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TRAI/FY22-23/118
Dated: 10.02.2023

To,
Shri Sanjeev Kumar Sharma,
Advisor (Broadband and Policy Analysis)
Telecom Regulatory Authority of India,
Mahanagar Door Sanchar Bhawan,
JawaharLal Nehru Marg,
New Delhi – 110 002.

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

Dear Sir,

This is in reference to TRAI's Consultation Paper on "Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India" dated 23.12.2022 (CP No. 15/2022).

In this regard, please find enclosed our response for your kind consideration.

Thanking You,

Yours' Sincerely,
For **Bharti Airtel Limited**

Rahul Vatts
Chief Regulatory Officer

Encl: a.a

Response to CP on Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India

Executive Summary

We thank the Authority for initiating this important consultation paper on the "*Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India*" and providing us with the opportunity to share our response to it.

The Submarine Cable Systems (SCS), landing in a country through the Cable Landing Stations (CLS), is one of the most critical pieces of global telecommunications infrastructure, facilitating as it does global commerce and trade by transmitting huge amounts of data worth billions of dollars, including financial transactions. It is the backbone that supports the entire international connectivity and digital ecosystem. It provides the infrastructure that ensures that communication is not lost for even a few minutes since that could have disastrous repercussions on time-sensitive operations as well as serious financial and security implications.

Over the last few years, India has witnessed exponential growth in data traffic with the proliferation of mobile broadband, an increase in the uptake of fixed broadband technologies with digital applications, and myriad services and IT solutions, all of which rely on this infrastructure for support. Indeed, the entire IT/BPO industry rides on this important SCS as does the ingress and egress in and out of India through the CLS.

This exponential increase in demand for internet services has led to a corresponding and unprecedented increase in the international traffic flowing through submarine cables, traffic that is expected to multiply still further with the launch of 5G and a further proliferation of data centres in India. To cater to this growing demand, submarine cable capacity will need to be increased proportionately and considerable infrastructure deployed. This will require not only huge investments but also a considerable period of time. It is important therefore that serious and long-term telecom operators and entities who are financially capable of helping with establishing submarine cables and setting up CLS in India are urgently encouraged to participate in doing so.

It is high time therefore that India moves to the next trajectory in terms of laying submarine cables and ensuring network security and criticality. This will only be possible with the urgent and needed support of enabling licensing and regulatory frameworks that encourage the entry of financially viable telecom operators with serious, long-term investments; ensure the efficient utilisation of existing infrastructure; and promote the ease of doing business while providing security protection.

Response to CP on Licensing Framework and Regulatory Mechanism for Submarine Cable Landing in India

In summary we recommend the following:

- ✓ Prescribe qualifying criterial for a licensed International Long-Distance Operator (ILDO)/ Internet Service Provider (ISP) who wants to set up a CLS and terminate any submarine international cable in India over its CLS.
- ✓ The criteria should include minimum networth and holding a minimum equity percentage (i.e. 10% stake or investment), either directly or indirectly in the proposed submarine cable/consortium.
- ✓ Such qualifying criteria should be applicable prospectively for future cables as the existing consortium agreements have long been closed.
- ✓ The ILDO should own the assets for laying the submarine cable/setting up CLS in Indian territorial waters.
- ✓ Encourage and promote Indian enterprises to enter the business of carrying out submarine cable repair and maintenance in Indian waters.
- ✓ Provide incentive to the ILDOs for forming a consortium to own a cable ship with an Indian flag stationed at the India port.
- ✓ Bring clarity/enabling provision for National Long Distance Operator (NLDO) to create the Indian undersea submarine cable network for domestic traffic and allow both networks (land and undersea) to connect with each other.
- ✓ Allow domestic traffic on cables, which are part of or merge with an international cable, including cables in international waters beyond the Indian Exclusive Economic Zone (EEZ).
- ✓ Allow stub-cables to be laid from the CLS through beach manholes into territorial waters as an ab-initio infra-arrangement to create a future-ready network and cable system.

Keeping this background in mind, please find next our response to the questions raised in the Consultation Paper.

Response to CP 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.

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.

Airtel Response:

In our view, more than limitations, it is the eligibility cum qualification criteria to set-up a CLS and land an SCS in India that needs to be reviewed and amended, given the criticality of asset.

