# Tata Communications Limited's response to TRAI Consultation Paper on 'Ease of Doing Business in Telecom and Broadcasting Sector'

## Preamble:

At the outset, we applaud the efforts of the Authority for their focus towards ease of doing business by reviewing and simplifying various business processes and resolving operational challenges to create enabling environment for both telecom and broadcasting sector. Undoubtedly, the Government has taken various initiatives in last few years for creating a conducive regulatory environment for business operations in India, in line with the Government's objective of "Ease of Doing Business" and promoting more investment in the Country. The recently implemented structural and procedural telecom reforms are important step taken by the Government in this direction to protect and generate employment opportunities, promote healthy competition, protect interests of consumers, infuse liquidity, encourage investment and reduce regulatory burden on Telecom Service Providers (TSPs).

The telecom services sector is fast evolving from being a mere connectivity provider to provider of platform and fabric-based services with the technological advances and innovations. TSPs business focus is swiftly shifting from offering basic connectivity services to digital and platform-based services. The evolving demands of customers have led to newer business models and emergence of highly sector specific applications and platforms to cater their business requirements in a cost-effective manner. To support this changing landscape of telecom market, there is an immense need to re-tune the existing regulatory and licensing requirement and therefore, it is important to carry out necessary reforms in existing framework under ease of doing business.

In this regard, the initiative to identify various processes/ issues in the existing licensing and regulatory framework which entails simplification coupled with the focus on cost efficiency is a welcome step at the juncture when telecom industry is financially stressed. As rightly pointed out in the Consultation Paper, "*Ease of doing business is not limited to obtaining permission/license alone, it is also important that compliances/audits should also be reasonable and do not put an unnecessary burden on the business. At the end of the day, the requirement of any compliances or audits is a cost to the business. "*

We believe that the outcome of this consultation in terms of policy and procedural reforms will strengthen the existing licensing framework to maintain healthy competition and to explore/ get more revenue opportunities for various stakeholders.

## Issue wise response:

Q1. Whether the present system of licenses/permissions/registrations mentioned in para no. 2.40 or any other permissions granted by MIB, requires improvement in any respect from the point of view of Ease of Doing Business (EoDB)? If yes, what steps are required to be taken in terms of:

a. Simple, online and well-defined processes

b. Simple application format with a need to review of archaic fields, information, and online submission of documents if any

c. Precise and well-documented timelines along with the possibility of deemed approval

d. Well-defined and time bound query system in place

e. Seamless integration and approvals across various ministries/departments with the end-to-end online system

f. Procedure, timelines and online system of notice/appeal for rejection/cancellation of license/permission/registration

Give your suggestions with justification for each license/permission/ registration separately with detailed reasons along with examples of best practices if any.

**Tata Communications Response:**

- **Introduce a fully functional and integrated "single window" clearance system**: The greatest need of the hour in terms of administrative processes is to introduce a truly effective and meaningful online "single window" process wherein all relevant documents and fees can be uploaded, and the permission be issued online in a time bound manner. The portal should be one-stop solution for all approvals and permission and should be seamlessly integrated across various ministries/departments with the end-to-end online system. Though the Ministry of Information and Broadcasting has taken steps such as introducing "The Broadcast Seva" portal, the implementation and effective use is awaited eagerly by the sector. Currently, the broadcast seva portal doesn't serve as a single window clearance system and the filing of application requires submission of documents in physical format with no clear timelines defined.

  The entire process involves approvals of multiple set of ministries and departments other than MIB, such as Ministry of Home Affairs ("MHA"), Department of Space ("DoS"), empaneled auditors of MIB, Ministry of Corporate Affairs ("MCA"), Ministry of Finance ("MoF") Wireless Planning Commission ("WPC") and National Operations and Control ("NOCC"). The involvement of multiple ministries causes delay in getting approvals as they do not stick to any stipulated timeframe and also derails business planning and payment of valuable forex to foreign satellite operators. Therefore, it is suggested that the WPC and NOCC process should also be brought online and integrated into the single window clearance system that enables the filing of applications online with MIB and the concerned Ministries/Departments are asked to give their comments online through intranet amongst ministries. The entire process should be time bound so that satellite TV businesses can take time sensitive decisions.

- **Changes required in Broadcast seva portal of Ministry of Information and Broadcasting (MIB):** The Broadcast Seva portal is used for filing of applications for various licenses/permissions from (MIB) and should allow submission of documents with digital signatures. Further, it may also be kindly noted that although the Broadcast Sewa portal allows the applicants to submit various applications along with documents such as affidavits and undertakings but still requires them to be submitted in original hard copies. This defeats the entire purpose behind ease of doing business as despite online submissions, physical

submission of certain documents is still required for processing the application. It is suggested that digital signatures be accepted and accordingly, any document bearing digital signatures be allowed to be submitted online. Further, it is submitted that this portal has to be brought at par with "*saralsanchar*" portal and application filing should be completely done through online mode only and offline applications should not be entertained.

- Also, the present Turn Around Time (TAT) for clearing of any application for grant of teleport takes anywhere between 9-12 months which requires to be reviewed and accordingly steps need to be taken to streamline the same process and timelines.

- **Licenses should be transferrable within a stipulated timeframe:** Companies usually restructure through merger, demerger or amalgamation so as to enhance the operational efficiency of that organization. There is a need to align the up-linking and downlinking guidelines with provisions of Companies Act. Sections 230 & 232 of the Companies Act, for the compromises, arrangements and amalgamations, provide that a notice of the meeting of shareholders and/or Directors along with scheme of compromise, arrangements and amalgamation (including merger or demerger) and other documents as may be prescribed, are mandated to be sent to all the Regional Directors, the income tax-authorities, the Reserve Bank of India, the Securities and Exchange Board, the Registrar, the respective stock exchanges, the Official Liquidator, the Competition Commission of India, and such other sectoral regulators or authorities (which would include the TRAI and MIB) which are likely to be affected by the compromise or arrangement. It is further required that representations, if any, by such authorities shall be made by them within a period of 30 (thirty) days from the date of receipt of such notice, failing which, it shall be presumed that they have no representations to make on the proposals. Hence, in view of the above and to improve the ease of doing business in the sector, we suggest the following:

  i. If both the transferor company and transferee company are holders of permission for up-linking of a TV channel under up-linking and downlinking guidelines, then, the Ministry should grant permission for transfer of the permission held by the transferor company to the transferee company within the thirty day period set forth under section 230 of the Companies Act, 2013, subject to the net worth criteria being met by the transferee company post approval of the amalgamation, merger or demerger being approved pursuant to the provisions of the Companies Act.

