COUNNTER COMMENTS TO THE RESPONSE FROM DIFFERENT OPERATORS ON THE TRAI CONSULTATION PAPER DATED 19-OCT-2012

TCL has already given a detailed explanation on the working of the proposed access facilitation charges in its Response to TRAI Consultation Paper dated 19th October 2012.

It would be worthwhile to point out that majority of the comments by different operators in context to current CP, has been already answered in TCL's detailed response. TCL would also like to reiterate that the current process of TRAI working for the fixation of proposed Access Facilitation Charges is not transparent.

Nevertheless, following is the response to some of the issues which has been raised by the different operators.

Comment 1:
DXC and ODFs required at the CLS have already been paid for by the consortium"
Also that "the connection between the CLS and alternate co-location site does not require DXC equipment on top of DWDM equipment"

Response:

TCL has reiterated number of times that the architecture of the network for access to the CLS, does not incorporate any of the elements reimbursed by consortium both for CAPEX as well as for OPEX. The consortium reimburses the cost only up to the CLS external ODF.

Cost items which are charged to operators as part of AFA includes:

a) CAPEX items like Equipment, Fiber (Inter & Intra building), External and internal fit outs, Duct and Project Management Cost etc.
b) OPEX items like Space and Power, Manpower Cost (for Operations and Maintenance), Equipment AMC, Revenue Share and Overheads etc.
c) Cost of Capital

Regarding the comment that there is no need for a DXC in case of an alternate site, it may be noted that the capacity delivered on different interfaces from cable landing station needs to be groomed as per the capacity requirement, monitored and supervised before extending to the access seeker, which is only possible through deployment of DXC.

As per TCL, Direct Access to Capacity cannot be resorted to, as proposed by some stakeholders. There is a need for the involvement of intermediate DXC equipment for the following reason:

a. There is no guarantee of receiving capacity on the same interface at CLS ODF from cable system as demanded by access seeker. Port allocation for capacity

extraction from system is solely at the discretion of consortium and not of CLS owner.

b. DXC introduction facilitates to effectively handle the access facilitation process, under following scenarios -
    i. Exact capacity port is exhausted
    ii. Exact capacity ports (Lower Speeds) are not provisioned in the cable system itself like IMEWE, EIG etc.
    iii. Access capacity extended from CLS on higher speed port to reduce the use of number of ports of CLS as well as that of backhaul provider terminal equipment
    iv. To facilitate access seeker to deploy multiple backhaul networks having multiple circuits.
    v. To facilitate a backhaul provider handling capacity of several access seekers at same port.
c. DXC introduction facilitates improved operation and maintenance of access capacity by-
    i. Facilitating supervision of circuit by way of alarm at CLS end (outside CLS) as well as at Backhaul end.
    ii. Providing monitoring point in case of complaint of the access capacity quality etc .
    iii. Quick upgrade of access capacity if needed by access seeker.
    iv. The upgrades / downgrades are simpler as it does not affect largely the CLS –DXC s which have larger TATs for augmentation.
    v. The distances to be covered between different floors of the two equipment (which are dependent on SFPs) or different building become redundant when another DXC is near the Customer hand-off.

Comments 2:

"Fully allocated cost per 10G is around Rs.5 Lakhs per 10G for each terminal, and we use relatively expensive equipment."

Response

TCL disagree with the numbers put by ACTO for fully allocated cost per 10G at Rs 5 Lakhs.In this connection we would request TRAI to seek and examine the basis of the price indicated as all the OCLSs have submitted the actual cost incurred on various network elements and various other costs along with proof of such costs. It is apparent that such Numbers seems to have been put forward with a purpose to mislead the authority.

The equipment which ACTO has considered in its calculation has to be verified for:

- Whether the technical set up considered by ACTO is capable of meeting the requirement as mentioned in Comment 1 above in respect of live high speed traffic.

- Whether the ACTO's calculation for the setup is in line with the set up proposed by TRAI in Fig-2 (Page -8) of the CP.

