging and tariff models. If such option is considered, then it may be necessary for access cum ILD service providers to offer matching termination rates in transparent and non-discriminatory manner to standalone ILDOs also. It may help access cum ILD as well as standalone service providers to negotiate ITC rates in such a manner that it balances the interests of Indian service providers as well as foreign service providers. In the data centric world, it may not only help in ensuring level playing field amongst Indian and foreign service providers but also in countering the onslaught from OTT communication apps."

The competition in this segment is high and there many factors which are not under the control of regulator including the challenges from OTT. In this scenario, the option of forbearance with

upper ceiling determined by TRAI will give better negotiating power to the TSPs and to deal with the challenges from OTT. TSPs can also negotiate with others TSPs in our country or with other countries either volume based or flat rate charges. This flexibility will not be available to the TSPs, if forbearance with upper ceiling determined by TRAI is not allowed.

The concern expressed in clause no. 2.28 in this consultation paper for forbearance does not arise due the significant presence of OTT services.

This consultation paper clause 2.18 also made it clear that many countries to whom we send major proportion of outgoing international long-distance calls, the international termination charges have been kept under forbearance. The traditional bilateral agreements have moved to a regime basis bulk minutes. The routing is done through routes which offers lesser bulk minute rates. In such a scenario, there is little significance to have such rates regulated with no forbearance.

“2.18. As noted earlier also, the ITC for incoming international long-distance call in India is regulated and presently fixed @ of Rs. 0.30 per minute. This is not the position in case of many countries to whom we send major proportion of outgoing international long-distance calls. In many countries, with whom India have significant volume of ILD traffic, the international termination charges have been kept under forbearance. It has come to the notice of the Authority that, in many cases, the foreign operators fix comparatively high international termination rates for outgoing calls from India. Such high rates for termination are fixed either by their regulator or by such TSPs themselves after commercial negotiations.”

Keeping in view of above arguments, ACTO suggest for forbearance of ITC for incoming international long-distance call in India as it is adopted in many countries and as in case of outgoing international long-distance calls, the international carriage charges and international termination charges at the foreign end are under forbearance.

ACTO would still ask for elimination of the ITC and IUC altogether and let the market determine the price for call termination. This will allow TSPs to negotiate “sender keeps all’ agreement and not worrying about the incremental cost of each minute being sent, which in effect allowing carriers on both side to compete more effectively with OTT providers.

Q.3If your response to the Q1 is negative, then in the changing international telephony market structure, what other regulatory measures are required to be taken by the regulator for protecting the interests of Indian consumers and service providers? Kindly justify your comments with supporting arguments.

ACTO’s response:

Our response to Q1 is affirmative.

Q.4 Your comments on any other issue related with the international termination charges may also be given.

ACTO's response:

While the paper is focused on the ITC, we would also like urge for elimination of PSTN interconnect restriction. If the Hon'ble Authority can consider the same along with ITC. This would allow carriers more flexibility in connecting to their IP network with public PSTN. Given that all carriers are aggressively migrating voice traffic away from TDM to VOIP, it's imperative that TRAI also relaxes the rules surrounding international call routings. TRAI should let the carriers decide network topology based on the most cost effective and technically sound solution rather than imposing restriction based on outdated PSTN model.

NDCP-2018 has stated in the strategy to review such restrictions.

“E. Strategies:

(i) (d) By restructuring of legal, licensing and regulatory frameworks for reaping the benefits of convergence;

*E (iii) (w) **By reviewing the policy of IP- PSTN connectivity;**”*

1.1 “ (g) Enabling Infrastructure Convergence of IT, telecom:

i Amending the Indian Telegraph Act, 1885 and other relevant acts for the purpose of convergence in coordination with respective ministries

iii Restructuring of legal, licensing and regulatory frameworks for reaping the benefits of convergence.

iv Allowing benefits of convergence in areas such as IP-PSTN switching.”

4. “The convergence of voice, video and data services has also become reality now. In the converged world, while the traditional telecommunication networks are being extensively used to deliver video services, after digitization, the cable TV networks are being increasingly used to provide fixed line broadband services. In order to meet the growing demand for the video, it would be necessary to encourage development of converged broadband and broadcast networks, development of cloud infrastructure for Video on Demand (VoD) services, and increase in high-speed broadband subscriptions. While video distribution in broadcast mode can fulfill the need of masses, the video on demand can meet the specific requirements of the consumers. Convergence of the networks can ensure efficient utilization of the available resources. The convergence of information, communication, and broadcasting services is creating vast new capabilities that are benefiting individual, businesses, and society as a whole.

