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## Counter Comments On The TRAI Consultation Paper

I urge GoI to make difficult decisions and change the submarine cable laws of India. Already, one vendor (out of 3) has made a decision internally not to bid on any submarine cable projects touching India due to significant losses it has incurred emanating from outdated laws that push project deadlines by up to 2 years – not to mention the fear of cableships being impounded every time they enter Indian waters. At the risk of upsetting some people, I have to reiterate that I have been told by multiple stakeholders that Indian submarine cable laws are the worst in the world. This is my humble attempt to contribute towards changing them so as to make India the best in class in this space.

- **1.)** The most important issue for all parties is the ability to land a cable without the CLS owner being forced to buy any bandwidth on the cable. I feel the government should agree to this critical issue conditional on the following:
- (i) CLS ownership should be treated like a real estate investment. Any ISP or Data Center without having an ILDO license should be able to host the cable landing as long as they are carrier-neutral with completely open access meet-me rooms from where any carrier can take the traffic wherever they want. Such CLS's should also have Zero RIO (AFC and Colocation charges).
- (ii) In addition, an ILDO licensee should be required to terminate the cable within the country.
- (iii) A cable owner (or part owner) should be able to have agreements with more than one ILDO to terminate his traffic and should be able to fire any ILDO or change him later if things do not work out.
- (iv). It is possible that some customers will want their PFE and SLTE equipment in the CLS itself whereas some of them will want to place the SLTE equipment in a data center far away from the CLS. So a single cable may have multiple ILDO's taking fiber pairs to various destinations.
- (v). If GoI is not willing to give multiple ILDO licenses per cable, then it should designate one ILDO provider and other carriers need not apply for any licenses specific to that cable.
- (vi). This also means that one does not need to sign up with an ILDO licensee in case of transit traffic.

- (vii). Cables owned 100% by OTTs coming into the country should have ownership of at least one fiber pair offered to all ILDO operators and at least 3 of them should be chosen to buy the fiber pair at cost price. This will eliminate monopolization of the cable by the OTTs and significantly lower prices to consumers. Nowadays each cable has up to 24 fiber pairs with a total of up to 1Pbps on the entire cable. Hoarding of such large amounts of bandwidth by OTTs while not allowing carriers to buy the capacity at cost price will significantly hurt the country.
- viii). Some legacy carriers want to restrict ownership of the CLS based on net worth and experience of the landing party. This is really dangerous as it will then restrict the innovators and entrepreneurs from building CLS's where one expects a lot of innovation to come from. By agreeing to this condition, GoI will then be forced to depend upon the legacy carriers alone to land a cable which is exactly opposite of what is needed in India. A CLS is just a real estate property. It should not be given any more importance than that and certainly does not need an ILDO license.
- 2.) Some legacy carriers also want domestic cables to be restricted to within 12 nautical miles of India. This is absolutely a bad idea since it will make the cable susceptible to significant breaks as most of the breaks happen in shallow territorial waters. I think the GoI should not distinguish between domestic and international cables only based on physical location.

The best way to determine a domestic or submarine cable should be purely based on traffic flows. If for example, IAX/IEX which is an international cable but also has a cable connecting Mumbai and Chennai should have domestic traffic flows designated as such while the rest of the traffic flows are international.

Also a cable that may start off as a domestic cable today could end up expanding to an international location. It would not be fair to subject the entire cable to be international at that point.

**3.)** Some legacy carriers also are against giving permission for cable owners to build out stubs in the ocean citing rapid technology change which could make the stubs unusable and India's need to build out more CLS locations than concentration of cables in one location.

I totally disagree with this stand. First of all, there are connectors manufactured by vendors which will enable two cables of different technologies to be connected to each other. Secondly, if that is a risk the cable owner is willing to take, then let them take that risk. GoI has no business in banning this based on the reason mentioned.

With regards to having multiple CLS's, I completely agree however it is ironical for the legacy carriers to use this reasoning given that they themselves have created the situation India is in today with only Mumbai and Chennai as the international hubs. Why did the legacy carriers not have 17 CLS's for the 17 cables coming in or why are they not building 6 more CLS's for the 6 new cables coming in? These are two different issues and should not be put in the same basket

**4.)** Some legacy carriers are also insisting that the 12 nautical miles of cable within Indian waters should be owned by the ILDO licensee. I think this is totally wrong and is probably the single-worst rule that is preventing India from becoming a hub. Think of it this way. An ILDO owner which is just an owner of the 12nm of the cable on paper now controls who can buy bandwidth on the 10,000 Km cable all the way to Europe.

This is precisely how monopolies are formed and encouraged. GoI should do some serious soul searching and reverse this law which is useless. If GoI is using the law to tax entities based on their ownership in Indian waters, there are other ways to extract the tax without enforcing this rule. By not allowing one company to own 100% of the cable within its territory, competition will thrive as the bottleneck is removed and more entities can now buy unused capacity on the cable thereby decreasing prices.