As per the extant licensing and regulatory framework, any entity with a valid ILD license or ISP license under the Unified License ('UL') can set up a **CLS** in India.

But there are no separate qualifying conditions/criteria for an ILDO/ISP to set up a CLS in India except for stating that the entity should hold a valid ILD/ISP Licence. The present framework does not specify any percentage of ownership stake that an ILDO/ISP should hold in the SCS.

This lack of a qualifying criterion related to the extent of stake, ownership and control of an ILDO/ISP in the SCS is creating a situation in the market wherein any entity by virtue of having an ILD or ISP license is acting as the landing party of a cable and setting up a CLS, without any pertinent interest in any traffic being carried over the cable under Indian jurisdiction. In fact, in the scenario of a multi-fibre pair of SCS that are now being deployed, the CLS owner or landing party may have little right or control on the cable.

Since CLS is a strategic piece of telecom infrastructure, it is extremely important to provide an additional qualifying cum eligibility criteria over and above holding a telecom licence which may include networth. This should explicitly state the need for holding a minimum stake as well in the cable either directly by ILDO/ISP or through its group companies/subsidiary if there is the intention to terminate that cable in their CLS.

Accordingly, we recommend making the following changes to/inclusions in the licensing and regulatory provisions related to laying SCS and setting up CLS in India:

a) **Prescribe an additional requirement of minimum networth of the licensed ILDO/ISP if they want to set up CLS and terminate any cable in India over its CLS.**

It is worth noting that such a qualifying requirement is not new in the Indian telecom licensing regime. For example, if any UASL/UL operator wants to participate in the spectrum auction, there is a requirement that the concerned operator have a minimum networth of Rs.100

Crore per licensed service area. Similarly, if an ISP wants to offer the IPTV service, the minimum networth of that ISP operator is required to be Rs.100 Crores.

It would therefore make sense to have a similar requirement in terms of additional but substantial networth for any ILD/ISP who wants to set up a CLS in India. *For example, a minimum networth of INR 250 Crore or more may be prescribed for setting up the CLS.*

b) Given the criticality of the asset in terms of the digital infrastructure of the country and the need to ensure investments by financially strong operators for the long-term sustenance of the asset, we recommend that the operator in question take a minimum stake or make investment in all new cables terminating in India, either directly or through its subsidiary. Therefore, the operator desirous of terminating a cable in India should have a stake of 10% or investment in that cable system.

This is similar to the US example referred to by the TRAI in this consultation paper.

As with the laying of any international cable, here, too, huge investments are made by various stakeholders including foreign companies, such requirements should be applicable prospectively to avoid any disruption and disturbance within the existing market which otherwise could force all the stakeholders to revisit their existing contracts and review their existing shareholding structure and investments.

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.

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.

Airtel Response:

Yes. Cable repair is an expensive and complex activity in the SCS that requires specially designed ships carrying highly trained crews and skilled engineers. Such a specialised repair vessel owned by an Indian entity will significantly help overcome the issues related to delays in undersea cable maintenance. Such an ecosystem should be promoted through enabling policy.

In fact, TRAI in this Consultation paper recognises that presently only two main marine service providers based out of Singapore and Dubai support all marine maintenance activities in and around the Indian waters. This creates a very high dependency on these vessel providers for repairing the SCS along the Indian coastline.

Therefore, we endorse the TRAI view that *undersea cable repair vessels owned by an Indian entity* in the current fast growing digital ecosystem *are critical to the efficiency of our network.*

These vessels will help overcome the delays in undersea cable maintenance resulting from dependency on foreign vessels. They will also save ship mobilisation time and will ensure timely repair of cable cuts leading to cost efficiency as well as an overall improvement in the digital economy of the country. Some of the challenges faced by most Indian ILDOs which an SCS repair vessel owned by an Indian entity could address include:

- Long mobilization times: Currently, the foreign vessels take 30 days, depending upon the availability of the vessel and its transit to an Indian port. With an Indian vessel, this time could be significantly reduced.
- Lack of cost efficiency: The total cost of a 30-day mobilisation and demobilisation period is currently levied on cable owners. ***Undersea cable repair vessels owned by an Indian entity would reduce the foreign exchange spent by the country.***
- Lack of time efficiency: Typically, 20 to 30 days are consumed in trying to comply with the various port and permit formalities of Indian ports. This can be easily avoided by having an Indian Flag vessel and crew.
- Inefficient cable infrastructure: The availability of Indian vessels will improve cable infrastructure availability which will therefore improve the overall digital economy of the country.

