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25 April 2014

Shri Manish Sinha,
Advisor (F&EA)
Telecom Regulatory Authority of India
Mahanagar Doosanchar Bhawan
Jawahar Lal Nehru Marg (Old Minto Road)
New Delhi 110002

Subject: **Response to Consultation Paper on 'Review of Tariffs for Domestic Leased Circuits' (No 01/2014) dated 24.03.2014**

Dear Sir,

Please find enclosed our response to the Consultation Paper subjected above.

We hope that the Authority will find our response useful and consider our inputs while formulating the recommendation on the subject.

Thanking you,

Yours sincerely,
For **Telewings Communications Services Private Limited**

(Pankaj Sharma)
Sr. Vice President and
Head Regulatory

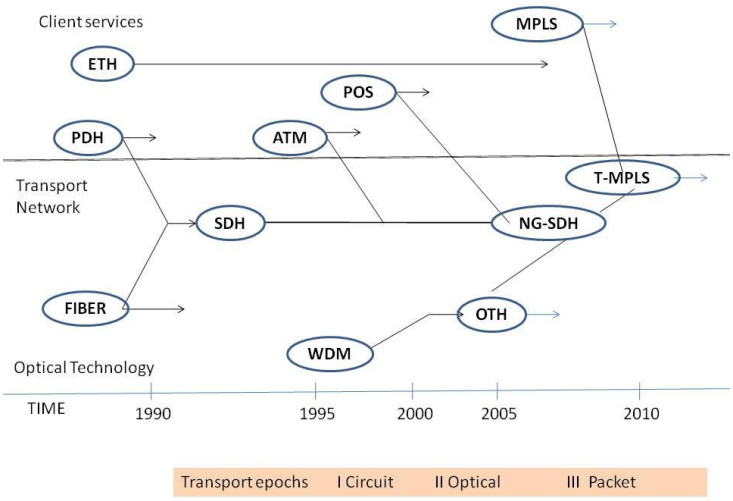
Encl: a.a.

Uninor Response to TRAI Consultation Paper on Review of Tariffs for Domestic Leased Circuits (DLCs)

Preamble

At the outset, we appreciate TRAI's efforts to bring out this consultation paper timely to review ceiling tariffs of Domestic Leased Circuits (DLCs) **in view of significant decline in the transmission cost coupled with rapid technological advances** (*refer below Graph- 1 depicting advancement of Backhaul from PDH – SDH – DWDM with the implementation period of respective technology*). Further, **there is a significant cost reduction in transmission / Optical equipments over a period of time due to introduction of higher capacity network technologies such as DWDM (Dense Wavelength Division Multiplexing) technology** which has enabled multi service network infrastructure coupled with broad array of new high capacity data services and reduce capital costs and operating costs through the elimination of service-specific network elements leading to more efficient utilization of the Bandwidth. There are other factors which have helped in overall cost reduction like reduction in fiber pair utilization, replacement of traditional microwave network with hybrid microwave / SDH network etc.

Graph -1

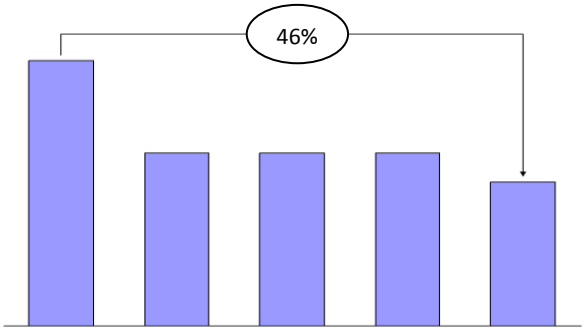


TRAI has pointed out in its consultation paper that although the market for DLCs has undergone several changes since 2005 and now there is a remarkable increase in supply and demand of DLCs due to intense competition, advancement of transmission technologies and reduction of transmission equipment costs which has lead to reduction in per unit cost of providing DLC resulted into availability of higher discounts on ceiling tariffs. However, **such higher discounts are generally available mainly on the dense route (like Delhi to Mumbai) which is in the range of 60-80%.** It is also important to highlight that the despite of adequate competition having 7-10 TSPs in each licensed service area and 31 licensed NLDO who can offer DLC services, customers are getting discriminatory discounts offering basis their requirements and routes. Whereas, **only 4-5 TSPs and NLDOs are offering bandwidth limiting options for the customers / TSPs in getting bandwidth – out of these on ground discounts vary on thin routes & hilly and remote locations.** In thin routes wherein predominantly PDH/ SDH Microwave have been deployed, TSPs are not willing to lease bandwidth creating non-level playing field.

