

Telenor (India) Communications Pvt. Ltd.

(Erstwhile Telewings Communications Services Pvt. Ltd.) The Masterpiece, Plot No. 10, Golf Course Road, Sector 54, DLF Phase-V, Gurgaon, Haryana-122 002.

www.telenor.in

T: +91-124-3329000 F: +91-124-3329996

17 October 2016

Shri Arvind Kumar

Advisor (Broadband & Policy Analysis) Telecom Regulatory Authority of India Mahanagar Doorsanchar Bhawan Jawahar Lal Nehru Marg New Delhi 110002

Subject: Consultation Paper on "Review of Interconnection Usage Charges"

Dear Sir,

This is with reference to the above referred TRAI consultation paper No. 17/2016 dated 05.08.16 and press release no. 89 & 96/2016 dated 02.09.16 & 23.09.16 respectively. In this regard, please find enclosed our response to the consultation paper as an Annexure to this letter.

We hope that the TRAI will find our response useful and consider our inputs while finalising the Regulation on this subject.

Thanking you,

Yours sincerely,

For Telenor (India) Communications Pvt. Limited

(Pankaj Sharma)

Chief Corporate Affairs Officer

Encl: a.a



Telenor (India) Response to TRAI Consultation Paper on Review of Interconnection Usage Charges (No.17/2016 dated 05 August 2016)

Preamble

Telenor (India) welcomes the consultation on review of interconnection usage charges (IUC) as per the guidance in the 11th amendment to IUC Regulation (1 of 2015). The Authority has rightly noted in para 1.24 that a comprehensive review takes 6 to 9 months to complete. It would be most appropriate to implement from next financial year.

Our present submission is an extension to our earlier submissions of Dec 2014 and Jan 2015 wherein we had submitted our detailed response and also submitted the cost model. We present a few data points which have changed since the consultation exercise was done in Dec 2014.

1. Spectrum for Data (LTE / UMTS)

In the past auctions held in Year 2010, 12, 13, 14 & 15 around 2500 Mhz of spectrum has been acquired. Notable amongst them is that more than 85% of this spectrum has been acquired for data. During the recently concluded auction in Oct 2016 a total of 964.8 Mhz of spectrum has been sold, this is almost entirely for data networks. The trend has continued in the present round of auction as well, taking the data spectrum to 90% of all spectrum acquired through auction held in Year 2010-16. Hence, only the apportioned cost of spectrum which is utilized for voice should be used in the calculation of MTC.

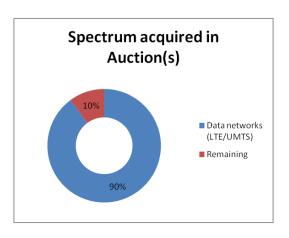


Table1: Spectrum acquired v/s used for data (LTE/UMTS)

2. LTE / UMTS network growth - there are no networks launched usina standalone 2G technology in the past four years. Increasingly the additional CAPEX is done in deploying LTE and UMTS networks. Hence, the cost incurred should be proportionately apportioned towards data networks and voice networks. The later part of the CAPEX is applicable for voice; the incremental portion of this cost utilized for terminating calls should be used for calculating MTC and FTC for voice.

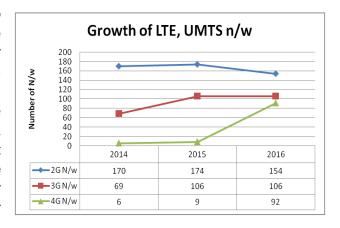


Table 2: Growth of 2G, 3G and 4G networks



3. Network modernization and efficiency -

practically all telecom service providers have embarked upon the path of modernizing their networks. This is to carry traffic on IP in major parts of their network and to cater to the requirements of the market. We at Telenor (India) have modernized 60% of our network, thus bringing 20% additional coverage with the same number of sites and around 25% efficiency in power consumption due to smaller footprint of the core and radio nodes. The transmitter in the radio access network (RAN) has been moved nearer to the antennae, thus minimizing RF cable losses and increasing power efficiency.