The development of an Indian ecosystem in this segment will eliminate the dependency on foreign-based repair vessels, **providing a new opportunity to Indian Industry under the 'Make in India'** programme and leading to improvements in overall costs and time. This will also help build skillsets locally as opposed to depending on overseas skillsets.

Therefore, in-order to promote the entry of Indian entities into this 5ecognize5d business, the Government may consider the following:

- This work should be given the same status as that enjoyed by SEZs and a tax exemption introduced, since this will result in a reduction of FOREX spent by the country.
- A single window clearance mechanism for permits and approvals for a longer period of validity should be introduced and customs duty / GST norms relaxed.
- Existing / planned routes should be tagged as critical cable corridors. These corridors should have regular patrolling by the coast guard and a set of clear guidelines concerning maritime activities in such corridors should be released with a view to safeguarding cable assets.
- Necessary space should be allocated to Indian operators to set up a 'Cable Depot' (Bonded warehouse) close to the base port of the repair vessel.
- Capital cost of repair vessels and cable depots could be a one-time investment. All operational costs and capital recovery should be recovered from users of the repair vessel. **The government could provide an incentive and support and encourage Indian entities and/or Indian ILDOs to form a consortium that owns a cable ship with the Indian Flag stationed at the Indian port within the country.**

While we are fully supportive of the initiative of bringing Indian companies into this business through various enabling government policies, it is important to recognize that the

development of the whole Indian ecosystem may take some time. Therefore, the government must address the issues related to Ease of Doing Business and address forthwith the huge delays in granting permissions to foreign vessels to carry out repairs and maintenance.

In fact, we have provided a detailed submission with respect to the SCS in our response to the consultation paper for Ease of Doing Business. We sincerely hope that those submissions will be considered by TRAI favourably while making recommendations on this aspect.

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.

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?

Airtel Response:

We are of the view that telecom operators should not only have the freedom to lay fiber both on land and under water but should also be permitted to use the same cable infrastructure for domestic and international connectivity under their respective license agreements.

Accordingly, we suggest adopting the following approaches:

Scenario 1 – Under NLD License:

There should be enabling licensing provisions/clarity for NLDO in terms of creating an Indian underseas submarine cable network for domestic traffic and both networks (land and undersea) should be permitted to connect with each other. Since such a network will be created within Indian territory/territorial waters, there should be no requirement of lawful interception for domestic traffic. Furthermore, such a network/connectivity should only be used for carrying domestic traffic.

The creation of a coastal corridor could also be explored as a possibility since most coastal towns may not consume a lot of bandwidth due to the lack of data centres and a content market. This should be supplemented with a defined multi-path NLD corridor to backhaul traffic to the major metro cities with facilitation provided for all necessary clearances / rights of way.

Scenario 2 - Under ILD and NLD License:

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Presently, undersea cables are landing in various cable landing stations in the five cities of Mumbai, Chennai, Cochin, Tuticorin and Trivandrum. Operators, however, are thinking of diversifying the locations of their CLS, which could mean many more CLSs landing in other Indian coastal cities.

Out of all the major coastal cities, Mumbai and Chennai serve as the two largest data consumption points in India. This necessitates that the NLD network between these two locations be stable. However, since all the NLDOs have built redundant NLD networks between these locations, the terrestrial networks are subject to many cuts, which has led to network switching, flaps and a deterioration in performance and outages.

As stated under Scenario 1, we support the idea of a domestic submarine cable network that carries domestic traffic. However, a standalone submarine cable meant only for NLD/Domestic traffic may not achieve the desired economies of scale considering the huge investments required for creating such an infrastructure.

