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AGNSI/TRAI/I&FN/CLS-CP/2012-13
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Subject: Consultation Paper [No. 08/2012 dated March 22, 2012] on Access Facilitation Charges and Co-location Charges at Cable Landing Stations

Ref.: TRAI letter No. 416-3/2010-I&FN dated 4th April 2012
TRAI letter No. 416-3/2010-I&FN dated June 22 2011
TRAI letter No. 416-3/2010-I&FN dated July 8 2011
Our letter No. AGNSI/CLS/2011-12 dated August 16 2011

Dear Sir,

This is with reference to the captioned Consultation Paper [No. 08/2012] released by Hon'ble Authority on 22nd March 2012.

At the outset, we would like to sincerely thank the Hon'ble Authority for releasing the consultation document on such an important matter. AT&T Global Network Services India Private Limited ("AT&T") respectfully submits these comments on the TRAI Consultation Paper on Access Facilitation Charges and Co-location Charges at Cable Landing Stations, issued on March 22, 2012 (the "Consultation Paper").

Additionally, through our industry association "ACTO", we have also submitted detailed inputs on the below mentioned questions which we fully support.



We trust you will find our submissions in order and will duly consider the same while finalizing and determining the charges.

Thanking you,

Respectfully submitted,
for **AT&T Global Network Services India Private Limited**

A handwritten signature in black ink that reads "Naveen Tandon".

Naveen Tandon
Authorised Signatory
Encl.: As above

Comments of AT&T: TRAI Consultation Paper (No. 08/2012) on Access Facilitation Charges and Co-location Charges at Cable Landing Stations, dated March 22, 2012

Introduction

AT&T Global Network Services India Private Limited (“AT&T”) respectfully submits these comments on the TRAI Consultation Paper on Access Facilitation Charges and Co-location Charges at Cable Landing Stations, issued on March 22, 2012 (the “Consultation Paper”).

AT&T is a wholly-owned subsidiary of AT&T Inc., which, through its affiliates, operates one of the world’s most advanced global backbone networks, provides services to virtually every country and territory in the world, and is a leading U.S. provider of international private line and other business and consumer communications services on the U.S.-India route. AT&T is licensed to provide National Long Distance (NLD), International Long Distance (ILD) and Internet Service Provider (ISP) services in India and began providing these services in 2007.

Access to submarine Cable Landing Stations (CLS) is an essential network element for almost every telecom network services requiring international connectivity. Any access barriers to these facilities can constrain the competitiveness of telecom operators and harm the growth of the international telecom market. Although the TRAI has made important progress in reducing access barriers to CLS in recent years, CLS access charges continue to be unreasonably high and result in artificially inflated prices for international services provided by other ILDOs to their customers in India. In particular, CLS access charges in India are excessively high in comparison to similar CLS access charges in other countries, including those in South East Asia. Furthermore, despite large increases in CLS utilization, these charges have remained unchanged at their same high levels since 2007. This is in sharp contrast to rapidly declining charges for all other aspects of ILD service since that time.

Indeed, as charges for these other components of ILD service (such as submarine bandwidth) have declined due to new technology and competition, the share total of end-user bandwidth charges in India accounted for by CLS access facilitation charges has increased from 5% of total Indian IPLC prices in 2007, to 50% of total prices in 2010.

It simply is beyond anybody's imagination that a few meters of fibre cross-connect cable in a CLS should now account for fully *half* of the total end-to-end cost of IPLC in India.

The Consultation Paper highlights the importance of this issue for India's economic development, with "affordable international bandwidth" being "an important driver for bridging the digital divide in India." (Section 2.24.) Further, the IT-BPO industry has "enormous" growth potential, and may account for 7% of India's GDP by 2015. (Section 2.25.) Similarly, the Asia-Pacific BPO market, in which India competes, is expected to grow by almost 18% in 2011. (Section 2.26.) The Consultation Paper observes that "the availability of affordable and reliable international telecommunication connectivity is a significant factor for the international BPO segment to flourish in any country" and that "international bandwidth prices may influence the growth of BPO industry in India substantially." (Section 2.27.)

The Consultation Paper also states that one of the characteristics of the present international bandwidth market in India is the "low competition in the CLS market; The CLS market is highly concentrated where two major players command a significant market share." (Section 2.22)

AT&T therefore welcomes the statement in the Consultation Paper (at Section 2.28) that "in order to bridge the digital divide and to further boost Indian economy, it is imperative that the international bandwidth prices are affordable and, therefore, the access facilitation charge at CLS, which presently constitutes a significant portion of it, needs a fresh look." The Paper further states (*id.*) that "[t]his consultation paper is an attempt in this direction." AT&T welcomes this important initiative by the TRAI and will be pleased to assist in any way possible.

