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Subject: Tata Communications Ltd. response to TRAI Consultation Paper on ‘Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India’

Dear Sir,

This is with reference to the TRAI Consultation Paper No.15/2022 dated 23-12-2022 on Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India.

In this regard, please find enclosed herewith Tata Communications Limited’s response to the Consultation Paper as Annexure -I for your kind perusal.

We request you to kindly take on record our response and consider the same while finalizing the recommendations.

Thanking You,
Yours Sincerely,

For Tata Communications Limited,

**Praveen Sharma
Authorized Signatory**

Enclosure: As mentioned above

TATA COMMUNICATIONS

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Tata Communications Limited Response to TRAI Consultation Paper on 'Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India'

Preamble

At the outset, we welcome this consultation paper considering the fact that the submarine cables are the vital and critical infrastructure of the digital age which forms the basis of the global and national telecommunications network and vital to the social and economic development connecting people and businesses across the globe.

The demands for submarine cable systems/ international bandwidth would continue to rise with the increasing requirement for route diversity and rising demand for capacity among Enterprises, Service Providers and Content Providers. These factors are contributing to investments, procurement and deployment of submarine cables on a global scale. The Content Providers like Google, Facebook, Amazon, and Microsoft being dominant users of international bandwidth, are huge drivers for capacity demand across the globe and are moving from capacity purchasers to submarine cable owners. These players are now driving the routes cable systems to take and pushing along new innovations inside of the cable systems viz. new transmission technology to handle higher capacity wavelengths, increased fiber counts for more overall system capacity and streamlined network management. In India also, similar submarine cable market trends have been seen. TRAI in its paper has also mentioned that India is set to register the highest growth in the Asia Pacific submarine cables industry, and the market size is expected to reach US\$ 78.6 Mn by 2030. As per the information available, there are 6 new cable systems are planned for commissioning by FY 2025 in India.

Need to review existing licensing and regulatory framework in line with evolving Business models and global trends to attract more Submarine Cables footprint into India to meet exponentially growing international bandwidth requirements:

In view of market dynamics of submarine cables and evolving business models, there is a need for the Government to review present licensing and regulatory framework in India so that Indian ILDOs /ISPs can act as landing party for laying / maintaining of submarine cable(s) in Indian territorial waters and create, control and maintain CLS infrastructure even if they do not have any significant stake in the Consortium owning such cable(s). This is also imperative to promote submarine cable market in India for ensuring availability of higher international bandwidth to cater the requirements of various users incl. international content providers, cloud service providers, app-based communication service providers etc.

Further, as mentioned in the para 1.16 of the TRAI paper, in India, setting up a new cable landing station is quite a complex process which require to be simplified. Similarly various clearances and permits (In-transit, Pre-repair, and Post-repair permit) are required for the repair work of the submarine cable in the maritime zones. Damage to submarine cables through indiscriminate anchoring, trawling, dredging, fishing activities carried out in the cable route leads to huge impact to essential telecommunication services and economy as well.

In order to cater the CLS market in an efficient manner so to ensure availability of sufficient international bandwidth to meet varied requirements of users and to attract more investments, there is an immense need to review the existing regulatory framework to address various issues and challenges in terms of simplification of administrative permissions / clearance processes for obtaining permissions to set up Cable Landing Station (CLS) and to support Submarine cable industry in preventing damage to cable in Indian Territorial waters and EEZ incl. MOD&MOHA clearance, cable system repairing, operational issues such as frequent cable cuts etc.

Globally, newer business models are evolving wherein ILDOs are not required to have any stake / interest in the consortium of the submarine cable system but undertakes to own the assets in territorial waters of the landing country. Similar arrangements are required to encourage in India as it will allow ILDOs, who do not have an interest to invest in an international Submarine Cable system to be eligible to become a landing party and the landing infrastructure provider for the new cable system. Such business model will increase the pool of potential landing parties that can provide such services for upcoming international Submarine Cable systems, allowing for further physical diversity and attracting more Submarine Cables footprint into India to meet exponentially growing international bandwidth requirements.

