

Reliance Communications Limited Response to TRAI Consultation Paper on Review of Tariff for Domestic Leased Circuit (DLC)

We welcome the opportunity provided by the Authority to comment on the issues related to review of tariff for Domestic leased circuit.

Executive Summary:

- A. With the presence of 7-10 Access Service Providers (ASPs) and 31 NLDOS, there is enough competition in the DLC market in India, wherein customers' esp. commercial entities are benefitted with competitive tariffs. Thus, there is no need to intervene in the prevailing practices of DLC tariff offering.
- B. Authority should adopt time tested policy of **forbearance** in the DLC tariffs wherein market will determine the prices.
- C. If at all Authority decides to determine the cost based ceiling for DLC tariff then all cost escalations in RoW charges, infrastructure maintenance charges, financial distress of the industry, Regulatory cost etc should be factored in appropriately.
- D. Customers today require end to end connectivity from its one office to another and based on its requirement seek P2P or VPN link from service provider who has to take care of both local lead or trunk segment. Thus, there is no reason to determine separate ceiling for local lead and trunk segment
- E. Authority should explore the possibility of infrastructure development in remote and hilly areas by giving Tax Sops, allowing for special rebates in various levies or any other way that the authority deems fit. This will help the service providers to provide effective pricing for these areas.
- F. VPNs being a network architecture defining and customization functionality of the tunneling protocols, they cannot be construed as a separate dedicated DLC and **should not** be subjected to any tariff regime under present competitive market.

1. Preface:

1.1 Leased circuits are means of providing point to point transmission connection between customers for their exclusive use and are very useful resource to various entities like new entrant service providers, corporate users, call centers, ISPs and individuals for dedicated voice and data connectivity. Suppliers of leased circuits are access providers (ASPs) and NLDOs.



- 1.2 The types and dimensions of leased line services available have increased significantly in the past number of years in all markets. Technical and commercial innovation has made available leased lines of heretofore unimaginable capacities to both retail and wholesale purchasers. The demand has been accelerated by a myriad of requirements including, increased availability of broadband services and internet access and cloud services, and the necessity for larger capacity mobile backhaul. The newer innovative technologies (from copper/DSL to P2P and VPN using OFC) available to them have allowed operators to meet this ever increasing demand and affordable tariff to customers for higher bandwidth.
- 1.3 Apart from being capital intensive, deployment of fixed network in cities/ towns face hurdles, like prohibitive regulatory & other associated costs involved in laying cables and inordinate delay in obtaining right of way (RoW) permissions from concerned bodies. In fact, there are areas viz. higher terrain, bird sanctuary, remote and hilly areas where the expansion of network is extremely difficult. In view this backdrop and facing financial stress, the operators are still providing competitive price for DLC.
- 1.4 Before responding to the queries raised by the Authority, it is important to look at the present market practices of DLC in the Country and any need to still continue with the Regulated regime for the DLC tariff.

2. Present state of the DLC market in India:

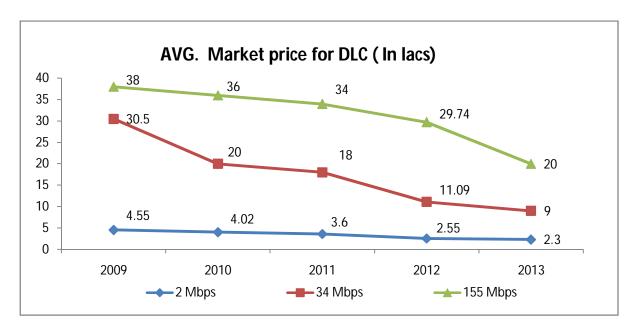
2.1 Ever since 1999 when the first TTO for DLC services was introduced, the market has transformed from being a monopolistic, nascent and growing market to a competitive, mature and almost saturated market. Post Liberalization in Dec 2005, the NLD operators are allowed to access the customers directly for the provision of leased circuits. Presently, apart from 7 to 10 ASPs, there are 31 NLD operators in the telecom market who can provide the DLC connectivity to the end user. As shown in the table below, there is no doubt that compared to year 1999 and 2005 where in there were only few players competing in the DLC market, today's market is characterized by ample competition.