  ii. Similarly, in case of transfer of business or undertaking in whole or part by way of a slump sale or an asset transfer, if both the transferor company and the transferee company are holders of permission for up-linking of a TV channel under up-linking guidelines, and downlinking guidelines, the Ministry should grant approval within a stipulated period of 15/30 days' subject to the transferee company meeting the net worth criteria.

  iii. In so far as the transferee company is not a holder of permission for up-linking of a TV channel under up-linking guidelines, and downlinking guidelines, The Ministry should make its representation to the proposal for merger, demerger, etc. within the time stipulated under the provisions of Section 230 of the Companies Act, 2013. Else it should be presumed that the proposal is approved subject to security clearance and net worth criteria being met

Q2. Whether the present system of licenses/permissions/registrations mentioned in para no. 3.81 or any other permissions granted by DoT, requires improvement in any respect from the point of view of Ease of Doing Business (EoDB)? If yes, what steps are required to be taken in terms of:

a. Simple, online and well-defined processes

b. Simple application format with a need to review of archaic fields, information, and online submission of documents if any

c. Precise and well-documented timelines along with the possibility of deemed approval

d. Well-defined and time bound query system in place

e. Seamless integration and approvals across various ministries/departments with the end-to-end online system

f. Procedure, timelines and online system of notice/appeal for rejection/cancellation of license/permission/registration

Give your suggestions with justification for each license/permission/registration separately with detailed reasons along with examples of best practices if any.

**Tata Communications Response:**

- **Surrendering any authorisation within the scope of UL or surrender of UL:** The process related to the acceptance of the surrender of license and issuance of NOC is to be made time bound and efficient. Further, there should be a time limit defined for release of bank guarantees associated with the surrendered license.

- **Bank Guarantee(s) should be returned within 30 days of expiry/surrender of the license**. There should be process in place for ensuring smooth coordination internally among DoT HQs, CGCA and concerned CCA Office and the Licensee should be able to get the Bank Guarantee(s) returned in a time bound manner under single window system.

- As a part of telecom reforms, DoT has issued guidelines for **digitization of paper CAFs as a procedural reform** which would allow the TSPs to reduce its operational cost and challenges being faced towards storage of paper CAFs. As per the notification, the UL (Access Service) Authorizations/ UASL licensees are now allowed to replace and store the paper CAFs as per the guidelines, however, the said notification does not prescribe these guidelines for UL VNO (Access Service) Authorization's licensees. We recommend that the said notification of guidelines should also be made applicable for the UL-VNO licensees having Access Service Authorisation so as to extend the benefit of the digitization of paper CAFs.

- **Flexibility to use any technology / platform to offer services**: In the current licensing framework, Licensee is not allowed to offer communication services by hosting network elements outside the geographical boundaries of the Country. There should be a flexibility to offer communication services using any technology and/or platform (Cloud Computing, SDN, NFV etc.) in order achieve higher operational efficiency provided same should be able to demonstrate Lawful Interception capability.

- **Rationalization of USO levy**: Presently, all licensees are paying 5% of their AGR towards USO levy under licensing obligation since introduction of revenue sharing regime for rural coverage. We are of the view that USO fee should not be construed as levy, rather it is contribution made by Licensees and existing amount available in USO fund is sufficient to connect the balance unconnected villages. Thus, USO levy is immediately to be brought down to 3%, in accordance with TRAI recommendations dated 06th January 2015 further with an ultimate objective of totally doing away with the levy in next 2-3 years.

- Adequate provision should be made to allocate funds from Universal Services Obligation Fund (USOF) for incentivizing Licensed Service Providers who are promoting connectivity to rural and remote areas especially with alternative and innovative technologies especially two million hotspots in rural area as envisaged in NDCP-2018.

- **Rationalization of license fee**:

    - DoT vide its recent amendment to the definition of Gross Revenue (GR)/AGR in the Unified License and standalone telecom licenses (eg. NLD, ILD et al), has introduced a new concept of Applicable Gross Revenue (ApGR). ApGR is arrived at after certain items including revenue from operations other than telecom activities/operations are reduced from Gross Revenue. The term 'revenue from operations other than telecom activities/operations' is very wide and lead to various interpretation. Therefore, necessary clarification should be provided clarifying that the revenue earned from the operations/activities conducted strictly under the scope of service of the respective license (i.e., telecom activities/operations) should only be treated as a basis of levy of license fee and the revenue earned by licensee from the activities for which no telecom license/permission of DoT is required should be excluded from levy of license fee.

    - License Fee on Internet services should be exempted for next five years to achieve Broadband proliferation goals of NDCP 2018. Alternately LF on rural broadband and fixed wireline (including FTTH) broadband should be exempted.

    - Reduction of license fee to Zero for the Wireline Services and 3% for Wireless Services from the current 8% of the Applicable Gross Revenue, (ApGR) at the earliest. Wireline is the backbone of any economy to wither fast changing technology in Wireless that is coupled with investments whenever the change in technology takes place. At the same time, upfront investment in wirelines services including laying of fiber across the length and breadth of the country involves significant investment and realization is over very long period. Therefore, It is requested that the Government may consider bringing down the license fee to zero percentage of ApGR for those services that are delivered through Wireline. In fact, the Government in the right earnest abolished Spectrum Usage Charges for auctioned spectrum and allowed surrender of spectrum encouraging investment in growth of Wireless services. Once invested in Wireline/fiber network, it is not possible to exit easily as entire investment is sunk upfront by the Telecom Operator. Wireline is the backbone to enable various services including Wireless connectivity. Similarly, Wireline services require significant push from the Government by bringing down the LF to zero percentage. TRAI in its's recommendation on "Roadmap to Promote Broadband Connectivity and Enhanced

Broadband Speed" dated August 31, 2021 has recommended to provide incentive on LF exemption for proliferation of fixed line broadband. This will ensure that the rural geographies will get its due share of Wireline based connectivity that is missing currently.

- **Telecom is a critical Infrastructure:** Telecom services are essential services and considered as critical communication infrastructure. It is recommended that Infrastructure status may be given to telecom sector which should be accompanied by associated benefits such as assured grid power at Industrial rate.

- **Abolish provision of additional SUC of 0.5% of Adjusted Gross Revenue (AGR) under Spectrum Sharing guidelines**: There should not be any additional spectrum usage charges (SUC) applicable for shared spectrum as Telecom Service Providers are already paying SUCs for their original spectrum holding which is majorly liberalized spectrum acquired in the spectrum auction by paying market driven prices. Moreover, with the pooling spectrum all Licensees will be benefited with the greater efficiency, more capacity and better coverage leading to increase in their revenue resulting into higher SUC to the Government.

