

February 10, 2023.

To
Shri Sanjeev Kumar Sharma
Advisor (BB&PA)
Telecom Regulatory Authority of India
Jawaharlal Nehru Marg, New Delhi-110002.

Subject: Comments on Consultation Paper dated December 23, 2022 “Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India”.

Dear Sir,

Please find attached comments of GCXG India Private Limited on the consultation paper dated 23-12-2022 on “Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India”.

Thanking You.



Pradeep Kumar Bhat
Authorised Signatory

Enclosure: as above.

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.

1. The License conditions of Standalone ILD, UL (ILD) or ISP (with international gateway permit) , regulates the establishment and operation of submarine Cable Landing Stations in India and TRAI vide The International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2007 (5 of 2007) has opened the bottle neck created by CLS owners for access of International Capacity at CLS and further TRAI by (a) The International Telecommunication Access to Essential Facilities at Cable Landing Stations (Amendment) Regulations, 2012 (b) The International Telecommunication Cable Landing Stations Access Facilitation Charges and Co-Location Charges Regulations, 2012 (c) The International Telecommunication Cable Landing Stations Access Facilitation Charges and Co-Location Charges (Amendment) Regulations 2018, has fixed the access charges for accessing CLS and thereby abolished the unfair practises adopted by CLS owners for accessing the International Capacity at CLS.
2. The aforesaid measures by DOT and TRAI are highly lauded by telecom industry, as these are long pending demands of telecom services provider and adoption of such measures has abolished the virtual monopoly of CLS owners over the ILD segment and help to bring a level playing field for all service provider for accessing international capacity at CLS and substantial reduction of the access charges for accessing international capacity on submarine cable benefitted the customers and it fuelled the growth of telecom and is a welcomed initiative towards the ease of doing business in the telecom industry.
3. The regulations of TRAI, are addressing the access at CLS and fixing tariff for accessing the capacity at CLS. These regulations does not facilitate or regulate (a) the installation of submarine cable system, (b) reuse of retired subsea network element or sharing existing submarine /CLS infrastructure and (c) even does not address the issues related to repair of the submarine cable, hence it is pertinent to say this segment of the telecom industry is not adequately addressed by the authorities.
4. In the absence of a clear policy or guidelines the submarine cable providers are facing challenges to get the approvals/permits for the installation of cable systems or even the approval or permits for repairs of submarine cables post installation. At present the service provider need to take number of approvals from central and state agencies, which is time consuming and causing delays in execution of project, sometimes the delay to get approvals may lead to escalation of cost for laying the cable. This is same in the case of repairs, not getting approvals on time, delays the repair of damaged cables and restoration of network.
5. Therefore, instead of amending the telecom license,
 - (a) authority shall formulate a policy and guidelines to streamline the process of getting approval for laying the submarine and its repairs post installation and mater incidental thereto such as sharing of infrastructure among ILDO and others measures that promote or encourage submarine telecom industry;

- (b) it is desired to have simplified and uniform online process for getting approval with a single window time bound process under DOT and where applicants know the progress of their application. The policy and guidelines shall specify the type or nature of information to be submitted by the applicants for the approvals. This will bring transparency and consistency in the process. TRAI may hold a consultation process for submarine cable provider and ILDO to share their views on the information and data required to grant the approvals.

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.

Presently international submarine cable operators and ILDO's relationship is governed by the contractual agreements mutually agreed by them. These agreements either include, ILDO acquiring stake in the submarine cable or having ownership interest in the subsea network assets in Indian territorial waters and under this contract sometimes ILDO do not acquire stake in submarine cable or own any assets in Indian territorial water but owns and operate cable landing station facility and agrees to facilitate for getting approval for installation of submarine cable and post repair of the cable. Since ILDO and international submarine cable operator are free to agree their obligations and responsibilities under their contract, this benefitted in connecting various cable systems to India. To date ILDO are comfortably positioned under their contracts with submarine cable operator and are earning benefits under their contractual arrangement, this encouraged smaller ILDO's and ISP's to come forward to establish CLS and connect submarine cables to India, therefore, the current ecosystem seems working effectively and shall not call for a regulatory intervention.

If the relationship between the submarine cable operator and ILDO is conditioned with the stipulations specified in Para 2.10 as a part of ILD License, such conditions will interfere with the rights of the parties to negotiate their contract freely and at sometimes ILDO do want to acquire stake in submarine cable nor want to own physical network in Indian Territorial waters, as these additional obligations will burden the ILDO financially as their purpose to set up CLS is to leverage or monetize their ILD network than investing in submarine cable.

