



Date: April 19th, 2012

Advisor (I&FN),
Telecom Regulatory Authority of India
Mahanagar Door Sanchar Bhawan,
Jawaharlal Lal Nehru Marg, (Old Minto Road),
New Delhi – 110 002

Verizon Communications India Pvt. Ltd.
Radisson Commercial Plaza,
A wing, 3rd Floor, National Highway 8,
New Delhi - 110037
India.

Phone : +91 11 42818100
Fax : +91 11 26779270

Sub.: VCIPL Response to TRAI Consultation Paper No. 08/2012 dated 22nd March 2012 on Access Facilitation Charges and Colocation Charges at Cable Landing Station (“CLS”).

Dear Sir,

This is with reference to the captioned Consultation Paper issued by the Hon'ble Authority on 22nd March 2012.

At the outset, we would like to sincerely thank the Hon'ble Authority for kindly accepting our request for initiating broad based public consultation in the matter of Access Facilitation Charges (AFC) and Colocation Charges (CLC) at the Cable Landing Station.

Verizon Communications India Private Limited (“VCIPL”) which is part of the group headed by Verizon Communications Inc, US, holds NLD/ILD and ISP-A Licenses. It also holds an international gateway license with its international gateways located at Mumbai & Chennai. In terms of international presence and global reach, the Verizon group, has the world's largest connected International IP Network with presence in 2,700+ cities across 150+ countries connecting 450,000+ Int'l Route Miles (submarine cable) over 6 continents spread across 4,500+ global PoPs.

Access to submarine cable landing stations is an essential input for international connectivity through undersea cables. However in many developing countries incumbent operators retain a monopoly or significant market power to control these essential facilities. Such operators can exact high prices from market entrants, restricting competition and increasing the price for bandwidth paid by end-users. For example, a **recent study**¹ concluded that the monopoly power exercised by incumbents over cable landing stations is a major cause of the high cost of telecommunications in Africa. As the demand for international bandwidth grows, the ability of incumbent operators to exercise their market power correspondingly increases with the potential for adverse market consequences also increasing.

Policymakers as a key part of their function should address any market distorting effects of anti-competitive behavior. If the commercial market is not functioning well, regulators should address that malfunction in this case by mandating that facilities and services which are essential for the provision of international connectivity are offered on a fair, reasonable and competitive basis. Such fair and reasonable access will result in lower prices, which will stimulate the market and create additional government revenue.

Although advances in technology will likely keep increasing the capacity of existing infrastructure, eventually market demand will surpass capacity and drive investment in and construction of additional undersea cables. eg Verizon participation in TPE, Europe-India Gateway (EIG) and Gemini Bermuda.

It is crucial that the regulatory environment is such that it will attract the necessary capital for this investment when India needs it. It is important to note that the TRAI issued regulations, “International Telecommunications Access to Essential facilities at Cable Landing Stations Regulations, 2007,” on June 7, 2007, (Regulations) to increase competition and reduce international bandwidth charges by mandating

¹ Source: Esselaar, Gillwald and Sutherland, *The Regulation of Undersea Cables and Landing Stations* (International Development Research Center)

access to submarine cable landing stations. The above regulations were due to be reviewed every three years aligning with market realities i.e in year 2010. We also note that some of the CLS-Reference Interconnect Offer(RIO) of Owner of Cable Landing Station (OCLS) have been pending since February, 2011 for final approval with TRAI in view of ongoing review. We have been given to understand that TRAI has given interim approval to the OCLSs whose RIOs is pending with the TRAI for final approval. However based on our understanding of the regulation, under the present regulations there is no provision under which TRAI can provide interim approval to the OCLS. It is requested that as an outcome of the present consultation, the determination of the CLS access charges under the pending RIOs should be decided as soon as possible based on internationally accepted industry benchmark. The outcome of the present determination should be made effective from the retrospective date on which the terms of the earlier RIO ended.