- **Spectrum Leasing should be permitted**: In addition to Spectrum trading and sharing, spectrum leasing should also be allowed under the spectrum reforms which would be highly effective in ensuring optimal utilization of spectrum. We are of the view that Spectrum leasing would further expand the market by way of more Operators using the licensed spectrum which will strengthen the competition thereby benefitting both the Customer as well as Government. Thus, allowing spectrum leasing would be a win-win for all stakeholders. Spectrum leasing would make participation in the spectrum auction more viable for Service Providers catalyzing higher participation in the auction. Spectrum leasing would also ensure that the spectrum should not be underutilized or remain idle, as observed in the recent spectrum auction of 2021, where only 37%[1] (in term of quantity) was sold and rest of the spectrum remains unsold. Allowing leasing of spectrum by the winning bidder would provide the necessary impetus to various entities to participate in the auction process. This will not only support in creation of networks for different 5G use cases, but also support reduction in CAPEX expenditure related to Spectrum to the licensees who would acquire spectrum in auction thereby ultimately increasing revenue for exchequer. Therefore, we strongly recommend that spectrum leasing should be permitted as a mechanism for ensuring optimal utilization of the available spectrum.

- **CLS Permissions and Cable Repairing:** The prevailing procedure related to licenses/permissions/registrations for building Cable landing Station (CLS) involves manual efforts of submitting various applications to multiple government entities with no facility to track the progress or feedback on the application. Further there exist no committed TAT for all such applications made for various clearances. Submarine cable operators would like to recommend one integrated portal hosting information such as Eligibility, Mandatory Document List for application with Form Download features, Defined Process Map, FAQs. This will enable applicants to seamlessly submit their application online with facility to track the progress in reliable and transparent manner.

[1] https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1702003

The present cable repair permit process takes approx. 4 to 8 weeks, however other countries like Egypt, UK & USA provides the same in less than 3 days. Further with the change in maritime belt from 12 nautical miles (nm) to 200 (nm) approval permit process has become furthermore complex and time consuming. Suggestion is that the maritime belt is brought back to 12(nm) and the entire approval process to be made through Online portal with minimal human interference and zero paperwork. Alternate way of doing this is by providing subsidiaries to the ILDO's for forming a consortium to own a cable ship with Indian Flag stationed at India port and allowing depot space for spares management and continue with the existing approval process for Indian flag ship. This model is already running successfully in Asia Market like Singapore, Philippines, Indonesia etc.

More CLS related details have been specified under our response provided to Q. No 5 & 6.

- **Network Centralization**: The concept of Network centralization has been evolving to reduce costs and increase control and monitoring. The introduction of All Internet Protocol (IP) platforms like IP Multimedia Subsystem (IMS) will lead to centralized architecture for Call control. Hence, the concept of "local Handover" of calls or Short Distance Charging Area (SDCA) based call routing should be removed. The inter operator traffic exchange should be enabled for limited preferred Point of Interconnect (POI) locations. This will ease the network architecture and help in reducing overall costs. This will also help to launch wireline voice services in tier 3, 4 and beyond towns.

- **Review of penalty structure:** Currently the provision of Unified license provides for a maximum penalty of Rs. 50 Crore/instance for all deviations/violations. There is a need to review the same in view of the nature of severity of the incident and same should be brought down to maximum penalty of Rs.1 Crore. The officials take a very defensive stand of levying maximum penalty of Rs.50 Crore even for minor deviation which leads to protracted litigation which benefits no one. As has been announced time and again by DoT, it may devise a suitable matrix, linking the penalty to the severity of the incident and recurrence of the violation for imposition of financial penalties.

- **Simplified Exit Policy:** The Government needs to provide a simplified exit policy for TSPs for closure of business through merger and de-merger. It should be done in a time bound manner and to ensure the companies do not lose out on the value of assets they have created due to delays in regulatory approvals. In case a TSP does not hold any spectrum, winding down of such telecom business should follow only NCLT process without any additional conditions or approvals from DoT. Additionally, there should be easy exit for the listed companies. The current regime of Reverse Book Building makes it almost impossible to de-list it from the bourses. This needs to be simplified so that a listed entity can close their business by way of merger/de-merger.

- **Common interpretation of circular/regulation by all concerned: I**t has been noticed that different CCAs/ DoT LSA filed Units interpret the circulars issued by DoT HQs differently posing challenging to the licensed service providers for the resolution of issues. A mechanism may be created for formal representations against such varying interpretations by CCAs/ DoT LSA filed Units to reduce the resolution time and efforts.

Q3. What are the issues being faced in the existing processes of granting registration to IP-I providers? Identify and suggest measures to address the same.

**Tata Communications Response:**

No Comments.

Q4. What measures should be taken to promote small and medium telecom infrastructure providers with ownership of the network created by them for maintaining the quality of services?

**Tata Communications Response:**

No Comments

Q5. Please provide your response with suggestions to improve the present system of operations and maintenance of the undersea cable network in respect of:

a. What procedure should be followed to facilitate O&M agencies for smooth operations and maintenance of undersea cables/cable networks and restoration of faults within a definite timeline?

b. What additional support is needed in terms of import and export of equipment, measurement tools and accessories etc., vessel conversion and various other clearances for expediting repair and operations of submarine cables by ship/vessel at cable landing station within Indian maritime zones?

**Tata Communications Response to Q5 (a) and (b):**

Submarine Cables are critical infrastructure which forms the basis of the global and national telecommunications network and vital to the social and economic development. Damage to submarine cables through indiscriminate anchoring, trawling, dredging, fishing activities carried out in the cable route leads to huge impact to essential telecommunication services and economy as well. One important area where Submarine cable industry can be supported is in preventing damage to cable in Indian Territorial waters and EEZ.

- A single window clearance for all the required permits could also be looked into as one of the probable solutions to significantly reduce the turnaround time. To the extent possible, the application for all these clearances should also be made "on-line".
- Naval and Customs clearance typically take one-week time. To save on time, ONGC clearance being an operational clearance, can also be obtained in parallel. At present, it happens only post the receipt of Naval & Customs clearance. Additionally, ONGC should be clearly advised to give clearance within one week from the date of application. Other than Naval clearance/ Customs/ONGC clearance at port, all other permits should be made "pre-permits" so that the Telecom Operators can obtain them in advance for a longer period of not less than one year.

- For a typical cable repair there are total 11 permits and approval requirements. it is important to consider pre-approval for few of them so that the Telecom service provider need to get only

essential approvals/permits only at the time repair. This will help the critical cable repair in shorter time to minimize the impact on the communication.