Comment 3:

"The cost from OCLS2 is much too high, bearing in mind that the MMR is typically only a few kilometers away from the CLS."

Response

This is once again a comment made without knowing the ground reality.

The cost of the fiber has been taken based on the distance between the 2 sites, the city concerned, availability of the fiber in the market between the 2 sites to be connected, feasibility of carrying out new OSP work at various sites etc.

- In case of LVSB CLS in Mumbai whose alternate site is at VSB, Fort, Mumbai , the distance is ~ 20Kms , with the fiber distance is 43 Kms (for Primary and secondary path included). ROW Permission is not available in South Mumbai. Even if available at some stretches, these are charged at INR. 95Lakhs /kms by the Brihanmumbai Mahanagar Palika.

Comment 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."

Response:

The types of interfaces provided by the consortium are different in different cable systems. Further cable systems keep modifying their policy of buying new interface ports. The current trend is to buy more and higher level interfaces. For information SMW-4 has proposed to equip itself with 100G ports and decided not to buy any interface ports less than STM-16. Similar is the case with other cable systems like SMW-3, IMEWE etc. Therefore the statement that consortium provides the interface for all level of capacity is not entirely true and CLS owners have to equip it to meet the low speed circuit requirements of the access seeker.

Thus it is obvious that not all the interfaces like STM-1/STM-4/STM-16 would be available in all the systems in future. Further there is no guarantee that the capacity to be accessed will be mapped by the Network Administrator at the interface of requisite speed.

Comment 5:

"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".

Response:

CAPEX elements comprise of equipment, fiber, and project management cost; OPEX item like maintenance cost of equipment and fiber can be linked as a **PERCENTAGE of CAPEX.**
On the other hand OPEX elements are not directly linked to the CAPEX items; like:

- Property rental
- Power cost
- Manpower cost for operation and maintenance. etc

30% of CAPEX as OPEX is insufficient to cater to all the OPEX elements involved. **CAPEX and OPEX are independent and they need to be worked out independently based on factual data.**
The OPEX on actual has been submitted to TRAI earlier.

Comment 6:

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.

Response:

IRU cost cannot be established at current pricing methodology. The costing then would have to take into consideration the multiple replacement cost of the equipment, cost of property itself rather than its rentals, inflation on AMC, Power, Manpower for Operations and Maintenance, External and Internal Fit outs and Security etc. for the next 10-15 years which are not possible to be predicted and accounted for accurately. Accordingly only annual lease model is recommended by TCL.

Comments 7:

" that provision should be included in the CLS – RIO which protects the commerical intrest of the non landing party in the consortium cable , by prescribing a clause to this effect that the non landing party has to pay the co-location charges for activation of its Bandwidth.

Response:

This issue needs to be dealt with at consortium level. The regulation on AFC by TRAI is required to be uniformly applicable on all the access seekeres who intends to draw capcity from a particular cable system.

Comments 8:

AFA charges are adversy affecting the prolifiration of Internet and Broadband services.

Response:

Economic Times quoted in its publication "India's broadband base grows 24.5 per cent in 2011 to 13.33 million" on 21st March'12 – "India is one of the fasted growing broadband players in the world; Ranking 11th in the world by number of broad band subscriber; Ranked 3rd by growth".

	2007	2009	2009	2010	2011	2012	CAGR
Broadband Users (Thousands)	3,083	3,872	6,218	8,770	11,509	13,790	
Growth over Previous year		26%	61%	41%	31%	20%	35%
Penetration (% of Population)	1.40%	1.70%	2.70%	3.80%	4.90%	6%	

Source : Telegeography

According to Telegeography (Independent source tracing bandwidth usage pattern internationally), India is witnessing a healthy growth in numbers of broadband users @35% CAGR over the last 5 years.

Considering the low penetration rate and rural-urban divide, last mile connectivity emerges to be the bottle neck rather than bandwidth pricing.

Secondly claims that the presence of undue advantage to the OCLS owners who are in the broadband business are false. In regards to this refer the following table from the TRAI annual report of published on 13th Apr-12.