There is also a need to facilitate use of international dark fibre pairs by ILDOs/ISPs other than the landing party ILDO/ISP by having relaxed process of approval for activation of dark fibres by ILDOs/ISPs at their PoP. This can be done by policy intervention wherein only PoP approval is required by any eligible ILDO or ISP, who is buying international dark fiber pair from the existing submarine cable system which has already landed in India by landing party ILDO/ISP after obtaining all the necessary approvals. Extending the passive international fiber pair from that CLS to any other POP / place of the eligible ILDO or ISP than such POP / place of any other eligible ILDO or ISP should only be treated as POP from where the international bandwidth fiber pair can be lighted subject to the applicable regulations in respect of monitoring of the international bandwidth and no other approvals should be required.

Domestic or NLD connectivity over subsea route should also be permitted by easing existing policy framework & guidelines considering the fact that the Subsea cables offers more reliable service and network availability and compliments domestic NLD network strength and reliability. Therefore, Subsea route should not be confined to Indian territorial waters or EEZ and integrated ILDOs and NLDOs (Long Distance Operators having both NLD &ILD license) should also be allowed to use subsea route for domestic connectivity. Additionally, NLD licensee should also be explicitly allowed to establish, own, maintain and operate domestic submarine cable connecting two or more cities on the coastal line and CLS solely to cater NLD traffic. In this manner, use of CLS / BMH infrastructure for both domestic and international cable systems together may also lead to apportion of the overall cost of landing submarine cable system thereby making available international bandwidth on competitive rates to the end users / entities.

Issue wise comments

Tata Communications Ltd. issue wise comments are as follows:

Q.1 What limitations are being posed by existing licensing and regulatory provisions for laying submarine cables and setting up of CLS in India? Please answer with the detailed justification for changes required, if any.

Tata Communications Response:

There are multiple limitations in the current scenarios, provisions & processes required to be followed by an Indian ILDO seeking the approval for laying the new submarine cable and setting up of Cable Landing Station (CLS) in India.

If these limitations in the current process are addressed in a time bound manner, this may improve & simplify the overall process requiring such approvals: -

- The prevailing procedure related to licenses/permissions/registrations for setting up of CLS and landing a new submarine cable system involves manual efforts of submitting various applications to multiple government agencies with no facility to track the progress or feedback on the application. No committed TAT (Turn Around Time) exist for all such applications made for various clearances. Web based single window portal from a designated authority in coordinating and getting all required approvals from respective agencies with defined TAT would simplify this entire process for the applicant.
- Such Portal should cover the receipt of applications from eligible applicants, upload the documents and application form with digital signature. The portal should envisage that applicant gets prompts and alerts at various stages of application submission so that all necessary requirements are compiled before submitting the application in manner similar to the DoT Saral Sanchar Portal. The Saral Sanchar Portal is single integrated approval window for each and every approval required by the applicant incl. obtaining new Telecom licenses, migration of existing licenses to Unified License regime, SCFA approvals, Experimental licenses, Registrations (IP-I, M2MSP) import licenses etc.
- Approval Process Simplification for ILDOs seeking to buy dark fiber from existing approved submarine cable system in India: As per current scenario where an ILDO gets the approval for laying a new submarine cable and sets up a CLS in India, flexibility should be provided for other ILDO's wanting to access dark fiber pair(s) in such approved submarine cable system without having to follow the lengthy and cumbersome approval process for landing of submarine cable and setting up CLS which the ILDO (Indian territorial segment owner) landing the submarine cable has already obtained from DoT and other respective authorities. In existing definition of CLS, it is considered as Dry Plant (defined in section 1.4-a), comprising the segment between Beach Manhole and CLS site, consisting of Power Feed Equipment (PFE) and Submarine Line Terminal Equipment (SLTE).

In new generation submarine cable systems, it is technically feasible to have PFE and SLTE at different locations for various fibre pairs and hence a review of existing definition of CLS is required in line with technology advancements thereby providing clarity on required approvals by ILDOs in such cases would also help in simplifying the process. ILDO who is landing the entire submarine cable system in India should be required to take comprehensive approval

for setting up of CLS (comprising of PFEs and SLTEs owned by CLS owner), while any other ILDOs who are extending only dark fiber pair(s) from such CLS location to their PoP and not the entire submarine cable and putting SLTEs and/or PFEs at their PoP, should have a simplified approval process only for their PoP location considering the same as Cable system lighting location as all other approvals are already in place, taken by ILDO (CLS Owner) landing the submarine cable system in India.

