

No. : 043/TRAI/2012-13/ACTO
Dated: 6th November, 2012.

Shri Rajeev Agrawal
Hon'ble Secretary,
Telecom Regulatory Authority of India,
Mahanagar Door Sanchar Bhawan,
Jawahar Lal Nehru Marg,
New Delhi - 110002

Subject: TRAI Consultation Paper no. 14 /2012 on "Estimation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations" dated 19th Oct, 2012.

Ref: (i) ACTO's letter No. 007/TRAI/2011-12/ACTO dated 16th August, 2011.
(ii) ACTO's letter No. 030/TRAI/2012-13/ACTO dated 19th April, 2012.
(iii) ACTO's letter No.031/TRAI/2012-13/ACTO dated 26th April 2012.

Respected Sir,

The Association of Competitive Telecom Operators (ACTO) would like to sincerely thank the Hon'ble Authority for issuing the amendment on *the International Telecommunication Access to Essential Facilities at Cable Landing Stations (Amendment) Regulations, 2012* and also giving us an opportunity to provide response to the consultation paper on *Estimation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations dated 19th Oct, 2012*.

ACTO is pleased to submit its comments to the Telecom Regulatory Authority of India (TRAI) in response to the Consultation Paper on *"Estimation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations" dated 19th Oct, 2012 (Annex-I)*.

ACTO's comments and counter comments on TRAI's consultation paper dated 22nd March 2012 are also enclosed as Annex-II and Annex-III for ready reference, please.

We trust that the Hon'ble Authority will find our submissions in order and will duly consider the same while finalizing and determining the AFC and CLC charges.

Thanking You,
Respectfully submitted
for Association of Competitive Telecom Operators



S C Saxena
Director
+91-9818885588

Enclosures: as above

CC: Shri Arvind Kumar, Advisor (NSL-1), TRAI

Comments of ACTO on TRAI's Consultation Paper on Estimation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations

Q1. Cost data and costing methodology used for estimating the access facilitation charges and co-location charges in this consultation paper. In case of a different proposal, kindly support your submission with all relevant information including cost and preferred costing methodology.

ACTO Comments

1. We agree with the costing methodology/approach adopted by TRAI for estimating the access facilitation charges /Co-location charges as have been indicated in the various tables under the present circumstances. We believe that the costing methodology is robust.

2. However in relation to the cost data indicated in various tables we would like to submit that:-
 - a. Line items /Sl.No. i and ii should be removed from Table 1 and Table 2(a), as both the DXC and ODFs required at the CLS have already been paid for by the consortium. We further believe that there is no need for an additional layer of DXC equipment simply to provide access to the cable system, and this is typically not provided in most CLSs. Additional DXC or DWDM equipment may be required for the provision of backhaul services, but this should be a component cost of the backhaul service, not the AFC.

- b. In table 2(c),
- i. Line item/ Sl.No. i should specify that this is only for one ODF, as only one is required.
 - ii. Line item ii should be removed, as the DXC equipment at the cable station has been paid for by the consortium, and the connection between the CLS and alternate co-location site does not require DXC equipment on top of DWDM equipment. The DWDM equipment already contains the DXC functionality. Hence to use a DXC as well would involve duplication of this function, and add unnecessary risk to the performance of the circuits.
 - iii. We believe that the DWDM charge indicated in Table 4(a) and 4(c) is too high. Our fully allocated cost per 10G is around Rs.500k per 10G for each terminal, and we use relatively expensive equipment.
 - iv. The apportioned fibre cost at table 4(b) - can we know what distances were used to calculate these, and why they are so vastly different. We could accept the proposed cost from OCLS 1, although it is high for a high volume route. However, the cost from OCLS2 is much too high, bearing in mind that the MMR is typically only a few kilometres away from the CLS.
 - v. If above mentioned anomalies are corrected then revised estimated charges for access facilities at cable landing station (AFC/CLC) would be in line with comparable competitive telecom market in other jurisdictions.