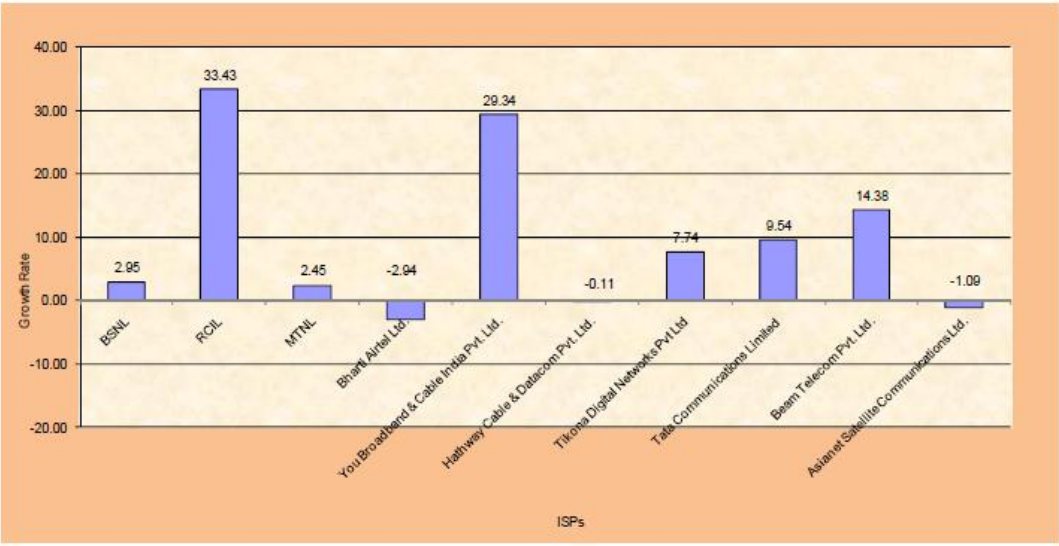
Table 1.22: Internet Subscriber Base & Market share of top 10 ISPs

S.No	ISP	Category	Service Area	Subs	Share (%)
1	Bharat Sanchar Nigam Ltd.	A	All India	12307235	54.97%
2	Reliance Communications Infrastructure Limited	A	All India	3576179	15.97%
3	Mahanagar Telephone Nigam Ltd.	B	Delhi & Mumbai	2537913	11.33%
4	Bharti Airtel Ltd.	A	All India	1370783	6.12%
5	You Broadband & Cable India Pvt. Ltd.	A	All India	389983	1.74%
6	Hathway Cable & Datacom Pvt. Ltd.	A	All India	360571	1.61%
7	Tikona Digital Networks Pvt Ltd	A	All India	255411	1.14%
8	Tata Communications Limited	A	All India	188118	0.84%
9	Beam Telecom Pvt. Ltd.	B	Andhra Pardesh	180926	0.81%
10	Asianet Satellite Communications Ltd.	B	Kerala	112954	0.50%
	Total of Top 10 ISPs			**21280073**	**95.04%**
	Others			**1110376**	**4.96%**
	Grand Total			**22390449**	**100.00%**

As seen from the table above, the TCL is on 8th Position with 0.84% of the total market share. Whereas other non OCLS owners including MTNL/You Broadband/Hathaway Cable & Data com Pvt. Ltd are much above the TCL. If AFA alone was the clinching factor to dictate the cost advantage, BSNL and Reliance with only one CLS each and MTNL without any CLS would not be occupying top 3 slot as above!. It leads to a different question- Is AFA charges the bottleneck or the last mile access is the real reason behind the poor penetration of the broadband market. We would request TRAI to examine this issue as well.

