



25 April 2014

Vodafone Response to TRAI Consultation Paper on Review of Tariff for Domestic Leased Circuits

The price ceilings for Domestic Leased Circuits (DLCs) were last specified in 2005; given the subsequent developments in the market we understand the Hon'ble Authority's desire to review the caps—especially since DLCs provide the backbone for the telecommunication service sector.

That said, we believe that the Authority should only intervene whether there is clear evidence of a 'market failure'. If competition is working effectively, regulators should forbear from intervening; this is the position of the Authority on mobile retail prices (the 'output' for which DLCs are often the 'input'). We note that in the previous (2005) review the TRAI intended to "continue with the tariff regulation until such time that competition becomes adequate and effective in the DLC market". We believe that the evidence — much of which has been documented by the Hon'ble Authority — demonstrates that the market is working well and, therefore, that the perpetuation of price ceilings is not required.

The evidence that the market is working effectively is well presented in the consultation paper:

*Between the year 2001 to year 2004, the new set of NLDOs made significant investments in building long distance bandwidth capacity in the country. As a result, several thousands of kilometers of optical fiber cables (OFC) were laid in the length and breadth of the country. **As the supply of bandwidth capacity increased particularly between large cities, DLC segment for the first time witnessed competition in the country.*** (Paragraph 2.15 – our emphasis)

*In consequence of the liberalized licensing regime for NLD services, 16 new players entered into NLD market between the year 2006 to 2007. As the NLDOs could now access the subscribers directly for provision of leased circuits/closed user groups, many NLDOs built not only long distance (trunk) transmission infrastructure but also the local area networks in order to serve their customers directly. **As a result, a significant competitive activity was witnessed in the retail market of the DLCs which drove the prices further downwards.** The new breed of the players started offering **MPLS-VPN and a host of customized services viz. provision of service level agreements (SLAs), class of service (CoS), bandwidth on demand, managed services etc. as per the requirement of the customers.** The increase in customer focus of the TSPs and reduction in tariffs for DLCs owing to **increased***



competition fuelled the demand of DLCs in the country particularly amongst the enterprises in the field of IT, ITES and financial services. (Paragraph 2.22 – our emphasis)

Prevailing Tariff is significantly below the ceiling tariff prescribed by the Authority, particularly on the dense routes: *Most of the service providers use the ceiling tariffs prescribed by the Authority through the TTO (36th Amendment), 2005 as their base tariff and offer discounts depending on the bandwidth, distance, location, volume of business etc. The discounts with respect to the ceiling tariffs are generally much higher on the dense routes.* (Paragraph 1.10(i))

As on date, apart from 7 to 10 ASPs, which are present in each licensed service area (LSA), there are 31 licensed NLDOs who can offer DLCs in the entire country to the end users.....Most of the large players in the NLD market such as Bharti Airtel Ltd, Bharat Sanchar Nigam Limited, Reliance Communication Limited, Tata Teleservices Ltd are also major ASPs. These NLDOs have built their long distance transmission infrastructure primarily for carrying the inter-circle voice traffic generated by the access segment. Further, being ASPs themselves, they have a presence in the local lead market.... (Paragraph 2.24)

The Consultation Paper also tabulates the price discounts available from nine providers on links of various bandwidths for both local and trunk capacity. These discounts are often above 60%. **Unsurprisingly, discounts are greater on the higher capacity, longer routes where unit costs are lower. This is symptomatic of a competitive market, not evidence of a problem.** Vodafone, as a net buyer of local ends, achieves a discount on all of its purchases.¹

We can summarise briefly the main features of the DLC market in India:

- Multiple suppliers of trunk and local capacity with evidence of continued investment in fibre rollout;
- Falling unit costs which have been passed on to buyers in the form of discounts on the ceiling tariffs with higher discounts on links with lower unit costs;
- Innovation, in response to customer demand, in the form new methods of provisioning capacity: MPLS VPNs

These are the hallmarks of a competitive market which does not require regulation.

Our position is consistent with the approach of regulators in Europe, where price regulation can *only* be instigated if regulators find ‘Significant Market Power’ (SMP). This is akin to the

¹ Note that Vodafone also faces instances of refusal to supply from some ASPs – we can give examples to the TRAI if required.



competition law concept of dominance, where the absence of competition means that operators can act independently of competitors. Put simply, they can raise prices profitably. We submit that there is no evidence that suppliers of either trunk or local end capacity (outside perhaps of a few geographic areas) have SMP.

In the UK, Ofcom has found that SMP varies by circuit type (trunk versus others) and geographically. The table below summarises Ofcom’s findings from its last Business Connectivity Market Review.²

Business Connectivity Market Review: Timetable and initial call for inputs

Table 1.1 Market definition and SMP findings from the BCOM 2013

| Interface technology | Bandwidth (Mbit/s) | Retail Services | | Wholesale Segments | | | | |
|----------------------|---|-----------------|------|---------------------------------|------------------------------|------|----------------|--------------------|
| | | UK | Hull | Symmetric Broadband Origination | | | Trunk | |
| | | UK | Hull | The WECLA | UK except the WECLA and Hull | Hull | UK | |
| Traditional (TI) | V Low: <2 | BT | KCOM | BT | | | KCOM | National No SMP |
| | Low: <=8 | | | No SMP | BT | KCOM | Regional BT | |
| | Med: >8, <=45 | | | No SMP | BT | KCOM | | |
| | High: >45, <=155 | | | No SMP | | | | KCOM |
| | Very High: 622 | | | | | | | |
| Alternative (AI) | Low <=1,000 | | KCOM | BT | BT | KCOM | | |
| Multiple (MI) | >1,000, and any if WDM at customer's premises | | | No SMP | BT | | | |

Ofcom found that no operator had SMP in the national supply of trunk circuits. Similarly, no operator has SMP in the supply of traditional interface access circuits in West, East and Central London (WECLA). However, BT has SMP outside of this area. In other words, regulation is confined to certain types of links in particular geographic areas. In India no regulation is required outside of the geographic “pockets” identified by the Hon’ble Authority (see our answer to Q6 below).