5. The digital transformation is emerging as a key driver of sweeping change in the world around us. The telecommunication industry is at the forefront of this transformation. The convergence of the digital and physical products through M2M and IoT services and applications is paving the way for Fourth Industrial Revolution (Industry 4.0). It represents a transition to a new set of systems that bring together digital, biological, and physical technologies in new and powerful combinations. Industry 4.0 is being built around the IoT/M2M infrastructure and services for which the availability of ubiquitous digital communication services; low-cost processing and high-density data storage; and an increasingly connected population of active users of digital technologies are pre-requisite. Therefore, just like physical form of connectivity like Roadways, Railways, Airlines, and Waterways, telecommunication

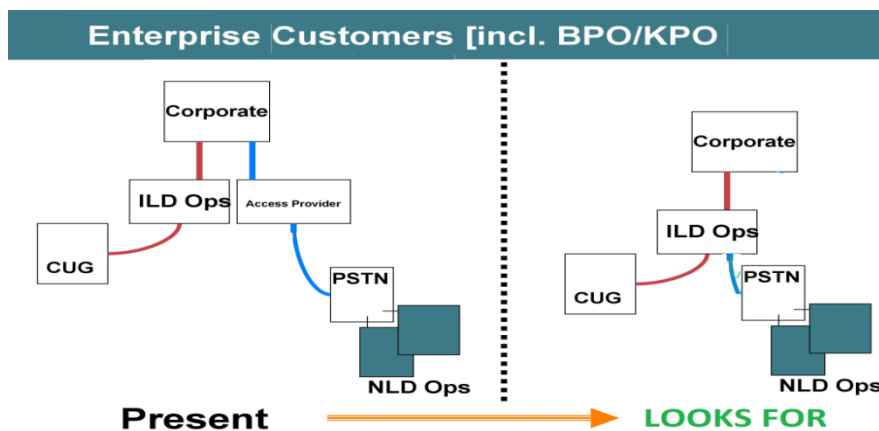
networks i.e. I-ways are also becoming essential infrastructure for economic development in the country.”

Current restriction on PSTN connectivity:

Current license condition restricts the PSTN interconnection for ILD operators vide license clause no. 2.2(b)

“2.2 (b)ILD service provider can enter into an arrangement for leased lines with the Access Providers/NLD service provider. Further, ILD Service Providers can access the subscribers directly only for provision of international Leased Circuits/Close User Groups (CUGs). Leased circuit is defined as virtual private network (VPN) using circuit or packet switched (IP Protocol) technology apart from point to point non-switched physical connections/transmission bandwidth.

Public network is not to be connected with leased circuits/CUGs.”



The above diagram illustrates the current restriction and what we are looking for in the case of enterprise customers like BPO/KPOs.

The current restriction on ILDOs to PSTN poses a major barrier in achieving interconnection of traffic, services and devices.

Interconnection of IP-IP, IP-PSTN has been allowed in access license

DoT has allowed Interconnection over IP Networks allowed vide its amendment dated 19th April 2016 in UL vide license clause 27.3.

27.3 Interconnection between the networks of different licensees for carrying circuit switch traffic shall be as per national standards of CCS No. 7 and for carrying IP based traffic as per Telecom Engineering Centre (TEC) standards as amended from time to time by Telecom Engineering Centre (TEC) and also subject to technical feasibility and technical integrity of the Networks and shall be within the overall framework of interconnection regulations/directions/orders issued by TRAI/Licensors from time to time. For inter-networking between circuit switch and IP based network, the Licensee shall install Media Gateway Switch. Further the Licensor may direct the Licensee to adopt any other technical standards issued by TEC on interconnection related issues.

With the implementation of the above amendment, now, it is evident that the probable security concerns or technological issues are no longer the reasons to restrict PSTN connectivity for ILDOs. Any security related concerns are same as it is for access service providers and ILDOs. All required security concerns and other requirement for the interconnection like IUC/Numbering etc will be applicable to ILDOs as it is in case of access service providers. Any concern related to by passing of international traffic does not apply as ILDOs are the only operators responsible for carrying the same and all other rules like IUC will also be similarly applicable. Moreover IUC regime in India has gone through drastic change and from 2020 onwards IUC will be nil as recommended by TRAI.

Therefore, we suggest TRAI to recommend DOT to allow the TSPs like ILDOs to have PSTN connectivity by removing the current regulatory restriction as mentioned above, in order to increase the level of competition for the benefit of the growth of BPO/KPO sector in our country.

Benefits of CUG-PSTN Interconnection:

- Reduction of operational costs by enabling the most direct routing possible, avoiding unnecessary costs from transit carriers and hops.
- Increased quality of voice calls and features through minimizing all unnecessary transcoding and unnecessary hops from transit carriers.
- Full end-to-end cross-network interconnect for new IP multimedia services.
- Flexible commercial models, including traditional bilateral settlement, cascade payment and settlement-free (also known as “bill and keep”) models.
- Creation, management and negotiation of interconnection agreements, ranging from very simple to extremely complex, among multiple operators.

In order to realize the full potential of the convergence of services, network and devices pursuant to clause 4 &5 of NDCP-2018, the existing restrictions and barriers on linking different PSTN, IP, Virtual Private Network (VPN) and Closed User group (CUG) networks should also be removed to ensure seamless interconnection. In particular, facilitating CUG/VPN-PSTN interconnection and the interconnection of IP and TDM networks is vitally important for the continued growth of the Business Process Outsourcing (BPO) and Enterprise Data Services sectors. Without such interconnection, these sectors must continue to undertake unnecessary investment in duplicating facilities separately on voice and data networks. Convergence will enable a much advanced and open IP platform for these important sectors of the Indian economy which will enhance the end-user experience and will efficiently address the growing needs of these businesses by enhancing the benefits of both CUGs and the PSTN.

ACTO requests TRAI to recommend DOT to remove the existing restrictions on linking different PSTN, IP, Virtual Private Network (VPN) and Closed User group (CUG) networks in order to ensure seamless interconnection in line with the objectives of NDCP-18. This step would will also provide important benefits to BPOs and other enterprises in India and stimulate the further growth of this very important economic sector.