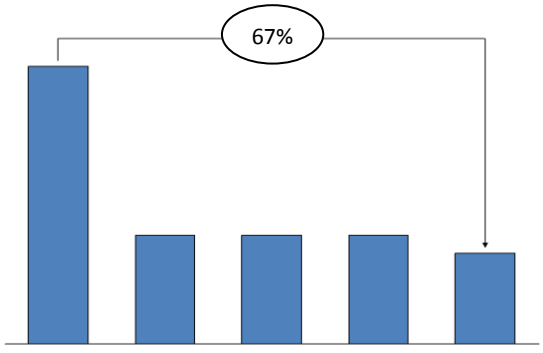
TSP who are leasing bandwidth from other TSPs/ NLDOs are being offered discounts upto 80% on the ceiling tariffs depending upon the bandwidth requirement and distance. It is also seen that the lower distances and bandwidth requirements attract lower discounts which is around 40-50%. This shows that against the maximum discount of 80%, the average discount remains 60-70% only.

Refer *Graph-2* depicting average discount of 46% for <=50Km distance and 67% for >50 km which incumbent TSPs offers on TRAI ceiling tariff since 2009 to a standalone Access Provider and *Graph–3* having indicative rates for MPLS and ILL services.

Graph – 2

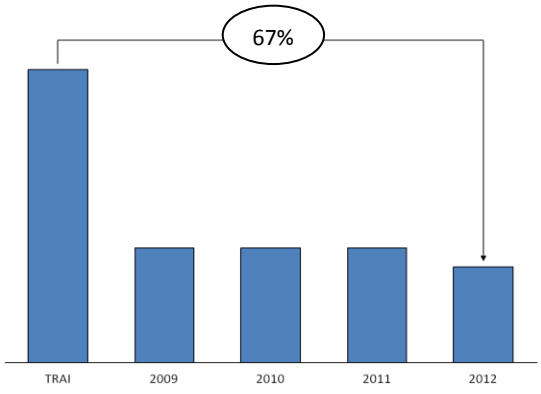


(Cost comparison for Bulk BW for long distance upto 50 Km)

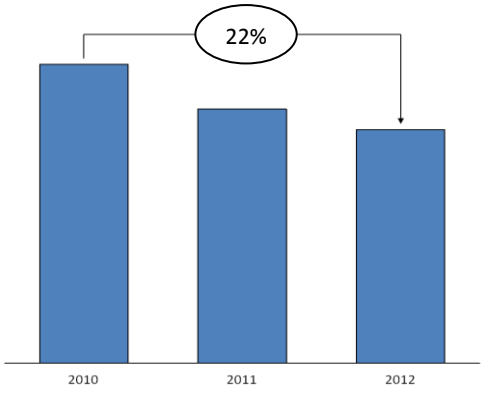


(Cost comparison for Bulk BW for long distance> 50 Km)

Graph – 3



(Cost trend for MPLS)



(Cost trend for ILL)

However, **we do have challenges in getting bandwidth on competitive rates on those geographic regions, hilly areas and / or routes where DLC service provider is having its monopoly in offering bandwidth**. The major reason for such discriminatory tariffs is the inherent policies of telecom PSUs who are major bulk bandwidth providers on key routes & Hilly areas which restrict them to offer discount structure commiserate with other private telecom service providers, putting them into a disadvantageous position in the competitive DLC market. In such cases, we are forced to pay higher tariffs in compare to discounts prevalent on major / dense routes and other areas leading to discriminatory price discounts.

In light of above submissions, our key recommendations are as follows:

- Although market forces are at play on major routes however owing to less competition on hilly area, Short distances & remote routes, percentage of discount on ceiling tariff is less/ nil. **Therefore, ceiling tariffs for DLC to be reviewed downward considering the current price discounts offered by TSPs / NLDOs to their DLC customers which are going up to 80%.** It is also recommended that revised ceiling should be common for all routes and geographies to minimize the price discount discriminations.

