CONSUMER PROTECTION ASSOCIATION
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Comments
On
The Framework for Service Authorisations
to be Granted Under the Telecommunications Act, 2023

Introduction :

The Framework for Service Authorisations to be granted under the Telecommunications Act, 2023, is of significant importance for several reasons. It will provide :

1. Regulatory Clarity and Consistency

- **Clear Guidelines**: The framework provides clear and consistent guidelines for the types of service authorisations available, the eligibility criteria, and the application process. This reduces ambiguity and ensures that all applicants are aware of the requirements.
- **Standardization**: By standardizing the process, the framework ensures that all service providers are subject to the same rules and criteria, promoting fairness and consistency in the telecommunications sector.

2. Facilitation of Market Entry

- **Ease of Entry**: The framework simplifies the process for new entrants to obtain the necessary authorisations, thereby encouraging competition and innovation in the market.
- **Support for New Technologies**: It enables the swift introduction of new technologies and services by providing a clear pathway for obtaining the required authorisations.

3. Protection of Consumer Interests

- **Quality of Service**: The framework ensures that only those providers who meet certain standards are granted service authorisations, thereby protecting consumers from substandard services.
- **Consumer Rights**: It includes provisions for the protection of consumer rights, such as data privacy and service reliability, ensuring that authorised service providers adhere to these standards.

4. Promotion of Investment and Growth

- **Attracting Investment**: A clear and predictable authorisation process attracts both domestic and foreign investment into the telecommunications sector, fostering economic growth and technological advancement.
- **Market Stability**: The framework provides stability and predictability in the market, which is crucial for long-term planning and investment by service providers.

5. Enhanced Compliance and Oversight

- **Regulatory Compliance**: The framework outlines the compliance requirements for service providers, ensuring that they adhere to the laws and regulations set forth in the Telecommunications Act.
- **Monitoring and Enforcement**: It facilitates effective monitoring and enforcement by the regulatory body, ensuring that service providers maintain their obligations and standards.

6. Adaptability to Technological Changes

- **Flexibility**: The framework can be designed to be adaptable to future technological advancements and changes in the market, ensuring that the regulatory environment remains relevant and effective.
- **Encouraging Innovation**: By providing clear pathways for the introduction of new services and technologies, the framework encourages innovation and the development of new telecommunications solutions.

7. National Security and Public Safety

- **Security Provisions**: The framework can include provisions to ensure that service providers implement adequate security measures to protect national infrastructure and consumer data.
- **Emergency Services**: It can also ensure that service providers are capable of supporting emergency services and public safety communications, which are critical in times of crisis.

8. International Competitiveness

- **Global Standards**: By aligning with international best practices and standards, the framework ensures that the telecommunications sector remains competitive globally, facilitating international cooperation and business opportunities.

The Framework for Service Authorisations under the Telecommunications Act, 2023, is essential for providing regulatory clarity, facilitating market entry, protecting consumer interests, promoting investment and growth, enhancing compliance and oversight, adapting to technological changes, ensuring national security and public safety, and maintaining international competitiveness.

This Framework will provide several benefits for consumers like :

1. Enhanced Quality of Service

- **Stringent Standards**: The framework ensures that only those providers who meet certain quality standards are granted service authorisations. This results in better service quality for consumers, including more reliable connectivity, higher speeds, and better customer service.
- **Performance Monitoring**: Regular monitoring and enforcement of quality standards ensure that service providers maintain high performance levels, leading to consistent and dependable services for consumers.

2. Increased Consumer Protection

- **Data Privacy and Security**: The framework can mandate strict data privacy and security measures, ensuring that consumers' personal information is protected from breaches and misuse.
- **Dispute Resolution Mechanisms**: Clear guidelines for handling consumer complaints and disputes ensure that issues are resolved promptly and fairly, enhancing consumer confidence in telecommunications services.

3. Greater Choice and Competition

- **Facilitating Market Entry**: By simplifying the process for new entrants to obtain service authorisations, the framework promotes competition in the telecommunications market. Increased competition typically leads to better prices, more innovative services, and improved customer service.
- **Variety of Services**: Consumers benefit from a wider range of service options as new providers and new technologies enter the market, catering to diverse needs and preferences.

4. Affordable Pricing

- **Competitive Market**: With more service providers in the market, competition drives down prices, making telecommunications services more affordable for consumers.
- **Regulatory Oversight**: The framework can include provisions to prevent anti-competitive practices and ensure that pricing remains fair and transparent.

5. Innovation and New Technologies

- **Encouraging Innovation**: The framework supports the introduction of new technologies and services by providing a clear pathway for authorisation. Consumers benefit from access to the latest advancements, such as 5G, Internet of Things (IoT) applications, and other emerging technologies.
- **Improved Services**: Innovation leads to improved services, such as better network coverage, faster internet speeds, and enhanced features, which directly benefit consumers.

6. Consumer Awareness and Education

- **Transparency**: The framework can mandate that service providers clearly communicate their terms, conditions, and service quality metrics to consumers, ensuring that they make informed choices.
- **Consumer Education**: Initiatives to educate consumers about their rights, available services, and how to choose the best options for their needs can be part of the framework, empowering consumers with the knowledge to make better decisions.

7. Enhanced Accessibility

- **Universal Service Obligations**: The framework can include provisions to ensure that telecommunications services are accessible to all, including underserved and rural areas, bridging the digital divide and ensuring equitable access to essential services.

- **Affordability Programs**: Provisions for subsidized services or special plans for low-income consumers can ensure that everyone has access to essential telecommunications services.

