TELECOM REGULATORY AUTHORITY OF INDIA

Responses received on

Consultation Paper no. 5/2007 dated 13th April 2007

on

'Access to Essential Facilities (Including Landing Facilities for Submarine Cables) at Cable Landing Stations'

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Comments of various stakeholders on the issues raised by TRAI in its consultation paper no. 5/2007 dated 13th April 2007

On

‘‘Access to Essential Facilities (Including Landing Facilities for Submarine Cables) at Cable Landing Stations’’

Q.1 (a) Is regulation required to be issued by the TRAI for manadating CLS-RIO to access the essential facilities and co-location at cable landing stations?

AT&T

The TRAI has properly determined to enact regulations mandating access to submarine cable landing stations, which is an essential input for many international telecommunications services. AT&T India strongly supports the enactment of the proposed regulations but also proposes the changes described above at pages 5-11 to improve their effectiveness, including: the provision of changes or clarifications in the proposed regulations addressing non-discrimination; the provision of competitive backhaul services; eligibility rules; collocation; and cable station access and cancellation charges. Additionally, as also stated above, the scope of the proposed regulations should be narrowed to focus on access, collocation and backhaul arrangements at cable stations controlled only by dominant operators. Non-dominant operators should be subject to the general obligation to provide cable station access on reasonable and non-discriminatory terms and conditions set forth in Section 3(a) of the proposed regulations but should be exempt from the specific requirements of the regulations and allowed to comply with this general obligation by negotiating access and collocation arrangements on a commercial basis.

Orange Business Services

In carrying out its regulatory tasks, Article 8.1 of the Framework Directive requires that EU National Regulatory Authorities (NRA) shall implement measures that are proportionate to stated objectives. Where access is denied or offered on unreasonable terms and conditions such that it hinders the emergence of a sustainable competitive market, Article 12.1 of the Access Directive provides that an EU NRA may "*impose obligations on operators to meet reasonable requests for access to, and use of specific network elements and associated facilities*".

Singapore has similarly adopted proportionate regulation as a regulatory principle where to the extent a market is not yet competitive, *ex-ante* regulation would be necessary6. Accordingly, Singapore had considered it necessary to mandate access and collocation to cable landing stations owned by the incumbent, Singapore Telecommunications (SingTel) under a Reference Interconnection Offer (RIO). In addition to cable landing access and collocation, the RIO further obligates SingTel to supply a suite of interconnection-related and wholesale services to eligible operators on a non-discriminatory basis.

Considering the present circumstances in which TRAI has recognized that competition in the IPLC and international connectivity segments in India is lacking and could be enhanced, it would be wholly appropriate and necessary that TRAI apply *ex-ante* regulation to replicate the absence of market forces in this sector. Insofar, jurisdictions that have effectively applied cable landing access regulation have progressed to become leading communication hubs.

BT Global Service

BT believes that the Access Facilitation Regulation for CLS is urgently required to facilitate access to international capacities as well as collocation facilities at CLS.

BSNL

Yes. However, the use of word CLS-RIO is likely to create some confusion and misgivings as RIO is used in the case of Interconnection. It may be appreciated that in the present case we are talking about cross connection of international and domestic resources and the co-location of the backhaul link equipment. Accordingly, it is suggested that the Regulation may be named like "Reference Cross Connection and Co-location Offer (CLS-RXCO)" or "Reference Access Facilitation and Co-location Offer (CLS-RAFCO)".

Bharti

Yes, Regulation is required to be issued by the TRAI for mandating CLS-RIO to access essential facilities and co-location at cable landing stations. Colocation facility is to be built by the Cable Station owner preferably in the same building or nearby facility in case it is not possible to have collocation facility along with the landing station area.

VSNL

CLS-RIO to access the essential facilities and co-location at cable landing stations should be voluntarily published by the concerned landing station operator, and no ex-ante regulation should be resorted to.. In this connection, the following points may be seen:

- Indian cable landing situation today is similar to that in the USA in the eighties. If USA stopped regulating their CLSs at that time, then similarly, there is no need for any regulation in India as well.
- Since there is adequate competition in India now, the access charges which form a part of the pricing, will be governed by the market forces.
- New terabit consortium based cables any way have provisions for open access at equal and non discriminatory charges which are being implemented in India very smoothly.

The issues, if any, in the CLS access can be resolved through ex-post regulatory measures.

Reliance Communication Ltd.

Yes. Without CLS-RIO the incumbents or operators with SMP will continue to frustrate / delay the access to capacity acquired by competing carriers. As ascertained by TRAI

the incumbent had 75% share in the IPLC market as of June 2005 i.e. more than three years after liberalization of the ILD sector.

Cable & Wireless

C&W submits that regulation is required to be issued by the TRAI mandating a CLSRIO for access to essential facilities and co-location. As the TRAI identifies in the Consultation, many international regulators have recognized the importance of regulating access to the CLS which can constitute a key bottleneck facility. With new ILD operators coming into the market in India, it is important that they are able to get timely and equal access to the CLS, in order to be able to efficiently use the international capacity which they either own or have leased on a long-term basis.

There has already been one high-profile dispute relating to access to cable-landing stations in India and C&W submits that, the publication of fair and transparent terms for CLS access and co-location should avoid such protracted disputes in the future and ensure that all operators can compete on a level-playing field and within time periods to allow the operators to compete effectively. The true benefits of competition to consumers in India will only be delivered if new ILD licensees can compete on a fair technical and commercial basis with the operators who own and control the relevant CLSs.

C&W considers the draft Regulation a good proposal from the TRAI. It captures many of the key elements which are required for CLS regulation. It has been observed in other markets that CLS owners/controllers will use any defect or uncertainty in the applicable regulations to delay or frustrate the provision of relevant co-location and access services to other licensees. In light of this, C&W has some proposed amendments and additions which it suggests will enhance the practical effectiveness of the Regulation.

Suggested amendments to the Draft Regulation

Definitions: “Capacity owner” - C&W suggests that it is clarified that the ILD carrier needs to either own capacity or ‘lease capacity on a long-term (greater than 10 year) basis’. Many ILD carriers may own long-term leases of international capacity (on a capitalized lease rather than an IRU basis). This should not prevent that ILD being a capacity owner for the purposes of these regulations.

Chapter II, Clause 3 (1) - In respect to new cable landing stations, we submit that there is no reason why the relevant cable landing station owner should not submit a proposed RIO to the Authority prior to the landing station coming into existence. There will, of course, be substantial planning and preparation in relation to the landing of a new cable system and, as such, the owner should provide the draft RIO to the TRAI for approval to provide adequate time prior to the CLS coming into existence for that other licensees have the opportunity to access the capacity as soon as the CLS is effective. We suggest that this should mean that the relevant CLS owner should provide the draft RIO terms no less than 6 months prior to the new cable system being activated. This issue has been considered recently in Singapore, in relation to the landing of the SMW4 cable

system in Singapore. The iDA in Singapore mandated some specific amendments to SingTel's RIO to recognize this issue. 1

C&W also notes another issue which we suggest that the TRAI consider in setting out the scope of CLS regulation. In a number of markets (including the UK), the

1 SingTel's Reference Interconnecction Office, Schedule 4B, clause 2.2.

landing of new cable systems in remote and unaccessible areas, with very limited domestic network access, has created isolated bottle-neck facilities, under the control of the CLS owner. C&W recommends that, in relation to the landing of new cables in India in the future, the TRAI bears this issue in mind when approving landing locations.

Chapter II, Clause 3 (3) - C&W submits that it is likely that the CLS-RIO of a cable owner will require some amendments prior to it being approved by the Authority. Therefore we would propose that there is a clear timeframe for the Authority to respond to the cable owners initial submission (30 days), after which there is a 15 day period for consultation, prior to the final requirements being notified to the cable owner. C&W also notes that there are likely to be other interested parties who may wish to comment on the proposed CLW-RIO terms.

Chapter II, Clause 5(2) - C&W submits that this clause needs to be more specific about the situations where it would be considered reasonable for a cable landing station owner to refuse to provide the requested access. The word 'feasible' leaves substantial opportunity for argument between the respective parties. We suggest that a cable landing station owner should only be able to refuse to facilitate the access if the relevant licensee has not provided the correct information as set out in Chapter II, clause 4. C&W notes that, in Singapore, the only situations in which SingTel is able to refuse an application for a submarine cable connection service, is if the information provided in the relevant form is incorrect or incomplete 2 .

II, Clause 6 (2) - C&W is concerned that this clause appears to contemplate the fact that the parties may still not reach a commercial agreement for the provision of the access services. Essentially the CLS-RIO made available to the other licensed carriers is an 'offer' which, once the carriers accept this offer, will form a contract between the parties.

Chapter II, Clause 8 and 9 - C&W believes that some specific timeframes need to be set up, within which the CLS owner will provide the relevant access services to the requesting licensee.

C&W submits that one of the critical factors to the CLS access regime being successful is that all available choice of backhaul providers can provide service to ITEs in the CLS. C&W suggests that it is made clear that any authorized backhaul provider is allowed reasonable CLS access to provide backhaul services to ITEs.

2 SingTel's Reference Interconnection Offer, Schedule 4B, clause 3.7. - please see

Chapter II, Clause 11 - Any facilitation of upgrade capacity should be in accordance with a specified timeframe. This timeframe should be less than the overall time period set out in the Regulation Schedule, Part III.

Chapter II, Clause 12 - Whilst C&W recognizes that is a fair for a CLS owner to charge a reasonable cancellation charge in appropriate circumstances, C&W is unclear of the reasoning behind the specified cancellation charges. The charges are currently specified as one year's O&M charges. There appears to be no costing rationale for this charge.

Chapter II, Clause 13 (2) - Whilst C&W agrees with the principle that, in the event that the ITE does not pay charges when due, the CLS owner would, eventually be able to terminate the service, we propose that, in addition to the 30 day payment period, the CLS owner would be required to give the ITE 14 days prior written notice (with the opportunity to rectify the breach) before the CLS owner could terminate the service.

III, Clause 15(2) and 15(3) - C&W proposes that it is clarified, under clause 15 (2) that the only reason for which the CLS owner may reject the application is if the access seeker is not an eligible ITE or has not been granted the required international gateway licence. It is important that the CLS owners cannot use the rejection of a co-location request as a mechanism to delay full international capacity access.

Chapter III, Clause 16 - C&W submits that the provision of the co-location services should not be dependent upon the advance payment of all relevant charges.

III, Clause 17(1) - It is very important that clear criteria are set out for the CLS owner to comply with, when determining whether there is availability in the relevant co-location site to meet an ITE request. C&W proposes that the words "due to space limitations or any other valid reasons" in the clause is replaced by the specific facts which would be acceptable for the CLS owner to refuse to provide the co-location space. C&W suggests that the following would be the only consideration which could justify a valid reason for refusing to provide the space: (a) security or confidentiality obligations imposed on the CLS owner by Government agencies; (b) if the CLS owner will be de-commissioning the relevant site within the next 4 months; (c) if other third party co-location orders which have already been taken by the CLS owner which results in the site already being full; and (d) if the CLS owners documented requirements for itself (and its own customers) over the next 4 months would result in the site being full. C&W notes that 17(3) would also need to be amended accordingly.

Chapter III, Clause 17(2) - C&W submits that it is going to be commercially impractical for the ITE to bear all the costs relating to the development of an alternate site.

Chapter III, Clause 18(1) - Again, we propose that the acceptable reasons for rejecting a request for additional co-location space need to be exhaustively set out. We would

suggest that the reasons set out in relation to clause 17(1) above should apply to additional co-location space. In addition, we would suggest that the only reason that additional equipment would not be allowed in the existing co-location space would be if this equipment would have an adverse impact on the operation of any existing equipment of CLS owner or that of any third party.

Chapter III, Clause 23(2)(d) - C&W proposes that this is made clearer, to ensure that the CLS owner cannot rely on this clause as an excuse to revoke the colocation services. We suggest that this should simply apply if the relevant colocation services are causing physical or technical harm to the co-location site. Also, at the end of clause 23(2), we suggest that there should be longer time period for notice to the ITE - perhaps 30 days minimum, to enable the ITE to seek to plan alternative arrangements. In 23(3)(b), we presume that this is meant to tie into a situation where the co-location space is never finalized - this should be clarified.

Sify Communication Ltd.

Being the oldest private ISP, Sify has been acquiring International capacity for a fairly long time. Our experience in acquiring International capacities has not been always a pleasant one and we have been voicing our concerns regarding the same from time to time. Discriminatory and non-transparent pricing, induced delays in provisioning of essential facilities including co-location space and abnormally high access facilitation charges have impaired our service delivery to end consumers. **Hence, we strongly iterate the need for a regulation which should be issued by TRAI for mandating CLS-RIO to access essential facilities and co-location at cable landing stations.**

Verizon

For the reasons noted in the introduction above, Verizon Business agrees with the CLS Consultation's conclusion that regulation is required to mandate a Cable Landing Station-Reference Interconnect Offer (CLS-RIO) to enable timely access on a non-discriminatory basis to the essential facilities and for co-location at CLS. Under the circumstances present at this time in the Indian market, there are risks of anti-competitive conduct that call for such regulation.

Forms of Anti-Competitive Practices at CLSs

We can classify the range of anti-competitive practices observed at CLSs into the following two broad categories: (A) Methods used to restrict access to reference capacity; and (B) Charges and procedures resulting in unnecessary costs and complexity.

(A) Methods used to Restrict Access to Reference Capacity:

(i) Preventing owners of submarine cable capacity from landing their own capacity in the country;

(ii) Delaying capacity owners from co-locating by such means as:
- claiming physical constraints, eg: space, power and availability of conduits;
- providing insufficient space at the landing station;
- insisting on long lead times for making space available;
- demanding unreasonable agreement terms;
- deferring co-location space commitments/construction until shortly before RFS (the date when the system is for Ready-for-Service);
- failing to give interested parties sufficient opportunities to reserve or express interest in co-location space;

(iii) Restricting the number of operators that have access to a CLS;
(iv) Prohibiting co-locating parties from accessing other cable systems landing at or connecting to the landing station;
(v) Placing physical limitations on grooming;
(vi) Prohibiting interconnection to other cable systems, for example for the purposes of transit or for establishing restorable capacity;
(vii) Withholding information about developments regarding new cable landings and facility works; and
(viii) Prohibiting the provision of backhaul by multiple providers, including those unaffiliated with CLS owners and submarine cable capacity owners.

(B) Charges and Procedures used to impose unnecessary costs and obstacles:

(i) Imposing expensive and discriminatory prices for co-location and cross-connection procedures;
(ii) Imposing unnecessary or unnecessarily stringent or onerous procedures that present hurdles for the party seeking access services (for example, by requiring access seekers to submit application forms exactly 20 days prior to the requested service activation date, and rejecting all application forms received anytime earlier or later than the stipulated filing day);
(iii) Imposing unrealistic forecasting requirements;
(iv) Imposing unreasonable limits on the number of orders for cross-connection and co-location services than can be processed at a particular time; and
(v) Imposing drawn-out, discriminatory and inefficient procedures that impact a competitor's ability to activate supply in a timely manner

Verizon Business has examined the proposed CLS-RIO regulatory framework in detail. In our view, the draft framework would help the TRAI achieve its broad objectives of enhancing further competition in provision of International Private Leased Circuits (IPLCs). We note that the proposed CLS-RIO framework features the following elements:

(i) Eligibility for access facilitation;
(ii) Access facilitation and interconnection including time frames;
(iii) Co-location facility;
(iv) Capacity up-gradation;

(v) Grooming service;
(vi) Minimum commitment period of the co-location service;
(vii) Co-location site access lead time and related issues, and;
(viii) Landing facilities.

We suggest that TRAI provide greater definition and clarification on the following issues in the CLS-RIO framework:

(i) <u>The purposes for granting better access to the CLS</u>

The draft regulations require the CLS owner to "*provide, on fair and non-discriminatory terms and conditions…. access to any eligible Indian International Telecommunications Entity requesting for accessing international submarine cable capacity on any submarine cable systems;*

We suggest that the TRAI consider specifying the purposes for mandating such access as follows:

(i) to access a licensed ITE's own cable capacity on any cable system at the relevant CLS; and/or
(ii) to access the cable capacity owned by any licensed third party ITE on any cable system at the relevant CLS for the purpose of:
   a. providing a backhaul service to that licensed third party and/or;
   b. enabling that third party to transit traffic between any cable system at the relevant CLS and another cable system.
   c. ensuring that ITEs may obtain access services to access multiple cable systems.

The ability of an ITE to transit traffic between any cable systems at the CLS is important and should be clearly permitted in the draft regulations. It is critical to ensure that CLS owners permit an ITE to access its own capacity on its cable system and also to permit the ITE to route traffic from one cable system to another as it manages its international network to maximize network efficiencies.

This ability to transit traffic at CLS was key to restoring traffic to the networks of a number of ITEs affected by the December 26, 2006, submarine cable outages caused by a magnitude 7.1 earthquake off the coast of Taiwan. Nine cable systems were taken out of service as a result of more than 21 cuts in various cables. This event interrupted global communications for businesses and consumers in Taiwan, Hong Kong, China, Korea, Singapore, Philippines, Vietnam, Thailand, Brunei and Australia. Singapore's telecommunication services, for example, were restored more quickly than those in Hong Kong and Taiwan. This was due in significant part to the ability of ITEs to transit their capacity from one cable system to another under Singapore's cable open access regime.

(ii) <u>The CLS-RIO should include a procedure for timely incorporating new cable systems</u>

The draft regulations are silent regarding the treatment of new cable systems. We suggest that TRAI require that the CLS owner incorporates any new cable system into the CLS-RIO by submitting any necessary amendments to TRAI for approval within a reasonable period, preferably 180 days prior to the RFS date of the new cable system. This requirement will enable ITEs' access by the RFS date. We note that the CLS owner is often the designated CLS partner within the cable consortium and would be in an informed position to advise TRAI on the expected RFS date of the new cable system.

We note that ITEs in some jurisdictions can be competitively disadvantaged in that by the time they obtain the necessary co-location and connection services under regulated arrangements to access the new cable system, the CLS owner would already have in place ready access for itself to the new cable system at RFS date.

The CLS owner effectively exercises monopoly power in the provision of back-haul services and international capacity services for the new cable system during the initial months while other ITEs have only embarked on negotiations to secure access to the relevant CLS for a backhaul network deployment.

(iii) The timeline to allow access to a new CLS by an ITE should be reduced

The proposed framework requires that a new CLS owner submit the CLS-RIO for TRAI's review within 30 days of the time the station comes into existence. The TRAI is given 60 days for the review and approval. Thereafter, within 15 days the CLS owner must make available the approved CLS-RIO. Only upon completion of these procedures can an ITE begin the regulated procedure for accessing the reference capacity. For purpose of this paper, we understand the meaning of "the station coming into existence" to refer to a cable system's RFS date at the CLS.