Summary

As set forth in the responses below to the questions listed in the Consultation Paper, AT&T believes that the TRAI should now supplement its regulations issued in 2007 mandating access to submarine cable landing stations by establishing open and transparent procedures for the regulation of access facilitation charges (AFC) and co-location charges (CLC). AT&T recommends that the TRAI should establish these charges based on a four-step approach that would require the owner of cable landing station (OCLS) to submit its proposed AFC and CLC charges to the TRAI, together with information demonstrating that the proposed charges are determined on the basis of cost in compliance with the specific methodology required by the TRAI. This methodology should be long-run incremental cost (LRIC). Other stakeholders should be allowed to review and comment on the submission, and the TRAI should then determine whether the OCLS-proposed AFC and CLC are in compliance with the required methodology, based on all information in the record, including the comments and information provided by the OCLS and other stakeholders. The TRAI should set forth its conclusions and supporting reasoning in a published decision. Additionally, any party to the proceeding should be able to request the TRAI to reconsider its decision as not being supported by the relevant facts or legal principles, and the TRAI should reconsider its decision on the submission of such a request.

AT&T's proposed approach is consistent with the existing regulations, which provide that the AFC should be "determined on the basis of the cost of network elements involved in the provision of access and distributed over the complete capacity of the system." (*Access to Essential Facilities at Cable Landing Stations Regulations, 2007* (5 of 2007), Chapter II, Paragraph 10(1)(b).) The proposed approach supplements those regulations by requiring the use of a specific methodology (LRIC) in establishing these charges, the use of transparent procedures allowing all stakeholders to review and comment on the network models, inputs, and all cost information underlying the proposed charges, and procedures for the review of the charges established by the TRAI. Currently, there is no public disclosure of the charges proposed by the OCLS, the basis of the TRAI decision, or any other aspect of the proceeding.

Under these existing procedures, other stakeholders have no opportunity to review and comment on the evidence submitted by the OCLS in support of its proposed charges, and the TRAI is unable to use their analysis to assist its own review. Modifying the existing procedures in accordance with these recommendations would allow the TRAI to base its decision on a complete record reflecting the analysis of all relevant parties.

The relevant direct network cost elements of access facilitation are readily identifiable and comprise the cost of basic cabling and (potentially) equipment with the labor necessary for installation. However, care should be taken that the OCLS does not recover costs through the AFC and CLC charges that are already fully paid under consortium cable arrangements, or that are not incurred by the relevant cable capacity access arrangement. As noted in response to Question 4 below, it appears from the “descriptions of the items considered” in developing these charges set forth in Annexes III through V of the Consultation Paper, that charges are being levied for the use of optical distribution frame (ODF) equipment associated with the submarine cable termination equipment that is already paid for by consortia owners. Also, there is no basis for imposing charges reflecting the recovery of costs for the use of digital cross-connect (DXC) equipment on direct access capacity that does not use such DXC equipment. Both examples indicate high and unjustifiable over-charges.

To prevent such over-recovery, and to ensure that access to cable stations is priced at competitive levels, the TRAI should require compliance with strict cost causation principles and should use the LRIC methodology. The TRAI should require the OCLS to provide a cost model based on this methodology and should invite stakeholder comment on the model and inputs, either as part of the proceeding in which the AFC and CLC are established, or in a separate proceeding under the procedures described above.

The TRAI also should review the charges established through these procedures at least every two years, to ensure that the facts and assumptions underlying the charges remain accurate.

AT&T believes that the adoption of such procedures, including in particular the ability of all stakeholders to review and comment on all information submitted by the OCLS, will show that current price levels for AFC and CLC in India are greatly in excess of their relevant costs and should appropriately be reduced in India to the levels seen in more competitive markets. This will assist greatly in allowing other ILDOs to provide more affordable international bandwidth to users in India, thus stimulating wider Internet usage and the resulting benefits to India's economy and society.

AT&T responds to the questions asked by the Consultation Paper as follows:

Responses to the Questions

Q1: *Which of the following method of regulating Access Facilitation Charges and Co-location charges (AFC & CLC) should be used in India?*

- (a) The prevalent method i.e. submission of AFC & CLC by owner of the cable landing station (OCLS) and approval by the TRAI after scrutiny*
- (b) Submission of AFC & CLC by OCLS and approval by TRAI after consultation with other stakeholders*
- (c) Fixing of cost based AFC & CLC by TRAI*
- (d) Left for mutual negotiation between OCLS and the Indian International Telecommunication Entity (ITE)*
- (e) Any other method, please elaborate in detail.*

Response to Question 1:

AT&T recommends that the TRAI should regulate Access Facilitation Charges (AFC) and Co-location charges (CLC) under a method that combines both (b) and (c) as follows.

First, the owner of the cable landing station (OCLS) should be required to submit its proposed AFC and CLC charges to the TRAI, together with information demonstrating that the proposed charges are determined on the basis of forward-looking economic cost and in compliance with the specific methodology required by the TRAI. (As described in response to Question 6 below, AT&T recommends that the TRAI should use the long-run incremental cost (LRIC) methodology to determine whether AFC charges are cost-based.)

Second, the TRAI should place the OCLS submission, including all information submitted to demonstrate cost, in the public record and provide all stakeholders and other interested parties a reasonable opportunity to review the submission and submit comments and model input corrections to the TRAI.