3. We have noted that the issue of inclusion of DXC has also been examined by TRAI in para 13, 14 and 15 under the heading of “**Identification of network elements**” of its consultation Paper. In para 13, TRAI has noted that there is only one passive element i.e. Optical Distribution Frame (ODF) which is required for the provisioning of access facilitation at 10G level or any other level which is provided by the consortium and two OCLSs i.e. BSNL and Reliance are also agree with this point of view . TRAI has further stated in para 14 of the Consultation Paper that TCL and Bharti are of the view that consortium does not provide all types of interfaces needed by the ITE.
4. It is important to mention that in the case consortium system (i.e. SMW3, SMW4, and EIG); **the C&MA agreements provide the all types of interfaces needed by the ITEs.** In fact, the consortiums provide the interfaces for all levels of capacity available for purchase on these systems. If an ITE requires further multiplexing of their capacity it could be provided under terms of a separate arrangement with the OCLS or the ITEs designated local back hauler. In this regard all relevant extract of C&MA agreements have already been submitted with Hon’ble Authority vide letter dated 16th August 2011 in response to TRAI’s letter No 416-3/2010-I&FN dated 22nd June 2011.
5. The analysis of information/data available in the consultation paper indicates that there is visible difference of opinion wherein majority of service providers including Reliance and BSNL are on one side and M/s TCL and Bharti are on the other side in favour of DXC. The rational given by TRAI for accepting the cost of DXC as both OCLSs are incumbent operators and having 12 out of 15 CLSs in India, therefore, their costs / network elements have been accepted. We believe

that such acceptance may be against the best regulatory practices where it is expected from the regulator that they should accept the most efficient cost/network elements into consideration at the time of fixation of charges of network services/products.

6. The view point of majority of service providers including BSNL and Reliance that only passive element i.e. Optical Distribution Frame (ODF) is required for provisioning of access facilitation, as stated in para 13 of TRAI's Consultation paper dated 19th October, 2012 is also substantiated by the fact mentioned in TRAI's consultation paper on "Access to Essential Facilities (including Landing Facilities for Submarine Cables) at Cable Landing Stations, dated 17th April, 2007 wherein in Figure 2 of Chapter 4, TRAI has not included DXC in its figure depicting Access Facilitation arrangement at Cable Landing Stations.
7. Therefore, the inclusion / non inclusion of DXC in the cost model is very important factor. In view of facts mentioned above, majority of service providers and TRAI, are not in favour of inclusion of DXC in the cost model. This may be the one of the reason why the CLS charges are not coming to the level of comparable competitive international markets. In case, as per TRAI's own analysis expressed in the consultation paper dated 17th April, 2007 and Consultation paper dated 19th October, 2012 referred above, if the cost of DXC is excluded from the cost model, then the access charges are expected to come down to the comparable international levels.
8. We have also noted that study paper of M/s Venture Consulting of April, 2012 filed by M/s Vodafone during its response to the consultation paper on CLS

dated 22.3.2012, also confirms that there is no need for DXC to provide the access facilitation at cable landing station .

9. We have noted that there are considerable variations in the cost data submitted by the two OCLs to TRAI, for example in the case of “Inter Floor cabling and tray work” it is more than 233%, in the case of “ODF” it is 47% and in the case of “DWDM equipment” it is about 14%. It is further noted that in the table 4(b) “fiber between CLS and MMR” the variation is about 313%. In such cases it is suggested that most efficient telecom service provider’s cost may be considered for estimation of final CLS access charges.

10. We would also like to highlight some more analysis of cost data and network elements used for arriving the estimated AFC/CLC. These are summarized below ;
 - Over 85 percent of the capital cost used as the basis of the proposed charges for access facilitation at the CLS, and approximately 45 percent of the capital cost used as the basis of the proposed charges for access facilitation at alternate co-location sites is for Digital Cross Connection (DXC) equipment. There is no reason for TRAI to consider approving mandatory CAPEX and OPEX charges for this unnecessary equipment. There is certainly no basis to the claims made by the OCLs that the provision of access facilitation using only the ODF linked directly to the submarine cable is neither “appropriate” nor “possible”.

- Two of the OCLS, BSNL and Reliance, do not make these claims and, rather, state that access at the 10G level only requires the use of the ODF and that access for lower capacity merely requires additional multiplexing.
- An important concern is that mandating the payment of substantial CAPEX and OPEX charges for the use of unnecessary equipment, as proposed by the Consultation Paper, artificially inflates the level of the proposed charges for these arrangements, and therefore fails to follow the TRAI's regulation requiring that the AFC shall be "determined on the basis of the cost of the network elements involved in the provision of access." Direct Wavelength Access STM-64 and STM-16 capacity connected to consortium system provided System Interface Equipment (SIE) does not require the use of a DXC and associated ODF as described above, and it is likely that the even larger wavelengths that may be used in the future also will not require this equipment.
- Similar concerns emanate regarding CAPEX and OPEX charges for unnecessary equipment apply to Dense Wave Division Multiplexing (DWDM) equipment, which comprises over 35 percent of the capital cost used as the basis of the proposed charges for access facilitation at alternate co-location sites.
- Our international experience in this segment suggest that TRAI's identification of operations and maintenance costs (OPEX) as being 30 percent of the capital costs of the network elements used to provide access

facilitation is based on no apparent evidence and establishes these charges at a very high level compared to industry norms in this segment as most of the cost items indicated in table 6 have already been paid by consortia .

