## Q0:

## Executive Summary:

### Proposing Policy Reforms for Internet Services

I suggest that Internet services should not require license fees or special licenses, similar to practices in many democratic countries. These services should be treated like any other business, subject only to normal taxation to foster rapid development and innovation. This approach can significantly boost a country's GDP by enhancing Internet connectivity.

### Economic and Social Benefits

Prioritizing social and economic growth in policies of Internet services can enhance education, healthcare, and e-commerce, leading to improved living standards. The success of technologies like India’s Unified Payments Interface (UPI) demonstrates how supportive policies can lead to substantial economic growth and societal transformation.

### Encouraging Local Entrepreneurship and Skill Development

Promote local digital service providers by including digital services in skill development programs and offering incentives. This will enhance local capabilities, stimulate job creation, and drive economic growth.

### Promoting Community-Based Internet Services

There should be a strong emphasis on promoting community-based Internet services, whether it's for gated communities, community clouds, or other services that benefit local groups. These initiatives can significantly enhance connectivity, digital literacy, and access to resources within communities.

### Understanding Technology Evolution and Its Impact on Policy

It is crucial to comprehend how technology has changed so quickly in the last several years, how this has affected past licensing policies, and how this will affect future technological advancements before making any comments. Our laws must support creativity and advance the nation's and its people's general socioeconomic development. In order to do this, we need to shed our colonial and pre-digital mindsets and replace them with a new one that takes into account recent technological developments.

### Accepting Contemporary Frameworks for Technological Progress

The rate of technological advancement necessitates that we reconsider antiquated regulatory frameworks and develop growth- and innovation-promoting policies. We can create a legislative framework that does the following by comprehending how technology has evolved and what its current trends are..

- **Encourages Innovation:** To ensure that fresh concepts and solutions can flourish, policies should promote technical development and create a climate that is favourable to innovation.
- **Encourages Socio-Economic Development:** By utilising technology to open up new opportunities and boost productivity, the correct framework may stimulate economic growth and raise living standards.
- **Eliminates Needless Bureaucratic Barriers:** Breaking free from colonial attitudes and pre-digital era regulations entails getting rid of pointless bureaucratic barriers that stand in the way of development.

Eliminating burdensome regulations for Internet services can boost technological advancement and economic growth, improving citizens' living standards. The success of UPI in India shows that innovation-friendly policies are essential for a thriving digital economy. To ensure effective regulations, we must keep pace with technology's rapid development and its impact on licensing practices. By updating outdated frameworks with modern strategies, we can encourage innovation, promote socio economic growth, and prepare our nation for success in the digital era.

## Q1

**For the purpose of granting authorisations under Section 3(1) of the Telecommunications Act, 2023, whether the Central Government should issue an authorisation to the applicant entity, as is the international practice in several countries, in place of the extant practice of the Central Government entering into a license agreement with the applicant entity? In such a case, whether any safeguards are required to protect the reasonable interests of authorized entities? Kindly provide a detailed response with justifications.**

**Ans:**

### The Evolution of Electronics and Communications

Transistors replaced vacuum tubes (valves) in electronic equipment, evolving into integrated circuits and high-end microchips with multi-core CPUs, sparking an electronics revolution.

In a similar vein, the communications industry changed. From early time- and frequency-division multiplexing techniques to Internet Protocol (IP)-based systems, the Global System for Mobile Communications (GSM) underwent evolution. 4G and 5G networks were made possible by the development of more compressed modulation techniques like 64-QAM and 128-QAM, which greatly increased data efficiency and capacity.

With the full adoption of IP for data, voice, and video communication, analogue multiplexing techniques have become outdated. Voice over IP (VoIP) has replaced Public Switched Telephone Network (PSTN) technology. Web Real-Time Communication (WebRTC) is used for video, while Session Initiation Protocol (SIP) is used for real-time chats.

Widespread compression, encryption, decompression, and decryption procedures are now possible thanks to improvements in processing power and memory affordability.

## The Impact of Increased Computing Power and Distributed Cloud Computing

The rise in computing power and decrease in memory costs have enabled significant advancements in compression, encryption, decompression, and decryption. Distributed cloud computing has revolutionized technology with scalable models that process billions of transactions, fostering the growth of SaaS platforms and e-commerce. Beyond e-commerce, it transforms finance, education, and daily life, creating new careers and simplifying tasks, allowing for personal development. Access to scalable, affordable computing resources has fundamentally changed how we live and work, making modern technology accessible to all and driving progress across various fields.

## The Future of Technology: Unified by Internet Protocol

As Internet Protocol (IP) and its technologies become the foundation of all developing technologies, it becomes increasingly difficult to distinguish between different digital services and providers. Email, VoIP, VPN, Wi-Fi, machine-to-machine communication, WLAN, cloud services, SaaS, NLD, ILD, PaaS, CaaS, FaaS, and AI all rely on the same IP-based framework.

## The Era of Data and Its Implications

Data and data services are now the "**new oil**," with immense economic and strategic value. To thrive, we must adopt a liberal, forward-thinking approach, moving away from outdated colonial and analog frameworks to fully leverage modern digital technologies.

## Embracing Modern Network Technologies

The transition to Software-Defined Networking (SDN) and Edge Computing marks a significant shift, enabling more efficient and flexible network management. Small devices in agriculture, automobiles, smart cities and home automation increasingly

rely on cloud-based control, requiring innovative thinking and simplified regulatory approaches.