In view of the above submissions, it is also stated that the CLS should be a location where international submarine cable lands in India. Additionally, it is also submitted that any eligible ILDO or ISP buying international dark fiber pair from the international bandwidth which have already been landed in India by the eligible ILDO or ISP after obtaining all the approvals needed for setting up of the CLS and extending the passive international fiber pair from that CLS to any other POP / place of the eligible ILDO or ISP than such POP / place of any other eligible ILDO or ISP should only be treated as POP from where the international bandwidth fiber pair can be lightened subject to the applicable regulations in respect of monitoring of the international bandwidth and no other approvals should be required.

Such eligible ILDO or ISP extending the passive international fiber pair on the existing submarine cable system with or without PFE, from the CLS to its POP should not be required to take all the approvals once again which had already been taken by that eligible ILDO or ISP who had landed the international submarine cable in India after taking approvals for setting up of CLS which is complex and time consuming. There is a need to have simplified approval process in place for such evolving business cases to meet varied international bandwidth requirements of the customers. This will ensure that such eligible ILDOs / ISPs buying that dark fiber pairs need not go through the cumbersome and time consuming CLS approval process and encourage that more entities will be able to procure international submarine cable dark fibre pair(s)/bandwidth in an easy and simplified manner.

Simplification of approval process will lead to better utilization of the Submarine Cable systems, better apportioned costs, higher availability of international bandwidth in the Indian market, more competition leading to better pricing and lowering of apportioned cost of laying and maintaining of these Submarine Cable Systems for the consortium.

Q.2 Which of the conditions, as stated in Para 2.10 be made applicable on the ILD licensee for applying permission /security clearance for laying and maintaining the submarine cable and setting up CLS in India? Please answer with the detailed justification.

Tata Communications Response:

It is suggested that it should be left to the choice of the ILDO to decide whether it wants to invest or not in the submarine cable system /consortium depending on its business requirements. However, the ILDO would need to have ownership of the submarine cable in the Indian territorial waters and would also need to install, control, operate and maintain the CLS. Prescribing any percentage of ownership would create entry barrier for ILDOs who want to act as landing station party for any of the consortium/ private submarine cable systems..

There are business models evolving globally in line with the condition (ii) wherein ILDOs are not required to have any stake / interest in the consortium of the submarine cable system but undertakes to own the assets in territorial waters of the landing country. **Therefore, there is a need to encourage this condition as it will allow ILDOs, who do not have an interest to invest in an international Submarine Cable system to be eligible to become a landing party and the landing infrastructure provider for the new cable system.** This will increase the pool of potential landing parties that can provide such services for upcoming international Submarine Cable systems, allowing for further physical diversity and attracting more Submarine Cables footprint into India to meet exponentially growing international bandwidth requirements. However, it should be ensured that such ILDOs should install, maintain, operate and control the CLS and have ownership of Submarine Cable in the Indian territorial waters.

Further, it is submitted that this option will promote diverse options for submarine cable footprint in India and ensuring that cable system/CLS is operated smoothly without any service interruptions. In addition, a detailed regulatory framework should be created so that ILDOs, not having interest / stake in consortium but only submitting undertaking about owning assets in Indian territorial waters and controlling the CLS in India to become landing party for all consortium members of the cable systems. Such ILDO should be an experienced and serious ILDO operator in managing Subsea Cable systems and able to showcase its commitment towards successful implementation, managing all ILDO license obligations, operation and maintenance of the cable systems as part of the approval applications. This framework can be also used to facilitate sale of dark fibres on the submarine cable system to other eligible IITEs thus ensuring their commitment for the long-term operations of the Submarine Cable system.

Q.3 Would an undersea cable repair vessel owned by an Indian entity help overcome the issues related to delays in undersea cable maintenance? Please provide justification for your answer.