11. we believe that this present estimation of charges for access facilities at cable landing stations have been arrived by TRAI by following the forward looking costing methodology .

12. In view of above, we support the TRAI's costing methodology for estimation of AFC and further strongly recommend that the DXC and its cost should be excluded from the cost model and our international experience suggest that the access facilities charges at the CLS should not exceed US\$5,000 per annum (approx. Rs250, 000) and US\$20,000 (R10, 00,000) p/a in the case of the remote MMR.

Q2. On the power requirement of the transmission equipment i.e. DWDM, DXC equipped with different capacities, supplied by different equipment manufacturers.

ACTO Comments

1. The Consultation Paper reports that the two OCLS submitted data shows electricity consumption varying from 2 KVA to 6 KVA per rack for different transmission equipment. In our experience, a rack full of DWDM equipment uses an average of 4 KVA per rack. However, in exceptional cases, up-to 6 KVA is acceptable for a DWDM node.

Q3. Percentage used for OPEX and capacity utilization factor with supporting data on each OPEX item specially on space and power consumption of various equipments.

ACTO Comments

Percentage for OPEX

1. We have noted from the CLS RIO that presently the owners of the cable landing stations (Tata and Bharti) have used Capex- Opex Ratio as 45:55.

Capex	45%
Opex	55%
Total cost	100%
Source: CLS RIO available on Companies' website	

2. We have noted that TRAI has used the provision of 30% of CAPEX as OPEX to estimate the items indicated in the Table 6 of the consultation paper and it has been used to estimate the operational cost (OPEX) in the Table 7(a) and Table 7 (b). The analysis of said tables suggest that the Capex- Opex ratio is 48:52/49:51.

These are summarized below;

Particulars	Table 7(a)	Table 7(b)
Capex (Depreciation and RoCE)	48%	49%
OPEX (Operating expenditure)	52%	51%
Total cost	100%	100%

3. It is also submitted that cost items indicated in Table 6 have already been paid by consortia, therefore, **the percentage (30%) used for OPEX for this segment for**

estimation of charges of access facilities at cable landing stations is not in line with industry practice of this segment, it should be less than 30% .

Capacity utilization factor

4. We have noted that capacity utilization factor taken by TRAI is in line with best international regulatory practices and costing principles, **therefore, we support the capacity utilization factor of 70% for estimation of AFC.**
5. It is important to mention that as per costing principles, the capacity utilization factor is generally applicable for machine/network elements / equipments and it is not applicable for estimation of charges for co-location and space. **Therefore, it is suggested that charges estimated under Table 9(b) for co-location charges per annum may be suitably revised.**
6. Notwithstanding above, some specific observations are as follows:-
 - We believe that most of the costs referred to in table 6 have already been paid by the consortium for the CLS. The power for the international circuit is already paid for by the consortium, and connecting the international circuit from the ODF in the CLS draws no additional power whatsoever.
 - Paragraph 31 states the cost per unit Rs. 15. We believe that this should not be more than Rs.8 per unit.

- Regarding the space, a pair of patch cords occupies only a few millimetres of space in a cable tray, either above or below the rest of the equipment in the CLS – i.e. an incidental amount.

Q4. Whether ceiling of uniform Access Facilitation Charges may be prescribed for all Cable Landing Stations in two categories i.e. AFC at CLS and AFC at alternate Co-location, or these charges should be dependent on submarine cable system or location of cable landing stations?

ACTO Comments

1. TRAI has very rightly noted in Para 22 of the consultation paper that “work done for access facilitation at cable landing station is the same for all cable landing stations. Therefore, it may not be required to estimate the cost based charges separately for each cable landing stations. The only variation could be due to space and electricity charges if the cable landing stations are located at two different cities, which may be a small portion of total costs. In case of access facilitation at Meet Me Room (MMR) the difference could also be because of length of optical fiber link between CLS and MMR”.
2. Keeping in view the monopolistic behavior of the incumbent OCLs and exorbitantly prevailing high access charges for the past 5 years, as has been rightly observed by TRAI in its consultation papers, we believe that unless and until the market of CLS Access Charges / co-location charges matures and the access charges are brought to the level of charges prevailing in the comparable competitive international telecom market, TRAI should prescribe ceiling for

uniform Access Facilitation charges at CLS and alternate Co-location and continue to prescribe the same.