- Cable protection zones and Safe Corridors can be created along the sub-sea routes to restrict high-risk activities by other sea-bed users which can potentially damage the cable systems. Since most of the sub-sea fault/damage occur near shores by fishing/anchoring/trawling, stringent regulations on these restricted zones within 200 NM for activities endangering the subsea cables integrity.

- Specific measures to protect subsea cables integrity from NON AIS vessels specifically within 200 NM EEZ. Fishing, trawling and other activities to be under rules, governance of Indian Coast Guard and compliance of non-anchoring Zone.

- Appropriate Maritime/Port Authorities should be advised to monitor activities carried out in and around the cable route (cable corridor) to avoid any potential threat or risks to ensure integrity of the sub-sea cables is maintained. There should be guidelines for daily management of non-anchoring/fishing-zone by Indian Government/Maritime authorities.

- Since sub-sea cable are critical Infra of national importance, Coast Guard/Navy can also be engaged for periodical patrolling of the submarine cable route.

- One of the most important factors for timely restoration of undersea cable network faults are closing the requisite permits in defined timelines. Though we have guidelines against permit approvals, but we are not sure about their necessity. For e.g., the procedure we follow under "Temporary Importation formalities" for foreign repair vessels and its goods, we tend to import the entire ship and a bond of entire ship value is sought from cable ship. There is a requirement to standardize this process as this collectively takes around ~30 to 45 days. Also there is a need to relook at the vessel conversion approval process as different ports have different rules for this. For example, in Chennai, vessel conversion and importation are carried out simultaneously; whereas, in Mumbai, the vessel is not converted until importation is complete and the total duty amount has been deposited with the customs authorities.

- Almost 100% of the cable repairs are happening within 150 Kms from the shore end in the EEZ waters. Across the globe, customs are not applicable in EEZ waters. An extension of Indian territorial water limits from 12 nautical miles to 200 nautical miles by Indian Customs department, will be detrimental for all cable repairs as then the customs will come into play.

- There is a big concern related to high cable cut incidents due to fishing activity in the Indian territorial waters. Almost all the cuts in the EEZ zone (between 30 Kms to 150 Kms) are happening due to fishing activities. Presently we don't have any coordination with Fishery department / Fishing communities. In this regard, we suggest the following: -
  i. Guidelines and advisory to be issued to other seabed users like Fishermen communities, Fisheries Commissioner, Shipping, Gas and Pipeline industries and other related industries to safeguard the submarine cables from damage so that a channel is

established for information sharing between the Fishing entities, where-in they are informed about submarine cable routes.

ii. Damage to sub-sea infra should be considered as damage to Critical Infrastructure of national importance and taken strictly under the Indian laws. Some guidelines are issued.

iii. Cable routes should be demarked as no fishing zones. RPLs (Route Position Locator) – Coordinates details) can be shared by TSPS for this purpose.

iv. Moreover, as the cost of restoration is considerable, accountability should be fixed in case any damage happens to cables due to negligence by some entity.

- Applicability of GST also needs clear exemption, as no such value added taxes are being imposed in any other country in its territorial/EEZ waters.

Kindly also refer our response provided in the Q No.2

Q6. Please suggest changes needed to simplify the following clearance/ permit procedures by various Government Authorities:

a. In-transit permits

b. Pre-repair permits

c. Post-repair permits

Provide your suggestions for each activity separately.

**Tata Communications Response:**

Submarine Cable Industry would look forward to having an ease of "permitting and approval" process to specifically improve repair completion Leadtime while complying with legitimate interests of Government and other stakeholders. Delay in repair has a potential risk of multiple failures leading to prolonged outages and increased repair costs and direct/indirect impact on economy. Repair of a damaged cable in prevailing process has Significant Leadtime in acquiring approvals from various authorities and that leads to delay and prolonged nonavailability of essential telecom services. Our submission will be to create a new approval framework which supports sub-sea repair to commence with minimum administrative Leadtime which is best in the world.

- The new process should consider establishing an Expedited Prior Approval Procedure in lieu of permits to facilitate repair in the event of damage to cables in maritime zones under their jurisdiction. Since cable ships are very limited in numbers and their base ports are well known, and cable ships remain in the same location during the repair, authorities would be able to pre-clear these vessels for cable repairs on submarine cables in areas under their jurisdiction so that repairs are not delayed, and costs are minimized. The objective is that the operator and cable ship can focus on speedy repairs at the time of disaster rather than focusing on seeking permits.

- Authorities should consider designating a single agency and single window as a focal point, for all permits and requirements relating to the repair of submarine cables.

- In current scenario, Submarine Cable Operator must have approval from organisations like ONGC to commence repair operation within 200 NM and such approvals have significantly high lead time. During Repair operation, Cable Ship operates at the designated fault location and Submarine Cable operators notify organisations like ONGC of the nature of work and timelines. Hence such approval/NOC from such organisations can be done away and replaced with notification guidelines to be adhered by all stakeholders. Alternatively, Long term approvals for repairs of the subsea cables from organizations like ONGC within 200 NM based on all the RPL of the cables provided thereby saving several weeks of approvals process.

- Auto renewal option should be available for MOD&MOHA clearance if there is no major change in the data provided in the original request. Also, option of taking approval for only incremental changes can be considered. MOD & MOHA approval and other associated approvals to be provided in stipulated timelines i.e., 2 months.

- Relaxation in the repair ship importations guidelines (2019) with removal of importation requirements within EEZ which in creating lot of issues and delays in getting submarine cable repairs done. Telecom Infrastructure in Indian EEZ is impacted the most and their repair, restoration guidelines to be revised as prior to 2019. The agreed process with operators, owners to be put under regulation. To avoid repair delays within 12NM/Territorial waters, there should be relaxation to cable ships with regards to customs/importing of cable ship for sub-marine cable repairs.

- Charging of customs Duty and GST only for the goods used during the repair on the repair ship thereby easing the complicated drawback process on re-exporting of the repair ships. This would save blockage of the huge funds by the repair ship owners and the potential delay in the subsea cable repairs in India. Also enabling faster repair should be given priority while other formalities like payment of customs duty can be done later as well.

Q7. Please provide your response with proper justification to improve the present system of EMF radiation compliance in terms of:

a. Relevance of EMF radiation audit and its impact for quick roll out of the network

b. Measures to safeguard public interest and building confidence in public against propaganda of hazardous EMF radiations in field

c. Issues being faced in the existing processes related to the self-certification, audit and penalty scheme of EMF radiation compliance process on Tarang Sanchar portal.

