



To,

Shri Sanjeev Kumar Sharma

Advisor (BB&PA)  
Telecom Regulatory Authority of India  
Mahanagar Doorsanchar Bhawan  
Jawaharlal Nehru Marg,  
New Delhi 110002

Subject: Comments on Consultation Paper on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India"

Dear Sir,

At the outset, we would like to express our sincere gratitude to the Authority to bringing out this Consultation Paper for discussion on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India." We appreciate the Authority for its regular efforts in simplifying the processes and keeping them more aligned to the industry and latest technologies. These efforts would certainly be the much needed steppingstones in attracting more submarine cables to India and advance the journey to achieve national objective of Digital India.

Please find attached response of Adani Data Networks Limited. on the TRAI consultation paper Consultation Paper No.15/2022 dated 23.12.2022 on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India".

Thanking you,

Yours' Sincerely,

For Adani Data Networks Limited.

Suvesh Chattopadhyaya



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## Consultation Paper on Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India

Q1 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.

ADNL Response:

We do not see any major limitations being posed under existing licensing and regulatory provisions for laying submarine cables and setting up CLS in India. However, there is expectation that process efficiency of one-stop-shop arrangement and timelines should improve.

We suggest new regulations for laying submarine cables to establish multiple cable protection zones and corridors in Indian waters that prohibits specific activities that pose risk to submarine cables – including fishing, anchor drop and drag and dredging within fixed geographic areas. While planning the cable protection zones, two factors need to be considered:

1. Ensure provision of sufficient spatial separation from other submarine cables for unambiguous identification, cable laying, and maintenance.
2. Avoid closely spaced clusters of submarine cable routes and landings, which magnifies the risk that a single natural or man-made event could damage multiple cable systems. This calls for promoting multiple cable landing zones and making it simpler to setup CLS, fronthaul and backhaul connectivity.

Q2 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.

ADNL Response:

1. We suggest that Para 2.10 (i) & (ii) to be made applicable without mandate for minimum investment percentage.



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2. We suggest that Para 2.10 (iii) to be avoided due to issues pertaining to non-compliance of Indian Regulations. The ownership of the submarine cable in Indian territory (wet and dry segment) to reside with ILDO under whose license, the cable is being landed.

Justification:

Para 2.10 (i): We suggest minimum requirement of ownership of the assets is to remain till India Waters only. Defining % ownership in consortium would not be viable option in new consortium models due to several reasons including

- a. Size of the submarine project (Route Kms). For long transcontinental cable systems, the % ownership of individual consortium member would be small; while on the other hand, in relatively shorter cable systems like those from India to Singapore, the % ownership is likely to be higher, for the same size of investment.
- b. Investment opportunity available in consortium (minimum investment unit or MIU). The MIU could be full fiber pair, fractional fiber pair or certain capacity holding. Individual consortium members would invest in one or more MIU based on their business plans. In fact, it could also include the branch from the trunk for landing in a certain country.
- c. Participation interest by ILDO which is dependent on CLS ownership, IPLC or IPT traffic and business forecast.
- d. Segment wise investment options available in new consortium investment models. New submarine cable systems in making or those being planned allow consortium members to selectively invest in the cable span of their interest.

Para 2.10 (ii): Control over the submarine cable assets in Wet (India Waters) & Dry segments will ensure that CLS owner will be able to perform all the obligations and fulfill local and regulatory compliances required under ILD license requirements. In new Submarine cable systems being built or planned, investments are being done basis full or fractional fiber pair (FP) ownership. // The ILDO may choose not to join the consortium, but it may





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execute landing party agreement with the consortium to provide managed landing services to individual FP owners of the cable system. For the sake of clarity, the ILDO would be the importer on record for all the equipment (e.g., PFE) and will have control of the assets. The right and control on the asset would be sufficient to comply with permitting and licensing requirements and regulations. ILDO will have to give self-declaration to undertake all the licensing and regulatory compliance as per directives of Indian authorities.

Para 2.10(iii) We suggest the ownership or landing party agreement to be necessary for an ILDO to ensure the control and further submission with local and regulatory compliance.

**Q3 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.**

ADNL Response:

We strongly support the idea of India Flag vessel to be used for submarine cable fault repair, facilitated by customs and tax regulations to make it practically feasible leading to viable business model for interested parties. International cable ship operators are reluctant to send their ships for repair in Indian waters due to complex regulations around customs and taxation and ask for exorbitant charges. As a result, India is ranked notoriously low when it comes to time taken to repair submarine cables. This adversely impacts the perceived reliability of submarine

cables and discourages development of new submarine cable systems. Having India flagged vessel stationed in Indian ports will bring down the time for mobilization and rectify fault and restore service. It will make India self-sufficient for submarine cable repair with swift restoration and remove dependency on overseas ship operators and that is aligned to India's vision of

self-reliance. It will also lead to significant cost saving and bring ease of doing business.

Justification:

- a. India flagged vessel will help reduce the repair work to few days instead for current turnaround time (TAT) of 45-60 days which include confirmation of ship availability by



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- overseas ship operators, transit time from Middle East or Singapore (Base location) and further time required to do security clearances, Customs and other formalities.
- b. Reduction in repair time will improve overall availability of the cable system and subsea connectivity.
  - c. India flag vessel will bring down the overall cost of restoration (mobilization & repair charges) and avoid foreign currency outflow.
  - d. Aligned with India's vision of Self-reliance and creating new industry and job opportunities.

**Q4** 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.

ADNL Response:

Submarine cable repair system consists of repair ship retrofitted with specialized equipment and trained technicians, depot facility to store spare cables, associated equipment like repeaters, branching units, ROADMs, etc. Providers with access to seaports and experience in operating ships can come forward to offer submarine cable repair and even cable laying services. With 17 cable systems landing in India and more than five (5) new cable systems in making, it provides significant repair and maintenance opportunity.