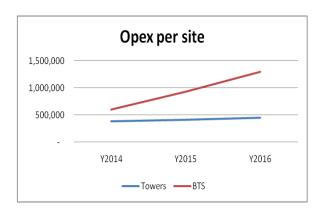


Table 3: Growth in towers v/s BTS

Another important data point is the growth in number of physical towers (excluding IBS, pole sites etc.) from 2014 to 2016 and the corresponding exponential growth in number of BTS for 2G and LTE/UMTS. Over the past two years from 2014-16 the tenancy ratio per site in terms of technology wise BTS has increased leading to reduced OPEX per BTS.

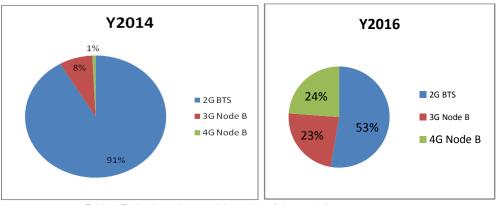


Table 4: Technology wise growth in number of sites 2014 / 2016

TRAI consultation on IUC is timely and expected outcome will further bring down the mobile termination charges in view of technology advancement and market dynamics stated above in SI. No. 1 to 3. We believe that any downward revision will not only strengthen the competitive framework but also ensure better tariff offerings for end consumers maximizing economic value for their telecom spend. However, such IUC review should be cost based which is the most appropriate approach for setting the termination charges for both wireless and wireline services.

Based on the efficiencies enumerated in Sl. No. 1 to 3 we have reworked the inputs to the Cost Model submitted to TRAI in Jan 2015. We have recalculated and find that **the pure LRIC based MTC has reduced to under 7 paisa** for an efficient national operator.



- 4. Cost Based V/s Bill and Keep We do not support introduction of Bill and Keep, an approach which we believe is particularly ill-suited to a country such as India which has a calling party pays (CPP) regime coupled with large differences in footprint and traffic imbalances between mobile operators.
 - As a principle, charges should always be aligned with a measure of costs in order to get the optimal economic efficiency in any market. TRAI should apply a **cost-based** (equal to cost) approach to the Mobile Termination Charge and Fixed Termination Charge, on the basis of **pure long-run incremental costs**. This method best serves inter-operator competition and efficiency in the Indian market, which in turn supports long-term market development to the benefit of consumers.
- 5. Cost based termination provide incentive to maintain QoS given the present traffic imbalance between different operators in Indian market and as we see the ongoing consolidation of services and networks. We believe that the imbalance will remain significant over the next 4-5 years. This will provide enough incentive for the terminating network to carry the call to it's destination, as opposed to BAK. Till such time only a cost based approach rather than BAK should be followed.
- 6. Pure LRIC is best suited for estimation of costs as a regulatory best practice the competition regulator (CCI) has also adopted <u>pure long run average incremental cost based method</u> for the purpose of calculating the cost of goods and services to maintain the competition efficiency in the market. Please refer our response to Q2 for details.
- 7. BAK for Wireline originated services has created arbitrage we submitted during the last consultation that the calculation of FTC should be based on costs. The Authority fixed the FTC at 0 paisa, along with fixed originated MTC, disregarding cost based calculation. This has opened the floodgates for small and medium entrepreneurs attempting to exploit this opportunity for regulatory arbitrage. While 0 FTC may have contributed to minor gains in the form of stemming the slide in wireline numbers (though evidence for causality is sketchy at best) it does not justify the harm caused by the existence of arbitrage between mobile originated and fixed originated MTC. Hence, we request the Authority to plug this gap of routing free calls through the 0 charge route and set a uniform MTC.

Key Submissions:

- I. TRAI should continue to use cost based approach in estimation of termination charges for both Wireless and Wireline services.
- II. TSPs estimating 35 paisa MTC in last consultation are offering On-net calls and STD calls at much lower rates.
- III. Cost of spectrum used for data networks to be excluded from the calculation.
- IV. Efficiency achieved with increase in BTS (3G/4G) on the same tower and also by deploying modern energy efficient nodes should be factored in calculations.
- V. The Competition Commission of India vide the Determination of Cost of Production Regulations, 2009 has adopted long run average incremental cost



- methodology to calculate **the marginal cost** when the quantity produced changes by one unit.
- VI. Authority had used *pure LRIC* as a method of estimation in Y2011. We urge TRAI to consider it as one of the methods in view of the new facts presented in our response to Q2.