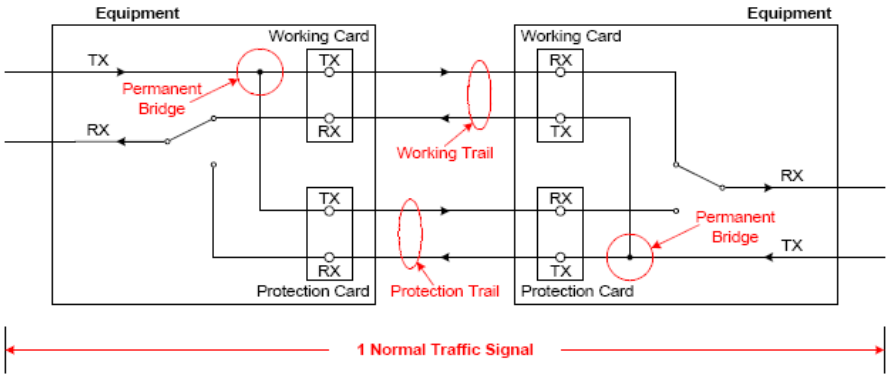
These procedures clearly discriminate against ITEs in favor of the CLS owner who is effectively granted a three-month head start over other ITEs in accessing cable capacity and the provision of backhaul services. We urge the TRAI to draft suitable provisions to grant ITEs permission to initiate access implementation plans to the CLS 180 days prior to its commissioning. The provisions should allow an ITE access to the CLS and approved CLS- RIO at least 180 days before a new CLS comes into service.

(iv) The regulations should further address the provision of backhaul facilities

The proposed regulations restrict co-location space for the specific purpose of accessing cable capacity at the CLS. We request that the rules be expanded to allow co-location for the purpose of building backhaul access into CLS. We also propose that the draft regulations allow for interconnection between co-locating ITEs at these facilities. This would offer the ability for international traffic hand-offs amongst the ITEs and would offer them access to multiple backhaul service providers within the facility.

(v) The regulations should provide for a protection trail for cross-connection services

The cross-connection service at the CLS should provide for a protection trail. The protection trail provides diversity to the main working trail, and like the main working trail, consists of a set of fiber cables linking the distribution frames of the optical distribution frame belonging to the CLS owner and the co-located equipment of the competitive carrier. This is depicted in the diagram below.



1+1 Protection Architecture

Cross-connection services are critical network elements providing the physical means by which capacity handed off at the dry end of the submarine cable head end is effectively delivered to the interconnecting carrier. A fault or outage in this network element would effectively result in a complete shutdown of any telecommunication services requiring international bandwidth, i.e: Internet Services, International Voice, International Data Services such as IFR and iATM, and MPLS-VPN services. It is therefore important that TRAI require that the CLS owner feature a protection trail as part of the cross-connection service.

(vi) The regulations should provide for multiple diverse conduits to access the CLS

The availability of diverse entrance conduits permits an ITE to access the CLS using two separate conduits. This is critical to effective redundancy and restoration. Without this feature, there is risk of a single point for failure on the ITE's backhaul network.

(vii) Cross-connection service charges should be capacity independent

Charges for cross -connection services should be capacity independent. The annual recurrent access charges available commercially at CLSs are levied on a per STM-1 or 155 Mbps of cable capacity. The same charging mechanism applies to the annual Operation and Maintenance (O&M) charges.

We submit that there is no nexus between the capacity and the cost for service provision. The Singapore regulator, the infocomms Development Authority (IDA), highlighted this important fact during its review of cross-connection services at SingTel's CLS in 2002.

(viii) Greater detail regarding virtual co-location should be provided

"Virtual co-location" permits an ITE to directly access the cable system from an external facility. With Virtual co-location, an ITE can access the CLS using its own fiber to connect to the applicable system optical distribution frame. We note that the draft regulation is also silent on the engineering specifics for virtual co-location. TRAI should require CLS owners to provide detailed engineering specifications regarding access, the mechanics for access and the relevant charges. This will enable reasonable and timely access to the facility for ITEs.

Asia Pacific Carriers' Coalition

APCC considers that it is necessary for TRAI to issue regulation mandating CLS-RIO to access the essential facilities and Co-location at CLSs. The implementation of such regulation would be broadly in line with regulations introduced in many overseas jurisdictions at the commencement of international telecommunications facilities competition- and which have been maintained (in whole or in part) beyond the initial period of market liberalization because the potential for an OCLS to restrict access to essential facilities at any individual CLS rarely disappears completely, OCLS to restrict access to essential facilities at any individual CLS rarely disappears completely. Without such regulation it is highly unlikely that the necessary access to, and Co-location at, CLS for effective competitive and its associated benefits in India will become, and remain, available.

We are in broad agreement that the draft regulations set out at Chapter 5 of the Consultation will enable an eligible International Telecommunication Entity (ITE) timely provision with fair, equitable, transparent and non-discriminatory access to essential facilities and Co-location at CLS from the OCLS.

ISPAI

Yes, the CLS-RIO needs to be mandated by TRAI for International Interconnection, considering that RIO also exists for Domestic Interconnection.

Telxess Consulting Service Pvt. Ltd.

Yes, the CLS-RIO needs to be mandated by TRAI for International Interconnection, considering that RIO also exists for Domestic Interconnection.

Q.1 (b) If yes, whether the draft regulations (at Chapter 5) framed for access to essential facilities including landing facilities and Co-location at Cable Landing Station (CLS), enable the timely provision with fair, equitable, transparent and non-discriminatory basis to requesting eligible Indian International Telecommunication Entity from the Owner of Cable Landing Stations?

AT&T

same as (a) above.

Orange Business Services

Overall, the key requirements for access and collocation to cable landing stations have largely been identified in the Chapter 5 draft regulations. Notwithstanding, there is scope to further tighten the provisions on transparency and non-discrimination to enable timely and fair provision.

BT Global Service

BT considers that the draft RIO regulation for CLS, which is in line with the general RIO for telecom services, has covered most of the relevant elements. However, we believe that the sharing of security monitoring facilities at CLS with new ILD operators should be mandated. The rationale and requirement for this facility is explained below.

BSNL

It is suggested that no regulation be made to mandate sharing of the Cable Landing Station for the purpose of landing of new submarine cable of a seeker. It should be left to the mutual agreement amongst the concerned parties. Normally, it is expected that a party laying a new submarine cable would opt for having its own CLS due to techno commercial reasons. This should be encouraged to help create additional CLS infrastructure which will have the added advantage of maintaining international connectivity in the event of disaster at other Cable Landing Stations. Secondly, Cable Landing Station can not be treated as bottleneck facility.
The proposed regulation appears to be too detailed as an attempt has been made to go into the nitty-gritty of the operational aspects of setting up of backhaul link, the international capacity and co-location. A regulation is expected to lay down only the guiding principles, which enable timely, fair, equitable, transparent and non-discriminatory provision of the required facilities.

Detailed provisions in the regulation prevent optimization of resources and possibilities of better understanding / arrangement among the parties. It is also to be kept in view that the CLS Owner at the other end and the Network Administrator of the Submarine Cable System play an important role in timely provisioning of the International capacity. The pricing structure of the leased and IRU is also decided by the market forces and to some extent on the agreed arrangements among the consortium members. Amongst other things, specially with respect to cross connection charges at the other end.

Therefore, the role of regulation with regards to prescription of the type of charges for international bandwidth in terms of flat charge or O&M charge or a combination etc. for the purpose of payment for enabling the commissioning of capacity or termination of capacity has to be carefully examined lest it may prove to be counter productive.

The operators must not be deprived of the possibility of negotiation amongst themselves to arrive at best possible techno commercial arrangements. However, such arrangement should be circumscribed by broad regulatory principles laid down by TRAI.

Therefore, it is suggested that the regulation may be thoroughly reviewed to do away with the provisions which are in the nature of over regulation and essential parts of the arrangements may be shifted to Part V which provides for guidelines for co-location of equipment, installation, maintenance etc. The OCLS can use the guidelines to frame agreements with the seekers.

Bharti

We agree the regulations set out in chapter 5 for access to essential facilities are adequate to enable timely provision with fair, equitable, transparent and non-discriminatory.

VSNL

Not Applicable

Reliance Communication Ltd.

Yes. However we would like to propose few changes to the regulations to make it administratively easier for ITEs to access the submarine capacity.

a. Standard RIO should clearly specify that the terms of interconnection will be subject to orders/regulations/directions of the TRAI.
b. Collocation related provisions should be similar to what has been agreed between domestic operators.
c. The regulation clearly specify that the Unbundled Network Element costs of all network elements should be worked out in sufficient details so that usage charges for various types of facilities can be calculated based on various types of elements involved. These costs should form the basis for cable station access charges. In other words, the regulations should clearly identify the demarcation point for Cable Station Access charges and Access Facilitation Charges to ensure that all relevant costs are aggregated under appropriate head. This will ensure that the party availing a particular service from CLS is charged only for that service.
d. The ITEs should be permitted to acquire the backhaul capacity from existing backhaul suppliers (i.e. UASLs and NLDOs) available at the CLS. For this purpose CLS should be mandated to connect the submarine capacity to collocated equipment of backhaul supplier selected by ITEs.

c. Similarly ITEs should also be permitted to use the virtual collocation of any backhaul provider for accessing the submarine capacity.
d. ITEs should not be forced to take collocation services from CLS for accessing the submarine capacity
e. UASL and NLD operators should also be covered for provision of collocation at the CLS or virtual collocation to ensure that ITEs have the access to competitive backhaul for accessing submarine capacity

Cable & Wireless

same as (a) above.

Sify Communication Ltd.

The draft regulation presented in Chapter 5 seems fairly comprehensive and covers most of the issues relating to access facilitation and provision of co-location space. The time limits specified also seems justified. There is however few additional inputs that we wish to put on record which will be addressed in subsequent questions.

Verizon

same as (a) above.

Asia Pacific Carriers' Coalition

same as (a) above.

ISPAI

Yes the Draft Regulation at Chapter 5 framed is comprehensively framed and covers most of the issues relating to access and facilitation at CLS.

Telxess Consulting Service Pvt. Ltd.

Yes the Draft Regulation at Chapter 5 framed is comprehensively framed and covers most of the issues relating to access and facilitation at CLS.
However, one additional point that needs to be clarified and included is as under:

Q.1 (c) In case considered inadequate, please give reasons and suggest any other additional/ alternative regulations required to achieve the basic objective of timely, fair and non-discriminatory access at CLS and Co-location with reasons thereof.

AT&T

same as (a) above.

Orange Business Services

Sections 4(a),(b) – In view that the Department of Telecommunications (DOT) already publishes a list of ILD Licensees on its website9, would it be necessary for access seekers to provide copies of their licensing agreement and certificates of authorization to verify their eligibility?

Section 6 – In principle, all Agreements between the Owner of Cable Landing Station and eligible ITEs pursuant to the RIO-CLS should be pre-approved by TRAI. In this respect, the Access Facilitation Agreement should form part of the pre-approved CLS-RIO. This would avoid any potential delays and stalemate if it were to be commercially negotiated and better achieve timely provision of access to and collocation of essential facilities at Cable Landing Stations. As an example, the Singapore RIO also includes a pre-approved Model Confidentiality Agreement.

Section 8 – To the extent backhaul supply is not competitive there should be a provision in the CLS-RIO to mandate the provision of backhaul services to access seekers. ILD operators should not be restricted from deploying backhaul networks should they wish to do so.

The proposed Regulations should include provisions to require Owners of Cable Landing Stations to provide redundancy for essential facilities (such as power supply, lighting, air-conditioning etc) to ensure business continuity in the event of outages.

BT Global Service

The security monitoring equipment for the purpose of legal interception and monitoring at an international gateway is a mandatory requirement for provision of international services. Such equipment is very complex and expensive and must undergo rigorous process of approval from security agencies. This leads to unavoidable delays in establishment of such facilities. In the new ILD license conditions there is a provision for sharing of monitoring capabilities under mutual agreement with existing licensees from whom international connectivity is taken to provide layer 2 and layer 3 VPN services. This provision in the license can enable a new ILD operator to start offering the services in a short timeframe without waiting to install its own security monitoring equipment thereby lowering a potential barrier to entry for new operators. However, to ensure non-discrimination and to ensure that this provision is effective in practice, the sharing of security monitoring facilities must be mandated. Unless the sharing of security monitoring equipment is offered as an element in the CLS-RIO, CLSOs would

be able to refuse to supply, delay reaching agreements and charge excessive prices. The charges for the sharing of security monitoring facility as well as the time period for the provision of the same should specified under “any other charges” in part 2 and part 3 of the schedule of CLS-RIO, respectively.

BSNL

same as (b) above.

Bharti

same as (b) above.

VSNL

These proposed regulations will not be in practice relevant to the private cable systems. It is due to the reason that there is only one seller of the capacity, who is also owner of the cable himself and owns the CLS in India. In this scenario, only when ILDO or eligible ISP buys capacity from the cable owner himself, the access would be needed and provided otherwise not. Also, the price at which capacity would be sold by this integrated owner would not be under the purview of TRAI. This integrated owner may, in fact, even offer access at “Zero” cost as his cost towards access is bundled with the cost of capacity itself. In order to make the proposed regulation effective in real sense, the integrated cable owner should be obligated to a ‘must provide’ regulation, subject to technical feasibility and availability of the capacity.

The proposed regulation may not be effective in case of private cables landing in India, Private (non-consortium) Cable owners would obviate the need for colo service at their CLS by other competing back-haul providers, as they can bundle the cost of capacity with that of backhaul and access into the final price agreed for the capacity from buyer. Private Cable owner will either patronize his own domestic network in India or some one of his preference. Under the situation, even the investment towards colo equipment and annual rent etc., paid by back-haul service provider shall go waste, as he would not get any business for backhaul provisioning in the private cable landing station. On the contrary, if concept of Meet-Me-Room (MMR) is preferred then the need for colo at multiple cable stations can be obviated. The concept of neutral MMR shall be best suited to take care of all eventualities.

Reliance Communication Ltd.

same as (b) above.

Cable & Wireless

same as (a) above.

Sify Communication Ltd.

We appreciate the fact that co-location has been dealt with quite fairly and comprehensively. We understand the need for fair terms of co-location, the absence of which defeats the very purpose of implementing this regulation. Terms of allocation of alternative co-location space has been specified in Regulation no. 17. We are aware of the intentional delays often induced in the access facilitation process by the OCLS stating reasons of non-availability of co-location space. The instant Regulation does have a provision for such a bottleneck situation and the OCLS has been directed **"to take reasonable measures to give an option of virtual co-location"** to the eligible ITE.

Additionally, if the ITE fails to identify a suitable site(s) for virtual co-location (which has to be in close proximity of the cable landing station) then **"the owner of the cable landing station shall endeavor to provide an alternate site other then the virtual co-location".**

We strongly feel the above provisions do not enforce the OCLS with sufficient intensity to arrange for alternate co-location site for the ITE. The ITE is further directed to bear "all costs and charges relating to alternate site for co-location and interconnection link to the cable landing station". This provision may act as a serious entry barrier for some eligible ITEs for the following reasons:

1. There is no provision in the regulation to mandate the OCLS to upgrade co-location space in case of non-availability.
2. Cost of the backhaul and interconnection of the same can be substantial for an eligible ITE and it is surprising that the cost of the same has to be borne the ITE himself just because the OLCS could not provide collocation space.

To avoid such a situation where the OCLS may delay the access facilitation process, we would urge the Authority to have well defined guidelines for the OCLS to follow in case co-location space is denied to the eligible ITE on ground of non-availability. Additionally, OCLS may also be mandated to upgrade co-location facilities at the cable landing station in a time bound manner by suitable sub-regulation under regulation no. 17.

Verizon

same as (a) above.

Asia Pacific Carriers' Coalition

same as (a) above.

ISPAI

There are 2 specific suggestions for consideration/addition to the Draft Regulation for the purpose of completeness of the agreements that will emanate from the Drafts needs

to be clarified and included as under:

i. Chapter 5, Clause 2, Sub Clause 4 – eligible ITE such as an ISP with international gateway permission should include both types of permissions i.e. submarine gateway and/or satellite gateway.
ii. Chapter 5, Clause 13 - relating to Termination – should include situations where, ownership of CLS companies and physical ownership of Co-Location spaces changes, the agreement of the CLS shall be kept irrevocable with the ITE for the remaining period of the IRU Tenure under the Agreement and will be discontinued or terms and conditions changed.

Telxess Consulting Service Pvt. Ltd.

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Q.2 (a) Whether the charges for Co-location and access to CLS for landing facilities should be specified by TRAI or should it be left to commercial negotiations between an eligible Indian International Telecommunication Entity and the Owner of Cable Landing Station?

AT&T

As described above at pages 9-10, charges for collocation and access should be determined in the first instance by the cable landing station owner based on the relevant costs and should be submitted to the TRAI for approval with information concerning the underlying cost components. The TRAI should evaluate these charges on the basis of an international benchmarking approach by comparing them with similar charges in other countries.

The access facilitation cost is reasonably based on the non-recurring initial cost of the new access arrangement, including such elements as the costs of construction, equipment and cross-connect access, which are specific to each access arrangement and should not be distributed over the complete capacity of the systems landing at the station. Thus, non-recurring initial cost of collocation arrangements are likely to be largely subsumed within the access facilitation charge. Other collocation costs will comprise the recurring rental and operations and maintenance costs of building support and maintenance, leasehold, power and other utilities. These costs also are specific to each access arrangement and therefore should be charged accordingly rather than being distributed over system capacity.

Additionally, as described above at page 10, in compliance with the principle that charges should be cost-oriented, access facilitation charges, annual operation and maintenance charges and restoration charges should not be structured on a "per unit capacity" basis. Under a cost-oriented fee structure, only access costs that are incurred on a per unit capacity basis should be charged on that basis.

Orange Business Services

The charges, as well as terms and conditions, for co-location and access to CLS for landing facilities should be specified by TRAI.

BT Global Service

The charges for collocation and access as well as the charges for sharing of security monitoring facilities should be specified by regulator. Without specified pricing, the commercial negotiations between the CLS owner and new operators (ITEs) will not be at a level playing field and are likely to fail or be unreasonably delayed. Prices should be cost based and only the cost elements which are directly attributable to provision of access and associated services should be taken into account. In the interim period, until such time as the cost based charges can be determined, a benchmarking approach can be used. For this purpose, applicable charges being levied by existing CLS owners and those prevailing in other compatible countries can be taken into account.

BSNL

Due to variety of equipments which are possible to be used for co-location and with possibilities of up gradation from time to time in the same rack or by putting additional racks, it may not be feasible to exactly prescribe the uniformly applicable charges. Therefore, it is felt that only essential components of the co-location facilities used should be listed in the regulation supported by examples of cost based calculations in typical configurations. This will help the parties concerned to apply the principles easily, minimizing the chances of disputes.

Bharti

Cable station Owner is required to submit their cost based RIO charges to TRAI for approval. Charges for co-location and access to CLS for landing facilities and any other ancillary services should be as per the TRAI approved RIO charges at that cable station.

VSNL

As it is a complex issue and the situation would vary from place to place, it would be better if left to be decided by the concerned parties themselves. A broad guideline in this regard could be issued by the Regulator, if needed.

Reliance Communication Ltd.