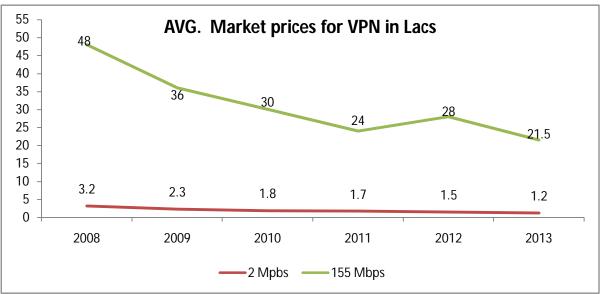
Year	1999	2005	2014
No. of Players in	BSNL	BSNL/MTNL, TATA ,	7-10 ASPs and 31
DLC market		Reliance, Airtel, TTSL,	NLDOs who can
		HFCL and IP-II (GAIL,	provide DLC
		power grid, railtel, shyam	
		telelink)	



2.2 Status of Competition in DLC market in India:

DLC services, as pointed out by the Authority in the present consultation paper itself, are being provisioned much below the ceiling levels set through the 36th amendment of TTO, 1999. This is testimony to the level of competition existing in the market for the DLC services. The graph below clearly shows trend for reduction in DLC and VPN tariffs in the last few years.





Source: Industry data, please note that DLC/VPN rates vary from operator to operator under the prescribed ceiling

2.3 Thus, there is ample competition in the market wherein customers have adequate choice to choose their bandwidth provider. Enterprise customers are availing benefits of higher



competition and market driven discount of as low as 80-90 % on the base rate prescribed by TRAI. These discounts on DLC tariffs (both P2P and MPLS VPN) are available for all segment of the customers' viz. from 64 Kbps to 256 Kbps, 2 Mbps to STM1 and higher capacities or from 50 Km to >500 Km and on PAN India basis. Details of this competitive pricing have already been submitted to TRAI.

- 2.4 In view of the foregoing, there is ample reason to do away with the regulated regime in the DLC market and adopt time tested policy of forbearance for the continued growth and competition in the DLC business, the end beneficiary of which will be the consumers.
- 2.5 Any practice of reducing the present ceiling as prescribed by the Authority may lead to distortion in the market practices of competitive pricing and flexibility/innovation in the tariffs offered by the service providers. Moreover, lowering ceiling tariffs can lead to creation of a dismal business case resulting in discouraging new entrants from building additional infrastructure there by limiting competition amongst the existing few.

3. Key Cost drivers for DLC:

3.1 Exponential increase in Right of Way(RoW) charges:

Apart from being capital intensive, deployments of fixed network in cities/ towns face major hurdles, like prohibitive regulatory & other associated costs involved in laying cables and inordinate delay in obtaining right of way permissions from concerned bodies. Through these policies, the local authorities/state government and/or other authorities have started levying arbitrary charges/permission fee/lease rentals/license fee/free bandwidths etc as a condition precedent for installation/ laying of infrastructure and grant of RoW permission, and as such, seeking to reap telecom as the source of their revenue. A table of the RoW charges paid to the various authorities is enclosed for reference- Annex1. The Authority may note the fact that the RoW cost over the period of time i.e since 2005 has increased drastically; in fact few states Viz. Bihar, Mah, KTK have started levying recurring charges apart from one time per km charges. The cost of RoW should be factored in completely while determining any tariffs for DLC.

3.2 Financial burden/state of the TSPs:

Presently, telecom industry is characterized by falling revenues versus significant increase in the operating and compliance costs, duties and levies etc. The operators are under financial stress due to high regulatory costs.



