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To,

Shri Sanjeev Kumar Sharma, Advisor (BB&PA), TRAI, New **Delhi**.

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No. BSNLCO-RGLN/25/10/2022-REGLN dated 06.02.2023

Sub: Comments of BSNL on Consultation Paper on Consultation Paper on Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India dated 23rd December, 2022.

Kindly find the comments of BSNL on the above mentioned Consultation paper as below:

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.

BSNL reply: There are several clearances required from multiple entities for setting up of CLS or laying of submarine cables. Time required for obtaining MOD and MOHA clearances continues to be a huge challenge for timely completion of any project. Recently, all projects are facing huge time delay in obtaining SPL (Specified Period License) from DG Shipping leading to loss of time and massive cost escalation due to vessel standby. Environmental clearance and EIA assessment approvals require more than a year on an average.

It is therefore requested to consider single window clearance for all key approvals considering importance of submarine cables and need for timely implementation of projects in view of huge growth in data consumption. Requirements like mandatory deployment of Indian crew should be done away with as the project requires specialized crew which are not available in the country.

The ownership of Indian ILDO should be minimum 25% in all such submarine cable that goes via Middle East. In other sub marine cables ownership can be much less. It is because nearly all international sub marine cables from India goes through middle east, 25% stake means leverages in bandwidth and better control on operations. For other prospective cable landing stations, which do not go through Middle East, the requirement of stake from Indian ILDO may be less than 25%.

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.

BSNL reply: Submarine cable projects are high value projects and typically run into hundreds of million USD in value. It is difficult for most ILDOs to contribute a substantial value of the investment required. Most of the investments into major international submarine cable projects is coming from OTT players and none of them hold ILDO license in India. Therefore, they typically look for an Indian counterpart for partnership. Owning the assets in territorial waters does not make any difference since the submarine cable system is a continuous piece of hardware. However, from any security related concern that may arise, the system installed in the CLS and the CLS itself must be under the control of the ILDO.

Condition 2.10 (iii) is recommended.

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.

BSNL reply: For repair of undersea cables, vessel is just a part of the overall requirement. Apart from the vessel, other essential elements like trained resources, availability of necessary equipment for repair and provision for a depot for storage of spare cable and cable components like repeaters, UJ kits etc. are important. Unless this entire ecosystem is established within the country, availability of only a repair vessel owned by an Indian entity will not make any difference. Huge amount of investment is needed for owning and operating a cable repair vessel and to establish the ecosystem required. This may be the reason that all currently available submarine cable repair facilities are owned and operated by large consortiums wherein multiple stakeholders pool their resources. However, considering the growth in the industry and number of deployments taking place in and around Indian region it would be a welcome step if an Indian owned and operated ecosystem can be established either in collaboration with existing players or independently, provided the necessary standards can be maintained.

Indian owned vessel for Indian waters is possible when sufficient weightage in stake is kept by Indian partner in the consortium. This will facilitate the clearance processes. Moreover majority of faults are within short distance from CLS which would inevitably be in Indian waters, thus fault rectification will be faster.

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.

BSNL reply: As mentioned unless a complete ecosystem is created, availability of an Indian owned cable repair vessel will not be sufficient. Matters related to constructing a cable depot in a suitable sea port (which essentially needs to operate as an SEZ since

repairs will happen not only in territorial but international waters as well) and overall investments and a suitable business plan is required.

Fast rectification will result in revenue saving for those number of days saves and better availability will attract further bandwidth hungry content providers and data centres that will offset the cost involved in maintaining such Vessel.

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.

BSNL reply: Submarine cables are a reliable medium for high capacity data communication. Unlike terrestrial networks submarine cable systems suffer far lower disruptions due to failures or cable cuts and can support much higher capacity than terrestrial systems. There are however, couple of drawback or challenges involved

(1) Initial cost of construction is typically higher than the terrestrial systems.

(2) Current regulatory provisions allow only international submarine cable systems which need to be modified to include domestic systems and allow ILDOs or NLDOs own and operate domestic submarine cable systems. Necessary provisions can be incorporated to avoid linking of these systems directly to any international system.

Considering the fact that India has a long coastline and major cities, urban hubs and other strategic installations exist all along the coast line establishing a submarine cable network along the coast for domestic connectivity is not only the need of the hour but an essential requirement and must be considered seriously.

Domestic submarine cables are financially viable to connect the Andaman & Nicobar as well as multitudes of isles of Lakshadweep with mainland as the alternate option of satellite based systems are very costly. The use of submarine to connect the locations which are otherwise connectable via terrestrial link will be a costly proposition.

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

BSNL reply: No separate regulatory provision for laying of domestic submarine cable network is in existence. Therefore, this issue needs to be addressed and appropriate regulatory framework needs to be promulgated. 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. Moreover, the permission/clearance process will have to be streamlined.

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.

BSNL reply: Stub-Cables are laid with the intent for enabling future submarine cable system expansion with ease and are frequently put into place in several International cable systems for this purpose. The Stub Cables deployment in Singapore as mentioned in the document are done as a result of limitation in available landing space in already overcrowded facilities in Singapore which is not the case in India. Deployment of independent Stub Cables in India with the expectation of connecting to a future system may be worth considering in Mumbai and Chennai wherein most submarine cables in India are landing. However, at other locations it may not be necessary. No special consideration in terms of licensing and regulatory framework is necessary for such deployments other than those already in place.

Stub cable is helpful because it obviates the cost in building infra rather existing infra can be used as there is a provision to extend the cable to that place. But such stub cable should be owned by a totally Indian ILDO/LDO because otherwise it would be giving licence to ILDO to lay cable in our land which can be used for other purposes like leasing fibres to others, de-boarding foreigners frequently in the name of maintenance. This would involve security risk.

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.

BSNL reply: CLSs are always connected to the terrestrial network. However, it seems the question suggests direct connectivity between CLS of two independent owners as means of providing additional redundancy. Current regulation is not clear whether such connectivity is allowed, besides it requires the concerned owners/operators to agree upon commercial modalities for allowing traffic over each other's system in case of any failure. Security concerns could also crop up in such arrangements. The requisite instructions for such connectivity may be issued.

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.

BSNL reply: The regulatory environment related to implementation of submarine cable systems in India continues to be difficult if not one of the most difficult globally. The number of approvals required and time/cost required for such approvals is a big impediment towards encouraging investment in the domain. We should expeditiously address all applicable regulatory and clearance related issues and make them business friendly. As a quick reference following is a typical list of Approvals/Clearances required by ILDOs for a typical Submarine System (List is not exhaustive):

- 1 Permit in Principle (Project Approval from DoT)
- 2 EIA & CRZ Approvals
- 3 Approval from Coastal Authorities
- 4 MOD Clearance For Vessel
- 5 SPL from DG Shipping for Vessel
- 6 INSA NOC for Vessel
- 7 NAVAREA and Naval Security Clearance for Vessel
- 8 MoHA Clearance for Crew
- 9 Vessel Import & Re-Export (Custom Duty)
- 10 Vessel Conversion and Re-Conversion
- 11 ROW permits for Land Route
- 12 Local Approvals for Civil Constructions

Establishing a single window clearance will go a large way in encouraging global as well as domestic players to develop capabilities of submarine cable laying as well as repair within the country.

Infra development at prospective sites by Indian partner of the consortium of the existing infra should be readied at existing location so that CLS to that station end link can be created well in advance. Direct dialogue with CDN players and DCs to know the exact requirements regarding location and connectivity.

(Ved Prakash Verma) DGM (Regulation-II)