Tata Communications Response:

Undersea cable maintenance as mentioned in para 2.15 of TRAI consultation paper is a very complex operation entailing prior multiple approvals. The proposed solution of having an undersea cable repair vessel owned by India entity is appreciated but the same would not address the complete issue. Besides setting up an Indian flag Ship, few other areas need to be addressed to overcome the current challenges faced for timely cable repair from Foreign ships: -

- We need to investigate the reasons for this delay and try to address that. For e.g., in India, cable repair permit process takes approx. 4 to 8 weeks, however other countries (Egypt, UK & USA) who even though don't have their local flagged ship are providing repair permission in less than ~3 days. Further with the change in maritime belt from 12 nautical miles (nm) to 200 (nm) in India, approval permit process has become furthermore complex and time consuming. The complexity in the permitting process which was earlier limited to 12 NMs (very limited fault occurring instances in this area) is now applicable to 200 NMs where most of the cable faults occur thereby requiring the entire complex permitting process to be followed for almost all cable faults.

- There should be an ease of “permitting and approval” process to specifically improve repair completion lead-time while complying with legitimate interests of Government and other stakeholders. Delay in repair of a damaged cable due to prevailing process of acquiring approvals from various Government authorities like customs, navy, DG shipping, ONGC, & actual port clearances (4-8 weeks) besides the long lead time for clearances with MOD/MOHA followed by the DOT to release the clearances and that leads to delay and prolonged nonavailability of essential telecom services and increased repair costs applicable for all the cable repairs most of which falls within 200 NMs, This has direct/indirect impact on economy. Repair of a damaged cable in prevailing process has Significant Leadtime in acquiring approvals from various authorities and that leads to delay and prolonged nonavailability of essential telecom services.
- Another big problem facing the Indian submarine cable industry is the treatment of installation and maintenance cable ships that come into India from overseas. It seems that there are custom issues faced by these foreign repair ships in terms of Exclusive Economic Zone vis-à-vis Indian territorial water jurisdiction. One of the vendors whose cable ship was charged an atrocious customs duty has already stated it will no longer to business in India. Another vendor’s cable ship was impounded for several months, and one of the ILDO had to bail out the ship by posting a bond worth of millions of dollars. Tata Communication recommends to review existing custom issues and take necessary action for further simplification for handling of submarine cable repair and installation cable ships.

The issues above can be addressed if below recommendations are considered:

- Considering Submarine cable systems are critical infrastructure, Maritime belt should be brought back to 12(nm) for purpose of laying/ownership of cable by ILDO and repair/maintenance operations. In addition, entire approval process should be made through Online portal with minimal human interference and zero paperwork. Presently, only document submission facility is available through online mode.
- Naval and Customs clearance typically takes one-week time. To save on time, ONGC clearance being an operational clearance, can also be obtained in parallel. Alternatively blanket/advance clearance for submarine cable corridor up to 200 NMs could be made available from ONGC with requirement of only intimation to ONGC before actual commencement of the work.
- For a typical cable repair there are total 11 permits and approval requirements. In this regard, other than Naval clearance/ Customs/ONGC clearance at port, all other permits should be made "pre-permits" so that the Telecom Operators can obtain them well in advance for a longer period of not less than one year.
- Auto renewal option should be available for MOD & MOHA clearance if there is no change in the data provided in the original request. Also, option of taking approval for only incremental changes can be considered. MOD & MOHA approval and other associated approvals to be provided in stipulated timelines i.e., 2 months.

- Alternate way of doing this is by providing subsidies to the ILDO's for forming a consortium to own a cable ship with Indian Flag stationed at India port and allowing depot space for spares management and continue with the existing approval process for Indian flag ship. This model is already running successfully in Asia Market like Singapore, Philippines, Indonesia etc.