Mechanism & Justification:

1. Joint consortium of ILDO operators or Individual ILDO or any private entity can charter a repair ship based out of an Indian Port.
  - a. For existing cable systems, long-term maintenance contracts are already in place with existing international operators for submarine cable repair services. The Indian flag repair vessel in this case can provide services to these international operators to manage fault repair incidents in India Waters and around. This will not only bring down the repair time but also lower the cost of repair.



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- b. For new cable systems in making, the Indian operator with India flagged ship can directly contract with consortiums / private submarine players for long term maintenance

contract with committed service levels and eliminate uncertainties and apprehensions of dealing with international repair ship operators.

2. Another critical prerequisite is custom free zone to setup and operate a Cable Depot to store the spares that are required for submarine cable repair. Currently, there is no cable depot in India majorly as heavy customs duty is levied on the stored spares. This makes the overall proposition commercially unattractive. As a result, depots in Oman/UAE/Sri Lanka/Singapore are being used to store the spares. It is therefore recommended that only the spares items that are consumed or deployed for the repair work should come under the ambit of customs duty. Further the depot should be either designated as bonded area where customs duty is not applicable, or the depot should be setup in bonded area.
3. Having depot in India avoids the India flagged repair ship from sailing to overseas depots to pick up spares and return before start of restoration activity, which further prolongs the repair time and service disruption.
4. India Flag vessel with trained Indian Crew would also help in addressing delays arising from permits to be acquired from MoD and MOHA approvals, which are otherwise necessary for foreign ships with foreign crew,
5. Another area of opportunity would be using India flagged ships for new submarine cable laying. However, this would require different category of ships which are bigger in size with specialized equipment.

**Q5** 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





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framework? Please answer in detail with the supporting document, if any.

ADNL Response:

1. Define domestic submarine cables being used exclusively for national long-distance connectivity to be governed by provisions of NLD license. These cables should not have any direct international connectivity through branching unit or any other means.
2. Simplify the permitting process when applying for cable landing in multiple states, preferably with set of common guidelines for all states and UTs.
3. Clarify if existing international submarine cables that land in multiple Indian cities can be used or domestic subsea connectivity and if LIM setup would be necessary in this scenario.
4. Clarity on license requirement for laying the submarine cables for connecting Indian port cities where cable route may extend into EEZ or even international waters. Notably restricting cable laying in shallow waters increases the cost of cable laying and makes it vulnerable to cable cut from fishing and anchoring.
5. Setup domestic submarine cable repair facility with India flagged repair ships and depots, as discussed further in response to Que no 4.

**Q6** Are any limitations being envisaged in respect of getting permissions and/or associated charges/ fee for laying domestic



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submarine cable and its Cable Landing Station? What are the suggested measures to overcome limitations, if any?

ADNL Response:

Given the scope of work for domestic submarine cable is largely similar to that of international submarine cable, the existing permitting framework is expected to work for domestic submarine cables, with the exception for the requirement of LIM setup necessary for international submarine cables. The following provisions are recommended in this context -

1. Streamlined process and single window permitting to be provided for domestic & international submarine cables traversing multiple cities and states.
2. Promote web tracking of permitting process with SMS update for progress milestones with well-established process and timelines.
3. Clear guidelines that traffic on Domestic submarine cables to be treated under NLD license.

Q7 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.





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### ADNL Response:

It would be beneficial to lay stub-cables along with new submarine cables. This would improve time to deploy new systems including permitting, cost of shore end laying and minimize disturbance to the fragile marine ecosystem, and encourage development of new submarine cable systems, international and/or domestic. There are several developed countries including Singapore & US that encourage deploying of Stub-Cables along with new submarine cable systems.

### Framework:

1. Permitting and laying of Stub-Cable to be governed under ILD license
2. ILDO to provide the information to the regulator on Stub-Cable along with PIP application of primary submarine cable
3. Permits to be obtained for the Stub-Cable during connectivity of the Stub-Cable fiber pairs to one or more new Submarine cable and/or individual fiber pair owners.
4. New submarine cable owners to be responsible for regulatory compliances post the integration of stub cable fiber pairs for end-to-end cable system and its operations

**Q8** 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.



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### ADNL Response:

Existing telecom licensing framework does not pose any restriction to interconnect CLS. Primarily its frequent fiber cuts between CLS due to development activities that lower reliability and create need for multiple fiber routes making such connectivity expensive.

### Challenges:

1. Fiber cuts in terrestrial fiber network due to developmental activities done by governmental and private agencies. There is no synchronization between agencies and no accountability of the damage cause to fiber infrastructure.
2. Non availability of express utility corridors connecting Cable Landing stations / Data Centers.

### Suggestions

1. Designated utility corridors to be developed for connecting multiple Cable Landing Stations/Data Centers within the city.
2. It is suggested to have single agency made accountable to build and operate the corridors for control activities that can damage the utility corridor and the optical fiber cable laid in it.

**Q9** 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.



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### ADNL Response:

1. Create ease of permitting to promote cable landing in multiple seashore locations to decongest cable landing and increase cable route diversity.
2. Create one or more near-shore cable protection zones as may be determined by number of new cable systems in making and those planned with long term horizon.
3. Streamlined process and single window permitting to be provided for domestic & international submarine cables traversing multiple cities and states.
4. Establish single window facility for submarine cables—for expeditious permitting as well as addressing matters related to installation, repair, and protection of submarine cable system.
5. Create monitoring agency to track activities of defaulting parties that damage submarine cables with empowerment to impose substantial penalties on defaulters.
6. No requirement of LIM setup for transit traffic (non-India terminating pass through traffic between any two connected submarine cables in same or different cable landing stations.