Third, the TRAI should determine the AFC and CLS charges to be applied on the basis of the specific costing methodology required by the TRAI and the information submitted by all parties in the proceeding. The TRAI should set forth its conclusions and supporting reasoning in a published decision.

Fourth, any party to the proceeding should be able to request the TRAI to reconsider its decision as not being supported by the relevant facts or legal principles, and the TRAI should reconsider its decision on the submission of such a request.

AT&T submits that its proposed approach has major advantages for both the TRAI and all stakeholders as compared to the current approach and the alternative proposals. Most importantly, AT&T's proposed approach provides the transparency that is entirely absent from the current approach. At present, the OCLS submits its proposed AFC and CLC to the TRAI, which reviews and approves these charges with no public disclosure of the basis of the TRAI decision or any other aspect of the proceeding.¹

These existing procedures provide no opportunity to other stakeholders to review and comment on the evidence submitted by the OCLS in support of its proposed charges and to allow the TRAI to use their analysis to assist its own review.

In this regard, AT&T understands that national regulators consider that their decision-making generally obtains major benefits from the opportunity to consider the informed comments submitted by interested parties based on those parties' review of the record evidence in regulatory proceedings.

¹ The Consultation Paper cites (in Section 3.12) the Authority's former observation that affording stakeholders the opportunity to comment "may unnecessarily delay the whole process" and that "adequate opportunity has already been given to stakeholders." AT&T believes that any delay resulting from the transparent and open proceeding recommended here would be amply justified by the improved information that would be available to the Authority to assist its decision-making. AT&T also reiterates that under the present procedures, other stakeholders have no access to or opportunity to comment on the rates and any supporting information submitted by the OCLS until after the Authority's decision-making process is completed.

Additionally, AT&T notes that while alternative (b) includes consultation with other stakeholders, it does not specifically require that other stakeholders should be able to comment on all information submitted by the OCLS, and that the TRAI should make its determination on the basis of the specific costing methodology required by the TRAI and the information submitted by all parties in the proceeding, including the other stakeholders. Moreover, none of the specific proposals require the TRAI to reconsider its decision as not being supported by the relevant facts or legal principles on the request of any party to the proceeding. AT&T considers that the right to obtain the review of a decision is an important regulatory safeguard that should be available in all circumstances.

Finally, the AFC and CLC should not be determined based on mutual negotiation between the OCLS and the Indian International Telecommunication Entity (ITE) seeking access, as proposed by alternative (d). Because there is not sufficient competition to ensure reasonably priced access to cable stations in India, and because of the very high level of current AFC and CLC, AT&T believes that the TRAI must establish these charges on the basis of forward-looking economic cost and taking account of the information and comments submitted by the OCLS and all interested stakeholders. As noted by the Consultation Paper (Section 2.22), the CLS market in India is “highly concentrated” and characterized by “[l]ow competition.” Moreover, the comparative pricing data set forth in Table 3.1 and Table 3.2 of the Consultation Paper show that CLS access charges in India are very much higher than similar charges elsewhere in the world. For example, CLS access charges levied by Tata Communications at the LVSB Mumbai cable station for 10 Gbps of bandwidth on the SMW4 cable are *more than five hundred times higher* than the corresponding charges for 10 Gbps of bandwidth on the same SMW4 cable at the Tuas cable station in Singapore.

Significantly, payers of these charges have been supplied no cost information to support such huge rate discrepancies. In these circumstances, AT&T considers reliance on negotiations as highly unlikely to bring any significant reduction in these charges.

Indeed, if this proceeding were to result in the TRAI adopting alternative (d) and no longer undertaking any regulatory review of these charges, it is possible that these charges would be raised to even higher levels as compared to charges prevalent worldwide.

To address the urgent need to reduce the AFC and CLC to reasonable and comparable levels in order to ensure continued growth in India's international telecommunications market, and to avoid the clear disadvantages presented by the alternative approaches listed in the Consultation Paper, AT&T recommends that the TRAI should adopt the four-step approach described above.

Q 2: In case AFC & CLC are regulated using method (a) or method (b) above, is there a need to issue guidelines containing algorithm and network elements to be considered for calculating AFC & CLC to the OCLSs? If yes, what should be these guidelines?

Response to Question 2:

As stated in response to Question 1, AT&T recommends that the TRAI should establish AFC and CLC based on a four step approach that would require the OCLS to submit its proposed AFC and CLC charges to the TRAI, together with information demonstrating that the proposed charges are determined on the basis of forward-looking economic cost and in compliance with the specific methodology required by the TRAI. Other stakeholders would then comment on the submission and the TRAI would make a determination based on all information in the record. The costing methodology to be followed in establishing these rates will need to include guidelines containing algorithms and network elements to be used in establishing cost-based rates.

The determination of recurring costs should involve the following steps:

- (1) The OCLS identifies the relevant material and labor related investments required to provide each AFC and CLC element.
- (2) Where appropriate, the OCLS applies loading factors to account for the costs associated with the installation or engineering activities for any relevant central office equipment or facilities.
- (3) The OCLS then applies annual capital cost recovery factors to these total investments and adds network-specific maintenance expense loading factors to complete the ongoing annual forward-looking costs directly associated with the identified investments.²
- (4) Annual operating expenses associated with general network operations, customer marketing and billing and other corporate overheads are then added. Altogether, items (3) plus (4) yield the total annual economic cost basis for pricing CLS services.
- (5) The OCLS then converts these total recurring LRICs to a per-unit basis depending on the volume of services provided.