The experience of TRAI and competing operators in the accessing the submarine cable capacity make a compelling case for TRAI to specify the charges for all the services required for accessing the submarine cable capacity. In the past incumbents have used the commercial negotiation as a tool to deny/delay access to submarine capacity and have used this as opportunity to impose price and non-price terms with a view to prevent / hamper ITEs ability to compete effectively. TRAI should specify the charges for each service as ceiling thereafter it should be left to negotiations between CLS and ITEs for better terms. This will ensure transparent, non-discriminatory treatment and certainty to the quantum of charges payable by ITEs for acquiring submarine capacity

Cable & Wireless

C&W suggests that the charges for co-location and access to CLS should be specified by TRAI. In line with international best practise, these charges should be cost-based charges. This is the recognized regulatory mechanism by which anticompetitive pricing regimes can be eliminated. For example, in Singapore, the iDA has recognized that SingTel were not providing reasonable co-location charges (as part of a commercial negotiation with other operators) and therefore the IDA has regulated these prices as part of the SingTel RIO. C&W also notes that, there have already been examples of CLS owners in India seeking to use their control over the CLS to restrict/prevent fair competition (for example, the long dispute between VSNL and FLAG in relation to CLS access). We believe that this provides the TRAI with suitable justification to

regulate charges at this stage.

C&W recognizes that developing appropriate cost-based pricing for these services may take some time. C&W believes that it is critical to the effective development of a competitive market in India that fair (and non-discriminatory prices) are available in the market immediately. Therefore, in the interim, C&W encourages the TRAI to look to benchmark appropriate charges for access and co-location. We believe that this can be done, in a reasonable manner, by looking to other Asian countries for benchmark pricing. Whilst we recognize that the distances for the access service may vary, the principles for co-location charges (in relation to manpower and equipment) will remain broadly similar.

Sify Communication Ltd.

We strongly feel that the Authority should specify charges for collocation and also access facilitation charges and SHOULD NOT be left to be commercial negotiations between the OCLS and the eligible ITE.

Verizon

Our experience in Singapore demonstrates that commercial negotiations regarding access to CLS may not necessarily lead to the desired outcomes for an ITE. Prior to the regulation of SingTel's cross-connection services in 2002, Facilities Based Operators (FBOs) were charged excessively high prices to access their submarine cable capacities. The charging structure imposed by SingTel comprised a one-off establishment charge of US $28,000 per main link (amounting to US $53,000 for a protected link) plus a US $25,000 annual recurring charge per STM-1 access on the same link. Consequently, an FBO seeking STM-4 access to its own cable capacity would be charged US $156,000 per annum. As the charging structure was incremental, the cost would increase proportionately (for example, to US $456,000 for access to an STM-16 circuit).

On 8 October 2002, the IDA completed its audit of SingTel's proposed charges for cross -connection services at CLS and effected the following reforms:

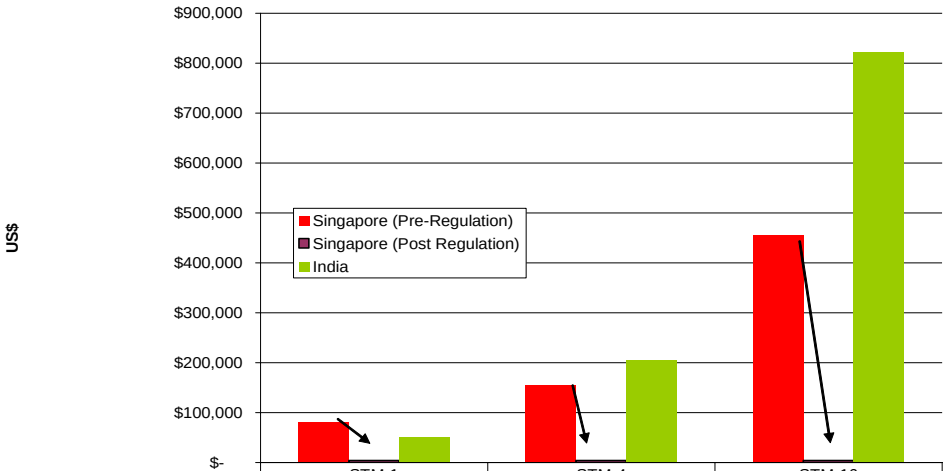
- the charging structure was changed from capacity dependent to capacity independent. That is, charges are the same irrespective of the amount of capacity activated (therefore, for example, an activation of an STM-1 would cost the same as a STM-16); and

- the total charge was set at the dramatically lower rate of US $4,120 (a reduction of a multiple of more than one hundred), making Singapore a showcase for best practices in the Asia Pacific region and helping drive industry growth and competitive market entry.

We submit that India's commercial charges for cross-connection services are unreasonably high by international standards. The following diagram presents VSNL's charges for the service. These charges consist of a one-time set up charge and

annual recurring Operations and Maintenance (O&M) charges. An STM-1 link can cost as much as US $51,345 while an STM-16 link can cost up to US $821,520. We urge the TRAI to review the present charging structure and bring the rates down to best practice levels.

Cross Connection Service Charges at Cable Landing Stations- Singapore (Pre and Post Regulation) vs India



	STM-1	STM-4	STM-16
Singapore (Pre-Regulation)	$81,000	$156,000	$456,000
Singapore (Post Regulation)	$4,120	$4,120	$4,120
India	$51,345	$205,380	$821,520

Source: SingTel RIO, VSNL

Note: An STM-4 is equivalent to 4 STM-1s while a STM-16 is equivalent to 16 STM-1s

Asia Pacific Carriers' Coalition

APCC considers that the charges for Co-location and access to CLS should be specified by TRAI. It is evident from comments in the APCC 2005 Submission above that, left to its own devices, it is unlikely that the major incumbent OCLS in India would set charges that approximate either cost or competitive rates. This has also been the experience of APCC in other areas where the major incumbent has had control over essential facilities. For example, IPLC pricing – where TRAI was also forced to intervene and take measures to impose reductions on the monopoly pricing practices adopted by the major incumbent.

Similarly, where incumbent OCLSs in other jurisdictions have failed generally to set reasonable charges (including access charges for CLS access and Co-location) themselves, regulators in those places have also found it necessary to intervene and oversee such pricing. Singapore is an example, and also demonstrates that such behaviour is not the preserve of the major incumbent in India and the need for regulation to apply to all OCLSs.

ISPAI

We agree with the provision that the CLS owners should convey to the Authority within 30 days, terms and conditions of the CLS-RIO. This should be done along with the cost indications of the un-bundled network elements and services, of the Landing

station facilities as well as the Co-Location facilities and the proposed charges to be levied by CLS to ITE's.

The Authority is requested to evaluate the same and approve both Prices and other Terms & Conditions to ensure; that Pricing is appropriately based on costs adheres to principles of non-discrimination and fairness.

The Authority must ensure each ITE access seeker gets same price and non-price conditions for accessing international submarine cables, co-location and landing facilities, as provided to owners/incumbents services/subsidiaries.

Telxess Consulting Service Pvt. Ltd.

We agree with the provision that the CLS owners should convey to the Authority within 30 days, terms and conditions of the CLS-RIO. This should be done along with the cost indications of the un-bundled network elements and services, of the Landing station facilities as well as the Co-Location facilities and the proposed charges to be levied by CLS to ITE's.

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The Authority must ensure each ITE access seeker gets same price and non-price conditions for accessing international submarine cables, co-location and landing facilities, as provided to owners/incumbents services/subsidiaries.

Q.2 (b) Give reasons for your comments.

AT&T

Please see Answer to (a) above.

Orange Business Services

It is noted that the cable landing stations in India are almost solely owned, in which case the Owner of Cable Landing Station would have monopoly access and administrative control of the respective in-service submarine cable systems with landing points in India. Access to cable landing stations is therefore an infrastructure bottleneck that is not subject to market forces and accordingly, the terms, conditions and charges for access should be regulated and mandated by TRAI.

BSNL

Please see Answer to (a) above.

Bharti

Charges for colocation and access to Cable landing station facility should be published by TRAI on Landing Station basis, which indicates complete transparency and leaves no ambiguity. And the services are available to any licensed International telecommunication entity at a fair and competitive price.

VSNL

Cost of real estate, power, human resources, air-conditioning, taxes, etc. and also the cost of extending of capacity from CLS to a convenient location for access provisioning may be different from place to place. It would suffice if OCLS are mandated to be non discriminatory and transparent in their charging.

Reliance Communication Ltd.

Please see Answer to (a) above.

Cable & Wireless

Please see Answer to (a) above.

Sify Communication Ltd.

Tariffs for access facilitation, annual maintenance and co-location continues to be

arbitrarily high and discriminatory in spite of the fact that liberalization of the International long distance market has taken place almost 5 years ago. Market forces have not been able to bring the tariffs down due to insufficient competition resulted by the limited number of cable landing stations operating in this country. Under such circumstances, it will only be appropriate if the Authority undertakes a comprehensive costing analysis to determine COSTS BASED charges and enforce the same through tariff orders. The ISP industry has long been subjected to vertical price squeeze that we have religiously brought to the notice of the Authority many a times. Mandating access to CLS will have no meaningful impact unless charges for the same are specified which hopefully may neutralize the price squeeze to certain extent.

Being service providers, we are not in possession of cost data submitted by owners of various cable landing stations, hence we are not in a position to suggest the costing model to be adopted and also the various unbundled elements that need to be considered during the costing analysis. We can only request the Authority that a costing analysis should be done immediately using the cost data submitted by various operators using some long range costing models. Strictly cost based tariffs should then be specified at the earliest.

Verizon

Please see Answer to (a) above.

Asia Pacific Carriers' Coalition

Please see Answer to (a) above.

ISPAI

i) The Authority is well aware that the ISP industry has time and again represented against the practice of Predatory pricing as well as the prevalence of Vertical Price Squeeze, that infrastructure owners resort to routinely against stand alone Service Providers. These SPs have no resources to determine real cost of various network elements and services. Hence, TRAI is best equipped to deal with this issue and determine all the elements and real costs involved, to arrive at fair and non-discriminatory pricing.

ii) All CLS owners are also ILDOs and ISP, who fall under the category of eligible ITEs. Hence, the Authority has to ensure that the principles non-discrimination and fairness, under RIO are not compromised with or abused.

It'll also not be out of place to mention that ISPAI was the first entity to take up the cause of international bandwidth liberalization, challenging the monopoly practices with regards to availability, prices and terms. ISPAI was responsible for petitioning the government to open up International Gateways, both Satellite and Submarine and ISPs were the only ones allowed to do so at one time. ISP industry has therefore been keen watchers, and the most active player in sensitizing the industry, government and regulator towards the need for improving international bandwidth connectivity.

Telxess Consulting Service Pvt. Ltd.

A) The Authority is well aware that the ISP industry has time and again represented against the practice of Predatory pricing as well as the prevalence of Vertical Price Squeeze, that infrastructure owners resort to routinely against stand alone Service Providers. These SPs have no resources to determine real cost of various network elements and services. Hence, TRAI is best equipped to deal with this issue and determine all the elements and real costs involved, to arrive at fair and non-discriminatory pricing.

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Q.2 (c) If the above charges are to be specified by TRAI, what elements are to be taken in to consideration and which costing methodology is to be employed? Give cost of individual elements separately and detailed calculation sheet?

AT&T

Please see Answer to (a) above.

Orange Business Services

Mandating access to critical network infrastructure can be justified as a means of increasing competition. Nevertheless, the rights of the infrastructure owner to exploit the facility for its own benefit vis-à-vis the rights of other service providers who require access to the facility to provide a competing service should be balanced. To achieve this, the price of access must be set at a level that is fair to all parties based on an orientation of costs. Long Run Average Incremental Cost (LRAIC) would be considered an appropriate costing methodology.

In the event access facilitation is extended through a virtual collocation facility where charges for ducts and interconnecting cables to the landing station are to be borne by the ITE, these charges should also be regulated by TRAI. In principle, the total cost of the virtual collocation alternative should not be onerously excessive compared to physical collocation such that the virtual collocation option would be cost prohibitive to an ILD operator who wishes to access owned capacity at the landing stations.

To promote cost transparency, accounting separation and cost accounting obligations should be applied on affected Owners of Cable Landing Stations so as to identify all elements of cost and revenue with their basis of calculation in regulating potential anti-competitive behaviour such as price squeezes. This is commonly practiced under the EU Directives.

BSNL

The basic elements could be rent for floor space, DC/AC power consumptions, heat load (Air Conditioning requirement), Cable Duct, Cable Tray inside the equipment room etc. If any of these elements of infrastructure is specifically constructed for co-location, the cost should be based on actual costs to be distributed into fixed cost and annual cost over the period of agreement. Otherwise, unit costs should be the cost distributed in proportion to the resources used by the seekers.

Bharti

There should be separate schedules for the two basic component involved in Access to essential facilities, namely:

- Schedule for Colocation Space charges:

- Colocation Charges are to be derived based
- on the rental/ land and building costs, Backhaul manhole etc.
- Infrastructure capital costs (Power Plant, DG, Air-conditioning etc.)
- Other Capital items viz. DDF, ODF and monitoring systems
- Recurring Charges for power consumption and other maintenance
- Manpower Cost:
- Supervision of work during installation, site inspection, final inspection, escort services for physical access.
- Supports costs
- Per request charge for physical access/emergency physical access.

1. Upon successful application of a request for colocation space, the submarine cable owner shall:
    - Proceed with a project study, which would include a site survey conducted by cable owner to establish and availability of the colocation facility.
    - The requesting Licensee shall pay the charges incurred in conducting the Project study.

    Tentative charges for Colocation:

    - Ordering & Provisioning:
      Per order costing

<u>Project Study cost</u>

- Site Preparation & Installation:
- Site preparation work
- Fire Safety Charges
- Building & Construction Authority charges (where applicable)
- Installation of Optical Fiber (where applicable)
- Provision, installation and termination of Power and Earthing.

2. The requesting International telecommunication entity shall be liable to pay and shall pay to submarine cable owner relevant charges as agreed by all the stakeholders concerned:

1. Application Charge – This charge will be paid by the requesting ITE to submarine cable owner for processing each request for Interconnection service. The application charge shall be applied if Submarine cable owner does not approve the request for interconnection or prematurely terminated by requesting ITE.

2.Activation Charge – The requesting ITE will pay a one-time activation charge for each link activation.

3. Deactivation Charge – The requesting ITE shall pay to submarine cable owner one-time link/capacity deactivation charge.

4. Annual Charge for Cable Systems –The requesting ITE shall pay recurring annual charge for the use of each link activated on the cable system.

VSNL

Not applicable.

Reliance Communication Ltd.

TRAI should use FLLRIC methodology. For each service to be provided by CLS cost elements to be considered shall be:

Cost Elements for Cable Station Access Charge Calculations:

Appropriate Share of Capital Cost of

1) Land, if applicable
2) Building
3) AC and DC equipment
4) DG
5) Multiplex equipment
6) Test equipment

Cost Elements for calculation of Access Facilitation Charge

If the collocation equipment is installed in the CLS

1) Cost of Co-axial cable if the collocation equipment is in the space adjacent to submarine cable equipment else
2) Cost of optical cable along with cost of SDH ADM equipment for connecting different floors in the landing station

For Virtual Collocation

Appropriate share of cost of

1) Duct
2) Cable charges

Collocation charges should be in line with charges established on principle laid down by TRAI in its IUC Regulations. The broad principle prescribed by the TRAI is that only Directly Attributable Incremental Cost Be used for the purpose of calculation on interconnection Costs.

For private cable system the OCLS should be mandated by TRAI to provide the cost / charges separately for:

(i) Landing Station Access cost
(ii) Access facilitation cost

(iii) Connectivity cost between CLS and alternative location which should be based on prevailing market prices subject to ceiling prescribed by TRAI in its TTO for domestic leased circuits.

The Regulation should clearly specify that there should not be any annual O&M charges levied on submarine capacity acquired on annual lease basis since annual charges are arrived at after considering the O&M charges.

Cable & Wireless

Please see Answer to (a) above.

Sify Communication Ltd.

Please see Answer to **(b)** above.

Verizon

Please see Answer to (a) above.

Asia Pacific Carriers' Coalition

Please see Answer to (a) above.

ISPAI

We request TRAI to undertake this exercise before determining the CLS-RIO. The details of all elements and their respective costs can be only accessed by the Authority and are not available to us. TRAI has already notified Telecom Tariff orders on International bandwidth and hence will have fair data on the various cost elements involved and the method to arrive at chargeable prices.

Telxess Consulting Service Pvt. Ltd.

We request TRAI to undertake this exercise before determining the CLS-RIO. The details of all elements and their respective costs can be only accessed by the Authority and are not available to us. TRAI has already notified Telecom Tariff orders on International bandwidth and hence will have fair data on the various cost elements involved and the method to arrive at chargeable prices.

Q.3 (a) Should there be any terms and conditions regarding the minimum commitment period for Co-location service at Cable Landing Station?

AT&T

A minimum commitment period of three years would provide a reasonable balance between the need to encourage competition, by reducing entry barriers for ITEs, and the legitimate interests of cable station owners in ensuring that access arrangements are maintained for a sufficient period to ensure a reasonable return.

Orange Business Services

Yes. As co-located ITEs need to have certainty of future leases, it would be desirable to –

- Subject the term of co-location lease to automatic renewal;
- Oblige Owners of Cable Landing Station not to withdraw access to facilities already granted.

BSNL

When the existing resources are utilized, there should be no minimum period of commitment. However, if a resource is specially created for a seeker then there has to be a minimum period of commitment of say 3-5 years or as mutually agreed between the seeker and the provider. However, the commitment period will also have a bearing on the annual charges to be levied. It needs to be kept in view that there will be an occasion of special construction work to be carried out only for one particular seeker.

Bharti

We thinks that the minimum commitment period for colocation service should be 1 year. ITE seeker should be responsible for all the set up costs and decommissioning costs post the expiry of the colo terms.

VSNL

General term could be 3 years initially with minimum 6 months notice period in case of early termination and minimum one year payment of colo charges even if he vacates before one year period.

Reliance Communication Ltd.

There should not be minimum term for collocation of equipment by ITE. The term of collocation should be co-terminus with term of Reference Capacity. In case of leased capacity there should be provision for automatic extention of collocation term to match with term of Reference Capacity

Cable & Wireless

C&W suggests that 3 years is a reasonable minimum commitment period for co-location services at the CLS. This is a reasonable period reflecting a fair commitment from the ITE to enable the CLS owner to plan and manage co-location efficiently, whilst not tieing the ITE into a disproportionately long term service agreement.

Sify Communication Ltd.

Yes, there should be defined terms and conditions regarding the minimum commitment period for co-location service at the Cable Landing Station.

Verizon

We submit that there should not be any minimum commitment period for co-location service at the CLS. We suggest instead that licensees entering the market retain their ability to terminate the co-location service by giving the CLS owner a 30 day notice, without incurring any penalties. This would prevent the owner of the CLS from imposing onerous time commitments on the requesting parties. However, parties should be free to negotiate commercial agreements that contain minimum commitment periods that result in benefits to both parties.

Asia Pacific Carriers' Coalition

APCC considers that, at this initial stage of regulating CLS Co-location, the TRAI proposal in Regulation 25 of the draft regulations for a three year minimum commitment period for Co-location at a CLS is appropriate and reasonable. Three years is sufficient a period to provide stability in CLS Co-location arrangements for both OCLSs and ITEs, yet does not require commitments beyond the reasonably foreseeable future from requesting ITEs. This minimum period should be reviewed by TRAI once CLS Co-location has established itself in practice, and be amended as appropriate and necessary.

ISPAI

Yes, needs to be a defined time frame.

Telxess Consulting Service Pvt. Ltd.

Yes, needs to be a defined time frame.

Q.3 (b) If yes, what should be the minimum period and why?

AT&T

Please see Answer to (a) above.