Further, the rising interest rates, depreciating currency rates etc have resulted in increase in debt servicing costs for operators, coupled with the impacts of adverse changes in foreign exchange rates. Operators are still struggling to achieve profitability despite the fact that the initial 20-year license terms has come up for extension for few operators. **All these aspects need to be factored in for determining any tariffs for DLC.**

In spite of the above-mentioned constraints, the tariffs for DLC are continuously been available with competitive rates, only due to hyper competition in the market and the enterprise customers have been benefitted with the affordable tariffs. This clearly establishes the proper functioning of the market and therefore we would recommend the policy of forbearance to be adopted in DLC tariff

4. DLC Regulations: Is it still required?

- 4.1 TRAI while formulating the TTO'99, specified distance wise cost based ceiling tariff for DLC and subsequently in 2005, reviewed and reduced the ceiling tariff for DLC vide TTO 36th amendment dated 21.4.2005. However, this reduction in the ceiling tariff was done on the basic premise of lack of competition in the DLC market in the Country.
- 4.2 The Authority mentioned that <u>the ceiling tariff will continue until there is a sufficient and</u> <u>effective competition in the market.</u> The excerpt from the explanatory memorandum of the said TRAI notification dated 21st of April 2005 is as below:

Quote -Section 1.6:

- "The Authority considers it appropriate to continue with tariff regulation until such time that competition becomes adequate and effective in the DLC market.".....
- 4.3 Later, the NLD market was liberalized in Dec 2005 and many NLD operators (around 16, b/w year 2006-07) entered in the market, the end beneficiary of which is the enterprises in the field of IT, ITES and financial services who are getting competitive prices and continuous reduction in tariffs due to high bandwidth demand and effective competition in the leased circuit market.
- 4.4 **On 14 Sep**, **2007**, TRAI specified the procedure relating to provision of DLC and also said that the rates of DLC <u>which have not been specified by the Authority will be mutually agreed upon between the service providers</u>.

Quote:

- "7. Tariff for DLC or local lead circuit:-
- (2) In case the rates for DLC or local lead of DLC as referred to in sub- regulation (1) have not been specified under the schedule IV to TTO'99, or, notified by the Authority under sub section (2) of



section 11 of the ACT, the rates in such a case for DLC or local lead of DLC provided by the service provider to another specified service provider under these regulations shall be such as may be mutually agreed upon between

- 4.5 Therefore, TRAI has been continuously monitoring the growth of the DLC market in India and has left the operators to negotiate the DLC prices under the ceiling prescribed in 2005 regulation with a view point that the DLC tariffs may be kept under forbearance if there is sufficient competition in the DLC market.
- 4.6 As brought out earlier, regulation of the DLC market was the need and justified from 1999 till 2005. Tariffs are fixed on the predictive judgment based on current market situation. However, with the present supply and demand levels scenario of the market, it is felt that the existing market practices are sufficient to discipline the DLC prices.

5. Why Forbearance?:

- 5.1 The unprecedented growth in the Indian telecom market due to adoption of policy of forbearance is the best precedence or reason for leaving the DLC tariffs on market forces.
- 5.2 Policy of forbearance in telecom tariffs has not only resulted in the wider economic growth of the country but has also contributed significantly towards the Government finances in form of license fees, spectrum charges, service tax etc.
- 5.3 Similarly, we request the authority to adopt policy of forbearance in DLC tariff and let the market forces decide the prices for the consumers. We believe that the presence of hyper competition in the DLC market will take care of consumer benefit.
- 5.4 The entrepreneurs who have made huge investments in creating the world class telecom network in the country are best placed to decide about the tariff strategy which ensures the growth of industry and sustainability in a hyper competitive market. Any kind of regulatory intervention may prove to be catastrophic for the very sustenance of the Industry.
- 5.5 In light of the above, we urge TRAI to use a light touch regulatory approach and adopt the time tested policy of keeping the tariffs under forbearance for DLC.

6. Forbearance, the International Practice.

On examination of global practices and the current market practices in India, a clear case is made out for withdrawal of regulation in respect of tariff for DLC in favour of market forces taking over.