In addition, there may be non-recurring costs associated with provisioning customer requests for new or rearranged CLS services. The costs associated with these non-recurring activities should be developed by identifying the specific activities involved and estimates of the efficient labor costs involved in performing these activities. Prices specific to these activities should then be proposed that match these costs.

² Capital cost recovery factors allow the OCLS to recover costs associated with depreciation, applicable taxes and return on investment (with the cost of capital set to reflect a weighted average of the OCLS' cost of debt and equity) on a "levelized" (or "annuitized") basis that distributes these costs evenly over the useful lifespan of the investment.

Specific algorithms and network elements required to establish cost-based recurring AFC rates are as follows:

CAPITAL	
Per meter cost of fibre	A
Per meter cost of fibre racking	B
Length of fibre	C
Length of racking	D
Termination on ODF	E
Number of terminations required	F
Total capital required	$G=(A*C)+(B*D)+(E*F)$
INSTALLATION	
Time required to install racking (per meter)	H
Time required to run fibre (per meter)	I
Time required to terminate fibre on ODF	J
Technician's labor cost per hour	K
Total installation cost	$L=[(H*D)+(I*C)+(J*F)]*K$
CAPITAL COST	
Total capital	$M=G+L$
Annual capital cost factor (includes WACC, depreciation, taxes)	N
Total capital cost	$O=M*N$
NETWORK MAINTENANCE COST	
Annual maintenance expense per unit of	P

investment	
Total annual maintenance cost	$Q=P*M$
OPERATING EXPENSE	
Network operations expense	R
Customer operations expense	S
Corporate overhead expense	T
Total operating cost	$U=R+S+T$
TOTAL ANNUAL COST	$V=O+Q+U$
TOTAL MONTHLY COST	$W=V/12$

Q 3: *In case, AFC & CLC are regulated using method (a), (b) or (c) above, please suggest the value of pre-tax WACC, method of depreciation and useful life of each network element? Please provide justification in support of your answer.*

Response to Question 3:

AT&T has no specific recommendations for a precise value of the weighted average cost of capital (WACC), as this is subject to market conditions in India. However, this should be determined under a clear, auditable methodology. As regards calculating capital structure, a market valuation should be preferred over book valuation. For depreciation, the most straightforward method is straight-line, with asset lives and net salvage values reflecting the economic (useful) life of the asset.

Q 4: *Which cost heads/ network elements should be included/ excluded while calculating Access Facilitation and Co-location charges? Please enumerate the items with specific reasons.*

Response to Question 4:

The relevant direct network cost elements of access facilitation are readily identifiable and comprise the cost of basic cabling and (potentially) equipment with the labor necessary for installation. These cost elements are shown by the diagram below. On consortium cables, other costs relating to the cable landing station and access (such as all building, ducting, ODF equipment into which the access cabling is connected) are paid for by consortium owners under the relevant Construction and Maintenance Agreement (C&MA) entered into by the owners.³ In other words, there are no other direct costs which the OCLS should recover as part of the AFC. Any double-recovery of such costs by the OCLS would be contrary to the requirement of the cable station access regulations that the AFC and CLC should be based on “the cost of network elements involved in the provision of access.” (*International Telecommunications Access to Essential Facilities at Cable Landing Stations Regulations, 2007* (5 of 2007), June 7, 2007 Chapter II, Paragraph 10(1)(b).) Similarly, any recovery of costs for equipment that is not used for the relevant access arrangement is also contrary to that requirement.

The Consultation Paper reports (Section 3.22) that the OCLS have “submitted that the costs included in their calculations are not being reimbursed from consortiums.” The Consultation Paper further states that “generic descriptions of the items considered for arriving at Access Facilitation charges, O&M charges and Co-location charges” are set forth in Annexes III through V of the Consultation Paper.

³ See also, Consultation Paper on “Access to Essential Facilities (including Landing facilities for submarine cables) at Cable Landing stations,” April 13, 2007 (acknowledging that “[a]ll the cost components from Beach Man Hole (BMH) up to Optical Distribution Frame (ODF)/Digital Distribution Frame (DDF) are paid for by the consortia.”)

AT&T provides comments below on the items listed in Annexes III through V. However, it should be noted that it is impossible to provide a proper assessment of the validity of the costing approach set forth in these documents without a full description of the terms used and the actual values that are used in these calculations. Without such disclosure, as described above in response to Question 1, it is impossible for other stakeholders such as AT&T to provide a proper analysis and allows only the identification of the following clear deficiencies:

First, AT&T notes that a significant portion of international submarine cable capacity terminating in India uses direct access arrangements, which do not use any digital cross-connect (DXC) equipment at the cable station, or any optical distribution frame (ODF) equipment associated with the DXC. For example, in the diagram shown in Annex III of the Consultation Paper, all direct access capacity neither uses, nor is connected to, the DXC and associated ODF in the Equipment Room at Floor B, and the DXC and associated ODF in the collocation Space. Accordingly, the costs associated with this DXC and ODF equipment should not be reflected in the AFC charged for direct access capacity. The access arrangements shown in Annexes IV and V, which also require no use of DXC or associated ODF equipment for direct access capacity, raise similar concerns.