Question wise Response

- Q1. In view of the recent technological developments in the telecommunication services sector, which of the following approaches is appropriate for prescribing domestic termination charge (viz. mobile termination charge and fixed termination charge) for maximization of consumer welfare (i.e. adequate choice, affordable tariff and good quality of service), adoption of more efficient technologies and overall growth of the telecommunication services sector in the country?
 - (i) Cost oriented or cost based termination charges; or
 - (ii) Bill and Keep (BAK)?

Please provide justification in support of your response.

Response:

Telenor India believes that the most appropriate approach for determining the mobile termination charge (MTC) and fixed termination charge (FTC) is <u>cost based</u> and conversely recommend against the Bill and Keep (B&K) approach which fails to take into account any of the costs incurred by the terminating operator.

Reasons in support of **cost based** approach:

- Cost-based pricing is supported by economic theory and provides the appropriate price signals to originating networks and their subscribers for causing cost on the receiving operator.
- Orienting" termination costs on the basis of a "rule of thumb" such as the "cost of termination should equal the cost of origination" is also inappropriate. This is because this method neglects the different costs required to support termination and origination (such as sales and marketing costs which do not support the origination of off-net minutes, i.e. wholesale minutes purchased by another operator). It also neglects the economics of the two-sided the market which is that operators are buyers and sellers of termination. As buyers and sellers, incumbents may have the incentive to keep charges high to limit competition from the smaller players, on the basis of traffic imbalances.
- Setting prices equal to cost (based on cost) is the appropriate method. Simply "orienting" prices towards cost is not specific, and could be interpreted in different ways, including



liberal glide paths. We believe this makes "orientation" subject to lack of robustness and could be too lenient.

 The use of a <u>cost-based</u> rather than a <u>cost-oriented</u> approach is likely to result in lower termination charges which should benefit consumers by improving competition. The resulting increase in competition will incentivise the operators to make continuing efficiency improvements.

Reasons for not adopting BAK approach:

- BAK clearly is not cost oriented and will not send economic efficient price signals to the market. Rather it will distort the market by setting the tariff below cost. Such distortion has been clearly observed through the exploitation of 0 fixed-to-mobile MTC.
- In the event that the terminating operator is not allowed to recover it's incremental cost in completing the call, he will have little incentive to complete the call, thereby degraded QoS.
- If BAK regime would be implemented, it would discourage further investments to support
 incoming calls and inter-circle transmission (e.g. gateways, incoming call capacity,
 efficient and diverse location of points of interconnect, quality of service for crossnetwork calls) resulting in increased congestion and reduced quality of service. It could
 also lead operators to price calls to other networks to reflect the zero contribution to the
 destination network, or route calls inefficiently by near end handover.
- No incentive for well established operators to carry calls of other operators, impacting
 quality of service and consumer dissatisfaction resulting into low uptake of services of
 smaller / sub-national operators.
- BAK approach will pave the way for exponential increase in the unsolicited SMS/ Calls
 due to lower cost of making promotional calls to subscribers of terminating networks. We
 site the following two examples from India.
 - a) During the past when SMS termination was in BAK regime, all operators' subscribers were flooded with unsolicited SMS leading to regulatory interventions by TRAI.
 - b) BAK regime was introduced in wireline in Feb 2015, since then various internet companies with no network have tried to exploit this 0 FTC / BAK regime to flood mobile networks will 0 charge calls, while themselves earning revenue through advertisements.
- No adoption of BAK approach has been seen even in matured markets. Wherever, BAK
 has been implemented, only through voluntary action or for historical reasons and not by
 regulatory intervention.



 BAK approach has been adopted by very few countries globally where traffic is generally symmetric and low level of competition or mobile consumers pay for incoming calls providing an alternative means of funding the terminating operator's cost, thereby these markets are not comparable with India. Refer the table-1 for the details of countries adopted BAK approach.