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)?

In view of the present level of competition to provide DLCs segment, we do not believe that the Hon’ble Authority should impose price ceilings for trunk and local ends. More generally, we agree with the Authority’s previous position that basing regulated prices on Forward Looking Long Run Incremental Costs (FLLRIC) is not appropriate. Using a fully allocated cost methodology will ensure that those who are willing and able to invest in infrastructure can earn a reasonable return, and therefore have an incentive to undertake such investment.

² See: <http://stakeholders.ofcom.org.uk/binaries/consultations/business-connectivity-market-review/summary/Business-Connectivity-Market-Review.pdf> (table on page 7)



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)

In the previous review of IUC charges, Vodafone made submissions that the appropriate weighted average cost of capital for cost modelling is just over 19%. We note that in modelling of SMS costs. The Hon'ble Authority used a rate of 15%. We believe that there is an urgent need for revision of this rate due to a significant increase in risks in the telecom business environment in the last few years, due to various well known causes. **We suggest that the rate should be at least 19%.**

(ii) Useful lives of transmission equipment and Optical Fiber Cable separately

- Transmission equipment: 5years
- Optical Fiber Cable: 15years

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

For information, Vodafone's transmission network is designed on the basis of three types: trunk, access (otherwise known as mid-mile) and local. The number of fibre pairs is as follows:

- Trunk Segment - 6 fiber pairs
- Access Segment - 12 Fiber Pairs
- Local - 1 Fiber

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

As the Authority notes in paragraph 2.24 "*[m]ost of the large players in the NLD market such as Bharti Airtel Ltd, Bharat Sanchar Nigam Limited, Reliance Communication Limited, Tata Teleservices Ltd are also major ASPs. These NLDOs have built their long distance transmission infrastructure primarily for carrying the inter-circle voice traffic generated by the access segment.*" Similarly, Vodafone uses much of its transmission capacity to carry voice traffic; the comparable utilisation factors are therefore very low.

That operators have spare capacity is further evidence that price ceilings are unnecessary. Operators will offer attractive deals to purchasers of capacity that would otherwise earn no revenue. Put simply, **when there are many players and excess capacity, prices will be set competitively and no intervention is required to protect purchasers.**



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 data and assumptions, if any.

Vodafone believes that **the market for all types of capacity and circuit length is competitive** and that no intervention by the Authority is required.

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

As we say above, price ceilings are not required for trunk segments and therefore there is no need to specify price ceilings for higher bandwidths.

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

No. Competition is working effectively to discipline the price of both trunk and local capacity; this is amply demonstrated by the level of discounts available in the market from all suppliers. Please note that Vodafone adopts this position not as a seller but as a net *buyer* of local ends.

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

We believe that local end price ceilings should apply if there is evidence of a market failure. It may be appropriate to have specific price ceilings for trunk and local end capacity if there is evidence that competition is ineffective (e.g., providers of capacity are supplying it at or near the price ceilings). The Authority states in paragraph 1.10 (v) that the price of DLCs in the remote and hilly areas such as North East, Assam and J&K service areas "*remain near the ceiling tariffs prescribed by the Authority*". If this is the **case, there is evidence that competition is not working effectively and therefore the Hon'ble Authority should consider price ceilings for these service areas only** (in the same way that Ofcom has regulation which only applies in certain geographic areas. If required, this **can be done using a bottom-up fully allocated cost methodology.**

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?

The current categorisation of <50 km as local access and more >50 km as trunk is appropriate.

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



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?

As we argue above, distance based ceiling tariffs should not be prescribed because competition is working well and there is no evidence of a market failure. If instead the price caps are retained, 5km remains a relevant distance.

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?

Ceiling tariffs should not be prescribed for trunk and local end capacity.

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

We believe that VPNs should not be brought under the tariff regulations for DLCs. The evidence shows that trunk and local capacity can be bought in a competitive market (at attractive discounts). Hence, all of the constituent parts of the VPN service can be bought at competitive prices and there is no requirement to regulate the price of VPNs because the service itself is sold by many operators (and subject to extensive discounting – see table 2.4 in the consultation). The same principle applies: the Hon'ble Authority should only regulate where there is evidence of a failure in the market. Moreover, VPNs are often provided as customised solutions which are tailored to the individual needs of the customer. It is impractical for the Authority to impose a tariff ceiling for every VPN permutation, and doing so would risk undermining the evident innovation in the provision of these services. Moreover, the Authority has not noted any consumer harm arising from the pricing of VPNs; **we therefore submit that current forbearance policy should continue.**

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?

Not applicable.

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?

Vodafone has no comment.

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?

Vodafone has faced instances of some suppliers refusing to supply capacity for local ends. We can provide examples to the Regulator and we request the Authority to investigate this matter.