Furthermore please also refer the table from the same TRAI report stating the rate of growth which is as follows:

Chart 1.14: Growth achieved by top ten ISPs during the quarter



This is highest for RCIL who have claimed to be on the receiving side of the high AFA charges. Additionally the 2 ISP who are not CLS owners in India- You Broadband and Beam cable also had a very good 29.34% and 14.38% growth. One of the major CLS owners Bharti has in fact shown negative growth in the ISP business. This is in contrast to the claims by the Operators. So as seen above the contention that AFA charges are in no way coming on way of the growth of the broadband penetration in India.

Ccomment 9:

Uniform Co-location charges:

Response:

TCL is against the application of uniform Co-locations charges for the following reasons:-.

Co-location charges / Access Facilitation Charges need to be worked out on various factors which are regional / cable dependent. It is due to the fact that several cost component going into formulation of colocation charges like rental, power cost, maintenance, manpower cost vary substantially from place to place/location to location. Infact, these factors are different even for cable landing stations with in Mumbai city as the cost of these factors vary at different locations with in a city. Therefore unification of colo charges is not tenable.

EXAMPLE: the rental for Per square Feet (PSF) / Month in Mumbai is Rs 280 whereas for Chennai it is only Rs 78 psf/month and much lesser in Ernakulum. Similarly, the power rates per unit is ~ Rs 10/Unit in Mumbai against Rs 8.1/unit in Chennai. In line with the same the External and internal fit out rates also varies from region to region.

Further the volume of traffic managed by Major CLS in Mumbai are different from that of Chennai and Ernakulum and accordingly the manpower cost and the project management cost allocation will wary.

Comment 10:

Presently CLS Access charges are extremely high when compared with similar competitive telecom market in other jurisdictions."

.**Response:**

The comparison of the access at Singapore is not relevant for the reason that Singapore CLS is end of cable for most of the cable systems. It is a transit point from one cable to other for most of the capacity touching Singapore. Further capacities transiting Singapore is mainly at lambda level and same is not meant for consumption at Singapore itself. Capacity used for consumption at Singapore is extremely small compared to transiting capacity while it is reverse situation in India where most of the capacity coming out of CLS is for Indian consumption. Therefore, Singapore model is not comparable for India scenario. Singtel just provides fiber patch between CLS ODF & MMR. The only cost involved therefore is the fiber chord. Such arrangement cannot meet the requirement of SLA which is the industry standard for ensuring near uninterrupted service for such high capacity circuits. In contrary, TCL's technical set up for access facility provides high standards of SLA to ensure that there is no room, what so ever for any complaint from access seeker or customers towards operational aspects of the capacity.

TCL has already submitted that in most of the countries charging relatively lower cross connects fee, the OCLS are resorting to compelling access seekers to buy Backhaul bandwidth from them only at a very high price.. **The backhauls margins are not only compensating for the under recovery of CLA access cost, but also ensure them a healthy profit.** Therefore the comparison is not correct due to deceptively low AFA charges and high backhaul charges. This is a common knowledge and the same is already discussed in detail with TRAI.

TCL would request TRAI to take note of these prevalent practices and ensure that the comparison is made under apple to apple conditions, rather than operators selectively showing absolute numbers to add credence to otherwise unjustifiable point.

Comment 11:

"that under the consortium system generally local incumbent telecom service providers (who are also member of consortium) are given preference and responsibility for construction and management of cable landing stations in their terrestrial and the costs (CAPEX and OPEX) of construction and management of cable landing stations are being reimbursed by the consortia. Therefore, the question of investment by foreign operators/standalone operators in that terrestrial does not arise as it will not be cost effective.

The arguments of incumbent operators as indicated in previous responses with respect to investment by foreign operators in CLS segment are not tenable in view of above, as it is generally accepted practice in consortium system that local telecom operator will take the responsibility for construction & management of cable landing station in its country. There is no significant investment required from the operators (who have been nominated / designated by the consortia) for management of cable landing station as the costs (Capex +OPEX) shall be reimbursed by the consortia. it is also important to mentioned that those cable systems who are landing in India under consortium system, all investments with respect to these systems have been made by the consortia and not by the TCL / Bharti, as shown by them in their responses to previous consultation paper that they have made alone
Investment for these cable system in India .