<u>Table – 5: Adoption of BAK approach globally</u>

Country	Charging Method (CPP/ RPP¹)	Termination charges regulated
China	RPP	Yes
USA	RPP	M to M – No (commercially negotiated) F to M & M to F – Yes (Reciprocal)
Canada	RPP/ BAK	No
Singapore	RPP	Yes
Hong Kong	RPP	No (Free to set parties agree for BAK)

- Given the entry of TSPs at different points in times and present in different frequency bands and some of them being pan India operators and others being sub-national operators, there are traffic imbalances between all networks. Thus, BAK is ill-suited to country such as India which has a calling party regime coupled with large differences in footprints and traffic imbalances between mobile operators.
- The impact of technology advances, convergence of services and deployment of IP based high speed data networks cannot bring down the termination cost as zero and hence cannot be assumed that BAK regime is best suited for India.
- BAK method has fundamentally different parameters and therefore the application of any glide path towards this regime is also inconsistent with regulatory principles and policy goals for the Indian telecommunication sector at large. Further, as per generally accepted regulatory principles/practices, Bill and Keep (B&K) cannot be implemented under the CPP Regime.

Q2. In case your response to the Q1 is 'Cost oriented or cost based termination charges', which of the following methods is appropriate for estimating mobile termination cost?

- (i) LRIC+
- (ii) LRIC
- (iii) Pure LRIC
- (iv) Any other method (please specify)

¹ CPP – Calling Party Pays, RPP- Receiving Party Pays



Please provide justification in support of your response.

Response:

Telenor India recommends **cost based** method for estimation of mobile termination cost based on the Pure LRIC (Pure Long Run Incremental Cost). We believe this method is most appropriate for determining mobile termination charges and best serves inter-operator competition and efficiency in the Indian market, which in turn supports long-term market development and sustainability to the benefit of consumers.

Our justifications for adopting a *pure LRIC* approach are as follows:

- Pure LRIC is now the preferred approach of regulators in Europe and other parts of the world for setting mobile termination charges. A number of leading regulators around the world have now adopted the Pure LRIC cost based approach to setting MTCs because it is economically efficient and transparent and because it benefits consumers.
- Telenor India believes the setting of IUC to a level of avoidable cost is the least intrusive solution to reduce the anti-competitive behaviour in the market. This methodology provides the best conceptual framework for estimating the marginal cost of interconnection which ensures operators are compensated for their avoidable costs related to terminating off-net calls in their network. This cost based approach is based on the 'Avoidable Costs' concept as recommended by the European Commission and being implemented by European regulators including OFCOM.
- The pure LRIC approach will reduce the ability of larger operators to discount onnet calling while recovering a proportion of their costs from other operators through the inflow of mobile terminated minutes. At the same time, the pure LRIC approach to MTCs improves the ability of smaller operators to offer flat-rate any-network calling. The resulting increase in competition will benefit consumers and improve dynamic efficiency.
- The pure LRIC approach means that customers of networks with lower levels of coverage will not be subsidising the additional coverage costs of networks with higher levels of coverage which should, therefore, be borne by the customers of the networks that offer higher levels of coverage (especially for interconnection between circles where the interconnecting operators may not have competing retail offers).
- Pure LRIC based MTCs do not contribute to network common costs that are also supporting data and other origination services, meaning that their operators will need to consider the provision and pricing of coverage and capacity for retail services un-subsidised by incoming MTCs.



Implementation of Pure LRIC model (India and globally):

- The Competition Commission of India vide Determination of Cost of Production) Regulations², 2009 has adopted pure long run average incremental cost based method for the purpose of calculating the cost of goods and services to maintain the competition efficiency in the market. This can be seen as best practice for determination of costs across sectors 'horizontal regulation'.
- The list of national regulatory authorities who have applied cost-based pricing for mobile termination is too long to include here, but includes leading regional regulators such as Ofcom (UK), ARCEP (France), ACCC (Australia), ICASA (South Africa), MCMC (Malaysia) and ANATEL (Brazil).
- Currently, 26 National Regulatory Authorities in the European Economic Area (EEA)
 have implemented the Recommendation for mobile termination rates and have pureLRIC-based mobile termination rate applicable. Refer below table depicting list of
 countries adopted pure LRIC costing model for estimation of mobile termination
 charges.