Orange Business Services

One year would be a reasonable period.

BSNL

It can be expected that a seeker being a licensed operator shall enter into long term arrangements with the CLS owner. As already suggested that the co-location facility should be allowed to continue irrespective of availability of International Bandwidth at the choice of the seeker, there appears to be no reason to prescribe a minimum period and the same should be left to the mutually agreed arrangements.

Bharti

Please see Answer to (a) above.

VSNL

Please see Answer to (a) above.

Reliance Communication Ltd.

There should be no minimum term which is independent of term of Reference Capacity

Cable & Wireless

Please see Answer to (a) above.

Sify Communication Ltd.

Co-locating essential equipments is a time consuming process for the eligible ITE and at the same time, making such space available is also a time consuming process for the OCLS and requires quite a bit of planning. Hence, there should be some minimum commitment period applicable to both the access seeker and the OCLS providing the co-location space so that neither can take undue advantage of the other.

Clause 4.5.10 (a) mentions the duration of the co-location agreement to be three years, which we feel is sufficient. Unfortunately, we could not find any provision for renewal of the co-location agreement at the end of 3 years. This, we feel should be included as co-location is needed for the entire IRU period which itself is often a long term, usually 5 years or more. Further, relevant provision should be included so that

both parties give notice to each other if they are willing to extend and renew the co-location agreement with sufficient time before the initial period of 3 year expires. This will enable the OCLS to make arrangements in advance and will also allow the ITE to search for alternate co-location space if the OCLS is not in a position to extend the co-location agreement.

Verizon

Please see Answer to (a) above.

Asia Pacific Carriers' Coalition

Please see Answer to (a) above.

ISPAI

The minimum period suggested in the consultation clause 4.5.10 (a) mentions Lease Agreement for Co-Location as 3 years. But the provision will have to be there to extend beyond 3 years on either mutually agreeable terms and conditions or such terms as the Authority will prescribe.

This is necessary since IRU terms are long term of 10 years or over and it is understood that co-Location will be required for the entire IRU period.

In addition, long term co-location lease agreements will have price advantages to the ITE and also to the OCLS (in case the later are to make such facilities available to ITEs).

Telxess Consulting Service Pvt. Ltd.

The minimum period suggested in the consultation clause 4.5.10 (a) mentions Lease Agreement for Co-Location as 3 years. But the provision should also be there to extend beyond 3 years on mutually agreeable terms and conditions (or such terms as the Authority may prescribe).

This is necessary since IRU terms are long term of 10 years or over and it is understood that co-Location will be required for the entire IRU period.
In addition, long term co-location lease agreements will have price advantages to the ITE and also to the OCLS (in case the later are to make such facilities available to ITEs).

Q.3 (c) If not, give reasons?

AT&T

Please see Answer to (a) above.

Orange Business Services

Not applicable.

BT Global Service

BT submits that the terms and conditions regarding the minimum commitment period for collocation service at CLS could be similar to those for IPLC & backhaul services as these are interrelated.

BSNL

Not applicable in view of the reply above.

Bharti

Not Applicable

VSNL

Not Applicable

Reliance Communication Ltd.

The proposed regulations require the ITE to use the collocation only for its own use and ITE is prohibited from reselling it to other ITEs. Hence it does not make sense for ITEs to have a minimum term which is not aligned with the term of Reference Capacity. Such minimum term which exceeds the term of Reference Capacity will impose unnecessary financial burden on ITE as well as block the precious collocation space at CLS which could be utilized by other ITEs.

Cable & Wireless

Please see Answer to (a) above.

Verizon

Please see Answer to (a) above.

Asia Pacific Carriers' Coalition

Please see Answer to (a) above.

Telxess Consulting Service Pvt. Ltd.

Please see Answer to (a) above.

Q.4 Whether the leasing of backhaul for the interim period by the Owner of Cable Landing Station to an eligible Indian International Telecommunication Entity to be mandated or left for mutual negotiations between Service Providers. Give reasons for your comments?

AT&T

The TRAI should mandate the leasing of backhaul facilities by dominant cable station operators for an interim period at cost-oriented rates to ensure that competitive ILDOs do not pay unreasonable charges for these services before the development of competitive backhaul services at each cable landing station. As described above at pages 6-8, the TRAI should remove the provisions of the proposed regulations that restrict the uses of collocated ITE equipment, and that could be used to prohibit competitive backhaul services, and should make clear in the regulations that ITEs may use cable station access and collocation arrangements to provide backhaul services to other ITEs with access rights to capacity landing at the cable station. Once these services are made available, the TRAI may rely increasingly on commercial negotiations to ensure that backhaul services are available on reasonable and non-discriminatory terms and conditions.

Orange Business Services

In principle, to the extent that the provision of backhaul from the cable landing station to an eligible ILD Operator's point of presence is not competitive, it would be necessary for TRAI to mandate the leasing of backhaul by the Owner of Cable Landing Station, especially where backhaul is supplied by a single monopoly provider. This would serve to safeguard against any refusal to supply by the Owner of Cable Landing Station of a non-competitive backhaul service which could potentially delay and jeopardise the fulfilment of an ILD operator's rollout commitment. Where backhaul is mandated, regulation on the price of backhaul should be at cost-oriented rates.

The promotion of viable and sustainable competition could be encouraged through facilities based competition in giving ILD operators the option to build backhaul.

BT Global Service

BT believes that all services which are not competitive and present bottleneck should be regulated until such time as competition develops. Should there be a dominant operator in backhaul with the ability to delay orders or extract monopoly prices, the benefit of open access to Cable Landing Stations would be eliminated. Only when the market for backhaul is fully competitive should leasing of backhaul be determined by commercial negotiation only.

BSNL

No. Backhaul is primarily point to point and it is unlikely that the OCLS will have backhaul link to the POP of the seeker. However, depending upon the requirement of

the seeker and mutual commercial arrangement, the seeker can share the backhaul of the OCLS or other ITEs if available. But on this ground the OCLS should be barred from refusing co-location to the seeker.

Situations may arise where there are multiple CLSs in the same city and the OCLSs have interconnectivity through high capacity links between such CLSs. The seeker should be enabled by the regulation to access facilitation to bandwidth from such CLSs using the inter CLS backhaul of the CLSs.

Bharti

It should be left for mutual negotiations between the Service providers so that advantages of competition are available to the ITE.

VSNL

All OCLS are not the backhaul providers in true sense like VSNL who can not provide local loop which necessarily need to be arranged by access seekers. Therefore, it should be left to access seeker to arrange for the backhaul himself as per his convenience.
On the contrary, back-haul providers in the city of CLS may be mandated to have co-location at CLS to ensure access to cable capacity through multiple links.

Reliance Communication Ltd.

ITEs should be given the freedom to acquire the backhaul from competing backhaul providers including OCLS. Only in the interim period where no backhaul provider is available at the CLS then it should be mandatory on OCLS to provide the backhaul at prevailing market prices of domestic leased circuits subject to ceiling prescribed by TRAI in its TTO for domestic leased circuits.

Cable & Wireless

As C&W has highlighted in section 1 above, we suggest that the key to an effective regime, is for competitive backhaul services to be available at a cable landing station. It is crucial that the CLS access regime allows for ITEs to have access to alternative backhaul suppliers and services (whether or not the alternative backhaul suppliers are ITEs and/or have access to their own international capacity).

Therefore, until broad competitive backhaul is available at CLS sites, C&W proposes that the CLS owner should be mandated to provide backhaul services on specified terms.

Sify Communication Ltd.

We do not feel that OCLS should be mandated to provide the backhaul for the eligible ITE and neither should the eligible ITE be mandated to lease the backhaul circuit from the OCLS. The backhaul is a domestic leased circuit and any licensed NLDO in India

is empowered by license conditions to provide such a backhaul circuit to the eligible ITE. Also, keeping in view the sufficiently competitive NLD market, we feel the ITE will be in a good position to commercially negotiate with NLDOs in India to acquire the backhaul as per his requirements.

Additionally, the OCLS may also be permitted to provide the backhaul circuit to the eligible ITE if both are able negotiate fair commercial terms, but under no circumstances the eligible ITE should be mandated to acquire the backhaul circuit from the OCLS.

Verizon

CLS owners should make available the supply backhaul services at the request of the ITE. At the very least, resale obligations should be imposed on the supply of backhaul services. In the absence of alternative supplier, suitable price regulations could be imposed on CLS owner for the supply of the service.

The TRAI could also consider removing any barrier to entry for the competitive supply of the backhaul service. This will require the introduction of regulation to allow backhaul suppliers to co-locate their equipment at CLSs. We note that the draft regulations do not explicitly provide for co-location for the purpose of providing backhaul services. The alternative backhaul suppliers should not be required to demonstrate ownership interest in the cable system as a precondition for accessing the CLS.

Asia Pacific Carriers' Coalition

APCC considers that the leasing of backhaul for the interim period by the OCLS to an eligible ITE should be mandated. Our reasoning for this is that, initially, it is highly unlikely that there will be sufficient alternative backhaul connection to CLSs. Therefore the only feasible backhaul to a CLS will probably be the OCLS's and with, effectively monopoly control over this backhaul the OCLS is in a position to deny competitive access to the CLS or to impose exorbitant charges for use of that backhaul.

To prevent this, the leasing of backhaul by the relevant OCLS should be mandatory for at least the interim period until sufficient alternative competitive backhaul is available. TRAI may also wish to consider setting relevant criteria to assess when availability of alternative backhaul for an individual CLS is sufficient on a case-by-case basis – and the mandate for the associated OCLS to lease backhaul can be removed, if ever.

Further, to prevent excessive charges being levied by the OCLS, TRAI should also set the price of backhaul leased from OCLS if and where domestic long distance circuit price regulation does not already adequately apply.

ISPAI

We do not see any reason to mandate the OCLS for providing the backhaul capacity.
Reason: This is a Domestic Lease Circuit that already is under the purview of TRAI's

TTO, hence the prices are fairly well established and also negotiable to some extent in case of high capacity demands.

ITE's may have the choice to opt for backhaul service from a subsidiary of the OCLS itself as a one stop shop arrangement, or obtain the same from other Service Providers.

[Additional Response] - Eligible ITE should not be mandated to obtain backhaul only from the OCLs/its associate/ subsidiary providers- it should be mandated that OCLs will provide other (competing) service providers appropriate access to its facilities for backhaul without reservation in the spirit of non-discrimination and fair practice.

In no case should the ITE be made to mandatorily obtain backhaul from only the OCLS or its associate or subsidiary providers.

Telxess Consulting Service Pvt. Ltd.

We do not see any reason to mandate the OCLS for providing the backhaul capacity.
Reason: This is a Domestic Lease Circuit that already is under the purview of TRAI's TTO, hence the prices are fairly well established and also negotiable to some extent in case of high capacity demands.
ITE's may have the choice to opt for backhaul service from a subsidiary of the OCLS itself as a one stop shop arrangement, or obtain the same from other Service Providers.
In no case should the ITE be made to mandatorily obtain backhaul from only the OCLS or its associate or subsidiary providers.

Q.5 What are the other non-price discriminatory practices of Owner of Cable Landing Station that are required to be addressed through proposed regulations?

AT&T

The proposed regulations, as amended in accordance AT&T India's comments, are likely to address most foreseeable efforts by cable landing station owners to impede competition by obstructing access to their facilities. The TRAI also should allow ITEs and other international operators to bring complaints before the Authority in the event that cable landing station owners attempt to impede cable station access in any manner, including in ways not anticipated by these regulations. TRAI should anticipate that notwithstanding its care in drafting these regulations, it will need to intervene promptly and forcefully when it identifies conduct inconsistent with the intended results expressed in the Consultation Paper

Orange Business Services

Under Article 12 of the Access Directive, EU NRAs may require that those EU operators with obligations to grant access to associated facilities –

- Not withdraw access to facilities already granted;
- Grant open access to technical interfaces, protocols or other key technologies to achieve interoperability of services;
- Provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services.

BT Global Service

No Comments.

BSNL

Non-price barriers appear to have been taken care of by the Authority in the proposed regulation

Bharti

- Equal access rights to access any cable system, at geographically diverse locations.
- Ability to activate/deactivate wholly assigned submarine cable system capacity.

VSNL

All OCLS should be mandated to provide co-location facility to all the backhaul providers in a non-discriminatory manner.

Reliance Communication Ltd.

Quality of Service for ITEs vis-à-vis its own use or use by its affiliate covering:

- provisioning time.
- Uptime / down time on the link connecting submarine capacity
- Time for restoration of any fault on link connecting submarine capacity

Cable & Wireless

The specific comments on the regulation set out in question 1 highlight other areas which C&W propose are covered, to avoid other potential discriminatory practices by the CLS owner.

Sify Communication Ltd.

Non-price discriminatory practices can equally be used to delay provision of access to capacities terminating in cable landing stations. The following are some non-price discriminatory practices that are required to be addressed by the proposed regulation:

- Delay in acknowledging capacity acquisition requests/applications
- Delay in conducting feasibility tests or denying feasibility in cases where technical feasibility exists.
- Delay in raising demand notes and invoices.

In addition, the following may lead to discriminatory practices:

- Offering loyalty / bulk discounts to some while denying the same to others.
- Tying or bundling: For example, the OCLS may assert that co-location space will only be provided if backhaul circuit is also leased from the OCLS. Such bundling may seriously impair the access facilitation process.
- Predatory alteration of co-location space and other associated environmental services: The OCLS should not alter the specifications of co-location space and layout of ducts within the co-location agreement period. Such alterations should only be allowed while renewing the co-location agreement

Verizon

Indicative time lines for provision of access facilitation services

The draft regulations allow too much time by which CLS owners must perform the tasks required to activate connection services. A comparison with VSNL's time lines is provided in the following table. We request that TRAI reduce the time lines in the chart below to best practice levels.

Time period for provision of Access Facilitation Services	Proposed Draft Regulations	Submarine Telecommunications Cables Access Facilitation Terms and Conditions (Source: VSNL)
1. Eligible Indian International Telecommunications Entity submits Request to Owner of CLS	Day 1	Day 1
2. Owner of CLS checks feasibility and reverts to eligible Indian International Telecommunications Entity, with acceptance or modified schedule for acceptance, or modified schedule for testing; provides pro forma invoices for payments	Day 11 (max 10 days)	Day 6
If acceptable, Indian International Telecommunications Entity signs agreement and makes necessary payments	Day 11 +x (x being the time taken by ITE to sign agreement and make necessary payments)	Day 6 + x (x being the time taken by ITE to sign agreement and make necessary payments)
Indian International Telecommunications Entity arranges and provides backhaul	Day 11 + x + y (y being the time taken by ITE to arrange and provide the backhaul circuit)	Day 6 +x + y (y being the time taken by ITE to arrange and provide the backhaul circuit)
Owner of CLS completes all actions with a view to facilitate Access to Reference Capacity	Day 22 + x + y (max 10 days)	Day 10 + x + y (max 4 days)
Owner of CLS extends Reference Capacity to CLS and provide Cross Connections	Day 22/24 +x +y (max 2 days)	Day 10/12 +x + y (max 2 days)

We have described other forms of potential anti-competitive practices on pages 3 and 4 of our paper.

Asia Pacific Carriers' Coalition

APCC notes that there are some unspecified time periods in the draft regulations for the provision of information and "various reasons" – for example, in respect of the

provisioning of virtual Co-location or other alternative arrangements. While we appreciate that it is difficult to specify time periods that will cover all eventualities (and we touch on one such necessary and genuine possibility concerning minor variations below), there is also a danger that an OCLS could take advantage of any ambiguity to delay acceptance or provisioning of CLS access and / or Co-location.

As the time in which capacity or service can be provided by an ITE to its customers is often the critical factor in a customer's decision as to which operator to enage, any delay that a competing ITE and OCLS can introduce in providing CLS access to another ITE can mean the loss of a customer for the ITE requesting CLS access.

Therefore, a ready means of bringing any unreasonable timeframes (proposed and/ or actual) to the attention of the TRAI is necessary. OCLSs and ITEs should also be reminded that the timeframes proposed by TRAI in the draft regulation are maximum timeframes, and that the provisioning of CLS access and Co-location services should not be pushed out to access maximums as a matter of course if provisioning can be completed sooner.

APCC also notes that Regulation 5 (2) of the draft regulations concerning confirmation by the OCLS of receipt of an application for CLS access and Regulation 17 (1) regarding Co-location applications require, in the event it is not feasible to provide access or Co-location, the OCLS to intimate to the eligible ITE an alternative plan. However, the OCLS does not appear to be required to provide reasons why access or Co-location is not feasible, only to offer an alternative.

We strongly recommend that the OCLS be required to provide reasons to the eligible ITE why CLS access and /or Co-location are not feasible. This will provide a means of monitoring OCLS rejections and discourage an OCLS from automatically rejecting most, if not all, access and Co-location requests and thereby forcing requesting ITEs to use alternatives – which generally will be more costly and time consuming for the ITE to implement.

Additionally, by requiring the OCLS to provide details to the requiting ITE why CLS access and/ or Co-location is not feasible, the requesting ITE will be able to assess whether matter causing the problem is essential to its requirements. It may well be that the matter at issue is not essential to the eligible ITE and that by the eligible ITE making a small variation to its application the question of feasibility is resolved. Therefore, APCC also strongly recommends that the draft regulations allow an eligible ITE a short period to consider the reason why it's access or Co-location request is not considered feasible and for the ITE to determine whether it can make variations to its requirements that will overcome these feasibility concerns.

ISPAI

Common practice may include delay in response to requests for capacities, delay /non acceptance of applications, delay in determining feasibility, delays in raising demand notes, delays in commissioning, etc.

The proposed Draft RIO seems to ensure that all such delays are accounted for with strict timelines mentioned at each step.

However, the mandate may not come into actual practice in spirit and in words, if there are no provisions for penalties for delay at any step. The authority may kindly include suitable and deterrent financial penalties in case of proven delays.

Telxess Consulting Service Pvt. Ltd.

Common practice may include delay in response to requests for capacities, delay /non acceptance of applications, delay in determining feasibility, delays in raising demand notes, delays in commissioning, etc.
The proposed Draft RIO seems to ensure that all such delays are accounted for with strict timelines mentioned at each step.

However, the mandate may not come into actual practice in spirit and in words, if there are no provisions for penalties for delay at any step. The authority may kindly include suitable and deterrent financial penalties in case of proven delays.

Q.6 Whether access facilitation to the leased fiber pair (Dark Fiber) from Owner of International submarine cable also need to be regulated? Give reasons for your answer?

AT&T

As described above at page 8, the proposed regulations should be amended to state that ILDOs are eligible to enter into access facilitation arrangements for all submarine cable capacity landing in India in which they or their affiliates have ownership interests. Such arrangements should be allowed regardless of any restrictions in submarine cable system construction and maintenance agreements that may purport to limit the usage of submarine cable capacity by non-wholly-owned affiliates. The TRAI should not permit the restrictive terms or practices of legacy submarine consortium arrangements to limit the pro-competitive benefits of the open and non-discriminatory cable station access arrangements proposed herein.

Orange Business Services

Dark fibre is unlit fibre optic cable (raw bandwidth) that requires investment by ILD operators for its deployment and use. To the extent supply of dark fibre is not subject to competitive provision TRAI should regulate access facilitation to the leased fibre pair from Owner of international submarine cable. In addition, regulation on access facilitation to dark fibre should also include provisions that do not restrict –

- The technologies to be deployed for lighting dark fibre;
- Use of the lit dark fibre.