## Simplifying the Regulatory Framework

To foster growth and innovation, it is essential to categorize data services into two broad categories:

1. **Data Services Not Requiring Sacred Government Resources:** These do not depend on limited resources like spectrum, mines, or atomic energy. Examples include most cloud-based services, machine-to-machine communication, and general internet services.
2. **Data Services Requiring Sacred Government Resources:** These rely on critical government-controlled resources, primarily spectrum, such as mobile network operators.

Adopting a modern regulatory framework will keep our nation aligned with technological advancements. Recognizing data as a key resource and allowing its growth without undue restrictions will foster innovation, enhance quality of life, and drive economic and social progress. As technology evolves, our regulatory strategies must also adapt, embracing IP-based technologies and avoiding outdated paradigms. This will enable us to fully benefit from the digital age, driving growth and prosperity.

## Redefining Business Regulations: From Licenses to Authorizations

Requiring a license for every business activity is rooted in a "colonial mindset" aimed at controlling commerce. To modernize this approach, we should shift to a simple system of authorizations, which grant permission or register the business without categorizing it as legal or illegal.

## The Case for Authorizations

For businesses not reliant on scarce government resources, such as spectrum or petroleum, there should be no licensing fees or licenses. Simple authorizations, similar to tax registrations like PAN or GST, should suffice.

## Innovation and Growth Under Licensing Frameworks

Strict licensing requirements inhibit innovation and corporate expansion. In today's volatile markets and rapidly changing technology landscape, businesses need flexibility to adapt and thrive.

## Need to Modify Telecommunications Licenses

In the telecom industry, new markets and technologies frequently emerge. Licensing should be reserved for limited government resources that require strict oversight, such as spectrum, while other areas should operate under simple authorizations.

## The Example of Lithium

Twenty-five years ago, lithium was not scarce. Today, it is critical for high-performance batteries, illustrating the rapid pace of change. Licensing should focus on specific resources, not broader business activities, similar to the approach taken with the Internet.

As a regulator, with the advent of graphene battery technology, lithium may no longer be a scarce resource. Instead, aluminum and fine carbon products might become scarce. Therefore, we must identify and manage the scarcity of these materials, determining which require licenses for the benefit of citizens and the nation.

## Benefits of License-Free Business

A regulatory environment favoring authorizations over licenses encourages innovation, market competitiveness, and sustainability. Simplifying authorization processes reduces bureaucratic hurdles, fostering economic growth and development.

Transitioning from a licensing-based system to one based on authorizations can decolonize business regulations, promoting innovation and adaptability. By reserving licenses for truly scarce resources and simplifying authorization processes for other business activities, we can create a dynamic and resilient economy aligned with modern technological advancements.

**Q2. Whether it will be appropriate to grant authorisations under Section 3(1) of the Telecommunications Act, 2023 in the form of an authorisation document containing the essential aspects of the authorisation, such as service area, period of validity, scope of service, list of applicable rules, authorisation fee etc., and the terms and conditions to be included in the form of rules to be made under the Telecommunications Act, 2023 with suitable safeguards to protect the reasonable interests of the authorised entities in case of any amendment in the rules? Kindly provide a detailed response with justifications.**

**Ans:**

If I own a mobile shop that also provides repair services and mobile recharges, I should be able to open my shop anywhere in India, as long as I register with the

state GST Authority. This ensures compliance with tax regulations without imposing unnecessary restrictions.

It's crucial to respect the rights of licensed spectrum holders and not start my own mobile service, as they have invested significantly in their licenses. Similarly, I should be able to start an Internet service provider (ISP) business anywhere in India, provided I comply with tax laws and responsibly use local resources, such as securing permissions for fiber installation and buying bandwidth.

Compliance with the Tax Authority ensures my business contributes to the local economy and adheres to the law, without infringing on the rights of licensed service providers. A fair and competitive market requires clear boundaries between different business types and their resources.

By ensuring businesses follow tax laws and respect license holders' rights, we foster an environment of innovation and fair competition. This protects investments, maintains regulatory compliance, and allows new businesses to thrive, benefiting the economy and consumers.

The ability to launch and run a business, whether an ISP or a mobile store, should be supported by a framework that promotes growth while ensuring legal compliance and respect for licensed resources. Streamlining registration processes and maintaining clear regulatory boundaries will encourage innovation, fair competition, and economic progress.

**Q3. In case it is decided to implement the authorisation structure as proposed in**
**the Q2 above, -**
**(a) Which essential aspects of authorisation should be included in authorisation documents?**
**(b) What should be the broad category of rules, under which, terms and conditions of various authorisations could be prescribed?**
**(c) Whether it would be appropriate to incorporate the information currently provided through the extant Guidelines for Grant of Unified License and Unified License for VNO, which included, inter-alia, the**

**information on the application process for the license, eligibility conditions for obtaining the license, conditions for transfer/ Merger of the license etc., in the General Rules under the Telecommunications Act, 2023?**
**(d) What could be the broad topics for which the conditions may be required to be prescribed in the form of guidelines under the respective rules?**
**Kindly provide a detailed response with justifications.**

**Ans :**

## Simplifying the Authorization Process for IT and Digital Service Providers

Current legal frameworks for "Digital Service Providers" and "Information Technology Service Providers" are comprehensive, covering consumer protection, IT, security, and more. Only minor updates are needed to reflect modern digital advancements.

## Leveraging Existing Frameworks

Instead of creating new regulations, we should update existing ones to reflect the nuances of digital services, ensuring consistency and avoiding redundancy.

## Streamlined Authorization Process

The authorization process should be straightforward, focusing on legal compliance and registration with relevant authorities like tax authorities (PAN, GST).