Second, even where international submarine cable capacity access arrangements require the use of DXC equipment, AT&T questions the need for the second DXC and associated ODF shown as being located in the co-location space in Annex III of the Consultation Paper. AT&T believes that a single DXC and associated ODF (as shown in the equipment room at Floor B in Annex III) is sufficient and that the costs associated with the second DXC and associated ODF equipment should not be reflected in the AFC charged for any capacity on consortium cables. The access arrangements shown in Annex IV also require only a single DXC and associated ODF, and therefore raise similar concerns.

Third, on consortium cables, the ODF equipment associated with the submarine cable termination equipment (as shown, for example, in Cable Station at Floor A in Annex III of the Consultation Paper) is paid for by consortium owners under the relevant Construction and Maintenance Agreement (C&MA). Accordingly, because the OCLS did not bear this stated cost, the costs associated with this ODF equipment should not be reflected in the AFC charged for any capacity on consortium cables. These concerns apply to all types of access arrangements (e.g., as shown in Annexes III, IV and V).

Fourth, regarding other CAPEX components listed in Annex III, the “Project Management Cost” (Line 14), and “revenue sharing” (Line 19) and the utilization thereof in the Line 20 formula, should be clarified. Similar clarifications are required of the “rate of license fee” component that is listed in all three Annexes under CAPEX, OPEX and co-location.

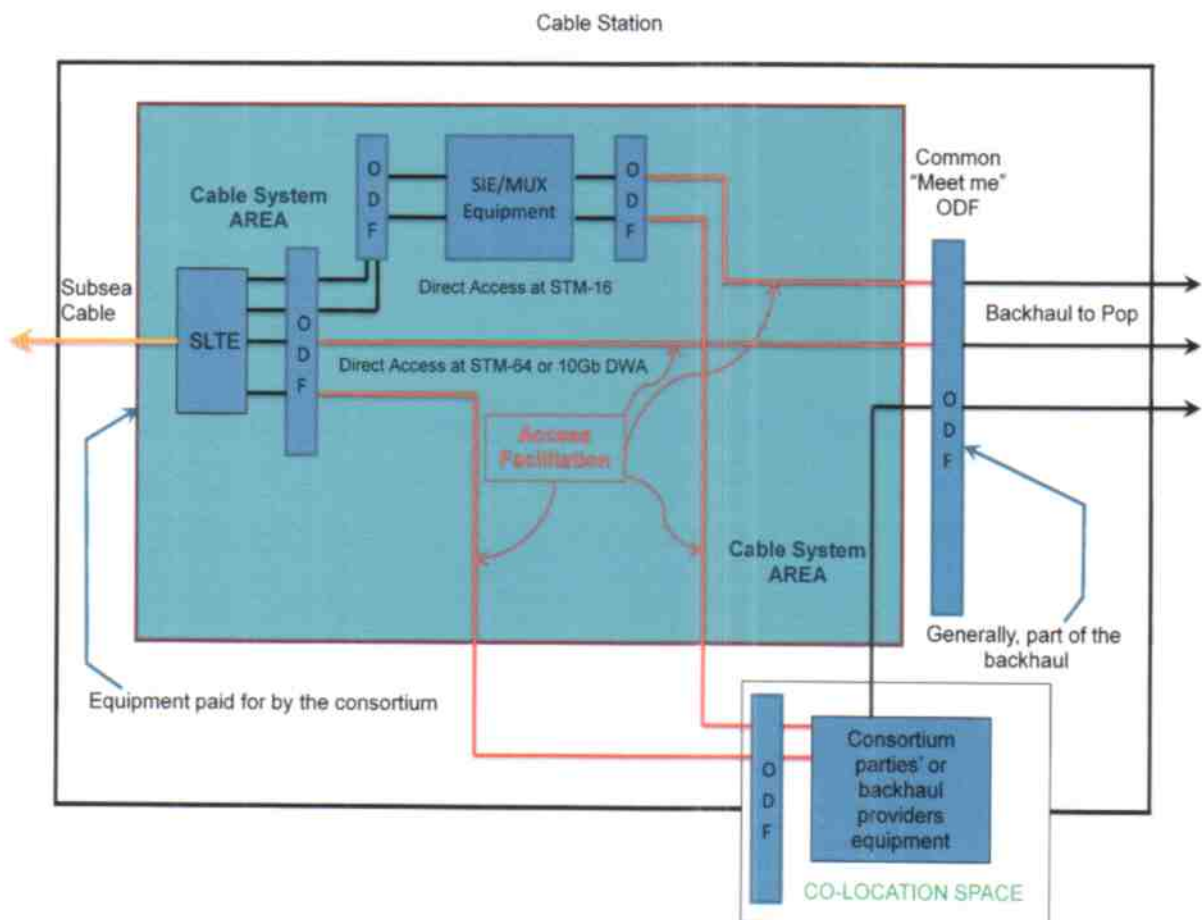
Fifth, the formulas used to apply such items as “License fee” in the Annexes appear to be mathematically incorrect. For example, rather than multiplying by the “rate of license fee,” they divide by “1 *minus* the rate of license fee,” which has the effect of calculating a higher rate. (See, e.g., Annex III, Line 30).