BT Global Service

No Comments.

BSNL

No. Dark Fiber pair on submarine cable is basic and scare resource and is jointly owned by consortium partners. Therefore, no regulation can be applied in any specific country of the Cable Landing Station for access to the dark fiber of the submarine cable. However, if a seeker is able to hire a dark fiber, the OCLS need to provide the cross connection through fiber. Further, arrangement for installation of Submarine terminal equipment and SDH equipment at the CLS can be left to the mutual negotiations.

Bharti

No. Since it will be a bilateral matter between the purchaser of the dark fibre on the submarine cable and the cable station owner.

VSNL

There will be handful of such transactions over a period of time therefore there is no need to regulate. Regulation need to be in place where multiple individuals /companies /operators /transactions can fall with in the purview of the same.

Reliance Communication Ltd.

It is not possible to acquire a fiber pair on consortium cables. In the current market scenario it is unlikely that any ITE would acquire the fiber pair on any of the private cables available in India. In any case the acquirer of the fiber pair would be able to get the access to CLS at negotiated prices since the size of the deal would be significant for both seller and buyer. The proposed regulations would also facilitate the acquirer to benchmark the cost of access to CLS. This provision can help only if TRAI is contemplating setting a benchmark for acquiring a fiber pair.

Cable & Wireless

C&W submits that it would not be appropriate to regulate access to the dark fiber from the owner of the international submarine cable. This is not an area which would usually be regulated by a national regulatory body. This is often governed by the relevant terms of the Construction & Maintenance Agreement for the relevant international submarine cable.

Sify Communication Ltd.

We would like to work with the Authority as well as the OCLS to better understand the implications of this question.

Verizon

We understand the reference to “leased fiber pair (Dark Fiber)” to mean the unlit optical fiber the ITEs could procure for deploying an alternative backhaul network to the CLS. To the extent that such facilities are not competitively available, i.e., they must be purchased from the regulated owner of the CLS, we suggest that they should be provided at cost-oriented rates that are reasonable, non-discriminatory and transparent.

Asia Pacific Carriers’ Coalition

As capacity utilization on individual submarine cable systems is often prescribed in the Construction and maintenance Agreements (C&MA) of respective cable system, APCC believes it would be inappropriate to look to regulate for something that may cause a breach of legally binding commercial agreements.

ISPAI
Can’t say

[Additional Response]- We would like to work with the Authority to better understand the implications of this question as it concerns with regulating International Consortia/ Private players.

Telxess Consulting Service Pvt. Ltd.

Can’t say

Q.7 Should the Owner of Cable Landing Station be mandated to provide the costing elements considered and costing methodology employed in arriving at the cost for access facilitation for International submarine cable capacity, landing access for Cable and Co-location to ITE? Give reasons for your answer?

AT&T

As described above at pages 9-10, dominant cable landing station owners should submit their proposed charges for access facilitation and collocation to the TRAI for approval with information concerning the underlying cost components. The TRAI should use this information to benchmark these charges against similar charges in other countries.

Orange Business Services

We have interpreted this question to be asking if the Owner of Cable Landing Station should be required to submit its cost stack to requesting eligible ITE.
In principle, the disclosure and determination of charges should be subject to transparency of process to minimise any possibility of discrimination. It would be desirable to subject the process of determining charges for access and collocation to a public consultation, where the cost stack for computing the charges should be disclosed. The basis for determining charges should be based on an orientation of costs. Where this process is sufficiently transparent, there should be no material impact whether the costing elements and methodology are provided to the ITE.
As a minimum, price control should include setting a price ceiling. As to the proposed form of publication via the website of the Owner of Cable Landing Station, this is considered to be consistent with general market practice.

BT Global Service

The details of costing elements as well as costing methodology employed to determine the cost of various elements should be provided by the owners of the CLS. This can be used by the regulator to arrive at Benchmarks and finally to arrive at the ceiling charges for various elements.

BSNL

The OCLS may be asked to declare the various cost elements of Cable Landing Stations to TRAI in confidence. As already suggested earlier, TRAI may prescribe the type of elements under which co-location charges shall be prescribed by the OCLS which will be subject to the approval of the TRAI. The rates so prescribed by the OCLS can be scrutinized by TRAI for reasonability. After the implementation of the regulation and experience gained there after, caps can be prescribed for various charges, if required.

As far as the cost elements of international submarine cable capacities are concerned, the same can be regulated separately and not under the proposed regulation herein. The costing of International capacities is a complex matter and to a great extent depends on the charges levied by the operators / OCLS at other end and also on the availability / non-availability of protection / restoration and the time involved therein.

Further, in reference to the sharing of CLS for landing of submarine cable of the seeker, it has already been suggested that it should be left to the mutually negotiated arrangements between the OCLS and the seeker.

Bharti

It should be mandated to provide the cost based pricing for collocation, access facilitation and other service at the landing station for accessing the international submarine cable capacity, submitted by the landing station owner to TRAI for approval. The components involved in the pricing should be discussed and approved RIO rates for a particular cable station is to be published by the landing station owner and/or TRAI.

VSNL

Since there is adequate competition, there is no need to mandate provisioning of costing elements/methodology by OCLS.

Reliance Communication Ltd.

In order to facilitate fixation of the cost based charges for each of the services provided by OCLS to ITEs, it is necessary that TRAI should have access to element wise cost. This will also help TRAI in identifying any artificial increase of the cost by the OCLS by including unrelated cost elements and / or increase the cost of relevant elements to justify higher charges for any or all services.

Similarly costing methodology employed by OCLS will clearly establish whether they are in line with TRAI's well established principles or not. For example by manipulating useful life of equipment for depreciation charges, capacity utilization level, WACC etc OCLS can increase the cost of CLS services to ITEs several times as compared to the actual underlying cost based charges based on TRAI's established methodologies.

Cable & Wireless

C&W would assume that, as part of the costing exercise carried out by the TRAI, the costing methodology would be discussed and disclosed within a consultation process. With regard to the specifics of the costing elements of the CLS owner, C&W submits that these should be provided to the TRAI in detail (in order for the TRAI to have the information required to determine the relevant cost-based charges). In relation to the disclosure of this information to the ITEs, whilst recognizing the confidential status of some of this information, C&W proposes that the charging

mechanism should be broken down sufficiently such that the ITEs can (a) understand, in broad terms, the costs of each major component service and (b) can fairly select the specific services which it requires (without being required to pay for elements/components of service which it does not require).

Sify Communication Ltd.

There can be two possible situations:

A. When the OCLS is doing the costing analysis and submitting the tariffs to the Authority for approval.
As indicated in page section 4.5.14 of the instant consultation paper, the Authority is indicating at giving the OCLS a chance to compute costs based tariffs for access facilitation charges, co-location charges, etc. Under these circumstances, it becomes absolutely mandatory that the OLCS is mandated to provide clear, transparent and segregated costs of each unbundled element and also clearly and comprehensively document the costing methodology employed to arrive at costs based tariffs and submit the same to the Authority for approval. The Authority should reserve the right to further place a demand on the OCLS any futher information that the Authority may deem necessary and sufficient to validate the costing analysis submitted by the OCLS.

B. When the Authority is carrying out the costing analysis.
As we have earlier mentioned in our response to question number 2(c) we would request the Authority to carry out the costing analysis and use the same to recommend cost based tariffs. In this case, the OCLS should only be mandated to submit segregated cost data for all the unbundled network elements.

Verizon

All costing elements relevant to calculation of the cost for access facilitation and co-location should be provided to promote cost-oriented rates that are reasonable, non-discriminatory and transparent. We suggest the TRAI consider a process to analyze the costing information provided by the CLS owner and consider methods to assess whether the charges proposed by the CLS owner are cost-oriented. We believe the TRAI is sufficiently empowered to do this.

Asia Pacific Carriers' Coalition

APCC considers that OCLSs should be mandated to provide the relevant costing elements and costing methodologies. As APCC considers that the charges for Co-location and access to CLS should be specified by TRAI, we also believe that the only way that TRAI can do this effectively and efficiently is if TRAI has adequate knowledge of relevant cost elements and costing methodologies.

From our understanding of TRAI's reviews of IPCL price caps, it was necessary for TRAI to thoroughly examine the cost elements and costing methodologies of the subject licensee and to amend certain of these elements and methodologies to arrive

at appropriate costs for IPLCs. We consider that the cost elements and cost methodologies for CLS access and Co-location require no less a thorough review.

The provision of such information to TRAI should also assist TRAI in making comparisons with competitive CLS charges in other jurisdictions – as a means of benchmarking and assessing the reasonableness of an OCLS's charges.

APCC also recognizes that some time will be necessary for the relevant cost information to be provided to TRAI, and that TRAI will need an appropriate period to complete its analysis of that information. Therefore, APCC suggests that in the interim, TRAI consider applying benchmark competitive CLS charges from other jurisdictions to set initial CLS access and Co-location charges.

ISPAI

Yes, it is necessary to mandate and obtain the costing elements and costing methods from the OCLS since they would be able to provide details that TRAI can evaluate and cross check and determine correctness. Any other entity including the eligible ITEs (except those ILDOs whose associate companies already are OCLS) may not have access to the correct details and data, since they are not in the business themselves.

Telxess Consulting Service Pvt. Ltd.

Yes, it is necessary to mandate and obtain the costing elements and costing methods from the OCLS since they would be able to provide details that TRAI can evaluate and cross check and determine correctness. Any other entity including the eligible ITEs (except those ILDOs whose associate companies already are OCLS) may not have access to the correct details and data, since they are not in the business themselves.

Q.8 What should be the terms and conditions for provision of landing facilities at cable landing station? Give reasons for your answer?

AT&T

As described above at pages 13-14, the TRAI's submarine cable station access regulation should focus on terrestrial access arrangements to submarine cable capacity landing at cable stations. This regulation should not extend to mandating landing arrangements for new submarine cables. Arrangements to land new submarine cables at cable stations in India should continue to be negotiated on a commercial basis between cable system owners (both private and consortium) and cable station owners, consistent with the existing practice in India and other countries.

Orange Business Services

The terms and conditions for provision of landing facilities at cable landing stations should be applied on a non-discriminatory basis to all ITEs including the affiliates of the Owner of Cable Landing Station. In the EU, obligations of non-discrimination shall ensure in particular, that the operator applies "*equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and provides services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners*".
The promotion of competition is a cornerstone of EU policy and a role of the NRA in France, ARCEP, is to protect competitors and enhance competition. To the extent, France Telecom is obliged to handle requests from other service providers faster than its own, where failure to do so could result in being sued for damages.

BT Global Service

No Further Comments.

BSNL

There is no need to prescribe any terms and conditions in view of the suggestions given above.

Bharti

Terms and conditions

- Purpose of Access facilitation is to provide open access to any cable system to an eligible International telecommunication entity and should be used specifically to access cable system. No ITEs should be permitted to sublet the colo space provided for this purpose and neither carry out any other activity, which undermines the rights granted to it under the regulations.
- Optical Fiber Cable : The requesting International telecommunication entity seeking access must not install more than two optical fiber pair in the colocation

space and up to the lead-in manhole outside the colocation space.

- Point of Interconnection: Network Interconnection between two International telecommunication entity will not be done at cable landing station colocation facility.
- The International telecommunication entity, requesting access to essential facilities should have there own voice and data monitoring capabilities as per the licensing conditions.
- In a scenario where an eligible ITE is offered alternate space for colocation due to constraints at cable landing station, or due to any other reasonable and valid technical reason. In such cases the ITE shall have to arrange the connectivity from the Alternate colocation site to the cable landing station at its own cost or ITE may seek virtual colo services.

VSNL

Since the basic ingredients of proposed service such as extra space, power, UPS, ducts from BMH to CLS to meet the new landing requirement may or may not be available as per the requirement; therefore it should be best left to mutual negotiation in line with global practice.

The terms and conditions for provision of landing facilities at cable landing station should be aimed at ensuring timely provisioning of landing facilities at cable station and this objective should not get lost.

To meet this objective, TRAI should also recommend the simplification of the process for approval of new landing station. It may be noted that it is not the cost of the CLS itself, but the complicated and time consuming process which could be deterrent to establishment of new CLS. It may be pointed out that inspite of these complications, since privatization, 4 new cable stations for I2I cable (Bharti), Bharat Srilanka cable (BSNL), SMW4 (Bharti) and Falcon(Reliance) have been already established besides VSNL CLSs. Also, when a ILDO plans to invest at least minimum sum of Rs. 200-250 Crores for a consortium based Cable system and typically over Rs. 1000 crores for a private cable system, then the cost of CLS should not really pose a big concern to concerned ILDO.

Reliance Communication Ltd.

The nature of submarine cable industry is such that this may not be relevant for the time being as no owner of private cable would not like to expose its entire cable to risk by landing at the cable station owned by a competing OCLS. In case of consortium cables the landing facilities are provided by the consortium members hence even the consortium cables would not like to avail this facility contemplated by TRAI. Once the benefits of the proposed regulations are availed by of all ITEs in a transparent and effective manner it may inspire confidence in the cable owners to explore this option.

Cable & Wireless

Please see response to question 1 above.

Sify Communication Ltd.

We feel the draft regulation presented in chapter 5 of the instant consultation paper covers almost all aspects and some additional inputs that we have already mentioned. Additionally we would like to reiterate some points as below:

1. The provisions of the proposed regulation will not be effective in true spirit unless strict penalties are recommended in case of any contravention. Hence, we would like the Authority to implement penalties on both the OCLS and the eligible ITE through appropriate regulations in all cases where the party involved has contravened any of the provisions put forth by this regulation.

2. We also feel that not only the initial access facilitation process be mandated but also the ongoing technical support that is required to maintain reliable service should be included in this regulation. In this regard we will strongly urge the Authority to include provisions to enforce MTTR commitments from the OCLS.

In all cases and under all circumstances, transparent and non discriminatory pricing should be ensured. Provision for refunds from both parties in case of early termination of agreements should also be included by way of relevant regulation.

Verizon

We understand the term “landing facilities” to mean those facilities inside a landing station such as the examples lists in 4.2.4. To the extent that such facilities are not competitively available, i.e., they must be purchased from the regulated owner of the CLS, we suggest that they should be provided at cost-oriented rates that are reasonable, non-discriminatory and transparent.

Asia Pacific Carriers’ Coalition

APCC considers the terms and conditions as set out in the draft regulations for the provision of landing facilities at CLSs to be broadly appropriate.

ISPAI

The Draft at Chapter 4 and 5 provide comprehensive coverage to all issues that need to be mandated within the terms of the Draft CLS-RIO. However we have suggested some additional inclusions in the answers above and which we repeat as under:

a) Chapter 5, Clause 2, Sub Clause 4 – eligible ITE such as an ISP with international gateway permission should include both types of permissions i.e. submarine gateway and/or satellite gateway.

b) Chapter 5, Clause 13 - relating to Termination – should include situations where, ownership of CLS companies and physical ownership of Co-Location spaces changes, the RIO agreement of the CLS shall be kept irrevocable with the ITE for the remaining period of the IRU Tenure under and shall not discontinued or terms and conditions changed.

c) Along with Terms & Conditions, Authority should ensure that Tariffs for various elements, if appropriately priced based on principles of non-discrimination and fairness, should be included.

d) The Authority must ensure that each ITE access seeker gets same price and other terms & conditions for accessing cables, co-location and landing facilities, as provided to owner/incumbents services/ subsidiaries.

e) Clause 4.5.10 (a) mentions Lease Agreement for Co-Location shall be for 3 years. But the provision should also be extendable beyond 3 years on mutually agreeable terms and conditions (or such terms as the Authority may prescribe).

f) Penalties for failure to adhere to mandated time frames are required to be included.

g) The eligibility for entering into the CLS-RIO should include ISPs with permission for submarine gateways or satellite gateways or both.

h) Clause 4.5.6 (B)(d) – Time frame A – To be fair, seeker should also be obligated to sign the agreement within 10 days, or in case more time is needed, unless extended mutually in writing. Step 3 should read as Day 22 + X (10 days from OCLS reverting with acceptance + X if any) X being any mutually extended date for signing, or in certain cases withdrawal/ cancellation of request. (OCLS maybe liable to tax on invoice raised hence need for seeker to also revert). In any case, chapter 5 mentions 5 days to sign agreement and another 5 days to make payment.

i) Step 4 should be Day 22 + Y

j) Step 5 should be 33 days + Y

k) Step 6 should be 36 days + Y only (x under applicable circumstances only).

l) Additional: (a) Step 6 should include formal conveying by OCLS to Seeker of commissioning of reference capacity on day 36th. (b) Step for seeker to sign and pay on 22nd day and/or mutually agrees in writing for extension of this date or cancellation of request by seeker to OCLS.

m) Clause 4.5.6 (B)(d) – Time frame B – Step 1 should coincide with Step 1 of Time Frame A. Step 3 should read as Day 22 instead of 11 + X, whereas seeker

should also revert to OCLS indicating acceptance of Co-Lo/Alternate Co-Lo space agreement and payment . These steps at Time Frame B should coincide with suggested steps in Time Frame A.

n) Clause 4.5.7 (b) – Information to be provided by seeker should include Rack space required.

Telxess Consulting Service Pvt. Ltd.

The Draft at Chapter 4 and 5 provide comprehensive coverage to all issues that need to be mandated within the terms of the Draft CLS-RIO. However we have suggested some additional inclusions in the answers above and which we repeat as under:

1. Chapter 5, Clause 2, Sub Clause 4 – eligible ITE such as an ISP with international gateway permission should include both types of permissions i.e. submarine gateway and/or satellite gateway.

2. Chapter 5, Clause 13 - relating to Termination – should include situations where, ownership of CLS companies and physical ownership of Co-Location spaces changes, the RIO agreement of the CLS shall be kept irrevocable with the ITE for the remaining period of the IRU Tenure under and shall not discontinued or terms and conditions changed.

3. Along with Terms & Conditions, Authority should ensure that Tariffs for various elements, if appropriately priced based on principles of non-discrimination and fairness, should be included.

4. The Authority must ensure that each ITE access seeker gets same price and other terms & conditions for accessing cables, co-location and landing facilities, as provided to owner/incumbents services/subsidiaries.

5. Clause 4.5.10 (a) mentions Lease Agreement for Co-Location shall be for 3 years. But the provision should also be extendable beyond 3 years on mutually agreeable terms and conditions (or such terms as the Authority may prescribe).

6. Penalties for failure to adhere to mandated time frames are required to be included.

7. The eligibility for entering into the CLS-RIO should include ISPs with permission for submarine gateways or satellite gateways or both.

8. Clause 4.5.6 (B)(d) – Time frame A – To be fair, seeker should also be obligated to sign the agreement within 10 days, or in case more time is needed, unless extended mutually in writing. Step 3 should read as Day 22 + X (10 days from OCLS reverting with acceptance + X if any) X being any mutually extended date for signing, or in certain cases withdrawal/ cancellation of request. (OCLS maybe liable to tax on invoice raised hence need for seeker to also revert). In

any case, chapter 5 mentions 5 days to sign agreement and another 5 days to make payment.