For example, any licensed operator who wants to connect the west coast of India with the east will have to cross over international waters and not be able to achieve the requisite economies of scale by carrying domestic traffic alone. In fact, there is another option available. There are international cables, either currently deployed or part of a future deployment plan, and such cables can easily be extended to Indian coastal towns with an incremental investment. For example, a Singapore to Europe cable landing in India, say in Chennai or Mumbai, can be looked at from the perspective of extension to other coastal areas in India on the east or west coast. This will not only help in bringing in cost efficiencies, but also provide a resilient alternate route for domestic traffic.

Therefore, we propose that domestic traffic may be allowed on cables, which are part of or merge with an international cable, including cables in international waters beyond the Indian EEZ. Such an infrastructure will provide reliable and resilient connectivity for domestic traffic. Such a route will also be a reliable alternative to the terrestrial network from the perspective of a long-term stable network.

This may be permitted to an entity holding both ILD and NLD licenses as well as owning the Cable Landing Station. **Wavelength level splitting can be done to segregate NLD and ILD traffic and all provisions pertaining to international cables like LIM, etc. which fall under the ambit of the ILD License should be applied for both domestic and international traffic.**

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.

Airtel Response:

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Yes. We strongly support the concept of stub-Cables, i.e., placing a pre-laid 'dark-fibre' from the CLS through a beach manhole into territorial waters as an *ab-initio* infra-arrangement. This will enable the Indian telecom industry to have a future-ready network and cable system. A proper regulatory framework for stub-Cables will ensure the following:

- Provide pre-ready infra-arrangement for future submarine projects in an efficient manner.
- Employing stub-cables will help reduce costs since they can be laid with an ongoing project for a CLS. This will enable the Indian telecom industry to invest more in the submarine cable infrastructure thereby becoming more competitive.
- Pre-laid infra will reduce timelines significantly. Laying of stub-cables will improve efficiency, provide a more economically viable future extension and reduce the time required to complete new submarine cable projects.

Therefore, we request TRAI to consider the following favourably:

1. Under its Licence, an ILDO may be allowed to install and maintain the stub-cable if the ILDO so desires. Stub-cables can either be built separately as an extension plan or along with the current cable. At the time of a new project, a separate exclusive or exhaustive permission process for laying such fibre may not be required.

a) Only the number of Stub-cable fibre pairs may be declared to nodal agencies, in this case DoT. It should be intimated at the time of building separate cables for future expansion or extension and/or granting approval for a new cable system.

b) Any use of the stub-cable needs to be formally communicated to DoT and the necessary permits maintained by the ILDO for every individual fibre pair under the new project.

c) There should be a policy to allow stub-cables with fibre pairs provisioned at designated locations beyond the territorial water limits so that they can serve as ready infrastructure for future cable or fibre pairs coming into India. This can be an extension of the current cable plan and any new projects requiring such infrastructure need not be separately approved for cable laying in the Indian territorial waters. The ILDO may notify the authorities on allocation of such infrastructure or a part of it for any new project and also report utilisation of the same at periodic intervals. Once a stub-cable is allocated for a new project, the new project owner intending to use the stub-cable infrastructure for onward termination of cable into India will be responsible for the LIM and other applicable regulatory compliances.

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.

Airtel Response:

We do not believe any such challenges are there since there is no restriction on the interconnection between CLSs. The interconnection between various CLSs in India is quite a common practice since it provides diversity and a necessary resiliency into the network. Every CLS owner by design is allocating space and power to other operators to bring their network into CLS. Operators are free to extend this capacity from that CLS to their PoP or other CLSs.

Multiple operators have established their presence in almost all CLSs and built a multi-path fibre network till their PoPs, creating a terrestrial network between CLSs, PoPs and data centres.

Therefore, if a cable is out of service for any reason, the ILDO can seamlessly have an arrangement for capacity on the other cable that extends to its PoP/CLS. Hence, we do not see any challenge in the current set-up and do not find a requirement for any specific framework.

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.