Further, there is a big concern related to high cable cut incidents due to fishing activity in the Indian territorial waters. Almost all the cuts in the EEZ zone (between 30 Kms to 150 Kms) are happening due to fishing activities. Presently we don't have any coordination with Fishery department / Fishing communities. In this regard, we suggest the following: -

- Guidelines and advisory to be issued to other seabed users like Fishermen communities, Fisheries Commissioner, Shipping, Gas and Pipeline industries and other related industries to safeguard the submarine cables from damage so that a channel is established for information sharing between the Fishing entities, where-in they are informed about submarine cable routes.
- Damage to sub-sea infra should be considered as damage to Critical Infrastructure of national importance and taken strictly under the Indian laws. Some guidelines should be issued.
- Cable routes should be demarked as no fishing zones. RPLs (Route Position Locator) – Coordinates details) can be shared by TSPS for this purpose. Moreover, as the cost of restoration is considerable, accountability should be fixed in case any damage happens to cables due to negligence by some entity.
- Cable protection zones and Safe Corridors can be created along the sub-sea routes to restrict high-risk activities by other sea-bed users which can potentially damage the cable systems. Since most of the sub-sea fault/damage occur near shores by fishing/anchoring/trawling, stringent regulations on these restricted zones within 200 NM for activities endangering the subsea cables integrity.
- Specific measures to protect subsea cables integrity from NON AIS vessels specifically within 200 NM EEZ. Fishing, trawling and other activities to be under rules, governance of Indian Coast Guard and compliance of non-anchoring Zone.
- Appropriate Maritime/Port Authorities should be advised to monitor activities carried out in and around the cable route (cable corridor) to avoid any potential threat or risks to ensure integrity of the sub-sea cables is maintained. There should be guidelines for daily management of non-anchoring/fishing-zone by Indian Government/Maritime authorities.
- Since sub-sea cable are critical Infra of national importance, Coast Guard/Navy can also be engaged for periodical patrolling of the submarine cable route.
- One of the most important factors for timely restoration of undersea cable network faults are closing the requisite permits in defined timelines. Though we have guidelines against permit approvals, but we are not sure about their necessity. For e.g., the procedure we follow under

“Temporary Importation formalities” for foreign repair vessels and its goods, we tend to import the entire ship and a bond of entire ship value is sought from cable ship. There is a requirement to standardize this process as this collectively takes around ~30 to 45 days. In addition, there is a need to relook at the vessel conversion approval process as different ports have different rules for this. For example, in Chennai, vessel conversion and importation are carried out simultaneously; whereas, in Mumbai, the vessel is not converted until importation is complete and the total duty amount has been deposited with the customs authorities.

Q.4 If the answer to the above question is yes, then please suggest possible mechanisms along with detailed justification and financial viability analysis for implementing this proposal.

Tata Communications Response:

- Government has implemented domestic subsea cable (Chennai-Andaman Nicobar) – CANI and is in process of establishing Kochi-Lakshadweep (KLI) cable system. These domestic subsea cable systems uptimes shall be very crucial in providing uninterrupted services for these islands in future and having an Indian Flag ship to manage them along with other cable systems landing in India becomes important for country.
- Considering maintaining and operating a Cable Repair Ship is an expensive proposition and include multiple approvals from various Govt agencies, one of the possible mechanisms for that can be formation of a Govt owned company owning and maintaining this ship. This company should be allowed to provide ship for cable systems operations within Indian Nautical waters to all the public and private cable systems landing in India on chargeable basis with all necessary approvals pre-established. Amount of time saved in repairing the cable system via this ship would be an incentive for all Indian operators to take its services on commercial basis. Since uninterrupted access to Broadband services has become like Fundamental Rights being guaranteed to the Citizens by the State and is considered as a lifeline of the economy, therefore to ensure Submarine Cable system should be uptime all the time, investment in the Indian flag ship to support such repair work can be done from the USO fund.
- It is recommended that an industry wide committee should be formed comprising Government representatives and all major submarine cable operators in India to discuss and create a detailed framework and financial viability models for this Govt owned ship and submit its recommendations for further evaluations and policy formation.

Q.5 What measures should be undertaken for promoting Domestic submarine cables for connecting coastal cities in India? What limitations are being posed by existing licensing and regulatory provisions for laying domestic submarine cables in India? What are the changes required in the existing licensing and regulatory framework? Please answer in detail with the supporting document, if any.