9. Step 4 should be Day 22 + Y

10. Step 5 should be 33 days + Y

11. Step 6 should be 36 days + Y only (x under applicable circumstances only).

12. Additional: (a) Step 6 should include formal conveying by OCLS to Seeker of commissioning of reference capacity on day 36th. (b) Step for seeker to sign and pay on 22nd day and/or mutually agrees in writing for extension of this date or cancellation of request by seeker to OCLS.

13. Clause 4.5.6 (B)(d) – Time frame B – Step 1 should coincide with Step 1 of Time Frame A. Step 3 should read as Day 22 instead of 11 + X, whereas seeker should also revert to OCLS indicating acceptance of Co-Lo/Alternate Co-Lo space agreement and payment . These steps at Time Frame B should coincide with suggested steps in Time Frame A.

14. Clause 4.5.7 (b) – Information to be provided by seeker should include Rack space required.

Q.9 Whether these proposed regulations also to be mandated for the Cable Landing Stations set up by ISPs for International Gateway for Internet?

AT&T

The proposed regulations should apply to all cable landing station owners with market power. As noted above, non-dominant operators should be subject to the general obligation to provide cable station access on reasonable and non-discriminatory terms and conditions set forth in Section 3(a) of the proposed regulations, but should be exempt from the specific requirements of the regulations and allowed to comply with this general obligation by negotiating access and collocation arrangements on a commercial basis. These regulations should be applied to ISP Gateway licensees in India in accordance with these principles.

Orange Business Services

No comments.

BT Global Service

BT submits that the proposed regulation should be mandated for all the CLSs irrespective of whether these are set up for Internet Gateway or otherwise. Physically all the CLSs are likely to be similar in nature and therefore the Ease of Access for the new operators should be mandated for all of these to enable effective and optimum utilization of facilities at CLSs in timely and non-discriminatory manner.

BSNL

Yes.

Bharti

Yes the proposed regulation should also be mandated for cable landing stations setup by ISPs for International Gateway for Internet.

VSNL

Cable landing stations need to be covered under the same regulation irrespective of whether the CLS is for ISP or for ILD gateway.

Reliance Communication Ltd.

CLS by nature are bottleneck facility hence irrespective of ownership by ISPO or ILDO it should be subject to same regulations.

Cable & Wireless

Whilst considering this a fairly unlikely scenario, C&W would support the same principles for access arrangements applying to all owners/controllers of cable landing stations.

Sify Communication Ltd.

Yes, to maintain a level playing field and operate on fair grounds for all stakeholders, the proposed regulation should be equally applicable to Cable Landing Stations set up by ISPs.

Verizon

We are of the opinion that the proposed regulations should apply to the CLSs set up by these Internet Services Providers (ISPs), unless there is some factual basis that a particular CLS should be exempt, pursuant to a waiver granted by TRAI. For example, if the ISP has no affiliation with an incumbent operator and there is a factual basis for concluding that the concerns associated with major suppliers do not apply, it may be appropriate for TRAI to waive applicability of the full set of regulations. Such a determination could be made in the course of evaluating a license application, assuming that a system for public consultation would be available.

Asia Pacific Carriers' Coalition

APCC has commented previously that the absence of significant market power of an OCLS is not justification for exclusion of any associated CLS from the requirement for regulated CLS access and Co-location. This is because access to any individual submarine cable system landing at a CLS can be achieved only through that CLS and, therefore, the respective OCLS has effective monopoly control over access to that particular cable system- irrespective of the OCLS's overall market position. Accordingly, APCC considers that the application of the draft regulations should be mandatory for all CLS, including for any CLS set up by ISPs for International Gateway for Internet **(Gateway ISPs).**

For the purposes of clarity and certainty, APCC would stress that such mandatory Gateway ISP CLS access and Co-location should only apply to the CLS itself and the facilities and services set out in the draft regulations, but not to any additional "gateway" facilities of a Gateway ISP at its owned CLS. Nor should the draft regulation apply to the "gateway" that any Gateway ISP or other ITE has established at a CLS not owned by it.

ISPAI

The proposed Regulations should be mandated for all types of CLS.

Telxess Consulting Service Pvt. Ltd.

The proposed Regulations should be mandated for all types of CLS.

Q.10 Is there any need of facilitation by the TRAI if Owner of Cable Landing Station and eligible International Telecommunication Entity fail to enter into an agreement?

AT&T

Competitive ILDOs in India should not be denied access to cable stations because they are unable to enter into a required agreement with the cable station operator. As described above, cable station owners with market power should be subject to the proposed regulations set forth in the Consultation Paper, with the amendments and clarifications described in these comments to ensure that they are not able to avoid providing reasonable access arrangements to their competitors. Non-dominant cable station operators should be allowed to negotiate access arrangements on commercial terms, but also should be subject to the general obligation to provide cable station access on reasonable and non-discriminatory terms and conditions set forth in Section 3(a) of the proposed regulations. Additionally, all ITEs and other international operators should be able to bring complaints regarding access to any cable station before the TRAI for resolution on an expedited basis.

Orange Business Services

An objective for mandating access to and collocation at cable landing stations should be to guarantee to access seekers that their requests will not be denied due to disagreements on the terms, conditions and charges for such access and collocation. At this stage, the TRAI's focus should be to strengthen the mandatory access and collocation framework for Cable Landing Stations by regulating and pre-approving all template Agreements to be entered into between the Owners of Cable Station and eligible ITEs [cross-reference response to part 1(c) above]. Once this framework is implemented, failing which, either disputing party should be able to call upon TRAI to intervene and provide resolution to the dispute. In any case, denials to request for access and collocation to cable landing stations may only be accepted for objective reasons. This should be clarified in the proposed Regulations.

BT Global Service

As is the case in most interconnection regulations, if the eligible operators and the owner of CLS are unable to enter into the agreement under this regulation, the intervention of regulator is required. A specified time frame can be allowed for the parties concerned to enter into Access Facilitation Agreement failing which the regulator should intervene after being approached by any of the affected parties. This has been rightly catered for at item No.6 (2) of Chapter 2 of draft regulation. In absence of such provision this regulation is not likely to have the desired impact as the CLSO could potentially delay by seeking unreasonable terms that the ITE will be unable to accept.

Conclusion:
In summary it is reiterated that the sharing of security monitoring capabilities as permitted in the ILD license should be covered as one of the elements of the schedule of charges as a

part of CLS-RIO. Also the ceiling charges for various elements should be determined and specified by the regulator until such times it can be left to the market forces after sufficient competition establishes in this segment.

BSNL

In the case of a dispute the jurisdiction lies with TDSAT.

Bharti

TRAI can facilitate between the CLS owner and ITE, if they have failed to enter an RIO agreement.

VSNL

Yes. TRAI facilitation is always welcome.

Reliance Communication Ltd.

TRAI should frame detailed terms and conditions for access to CLS as part of RIO to avoid the situation of further intervention. The detailed terms and conditions should be approved by TRAI as a part of RIO for publication by OCLS. TRAI intervention should be necessary only where there is a dispute on interpretation of provision of RIO approved by TRAI.

Cable & Wireless

C&W strongly encourages the TRAI to provide a fast facilitation process to ensure that the CLS and the ITE enter into appropriate agreements on a timely basis. Ultimately, within this regime, the CLS owner should be offering a standard contract (as approved by TRAI) which an ITE can simply accept to form a binding contract. By way of example, this is how the current regime in Singapore works - SingTel publishes a RIO which a licensed carrier can accept and finalise within a very short timeframe.

A number of new carriers have, however, already received ILD/NLD licences and require fair CLS access in the short-term. C&W is concerned that, prior to the formal agreements being prepared by the CLS owner, and approved by the TRAI (pursuant to the finalized Regulation), there will be a material time gap, during which the CLS owners could frustrate the entry of the new ITE licensees into the Indian market. C&W therefore strongly supports the implementation by the TRAI of both (a) a rapid (maximum 30 day) interim mediation process by which ITEs can obtain fair and nondiscriminatory access to CLS (prior to the finalization of the Regulation and the commercial offers being mandated under the Regulation) and (b) a clear and timelimited process for resolving disputes once the full framework is in force.

Sify Communication Ltd.

In a case where the OCLS and the eligible fail to negotiate fair commercial terms, either or both parties can approach TRAI to intervene in best possible way so that both parties can

enter into an agreement and sign the CLS-RIO. We strongly feel the need for facilitation by the Authority under such circumstances.

Verizon

We are of the opinion that the CLS-RIO should be a mandated set of agreements between the CLS owner and the ITE and should encompass all terms and conditions necessary for access to the cable system and for backhaul services.

Asia Pacific Carriers' Coalition

APCC considers there to be a definite need for TRAI facilitation in the event of an OCLS and an eligible ITE failing to reach agreement. The absence of such a facility could result in an OCLS proposing unreasonable terms in an agreement, in the full knowledge that such terms would be unacceptable to any eligible ITE, and then use the resulting disagreement to extend agreement negotiations unnecessarily.

Further, we believe that TRAI should implementing a TRAI **"fast-track"** arbitration/review process. In making this recommendation, we have in mind the resolution of minor issues that may be associated with matters such as the variation requests referred to in our response to Question 5 above – where time is of the essence for the requesting ITE in obtaining CLS access and Co-location.

ISPAI

In case of OCLS and ITE failing to enter into an agreement within the prescribed 22nd day (or mutually agreed extension date), provision is suggested that after the expiry of the demand date, any or either of the parties should approach TRAI for facilitating the CLS RIO between the two. Both can then mutually decide to accept the RIO or cancel the arrangement.

Telxess Consulting Service Pvt. Ltd.

In case of OCLS and ITE failing to enter into an agreement within the prescribed 22nd day (or mutually agreed extension date), provision is suggested that after the expiry of the demand date, any or either of the parties should approach TRAI for facilitating the CLS RIO between the two. Both can then mutually decide to accept the RIO or cancel the arrangement.

Q.11 Any other suggestions.

AT&T

AT&T India would be pleased to provide any additional information that would be helpful to the TRAI.

Orange Business Services

Under Section 3.4.3 of this Consultation Paper, TRAI may wish to note that pursuant to the Authorisation Directive19, the French licensing regime is now under a general authorisation framework which require entities in general to obtain general authorisations to provide electronic communication networks and services open to the public (with the exception of frequencies and numbering resources which still require individual licensing). Under the general authorisation framework, the undertaking concerned may be required to submit a notification but must not be required to obtain an explicit decision by the NRA before commencing the provision of electronic communication networks or services. This move to a general authorisation regime has significantly reduced the barriers to market entry and eased market access for new players in the EU.

BSNL

In view of various suggestions given by BSNL and those received from the other quarters, it is felt that the revised draft regulation/guidelines may be framed and the Authority may circulate the same for final comments.

Bharti

TRAI can set guidelines and policy for cable landing station owners and ITE, how to access the CLS capacity and also set policy guidelines for RIO (Reference Interconnection Offer) and mechanisms to access the cable system. It should regulate and benchmark the pricing of components involved.

International telecommunication entities that are accessing the capacity from cable landing station, should have their own data & voice monitoring system. The International telecommunication entity should be responsible for all security guidelines, set as per the licensing conditions.

VSNL

Concept of neutral MMR/Carrier Hotels instead of as proposed above by TRAI would be best suited to resolve the issue under reference.
The time lines mentioned in the regulation should be clarified to be as working days.

Reliance Communication Ltd.

(a) Once TRAI approves the cost based charges for various services provided by OCLS it

should seek periodic report from OCLS giving details of charges imposed on ITEs including OCLS itself and its affiliates to ensure that OCLS are providing the CLS services in a non-discriminatory manner.

(b) TRAI should not force ITEs to access the capacity at CLS through its own collocation equipment as this may be difficult for smaller operators / ISPs / resellers to incur additional capex and undertake administratively burdensome and time consuming obligation. ITEs should be given the option to access the submarine capacity either through their own collocated equipment or through other backhaul providers.

Sify Communication Ltd.

We have mentioned all the relevant and necessary points while responding to questions mentioned hereinabove and do not have any further suggestions.

Verizon

The proposed regulations require an ITE to provide a copy of the commercial agreement for sale or lease of Reference Capacity as a pre-condition for the supply of service. We are concerned that this procedure is unnecessary and would impose unreasonable obligations on the ITE to disclose commercially sensitive information to the CLS owner. We submit that paragraph 4C of the draft regulations should be amended to require only the provision of reasonable information. We believe a written confirmation (in the form of a letter or an email) from the cable network administrator attesting to the ITE's capacities on the relevant cable system is sufficient.

The proposed regulations contain a facilitation provision for the resolution of disputes. No time frames for the resolution of disputes are contemplated. These are needed to provide the requesting ITE with adequate certainty. The proposed regulations contemplate that the intervention of the regulator can only be requested "jointly". Either party should be able to request the intervention of the regulator, without the permission of the other party. In addition either party should be able to refer the dispute to an effective dispute resolution body as an alternative to the facilitation process. We assume that disputes can be referred under clause 14(2)(i) of the TRAI Act. We suggest that recourse to said dispute resolution clauses be clearly stated as an alternative or in addition to recourse to the facilitation process.

The proposed regulations permit the ITE to "provide Grooming Services at CLS of such owner" We suggest the TRAI broaden the scope to include the provision of Grooming Services by ITEs to third parties.

Asia Pacific Carriers' Coalition

For the purposes of certainty, APCC requests TRAI to clarify whether there is a minimum level of capacity on a submarine cable system (acquired through any of the channels identified by TRAI in the Consultation) necessary for an eligible ITE to qualify for CLS access

and Co-location. We note that the Per Unit Capacity levels set out in Section 1 Part II of the draft “Form of CABLE LANDING STATION-REFERENCE INTERCONNECT OFFER” under the “SCHEDULE” in the Consultation sets out capacity in units of STM-1. From this we assume that TRAI considers an STM-1 as the minimum qualifying capacity – subject to interface levels specified in relevant C&Mas, supply contracts and/or IRU agreements.
If TRAI does consider an STM-1 to be the minimum qualifying capacity, APCC suggests that this minimum of an STM-1 only apply as the minimum initial capacity and that additional capacity can be added in smaller increments. APCC suggests this because once an ITE has established its initial CLS access or Co-location at an STM-1 level, the additional requirements on the OCLS for connections and /or space to accommodate incremental ITE capacity are minimal but do, at the same time, permit the ITE greater flexibility in meeting the demands of its customers, time to market, and in managing its international capacity most effectively and efficiently.

ISPAI

TRAI must ensure the Tariff Orders are also issued alongside the RIO Regulation, or else the exercise may be rendered meaningless.

There are 4 Cable landings at Mumbai and 3 landings at Chennai. Hence, it is suggested that suitable policy/regulatory provisions for setting up the Meet Me Rooms, or more appropriately, Tele-houses be established too, where ISP, ILD, NLD operators can peer conveniently with cross connect facilities.

Telxess Consulting Service Pvt. Ltd.

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Prepared by Amitabh SinghalHe is a Founder of and DG of ISPAI. He was involved in first bringing the international bandwidth/connectivity issue to the fore in 97-98, under the aegis of ISPAI, asking for ISPs access to Submarine cable services directly, and then successfully petitioned the government to let ISPs open up Int’l gateways via satellite and submarine routes, among other things including ending the monopoly.

General Comments

AT&T

AT&T Global Network Services India Private Limited ("AT&T India") respectfully submits these comments on the Consultation Paper on Access to Essential Facilities (Including Landing Facilities for Submarine Cables) at Cable Landing Stations, released by the TRAI on April 13, 2006 ("Consultation Paper"). AT&T India welcomes this further important pro-competitive initiative by the TRAI to remove barriers to telecom trade and investment in India and is pleased to comment on the TRAI's proposed regulations to provide International Long Distance Operators ("ILDOs") with access to international submarine cable capacity on fair and non-discriminatory terms and conditions.

AT&T India is a joint venture, owned 74 percent by AT&T Inc. ("AT&T"), and 26 percent by Mahindra Telecommunications Investments. AT&T, through its affiliates, operates one of the world's most advanced global backbone networks, provides services to virtually every country and territory in the world, and is a leading U.S. provider of international business and consumer communications services on the U.S.-India route. AT&T India is licensed to provide National Long Distance (NLD), International Long Distance (ILD) and Internet Service Provider (ISP) services in India and began providing services in early 2007.

AT&T India's entry to the Indian market follows India's decision to stimulate greater investment and new entry in telecommunications by raising permissible foreign investment levels to 74 percent and reducing the license fee and annual revenue share for ILD and NLD operators. These pro-competitive initiatives by the Indian government will provide significant benefits to Indian consumers and businesses and encourage broad growth in India's economy.

The TRAI has now properly determined that the enactment of new regulations is essential to ensure that new international operators obtain reasonable and non-discriminatory access, collocation and backhaul arrangements to international submarine cable capacity landing in India. AT&T India strongly supports the regulations proposed by the TRAI in the Consultation Paper, but also proposes changes to improve their effectiveness, including: the provision of changes or clarifications in the proposed regulations addressing non-discrimination; the provision of competitive backhaul services; eligibility rules; collocation; and cable station access and cancellation charges.

AT&T India further suggests that to avoid distorting forward-looking investment incentives, the scope of the proposed regulations should be narrowed to focus on access, collocation and backhaul arrangements at cable stations controlled by dominant operators and that non-dominant operators of cable stations should be subject only to a general obligation to provide cable station access on reasonable and non-discriminatory terms and conditions as set forth in Section 3(a) of the proposed regulations. The general regulatory obligations should prove sufficient with respect to non-dominant cable station operators, and where appropriately applied, this will enhance incentives for new cable station investment.

Open and Non-discriminatory Access to Submarine Cable Stations is Critical to

Telecom Competition in India: India has long recognized that "provision of world class telecommunications infrastructure and information is the key to rapid economic and social development of the country" and is "critical not only for the development of the Information Technology industry, but also has widespread ramifications on the entire economy of the country."[1] India's draft National Telecom Policy 2005-06 emphasizes that the telecom sector is a "key driver" of the economy that can "[p]ropel India into the forefront among the global economic superpowers with high quality and cost-effective telecom infrastructure and service support."[2] This national policy also highlights the importance of a competitive market and a level playing field in attracting the necessary investment in telecommunications infrastructure and developing new services.[3] India seeks to encourage "a transparent and enabling investment and regulatory environment" providing "a fair, stable and predictable policy and regulatory regime" and "equal opportunities and level playing field for all players."[4]

Consistent with these strategic objectives for telecommunications, the TRAI emphasizes in the Consultation Paper (page 1) that international private leased circuit connectivity and submarine cable landing station access are "critical to the success of Business Processs Outsourcing (BPO), ITES [IT Enabled Services] and Broadband services in the country contributing to additional employment opportunities and Gross Domestic product (GDP)." AT&T India agrees. As the TRAI has previously found, the development of effective competition in international telecommunications services requires open and non-discriminatory access to the submarine cables that provide the major share of international connectivity for international operators. Because access to submarine cable stations is an essential input for many telecom services requiring international connectivity, the TRAI has correctly concluded that "growth of competition in IPLC is being hampered by the absence of mandated equal access to cable landing stations."[5]

In particular, the development of international telecommunications services competition in India has been impeded by the difficulties of obtaining access to international submarine cable capacity landing at cable landing stations in India controlled by India's incumbent international carrier, Videsh Sanchar Nigam Ltd. ("VSNL"). The three international submarine

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[1] The New Telecom Policy 1999, Sect. 1.1.

