TCL response to TRAI consultation Paper dated 19th Oct-12 on Estimation of Access Facilitation charges and Co-location Charges at Cable Landing Stations

With reference to the consultation paper issued by TRAI on 19th Oct-12 prescribing the Access facilitation charges, we would like to submit that the working methodology and the cost numbers for each of CLSs owned by TCL has been under discussion with TRAI since 30-06-12.Vide its letter dated 18-05-12, TRAI had asked for presentation to be given on following points with respect of each of CLSs separately:

(a) Layout of CLS demonstrating the following separately:

- (i) The cost elements for which cost is reimbursed by the Consortium to M/s. Tata Communications Ltd.
- (ii) The cost elements provided by M/s. Tata Communications Ltd. (for which cost is not reimbursed by the Consortium to M/s. Tata Communications Ltd.) for provision of access facilitation and co-location to the eligible Indian International Telecommunication Entity (ITE).
- (b) The interfaces provided in the equipment by the consortium e.g. STM-64, STM-16, STM-4, STM-1 etc.
- (c) The cost elements required to provide access facilitation and co-location to the ITE for capacities of interfaces provided in the equipment by the consortium.
- (d) The cost elements required to provide access facilitation and co-location to the ITE for capacities other than those provided in the equipment by the consortium.
- (e) The additional features/services sought by the ITE from M/s. Tata communications Ltd. Other than access facilitation and co-location.
- (f) The distance (in kms) between CLS and alternate location (if access facilitation is provided at alternate location).

A comprehensive presentation was given to TRAI on the issue and thereafter vide our letter dated 24th August, 2012 the queries raised by TRAI on various aspects of access facilitation were responded to.

TRAI vide its letter No. 416-3/2010-I&FN dated 17th August, 2012 scheduled a meeting to discuss access facilitation charges and co-location charges which were submitted to TRAI for all the TCL Cable landing Stations vide its letter dated 18.11.2010. The meetings were held on 30.08.2012 and subsequently on 6th September, 2012 and 25th September, 2012. In these meetings extensive discussions were held on the methodology used for computation of access facilitation charges, cost of various network elements used in the Cable Landing Stations, documents supporting the actual cost incurred etc. As a result of discussions, the methodology for computation of access facilitation charges was modified as required and the computations were submitted to TRAI in September, 2012.

TRAI issued a Consultation Paper on Estimation of Access Facilitation Charges and Co-location Charges at Cable Landing Stations dated 19.10.12. TRAI also issued "International Telecommunication Access to Essential Facilities at Cable Landing Stations (Amendment) Regulations, 2012 (21 of 2012)" on 19.10.2012 wherein provisions have been made in the regulations to prescribe cost based Access Facilitation Charges, Co-location Charges and other related charges by the Authority.

It may be seen that all the discussions with TRAI on the Cable Landing Station access facilitation charges were done specific to each of the Cable Landing Stations. It is not clear from the Consultation Paper whether TRAI would prescribe access facilitation charges and colocation charges for each of the CLSs belonging to different OCLSs or would prescribe a benchmark access facilitation/co-location charges.

The network elements used in the designing the access to Cable Landing Station are governed by number of factors including requirement of the quality of service, consortium requirements in case of consortium cable and is decided by the OCLS accordingly. Thus in the existing set up, network elements have already been provided for and the costs invested by the OCLS. Any methodology which is proposed to be used for determining access facilitation charges should take in to account such investments made. It would be unfair to disallow network elements already provided for in the Cable landing Stations.

We would also like to submit that the methodology for working out the access facilitation charges and the cost numbers taken in the Consultation Paper require clarifications as they are not in line with the discussions held with TRAI in the month of August & September, 2012. The issues on which clarity is required are detailed in **Annexure 1**. Due to lack of clarity as mentioned, we are not in a position to give a substantial response to the Consultation Paper. However we would like to submit our stand on some of the issues as set out below:

TCL comments on Issues for Consultation:

1. 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.

Regarding **"Identification of network elements"** following are the stand of TCL on the points made in the consultation Paper:

- The AFA circuits have been delivered as per the architecture design of TCL, and cannot be created in a different manner than what has been done for TCLs' own captive requirements.
- DXC is an integral part of TCL architectural design. DXC introduction facilitates improved operation and maintenance of access capacity by
 - a. The distances to be covered between different floors of two equipment (which are dependent on SFPs) or different building become redundant when another DXC is near the Customer hand-off.
- In context to point 16
 - a. Test equipment's are not included. All the circuits which are handed over to access seekers are tested before the delivery and also during the operation for fault management and rectifications.