Accordingly, our comments / suggestions are from a perspective which addresses both the important issue of regulating the access charges as well as the enabling a framework for creation of level playing field and transparency in the sector ensuring its continued expansion as demand requires.

We are pleased to submit our comments / suggestions on the consultation document as Annexure – A for the kind consideration of Hon'ble Authority. We hope that our comments / suggestions will merit the kind consideration of the Hon'ble Authority.

Thanking you,
Yours Sincerely,



Priya Mahajan



Chief Counsel | Public Policy & Regulatory Affairs,
India & SAARC

Verizon Enterprise Solutions

Tel: +91 1142818135 | Mob: +91 9873248663

Office Address 3rd Floor, Raddison Commercial Plaza,

NH-08, New Delhi-37, India

Annexure A

Background

Competition in international connectivity (i.e., submarine cables) and access to services such as international and Internet gateways is key to lowering the cost of bandwidth and broadband prices for consumers. Effective interconnection and gateway regulatory frameworks that introduce new models of sharing and collocation, and reduce barriers to existing private, government and international networks is important in encouraging existing and new market entrants to expand into broadband and other services.

An example of the process to liberalize the international gateway and secure bandwidth capacity at lower prices is described in the Reference Document *International Sharing: International gateway liberalization – Singapore's experience*. This paper documents the way that Singapore's Infocomm Development Authority (IDA) required the dominant license holder to provide a (RIO), mandated co-location at the submarine cable landing station, mandated connection services and regulated prices, and a coordinated submarine cable landing process, so as to ensure the required level playing field existed in Singapore for the smooth functioning and continued expansion of the connectivity market. This one-stop-shop approach also addressed the fact that in the past, submarine cable providers had to approach several different government entities in order to effectively provide services in a fair and transparent manner

Issues for Consultation

Q1: Which of the following method of regulating Access Facilitation Charges and Co-location charges (AFC & CLC) should be used in India?

- (a) The prevalent method i.e. submission of AFC & CLC by owner of the cable landing station (OCLS) and approval by the TRAI after scrutiny
- (b) Submission of AFC & CLC by OCLS and approval by TRAI after consultation with other stakeholders
- (c) Fixing of cost based AFC & CLC by TRAI
- (d) Left for mutual negotiation between OCLS and the Indian International Telecommunication Entity (ITE)
- (e) Any other method, please elaborate in detail.

VC IPL response:

In our view Hon'ble authority should follow the method (b) of Submission of AFC & CLC by OCLS and approval by TRAI after consultation with other stakeholders. The review and approval by the TRAI should be based on the following broad based principles

Prevent the exercise of market power in an anti-competitive way. An important goal of regulation is to ensure that prices are fair and reasonable, where competitive forces are insufficient to achieve this effect. Any regulatory price control mechanism should encourage prices that reflect what one would observe in a competitive environment.

Achieve economic efficiency. The regulatory mechanism chosen should improve economic efficiency. There are several measures of economic efficiency. One such measure is 'allocative efficiency' which requires that the prices in a market are based upon and equal to the underlying costs that society incurs to produce those services (generally the Long Run Incremental Cost of producing the service or LRIC). This ensures that customers whose valuation of the service exceeds the cost of producing the service will purchase the service. Customers who place a lower valuation on the service will forgo it. This guarantees that the "optimal" amount of the service is consumed, given cost and demand conditions.

Promote competition. The goal of regulatory intervention should be to permit and promote competition in telecommunications markets. Where the legal framework permits competition, it is important that regulation (at a minimum) does no harm to competition.



Minimize regulatory cost. All else being equal, regulators should choose a regulatory mechanism that is less costly to implement over one that is costlier to implement.

Ensure high service quality. In addition to ensuring that the prices of telecommunications services are fair, regulators should ensure that consumers receive a high quality service. In ranking alternative regulatory options, regulators should give preference to mechanisms that result in higher quality service, all else being equal. This can be achieved by adopting international best practices and benchmarking against those to match the overall service quality.