- **Modern technologies like MPLS-VPN that have brought the efficiency in DLC services and resulted in lowering cost of services should be brought under the regulation** by specifying ceiling tariffs.

- Customers are demanding higher bandwidths. Some of these demands are much higher than bandwidth for which no ceiling tariff have been prescribed by TRAI. It is suggested that **TRAI should fix the ceiling tariffs for STM-4 and STM -16 to protect the interest of the customers**.

Uninor Response to the issues under consideration

Q1: Should TRAI continue to use the bottom-up fully allocated cost method for computation of cost-based ceiling tariffs for point-to-point DLCs (P2P-DLCs)?

Q2: In case your response to the Q1 is in the affirmative, what values of the following items should be used for estimation of ceiling tariffs for P2P-DLCs:

(i) Return on Capital Employed (ROCE)
(ii) Useful lives of transmission equipment and Optical Fiber Cable (OFC) separately
(iii) Average no. of fiber pairs lit in OFC in trunk segment and local lead segment separately
(iv) Utilization factor of OFC system in trunk segment and local lead segment separately?

Response: It is recommended that **TRAI should continue to use the current methodology for reviewing the tariff ceiling for Point to Point DLCs considering the advancement made in the technology front resulting into more efficiency, reduction in transmission equipment costs and higher bandwidth demand from the customers**. We believe that this approach of reviewing current ceiling will extend maximum benefits to the end customers in a non discriminatory manner.

The very fact that most of the private Operators are able to offer discounts in the range of 60-80% on the current TRAI ceiling tariffs and are still make profits indicates that the TRAI base rates should be equal to or better after adjusting the discount component of existing TRAI ceiling rates. In addition, large scale fiber sharing, co-building of fiber network, sharing of infrastructure are all in vogue hence while working out pricing this factor must be kept in mind. Further, we submit that the revised ceiling should be common for all routes and geographies to minimize the price discount discriminations and for ensuring level playing field among TSPs.

Following are our inputs on the items specified by TRAI to be used for estimation of ceiling tariffs for P2P DLCs:

(i) Return on Capital Employed (ROCE): Since Uninor is not leasing out any bandwidth as of now hence this question is not applicable.

(ii) Useful lives of transmission equipment and Optical Fiber Cable (OFC) separately:
Optical Fiber Cable: There is no "theoretical lifetime" of Optical fiber cables and has been in commercial use for almost 30 years. Tax depreciation for fiber optic cable is often 15 years or more. Tenders for fiber optic cable often request for expected service lives of 25 years or more. There is no reason to believe that the optical fiber and optical fiber cable will not last at least that long unless got damaged due to construction or excavation projects or replaced with better technologies.
Transmission Equipment: For transmission equipment lifetime as per the industry standard is 7-10 Years. Tax depreciation for Transmission equipment is 7 Years. It is also to highlight that as per the rate of growth in the transport field is concerned, 7 years life of the equipment will be too long & service providers will be swapping the network elements to support and cater the new technology to meet traffic demand requirements.

(iii) Average no. of fiber pairs lit in OFC in trunk segment and local lead segment separately:

For Trunk/NLD – 24 Pair x 2 OFC
For Access / Local lead – Max will be 48 pair x 2 OFC

(iv) Utilization factor of OFC system in trunk segment and local lead segment separately?

For Trunk/NLD: Approx 3/4 pair OFC:
- 1 Pair for NLD Traffic.
- 1 Pair for the Intercity NLD traffic which comes between the main routes.
- 1 or 2 Pair required for the enterprise customer (very rare).

For Access: Approx 4/5 pair OFC:
- 1/2 Pair for the intra city/access traffic.
- 1/2 Pair for the enterprise customers. (Utilization increases in access network in case there are more enterprise customer to be connected on OFC.)

We request TRAI to consider the above submission also while reviewing the ceiling tariffs for DLC.

Q3: In case your response to the Q1 is in the negative, what should be the alternative approach for determining tariffs for P2P-DLCs of various bandwidth capacities? Please support your view with a detailed methodology along with supporting data and assumptions, if any.

Response: Not applicable.

Q4: In your opinion, what are the bandwidth capacities of P2P-DLCs for which ceiling tariffs need to be prescribed?