**Tata Communications Response:**

No Comments

Q8. What mechanism do you think should be followed in DoT to facilitate investors in exploring possibilities of business opportunities in the field of telecom? Provide your comments with justifications. Also, provide best international practices and adoption of new technologies for various processes and suggested process flow that could be adopted for further facilitating ease of doing business in India.

**Tata Communications Response:**

We have following suggestions to facilitate investors in exploring possibilities of business opportunities in the field of telecom:

- Central/State Government /Local Authorities should provide proactive information related to industrial corridors/SEZs/Smart cities to private investors. Example: Government of Japan has established telecom infrastructure along sewage pipeline and in Europe, utility corridors are developed beside national highways.

- Rationalization of taxes is one of the most important reforms required to boost the financial health of the telecom sector today. Telecom levies and taxes which are compared to other countries are high in India and if Government can work towards reducing it to an optimal level it then it may create traction among new investors to invest in telecom sector in India.

- Government should create a model plan considering telecom infrastructure as an essential service and critical communication infrastructure. It is recommended that Infrastructure status given to telecom sector should be accompanied by associated benefits such as assured grid power at Industrial rate, consider Fibers as protected National assets etc.

- There should be an easy entry and exit for the investors from the Indian telecom sector.

Q9. Whether the present system of licenses/clearances/certificates mentioned in para no. 3.94 or any other permissions granted by WPC, requires improvement in any respect from the point of view of Ease of Doing Business (EoDB)? If yes, what steps are required to be taken in terms of:

a. Simple, online and well-defined processes

b. Simple application format with a need to review of archaic fields, information, and online submission of documents if any

c. Precise and well-documented timelines along with the possibility of deemed approval

d. Well-defined and time bound query system in place

e. Seamless integration and approvals across various ministries/departments with the end-to-end online system

f. Procedure, timelines and online system of notice/appeal for rejection/cancellation of license/clearance/certificate

Give your suggestions with justification for each license/ clearance/certificate separately with detailed reasons along with examples of best practices if any.

**Tata Communications Response:**

<u>Experimental & Technology Trial License:</u>

- DoT has made the process online through Saral Sanchar Portal for submission of application for the grant of Experimental and Technology Trial license under various categories licensing

for use of Spectrum to conduct Experiments, Demonstrations, etc. Although Government vide PIB press release dated 29-06-2021 it was announced that Deemed approval will be accorded within 6 to 8 weeks from the date of application for all outdoor radiating licenses. However, there is no firm guidelines available on the approval timelines.

- There should be timely approvals for the Experimental and Technology Trial licenses as well as the extensions for such experimental licenses should be approved within 3-4 weeks from the date of the online application submission. Currently these take anywhere between 3 to 4 months.

- In case of any amendment required in the existing Experimental License at a later date due to change in market dynamics, inability of vendor to supply the equipment mentioned in the license etc. TSP need to go through the process again for carrying out necessary amendment in the license in coordination with concerned WPC RLO Office and also require to deposit License amendment fee of Rs 1000 per modification in the experimental license through Bharatkosh portal. It is also a time-consuming process which further delays the testing/ POC of use cases. It is recommended that the modification process in the experimental license should also be done online within 1 weeks' time. Further, these should not be any license amendment fee to be charged for the same.

Q10. Whether the present system of permission/approval mentioned in para no. 3.101 or any other permissions granted by NOCC, requires improvement in any respect from the point of view of Ease of Doing Business (EoDB)? If yes, what steps are required to be taken in terms of:

a. Simple, online and well-defined processes

b. Simple application format with a need to review of archaic fields, information, and online submission of documents if any

c. Precise and well-documented timelines along with the possibility of deemed approval

d. Well-defined and time bound query system in place

e. Seamless integration and approvals across various ministries/departments with the end-to-end online system

f. Procedure, timelines and online system of notice/appeal for rejection/cancellation of permission/approval

Give your suggestions with justification for each permission/approval separately with detailed reasons along with examples of best practices if any.

**Tata Communications Response:**

In the NOCC payment process, we are paying advance payment for monitoring charges however there are no guidelines / process available for adjustment of the balance from these advance payments if Licensee surrender the bandwidth before the specified period. Therefore, NOCC should release necessary guideline / clarifications on this for ensuring timely settlement of such cases.

Q11. Whether the present system of permissions/approvals mentioned in para no. 3.107 or any other permissions granted by TEC, requires improvement in any respect from the point of view of Ease of Doing Business (EoDB)? If yes, what steps are required to be taken in terms of:

a. Simple, online and well-defined processes

b. Simple application format with a need to review of archaic fields, information, and online submission of documents if any

c. Precise and well-documented timelines along with the possibility of deemed approval

d. Well-defined and time bound query system in place

e. Seamless integration and approvals across various ministries/departments with the end-to-end online system

f. Procedure, timelines and online system of notice/appeal for rejection/cancellation of permission/approval

Give your suggestions with justification for each permission/approval separately with detailed reasons along with examples of best practices if any.

**Tata Communications Response:**

We would like to submit the following inputs regarding TEC permissions / approvals regarding mandatory testing certification of telecom equipment (MTCTE) for simplification of existing process:

- Allowing 5-year-old reports for initial applications in phase III and IV as this will enable smoother transition of investment from ILAC to CAB test labs instead of likely disruption that will be caused by this abrupt removal of ILAC acceptance and nullifying industry investments and impacting business continuity.

- For products introduced in the market before the MTCTE ERs become effective, earlier versions of the standards may be accepted to ensure business continuity and the products whose ERs are yet to be uploaded on the portal to be introduced in future phases.

- We request to allow a minimum of 18 months to comply for Phase 3 and 4 in addition to a tiered approach for implementation from the date when product ERs are made mandatory.

- In addition to the tiered approach, it is our recommendation that for the duration in-country testing is completed and under certification, TEC should allow the import of the product based on test reports. This would help reduce the disruption to the business that the strict timelines provided under Phase III and IV.

- MTCTE website should reflect the vendor wise/product wise status of the equipment testing and certification. This will be a significant support and help for TSPs to decide on the procurement of such equipment.

- The Timeline for Certification of equipment should be realistic and enforced only after ensuring that the backend infrastructure is fully ready to manage the volume of testing and certification in a time bound manner.

- System should provide 12-18 months grace period for Vendors to get the testing and certification done.

- The MTCTE team of TEC should work with Vendors directly to get the product certified and upload the information on their portal. This will ease the process and helpful for TSPs to decide their procurement strategy.

Q12. What measures should be taken to ensure that there is no duplicity in standards or in testing at BIS, WPC, NCCS, and TEC? Which agency is more appropriate for carrying out various testing approvals? Provide your reply with justification.

**Tata Communications Response:**

In order to avoid duplicity, there should be only one standards body for telecom which can be TEC.