Q 2: In case AFC & CLC are regulated using method (a) or method (b) above, is there a need to issue guidelines containing algorithm and network elements to be considered for calculating AFC & CLC to the OCLs? If yes, what should be these guidelines?

VC IPL response:

Generally, the CLS assets required to provide an ILD access to capacity should be included in the calculation of the AFC & CLC. The main question is how to identify and share the cost of the asset provided in a specific cable station as site conditions/configuration may differ between cable stations. From a simplistic viewpoint, any asset/infrastructure (or portion thereof) provided by the CLS operator in support of the cable system up to the cable system ODF (demarcation point) should not be included in the AFC or CLC. This would include all infrastructure, services, and support for all cable system provided equipment.

Q 3: In case, AFC & CLC are regulated using method (a), (b) or (c) above, please suggest the value of pre-tax WACC, method of depreciation and useful life of each network element? Please provide justification in support of your answer.

VC IPL response:

A precise value of the weighted cost of capital (WACC), should be subject to market conditions in India and determined under a clear, auditable methodology. Further for asset depreciation, the most straightforward method is the straight-line method (SLM), with asset lives and net salvage values reflecting the economic (useful) life of the asset. This method is preferred over the front loading method of depreciation using a sliding scale. Further we would recommend GAAP standards for asset lifespan. We hereby reproduce below some typical depreciable lives of fixed asset used in modeling process as per international standards.

Depreciable Lives of Fixed Assets

Asset Class

Network Element

Description	Life(years)
DXC- Digital Cross Connect Equip	10
FAL-Network Management Equip	10
FOP-Fiber Optic elect	10
MUX-Multiplex	10
POW-Network power	10
TEQ-Test Equipment	7
TMM-Tools	



Q 4: Which cost heads/ network elements should be included/ excluded while calculating Access Facilitation and Co-location charges? Please enumerate the items with specific reasons.

VC IPL response:

Under the Consortium Model, the consortia pays for all network elements up to the cable system ODF including the ODF. This also includes the SDH Mux equipment, fibre jumpers, and associated ports. Noting each system could vary, the SDH equipment breaks down the available SDH system interface components to the individual STM-n components. For example in EIG the original design interface was STM-16, STM-64, and 10Gb DWDM. For SMW4 the interface levels are STM-1 and above and 10Gb DWDM. Therefore all network elements up to CLS system ODF should be excluded from Access Facilitation calculation.

In the case of infrastructure paid by the consortia, it would include all floor space occupied by the consortia provided equipment, a prorated (if shared with other station occupants) portion of the building support equipment (such as HVAC, DC power plant, generators, fire suppression equipment, building security equipment, etc). For recurring cost, it would include a portion of utility bills, property taxes, all labor required to operate and maintain the consortia equipment, security cost, monitoring circuits, management support, etc. All of these costs should be excluded from the Access Facilitation calculation.

In regards to collocation space, the approach should be cost based with square footage cost forming the basis for the space.

Starting with the total cost of the building/total square footage (excluding specifically dedicated building space and/or support systems such as HVAC, AC/DC power equipment etc), if the cost for these items is shared by colo space, then these costs will be included.

Cost per square foot (embedded cost) + cost to build out collocation space (civil works, cable ladder and trays)/square footage = cost basis per square foot for collocation **space**. This should be considered NRC to capture out of pocket cost for providing the space.

In addition separate NRC/MRC cost can be included for entrance conduit, DC power (build out and recurring), OTCs, all items specific to each customer.