Response:

The comment that the exiting OCLS are given the preference because they already have the CLS infrastructure in place is not correct. Consortiums are always open to offer building of CLS by any licensed operator in that particular territory/country. Example C&W had equal chance to build a cable station in India for EIG cable as they are a licensed service provider in India.
On the contrary, the local service provider is pushed by the consortium members to build a CLS for the planned cable in their territory, on the plea that they are better equipped to do so, couple with the reluctance of non-local licensed service providers for building the same.

If it is a fact that all the cost for building the CLS are reimbursed by the consortium,it is inexplicable as to why other licensed ILDOs have not built CLS in India in spite of the fact that even their customers are looking for diversities in all aspects including that of cable stations? For the reason of diversity, NEW CLSs for IMEWE, GBI, EIG, TGN EA and TGN Gulf have been built by TCL/Bharti/Sify at different locations within Mumbai.

Further it would not be out of the way to mention that some of the new cable system like BBG & SMW-5, connecting Oman and Europe to Singapore respectively, are not landing in India. Some of the licensed ILDOs in India are part of the consortiums and have the **perfect opportunity to build its own CLS in India**. However they are **shying away from building CLS** in

India, despite the cost reimbursed by the consortium. Such attitude of these licensed ILDOs shall deprive India of an opportunity to have more submarine cable system touching its shores, which would have helped the overall IT/Telecom growth. Had there been any Indian Service Provider partners in the consortium, it would have been pressurized by the consortium members to build the CLS in India.

By virtue of being OCLS, local service provider building the CLS is in disadvantageous position as it has to bear the huge burden of Cable Station CAPEX initially. While a portion of CLS cost (Equipment related) is borne by consortium, the infra and facility cost (Including Land and Building, power, air conditioning, trained engineering manpower etc) is mostly borne by the CLSO. These are huge costs and can be recovered only if there is activation of capacities by other Parties at our CLS.

Since 2005, 4 submarine cables have come up namely SMW4, IMEWE, EIG and GBI cable system out of which 2 submarine cables SMW4 & IMEWE, has come up with 2 separate CLS in India. Two private Cables, TIC & i2i, also came up with independent CLS. Sify, the only new ILDO licensee out of 19, decided to invest in CLS for GBI cable system. These examples highlights that there were no restriction, financial or any other entry barrier, to build CLS by any licensed operator in India.

All ILD operators are treated equally by DoT and other Government agencies for securing license for landing submarine cable/construction of CLS. In spite of this, if ILD operators like C&W are not coming up with their own cable/ cable stations, they need to be questioned for their disinterest in investing in Cables/CLS instead of viewing participation of old ILDO's in this field with suspicion.

Most of the time, a cable owner in India activates circuits immediately upon its commissioning and as a consequence, as per consortium rules, it bears the entire construction cost of cable stations (about USD 6-6.5 million) used for the activated circuits initially which may be shared subsequently or otherwise depending upon the need of other consortium members to activate their capacities at concerned CLSs. On a comparison of station cost per STM-1 on account of the basic construction/infrastructure cost required to be borne by the CLS owner with AFA fee charged for providing access, it can be seen that till over 10 waves of capacities are activated on the cable from that cable station, the infrastructure cost of the station cost to owner for activating the capacity remains significantly higher than the aggregate of AFA fee approved by TRAI and that may be charged by the CLS owner for access facilitation. This amply demonstrates that AFA fee is a very small fraction of station cost, which an access seeker pays for activating a circuit in initial days.

Comment 12:
"AFCs should be set per link rather than per unit capacity. This is because a "per link" charge is consistent with the cost causality principle"

Response:
AFC cannot be charged per link as cost of different interfaces used for different capacities is different.