[2] The World Bank similarly has found that "enterprises using [information and communications technology] more intensively are more productive, grow faster, invest more, and are more profitable." World Bank, *Information and Communications for Development 2006: Global Trends and Policies*, at 60-62 (based on surveys of 20,000 companies in 56 low and middle income countries). The World Bank reports there has been a broad consensus for several years "among policymakers worldwide that information and communication provide key inputs for economic development, contribute to global integration while helping to retain the identity of traditional societies, and enhance the effectiveness, efficiency, and transparency of the public sector." *Id*. at 42.

[3] The World Bank also emphasizes that "[c]ompetitive markets grow faster, lower costs, facilitate innovation, and respond better to users' needs" and that "[t]he first step in extending services is to let the market work." *Id*. at 43.

[4] *Id*. at 3.

[5] TRAI, Recommendations on Measures to Promote Competition in International Private Leased Circuits (IPLC) In India, Dec. 16, 2005 ("IPLC Recommendations"), at 4 & 20.

cable landing stations owned by VSNL are the only landing points in India for the consortium cables SeaMeWe-3 (SMW3) and SAFE as well as for the private cables FLAG Europe-Asia (FEA), i2i Cable Network (i2i) and Tata Indicom Cable (TIC).

The TRAI has previously found that "user groups are adversely affected by the high prices charged by VSNL and in such a situation there is a need for regulatory intervention to address the incumbent exploiting its ownership of the landing station, which is a bottleneck facility."[6] Similarly, the Office of the U.S. Trade Representative ("USTR") has reported that comments filed for USTR's Section 1377 Report for 2005 "argue that VSNL's persistent refusal to permit interconnection at its cable landing stations, and its failure to activate additional capacity on these cables, result in artificial shortages of bandwidth into and out of India and inflate prices, hampering the provision of robust global telecommunications services."[7] The U.S. Federal Communications Commission also has noted allegations by FLAG Telecom Group, the owner of the FEA private cable, that VSNL has leveraged control over its cable landing stations to limit available submarine cable capacity and maintain artificially high prices for international circuits terminating in India.[8]

TRAI's Draft Regulation: To address these concerns, the Consultation Paper proposes regulations requiring cable landing station owners to provide international operators with access to submarine cable capacity on fair and non-discriminatory terms and conditions and also to provide licensed international operators with submarine cable landing facilities at their stations. The proposed regulations require each cable station operator to submit a "Cable Landing Station Reference Interconnect Offer" containing such terms and conditions in compliance with the proposed regulations for approval by the TRAI within thirty days of the effective date of the regulations.

AT&T India strongly supports many aspects of this important initiative by the TRAI, in particular to prevent the abuse of incumbent market power over cable landing facilities and to ensure that competitive carriers in India have open and non-discriminatory access to international submarine cable capacity. The TRAI has properly determined that new international operators must obtain reasonable and non-discriminatory access, collocation and backhaul arrangements at the incumbent carrier stations that land most submarine cable capacity in India if they are to compete effectively with incumbent carriers in the newly liberalized markets for international telecommunications services.

AT&T India also proposes certain changes in the proposed regulations to improve their effectiveness in promoting the growth of competition in the Indian telecommunications market. First, to ensure that new entrants may obtain the necessary cable station arrangements to allow access to submarine cable capacity without unnecessary cost or delay, AT&T India recommends that the proposed regulations should be clarified or expanded, such as by making clear that collocated carriers at the cable station may use their equipment at the cable station to provide competitive backhaul services and to allow other

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[6] TRAI, Consultation Paper No. 10/2004 at 6-7.

[7] The Office of the U.S. Trade Representative, Results of the 2005 Section 1377 Review of Telecommunications Trade Agreements, at 6.

[8] Federal Communications Commission, *VSNL America, Inc*., 19 FCC Rcd. 16555, ¶ 8 (2004).

operators to cross-connect to those services at the cable station. Second, to avoid unnecessary regulation of new entrant operators that have no ability to harm competition, AT&T India suggests that the scope of the proposed regulations should be narrowed to focus on access, collocation and backhaul arrangements at cable stations controlled by dominant operators. Additionally, AT&T India suggests that the regulations should not apply to cable landing arrangements, which are more appropriately negotiated on a commercial basis. These proposed changes are described below.

Suggested Improvements in the Proposed Regulations: To improve the effectiveness of the new regulations in ensuring open access to incumbent-controlled cable stations on reasonable terms and conditions, AT&T India suggests the inclusion of the following changes or clarifications.

Non-discrimination: To provide additional clarification of the obligation to provide access to submarine cable capacity on fair and non-discriminatory terms, as stated at Chapter II, Section 3(a) of the proposed regulations, the regulations should state that the cable station owner is required to provide an equivalent level of attention to repair or replacement of interconnection facilities provided to eligible Indian Telecommunications Entities with access or collocation arrangements as the cable station owner provides to its own similar facilities at the cable station in similar circumstances whenever faults or failures are discovered by the cable station owner or brought to the cable station owner's attention by the ITE in order to return the interconnection facilities to service. In the even of a simultaneous failure of cable station owner and ITE facilities at the cable station, however, the cable station owner should have the right to repair its own facilities first.

Statement of Reasons for Non-Feasibility of Access: The TRAI should ensure that the cable station access regulations do not provide dominant operators with broad discretion to block or delay reasonable access requests for anticompetitive reasons on the grounds of purported non-feasibility. The proposed regulations, Chapter II, Section 5(2), allow cable station operators to put forward an "alternative plan" where it is "not feasible" to comply with an access facilitation request or required test. Although cable station operators should not be required to comply with unreasonable requests, ITEs should have the opportunity to review the reasons for any refusal and, if warranted, to challenge any such refusal before the TRAI in an expeditious manner. The regulations accordingly should require the cable station operator to provide a written statement of the reasons for any determination that an access facilitation request or required test is not feasible, within 5 days of the submission of a request for such a statement by the ITE making the access request. If the ITE is dissatisfied with the cable station operator explanation, the TRAI should have a streamlined process to adjudicate the ITE challenge within 14 days of filing with the TRAI.

Provision of Competitive Backhaul Services: An important element in ensuring non-discriminatory access to cable stations is ensuring that operators collocated at the cable station may develop competitive backhaul services, and thereby provide backhaul services to other operators with capacity landing at the station. The provision of competitive backhaul services in this way provides an important limitation on the ability of the cable station operator to require unreasonable rates or terms for backhaul services. Without competitive backhaul services to bring undersea cable capacity to major city switching centers, the activated capacity at the cable landing station can still be throttled back by high costs and constrained supply.

The importance of ensuring the provision of competitive backhaul services is recognized by the Consultation Paper, which states (p. 18) that "[i]t is necessary for an eligible Indian International Telecommunication Entity to have the right to utilize the backhaul facilities available at [the] Cable Landing Station from any of the service providers. The Paper also notes (p. 20) that "ITE[s] need to access other service providers' backhaul facilities" and "[t]herefore {i]nterconnection between co-location areas needs to be provided."

Unfortunately, contrary to these laudable statements, the current formulation of the proposed regulations would effectively *prohibit* collocated operators from providing competitive backhaul services. The proposed regulations state in Chapter III, Section 22, that collocation space may be used "exclusively for the purpose of accessing submarine cable capacity in the Cable Landing Station." The Consultation Paper also states in commentary on the proposed draft regulations (p. 28) that cable station operators "may immediately terminate" collocation leases if collocation equipment is used other than for interconnecting the ITE network to the cable station network. A similar restriction is included in Part V, Section 2.3 of the proposed regulations concerning permissible usage of collocation equipment. AT&T India believes that these provisions were not intended to have an adverse effect on the ability for collocating ITEs to develop competitive backhaul services, but is concerned that a dominant cable station operator could interpret the provisions to have that effect.

AT&T India urges the TRAI to remove these restrictions and to make clear in the regulations that collocation space and equipment may be used for the provision of backhaul services to other operators and to interconnect to other collocation areas, and that such usage provides no basis for terminating any collocation lease. The regulations should allow an ITE to use collocation space to interconnect with capacity landing at the cable station for which that ITE or any other ITE has access rights, provided the ITE with access rights to the capacity submits a written request to the cable station owner and the collocated ITE pays the additional costs of such interconnection. The regulations should also allow the collocated ITE to use the collocation space and associated access rights for the operation or technical control of such other ITE's capacity landing at the cable station in order to provide backhaul services and for installing and operating any equipment necessary for this purpose.

The TRAI also should remove other restrictions in the proposed regulations that are likely to prevent the provision of competitive backhaul services, including the requirement in Part V, Section 1.2, that ITEs may not install more than two fiber optical cables in the collocation space and up to the lead-in manhole.

Eligibility Rules: The regulations should ensure that Indian ILDOs are able to access international submarine cable capacity owned by their foreign affiliates on submarine cable systems landing at cable stations in India. To ensure that the pro-competitive benefits of this cable station access regulation are not limited by the restrictive terms of legacy submarine consortium arrangements, the proposed regulations should affirm that ILDOs are eligible to enter into access facilitation arrangements for all submarine cable capacity landing in India in which they *or their affiliates* have ownership interests. This will increase the amount of activated capacity in India, which in turn will lower prices and stimulate growth of bandwidth intensive services in India.

Additionally, because ITEs affiliated with non-Indian entities owning capacity on submarine

cable systems are likely to hold only the Indian territorial portion of this capacity, and are unlikely to own such capacity through to the distant end submarine cable station, the regulations should define "Reference Capacity" as international submarine cable capacity "in the submarine cable system landing at the cable landing station in India." As currently drafted, the regulations define "Reference Capacity" as international submarine cable capacity "from the distant end submarine cable station to the cable landing station in India." The more expansive definition does not match undersea cable capacity ownership structures, particularly for new entrants to India. Further, ITEs should be allowed to be parties to interconnection agreements with Reference Capacity, in addition to "agreement[s] for sale or lease of Reference Capacity." Chapter I, Section 2 (r).

No Required Disclosure of Sensitive Commercial Information: Another concern with the eligibility rules set forth in the proposed regulations is the requirement that ITEs must disclose competitively-sensitive information to a competitor as part of their application for access facilitation. Specifically, under Chapter II, Section 4 (c), ITEs are required to provide a copy of the "commercial agreement for sale or lease of Reference Capacity" or a Memorandum of Understanding in their application to the owner of the cable landing station. However, the TRAI should not require ITEs to disclose competitively-sensitive terms and conditions of their purchases or leases of international capacity to cable station owners merely to confirm the existence of these arrangements, since cable station owners are also likely to compete with ITEs in the provision of international services. Instead, a letter to this effect from the owner or manager of the cable system or from the capacity owner should be sufficient.

Collocation: The regulations should make clear that the cable station owner is required to provide collocated operators with rights to use interconnection facilities and to receive other necessary services in accordance with industry practice, such as: heating/air conditioning; power, including back-up generators; access arrangements to the collocation space; and cable station parking facilities (for both ITE employees and subcontractors); and security. As presently drafted, the proposed regulations set forth no requirements regarding necessary service levels in these critical areas that cable station operators should provide to collocated operators. Additionally, Chapter III, Section 23 (10) of the proposed regulations states that the regulations do not bind cable landing station owners for "any service guarantee agreement." The TRAI should amend this language to make clear that cable station owners are required to provide reasonable guarantees of appropriate levels of necessary services to collocated operators.

Charges for Cable Station Access: The Consultation Paper proposes (p. 31) that charges for access facilitation and collocation should be determined in the first instance by the cable landing station owner based on the relevant costs and should be submitted to the TRAI for approval with information concerning the underlying cost components. AT&T India supports this approach, and suggests that the TRAI should evaluate these charges on the basis of an international benchmarking approach by comparing them with similar charges in other countries.

The proposed regulations describe the access facilitation charge at Chapter II, Section 10(b) as based on the cost of the network elements required to provide access and "distributed over the complete capacity of the system." However, the access facilitation cost is reasonably based on the non-recurring initial cost of the new access arrangement, including such elements as the costs of construction, equipment and cross-connect access. These charges are specific to each access arrangement and should not be distributed over

the complete capacity of the systems landing at the station.

The proposed regulations address collocation charges at Chapter II, Section 16, but fail to state that these charges also should be based on the relevant costs of providing collocation services. AT&T India therefore suggests that TRAI amend the language to include this requirement. The non-recurring initial cost of collocation arrangements are likely to be largely subsumed within the access facilitation charge. Other collocation costs will comprise the recurring rental and operations and maintenance costs of building support and maintenance, leasehold, power and other utilities. These costs also are specific to each access arrangement and therefore should be charged accordingly, rather than being distributed over system capacity.

Because access costs are specific to each access arrangement, and should be charged on that basis, AT&T India is further concerned that the "Details of Charges" set forth in Part II of the proposed regulations comprise access facilitation charges, annual operation and maintenance charges and restoration charges, all of which are structured on a "per unit capacity" basis. Under a cost-oriented fee structure, only access costs that are incurred on a per unit capacity basis should be charged on that basis, and other costs such as construction should be charged to the operator for which the cost is incurred.

Cancellation Charges: The proposed regulations require a cancellation charge equivalent to one year's operations and maintenance charges, payable as a cancellation charge in the event that the operator requesting an access facilitation arrangement reduces the amount of capacity subject to purchase or lease that is to be accessed at the cable station. *See* Chapter II, Section 12(1). *Id*., Section 23(3). However, the imposition of such extensive cancellation charges for unplanned reductions in the amount of capacity landed through the access arrangement is likely to impede competition by encouraging ITEs to limit capacity commitments that might trigger cancellation charges if they are not fulfilled. While cable station operators reasonably may charge ITEs for the costs associated with changes in the amounts of landed capacity, cancellation charges should be payable only on the cancellation of the entire proposed access arrangement. Additionally, cancellation charges should be limited to the charges applicable for the termination of the collocation lease in addition to any additional costs incurred by the cable station owner in connection with the access arrangement. In essence, reasonable cancellation charges should be oriented to the costs incurred due to the cancellation.

Termination of Access Facilitation: As presently drafted, Chapter II, Section 13(2) of the proposed regulations allow the cable landing station owner to terminate access facilitation arrangements where charges remain unpaid for more than thirty days even where those charges are disputed. This provision appears unnecessarily onerous because of the brevity of this permissible payment period, and is likely to confer undue bargaining leverage upon the cable station owner where charges become subject to dispute, regardless of underlying merits. This language should be amended to allow discontinuance of access facilitation only if charges remain due and undisputed for more than ninety days.

Scope of the Proposed Regulation: An important further issue is whether submarine cable station access regulation should apply to all cable landing stations or only to cable landing stations controlled by operators with market power. AT&T India believes that the TRAI should focus its submarine cable station regulation on cable station operators with market power and the concurrent ability to abuse market power, and absent that should rely on market pressures to ensure that non-incumbent operators provide access to their cable stations on

reasonable terms and conditions. Although the TRAI indicates in the Consultation Paper that cable station access regulation is appropriately focused on dominant carriers, the text of the proposed regulations would apply to *all* cable landing station owners, including incumbent operators with extensive control over submarine cable landing points and new entrants with little or no ability to exercise market power. AT&T India recommends an amendment of the proposed regulations to ensure consistency with the Consultation Paper focus on dominant carriers.

As the TRAI makes clear in the Consultation Paper (p. 16), "[t]he [p]rimary [r]egulatory concern is to ensure that the incumbent/operators with significant market power having control over the cable system and CLS [cable landing station] do not resort to non-price discrimination like denial/delay in providing access, unreasonable terms and conditions for [a]ccess etc." Consistent with this concern, the TRAI explains in the introductory sections of the Consultation Paper that cable station access regulations should apply to "dominant suppliers who have or are responsible for the operation of the cable station."[9] The TRAI states that this access regulation is required to "check anti-competitive behaviour of [the] incumbent or operator with Significant Market Power."[10]

The proposed regulations, however, are not limited to incumbent or dominant operators and instead apply to "*every owner* of a cable landing station." (Emphasis added.) Under these proposed regulations, all cable station operators, including those without market power, are required to submit a cable landing station reference interconnection offer and to enter into access facilitation arrangements under the terms specified in the proposed regulations, rather than negotiating these access arrangements on a commercial basis. AT&T India believes it is unnecessary to apply such regulation to new entrant operators in order to promote competition in India and that such an approach is likely to obstruct rather than assist the development of competition by reducing incentives for market entry and investment in new cable landing stations.

While these non-dominant operators are appropriately subject to the general obligation to provide cable station access on reasonable and non-discriminatory terms and conditions as set forth in Section 3(a) of the proposed regulations, AT&T India suggests that the TRAI should exempt these operators from the specific reference interconnect offer requirements of the regulations and should allow them to comply with this general obligation by negotiating access and collocation arrangements on a commercial basis. Thus, non-dominant operators should not be required to provide a Reference Interconnection Offer for submarine cable station access or to provide the specific access facilitation and collocation arrangements required by the proposed regulations.

This more deregulatory approach to submarine cable stations controlled by non-dominant operators is followed by regulators in liberalized countries such as the member states of the European Union, and the United States. This approach also reflects the structure of WTO obligations for access to public telecommunications transport networks, under which "major supplier" (dominant) operators are subject to more extensive access requirements than non-

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[9] Consultation Paper, Preface.

[10] *Id.*, at 12.

dominant operators, including the provision of interconnection arrangements at "cost-oriented" rates.[11]

Cable Landing Arrangements: As drafted, the proposed regulations apparently would require cable station owners to provide *both* terrestrial access to submarine capacity landing at the cable station for eligible Indian ITEs *and* landing facilities for submarine cables at the cable station to licensed International Long Distance Operators. *See* Chapter II, Section 3(a) & (c). AT&T India believes that the TRAI's submarine cable station access regulation should focus on terrestrial access arrangements to submarine cable capacity landing at cable stations and that this regulation should not extend to requiring landing arrangements for new submarine cables. Arrangements to land new submarine cables at cable stations in India should continue to be negotiated on a commercial basis between cable system owners (both private and consortium) and cable station owners, in accordance with the existing practice in India and other countries. There are many complex considerations with respect to landing a new submarine cable, not the least of which include finite space considerations to maintain the core electronics and resilient power systems for an additional cable. Given these legitimate considerations, AT&T India does not believe it is proper to include a landing obligation on the cable station operator. Rather, the TRAI's rules should remain focused on competitive access to the capacity of landed cables.