## Benefits of Simplified Authorization

- **Consistency and Clarity**: A clear regulatory framework based on existing laws.
- **Efficiency**: Reduced administrative delays, allowing focus on growth and innovation.
- **Reduced Redundancy**: Avoiding overlapping regulations.

## Necessary Adjustments for the Digital Era

- **Enhanced Security Protocols**: Update IT laws for emerging technologies.
- **Consumer Protection in Digital Transactions**: Strengthen laws for online services.
- **Data Privacy**: Enforce stricter data management regulations.

Building on existing legal frameworks, with necessary adjustments, ensures a streamlined, efficient regulatory environment that supports innovation and growth while ensuring compliance. All mergers and acquisitions should follow existing company laws.

**Q4. In view of the provisions of the Telecommunications Act, 2023, what safeguards are required to be put in place to ensure the long-term regulatory stability and business continuity of the service providers, while at the same time making the authorisations and associated rules a live document dynamically aligned with the contemporary developments from time to time? Kindly provide a detailed response with justifications.**

**Ans :**

## Simplifying Regulatory Focus for Businesses

Restaurant owners must obtain necessary permissions for food safety, fire protection, and consumer protection, ensuring accountability without interfering in menu specifics. This focus on customer safety and rights should also apply to digital service providers.

## Prioritizing Consumer Protection and Fair Taxation

Authorities should focus on consumer protection and proper taxation, not on the specifics of services like VPNs, encrypted messaging, or cloud services. Regulating these specifics is impractical.

## Setting a Clear Regulatory Framework

Policies should protect consumers and prevent unethical behavior by enforcing existing laws rather than creating new, complex regulations for each emerging service.

## Avoiding Unnecessary Licensing Fees

Introducing licensing fees for new business categories often protects established companies and stifles competition and innovation. A simpler strategy that encourages innovation without the burden of licensing costs is essential.

Regulators should prioritize consumer protection, equitable taxation, and malpractice prevention without delving into service specifics or imposing unnecessary licensing fees. This approach fosters innovation, fair competition, and business growth while safeguarding consumer rights.

**Q5. In addition to the service-specific authorisations at service area level, whether there is a need for introducing a unified service authorisation at National level for the provision of end-to-end telecommunication services with pan-India service area under the Telecommunications Act, 2023? Kindly justify your response.**

**Ans : As answered in Q2 and Q3,**

**Q6. In case it is decided to introduce a unified service authorisation at National level for the provision of end-to-end telecommunication services-**
**(a) What should be the scope of service under such an authorisation?**
**(b) What terms and conditions (technical, operational, security related, etc.) should be made applicable to such an authorisation?**
**(c) Would there be a need to retain some of the conditions or obligations to be fulfilled at the telecom circle/ Metro area level for such an authorisation?**

**(d) Should assignment of terrestrial access and backhaul spectrum be continued at the telecom circle/ Metro area level for such an authorisation?**

**(e) Any other suggestion to protect the interest of other authorised entities/ smaller players upon the introduction of such an authorisation.**
**Kindly provide a detailed response with justification.**

**Ans :**

## Simplifying Regulatory Framework for Digital and IT Services

a) **Providing Digital Services and Information Technology Services**
Establish a legislative framework that supports development, innovation, and consumer protection, ensuring effective service provision while safeguarding consumer rights.

b) **Market-Driven Technical and Operational Standards**
Allow customers to assess service quality based on personal experiences and reviews. Strengthen consumer protection cells to handle complaints and resolve disputes effectively.

c) **Regulation for Internet Service Providers (ISPs)**
Prioritize equitable access to infrastructure and services, avoiding unnecessary limitations to encourage market innovation and competition, resulting in better products and services at lower costs.

d) **Regulation for Spectrum Allocation**
Balance the need for innovation and fair competition with responsible management of spectrum, which requires specific regulatory oversight due to its limited availability and strategic importance.

e) **Encouraging Local Entrepreneurship and Skill Development**
Promote local digital service providers by including digital services in skill development programs and offering incentives. This will enhance local capabilities, stimulate job creation, and drive economic growth.

Creating an effective regulatory framework for digital and IT services involves focusing on consumer protection, market-driven standards, and local entrepreneurship. By avoiding unnecessary regulations and providing incentives, we can foster a vibrant and innovative digital economy. Strengthening consumer protection cells and managing spectrum allocation carefully will ensure a fair and dynamic market environment.

**Q7. Within the scope of Internet Service authorisation under the**

**Telecommunications Act, 2023, whether there is a need for including the provision of leased circuits/ Virtual Private Networks within its service area?**
**Kindly provide a detailed response with justifications.**

**Ans:**

## Understanding VPNs and Their Challenges

### The Nature of VPNs

A Virtual Private Network (VPN) primarily encrypts data, allowing users to securely transmit sensitive information over the internet. Service providers perceive VPN traffic as encrypted data packets, ensuring confidentiality and security from unauthorized access.

### User Autonomy in VPN Usage

Users can create VPN connections between different sites without needing additional permissions from internet service providers (ISPs). The VPN client and server handle encryption and decryption, minimizing the ISP's involvement.

### Challenges in Regulating VPNs

Banning or restricting VPNs is difficult because encrypted VPN traffic is hard to distinguish from other types of encrypted internet traffic, like HTTPS.

### Global Attempts and Limitations

Efforts to ban VPNs, including in the Gulf countries, have largely failed as users adapt by using sophisticated VPN protocols to avoid detection. This resilience highlights the difficulty of enforcing such bans. Regulatory frameworks should recognize these limitations and focus on ensuring secure and accessible encrypted communication.