Response: It is suggested that TRAI should keep the existing categories for the bandwidth capacities of P2P-DLCs as it is for the purpose of defining ceiling tariffs. Further, it is recommended that **TRAI should determine tariff ceiling for STM-4/STM-16 Circuits also considering the increase in the demand of bandwidth from the customers. Proposed ceiling for STM4 should be two times of STM1 and six times of STM1 rate for STM16.**

Q5: In your opinion, is there a need for prescribing separate ceiling tariffs for local lead and trunk segment?

Response: **Since customer negotiates end-to-end rates with the TSP/ NLDO for the required bandwidth in order to gain maximum economic benefits hence there is no need of prescribing separate ceiling tariffs for trunk route and local lead.** The separate ceiling tariffs may put the end customer in disadvantage position during negotiation of rates.

Further, from Customer perspective, there is no difference in "local Leads" & "trunk Route" and Customer is leasing End to End P2P link from the TSP/NLDO. Therefore, **TRAI should mandate in its revised regulation that TSPs/ NLDOs should only offer rates for end-to-end media.**

In view of above, we recommend that there is no need to prescribe separate ceiling for local lead and trunk segment.

Q6: In your opinion, is there a need for prescribing separate ceiling tariffs for remote and hilly areas?

Response: As stated by TRAI in its consultation paper that given the investment intensive nature of such infrastructure, the high growth has been witnessed only on those routes on which economic activity is very high. As a result, the supply and demand of transmission bandwidth have not been uniform across the country. In service areas like Assam, North East and Jammu & Kashmir, the supply lags demand. Moreover, these geographical regions have the presence of only a few NLDOs and relatively scant transmission infrastructure is available there. Owing to the low competition, the tariffs of the DLCs on such routes and regions are comparatively much higher. It has been observed that, on the routes and areas characterized by low competition, the customers face a tariff at par with the TRAI's ceiling tariffs as the TSPs generally keep their base tariffs for DLCs equal to the ceiling tariffs prescribed by the Authority. Per unit cost of providing DLC has reduced owing to advancements in the transmission technologies and increased demand particularly on the dense routes. It is also important to highlight that in those geographic regions, hilly areas and / or routes where TSP/ NLDO is having its monopoly in offering bandwidth, customers/ TSPs are forced to pay higher tariffs in compare to discounts prevalent on other routes/ areas leading to discriminatory price discounts.

In view of above scenario, it is recommended that **there should not be any differential ceiling tariffs for remote & hilly areas vis-à-vis other routes which are having more benefits to service provider(s).** It is also suggested that TRAI should made the provision in the regulation mandating TSPs laying fiber in such areas should be asked to provide at least 20-30% of their total bandwidth capacity with customers/ other TSPs on need basis. These being part of larger cross connected Core network.

Following is the justification to support our above recommendations:

- Continuing existing practice of same ceiling tariff for hilly/ difficult & plan areas will encourage faster telecom development in such regions/ areas.

- Since telecom development in other areas are far better and TSPs/ NLDOs are getting more business resulting more profits hence therefore tariffs for hilly / difficult areas & terrains may be cross subsidized at the expense of other areas and accordingly offset the overall telecom development cost in such areas.

- Media/Fiber has covered sizable proportion of the region/ areas and cost incurred would already have been amortized, thus justifying uniform ceiling tariffs across all service areas.

Q7: In your opinion, what are the distances of P2P-DLCs for which ceiling tariffs need to be prescribed?

(i) trunk segment and
(ii) local lead segment (separately)

Response: Please refer response given above in para 5

Q8: In your opinion, is the distance interval of 5 km still relevant for prescribing distance-based ceiling tariffs for P2P-DLCs?

Response: Presently, TRAI has defined the ceiling limit for the distance from 5 to 500 kms. The same can be kept as it is.

Q9: In case your response to the Q8 is in the negative, what distance interval should be used for prescribing distance-based ceiling tariffs for P2P-DLCs?

Response: In view of response given in para 8, it is not applicable.

Q10: What equipped capacities of trunk segment and local lead of P2P-DLC should be used for computation of ceiling tariffs of various bandwidth capacities?

Response: Since Uninor is not leasing out any bandwidth as of now hence this question is not applicable.

Q11: Should VPNs such as MPLS-VPNs also be brought under tariff regulations for DLC?