Comment 13:
"TRAI should also impose several non-price conditions on the behavior of vertically integrated OCLS. Regulations are needed to minimize the potential for vertically integrated CLS owners to exploit CLS ownership in retail telecommunication markets. For instance, regulation should be designed to ensure that OCLS do not self-supply access at a rate more favorably than it supplies externally"

Response:
AFA is cost based and hence preferential rates are not possible. It must be noted that TCL uses identical but different setup to access the capacity from the CLS. Therefore TCL also bears the similar charges towards accessing the capacity from CLS like any other access seeker.

Comment 14:
The cost of building a cable landing station is a fraction of the cost required to build the international submarine cable system. Therefore, the charges for access facilities at cable landing station should also be in the same proportion.

Response:

Access Facilitation Charges are recovery of cost incurred towards providing the access of bandwidth to licensed service provider. These are purely cost based unlike pricing for IPLC services which are market driven. Both the items cannot be compared.

Comment 15:
"Cost per unit Rs. 15. We believe that this should not be more than Rs.8 per unit."

Response:
Commercial Power Supply is assumed at an average rate of next five years, with current base rate of Rs11.06 per unit. Rates have been increasing at 4% CAGR in last 5 years. Hence the average of coming 5 years is Rs12.03 per unit.
Secondly, to operate equipment, we need processed power (which include rectifier, backup batteries, UPS, generators, fuel cost, staff cost to operate the power setup, maintenance of these equipment including AMC as applicable etc), hence the rates increase to Rs15 per unit.

Comment 16:

"alternative access methodology – i.e. the inspan 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."

Response:

Access facilitation is a managed service and therefore need to be dealt with appropriately as per the technical standards followed for similar telecom services. Refer to the response of Comment1.

Comment 17:

"AFC should not apply to the traffic that simply transits between two cable systems and does not touch the domestic Indian network. Therefore, the Authority is requested to regulate the prices for transit capacity along with the capacity being accessed in the country"

Response:

AFC is the charge primarily for extracting the capacity from cable station and handing over up to the backhaul service provider equipment. OCLS need not necessarily know the end use of the capacity extracted under AFC.

In many cases the capacity drawn from one station may be transiting to a different territory using the CLS of different OCLS. Does it mean that both OCLS should offer the service for transiting capacity under such situation free of charge?

ANCILARY – Source of comment:

The comments mentioned below are mentioned in one or the other form by the operators mentioned against them.

Comment 1:
"DXC and ODFs required at the CLS have already been paid for by the consortium"
"Also that "the connection between the CLS and alternate co-location site does not require DXC equipment on top of DWDM equipment" – **ACTO; INFOTEL; RCOM; EQUANT; Verizon; AT&T**

Comments 2:
"Fully allocated cost per 10G is around Rs.5 Lakhs per 10G for each terminal, and we use relatively expensive equipment." - **ACTO**

Comment 3:
"The cost from OCLS2 is much too high, bearing in mind that the MMR is typically only a few kilometers away from the CLS." – **ACTO; EQUANT; AT&T**

Comment 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." **– ACTO**

Comment 5:
"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". – **ACTO; AT&T; CITYCOM**

Comment 6:
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. **– ACTO; BSNL; ISPAI; INFOTEL; RCOM; NGN;**

Comments 7:
" that provision should be included in the CLS – RIO which protects the commerical intrest of the non landing party in the consortium cable , by prescribing a clause to this effect that the non landing party has to pay the co-location charges for activation of its Bandwidth. - **BSNL**

Comments 8:
AFA charges are adversy affecting the prolifiration of Internet and Broadband services. - **BSNL**

Ccomment 9:
Uniform Co-location charges: - **BSNL; INFOTEL; RCOM; EQUANT; NGN**

Comment 10:
Presently CLS Access charges are extremely high when compared with similar competitive telecom market in other jurisdictions." – **C&W**

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the consortia) for management of cable landing station as the costs (Capex +OPEX) shall be reimbursed by the consortia. it is also important to mentioned that those cable systems who are landing in India under consortium system, all investments with respect to these systems have been made by the consortia and not by the TCL / Bharti, as shown by them in their responses to previous consultation paper that they have made alone
Investment for these cable system in India . – **C&W**

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