## Introduction to VxLAN

### Advanced Network Virtualization

VxLAN technology enhances network virtualization by creating flexible and scalable virtual overlays on existing Layer 3 infrastructure, surpassing traditional VPN limitations.

### Integration with Software-Defined Networking (SDN)

Combining VxLAN with SDN separates the control plane from the data plane, enabling centralized management, automation, and dynamic configurations. This integration results in secure and adaptive virtual private networks.

**Enhanced Security with TLS and WireGuard**

VxLAN and SDN utilize strong security mechanisms:

- **TLS Certificates**: Ensure authenticated and encrypted communications.
- **WireGuard**: Offers a modern, high-performance VPN protocol with advanced cryptographic techniques.

VxLAN, supported by SDN, creates secure, scalable, and adaptable virtual networks using advanced security protocols like TLS and WireGuard. This modern approach meets the demands of complex network architectures, enhancing both security and infrastructure robustness.

## Minimal Role of ISPs and Regulators in VPN Management

The role of ISPs and regulators in VPN management has diminished due to the user-driven nature of VPN creation. Users can now easily establish multi-site VPN connections or network independently, even with basic broadband services.

## User-Driven VPN Creation

- **Simplified Setup**: Numerous user-friendly tools allow users to create secure VPN connections without needing ISP support or regulatory approval.
- **Independence from ISPs**: VPN technologies handle encryption and decryption, minimizing ISP involvement.

## Diminished Regulatory Need

- **Technological Advancements**: Easier-to-use VPNs reduce the need for regulatory oversight.
- **Focus on Privacy**: VPNs prioritize user privacy and security, aligning with the demand for secure communications.

Given the user-driven nature of VPN creation, ISPs and regulators have minimal roles. Users can establish secure VPN connections with basic broadband, making extensive regulatory involvement unnecessary.

**Q8. In case it is decided to enhance the scope of Internet Service authorisation**
**as indicated in the Q7 above, -**
**(a) What should be terms and conditions (technical, operational, security related, etc.) that should be made applicable on Internet Service authorisation?**
**(b) Any other suggestion to protect the reasonable interests of other authorised entities upon such an enhancement in the scope of service.**
**Kindly provide a detailed response with justifications.**

**Ans :**

## Advocating for Open Market Policies to Foster Innovation

### Embracing Flexibility and Consumer Rights

Innovation thrives without rigid standards, predefined recipes, or stringent SOPs for digital services. Treat these services like any other business, focusing on consumer rights and encouraging innovation. India's ban on VoIP to protect telecom operators stifled local innovation, allowing global players like Vonage to dominate the market.

### Letting Market Forces Decide

Market forces should determine business success, not regulatory authorities. Apple's iPhone disrupted its own iPod market, showing that shielding outdated industries hinders advancement. Authorities should facilitate environments where disruptive technologies can thrive.

Open market policies that prioritize consumer rights and innovation over protectionism are crucial. Allowing market dynamics to dictate business success prevents stifling breakthroughs and ensures emerging technologies can prove their value.

**Q9. Whether there is need for merging the scopes of the extant National Long Distance (NLD) Service authorization and International Long Distance (ILD) Service authorization into a single authorisation namely Long Distance Service authorisation under the Telecommunications Act, 2023?**
**Kindly provide a detailed response with justifications.**

**Ans :**

## NLD and ILD in a Digital World

Traditional National Long Distance (NLD) and International Long Distance (ILD) services are becoming obsolete with the rise of apps like WhatsApp voice and video call, which use Internet Protocol (IP)-based communications. Outdated analog techniques which is still persist and increasing costs for both providers and customers

## Promoting Fiber Infrastructure Deployment

To meet the growing demand for digital communications, it is crucial to deploy substantial fiber infrastructure. Current licensing requirements for fiber deployment can be a barrier. Authorities should streamline or eliminate these procedures to encourage investment and growth. Many smaller cities lack affordable infrastructure due to dependence on NLD providers' financial status.

## Adapting to Technological Changes

Technology evolves rapidly, posing challenges for protecting NLD and ILD investments. Rather than safeguarding outdated eco-systems, regulations should adapt to new technologies. Promoting modern infrastructure, such as fiber networks, will ensure the telecom industry's competitiveness and affordability.

The relevance of traditional NLD and ILD services is declining. Prioritizing infrastructure deployment and updating regulations to align with technological advancements will ensure telecom services remain economical and efficient. Enabling Indian companies to offer direct internet services using low-orbit satellites can further enhance connectivity, even in remote areas, benefiting all citizens and supporting the digital economy.

**Q10. In case it is decided to merge the scopes of the extant NLD Service authorization and ILD Service authorization into a single authorisation namely Long Distance Service authorisation under the Telecommunications Act, 2023, -**
**(a) What should be the scope of service under the proposed Long Distance Service authorisation?**
**(b) What terms and conditions (technical, operational, security related, etc.) should be made applicable on the proposed Long Distance Service authorisation?**
**(c) Any other suggestions to protect the reasonable interests of other authorised entities upon the introduction of such an authorisation?**
**Kindly provide a detailed response with justifications.**

**Ans : No comments**

**Q11. Whether there is need for merging the scopes of the extant GMPCS authorization and Commercial VSAT CUG Service authorization into a single authorisation namely Satellite-based Telecommunication Service authorisation under the Telecommunications Act, 2023? Kindly provide a detailed response with justifications.**

**Ans:**
Instead of commercial VSAT CUG India should promote Low Orbit Satellites. CUG can be easily created using Internet technology using VPN and/or VxLAN or other technologies.