Sixth, regarding the CAPEX and OPEX components listed in Annex IV, the apportionment of equipment and links at 128 STM-1’s severely understates the capacity of DWDM (dense wave division multiplexing) equipment and the use of a 70 percent utilization factor increases this concern. A similar concern applies to the use of this approach in Annex V.

Seventh, regarding OPEX, all annual maintenance charges (e.g., as listed in Annexes III though V) should be adjusted to reflect the non-use of equipment by certain capacity arrangements and the payment of equipment and associated maintenance charges by cable consortia (as described above). Clarifications are also required of the OPEX component “overhead charges” listed in line 27 of Annex III, and line 21 of Annexes IV and V.

The above deficiencies cast significant doubt on the cost-based nature of the current AFC and CLC, and indicates the existence of high and unjustifiable over-charges. To prevent such over-recovery, the TRAI should require compliance with strict cost causation principles and should use the LRIC methodology.

Additionally, it is important to note that AT&T and other ILD operators have had no previous opportunity to review the information contained in Annexes III through V. As described in response to Question 1, the TRAI should ensure that all stakeholders are able to review all future information submitted by the OCLS concerning these charges and to submit comments for consideration by the TRAI in its decision-making.



Q5: What should be periodicity of revision of AFC & CLC? Support your view with reasons.

Response to Question 5:

The TRAI should require the regular review of AFC and CLC to ensure that these charges continue to be based on “the cost of network elements involved in the provision of access and distributed over the complete capacity of the system,” as required by the cable station access regulations. (*International Telecommunications Access to Essential Facilities at Cable Landing Stations Regulations, 2007* (5 of 2007), June 7, 2007 Chapter II, Paragraph 10(1)(b).) The TRAI noted in point 1.109 of the Recommendations on Telecommunications Infrastructure Policy dated April 12 2011, the Authority has very rightly noted as in point 1.109 that “the Authority understands the need for a periodic review of RIO pricing especially in view of the constantly changing International bandwidth prices.”

The need for periodic review is demonstrated by the current CLS access charges, which were established in Reference Interconnect Offers approved by the TRAI in October 2007. AT&T understands that these charges were calculated based on the then-prevailing utilization of international capacity and cost elements at the respective CLS. Since that time, there has been a major increase in capacity utilization on submarine cable systems. For example, international capacity utilization at the Mumbai and Chennai CLS has increased by more than 10 times since 2007. To ensure that “the cost of network elements involved in the provision of access” remains “distributed over the complete capacity of the system,” as required by the regulation, per-unit fixed costs, such as capital costs, should be reduced in accordance with the increase in international capacity utilization. Similarly operations and maintenance (O&M) charges of CLS also should be adjusted to account for the increase in capacity utilization. Without such periodic adjustment of per-unit costs in such circumstances, the CLS charges provide the OCLS with a massive over-recovery.

Unless this issue is properly addressed it will become even more urgent in the future with the continued rapid growth of international submarine capacity in India. The Consultation Paper notes that demand for international bandwidth in India is expected to grow at a compounded annual growth rate (CAGR) of 83 percent until 2015. (Section 2.21.) This demand may increase at even higher rates if wireless usage in India rises toward the higher levels currently seen in Japan and the United States. (Section 2.24.)

The necessary frequency of review will depend upon the method under which the AFC and CLC are established in the future. If the AFC and CLC are established under the approach recommended by AT&T, through use of an appropriate LRIC methodology and under transparent procedures allowing review and comment by other stakeholders, the TRAI should review these charges at least every two years to ensure that the facts and assumptions on which it relied in establishing the rates remain accurate, including that capacity is expanding in accordance with the growth projections included in the relevant model. Such a review should again include the opportunity for stakeholders to review the information submitted by the OCLS and to file comments for consideration by the TRAI in making its determination. If the AFC and CLC are established under other procedures, these charges should be reviewed at least annually.

Q 6: In case, cost based AFC & CLC are fixed by TRAI, which costing methodology should be applied to determine these charges? Please support your view with a fully developed cost model along with methodology, calculation sheets and justification thereof.

Response to Question 6:

The TRAI should use the internationally generally accepted Long Run Incremental Cost (LRIC) methodology. The U.S. Federal Communications Commission, for example, has stated that “[m]ost economists generally agree that competitive markets, over the long run, tend to force prices toward incremental costs.