BSNL

i) BSNL appreciates and supports TRAI's long due efforts to overcome the bottlenecks in easy availability of the International Bandwidth to the authorized International Telecom Entities in India. It is of utmost importance to ensure access to the submarine Cable Landing Stations in a non-discriminatory and transparent manner. The TRAI's efforts shall go a long way in establishing a mature, fair and competitive International Bandwidth Market.

ii) However, it is an agreed principle that regulation should make an enabling environment available to the concerned operators and should be restricted to laying down the guiding principle and abstain from the nitty-gritty of the operating arrangement among the operators, thus giving enough space to the operators to work out optimum technical economic solutions based on commercial interests.

iii) It is felt that the proposed regulation has delved more into the inter operator arrangement than required. For example, the regulation intends to provide the time limits for various activity components right from the date of application by the seeker not only for the co-location space but also for the International Bandwidth build up and commissioning. It has to be kept in view that availability of International Bandwidth is also dependent on the

[11] Under the full WTO Reference Paper, interconnection with "major suppliers" of basic telecommunications services is required at "cost-oriented" rates. *See, e.g.*, WTO, Fourth Protocol to the General Agreement on Trade in Services, The United States of America, Schedule of Specific Commitments, at 5. The Annex on Telecommunications requires access to and use of public telecommunications transport networks and services on reasonable and non-discriminatory terms and conditions. *See* WTO, General Agreement on Trade in Services, Annex on Telecommunications, Section 5.

response of the operators at the other end as well as on the cable route and further on the network administration in the case of consortium cables.

iv) Similarly, efforts have been made to indicate that O&M charges shall be payable in case of cancellation of demand. It is to be noted that O&M charges are normally applicable in the case of IRU capacities. Different arrangements are possible in the case of normal leasing of bandwidth depending on the agreements among the Cable Landing Station owners at both ends as well as the user operators. This further depends on whether the capacity is protected or unprotected. Since, the market is competitive and will become more competitive with this regulation, cancellation charges for the bandwidth on IRU or lease will be part of the commercial agreements arrived at and it may not be possible to govern the same with the regulation.

v) An impression is gained that the Regulation intends to permit the co-location only when the seeker has applied / obtained International Bandwidth and co-location needs to be withdrawn when such capacity lease is not available / has been terminated. Conceptually this is incorrect. It is expected that once co-location is requested, intention of the seeker is to lease the International Bandwidth as the seeker will have to start paying the co-location charges from the date of commissioning of the co-located equipment. As such, the co-location should not be refused in the absence of immediate bandwidth demand. Similarly, termination of co-location should not be done if International Bandwidth lease has been terminated. Bandwidth on International routes will be leased by the seeker from time to time depending on requirement. Thus, in principle co-location requests of all the seekers must be entertained with last priority being given to those seekers who have not demanded or obtained International Bandwidth on lease from the OCLS or consortium partner. This is also important from the point of view of the time taken in building up the last mile facility from the POP of the seekers to the CLS. The regulation should not create a situation of loss of time in building up end to end bandwidth due to International capacity becoming available before commissioning of the last mile facility. In any case, the resale of any of such facilities like co-location, space etc. must be forbidden.

vi) It is to further mention that co-location for the submarine cable landing of another ILDO should not be encouraged. In turn it can be considered if setting up of a new CLS by a new owner of a submarine cable system is to be mandated. The cost of Cable Landing Station is a very small percentage of the total investments in a submarine cable and in general the competing ILD operators would want the cable landing facilities under their own control. The multiplication of the cable landing stations shall be in the interest of telecom sector as concentration of too many cables in a CLS may lead to catastrophic failures in case of disaster. Further, keeping in view the fact that time available for construction of CLS is sufficient as the cable laying itself takes a fairly long time, mandating of submarine cable landing at CLS is not required. In fact, some times the cable owners prefer to buy out the readily available buildings. Therefore, Cable Landing Station building is not a bottleneck facility as far as additional submarine Cables are concerned. Accordingly, it is felt that sharing of Cable Landing Stations for additional cable landing facilities may be left to the mutual agreements of the concerned parties.

vii) It is suggested that the RIO should be generic, incorporating the provisions from the

guidelines with essential components which are required to ensure non-discrimination and transparency. Keeping in view the complexity of the business, the OCLS and the seeker may be given a chance to reach a mutual agreement on the conditions. A time of 45-60 days may necessarily be given for the preparation of RIO. RIO and the amendments to the RIO can be filed with TRAI and the Authority may intervene if they are in contradiction to the provisions of the regulation.

2. In addition to the above, the comments on the draft regulation in Chapter-5 and the answers to the Questions in Chapter-6 are also enclosed as **Annexure-I & II** respectively. The content of the Annexure may kindly be read with the contents of this letter. For the sake of brevity, many of the operational issues require to be shifted to the guidelines, have not been specifically mentioned while commenting on the clauses of the regulation.

3. It is submitted that the revised regulation and the guidelines may be circulated again for the final comments of the stake holders.

Broad Observations On The Draft Regulations (Chapter -5)

CHAPTER - II.

Clause-3(c): As already indicated in the covering letter, access to the landing station for landing submarine cable of the seeker should not be mandated by Regulation.

Clause-3 (d) (5) & (6) : The Regulation should leave flexibility for amending the RIO based on the specific needs of the OCLS and the seeker to meet their service requirements. Such flexibility should be provided through the Regulation and not that any amendment in the RIO shall invite the approval from the Authority.

Clause 4 (c) (i): The commercial agreement for sale / lease of reference capacity is a confidential document and it should not be required to be submitted to the OCLS as these arrangements are generally covered by NDA. A declaration by the seeker should be sufficient along with a confirmation, if necessary, from the second party from whom the reference capacities has been purchased / leased.

Clause 4 (2): Since commercial agreement should not be required to be submitted, this clause may be modified accordingly. It is further to mention that even a prior capacity lease or sale agreement or MOU should not be necessary as indicated in the covering letter.

Clause 7 (1) & (2) : As the seeker is free to obtain capacity from any of the consortium members/ owner of another submarine cables landing at the same CLS, the issue of firm demand on the OCLS is not in question. Accordingly, the entire clause needs modification.

Clause 9 : It is felt that this clause may be deleted from the regulation and made part of the guidelines as suggested in the covering letter.

Clause 10 (b) : TRAI may separately prescribe the principles of costing the network elements as the statement under this sub clause can be used to the serious disadvantage of the OCLS. The capacity may mean ultimate capacity or equipped capacity or activated

capacity etc. In each of these cases, the Access Facilitation charges will very widely.

Clause 10(2) : Prescription of charging methodology in terms of O&M charges etc. will have to be defined as a guideline. Due to the competition in the market, the commercial arrangements keep changing and also they depend on the agreement amongst the owners of the cable. In the case of annual lease normally there is no separately prescribed O&M charge. Making these items the part of regulation will create difficulties for the operators and also take away the flexibility, of entering into commercial arrangements, between the operators.

Therefore, this clause needs modification / deletion and may be considered for making part of the guidelines.

Clause 11 : The question of payment of up gradation charges for the reference capacity should arise only when the capacity has been leased from the OCLS. However, charges for the up gradation of co-location facility, if required, and the cross connect capacity shall only be payable to the OCLS.

Clause 12 : This clause again refers to the operational and commercial matters and should not find place in regulation. As already pointed out, O&M charges are not applicable in the case of normal lease of circuits. IRU / lease capacity agreements are also some times dependent upon the arrangements between the OCLS and the operators at the other end. Therefore, mandating such charges and related the cancellation charges or yearly O&M charges may become counter-productive / irrational.

Clause 13 : The access facilitation arrangements, as far as they have any link with co-location, should not be subject to cancellation on termination / withdrawal of any IRU / lease capacity agreement. This is an ongoing business and the seeker may acquire further capacities in due course as per the business need. Therefore, withdrawal of co-location in such circumstances will not be desirable and it should be left to the understanding and arrangements between the parties.

There may be some disputes among the parties because of which the payments become outstanding / delayed. Hence, there must be a provision for resolution of disputes among the parties like arbitration etc. before the OCLS is allowed to withdraw the access facilitation. Provision of payment of interest for delayed payment may also be kept in the agreement between the parties.

Clause 14 : This clause also will need amendment in view of the comments given for clause 13 above.

Clause 17 (3) : Making the duct within the building available should be provided in the regulation with a flexibility of alternate arrangement by the OCLS, once the virtual co-location has been agreed.

Clause 18 : This clause does not cover the situation when the OCLS rejects the request of the seekers for additional co-location space and other facilities.

Clause 20 : This clause should also be part of the guidelines as it is an operational matter.

Clause 23 : Most of the issues brought out in this clause appear to be suitable to be the part of the RIO as the OCLS and the seeker may like to have mutually agreed commercial / operational arrangements under the guidelines prescribed by the TRAI.

Schedule Part-II : The template should contain unit capacities at E1, E2, E3 and DS3 levels also.

Claus 1.2 prescribes that recurrent access facilitation charge shall be applicable only for the first three years. Objective of this limitation has not been revealed.

Clause 2 provides for O&M charges on access facilitation in addition to annual charges. The purpose of these charges is also not clear.

Schedule Part-III : This should become part of the guidelines thereby leaving flexibility to the operators under an overall prescribed time limit for access facilitation / co-location.

VSNL

A submarine Cable Landing Station is a facility where the International Submarine Cable lands in to a country for the purpose of getting connected with the domestic network of that country. Ordinarily speaking a submarine cable landing station would be that premises which houses necessary equipment where the submarine cable after off-shoring would get terminated. In India there are specific permissions required to be obtained before establishing a landing station and loading traffic on the cable landing there. The topical regulations have been notified prescribing the modalities how an ILDO or an ISP can own and establish a Cable Landing Station. The policy in respect of ISPs permitting them to establish Cable Landing Station based international gateways was first introduced in the year 2000. Thereafter, in the year 2002, competition in the ILD services sector was introduced with other newly licensed ILDOs being allowed to establish their own Cable Landing Station based international gateways.

It is worth noting that till date, none of the ISPs except one ISP, have established any Cable Landing Station in the country after the policy was notified in the year 2000. The only ISP who applied for cable landing station gateway permission also applied for ILD license thereafter and got its landing station permission migrated to its ILD license. There are other ILDOs viz. Reliance and BSNL, who have established their own Cable Landing Stations. It can be said that all the major players in the international bandwidth/services market, who desired to establish their own Cable Landing Station facilities, have established such facilities with reference to their own international submarine cables/capacity and it is not in the public domain or knowledge that any other operators (whether ISP or ILDO) have planned to land its own cable on Indian shores and wish to establish such a facility in future

As on date, after about seven years from the year 2000 when ISPs were permitted to establish their own cable landing stations, there are effectively ten ILD Licensees, out of which four own their Cable Landing Stations and international capacities. There are about

eight cables touching Indian shore through seven landing stations. Thus, there is adequate competition amongst the various entities owning the Cable Landing Station for providing international bandwidth capacities to the Indian ITEs. It cannot be said that either the Cable Landing Stations or the international capacity in India is owned by a single or small number of players. . It is also submitted that the Essential Facilities have been defined in the ICT regulation tool kit as follows:

"Essential facilities are resources or facilities that have the following properties:

- They are critical inputs to retail production. Essential facilities are located at the wholesale level of the production chain, and are essential inputs in the production or supply of the retail product or service,
- They are fully owned and controlled by vertically integrated incumbent firms. The owner of the facility participates in the retail as well as the wholesale stage of the market,
- They are a monopoly. Retail competitors can only acquire an essential facility from the incumbent firm that owns and controls it,
- It is not feasible, either economically or technologically, for retail competitors to duplicate the essential facility or develop a substitute for it."

From the above description of Essential Facilities, it is clear that the Submarine Cable Landing Stations, being owned and operated by four ILDOs out of ten licensed ILDOs cannot be treated as an Essential Facility.

It may be seen that in similar scenarios in other markets like US, UK etc. and also globally, the prevailing regulations regarding cable landing station and access were withdrawn, once the competition matured there. However, in India, where there were no regulations till now on CLS access, it is now being proposed to regulate this segment of the network treating it as an essential facility at the stage where market has the competitive advantage. Therefore, it may be that this move at this stage to standardize the terms and conditions for access to Cable Landing Stations of various ILDOs is, perhaps, with an aim to bring about uniformity in respect of various access issues at CLSs owned by various ILDOs.

It would not be out of place to mention that VSNL on its own initiative had submitted its standard terms and conditions for providing access to its Cable Landing Stations to TRAI in the month of November, 2006. As always, VSNL would like to welcome this regulatory initiative and would like to contribute towards the endeavours of TRAI in this regard. This initiative of TRAI is seen as a step towards unbundling of the CLS access from the bandwidth prices. Similar unbundling in respect of National Long Distance (DLC) and local (last mile) loop is already under active consideration of TRAI. We would like to submit that in the interest of removing all the bottlenecks in the communications chain, unbundling exercise should not end at the CLS component of the communication chain only, but should be taken to its logical end by covering the last mile level, including the National Long Distance (DLC) loop. To this end, the consultation for DLC is already over, whereas recommendations for Local Loop unbundling, though submitted to the Government, are awaiting its clearance. We would hope that these remaining components of the network as aforesaid would get similar

attention and treatment.

Sify Communication Ltd.

At the outset, we appreciate the proactive approach taken by your good office in initiating the consultation process for Access to Essential Facilities (Including Landing Facilities for Submarine Cables) at Cable Landing Stations". Growth of the ICT sector in India has long been stunted by the high International bandwidth prices which continue to be way above as compared to other nations in the APAC region. We thankfully acknowledge the earlier forward looking measures taken by your good offices in bringing down International bandwidth prices. We agree that this is an opportune time to look at fair and equitable access to essential facilities at cable landing stations specially when resale in the International Private Leased Circuits have been recently recommended. True as it might be, the fruits of these proactive measures could not be fully realized without access to cable landing stations and its associated essential landing facilities.

Rapid technological developments in data transmission technologies have reduced the CAPEX as well as OPEX involved in the provisioning of a cable system. The reduction in costs can primarily be attributed to exponential increase in carrying capacity over which the entire costs can now be amortized. Unfortunately, due to absence of appropriate regulations, the benefits of the cost reduction have not cascaded down to the Internet service providers who continue to pay non-transparent and arbitrary costs charged by Cable landing station owners.

Needless to say, conducting a comprehensive costing analysis to determine costs of unbundled network elements in a Cable Landing Station should be done prior to implementation of this regulation, the main objective being lowering of costs and encouraging fair and indiscriminating access.

As rightly pointed out in this consultation paper and in other references from TRAI, Cable landing stations are critical infrastructure and has been typically considered as a bottleneck facility in all those countries that have had a monopolistic International long distance market. The transition to a competitive market is critical, especially when a number of new entrants have become eligible ITEs by acquiring either an ILD or an ISP license but not all of them are in a position to have their own cable landing stations. During this transition period from a monopolistic market to a perfectly competitive one, we strongly feel the need for a regulation.

Looking forward:-
As important stakeholders of the information society we have always looked forward for a level playing field for all and proactive forward looking policies enabling sustained growth. We hope our responses will be given due cognizance and the proposed regulation will serve its good purpose for both the OCLS and the eligible ITEs.

Verizon

Verizon Communications India Private Limited ("Verizon Business") is pleased to provide input for this important TRAI consultation on Access to Essential Facilities (including landing

facilities for Submarine Cables) at Cable Landing Stations (CLSs). As TRAI has recognized, "competition in IPLC segment could be enhanced if International Long Distance Operator (ILDO) licensees entering the market have adequate access to necessary facilities at cable landing stations." Verizon Business is a licensed Internet Service Provider (internet telephony) in India and has applied for an ILDO license. Our ability to obtain competitive access to these essential facilities is critical for our supply of telecommunication services including high-speed bandwidth to our Indian end-users.

As TRAI has recognized and documented, submarine CLSs and related transmission facilities are critical installations for International Telecom Entities (ITEs). These facilities provide the physical landing points for submarine cable systems and often also house the necessary network interface equipment enabling ITEs to interconnect their in-country networks to the respective international cable systems landing at these facilities. The ITEs typically co-locate their equipment at these CLS to access their own cable capacity on cable systems required for the provision of international telecommunication services to their customers, to access the cable capacity owned by third parties on the cable systems for the purpose of providing backhaul services to third parties, and also to provide the means to transit traffic to or on behalf of third parties between any cable system at the landing station to another cable system within the same landing station or at another facility. Thus, as the CLS Consultation states, it is "evident that under circumstances of monopoly or limited number of cable landing stations or other circumstances there is a need for regulating the access to cable landing stations."

As the CLS Consultation describes, best practice regulators have introduced cable open access regimes in their respective countries. This means allowing any properly licensed carrier to access its submarine cable capacity at the CLS, to transit traffic from one cable system to another within the same CLS or through another facility, and to build alternative backhaul network infrastructure. Verizon Business commends TRAI for developing a well-founded proposed approach to creating such best practices as appropriate for the market in India. Based on our company's extensive participation in international submarine cable systems, provision of services in markets around the world, and our knowledge of the Indian market, we provide responses to the questions raised in the CLS Consultation below.

Asia Pacific Carriers' Coalition

The Asia Pacific Carriers' Coalition (APCC) welcomes the opportunity to respond to the Telecom Regulatory Authority of India's (TRAI) consultation in relation to "Access to Essential Facilities (Including Facilities for Submarine Cables) at Cable Landing Stations", paper 5/2007.

The APCC is an industry association of global and regional telecommunications carriers operating in Asia Pacific, formed to work with Governments, National Regulatory Authorities and Consumers to promote open market policies and best practice regulatory frameworks throughout the Asia Pacific region.

This submission made by the APCC reflects the opinion of the majority of its members.

We would like first to commend TRAI on its initiative and resolve to review and reform major elements of the international telecommunications regime in India to date – for example, ILD licensing and International Private Leased Circuit (IPLC) provision – and we see TRAI's current proposals for Cable Landing Station (CLS) reform as completing the last key component necessary to enable the development of a competitive international facilities market in India.

APCC has commented at length on the issues associated with access to, and Co-location at CLSs in India and the need for reform of existing arrangements in previous APCC submissions, its July 2005 submission in particular (APCC 2005 Submission). The issues identified in the APCC 2005 Submission concerning means by which the Owner of a CLS (OCLS) can frustrate competitive access to a CLS included:

(a) Restricting access to capacity

- Preventing owners of capacity from "landing" their own capacity in the country.
- Delaying capacity owners from co-locating (for example, by claiming physical constraints or under-providing space, long lead times for making space available, unreasonable agreement terms, deferral of Co-location space commitments/construction until shortly before RFS (the date when the system is for Ready for Service), or by failing to give interested parties sufficient opportunities to reserve or express interest in collocation space).
- Restricting the scope of operators that have access to a landing stations.
- Prohibiting co-locating parties from accessing other cable systems landing at or connecting to the landing station.
- Placing limitations on grooming (disaggregating capacity into smaller increments)
- Prohibiting interconnection to other cable systems, for example for the purposes of transit or for establishing restorable capacity.
- Restricting access to information about developments (for example, relating to facility enhancements)

(b) Charges and procedures

- Imposing expensive and discriminatory prices for Co-location and cross-connection procedures. For example, present O&M (operations and maintenance) charges are in the order of one thousand times higher than competitive rates. VSNL is currently charging up-front connection charge of US$173,000 and annual recurring charges of US$55,000 per STM-1/
- Imposing unnecessary or unnecessary complicated procedures that increase risks of a requesting party's non-compliance (thereby exposing applicant to penalties or to termination of an application)
- Imposing unrealistic forecasting requirements (thereby exposing applicant to penalties).
- Imposing limits on the number of orders than can be processed at a particular time (for example, on collocation or cross-connection requests)
- Imposing drawn-out, discriminatory and inefficient procedures that impact a competitor's ability to activate supply in a timely manner (this is of particular competitive importance in respect of newly activating cable systems, in which key

sales opportunities attend the supply of fresh capacity to a market).

- Backhaul services
- Prohibiting or obstructing competitive suppliers of backhaul from accessing and co-locating at landing stations.

APCC is pleased to note that these issues look to have been addressed in the Consultation and draft regulations and, consequently, we are in broad agreement with TRAI's proposals. This being the case, APCC's specific comments in this being the case, APCC's specific comments in this submission are on an exception basis and are largely simply matters of clarification or refinement.