## Utilising Low Orbit Satellites to Bridge the Digital Divide

Large and varied geographical areas make up India, many of which are isolated and poorly supplied by conventional internet infrastructure. One way to overcome this might be to enable Indian companies to offer direct internet services using low-orbit satellites. Low orbit satellites, which can bring high-speed internet connectivity to

even the most remote places, will enable all citizens to benefit from the digital economy.

**Q12. In case it is decided to merge the scopes of the extant GMPCS authorization and Commercial VSAT CUG Service authorization into a single authorisation namely Satellite-based Telecommunication Service authorisation under the Telecommunications Act, 2023, -**

**(a) What should be the scope of service under the proposed Satellite-based Telecommunication Service authorisation?**
**(b) What should be terms and conditions (technical, operational, security related, etc.) that should be made applicable on the proposed Satellite-based Telecommunication Service authorisation?**
**(c) Any other suggestion to protect the reasonable interests of other authorised entities upon the introduction of such an authorisation?**
**Kindly provide a detailed response with justifications.**

**Ans :** No Comments, already given my suggestion in the previous answer.

**Q13. Whether there is a need for merging the scopes of the extant Infrastructure Provider-I (IP-I) and DCIP authorization (as recommended by TRAI) into a single authorisation under the Telecommunications Act, 2023? Kindly provide a detailed response with justifications.**

**Ans :** Promote infrastructure, allow all providers. Further no comments

**Q14. In case it is decided to merge the scopes of the extant IP-I and DCIP (as recommended by TRAI) into a single authorisation under the Telecommunications Act, 2023, -**
**(a) What should be the scope under the proposed authorisation?**
**(b) What terms and conditions should be made applicable to the proposed authorisation?**
**Kindly provide a detailed response with justifications.**

**Ans:** Same as above answer of Q13

**Q15. Whether there is a need for clubbing the scopes of some of the other authorisations into a single authorisation under the Telecommunications Act, 2023 for bringing more efficiency in the operations? If yes, in your opinion, the scopes of which authorisations should be clubbed together? For each of such proposed (resultant) authorisations, -**
**(a) What should be the scope of the service?**
**(b) What should be the service area?**
**(c) What terms and conditions (technical, operational, security, etc.) should be made applicable?**

**Kindly provide a detailed response with justification.**

**Ans :**
**Simplifying Regulations for Digital Data Services**

Digital data services should be treated like any other common business, without imposing specific technical, operational, and security standards that could stifle growth and innovation. Instead of creating new, restrictive regulations, we should rely on the existing legal framework to ensure consumer protection and curb malicious business practices. This approach allows the industry to thrive and innovate while maintaining necessary safeguards.

**Q16. Whether there a need for removing some of the existing authorizations, which may have become redundant? If yes, kindly provide the details with justification.**

**Ans : Already proposed in previous multiple answers.**

**Q17. Whether there is a need for introducing certain new authorisations or sub-categories of authorisations under the Telecommunications Act, 2023? If yes, -**
**(a) For which type of services, new authorisations or sub-categories of authorisations should be introduced?**
**(b) What should be the respective scopes of such authorisations?**
**(c) What should be the respective service areas for such authorisations?**
**(d) What terms and conditions (general, technical, operational, Security,**
**etc.) should be made applicable for such authorisations?**

**Kindly provide a detailed response with justifications.**

**Ans :**

**Treat Digital Data Services Like Any Other Normal Business**

As previously mentioned, digital data services should be treated like any other normal business. This means applying the same regulatory standards without imposing additional technical, operational, or security requirements that could hinder growth and innovation. By doing so, we ensure a level playing field that encourages competition and technological advancement.

**Q18. In view of the provisions of the Telecommunications Act, 2023 and technological/ market developments, -**
**(a) What changes (additions, deletions, and modifications) are required to be incorporated in the respective scopes of service for each service authorisation with respect to the corresponding authorizations under the extant Unified License?**

**(b) What changes (additions, deletions, and modifications) are required to be incorporated in the terms and conditions (General, Technical, Operational, Security, etc.) associated with each service authorisation with respect to the corresponding authorizations under the extant Unified License?**
**Kindly provide a detailed response with justifications.**

**Ans. :**

**Treat Digital Data Services Like Any Other Normal Business**

As previously mentioned, digital data services should be treated like any other normal business. This means applying the same regulatory standards without imposing additional technical, operational, or security requirements that could hinder growth and innovation. By doing so, we ensure a level playing field that encourages competition and technological advancement.

**Q19. In view of the provisions of the Telecommunications Act, 2023 and technological/ market developments, -**

**(a) What changes (additions, deletions, and modifications) are required to be incorporated in the respective scopes of service for each service authorisation with respect to the corresponding authorizations under the extant Unified License for VNO?**
**(b) What changes (additions, deletions, and modifications) are required to be incorporated in the terms and conditions (General, Technical, Operational, Security, etc.) associated with each service authorisation with respect to the corresponding authorizations under the extant Unified License for VNO?**
**Kindly provide a detailed response with justifications.**

**Ans :**

Please see my previous comments, Treat Digital Data Services Like Any Other Normal Business

**Q20. Whether the Access Service VNOs should be permitted to parent with multiple NSOs holding Access Service authorisation for providing wireless access service? If yes, what conditions should be included in the authorisation framework to mitigate any possible adverse outcomes of such a provision? Kindly provide a detailed response with justifications.**

**Ans** : See my comments to the next question.

**Q21. Considering that there are certain overlaps in the set of services under various authorisations, would it be appropriate to permit service-specific parenting of VNOs with Network Service Operators (NSOs) in place of the extant authorisation-specific parenting?**

**Kindly provide a detailed response with justifications.**

**Ans :**

**Instead of VNO,** Encouraging Skill Development and Entrepreneurship in Service Provider Networks

In service provider networks, entrepreneurship and skill development are critical to building a strong digital economy. This entails creating specialised curricula and certificates, setting up useful seminars, and advertising internships with reputable organisations. Providing funding programs, tax breaks, and mentorship possibilities would help small and startup companies even more. By fostering innovation, diversifying the economy, and generating job opportunities, these programs will prepare the economy to successfully compete on a global basis.