3. We supports the implementation of uniform charges to provide predictability for stakeholders as well as to reduce the substantial administrative work by the TRAI that would be required to establish separate fees for each cable station. Additionally, provided that the underlying costs are similar, uniform fees are consistent with the requirement of the Authority's regulations that that the AFC should be "determined on the basis of the cost of the network elements involved in the provision of access." Moreover the costs of access arrangements appear to be sufficiently similar at different cable stations and for different submarine cable systems to support the use of uniform rates, provided that these different arrangements require the use of the same equipment.
4. **We support the TRAI's view noted in Para 22 and recommend that the ceiling of uniform cost based access facilitation charges should be prescribed by TRAI for AFC at CLS and alternate collocation in all cases.**
5. **However, we further suggest an alternative access methodology - i.e. the in-span access methodology (fibre connectivity in a junction box outside the CLS). This would remove the need for accessing via a remote MMR in most cases.**

Q5. Whether prescribing the access facilitation charges on IRU basis is required?

ACTO Comments

1. We believe that AFC on IRU basis is required under the present circumstances. This allows access seekers to match the contracts looking for IRU Contract term.

Q6. Whether uniform co-location charges may be prescribed or such charges should be location dependent?

ACTO Comments

1. We believe that here the issue is as to what measures can be taken to ensure transparent and non-discriminatory treatment in pricing and provisioning of collocation facility? In this regard, it is pertinent to quote from TDSAT Order, in Petition No.148 of 2005, dated 19th March 2007 as under:
“In order to ensure that there is a semblance of fairness and reasonability and Respondent is not tempted to adopt an arbitrary approach in this regard as it has done in the matter presently before us, we request TRAI who at one point of time had intereoned in this matter to lay down guidelines at the earliest to ensure that the fixation of such charges by service providers including MTNL is not done arbitrarily and is based on use of sound criteria and reasonable rationale.....”
2. Therefore, in order to ensure transparency in pricing and provisioning of Collocation facility, TRAI must prescribe the range or a band for the Collocation

charges based on the actual cost. This range or band for Collocation charges could be based on the cost involved on the basis of classification of cities.

3. We recommend that TRAI must prescribe the location based range or band for the collocation charges based on cost oriented principle.

Q7. Whether the restoration and cancellation charges should be either a fixed charge or based on a percentage of the AFC. In case of fixed charge, should the present charges be continued or need revision?

ACTO Comments

1. Presentably the restoration and cancellation charges are in the range of Rs. 1,00,000 to Rs 1,10,000. We believe that these charges are on higher side. We understand that restoration / cancellation is equivalent to plug-in or plug-out for connection or disconnection for any circuit. We recommend that the present charges should be revised to the tune of Rs. 10,000/- per instance of restoration / cancellation.

Q8. Any other comment related to Access Facilitation Charges, Co-location charges and other related charges like cancellation charges, restoration charges along with all necessary details.

ACTO Comments

a) **Applicability** - As per the CLS Regulations, 2007 the review of access / co-location was due in the year 2010. We have been contesting since 2010 through facts and figures that these charges may be reviewed immediately and should be brought down to the level of charges prevailing in other

jurisdictions. These charges have not been reviewed and fixed in 2010 itself and the standalone ILDOs would have been forced to pay the high charges to the OCLSs till date. It can be well understood through Table 7(a) and 7(b) of the consultation paper which shows the annual CLS / Co-location charges at merely 2~5% of the existing prevailing charges. Keeping in view above, TRAI may consider retrospective implementation of the CLS / Co-location charges.

- b) **Compensation thru revising existing RIOs by OCLSs** - In case retrospective implementation of CLS Access charges is not possible TRAI may take suitable steps to compensate the seekers by mandating the OCLSs to offer revised charges immediately for all contracts entered before finalization this consultation process for access facilities at cable landing stations. Therefore, **Suitable provision in the regulation to the effect that the existing agreements between the access provider and seekers would also stand amended to incorporate the revised charges specified by TRAI with immediate effect.**
- c) **We are not aware as to how the existing OCLSs, especially incumbent operators, being integrated operators, are charging AFC/CLC from their own access services. Therefore, we recommend that with a view to ensure level playing field in a transparent and non discriminatory manner, the AFC/CLC prescribed should also be charged by these OCLSs from their own access services. A reporting requirement to this effect may also please be mandated for the OCLSs, as been prescribed by TRAI in case of SMS and Carriage charges in the IUC Regulations.**