Table – 5: Adoption of Pure LRIC Model globally

Pure LRIC implemented	MTR rates via benchmarking of other countries that applied pure BU-LRIC
Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, France, Greece, Hungary, Italy, Luxembourg, Malta, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom	Cyprus, Estonia, Iceland, Latvia and Lithuania

Pure LRIC has also been adopted by regulators outside the European Union, such as those in Norway Jamaica, Kenya, and Tanzania. Only two³ countries do not follow the Recommendation for MTR within the EU(Finland, and Netherlands)

• BEREC (Body of European Regulators for Electronic Communications)⁴ has been arguing in their recent submission to EU that in its opinions, in the case of termination services, that the pure BU-LRIC is the approach best suited to facilitate a more efficient distribution of financial transfers between competing operators and, consequently, by eliminating competitive distortions in the termination markets, also to contribute to a level playing field between all fixed and mobile operators. Additionally, continuing to base the calculation of TR on a pure BU-LRIC approach will maintain regulatory certainty for stakeholders. Further, BEREC concluded that:

 $^{^2 \ \}underline{\text{http://www.cci.gov.in/sites/default/files/regulation pdf/cost pro.pdf}}\\$

³ Not counting Germany, which will apply pure LRIC from 1. December 2016

⁴ http://berec.europa.eu/eng/document_register/subject_matter/berec/others/6087-berec-response-to-the-european-commission8217s-public-consultation-on-the-evaluation-of-the-termination-rates-recommendation



"By adopting the TR Recommendation, and, therefore, the recommended pure BU-LRIC approach, NRAs ensure that the costing methodology chosen supports efficient production and consumption decisions; minimises artificial transfers and distortions between competitors and consumers; and best promotes competition by, among other things, ensuring that all users derive maximum benefit in terms of choice, price and quality".

Q3.In view of the fact that the estimates of mobile termination cost using LRIC method and LRIC+ method yielded nearly the same results in year 2011 (as filed in the Hon'ble Supreme Court on 29.10.2011) and in year 2015 (as estimated for the Telecommunication Interconnection Usage Charges (Eleventh Amendment) Regulations, 2015 dated 23.02.2016), would it be appropriate to put to use the estimates of mobile termination cost arrived in the exercises of year 2011 and year 2015 in the present exercise?

Q4. If your response to the Q3 is in the negative, whether there is a requirement of running the various LRIC methods afresh using the information on subscriber, usage and network cost for F.Y. 2015-16 for estimation of mobile termination cost?

Response:

- TRAI should not consider estimates of mobile termination cost arrived in the exercises of year 2011 and year 2015 for the present exercise to determine the mobile termination cost.
- Telenor India strongly recommends to do this activity afresh using the information on subscriber, usage and network cost for FY 2015-16 for the estimation of mobile termination cost.
- In case of Telenor India, the cost for 2G networks is already available with the Authority and the cost of the other 3G and 4G networks in the country is also available with the Authority, these are more efficient than 2G networks.
- Consistent with a pure LRIC methodology, Telenor India does not see it as appropriate
 to include the cost of spectrum in the calculation, as the amount of spectrum held by an
 operator is not determined based on termination voice traffic. This is particularly true
 now that the majority of the spectrum is used for data services.
- Fresh investments are done mainly in 3G/ 4G networks, no new 2G network on standalone basis has been launched in the past 4 years. Hence, **CAPEX towards data** networks should be excluded from calculation of voice termination.
- Further, it has been examined that per BTS cost has been reduced significantly (refer below Table -3) in last one year due to launch of 3G & 4G networks. There are around five lakh additional BTSs have been deployed vis-a-vis marginal increase in the number of towers.



	Year 2014-15	Year 2015-16
Towers	370,000	450,000
BTs	850,000	1,300,000

This **reduced OPEX** needs to be considered by Authority while doing the calculations.

Q5. In what manner, the prescription of fixed termination charge as well as the mobile termination charge from wire-line networks as 'zero' through the Telecommunication Interconnection Usage Charges (Eleventh Amendment) Regulations, 2015 is likely to impact the growth of the Indian telecommunication services sector as a whole? Please support your viewpoint with justifications.