Q13. Whether the present system of getting fresh and additional space segment capacity on Indian and foreign satellites for various services mentioned in para no. 4.15 or any other new service from DOS, requires improvement in any respect from the point of view of Ease of Doing Business (EoDB)? If yes, what steps are required to be taken in terms of

a. Simple, online and well-defined processes

b. Simple application format with a need to review of archaic fields, information, and online submission of documents if any

c. Precise and well-documented timelines along with the possibility of deemed approval

d. Well-defined and time bound query system in place

e. Seamless integration and approvals across various ministries/ departments with the end-to-end online system

f. Procedure, timelines and online system of notice/appeal for rejection/cancellation of space segment capacity

Give your suggestions with justification for allocation of space segment capacity for each service separately with detailed reasons along with examples of best practices if any.

And

Q14. Whether the existing procedures to acquire a license for providing satellite-based services in the existing framework is convenient, fast, and end-to-end online for the applicants? If not, what other measures are required to simplify the various processes to enable ease of doing business in India for satellite-based services? Give details along with justification.

**Tata Communications Response to Q No.13 & 14:**

We submit that the current processes under various service License or Frequency/Siting clearances for earth stations requires to obtain clearances separately from the appropriate authorities under Ministry of Information and Broadcasting (MIB), Ministry of Communication (MoC). We request that there should be one central entity within DoT coordinating all required approvals /authorizations, instead of requirement to go to approvals to multiple Government agencies like I&B, WPC, DOS etc.

Apart from the above, the requirement to execute an agreement for bandwidth with Department of Space (DOS) before applying for a teleport license should be streamlined and DOS should start charging for the bandwidth only when the teleport permission is granted by MIB and not before that.

Q15. Whether the present system of permissions/registrations mentioned in para no. 5.10 or any other permissions granted by MeitY along with BIS, requires improvement in any respect from the point of view of Ease of Doing Business (EoDB)? If yes, what steps are required to be taken in terms of:

a. Simple, online and well-defined processes

b. Simple application format with a need to review of archaic fields, information, and online submission of documents if any

c. Precise and well-documented timelines along with the possibility of deemed approval

d. Well-defined and time bound query system in place

e. Seamless integration and approvals across various ministries/departments with the end-to-end online system

f. Procedure, timelines and online system of notice/appeal for rejection/cancellation of permission/registration

Give your suggestions with justification for each permission/registration separately with detailed reasons along with examples of best practices if any.

**Tata Communications Response:**

No Comments.

Q16. What are the issues being faced by various service providers in seeking stable and committed quality power supply connections from power DISCOMS? For statewide operations whether it is feasible to get power supply in time bound manner for various locations from a single-window contact or has to be made region-wise. What measures do you suggest to improve the same?

**Tata Communications Response:**

Please find below the power supply related concerns / challenges inputs with desired expectations from DISCOM (State Power distribution company) which we are experiencing in day-to-day operations at our facilities / network locations.

| Sr No | Category | Concern / Challenge description | Desired expectations from DISCOM (State Power Distribution Company) |
|---|---|---|---|
| 1 | Alternate power source like Solar, Wind, Hydroelectric etc | Currently in multiple states like Delhi (DISCOM – NDMC), Mumbai Maharashtra (DISCOM – BEST), Hyderabad Telangana etc, Open Access (OA) is not allowed / permissible to purchase the Renewable energy from Market due to regulatory related restrictions in renewable energy sector | Open access should be allowed in these states with listed DISCOM to meet the power at affordable rate and reduction of CO2 emission offset to support planet under sustainability mission of company |
| 2 | Power Quality level | Multiple states like UP, Punjab, Haryana, Maharashtra, MP etc, DISCOMS does not provide quality power to consumers in perspective of voltage range, unexpected surge etc. This led to power fluctuation, impact of equipment life, sudden breakdown and running of diesel generator etc for longer duration. The high DG running led to pollute the environment by emitting more CO2 levels. | Quality of power supply within safe operating limit of +/- 5% of nominal voltage for 0.44 / 11 /22 /33 KV Voltage operating level |
| 3 | Business continuity Management | The required redundancy and resiliency in terms of dual power and dual feeders are not available to consumers. It leads to power cut in case of any natural calamity such as cyclone, rain, storm etc. Prolonged power cut led to running of diesel generator for longer period which is significantly high cost and not affordable in competitive market. | The required redundancy and resiliency to be factored in design and execution by DISCOMs to ensure the uninterrupted power during any natural calamity condition |
| 4 | New Power connection / Load enhancement work | Multiple permissions and approval process for any load enhancement related works to meet business demand is highly lengthy and time consumption | DISCOM to ensure single window for consumers and time reduction of internal time taking process so that consumers power requirements could be |

| | | | |
|---|---|---|---|
| | | process as it required approval at multiple / various levels / authorities | fulfilled in stipulated timeframe without any business suffering / impact to customers. |
| 5 | 100% Electricity duty exemption | Currently, telecom sector is not getting rebate on electricity duty which DISCOM charging on month basis based on power consumption recorded for that month period. | Telecom sector being an essential services, it should be exempted from purview of electricity duty in monthly electricity bills. |
| 6 | Overhead powerline infrastructure | Currently there are multiple sites where DISCOM has provided the HT power supply (11 /22/33 KV) by using AB (Air Break ) switch / GOD alongwith Drop Out (DO) fuse which is not reliable specially in rainy weather conditions and also not human safety friendly from fault diagnosis and rectification perspective | DISCOM should adopt jointing overhead conductor through underground cable arrangement by incorporating compact substation design which is new technology and eliminate both operational and human safety risks |
| 7 | Multiple Power tapping from same structure / power transmission tower | Currently, many powers transmission lines connections are connected through same structure / power transmission tower which led to multiple power lines failure in case of structure / power transmission tower collapse. | All power transmission lines must have separate structure / power transmission tower to avoid multiple power failures / interruptions at same time |

Q17. Whether the extant mechanism of reporting and filing at the SARAS portal and the offices of Controller of Communication Accounts (CCA) simple and user-friendly? If not, what measures are required to make it simple, transparent, and robust? Justify your comments.

**Tata Communications Response:**

On many occasions, we face technical glitches while uploading AGRs in SARAS portal, that should be removed for smooth online filing. Many times, we have to try uploading AGR at least 4-5- times and then only system accept uploading, this takes our lots of time and energy. Further, once online filing of AGR is done, physical filing should be stopped to avoid duplicity of work.

Further, we also suggest that instead of submission of Affidavit for AGRs on quarterly basis, an undertaking should be taken from authorized signatory of the company and submission of Affidavit should be discontinued.