Tata Communications Response:

- Allow domestic or NLD connectivity over subsea route – Presently, Government is promoting utility companies to monetize non-tariff revenues, such as offering NLD fibre over power lines, gas pipelines etc. to meet demand for new data-centric networks. Currently, subsea cables are landing in various cable landing stations in 5 cities across India, in Mumbai, Chennai, Cochin, Tuticorin and Trivandrum. There are more new cable landings are envisaged in future with Mundra, Vizag and Digha (Calcutta) maybe connected to subsea cables soon. In this regard, Subsea cables offers more reliable service and network availability and compliments domestic NLD network strength and reliability, many examples worldwide of this; Palapa Ring (Indonesia), Indigo (Australia), TGN-Pacific (USA), etc. Therefore, Subsea route should not be confined to Indian territorial waters or EEZ and integrated LDOs (Long Distance Operators having both NLD &ILD license) should also be allowed to use subsea route for domestic connectivity. This will also help in bringing down apportioned cost of submarine cable system when it is used for both international and domestic bandwidth purpose. Additionally NLD licensee can be explicitly allowed to establish, own, maintain and operate domestic submarine cable connecting two or more cities on the coastal line and CLS solely to cater NLD traffic.
- A submarine cable should not be declared domestic or international. However, it may be mandated to have dedicated cable pair for domestic and international traffic.

Domestic submarine cables connecting coastal cities and Data Centers is an option in a few geographies as mentioned in para 3.2 of the consultation paper.

- Existing license & regulatory provisions limits submarine cables and required CLS approvals to ILDO license holders only with no provision existing for integrated LDOs using some of fibers in existing cable systems for only domestic traffic within the same cable landing station and extend to other parts of the country. The definitions/policies around Security Monitoring, domestic traffic traversing international waters (leaving and coming back to country) and non-availability of Indian flag ship for any repair requirements are few other limitations of existing policies /regulations limiting laying of domestic subsea cable systems in India.
- An open approach in permitting domestic subsea cables and developing this infrastructure across the country's coastline should be explored by easing existing policy framework & guidelines for that need to be developed as existing licensing and regulatory provisions does not exclusively cover the relevant provisioning. As proposed in para 3.4 and 3.5 of the consultation paper, the guideline needs to be implemented ensuring traffic remains domestic. Some of the recommendations are provided below:
 - Existing ILDOs/NLDOs should be encouraged to use existing CLS/BMH infrastructure to dedicate a few fibers only for domestic traffic in existing/upcoming cable systems provided fibers carrying the traffic for both domestic and international should be kept separately. A different Domestic CLS should not be mandated, instead a physical separation of terminating equipment for domestic and international traffic should be maintained.
 - Connectivity to International side should be allowed to increase the utilization and viability of these domestic subsea cables connecting coastal cities to the global Submarine map.

- Regulation provisions of ensuring domestic traffic originating and terminating within India, without going out of country boundaries should be simplified and many times these domestic cables would traverse beyond Indian Nautical waters.
- In this manner, use of CLS / BMH infrastructure for both domestic and international cable systems together may also lead to apportion of the overall cost of landing submarine cable system thereby making available international bandwidth on competitive rates to the end users / entities.

Q.6 Are any limitations being envisaged in respect of getting permissions and/or associated charges/ fee for laying domestic submarine cable and its Cable Landing Station? What are the suggested measures to overcome limitations, if any?

Tata Communications Response:

Currently, there is no regulatory framework / guidelines for operating and building domestic submarine cables in India. It is suggested that a domestic submarine cable build can also be done like a consortium with interested NLDOs/ILDOs participating in that with ownership stakes. ILDOs can be allowed to use their existing infrastructure of CLS/BMH to build these domestic cables and carrying only domestic traffic in addition to exploring use of existing submarine cable systems for domestic traffic purposes, subject to technical feasibility.

There should not be need of any security monitoring requirement for domestic traffic and regulation for domestic traffic not leaving the territorial boundaries of the country.

Q.7 Will it be beneficial to lay Stub-Cables in India? If yes, what should be the policy, licensing, and regulatory framework for laying, operationalizing, and maintaining the stub cable in India? Please answer in detail with the supporting documents, if any.