Q12: In case your response to Q11 is in the affirmative, what method should be used for computation of cost based ceiling tariffs for VPNs?

Response: Yes, **Tariffs for VPNs such as MPLS- VPN, ILL should also be brought under the regulation for DLC basis the bandwidth capacity**.

TRAI should recommend ceiling tariff from 1 Mbps till 2000 Mbps as well as per Mb rate for capacity slabs. We suggest following bandwidth slabs and proposed rates for MPLS and ILL services basis the empirical data –

MPLS	
Capacities (in Mbps)	**Proposed rate (per Mbps)**
<10	Y#
10-50	Y*(0.67)
51-200	Y*(0.35)
201-500	Y*(0.26)
501-1000	Y*(0.25)
>1000	Y*(0.24)
#Proposed value of Y is INR 24,000 as per 2013 prevailing rate.	

ILL	
Capacities (in Mbps)	**Proposed rate (per Mbps)**
<10	Y#
10-50	Y*(0.83)
51-200	Y*(0.93)
201-500	Y*(0.67)
501-1000	Y*(0.65)
>1000	Y*(0.63)
#Proposed value of Y is INR 17,000 as per 2013 prevailing rate.	

Q13: In your opinion, is there still a need for prescribing separate ceiling tariffs for DLCs which are provided on Managed Leased Line Network (MLLN) Technology?

Response: There is no requirement for prescribing separate ceiling tariffs for DLCs provided based on MLLN technology.

Q14: Is there any other relevant issue related to tariff for DLCs which the Authority should keep in mind while carrying out the present review exercise?

Response: We wish to inform TRAI that currently, we are not selling domestic leased circuits including virtual private networks (VPNs). However, **we would like to highlight various practical challenges which we are experiencing while procuring leased lines from other telecom Operators**. These are as follows:

- **Cross Connect** – In present scenario, Carriers are not allowing Cross connect between their MuXs at their premises resulting in to big challenge and if they are at all allowing us in some exceptional cases, demanding huge cost for the same. It is strongly recommended that there should not be any Cross Connect Charges applicable at all in any circumstances.
- **POI Media Establishment using 3rd Party Media** – Presently, incumbent Operators are compelling new Operators to establish POI leasing media from them only and not allowing to use of any 3rd party lease media. In view of the same, we are facing several challenges & issues and could not able to route our traffic on Access/NLD POIs and calls are getting overflowed through NLD Carrier/L-1 TAC leading to inconvenience to customers as well as loss of revenue. Therefore, POI establishment using 3rd party lease media should be allowed in all cases and incumbent Operators should not impose any charges as Operator who is taking the media has already paid leased line charges to 3rd party in line with TRAI specified rates including cost of infrastructure /Equipments lying in incumbent Operator premises.
- **Dark Fiber** - Currently, there is no regulation on leasing Dark Fiber. We request TRAI to look into this matter to safeguard the interest of the customers. Following is the proposed cost methodology for the same.

Particulars	Unit of Measurement	Unit Price
Intercity	Cost /Pair/Km	50,000
Intracity	Cost /Pair/Km	1,80,000

Assumption: IRU is 15 years. O&M cost is 3% of total cost per annum. Price is in INR.

- **One time charge (OTC)** – These charges are levied by TSPs/ NLDOs and way above the normal cost of deployment (Equipment, fiber & ROW). Although these cost are already inbuilt in the end-to-end leased line ceiling tariffs prescribed by TRAI, however these are charged on case to case basis. This is increasing our overall cost for end customer as well as delaying network rollout / augmentation.

The existing regulatory framework is not protecting on any of these highlighted issues leading to exploitation of new operators like Uninor in terms of cost disadvantage, discrimination treatment etc. by incumbent Operators/ Carriers. We request TRAI to consider above mentioned challenges while reviewing the ceiling tariffs.

In view of above, we submit that –

- **TRAI should take holistic view of all kinds of media leasing issues including OTC, MPLS, ILL, Cross Connect charges, IRU for Dark Fiber while reviewing ceiling tariff for DLC and suggest comprehensive regulation with downward revised ceiling rates.**

- **No additional charges to be imposed by incumbent TSPs / NLDOs and same should be all inclusive in the ceiling tariff defined by TRAI.**

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