**Q22. In view of the provisions of the Telecommunications Act, 2023 and technological/ market developments, -**

**(a) What changes (additions, deletions, and modifications) are required to be incorporated in the respective scopes of service for each service authorisation with respect to the corresponding extant standalone licenses/ authorizations/ registrations/ NOC etc.?**
**(b) What changes (additions, deletions, and modifications) are required to be incorporated in the terms and conditions (General, Technical, Operational, Security, etc.) associated with each service authorisation with respect to the corresponding extant standalone licenses/ authorizations/ registrations/ NOC etc.?**
**Kindly provide a detailed response with justifications.**

**Ans :** Please see my previous comments. Treat Digital Data Services Like Any Other Normal Business

**Q23. In view of the provisions of the Telecommunications Act, 2023 and market developments, whether there is a need to make some changes in the respective scopes and terms and conditions associated with the following service authorisations, recently recommended by TRAI:**
**(a) Digital Connectivity Infrastructure Provider (DCIP) Authorization (under Unified License)**
**(b) IXP Authorization (under Unified License)**
**(c) Content Delivery Network (CDN) Registration**
**(d) Satellite Earth Station Gateway (SESG) License**

**If yes, kindly provide a detailed response with justifications in respect of**
**each of the above authorisations.**

**Ans :** Treat these Digital Data Services Like Any Other Normal Business as these are derivatives of the Internet. No comments for SESG

**Q24. In view of the provisions of the Telecommunications Act, 2023 and market developments, any further inputs on the following issues under consultation, may be provided with detailed justifications:**
**(a) Data Communication Services Between Aircraft and Ground Stations Provided by Organizations Other Than Airports Authority of India;**
**(b) Review of Terms and Conditions of PMRTS and CMRTS Licenses; and**
**(c) Connectivity to Access Service VNOs from more than one NSO.**

**Ans :** No Comments

**Q25. Whether there is a need for introducing any changes in the authorisation framework to improve the ease of doing business? If yes, kindly provide a detailed response with justifications.**

**Ans :** Already commented. Treat Digital Data Services Like Any Other Normal Business and registration should be equivalent to PAN and GST registration.

**Q26. In view of the provisions of the Telecommunications Act, 2023 and market technological developments, whether there is a need to make some changes in the extant terms and conditions, related to ownership of network and equipment, contained in the extant Unified License? If yes, please provide the details along with justifications.**

**Ans :** Already commented. Treat Digital Data Services Like Any Other Normal Business

**Q27. Whether any modifications are required to be made in the extant PM-WANI framework to encourage the proliferation of Wi-Fi hotspots in the country? If yes, kindly provide a detailed response with justifications.**

**Ans :** No, Wi-Fi is a derivative Internet protocol and Technology and should be treated as any other business of India. No regulatory framework required for growth separately.

**Q28. What should be the broad framework including the specific terms and conditions that should be made applicable for captive**

**authorisations, which are issued on a case-to-case basis? Kindly provide a detailed response with justifications.**

**Ans :** Already commented on my hypothesis in a previous answers.

**Q29. What amendments are required to be incorporated in the terms and conditions of authorisations for providing telecommunications services using satellite-based resources in light of the policy/ Act in the Space Sector?**
**Kindly provide a detailed response with justifications.**

**Ans :** Please see my comment about low orbit satellite Q11

**Q30. Whether the provisions of any other Policy/ Act in the related sectors need to be considered while framing terms and conditions for the new authorisation regime? If yes, kindly provide a detailed response with justification.**

**Ans :**

## Considering Entrepreneurship and Skill Development in Regulatory Frameworks

It's uncertain whether entrepreneurship development and skill development programs can be seamlessly integrated into this regulatory framework. However, fostering these areas is crucial for driving innovation and growth in the digital economy. While the primary focus of regulatory frameworks is often on compliance and governance, incorporating elements that support entrepreneurship and skill development can create a more robust and dynamic market environment.

### Promoting Community-Based Internet Services

There should be a strong emphasis on promoting community-based Internet services, whether it's for gated communities, community clouds, or other services that benefit local groups. These initiatives can significantly enhance connectivity, digital literacy, and access to resources within communities.

## Community Internet Access

- **Gated Communities**: Establishing internet services in gated communities provides residents with reliable, high-quality connectivity, enhancing digital services and access for everyone.
- **Community Cloud**: Community clouds can host applications, store data, and provide analysis, making technology more accessible and affordable for community members.

## Leveraging Corporate Social Responsibility (CSR)

- **CSR Funding**: Companies can use CSR funds to create and maintain community clouds or digital services, benefiting the community and enhancing their reputation as socially responsible organizations.
- **Employee Benefits**: Employers can offer digital data services to employees, ensuring reliable internet for personal and professional use, which supports remote work and increases productivity.

## Financial Sustainability and Income Generation

- **Earning Money by Sharing Resources**: Communities can generate revenue by sharing digital resources, creating self-sustaining models. Charging for community cloud access or selling extra bandwidth helps maintain and expand digital infrastructure.