To conclude CLS owners are members of various International Consortiums (e.g. EIG, SMW4 etc) which operate in accordance with joint consortium agreements (C&MAs). As per generally accepted commercial practices in this segment, it is our understanding that the costs (CAPEX and OPEX) to build and operate a Cable Landing Station, in the C&MA, are billed out to all the consortium members so that the terminal party (i.e. Cable landing station owner) is reimbursed for both the capital construction costs and the ongoing Operation and Maintenance Expenditure (O&M). Therefore, it can be inferred that each consortium reimburses CLS owners the cost associated with building and operating these stations. Since the major costs are already reimbursed by the Consortium, there seems to be little justification for either charging higher and / or different charges namely, RIO/AFA and O&M from the seekers. The aforesaid point has also been rightfully endorsed by Hon'ble authority in its own Consultation paper dated 22nd March 2012 wherein the authority in para 3 notes that

Quote

Many service providers have submitted that CLS access charges need to be re-determined in view of manifold increase in capacity utilization and the fact that the costs (OPEX + Capex) incurred by OCLS for setting up a CLS is reimbursed by consortium members under the C&M Agreement. Some service providers have stated that the Access Facilitation Charges for CLS should be in line with the international trends and TRAI must take into account the agreement between consortiums and OCLS so that they are not over compensated for the same.

Unquote



Q5: What should be periodicity of revision of AFC & CLC? Support your view with reasons.

VCIPL response:

The Periodicity of revision of AFC and CLC should be 1 year as we believe this is a reasonable period for review in order to align the prices with the market conditions in case there is a necessity to regulate the charges earlier, there should be enough flexibility in the regulation to correct such an aberration.

The Hon'ble authority rightfully noted in point 1.109 of the Recommendations on Telecommunications Infrastructure Policy dated April 12 2011 that **"the Authority understands the need for a periodic review of RIO pricing especially in view of the constantly changing International bandwidth prices."**

Q 6: In case, cost based AFC & CLC are fixed by TRAI, which costing methodology should be applied to determine these charges? Please support your view with a fully developed cost model along with methodology, calculation sheets and justification thereof.

VCIPL response:

We recommend that TRAI should use the internationally accepted Long Run Incremental Cost (LRIC) methodology

While implementing LRIC-based pricing for AFC and CLC, TRAI should direct the OCLS to provide a cost model based on this methodology in support of the AFC and CLC charges being levied . We would also recommend that the TRAI should provide adequate opportunity to all stakeholders to make this information available for comment and also to duly consider any comments submitted in its decision-making concerning the model. Further TRAI could adopt a LRIC model in this fashion as a separate proceeding, or in conjunction with the proceeding that would also determine the AFC and CLC under the procedures that are described in response to Question 1 above

LRIC is the appropriate price floor because the planned increment of service for which a price is set need not be the entire quantity of the service. However, regulators increasingly use the (average) TSLRIC (Total Service Long Run Incremental Cost) as the price floor in place of LRIC. The difference between LRIC and TSLRIC is that TSLRIC includes service-specific fixed costs, while LRIC does not. As a result, TSLRIC usually results in a higher price floor.

In the United States, some regulators have established (average) TSLRIC as the price floor for the service as a whole so that the total revenues received from the service must at least equal the service's TSLRIC. Yet for the price floor for an additional unit of output, regulators have accepted LRIC as the proper price floor.

Q 7: Whether Access Facilitation charges and O&M charges should be dependent on capacity (i.e. STM-1, STM-4 or STM-16) activated? Support your view with reasons.

VCIPL response:

Access Facilitation charges should be cost based and not capacity based. Further the Lease Charges for Access Facilitation should not have any O&M charges included. Lease Charges are always inclusive of O&M and therefore there is no need for the CLS owner to get reimbursed for a service twice when the same has already been included as a part of Lease Charges, This aberration in the charging mechanism of Leased Charges needs to be corrected in order to bring down the Lease Charges and enable the ITE to effectively compete in the market. The CLS charges should be set in accordance with internationally accepted costing methodology i.e. LRIC. The access charges should be incremental cost based taking into account the exponential increase in capacity utilization and in line with international benchmarks so that customers in India get the benefit of lower charges. The review should provide options to ILDOs to purchase International bandwidth at competitive prices on a range of diversified submarine cables with transparent and non-discriminatory access at cable landing stations.