Acquiring stake in submarine cable system and owning network assets is a financial burden for smaller ILDO as they cannot afford to contribute the initial capital investment for laying the cable nor they are willing to pay the O &M charges for the capacity they gained by acquiring stake and by owing the subsea asset they have to pay for the maintenance cost for repairing the submarine cable, therefore such conditions will be burden to smaller ILDO's and discourage them from setting CLS, it thereby affect the growth of subsea cable segment.

This conditions will only favour larger ILDO as they have financial backing to acquire stake and own subsea assets and thus create a monopoly for the larger ILDO's in this segment, as they can comply with such conditions, even the submarine cable operator may not wish ILDO to acquire any stake in the system or own asset in territorial water of India, as it may lead to complication, as an when submarine cable operator want to restructure their business.

Therefore, it is preferred not to make any of the conditions of para 2.10 as part of ILD License. With respect to security and other regulatory aspect, following shall be part of ILD License:

- (a) ILDO or ISP (with international gateway permission) can establish the Cable Landing Station in India
- (b) ILDO/ISP should apply for all permits and approval for laying submarine cable in territorial water of India; and
- (c) ILDO/ISP is responsible for Ministry of Home Affairs (MOHA) and Defence approval for maintenance and repairs.
- (d) while, applying for the permits, ILDO should specify its relationship with submarine cable operator and a written certification or letter of undertaking (LOU) shall submitted by international cable operator to substantiate the ILDO's position.

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.

Generally, end to end submarine cable is being repaired by one single contractor including segments of cable in international waters and in the territorial waters of India for better management and to rationalise cost of repair. The repair and maintenance work is carried out and coordinated by the international submarine operator who owns and operate the entire system and have entered the contact with the maintenance contractor for repair and maintenance of the entire system, therefore it is not technically viable for ILDO to deploy separate maintenance contractor for repair and maintenance of the submarine cable in territorial waters of India, hence, we don't see any special advantage, if the repairs and maintenance is conducted by an Indian entity.

The delay in repair and maintenance of the submarine cable is mainly due to time taken for the grant of approval and permits by the government agencies. Various approvals required from central agencies for the repair and maintenance of subsea cables, if some of these approval and permits are rationalised for the life of the cable system and leaving those approvals which need to be taken based on change in the circumstances, the delay be reduced to an extent. Policy and process to be framed to streamline and simply the grant of approval under one single government agency.

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.

No comments.

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

Domestic submarine cables for connecting coastal cities in India is a welcomed initiative, implementation of this initiative shall be by a comprehensive regulatory framework for

governing this segment, in this regard the service provider need clarity on the approvals required from state and central government agencies for laying of cables and the approval required for the repairs post installation , further the framework may specify the governing mechanism for getting consensus from the communities affected and a time bound process for execution of gas/petroleum pipeline crossing agreements. The regulatory framework should have provisions, for compensating the damage to be caused to the cable and a methodology to collect such damages, therefore in the absence of law or regulation in this field, this project may face hurdles in implementation.

The legal framework for the Domestic submarine cable connectivity, to set out single window system for various approval and permits required for such project in a timebound manner. This framework will have the mechanism to resolve the dispute and challenges that may arise from the local bodies, affected communities and petroleum/gas companies during the grant of approval and while implementing the project.

IP-1 provider/NLDO shall be permitted to implement such domestic cable connectivity and sharing of the existing ILD submarine infrastructure to extent possible shall be permitted to encourage this segment , such as space , colocation at CLS and right of way shall be shared with the NLDO to install their equipment's where ILDO network will be separated from NLDO network , this will reduce the cost of the project and save time to implement the project. Infrastructure sharing shall be regulated for fair access and charges for sharing of infrastructure for the domestic cable connectivity. The town planning for the coastal cities shall have sea shores earmarked for laying of dark fibres that can be further extended to connect domestic subsea cables. If required the clause 2.2 (ii) of the NLD license shall be amended to bring clarity on sharing of domestic cable infrastructure and permits with other licensees and IP-1 Provider.

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?

Policy and regulatory framework are required to bring clarity on the permits required from government agencies for laying domestic cable. Consultation with telecom industry will be initiated before framing the policy and guidelines/regulatory framework. Sharing of the existing infrastructure shall be promoted to encourage the laying of domestic cable on cost effective basis. Wherever required the access and tariff for sharing infrastructure shall be regulated for the growth of the domestic submarine cable industry.

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.

Proposal for laying Stub Cable is beneficial for future submarine cable projects. Even Stub Cable will facilitate the branching of the existing submarine cable for additional landing in India. Wherever technically possible, CLS owners are encouraged to install Stub Cable at their existing Cable Landing Stations under their prevailing permits and approval. When, any

approval for new cable system is granted by the authorities, such approval should specify the approval for stub cable, even the new CLS applicants shall be encouraged to disclose the numbers of Stub Cable that can be accommodated in the new CLS, even though their physical availability will be on the demand basis.