## Inclusive Socio-Economic Development Without Licence Fees

- **No Licence Fees**: Removing licensing fees lowers entry barriers, enabling more communities to launch and sustain digital services.

## Community-Based Digital Services' Advantages

- **Improved Connectivity**: Community-based solutions close the digital divide, providing high-speed internet to more people.
- **Economic Expansion**: Better internet access promotes local business growth, job opportunities, and education.
- **Social Inclusion**: Ensures all community members, regardless of financial status, have access to essential digital resources.

Promoting community-based internet services can significantly enhance connectivity, economic growth, and social inclusion. CSR funds can support these initiatives by sponsoring digital services or developing community clouds. Eliminating licence fees and allowing communities to share revenue fosters an inclusive, self-sustaining model for socio-economic development. Investing in local digital solutions ensures that everyone benefits from technology, strengthening community ties and empowerment.

**Q31. What conditions should be made applicable for the migration of the existing licensees to the new authorisation regime under the Telecommunications Act, 2023? Kindly provide a detailed response with justifications.**

**Ans :**

**Treating Digital Service Providers as Normal Businesses**

Digital service providers should be treated like any other business in fields where scarce resources are not utilized. There should be no license fees or licensing agreements required. Release all bank guarantees and start treating digital services as normal business activities. This approach aligns with the practices of democratic countries worldwide, where the internet is recognized and treated as a standard business.

**Q32. What procedure should be followed for the migration of the existing licensees to the new authorisation regime under the Telecommunications Act, 2023?**
**Kindly provide a detailed response with justifications.**

**Ans:** Please see my comment in previous question 31.

**Q33. Do you agree that new guidelines for the transfer/ merger of authorisations under the Telecommunications Act, 2023 should be formulated after putting in place a framework for the authorisations to be granted under the Telecommunications Act, 2023? Kindly provide a detailed response with justifications.**

**Ans :** Let the company law govern that no special provision is required.

**Q34. Whether there is a need to formulate guidelines for deciding on the types of violations of terms and conditions which would fall under each category as defined in the Second Schedule of the Telecommunications Act, 2023?**
**If yes, kindly provide a detailed response with justifications.**

**Ans :** No comments

**Q35. Are there any other inputs/ suggestions relevant to the subject? Kindly provide a detailed response with justifications.**

**Ans :** Please see my comments in Q1- Q4 and other related comments.

**Q36. In case it is decided to introduce a unified service authorisation for the provision of end-to-end telecommunication services with pan-India service area, what should be the: -**
**(i) Amount of application processing fees**
**(ii) Amount of entry fees**
**(iii) Provisions of bank guarantees**
**(iv) Definitions of GR, ApGR and AGR**
**(v) Rate of authorisation fee**
**(vi) Minimum equity and networth of the Authorised entity**
**Please support your response with proper justification.**

**Ans :** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q37. In case it is decided to enhance the scope of Internet Service authorization**
**as indicated in the Q7 above, what should be the:**
**(i) Amount of application processing fees**
**(ii) Amount of entry fees**
**(iii) Provisions of bank guarantees**
**(iv) Definitions of GR, ApGR and AGR**
**(v) Rate of authorisation fee**
**(vi) Minimum equity and networth of the Authorised entity**
**Please support your response with proper justification.**

**Ans :** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q38. In case it is decided to merge the scopes of the extant NLD Service**
**authorization and ILD Service authorization into a single authorization**
**namely Long Distance Service authorization under the Telecommunications**
**Act, 2023, what should be the: -**
**(i) Amount of application processing fees**
**(ii) Amount of entry fees**
**(iii) Provisions of bank guarantees**
**(iv) Definitions of GR, ApGR and AGR**
**(v) Rate of authorisation fee**
**(vi) Minimum equity and networth of the Authorised entity**
**Please support your response with proper justification.**

**Ans :** No comments.

**Q39. In case it is decided to merge the scopes of the extant GMPCS authorization and Commercial VSAT CUG Service authorization into a single authorization namely Satellite-based Telecommunication Service authorization under the Telecommunications Act, 2023, what should be the: -**
**(i) Amount of application processing fees**
**(ii) Amount of entry fees**
**(iii) Provisions of bank guarantees**

**(iv) Definitions of GR, ApGR and AGR**
**(v) Rate of authorisation fee**
**(vi) Minimum equity and networth of the Authorised entity**

**Please support your response with proper justification.**

**Ans :** No comments.

**Q40. In case you are of the opinion that there is a need for clubbing the scopes of**
**some other authorisations into a single authorisation under the Telecommunications Act, 2023 for bringing more efficiency in the operations, what should be the:**
**(i) Amount of application processing fees**
**(ii) Amount of entry fees**
**(iii) Provisions of bank guarantees**
**(iv) Definitions of GR, ApGR and AGR**
**(v) Rate of authorisation fee**
**(vi) Minimum equity and networth of the Authorised entity**
**Please support your response with proper justification.**

**Ans :**No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q41. In case you are of the opinion there is a need to introduce certain new**
**authorisations or sub-categories of authorisations under the Telecommunications Act, 2023, what should be the: -**
**(i) Amount of application processing fees**
**(ii) Amount of entry fees**
**(iii) Provisions of bank guarantees**
**(iv) Definitions of GR, ApGR and AGR**
**(v) Rate of authorisation fee**
**(vi) Minimum equity and networth of the Authorised entity**
**Please support your response with proper justification.**

**Ans :** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q42. What should be the amount of application processing fees for the various service authorisations including VNOs, other than the merged/clubbed/new service authorisations? Please provide your response for each of the service authorisation separately.**