- b. Inter floor cabling for fiber and power chord has not been considered.
- In context to point 17
 - a. Cost of test equipment is not provisioned
 - b. Cost of Network Monitoring Systems is not considered

Regarding **"Cost data used for the CAPEX items"** following are the stand of TCL on the points made in the consultation Paper:

- In context to point 20 and 21
 - a. Since AFA charges are worked out on cost basis, the concept of economy of scale is not applicable here. In the set up the STM-4 card cost is ~ 4 times to STM-16 cost and STM-16 cost is ~4 times the STM-1/4 cost. And hence the division of higher capacity into lower by dividing the same by a factor of 2.6 to is not appropriate as it would result in under recovery of the cost.
 - b. The proposed interfaces required to be equipped by TCL is based on the past trends, with provision of market demand for higher capacities, and accordingly the interface cards have been planned. By not enabling the required cards in advance it will impact the delivery timelines of the AFA seeker. For example the timeline for the ordering of the equipment is very high which includes the internal Approval for procurement + Ordering the equipment + Supply of equipment + installation/commissioning of ordered equipment which may be anywhere between 4-6 months which is very significantly higher than the expected time line for delivery.
- In context to point 22
 - a. The logic of taking 30% of the CAPEX as OPEX is not right as reduction in CAPEX is not directly proportionate to reduction in OPEX.
 - b. In the TRAI consultation paper (Point -36) the difference in colocation rates in Chennai and Mumbai is 36%. The same elements apply to colocation of TCL equipment for facilitating the access of CLS. OPEX as 30% of CAPEX does not include elements like those captured in the calculation of co-location charges in point 36 and the difference in the rates of these elements across different CLS. Hence the AFA charges cannot be standardized on the basis of technical set up alone. The location of CLS also significantly influences AFA charges hence can not be ignored.
- In context to Point 23
 - a. There is no provision for spares of the equipment as per the standard practice followed for maintaining technical set up needed for provisioning of access facilitation.
- In context to point 24 –

The cost of passive network elements being apportioned for lower capacity on the basis of provisioning cost of one 10 G is not accurate. The passive cost is on the basis of number of circuits and does not vary proportionate to the size of capacity/speed of circuit.

- In context to point 26
 - a. DWDM Cost Fully loaded DWDM with 40 channels cost INR 90,481,249; hence per 10G CAPEX allocations for DWDM should be INR 2,262,000 rather than INR 780,000 prescribed in the consultation paper.
 - b. DXC Cost Fully loaded DXC (3xSTM64) cost INR 3,497,000; hence per 10G CAPEX allocation for DXC should be INR 1,165,000 rather than INR 820,000 prescribed in the consultation paper as explained in our recent submissions.
 - c. Project Management Cost It is the cost of man-hour used for filling the AFA charges to TRAI, which cannot be on percentage basis, it has to be on actual basis. Should we not include cost of engineering/comml staff employed to plan/ order and implement the technical facilities for AFA!!
 - d. Methodology adopted by TRAI in consultation paper for OTHER CAPEX elements is not clear and need appropriate elaboration.

Regarding **"Annual recovery of capital cost"** following are the stand of TCL on the points made in the consultation Paper:

- In context to point 28
 - a. Life of equipment is 5 years and not 10 years; Depreciation rate through SLM should be 20% and not 10%. This is due to fast technological obsolesce cycle of deployed equipment on account of technical innovations leading to early phasing out of the equipments.
 - b. Life of fiber optic cable is 15 years and not 18 years.
 - c. WACC is cost at which companies raise fund (i.e. Dividend on Equity, Interest on Debt and Retain Earnings which could have invested in other opportunities). It varies from company to company, depending on their capital structure and is not a subjective number. For TCL it is 23%.
 - d. WACC calculation is not clear, as WACC charges is being averaged. NPV of the WACC amount is much lower than actual.

Regarding "**Operational cost**" following are the stand of TCL on the points made in the consultation Paper:

- In context to point 30
 - a. Given the past trends all the space earmarked for co-location of the AFA have been fully utilized. Free space for future expansion, in case of rack space, has to be maintained. If space is not reserved in advance, all future requirement won't be met which would also be contrary to TRAI expectations. As space is reserved for CLS and associated applications, it has an associate cost.
- In context to point 32
 - a. It may be noted that the 6-8 rack space is for the TCL equipment for providing the AFA circuits. However this 6-8 rack will be serving different access seeker via multiple equipment on different interfaces from Different backhaul providers installed over a different point of time.