In dynamic, competitive markets, firms take action based not on embedded costs, but on the relationship between market-determined prices and forward-looking costs.”⁴ Additionally, “[f]or services . . . that share some joint and common costs, incremental costs would include a reasonable contribution to forward-looking joint and common costs.”⁵ Prices based on LRIC methodology will therefore reflect the price levels that would prevail in a competitive marketplace. For this reason, the Communications and Information Technology Commission of the Kingdom of Saudi Arabia, as just one example, has adopted the LRIC methodology for use in liberalizing its telecommunications market.⁶ By requiring the use of this methodology, the Authority will ensure that access to cable landing stations is priced at competitive levels and this will further enhance competition in India’s international market.

The following principles, adopted by the U.S. Federal Communications Commission, set forth the basis for determining forward-looking economic costs:⁷

“§ 51.505 Forward-looking economic cost.

(a) In general. The forward-looking economic cost of an element equals the sum of:

- (1) The total element long-run incremental cost of the element, as described in paragraph (b); and
- (2) A reasonable allocation of forward-looking common costs, as described in paragraph (c).

(b) Total element long-run incremental cost. The total element long-run incremental cost of an element is the forward-looking cost over the long run of the total quantity of the facilities and functions that are directly attributable to, or reasonably identifiable as

⁴ U.S. Federal Communications Commission, *International Settlement Rates*, 12 FCC Rcd. 19806, para. 129 (1997).

⁵ *Id.*

⁶ See *LRIC Model Guidelines for the Kingdom of Saudi Arabia*, Mar. 1, 2008, available at: <http://www.ictregulationtoolkit.org/en/Publication.3687.html>.

⁷ 47 C.F.R. Sects. 51.505 & 51.507.

incremental to, such element, calculated taking as a given the incumbent LEC's provision of other elements.

(1) Efficient network configuration. The total element long-run incremental cost of an element should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC's wire centers.

(2) Forward-looking cost of capital. The forward-looking cost of capital shall be used in calculating the total element long-run incremental cost of an element.

(3) Depreciation rates. The depreciation rates used in calculating forward-looking economic costs of elements shall be economic depreciation rates.

(c) Reasonable allocation of forward-looking common costs--

(1) Forward-looking common costs. Forward-looking common costs are economic costs efficiently incurred in providing a group of elements or services (which may include all elements or services provided by the incumbent LEC) that cannot be attributed directly to individual elements or services.

(2) Reasonable allocation.

(i) The sum of a reasonable allocation of forward-looking common costs and the total element long-run incremental cost of an element shall not exceed the stand-alone costs associated with the element. In this context, stand-alone costs are the total forward-looking costs, including corporate costs, that would be incurred to produce a given element if that element were provided by an efficient firm that produced nothing but the given element.

(ii) The sum of the allocation of forward-looking common costs for all elements and services shall equal the total forward-looking common costs, exclusive of retail costs, attributable to operating the incumbent LEC's total network, so as to provide all the elements and services offered.

(d) Factors that may not be considered. The following factors shall not be considered in a calculation of the forward-looking economic cost of an element:

(1) Embedded costs. Embedded costs are the costs that the incumbent LEC incurred in the past and that are recorded in the incumbent LEC's books of accounts;

(2) Retail costs. Retail costs include the costs of marketing, billing, collection, and other costs associated with offering retail telecommunications services to subscribers who are not telecommunications carriers, described in [§ 51.609](#);

(3) Opportunity costs. Opportunity costs include the revenues that the incumbent LEC would have received for the sale of telecommunications services, in the absence of competition from telecommunications carriers that purchase elements; and

(4) Revenues to subsidize other services. Revenues to subsidize other services include revenues associated with elements or telecommunications service offerings other than the element for which a rate is being established.

(e) Cost study requirements. An incumbent LEC must prove to the state commission that the rates for each element it offers do not exceed the forward-looking economic cost per unit of providing the element, using a cost study that complies with the methodology set forth in this section and [§ 51.511](#).”

“§ 51.507 General rate structure standard.

(a) Element rates shall be structured consistently with the manner in which the costs of providing the elements are incurred.

(b) The costs of dedicated facilities shall be recovered through flat-rated charges.

(c) The costs of shared facilities shall be recovered in a manner that efficiently apportions costs among users. Costs of shared facilities may be apportioned either through usage-sensitive charges or capacity-based flat-rated charges, if the state commission finds that such rates reasonably reflect the costs imposed by the various users.

(d) Recurring costs shall be recovered through recurring charges, unless an incumbent LEC proves to a state commission that such recurring costs are de minimis. Recurring costs shall be considered de minimis when the costs of administering the recurring charge would be excessive in relation to the amount of the recurring costs.

(e) State commissions may, where reasonable, require incumbent LECs to recover nonrecurring costs through recurring charges over a reasonable period of time. Nonrecurring charges shall be allocated efficiently among requesting telecommunications carriers, and shall not permit an incumbent LEC to recover more than the total forward-looking economic cost of providing the applicable element.”

To allow the implementation of LRIC-based pricing for AFC and CLC, the TRAI should require the OCLS to provide a cost model based on this methodology in support of these charges. The OCLS should also be required to provide all inputs to the model and other supporting information. The TRAI should make this information available for comment by other stakeholders and should consider any comments submitted in its decision-making concerning the model.