**Ans:** No comments required in my opinion to Treat Digital Service Providers as Normal Businesses.

**Q43. Whether the amount of entry fee and provisions for bank guarantee for**
**various service authorisations including VNOs, other than the merged/clubbed/new service authorisations, should be:**
**i. kept the same as existing for the various service authorisations under the UL/UL(VNO) license**
**ii. kept the same as recommended by the Authority for the various service authorisations under the UL/UL(VNO) license, vide its Recommendations dated 19.09.2023**
**iii. or some other provisions may be made for the purpose of Entry Fee and Bank Guarantees**
**Please support your response with proper justification separately for each authorisation.**
**Q44. Whether there is a need to review any of the other financial conditions for**
**the various service authorisations including VNOs, other than the merged/clubbed/new service authorisations? Please provide your response**
**for each service authorisation separately with detailed justification.**

**Ans:** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q45. In case it is decided to merge the scopes of the extant IP-I Registration and**
**the Digital Connectivity Infrastructure Provider (DCIP) authorization into a**
**single authorization under the Telecommunications Act, 2023, what should**
**be the: -**
**i. Amount of application processing fees**
**ii. Amount of entry fees**
**iii. Any other Fees/Charge**
**iv. Minimum equity and networth etc. of the Authorised entity.**
**Please support your response with proper justification.**

**Ans:** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q46. For MNP license and CMRTS authorisation, should the amount of entry fee**
**and provisions of bank guarantees be:**
**i. kept same as existing for the respective license/authorisation.**
**ii. kept the same as recommended by the Authority vide its Recommendations dated 19.09.2023**
**iii. or some other provisions may be made for the purpose of Entry Fee and Bank Guarantees**
**Please support your response with proper justification separately for each**

**authorisation.**

**Ans :** No Comments

**Q47. For other standalone licenses/ registrations/ authorisations/ permissions,**
**should the existing framework for financial conditions be continued? Please**
**provide detailed justification.**

**Ans:** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q48. If answer to question above is no, what should be the new/revised financial**
**requirement viz. bank guarantee/ entry fee/ processing fee/ authorisation fees/ registration fees or any other charge/ fees? Please provide detailed justification in support of your response for each other license/ registration/**
**authorisation/ permission separately.**

**Ans:** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q49. In case of the merged M2M-WPAN/WLAN service authorisation, what should**
**be the processing fees or any other applicable fees/ charges. Please support**
**your response with proper justification.**

**Ans:** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q50. In the interest of ease of doing business, is there a need to replace the**
**Affidavit to be submitted with quarterly payment of license fee and spectrum**
**usage charges with a Self-Certificate (with similar content)? Please justify your response.**

**Ans:** No comments required in my opinion to Treat Digital Service Providers as Normal Businesses authorisation should be equivalent to PAN and GST authorisation or registration.

**Q51. Is there a need to revise/ modify/simplify any of the existing formats of**

**Statement of Revenue Share and License Fee for each license/authorisation (as detailed at Annexure 3.2)? In case the answer to the question is yes, please provide the list of items to be included or to be deleted from the formats alongwith detailed justification for the inclusion/deletion.**

**Ans:** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q52. In case of a unified service authorisation for the provision of end-to-end telecommunication services with pan-India service area, what should be the format of Statement of Revenue Share and License Fee for each of these authorisations? Please support your response with justification.**

**Ans:** No comments required in my opinion to Treat Digital Service Providers as Normal Businesses and rest using scarce resources will be decided as per auction.

**Q53. In case the scope of Internet Service authorization is enhanced, what should be the format of Statement of Revenue Share and License Fee for each of these authorisations? Please support your response with justification.**

**Ans:** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q54. In case of merged extant NLD Service authorization and ILD Service authorization into a single authorization namely Long Distance Service authorization, what should be the format of Statement of Revenue Share and License Fee for each of these authorisations? Please support your response with justification.**

**Ans:** No comments already covered in previous comments.

**Q55. In case of merged extant GMPCS authorization and Commercial VSAT CUG Service authorization into a single authorization namely Satellite-based Telecommunication Service authorization, what should be the format of Statement of Revenue Share and License Fee for each of these**

**authorisations? Please support your response with justification.**

**Ans:** No comments.

**Q56. In case you have proposed to club the scope of some of other authorizations OR introduce certain new authorisations/ sub-categories of authorisations, what should be the format of Statement of Revenue Share and License Fee for each of these authorisations? Please support your response with justification.**

**Ans:** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q57. Whether there is a need to review/ simplify the norms for the preparation of annual financial statements (that is, the statements of Revenue and License Fee) of the various service authorizations under UL, UL(VNO) and MNP licenses? Please give detailed response with proper justification for each authorization/license separately.**

**Ans:** No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q58. In case of migration, how the entry fee already paid by the company be calculated/ prescribed for the relevant authorisation(s)? Please provide detailed justification in support of your response.**

**Ans:** No migration, No comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q59. Should the application processing fee be applicable in case of migration. In case the response is yes, what should be amount of application processing fee? Please give reason(s) in support of your answer.**

**Ans:** No migration, no comments require as my opinion to Treat Digital Service Providers as Normal Businesses

**Q60. What should be terms and conditions of security interest which Government**

**may prescribe? Please provide a detailed response.**

**Ans:** Treat Digital Service Providers as Normal Businesses and my opinion is already given in the first four questions.

**Q61. Whether there are any other issues/ suggestions relevant to the fees and**
**charges for the authorisations to provide telecommunication services? The same may be submitted with proper explanation and justification.**

**Ans:** My opinion is as the first few questions of this consultation.