- 6.1 FCC (USA): In a FCC report and order on the matter of Special Access (DLC) for Price Cap Local Exchange Carriers, by AT&T Corporation¹ dated 22 Aug 2012, FCC has suspended their 1999 regulatory rules for special access services in light of significant evidence that these rules were not working as predicted, and widespread agreement across their industry sectors that these rules failed to accurately reflect competition in today's special access markets. In the interim, till such time they are able to decide on the regulatory requirements for special access, they have provided for targeted relief in through the forbearance process. FCC has admitted that their earlier regulatory rules were based on predictive judgments and positive competitive market development should result in reduced regulations. In 2012, based on their experience of the past 13 years, they have emphasized that the forbearance process provides an avenue for complete analysis of the market conditions.
- 6.2 **JAPAN:** All Regulations in DPLC market were abolished in April 2004 as the regulator determined that the market was now competitive.
- 6.3 **IRELAND**: In 2004, ComReg conducted the detailed study of the leased line market in the Country and concluded with the removal of all regulation in DPLC market.
- 6.4 Moreover in the Countries like UK, France and Australia wherein the DLC tariffs are provided under regulated prices, has only 3-4 operators competing in the market which is diagonally opposite to the present Indian market having more than 41 operators (7-10 ASPs and 31 NLDOs) who can provide Lease circuits. Thus, there is no reason to continue regulating the DLC tariffs in the Country.

Considering the above, we would like to make the following submission on the questions raised by the Authority in the consultation paper:

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)?

AND

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

¹ Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, WC Docket No. 05-25, RM-10593, Adopted on August 15, 2012, and Released on August 22, 2012.



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

AND

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.

AND

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

RCom Comments (Q1,2,3 &4):

- With the presence of 7-10 ASPs and 31 NLDO, DLC market in India is today characterized by fierce competition wherein customers have enough choice to select their service provider. Operators are offering competitive pricing including huge discounts to the tune of 80 % under the ceiling prescribed by the Authority. One can easily conclude that the DLC business in India is matured and saturated.
- TRAI in the year 1999 and subsequently in 2005 issued the ceiling tariff on the grounds of lack of competition and to avoid DLC to become a bottleneck facility. Now, with the hyper competition available in the market, customers' esp. enterprises like BPO, IT, ITES are well connected by the secured P2P and the MPLS VPN facility.
- DLC services, as pointed out by the Authority in their consultation paper itself, are being provisioned much below the ceiling levels set through the 36th amendment of TTO, 1999. This is testimony to the level of competition existing in the market for the DLC services.
- Thus, there is ample reason to <u>do away with the regulated regime in the DLC market and adopt time tested policy of forbearance for the continued growth and competition in the DLC business, the end beneficiary of which will be the consumers.</u>
- Any practice of reducing the present ceiling as prescribed by the Authority in 2005 may lead
 to distortion in the market practices of higher discounts and flexibility/innovation in the
 tariffs offered by the service providers.
- Also, TRAI while revising the ceiling tariff for DLC in year 2005 has opined for adoption of
 forbearance once the market will touch the effective competition. As stated above, ever since
 liberalization of NLD market in year 2006 and presence of various ASPs in each circle, the
 lease circuit market is hyper competitive and the customers are benefitted of lower prices



and technological innovation of MPLS VPN. It is suggested that the DLC tariff should be left to the market forces and forborne.

• In light of the above, we request TRAI not to intervene in the ongoing practices of providing DLC tariff in the Country. Considering the increase in demand and fierce competition in supply of lease circuit, it is requested that the policy of forbearance should be adopted for DLC Tariffs.

Notwithstanding the above, if Authority decides to determine the cost based ceiling for DLC tariff then all cost escalations in RoW charges, infrastructure maintenance charges, financial distress of the industry, Regulatory cost etc should be factored in appropriately.

• We also suggest that, the bottom up FAC approach should be continued with to determine the cost based ceiling for DLC tariff and all cost escalations as mentioned above and changes in the cost elements/values as tabulated below should be incorporated. We are enclosing a list of the Avg. RoW Charges (Annex.1) in various circles/cities for the kind reference of the Authority. The increase in cost of RoW should be factored in completely while determining any cost based tariffs for DLC.

Cost Components	Year 2014
ROCE	14%
Avg life of fiber	15-18 years
Average no. of fiber pairs lit in OFC in trunk	Local Lead: 2.3
segment and local lead segment separately	Trunk: 1.5
Utilization factor of OFC system in trunk	Local Lead: 70%
segment and local lead segment separately	Trunk: 63%

- Authority while determining the cost based ceiling in 2005 had divided all cost elements in three categories² including fixed/Semi variable/ variable costs, however there were few costs elements viz. Elements manager, Building permission, Annual operating licence cost and upgrade in any software/hardware, OSS/BSS licence cost etc that were not considered. With the advent of the technology, service providers have to continue upgrading their networks to meet the bandwidth requirement of the customers, thus we request that these cost elements along with the inflation in all cost items especially power, battery, Diesel etc should be included in any tariff determination for DLC.
- With the proliferation of data requirement, Service providers have to meet the uninterrupted bandwidth commitment and thus redundancy circuits have to be built up to

² Refer to Annexure A- Appendix 3 of DLC Regulation dated 21 April 2005



fulfill the SLA with the enterprise customers. This tantamount to **Redundancy cost**, which should be included in cost based ceiling tariff for DLC.