Response:

The PSUs – BSNL and MTNL appear not to have received any significant benefit from zero FTC. Their subscriber market share is continuously reducing. For instance, during the period Dec-15 to May -16, the subscriber growth was -4.5% put together in both the PSUs.

- While the anticipated positive effects of setting FTC and fixed-originated MTC equal to 0, seem elusive, a harmful side-effect is much in evidence. The introduction of BAK for wireline services vide last amendment of IUC regulation has created an arbitrage opportunity between fixed and mobile networks, as calls originating on mobile network face an MTC of 14 paise, whereas calls seemingly originating on fixed networks face MTC of 0. This has been exploited by a few in the recent past for routing of calls through fixed networks into mobile networks. We doubt this was the intended aim of the regulation, hence we urge that this is revisited and corrected by arriving at a cost based FTC and MTC.
- In Telenor's view, the termination charge should always be based on cost. This
 means the termination charge should depend on the terminating network
 irrespective of the nature of the originating network wireless (mobile) or wireline
 (fixed line).
- The opportunity of arbitrage due to (huge) differential in MTC and FTC should be plugged by keeping both as equal.

Q6. Whether termination charges between different networks (e.g. fixed-line network and wireless network) should be symmetric?

Response:

• The traffic between different networks (fixed line network and wireless network) should not necessarily be symmetric.



- As recommended by Telenor India, pure LRIC method should be used to determine MTCs, and we believe it is logical to use the same approach to determine FTCs. As cost structures in mobile and fixed networks are different, one can expect FTC and MTC to be different, and the approach should thus allow for asymmetry.
- However, at the same time it is a prudent regulatory practice to avoid arbitrage. In this case the 0 FTC decision of authority has resulted in unintended market reaction. Hence we recommend that FTC and MTC should be equal. Please refer our answer to Q5 for details.

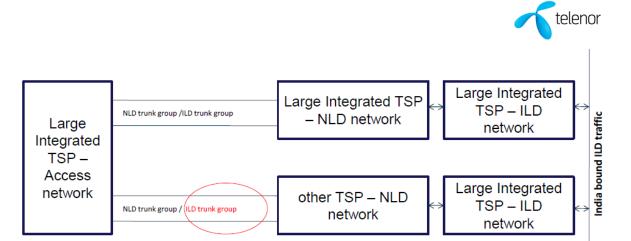
Q7. Which approach should be used for prescribing International Termination Charge in the country? Should it be kept uniform for all terminating networks?

Response Q8 & Q9:

- The principle of reciprocity resulting in differential charging for different countries is not a viable option as the resulting arbitrage will open grey market possibilities where ILD calls will be re-routed from higher termination geographies through lower termination geographies towards India.
- On the principle of parity, we propose that International Termination Charge for incoming calls should be suitably raised from the present level to balance the skew in incoming to outgoing traffic.
- The international termination charge should continue to be kept uniform across all terminating networks.
- Q8. Whether, in your opinion, in the present regulatory regime in the country, the standalone ILDOs are not able to provide effective competition owing to the presence of integrated service providers (having both ILDO and access service licenses) and, therefore, there are apprehensions regarding sustainability of the stand-alone ILDOs in the long-run?

Response:

- There is intense competition in carrying the international incoming traffic among large integrated TSPs having their own in-house Access, NLD and ILD networks and subnational operators like Telenor India and standalone ILDOs.
- The below diagram explains the generic connectivity between NLDO and access providers for carrying NLD as well as ILD traffic.