- **5.)** With regards to LIM requirements, there should be no such requirement for transit traffic or for domestic traffic. Also, as per my comments earlier, the official LIM requirements should be for 2% of the total bandwidth coming in as per the current practice with some of the legacy carriers.
- **6.)** Access Facilitation Charges (AFC) and Annual O&M Charges for the CLS should be made Zero and Colocation charges should be no more than those charged by data center colocation in India. Unless the AFC charges are officially made Zero the RIO issue in India will never change as TRAI knows very well. There should be no grey areas for these charges.
- **7.)** When someone builds a cable depot in India, it should be set up either at a STPI facility or in a bonded area where there are no customs charges to be levied. In case there are any customs charges, they should be levied at the time of usage rather than on entry in to Indian waters.
- **8.)** Gol must encourage all future cable landings to be in carrier-neutral, open access CLS's rather than closed loop legacy carrier owned CLS's which makes it impossible for other carriers to participate. Cables landing in such CLS's should be given \$5 million by the government to encourage such behavior and a fine for \$5 million to those cables that will land in other legacy facilities.

- **9.)** The NLD license for carrying domestic traffic should be amended to specifically address domestic submarine cables and cable landing stations. As long as the traffic stays domestic even if the cable is physically beyond the 12nm limit, the NLD license should be able to cover it. Any transit traffic (even if international) should be considered as domestic under the jurisdiction of the NLD license.
- **10.)** Permitting of cables which has been extended to 200 nautical miles need to be kept at the legal limit of 12 nautical miles in order to save significant time, money and resources.
- **11.)** Cableships should be given 2-year permits and approvals from government entities such as Navy, DG Shipping, MOD/MOHA, port clearances, ONGC and DOT (total of 11 clearances). Customs can be done every time a ship comes in but asking for a bond for entire ship price is ridiculous and should be stopped immediately. Custom duties can be levied on the cable actually used for the repairs.
- **12.)** Technology is now available where if a ship comes close to a cable, notification can be sent to the ship owner and the cable owner so potential cable breaks can be avoided.
- **13.)** Domestic and international cables should be operated from the same CLS. And same cable can be both a domestic cable and an international cable depending on the ingress and egress points.
- **14.)** Ability to sell dark fibers on both domestic and international cables is necessary to advance submarine cables in India.
- **15.)** Gol should offer land for cable depot to a party willing to set it up and should offer tax holiday for the entity willing to buy the cableship as it will save significant foreign exchange. Gol should also take a small equity in the entity and create a private-public JV. I am ready to present my business plans for both. Indian carriers and cables landing in India should not be forced to become customers of this new entity. Market forces will naturally align them towards the Indian solution.
- **16.)** All approvals for new cables (Permits In Principle) should be given in 3 months or less and permits for cable repair in 15 days maximum through a fast-track process using digital media with reports going directly to the Minister in case of any delays.
- **17.)** Gol should encourage building of a domestic submarine cable by taking a small equity in the company wanting to build the cable in a private-public JV. I am ready to present my proposal and business plan.

- **18.)** As far as connectivity between existing CLS's is concerned "all is well" signal from Indian carriers not withstanding GoI should not fight that battle but rather focus on the new cables that will come to India it is important that all new cables land only in carrier-neutral CLS's with completely open and free meet-me rooms.
- **19.)** Gol should open up the market to Chinese vendors for cable only. In Sea-Me-We-6, just allowing HMN to bid on the cable dropped the price of the cable by almost 30% even if in the end the contract went to Subcom. As long as HMN bids only on the cable and not on any electronics, from a security perspective it should be fine even if some contracts are awarded to HMN. But it will surely create a hyper competitive environment with every vendor forced to lowering their prices.
- **20.)** Gol should open up the market to Chinese carriers for transit traffic. In IAX/IEX, China Mobile is allowed to own fiber pairs as long as they do not go through India. Why not allow them to transit India as long as they are not allowed to drop traffic in India? This will give a huge boost to the Indian transit market without compromising its internal security.
- 21.) Bandwidth as a strategic asset. In a post-globalization world where the buzzword coined by Hon Prime Minister Narendra Modi is Atmanirbhar Bharat, the GoI should look at Internet Access similar to how it looks at storing foodgrains in case of a disaster. In case India is cut off by the OTTs (most highly unlikely but not an impossible scenario), do the Indian carriers have enough bandwidth and networks to continue providing uninterrupted service to its citizens? The GoI should have an audit of its global bandwidth and should also invest in certain cables as an emergency backup plan.
- **22.)** All decisions taken by GoI should take in to account the possibility of a Living Cable Network similar to a domestic network where each cable is not a unique cable with a unique name but rather part of a network. It is quite possible that a new submarine cable coming in to India can continue to grow under the same name but at different locations in India.
- **23.)** Every new cable coming out of India should use SMART cable technology at least until the 200 nautical mile range so that it will help India in weather detection, prediction and climate change initiatives.
- **24.)** Even if all of the above issues are resolved, India can never be a global hub until Telecom Egypt's transit ransom pricing is addressed. It costs more to transit 200Km of Egyptian land than the cost of the entire cable from India to Europe. GoI must force Telecom Egypt to reduce its transit pricing by 98%. Unless this issue is resolved, India will always be more expensive compared to the US and Europe.