Airtel Response:

We request TRAI to consider the following favourably, especially since they are critical for the growth of the submarine cable industry:

1. **Charges paid to other TSPs may be allowed as pass throughs**: *As per the UL - ILD Authorisation Clause - 2.4 - "Licensee shall make its own arrangements for all infrastructure involved in providing the service and shall be solely responsible for the installation, networking, operation and commissioning of necessary infrastructure, equipment and systems, treatment of subscriber complaints, issue of bills to its subscribers, collection of revenue, attending to claims and damages arising out of its operations etc. However, the Licensee may share the infrastructure as permitted under the scope of respective service authorization in PART-II of the Schedule to the License Agreement or as per the directions/instructions issued by the Licensor from time to time."*

   Thus, while the infrastructure sharing between various licenses is permitted under various licenses / authorisation, the charges paid towards the same are not allowed as deduction from Gross Revenue. Such a regime impacts the overall ecosystem unnecessarily, hindering the economies of scale from operating for network opex and capex while also increasing the cost of investments. The limitations in the current policies lead to the following:

   a) They actually discourage the sharing of infrastructure which creates an unnecessary financial stress on the entity as operators then prefer to have their own network.

b) They increase the cost of operations even though there may exist some unutilised capacity with another operator.
c) Charges paid by one Licensee to another Licensee create a cascading effect of tax impacting the overall cost of services.

Sharing of assets not only distributes the cost but also significantly reduces business risk. This creates additional business opportunity. This can also be vouched for from the fact that ever since DoT allowed registration for passive infrastructure and the sharing of it with and between TSPs through IP1 registration, it flourished as a separate business stream.

This measure of DoT supported all the new / upcoming Telcos during the time as the cost of entry to market got significantly reduced as compared to incumbent operators. This did not include the time taken for rolling out the network.

Thus, we recommend that the following should be allowed as eligible deductions for TSPs:

a) Charges paid by one TSP to another TSP for sharing of its network.
b) Annual Access Facilitation Charges at CLS / Alternative Locations.
c) Annual Operation & Maintenance Charges at CLS / Alternative Locations.
d) Co-location charges.

2. **Cable laying & repair services** should be designated as 'mission critical and should have priority for 'Permits in Principle' and clearances from Government agencies. Submarine Cable and CLS repair and O&M need to be streamlined and simplified, particularly with regard to shortening the approval timelines from various agencies, and physical documentation and online part of documentation minimised. Moreover, permission should be generated online in a time-bound manner and the concept of deemed approval should also be considered. As CLS operators need to obtain multiple clearances and approvals from many ministerial departments in addition to MOD, MHA & DoT, there is a need to minimise the approval process/documentation part and institute a single window clearance process that will encourage new CLS stations.

3. The onerous requirements of a mandatory presence of DoT officials on ships should be removed and TSPs should be entrusted with the activity of capturing GPS co-ordinates instead of DoT officials. The DoT may specify fixed time intervals for capturing GPS co-ordinates along with requirements for the service provider in question to submit a map by plotting the captured GPS co-ordinates and also submitting an undertaking with other relevant documents to the DoT.

4. **Currently, MOHA & MOD approval is provided at different sites. A single window clearance** for all the required permits (MOD, MOHA, Cable Landing Station, Cable Repair permission) could also be looked into as one of the probable solutions to significantly reducing

turnaround times. There are no defined turnaround timeline (TATs) for granting clearance and approvals for all such Permit/applications. Nor does any mechanism exist for tracking of status of stage of an application. Hence it is recommended to develop a single integrated portal hosting information such as eligibility, mandatory documents list for application with a form-download feature, defined process app, FAQs, and a copy and paste option will enable applicants to seamlessly submit their applications online with the facility to track progress in a reliable and transparent manner.

5. **Auto renewal option should be available for MOD & MOHA clearance** if there is no major change to the data provided in the original request. Also, the option of taking approval for only incremental changes can be considered. MOD & MOHA approval and other associated approvals could be provided in stipulated timelines, i.e., 1 month.

6. **Financial incentives could be provided given that** CLS is so essential to international connectivity and future substantial digital growth.

   - **Encourage Indian operators by providing financial incentives** to build new CLSs and streamline the documents/approval process.

   - **Exempt CLSs from GST.** Since it is essential to global connectivity and India competing with other leading economies to promote herself as an international data hub, CLSs should be exempt from GST.

   - **Allow access facilitation charges and co-location charges paid by one ILDO to work for another ILDO** as pass-through charges. This will make the connectivity charges more competitive.