Q 8: If Access Facilitation charges and O&M charges are fixed on the basis of capacity activated;

- (a) Should the charges be linearly proportionate to the capacity activated; or
- (b) Should the interface capacity as provided by the submarine cable system at the cable landing station be charged as a base charge while higher or lower bandwidth be charged as the base charge plus charges for multiplexing/ de-multiplexing?

VC IPL response:

As stated in the previous response to Q 7, Access Facilitation charges should be cost based and not capacity based. If an ITE/ILD requires access to capacity at the interface rate provided by the cable system, there should be no multiplexing/demultiplexing service required from the CLS operator. In this instance, only a fibre connection would be required and fibre cost is independent of the bandwidth carried therein. Therefore in our view charges should not be linearly proportionate to the capacity activated and should rather be based on cost.

Q 9: Whether there is a need to fix Access Facilitation charges for all types of submarine cables? If no, which kind of submarine cables may be exempted and why?

VC IPL response:

No Comments

Q 10: Is there a need to introduce any new provision or to modify/delete any of the clauses of the 'International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulation 2007', in order to facilitate access to essential facilities at cable landing station?

VC IPL response:

We understand that there is a need to review and modify existing clauses of model RIO document which is required to be followed by parties seeking access to essential facilities at the Cable landing station.

Review of RIO

Under the present regulatory regime, Telecom Service Providers are required to follow the model RIO, while also being given the freedom to enter into mutually acceptable terms and conditions of interconnection, in such a scenario it is not clear what the role of the model RIO is. Predominantly the vast majority of ILD operators seek interconnection with incumbent service providers which have significant market power and are in a dominant position so far as that market is concerned. **The Authority has very rightly noted from the research report of Plum Consulting that the cable landing station market in India is highly concentrated, with two cable landing station owners (Tata Communications and Bharti) accounting for more than 93% market share in this segment. The report has further noted that the competition between international cables is likely to be limited by the lack of competition at the cable landing stations.** The effect of this is that the ILD operator has to sign up on the incumbent terms which are largely one sided. . In fact the RIO requires a comprehensive review in line with the desired telecom market scenario which lays emphasis on pro-competitiveness and fair play between the various service providers.

Some of the terms and condition of the RIO document which require review are:-

■ **Charges and Billing**



- Payments must be made within 15 calendar days of the invoice date
- Issue

There is no requirement of how quickly CLS owner have to submit the invoice after they issue the invoice. We would submit that the invoice should be submitted to its addressee on the same date that it is issued. Further the payment terms are out of line with the normal commercial standard payment period of 30 days.

■ **There is no right to dispute charges**

- Interest of 2% above the prevailing Prime Lending Rate can be charged on outstanding amounts.
- Late payment or default in payment constitutes material breach of the agreement

■ **Security Deposit**

- Service Provider has the right to demand an interest-free refundable security deposit up to 50% of the MRC. It can draw on this fund if we are late in making a payment or are in default. We need to always keep the amount in the designated account in case demanded by CLS owner

■ **Suspension**

- CLS owner may suspend the RIO without notice if we provide any **inaccurate information that adversely impacts the CLS owner.**

■ **Term, Termination and Restoration**

- In addition to the termination provisions provided in the TRAI regulations, the RIO provides for termination without notice if in the CLS owner's opinion, use of the services contravenes any law OR "if operation of IITE is not in the interest of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality" This is very broad, undefined and allows termination immediately

■ **Section 4. Procedure for Application by the Eligible Indian ITE for Access Facilitation to the CLS and related Reference Capacity**

- There are a number of documents required to be delivered along with the application for Access Facilitation and payment for the service. We would like the authority to review the requirement in case the same is relevant.