- In this diagram, the other NLD/ILD network terminating traffic in access network are in direct competition with the in-house NLD/ILD network of large integrated service providers. While the termination rates are fixed, the international carriage charge segment is based on competitive negotiation. The calls being collected from international market are for the entire country and not specific to particular access networks. But the ability of other ILDOs to collect India terminating international traffic is restricted by their capacity to terminate these calls in access networks due to non availability of adequate POIs specifically at ILD trunk group.
- Some of the access providers have a walled garden approach towards other NLDOs for point-of-interconnect (POI) augmentation in their access network. Hence, there is a need for monitoring of POIs for NLD and ILD traffic terminating in access networks thereby increase in competition in this segment.
- The above explains the current situation restricting the capacity of sub-national operator like Telenor to terminate incoming international traffic in all access networks equally.
- This issue needs to be addressed to enable us to respond to this question. We have raised this issue in our earlier response submitted during last consultation in December 2014 however the same was not addressed by TRAI.
- Q9. If your response to the Q8 is in the affirmative, which of the following approach should be used as a counter-measure?
 - (i) Prescription of revenue share between Indian ILDO and access provider in the International Termination Charge; or
 - (ii) Prescription of a floor for international settlement rate (levied by ILDO upon the foreign carrier) for international incoming calls; or
 - (iii) Any other approach (please specify)

Please provide justification in support of your response.

Response:



We suggest Approach iii, i.e. to fix the bottleneck facility so that all ILDOs (big or small, integrated or standalone) are able to compete in the market place on equal footing.

- a. International termination rates (payable to Access Provider) may be increased from the present rates to about Rs. 1.00 per minute to minimize the call ratio imbalance.
- b. Integrated Service Operators are slow to allot ILD ports to new and Stand Alone ILDOs which is one of the key contributors to skewed India Termination rates. Situation will definitely improve if incumbents / Integrated players allow timely interconnects for ILD traffic.
- c. TRAI should seek monthly reports (as in case of Access Access) from all Operators about ILD port requests made by seeking operator and actual ports allotted by the seeked Operator. In case the seeked operator refuses or delays allocation of ports beyond 30 days, TRAI should take penal action against erring operators.
- d. As this bottleneck facility of port allocation gets tackled, over all India Termination rates will improve as market forces shall do the needful.

Q10. Is there any other relevant issue which should be considered in the present consultation on the review of Interconnection Usage Charges?

Response:

We request TRAI to consider following two (2) issues which we believe are relevant for a fair and transparent IUC regime –

Bad debts in IUC settlements

- TRAI should mandate all TSPs/ NLDOs/ ILDOs to submit the 'Aging Report for IUC settlement' on a monthly basis. The information about the pending interconnection dues and pendency period can be part of this reporting. This report should also highlight the disputed amount as a separate category.
- We request TRAI to publish it operator wise on a quarterly basis and seek action plan/ call for review meeting for faster resolution. There are past precedence when TRAI had taken such actions vide it's letter dated 16 Jan 2012.

Standard Interconnect Offer (SIO) – presently the RIO regulation of the authority is applicable only on SMP and in the multi operator scenario in India we have an oligopoly but no SMP. Consequently this regulation does not apply to any of the licensed service providers.

However, there remain long unsettled issues of non-reciprocity, discrimination, unilateral and arbitrary clauses in the interconnect agreements signed between different TSPs. Industry has represent through its Associations in May 2012 and June 2015 on this issue. TRAI had initiated the pre-consultation process on 'Review of Interconnection Framework to ensure effective interconnection between all telecom service providers vide its letter No. 409-13/2015-NSL-I dated 14-10-2015.



Authority had sought pertinent questions based on the Industry representation as well as the letters from individual operators. All TSPs were requested to state whether:

- (a) in view of the regulatory, market and technological changes during the last few years in telecommunication sector, any review of existing Regulations on interconnection is called for with a view to make interconnection agreements more effective, non-discriminatory, fair and transparent? If yes, what kind of changes are required in interconnection regulation framework?
- (b) should TRAI notify/ prescribe a standardised interconnection agreement (default option) in those situations, where the tow service providers fail to negotiate mutually agreed items and conditions of interconnection within a specific time frame?

Telenor (India), other TSPs and the Industry Associations had responded with their issues, however we have not heard on this from the Authority.

As a best case example the Roaming agreements are prescribed by the GSMA and all TSPs follow the template agreement. This has resulted in no litigation or dispute in the Roaming arrangements.

We request TRAI to complete this consultation process and prescribe a standardised interconnect agreement (SIO) to be signed by all TSPs and the earlier signed agreements should also be migrated to this new regime.