• Further, we request TRAI that industry committee (as has been done in spectrum trading /sharing guidelines) should be involved for determination of any tariff ceiling for DLC.

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

RCom Comments

- Customers today require end to end connectivity from its one office to another and based on
 its requirement seek P2P or the VPN link and it is the service provider who has to take care
 of both the local lead or the trunk segment and customer is bothered of only the end to end
 facility.
- Moreover, operators have integrated network for end to end DLC/VPN service and there is no as such demarcation of local lead and trunk segment.
- In view of the above, there is no reason to determine separate ceiling for local lead and the trunk segment. As requested above, we reiterate that the tariffs for DLC should be left to forbearance and let the market forces/competition take care of the prices and services provided by the service provider.

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

RCom Comments:

No, there should not be separate ceiling tariffs for remote and hilly areas. The rationale thereof is as below:

- Development and subsequent maintenance and operations of telecom infrastructure in remote and hilly areas is fraught with difficulties as given below:-
 - ✓ Difficult Terrain.
 - ✓ Inclement weather.
 - ✓ Lack of roads / restricted availability of roads. At times the roads get blocked for certain duration of the year due to snow etc.
 - ✓ Lack of power availability.
 - ✓ Lack of availability of technically trained manpower.
 - ✓ Restricted access / limitation on development of infrastructure due to protected zones.
 - ✓ Difficult logistics maintenance.



- These difficulties, apart from escalating the cost of infrastructure development, also impede project implementation due to delayed clearances. Overall these act as a deterrent and for the ASPs or NLDOs for infusing CAPEX and OPEX in these areas. Even FCC has experienced³ that lowering tariffs, especially in such areas, can further discourage the existing / new entrants from building infrastructure there by restricting availability of the services itself.
- It is suggested that instead of setting tariff ceilings, the Authority should explore the
 possibility of infrastructure development in these remote and hilly areas. <u>TRAI should look</u>
 to incentivize infrastructure development in these areas by way of giving Tax Sops,
 allowing for special rebates in various levies or any other way that the authority deems
 fit.
- It is brought out that the defence forces have been permitted to enter into strategic alliances with BSNL, in North and North East ares, for developing telecom infrastructure, e.g. Srinagar Leh or Siliguri Darjeeling OFC links. For aiding infrastructure development at lower costs, in the remote and hilly areas, TRAI is requested to put in suitable recommendations with MoD and other agencies like railtel, PGCIL, etc for permitting enactment of similar strategic alliances with the private TSPs as well. Such measures shall automatically translate into cost effective DLC services in these areas.

Q7: In your opinion, what are the distances of

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

of P2P-DLCs for which ceiling tariffs need to be prescribed?

AND

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

AND

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?

AND

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³ Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, WC Docket No. 05-25, RM-10593, Adopted on August 15, 2012, and Released on August 22, 2012.



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?

RCom Comments (Q 7,8,9,10):

- As stated earlier, there is no need to prescribe the ceiling for DLC tariff. However, if TRAI
 decides to prescribe ceiling for the DLC, then our submission in context of this query is as
 follows:
- Leased circuits are today provided in the market on the basis of below distances:
 - 1. Up to 50 Km
 - 2. 50 to 200 Km
 - 3. 200 to 500 Km
 - 4. Above 500 Km
- Thus, the ceiling if at all to be prescribed or revised should be based on the above said distances. We reiterate the submission that apart from the cost elements used in the bottom up costing of the year 2005, the cost escalations in ROW charges, network elements, AMC etc and regulatory costs need to be factored in appropriately.

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

AND

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?