Tata Communications Response:

Laying Stub-cables may not be beneficial, as potential landing points are to be identified when these cables are planned. Additionally, use of Stub cables to land multiple different subsea cables into country via separate approvals would not enable required diversity from BMH to Stub location (undersea) and any cut in this segment in Indian territorial waters would impact major traffic entering into India. **Stub Cable would become single major point of failure in case of disruption.** Also, for ILDOs it will be difficult to forecast such requirements on how much infrastructure to lay upfront along with a new cable and leave it for any potential future use. For instance, Falcon Submarine Cable system comprising of the stub cables have been remain unutilized for more than ten years thereby making the overall business case commercially unviable.

Alternatively, it will be more beneficial if the licensing and regulatory requirements is eased out as below:

- Permits to be provided to ILDOs based on some basic information only such as landing points, overall project cost and share of ILDOs in consortium/ Cable, if any.

- MOD/ MOHA clearance for shore end landing facilities such as ships and crew to be made on fast track
- Other environmental clearance should be made on fast track
- Pre survey of strategic landing points should be available
- Single point of clearance for all above with TAT

Further, a policy intervention is required related to decommissioning of existing submarine cable system after end of life. In case, if the stub/ part of such submarine cable in the Indian territorial waters is still in good condition, there should be a provision to permit usage of such stub/ part of this submarine cable including its Cable Landing Station (CLS) in India for a new submarine cable system basis existing permissions only which were obtained from the multiple authorities and subject to filing of appropriate intimation in respect of new submarine cable system which is proposed to be commissioned in India using such stub / part of the existing submarine cable and its associated CLS in India.

Q.8 What challenges are being posed by existing telecom licensing and /or any other framework for establishing terrestrial connectivity between different CLSs in India? What are possible solutions to such challenges? Please support your answer with detailed justification.

Tata Communications Response:

Currently we don't foresee any challenges posed by existing telecom licensing/other frameworks in connecting terrestrial links between the Cable Landing Stations and/or their designated MMRs. Capacity of every cable system is accessible via MMR of the cable system, which can be extended via terrestrial link to any other Cable system MMR in the country to connect these capacities. However, there is no common platform currently enabled by TRAI to address any concerns raised by ILDOs related to this access in MMRs, though frameworks states that this access should be provided on non-discriminatory manner by each Cable System owner. (For example, Tata Communication has been requesting to access CLS colocation and MMR for BBG & AAE1 cable system at the MMR facility by the respective cable landing station owners for quite some time and we have been always responded that access cannot be provided due to reason of no space availability).

In addition, while there is a framework in place to connect multiple subsea cable capacities via domestic links from their MMRs, there is no policy framework in place promoting connectivity between multiple CLSs at SLTE level (before capacity landing), which may enable quick restoration options of capacities between cable systems in case of the failures.

Q.9 In comparison with other leading countries, what further measures must be undertaken in India for promoting investment to bring submarine cable in India? Please answer in detail with the supporting documents, if any.

Tata Communications Response:

The TRAI consultation paper has proposed expansive and varied options to consider for the promotion of investment in submarine cable systems. Below are key highlights which can be referred as a synopsis of suggested improvements: -

1. Easing the permitting and related clearance for subsea landings and repairs for ILDOs and ensuring that ILDOs have minimum interests in the cable system to provide services in the country.
2. Indigenous cable laying ships and related expertise within India.
3. Development of diversified cable landing points to avoid a single point of failure as evident in western coast.
4. Aligning with Govt strategies to promote industrial growth in other coasts of India, especially on Domestic Subsea Cables.
5. Creation of Cable protection zones and Safe Corridors along the sub-sea routes to restrict high-risk activities by other sea-bed users to minimize damage to the cable systems.
6. Definition of Indian Territorial Waters (12NM vs 200NM) needs to be clarified for purpose of laying/ownership by ILDO/repair & maintenance.
7. Sub-sea cable should be declared as critical infrastructure and guidelines/rules to be framed protect it and action against anyone who tries to harm it.

In addition to above, we would also to submit that in order to recover massive investments, the submarine cable system owner consortium/private owner should also be allowed to sell dark international fibre pairs to eligible Indian International Telecommunications Entity (IITE) from the CLS onwards which such eligible IITEs can light up at their PoPs. Eligible IITEs buying dark fibre should require only LIM demonstration and their PoP should not require rigorous approvals as are required for building a new CLS. This would help greatly in proliferation of international bandwidth and would make bandwidth and cable system cost cheaper.