Q18. Whether any issues are being faced by the telecom service providers during declaration and verification of documents for deduction claimed from the Gross Revenue and special audits of revenue? If yes, provide your comments with the reasons thereof.

**Tata Communications Response:**

As highlighted by TRAI in its paper, the verification of documents is a huge exercise and requires significant effort and resources in the preparation of documents, and its verification on the part of both TSPs and the Government. Therefore, it is suggested that the deductions should be allowed based on Auditors certificates for all the Services, as being done in the cases of ILD & NLD Services.

Q19. What improvements do you suggest in the various extant audit processes conducted by DoT LSAs? How the process of the Customer Acquisition Form (CAF) audit can be further simplified? Provide your comments with justifications.

**Tata Communications Response:**

As mentioned in TRAI Consultation paper, the onerous requirements of audits/ inspections should be reduced and simplified with DoT focusing only on systemic issues. Instead, it is suggested that the culture of self-certification of compliance basis internal audits conducted by Licensee should be institutionalized and only in exceptional cases, audit / inspections should be conducted by DoT field units on a sample basis.

**Multiple Technical and Security Inspections/ Audits for various Licenses – ISP / NLD/ ILD**:

- Under Unified License the authorizations for various services - National Long Distance (NLD), International Long Distance (ILD) and Internet Services (ISP category A) are being issued on Pan India basis.
- However, at present the DoT LSA field units have been conducting periodic inspection/ audits on telecom circle wise /Licensed Service Area (LSA) basis. This has led to duplicity of work at the end of licensor as most of the information sought by LSAs is common and gets repeated for a licensee with Pan India operations. Each DoT LSA has the same inspection schedule and it's a time-consuming process and duplicity of efforts to conduct the inspections by different LSAs on the same TSPs.
- The whole country is divided into 22 LSAs and all LSA field units have been assigned to inspect and audit the telecom licensees every year. Such an exercise becomes quite arduous as well laborious with huge administrative burden on the licensee so as to get the exercise completed for all the LSAs with in the same year. It is worth mentioning here that all these Pan India licensees file/ report consolidated AGR/ revenues at one LSA. Hence, it is desirable that the inspection activity should also be centralized.
- Therefore, it is suggested that the technical and security inspections for the licensees with Pan India operations i.e NLD/ ILD/ Category A ISP should be held centrally at a single location by a designated LSA Unit for Licenses with PAN India Service Area. The licensee can share a copy of the report with other LSAs in case they are required to do so.
- The location of the centralized inspection / audit can be either the Registered / Head office of the licensee or Delhi telecom circle.

This will lead to following benefits:

- The removal of redundancy/ duplicity of works conducted by various LSAs on the same TSP. This will encourage efficiency and also give ample time for LSA units to perform other key functions within their jurisdiction.
- The centralized audit/ inspection will lead to maintenance of uniformity as the variation in interpretations of the statutes/ circulars/ directions/ regulations/ license terms and conditions would get avoided.
- The centralization of audit/ inspection process would enable ease of doing business substantially for the licensor as well since all the required information from the TSPs would be available at one place for conducting the inspection/audit process.

Q20. What measures are required to be taken to simplify the various submissions/filings made by teleport operators, DTH operators, MSOs, and other stakeholders at MIB? Provide your detailed reply with justifications.

**Tata Communications Response:**

Presently, all the teleport operators having permissions for uplinking and downlinking of TV channels are required to furnish the detailed list of TV channels being uplinked from their teleport by the 15th of every month in the format prescribed by MIB. Similarly, a report maintaining a record of the location and the events which have been covered and uplinked by SNG/DSNG terminals and downlinked at their main satellite earth station is required to be submitted by the commercial DSNG operators before MHA/MIB.

However, these reports are offline reports and to be submitted only through physical mode. Therefore, we suggest that there should be an MIB online reporting portal to be launched in line with TRAI reporting portal wherein all Licensees are required to upload their periodic reports in a time bound manner to promote ease of doing business.

Q21. TRAI seeks multiple reports through its multiple divisions at predefined frequency intervals. Reports submitted by operators are examined and for non-compliances, show cause notices are issued and financial disincentives are imposed, wherever applicable. Do you think there is a need to improve reporting and compliance system in TRAI? Please elaborate your response with justifications.

Q22. Identify those redundant items which require deletions and at the same time the items that need to be included in the reporting and regulatory compliance systems due to the technological advancements. Suggest such changes with due justifications.

Q23. What kind of IT-based reports and compliance submission processes do you suggest in TRAI? Provide your comments.

**Tata Communications Response to Q no. 21, 22 & 23:**

- Although considerable efforts have already been made by TRAI and now majority of the reports are now being required to upload on the portal provided by TRAI however there are still some reports which need to be submitted either in hard copy or through an email. Thus, it is suggested that TRAI should extend its online system to all the periodic reports in a time bound manner.

- We also suggest that the regulatory reporting requirement should be minimal and should be done through online portal only. With the help of online reporting, various dashboards can also be made providing insight of data submitted by service providers.

- In the Accounting Separation Regulation, we understand that Replacement Cost Accounting report have not been used for any regulatory decision and it may be appreciated that arriving at such reports is very costly exercise involving significant resources and time which increases regulatory cost to Company. In view of lesser need of current cost and practical difficulties in preparation of accounting separation reports on the basis of replacement cost accounting, it is suggested that such reports may be withdrawn from the regulation.

Q24. Are there any other issues in the present system of licenses/permissions/registrations granted by MIB/DoT/WPC/NOCC/TEC/DOS/ MeitY/MoP that can be identified as relevant from the perspective of ease of doing business in the telecom and broadcasting sector? If yes, provide a list of those processes and suggest ways for their improvement.

**Tata Communications Response:**

We have following suggestions under ease of doing business in the following areas:

**ROW Permissions and Charges:**

- ROW is an important element and key enabler for digital mission of the Government of India. However, State policies have not been implemented on the ground as per RoW Rules issued by the Government of India in terms of RoW Permissions and charges. There is no clarity and transparency in approval timelines and the charges levied for ROW by various state and central agencies.
- The RoW permissions are granted by individual central, state, local government bodies. Telecom sector doesn't enjoy the same privileges which are enjoyed by other Utility providers, such as., Power companies, gas companies etc., enjoy.
- The RoW charges levied by various central, state and municipal bodies vary from state-to-state, city-to-city and there is no central body that administers or regulates the charging methodology levied by different agencies from time to time. Having one would help in simplification and expediting RoW approvals. Most metro cities have sky-rocketing RoW and reinstatement charges that prohibit laying and developing a fibre network. These charges aren't standard and can vary even within city limits for certain cities. here are no SLAs by utility providers for Grant and dispensation of RoW applications expeditiously; standardization in duration (number of years) for which the RoW permissions are provided, privileges of Service Providers towards reinstatement of fibre assets during the RoW period.
- There are also no statutes or laws that provide protection of fibre assets of Telecom Service Providers which get damaged and cut by various other agencies including Utility providers while they dig to lay their own underground assets like water pipes, drainage systems, electric cables etc. during their own expansion plans. There needs to be guidelines towards safety of assets and remedies thereof that are laid and acquired after payment of huge RoW charges.