Like Stud Cable, reuse of the retired subsea cable shall be promoted, where such reuse is technically feasible. This will be to connect the new submarine cable systems or to create a branching unit by of the existing subsea cable. It will reduce the cost and will save the time for getting the approval and permits for laying the new subsea cable in Indian waters as the reuse of retired cable will be under its existing permits and approval. Regulatory framework is required to encourage the reuse of retired cable.

ILDO who enter contract with the subsea cable operators to use a single fiber pair or agrees to access the unused dark fibre of the existing cable systems, shall be permitted to access the unused dark fibre either at the CLS or in the territorial water. Even regulatory intervention is required to facilitate the use of unused the access of dark fibre otherwise ILDO may restrict such access under the "exclusivity" of its contracts with submarine cable operators. ILDO shall be encouraged to permit other ILDO to access unused dark fibre at the existing CLS by sharing the CLS facilities/infrastructure, right of way and other permits. If sharing of CLS infrastructure is not covered under the scope of clause 2.4 (ii) of the ILD License, then the license shall be amended to include the sharing of permits and approval and CLS infrastructure under its purview, even the obligation of sharing shall be made mandatory. Where required sharing of CLS infrastructure shall be implemented through a regulatory frame work for fair assess and tariff for sharing the infrastructure, otherwise CLS owner are reluctant to share their CLS infrastructure to the wiling ILDOs, the regulatory framework will create a level playing field and CLS owner shall be compensated for sharing their CLS Infrastructure. This will promote the subsea cable industry. However, if ILDO wish to access the unused dark fibre by accessing the part of CLS Infrastructure (ie., access at beach manhole instead of accessing at the CLS) , such shall be permitted under the aforesaid regulatory framework.

A policy to be formulated for the optimum use of the existing Cable Landing station, Stub Cable and Fronthaul including the reuse of retired subsea system assets , and scope of the policy shall include the sharing of such infrastructure and tariff for sharing the infrastructure . Even a reporting mechanism will put in place where each CLS owner to provide the details of the used and unused CLS infrastructure and sharing of CLS infrastructure with the other ILDO.

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.

Connectivity between different CLS is an absolute necessity for redundancy, diversity and transit. But lack of clarity in the licensing and on regulatory framework is a challenge in providing the connectivity. The submarine cable that connects to India brings the traffic that terminate in India and the India transit traffic. But license require ILDO to monitor the traffic belong to the ILDO, when the CLS are interconnected the ILDO may receive the traffic that belong to other ILDO's and India transit traffic, in such case ILDO need clarification whose international gateway to be used for termination traffic and what type of traffic need to be monitored and who will monitor the traffic. Secondly, the traffic that comes may be of the different capacity size and belong to more than one ILDO, in such case the ILDO at whose CLS

the traffic is received may not have the monitoring system to monitor high bandwidth traffic, in such case clarity is required from regulatory side. Even clarity required when CLS on west coast of India is interconnected with CLS at the east coast of India, how the traffic will be monitored when the gateway and monitoring system are available at any one of the CLS. CLS to CLS connectivity via subsea may be explored for higher redundancy and consistency in the path, as this may reduce the outage that frequently occurs on terrestrial segment.

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.

1. Regulatory Framework need to be simplified.

Instead applying for MOHA and MOD at regular interval by all operators, DOT can keep the database of repair vessels and its crew updated which can be updated from time to time,(Entire Process shall be done online instead of Paper work), thus the need of applying for MOHA and MOD can be eliminated.

2. As per the Indian customs regulation, a cable ship is a foreign vessel, and hence, it is imported to India and has to undergo Customs Clearance. At the time of importation, the cable operator has to provide a bond against the vessel. Post the repair operations, the bond is cancelled and the ship is exported. This process Further addto the delays and needs to be eliminated.

3. Single Window Clearance system shall be in place for all Permit Requirements for cable laying and Repair Operations.

4. Concessions to setup Cable Depots and Repair facilities in India will also help in Promoting the submarine cable in India.

5. Escort ship services by Indian ships can be introduced for quick allowing of outside marine ships and crews.

6. All the Submarine cable systems to be Defined as Open cable systems for easy access of the International submarine Fibers.

7. There has not been any review of the Access Facilitation Charges and Colocation Charges prescribed by *The International Telecommunication Cable Landing Stations Access Facilitation Charges and Co-Location Charges Regulations, 2012 amended in 2018* ,with the changes in the market pricing, the AFA charges have become a significant portion of the end to end pricing. There is a need for review of the current charges and also a periodic review mechanism needs to be established by the regulator.