■ **Access**

- ITE must grant CLS owner designated representatives with access to enter into and remain on IITE's premises as it "**deems fit to ensure that the Reference Capacity is being used for the purposes in accordance**" with ITE's relevant licenses. This is an arbitrary provision and requires review.

■ **Indemnity**

- This is a unilateral indemnification by ITE in favour of CLS owner relating to Intellectual Property claims, misrepresentation and/or breach, and gross negligence and willful misconduct (Section 21.1) and unauthorized use by ITE or its customers of the Reference Capacity. The ITE would normally require at least mutuality on this provision

■ **Other T&C's**

- The parties have 5 days after confirmation for "Access Facilitation" (referenced in Section 8.1) to enter into an Access Facilitation Agreement. 5 days is an extremely short Timeframe in which to review and negotiate such an agreement. This effectively limits the ability of the ITE to negotiate at all.
- Section 8.3 (page 3): if the parties fail to enter into the Access Facilitation Agreement they can request the "Authority" to facilitate the negotiations. There is no definition of the 'Authority' - Further it is unclear what "facilitate" means in this context.
- Limitation of liability is unilateral benefiting only CLS owner.
- Indemnity clause is unilateral benefiting CLS owner.
- A member of the cable consortium or the owner of the cable from which ITE is acquiring the relevant capacity must confirm to CLS owner that they have entered into a contract for the capacity. It is unclear why this is required at all.
- In terms of the commercial outcomes of the RIO document, it is imperative to note that the cost of interconnect so far as the IITE seeking interconnect is concerned is as high as 10% of the total line cost for the India network costs. This leads to the products of interconnect seeker /ITE becoming up to 15-20% more expensive than the Incumbent service provider, thereby putting the ITEs in a demonstrably disadvantageous position vis a vis the incumbents.



- Further the RIO document should also address the issue of standalone NLD operators to be given non-discriminatory access at CLS to terminate domestic back-haul capacity to ILD Operators in the “Meet-Me-Room” located in CLS at a fair co-location charges.

It is pertinent to mention that in India most of the CLS owners are vertically integrated telecom service providers, not only providing retail telecom services but also wholesale telecom services within the same jurisdiction. In such situations, it is very difficult for standalone Long Distance International Telecom Service providers to compete with them for the same telecom services / products. Therefore regulatory intervention becomes all the more important to correct any market aberrations and to create a level playing field for all the players to effectively compete in a fair and transparent manner. Regulators across the globe have intervened on a need basis to prevent such market aberrations. An example of this is set out below.

Instance of regulatory intervention to correct an abuse of dominant position in case of POLAND

Abuse of Dominance in Poland

In June 2011, the European Commission imposed a fine of €127 million on telecoms operator Telekomunikacja Polska S.A. (TP) for abusing its dominant position in the Polish market.

Poland has one of the lowest broadband penetration rates in Europe - in January 2010 it reached only 13%, significantly below the EU average of 24%. Consumers have also suffered from lower connection speeds: 66% of Internet access lines in Poland do not exceed the speed of 2Mbit/s compared to an EU average of just 15%. Finally, monthly prices per advertised Mbit/s were much higher than the prices in other Member States and the second highest in the OECD area.

In order to provide broadband Internet access to end-users, new market entrants need to acquire wholesale broadband access and local loop unbundling. In Poland, these are exclusively provided by TP which proposed unreasonable conditions, delayed the negotiation processes, rejected orders in an unjustifiable manner and refused to provide reliable and accurate information to alternative operators. Together, these practices prevented alternative operators from competing



effectively in the market and constituted an abuse of TP's dominant position on the Polish broadband market.

Telekomunikacja Polska's total turnover in 2010 was € 3.9 billion (PLN 15.7 billion). The fine takes account of the duration and gravity of the infringement and has been calculated on the basis of the average value of TP's broadband sales between 2005 and 2009 in Poland. TP's turnover in 2010 was € 3.9 billion.

Source: European Commission, Press Release, 22 June 2011.