- There are also frequent cases where RoW are demanded again for performing repairs or replacement of fibre cables damaged due to fibre cuts caused as above, where regulation and monitoring body would help streamline provision of rights and privileges.
- State and Municipal bodies treat RoW as a “cash cow” by local bodies and state governments on the assumption of being the State subject.

*Recommendations:*

- Uniform and nominal ROW charges.
- Government should create an online platform for Railway RoW Applications and with affordable RoW rate because current Railway RoW charges are very high.
- Land demarcation data base in not available with Government and it is creating issues during RoW applications (like Railway, Forest, NHAI etc.). Same should be made available in a digital manner.
- Government should establish a Nodal agency like DoT LSA field units to coordinate and resolve RoW permission issues.
- A single window clearance is must for processing of all RoW permission applications by leveraging digital means to bring transparency and predictability with minimum TAT -30 days
- Government should set up central or state level agencies to monitor the success of the RoW policy, and report disputes in implementing the policies.
- Nodal agency should ensure that service providers do not face any problems/ hurdles in obtaining a “No Objection Certificate” (NOC) from various concerned authorities\
- Government should monetize their passive infrastructure (like fiber, duct space, etc.)
- There should be common policy for all central government bodies, state government bodies and local authorities. And one central co-coordinator at each district level with direct supervision of DoT need to be created with precise timeline to grant permission for RoW.
- Right of way charges should be enabled to be paid over a period of 15 years. Fiber Capacity should be allowed to be shared and transferred without need of additional Right of way charge. This would increase value of investment made by infrastructure creator in Fiber infrastructure.
- For RoW, there should be a single window clearance with active cooperation of all local bodies. All state electricity poles, municipal poles should be allowed to use for laying of OFC cable and a proper mechanism for the same needs to be worked out.
- All state electricity poles and streetlight poles under local bodies must be allowed to lay OFC cables, and their permission also need to be monitored. This will enhance the speed of rollout and this need to be done without any discrimination. For all new road construction, a separate channel needs to be kept for ducts of OFC to be laid in future.
- Policy framework should be in a place for structured overhead of Cable network for allowing structured pole based Aerial fiber deployments especially in geographies where building underground fiber infrastructure is a challenge. The permission to install overhead fiber would be another biggest enabler to provide cost-effective broadband services as the installation and operational maintenance of overhead fiber is much faster and far cheaper than underground OFCs.

**Allow Active infrastructure sharing under ISP license / UL-ISP / UL(VNO) ISP Authorisation:**

- DoT on 31-03-2021, has amended the terms and conditions of ISP licenses to permit active infrastructure sharing. Through this amendment, a new condition has been inserted in the ISP licenses stating that *"Sharing of Active infrastructure amongst Service Providers based on mutual agreements entered amongst them is permitted. Active infrastructure sharing will be limited to WiFi equipment such as Wi-Fi router, Access Point etc. Sharing of backhaul is also permitted."*
- From the plain reading of this newly inserted condition, contrary to it appears that permission to share active infrastructure amongst service providers has inadvertently got limited to backhaul and Wi-Fi equipment.
- Limiting active infrastructure sharing to backhaul and Wi-Fi equipment may not yield the expected benefits. Therefore, similar to access service authorisation, passive as well as active infrastructure sharing should be allowed under the Internet Service license, Internet service authorisation under UL and UL (VNO) licenses.
- TRAI had recommended for permitting active infrastructure sharing to ISPs in its recommendations on "Proliferation of Broadband through public Wi-Fi networks. "TRAI has reiterated above recommendation in its recommendations on "Roadmap to Promote Broadband Connectivity and Enhanced Broadband Speed" dated 31st August 2021.
- In view of above, it is requested that TRAI's earlier recommendations may be implemented at the earliest.

**Allow Active infrastructure sharing under UL (Access Service Authorization) /UASL for wireline services:**

The SME sector has been hit the hardest by the ongoing Covid 19 pandemic and resulting into evolution of "digital" business models to survive in the new norm. The sharing of active infrastructure in the core networks of wireline telecom operators shall enable the delivery of low-cost voice, data, and internet products which are essential for this sector to sustain and flourish. The recommended Network elements proposed to be included for sharing among UL (Access Service Authorization)/ UASL are as under:

**a) Core Voice Platforms:** including Switches (IMS, NGN), SBC, MGW, MGCF, AGCF, and associated voice network infrastructure.

**b) Core Data and Internet Platforms:** including Service delivery nodes and respective media such as Internet Gateways, Routers, Switches, STP, IN, SMSC, MPLS, AAA, CDN, etc.

**c) Private Network, URLCC** : Ultra reliable Low Latency communication network, which has slicing capability.

**Challenges and Recommendations for Wireline Voice Services**:

**a) Internet Telephony:** Cloud adoption is the next wave in telecom sector and hence the regulations for Internet telephony should open with below consideration:

**(I)** All Users should be given full flexibility to use their Fixed line number over any access medium including Internet.

**(II)** Globally this is operational, and India also should adopt this. Current regulation restricts the use of fixed line numbers within limited premise over Internet telephony.

**(III)** Recent revised guidelines dated June 21, 2021 for Other Service Provider (OSP) should be extended for all types Enterprise Customers.

**(IV)** Integration of PSTN services with Collaboration suites like Microsoft Teams, Zoom, Google Meet should be allowed which would benefit end users and open new opportunity areas for Telcos.

**Trusted Telecom Cell Portal:**

- The Approval process for current submitted applications need to be expediated and approval should be accorded in a time bound manner.
- The Trusted telecom cell portal should reflect the trusted product and trusted Source status of each vendor across the industry for the information to all TSPs.
- If the product approved for any one customer application, it should be automatically extended to other customers.
- The 2 years term approval of trusted cell is too short for Telecom Network products and ideally the approval should be for minimum 7 years period.
- There should be a cooling period of 12 months to ensure business continuity and that time should be used to certify all vendors through trusted telecom cell.
- The online Portal need to be more simplified for faster submission and ease of access.

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