2. On the power requirement of the transmission equipment i.e. DWDM, DXC Equipped with different capacities, supplied by different equipment Manufacturers.

- DXC/DWDM equipment used for accessing different OCLS is dependent of the traffic forecast and network architecture; It cannot be standardized
- In context to point 31 TCL has already submitted that the Power requirement for the ECI equipment and the DWDM equipment, which is in the rage of 1.8 KVA to 2.5 KVA.
- Power cost should include cost of processed power (Battery/Rectifier/UPS etc) and would vary from region to region, depending on local power rates given by local authorities. Secondly the power rate is the average of next 5 years projected rates.

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

The logic of taking 30% of the CAPEX as OPEX is not right as:

- Reduction in CAPEX is not directly proportionate to reduction in OPEX.
- OPEX is by and large a standard figure for a particular technical setup catering to a forecasted requirement say for 100 CCt. In this case, opex would remain same irrespective of the fact whether it is serving to 2 circuits or 100 circuits!!, Opex would again be different for say 101the circuit, as brand new set up would be installed for next set of 100 circuits .Thus OPEX for 101 st circuit would be again increase substantially.

4. 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 Colocation, or these charges should be dependent on submarine cable system or location of cable landing stations?

AND

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

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 \sim 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.

As evident from the working (Point-36) in the TRAI consultation paper the difference in colocation rates in Chennai and Mumbai is 36%. The same elements apply to colocation of TCL equipment for facilitating the access of CLS.

To conclude though the topology may be the same across CLSs in different locations, it is not possible to adopt a common cost structure for different CLSs.

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

IRU basis is not required as working on leased basis provides much desired flexibility to seeker as well as the provider.

7. 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?

We agree to the point that the service must be subscribed for a minimum period of one year and in case of termination of any service prior to completion of one year, charges for one year shall be borne for such circuit/ capacity by the ITE.

8. 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.

As mentioned in reply to Questions above.

ANNEXTURE 1

Item groups	Item Description	Remarks
ITMC	ODF	Costing Methodology is not clear; The passive cost is on the basis of number of circuits and does not vary proportionate to the size of capacity/speed of circuit.
	DXC at ITMC	Stand by Equipment not considered by TRAI; Costing Methodology not clear; Even using TRAI methodology the costing of per 10G is not matching with actual cost.
	DWDM (in case of LVSB) at ITMC-1 &2	Stand by Equipment has not been considered by TRAI; Costing Methodology is not clear; Even using TRAI methodology the costing of per 10G is not matching with actual cost.
	All test equipment	Test Equipment has not been considered.
	Ingra-floor cabling and traywork.	Costing Methodology is not clear; The passive cost is on the basis of number of circuits and does not vary proportionate to the size of capacity/speed of circuit.
MMR	DXC MMR	Stand by Equipment not considered by TRAI; Costing Methodology not clear; Even using TRAI methodology the costing of per 10G is not matching with actual cost.
CONNECTIVITY COST (OFC)	Inter-Building: LVSB-VSB	The O&M for the interbuilding has been considered at 2% in TRAI working; However in-actual it is at 5%
OTHER COSTS	Manpower Cost towards installation	Manpower Cost towards installation has not been considered
	Huwawei and ECI NMS	Cost of Network Monitoring System has not been considered.
ANNUAL RECURRING COST	Space & support infrastructure DXC @ ITMC-2	TRAI has considered 30% of the CAPEX as OPEX. TRAI has not considered that the reduction in CAPEX may not mean a direct reduction in OPEX.
	DWDM @ ITMC-1 & ITMC-2 DXC (ECI) @ MMR	
	ManpowerCost	
WACC		WACC is a company specific It cannot be standardised. Secondly even with 15%, WACC calculation is not clear, as WACC charges is being averaged. NPV of the WACC amount is much lower than actual.
INDIRECT COSTS	Project Management	10% of the capex items does not cover the actual man-hour cost spend on Filing the AFA
FINAL COST WORKING FOR LOWER INTERFACES		AFA charges are worked out on cost basis, the concept of economy of scale is not applicable. Deriving lower interface cost by using 2.6 factorial is not appropriate as it would result in under recovery of the cost.