RCom Comments:

No, VPN such as MPLS VPN should not be brought under tariff regulations for DLC. The reason thereof is as below:

- Domestic leased circuit (DLC) is a physical connectivity from a port on the DLC service providers nearest switch / router to the customer premise, i.e. DLC is established at the physical (1st layer of the OSI Model). VPN on the other hand is a point to point routing functionality which is established electronically, over the physical connectivity of DLC, by exploiting the layer 2 or 3 functionalities of the OSI model. VPN is just an <u>inherent functionality</u> of the IP and MPLS protocols / any other tunneling protocol which enables sharing of a single port of the DLC Operators' router i.e. it enables establishment of virtual DLCs within the DLC operators' network only.
- Establishment of VPNs is central to MPLS protocol and dictates the core network's architecture itself. They provide the requisite flexibility for defining and redefining the network architecture without disturbing the physical connectivity, enabling creation of a



robust, redundant and self healing network. Accordingly, VPN circuit provisioning can differ from one operator to another. Therefore, VPNs being distance and physical connectivity agnostic, cannot be modeled through a simplistic architectural model.

- Additionally, VPN services are highly customizable as per the requirements of an individual customer. VPNs enable customized configuration (Static as well as Dynamic) of each virtual DLC for their bandwidth capacity, security level and volume of data transfer as per the customer's requirement. The customization of VPNs can be as per the time of usage by the customer, i.e. a customer using a VPN during peak hours / other times during the day / at night / as a combination of these, etc. Some customers may also have burstable bandwidth requirements to be customized at different times during the day / night. A snapshot of the VPN attributes that would be required to be modeled is given below for reference.
 - a. Technology: MPLS Layer 2 vs MPLS layer 3 vs. IP Sec/SSL
 - b. Feature: Any to any vs. Hub spoke vs. partial hub spoke
 - c. Bandwidth: CIR vs EIR vs CAR / Other buffers
 - d. QoS: Four Queues vs 6 Queues vs. per flow prioritization
 - e. Usage based bandwidth and it's various flavors
 - f. Service provider based concurrency factors.
- These attributes make the tariff structure of VPN very complex and modeling their customization characteristic (variable and highly dynamic parameters) shall be detrimental to the customer's interests as it would prevent innovative provisioning and operations of VPNs.
- Application of the existing DLC model, for VPN costing, is definitely not justified as they
 provide the flexibility of customization, within the core network, through combination of
 multiple options over and above the basic DLC provisioning infrastructure. Any attempt to
 model its flexibility and customization capabilities shall bring in rigidity and thwart the
 very purpose for which VPNs were evolved.
- VPNs being a network architecture defining and customization functionality of the
 protocols, they cannot be construed as a separate dedicated DLC and should not be
 subjected to any tariff regime. With the existence of 7-10 ASPs and 31 NLDOs in the DLC
 market it is recommended that the VPN services should be kept out of the gamut of
 tariffs and regulations and should be left to forbearance.



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?

RCom Comments:

No. DLC provided on Managed lease line should also be left to forbearance.

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?

RCom Comments:

Like NOFN, Government should look in to providing Nil/low RoW for the development of OFC backbone infrastructure by the Pvt. Telecom operators.



Annexure-1

RoW charges for OFC laying levied by different Municipal authorities

City	2009-2010	2010-11	2012-13
	Rates/Km	Rates/Km	Rates/Km
BLR	147,000	147,000	600,000
Chennai	-	-	850,000
Cochin	800,000	800,000	2,100,000
HYD	850,000	1,120,000	1,600,000
UPW	450,000	500,000	1,100,000
UPE	450,000	500,000	1,700,000
NOD	550,000	645,000	1,200,000
KOL	1,700,000	1,870,000	2,200,000
JLD	250,000	350,000	400,000
JIP	300,000	345,000	800,000
GZB	550,000	645,000	1,200,000
GGN	550,000	645,000	800,000
FBD	550,000	632,500	800,000
Delhi	850,000	1,200,000	2,500,000
RONorth	250,000	300,000	3,000,000
Pune	2,700,000	4,000,000	44,00,000
Mumbai	6,700,000	8,200,000	8,500,000
MPCG	150,000	150,000	900,000

Note: Some of the Municipal corporations have also started levying recurring charges leading to heavy burden on service providers.