The TRAI could adopt a LRIC model in this fashion as a separate proceeding, or in conjunction with the proceeding that would also determine the AFC and CLC under the procedures that are described in response to Question 1 above.

Q 7: Whether Access Facilitation charges and O&M charges should be dependent on capacity (i.e. STM-1, STM-4 or STM-16) activated? Support your view with reasons.

Response to Question 7:

Whether the AFC and CLC should be dependent on capacity should be determined by the type of access arrangement. Charges for direct access capacity, which does not use any digital cross-connect (DXC) equipment or other electronics at the cable station, and for which the access arrangement requires only a simple fibre cross-connect, should be independent of capacity. As ACTO has previously noted in comments filed on this issue on March 17, 2010, the approximate costs of the required cable are around US\$40 and the required installation involves very limited manpower hours. Capacity-based charges should apply only to capacity requiring the use of digital cross-connect (DXC) equipment.

Q 8: If Access Facilitation charges and O&M charges are fixed on the basis of capacity activated;

(a) Should the charges be linearly proportionate to the capacity activated;
or

(b) Should the interface capacity as provided by the submarine cable System at the cable landing station be charged as a base charge while higher or lower bandwidth be charged as the base charge plus charges for multiplexing/ de-multiplexing?

Response to Question 8:

As described above in response to Question 7, capacity-based charges should apply only to capacity requiring the use of digital cross-connect (DXC) equipment. Charges for direct access capacity, which does not use any digital cross-connect (DXC) equipment or other electronics at the cable station, should be independent of capacity. In response to Question 8(a), capacity-based charges should not be linearly proportionate to the capacity activated, because, as noted by ACTO in comments filed on this issue on March 17, 2010, connection circuit costs are independent of circuit size, and the costs of the use of DXC equipment are not linear. Thus, any linear approach will almost surely lead to the over-recovery of costs.

AT&T therefore supports the use of a base charge plus non-linear charges for multiplexing equipment. The TRAI accordingly should prohibit the continued use of linear pricing by the OCLS under which the charges for a STM-64 connection are 64 times those for a STM-1. This present linear methodology results in an extraordinary non-cost oriented over recovery for the OCLS.

Q 9: Whether there is a need to fix Access Facilitation charges for all types of submarine cables? If no, which kind of submarine cables may be exempted and why?

Response to Question 9:

The new procedures for the establishment of cost-based charges should apply to all submarine cable capacity to which access is provided by the regulations set forth in *International Telecommunications Access to Essential Facilities at Cable Landing Stations Regulations, 2007* (5 of 2007), issued on June 7, 2007. Those regulations provide “access to any eligible Indian International Telecommunication entity requesting for accessing international submarine cable capacity on any submarine cable systems.” (*Id.*, Section 3(a).)

The purpose of the procedures to be established through this Consultation is to ensure the provision of the cost-oriented and non-discriminatory access to the cable landing stations and related submarine capacity that is required by those regulations. To ensure the achievement of these objectives, the new procedures for the establishment of cost-based charges should apply to all cable landing stations and related submarine capacity that are subject to the above-referenced regulations.

Q 10: Is there a need to introduce any new provision or to modify/delete any of the clauses of the 'International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulation 2007', in order to facilitate access to essential facilities at cable landing station?

Response to Question 10:


AT&T believes that a comprehensive review of TRAI's regulations regarding access to submarine cable systems should be undertaken, because the regulations do not uniformly provide sufficient assurance of transparency, certainty, or timely provision of needed services. In addition to the very high level of charges for AFC and CLC that is the subject of this Consultation Paper, these concerns include the following: (i) the Reference Interconnection Offer (RIO) is not a mandated set of agreements but is to be negotiated on an ad-hoc basis, (ii) denial of access can be "for any valid reason" – a term that is not defined in the regulations, (iii) there are extensive time periods to give effect to RIOs for new systems, (iv) the minimum provisioning period for access services is too long, and (v) many of the maximum time periods for the negotiation and payment of access and backhaul arrangements are too brief. Additionally, the AFC should not apply to traffic that simply transits between two cable systems and does not touch the domestic Indian network.

Further, despite the requirement of the regulations that all parties have fair and non-discriminatory access to international cable capacity, ILDOs are often left at a competitive disadvantage due to lack of clarity in TRAI's regulations.

To avoid this situation, TRAI should clarify that a Cable Landing Station “comes into existence” and thus triggers publishing of reference interconnect offer (RIO) under interconnection rules when “substantially constructed” to ensure that access services are available to all ILDCs by the “ready-for-service” date of the new cable. Landing carriers should not wait until all relevant security clearances and permits have been obtained before submitting their RIOs to TRAI, as this puts other ILDOs at a competitive disadvantage. Any required clearances and permissions that the landing carrier has yet to receive for the CLS should not prevent the landing carrier from submitting its RIO terms for approval and subsequent publication.

AT&T would be pleased to answer any questions concerning these comments.

Respectfully submitted,



Naveen Tandon
Authorised Signatory