8. Robust Emergency Services

- **Reliable Communications**: The framework ensures that service providers maintain robust and reliable networks capable of supporting emergency services, ensuring that consumers have access to critical communications during emergencies.
- **Public Safety Features**: Features such as priority access for emergency calls and alerts can be mandated, ensuring public safety and timely information dissemination.

9. Regulatory Accountability

- **Consumer Representation**: The framework can include mechanisms for consumer representation and feedback in regulatory processes, ensuring that consumer interests are considered in decision-making.
- **Regular Audits and Reports**: Regular audits and public reports on service provider performance and compliance with regulations ensure transparency and accountability, fostering trust between consumers and service providers.

The Framework will enhance the quality of service, increase consumer protection, promote competition, drive innovation, ensure affordability, improve accessibility, support robust emergency services, and maintain

regulatory accountability. These benefits collectively ensure that consumers receive high-quality, reliable, and affordable telecommunications services.

When preparing the Framework for Service Authorisations to be granted under the Telecommunications Act, 2023, several precautions should be taken to ensure the framework is effective, fair, and comprehensive. Here are key precautions to consider:

1. Stakeholder Consultation

- **Involvement of Stakeholders**: Engage with all relevant stakeholders, including telecommunications providers, consumer groups, industry experts, and government agencies, to gather diverse perspectives and ensure the framework addresses the needs and concerns of all parties.
- **CAG's Consultation**: Conduct CAG consultations to solicit feedback from the CAG and ensure that consumer interests are adequately represented.

2. Comprehensive Research and Analysis

- **Benchmarking**: Study frameworks and best practices from other countries to understand what has been effective in different regulatory environments. Adapt these practices to fit the local context.
- **Impact Assessment**: Conduct thorough impact assessments to evaluate the potential economic, social, and technological impacts of the framework.

3. Clarity and Simplicity

- **Clear Definitions**: Ensure that all terms and conditions are clearly defined to avoid ambiguity and misinterpretation. This includes definitions of various types of service authorisations, quality standards, and compliance requirements.
- **User-Friendly Documentation**: Prepare user-friendly guidelines and documentation to help stakeholders understand the framework easily.

4. Flexibility and Adaptability

- **Regular Updates**: Design the framework to be adaptable to future technological advancements and market changes. Establish mechanisms for regular reviews and updates to keep the framework relevant.
- **Provisions for Innovation**: Include provisions that allow for the quick and efficient introduction of new technologies and services.

5. Robust Compliance and Enforcement Mechanisms

- **Monitoring and Enforcement**: Develop robust mechanisms for monitoring compliance and enforcing regulations. This includes regular audits, inspections, and penalties for non-compliance.
- **Transparent Procedures**: Ensure that the procedures for enforcement are transparent and fair, allowing for due process and the right to appeal.

6. Data Privacy and Security

- **Stringent Requirements**: Incorporate stringent data privacy and security requirements to protect consumer information and prevent data breaches.
- **Regular Audits**: Implement regular security audits and assessments to ensure compliance with data protection standards.

7. Consumer Protection and Rights

- **Complaint Resolution**: Establish clear and efficient processes for handling consumer complaints and disputes. Ensure that consumers have easy access to support and resolution mechanisms.
- **Transparency in Terms and Conditions**: Mandate that service providers clearly communicate their terms and conditions, including pricing, service quality metrics, and customer rights.

8. Encouraging Competition and Innovation

- **Non-Discriminatory Access**: Ensure that the framework promotes fair competition by providing non-discriminatory access to essential infrastructure and services.
- **Supporting Small Providers**: Include measures to support small and new entrants to the market, fostering innovation and diversity in service offerings.

9. National Security Considerations

- **Security Provisions**: Include provisions to ensure that service providers implement adequate security measures to protect national infrastructure and consumer data.
- **Emergency Services**: Ensure that service providers are capable of supporting emergency services and public safety communications.

10. Legal and Regulatory Alignment

- **Consistency with Existing Laws**: Ensure that the framework is consistent with existing national laws and international agreements to avoid conflicts and ensure smooth implementation.
- **Legal Clarity**: Provide clear legal guidance on the responsibilities and obligations of service providers under the framework.

11. Economic and Social Inclusivity

- **Universal Service Obligations**: Include provisions to ensure that telecommunications services are accessible to all, including underserved and rural areas.
- **Affordability Programs**: Consider measures to ensure that services remain affordable, particularly for low-income and vulnerable populations.

12. Sustainability

- **Environmental Considerations**: Encourage sustainable practices and the use of environmentally friendly technologies in the provision of telecommunications services.

By taking these precautions, the framework for service authorisations under the Telecommunications Act, 2023, can be designed to be fair, effective, and beneficial for all stakeholders, particularly consumers.

Comments :

Q.1 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.

Comments :

The question revolves around the potential shift in regulatory practice from a license agreement model to an authorization model under the Telecommunications Act, 2023, for granting authorizations to telecommunications entities. Here is a detailed analysis and response, with justifications:

License Agreement Model vs. Authorization Model

License Agreement Model:

1. **Benefits**:

- **Control and Compliance**: Ensures stringent control and compliance with regulatory requirements.
- **Clear Accountability**: Defines clear accountability and recourse mechanisms for non-compliance.
- **Detailed Framework**: Provides a detailed framework for operations, service standards, and financial obligations.

2. **Challenges**:
   - **Bureaucratic Delays**: Often leads to delays in processing and issuing licenses.
   - **Rigidity**: May lack flexibility to adapt quickly to technological advancements and market changes.

Authorization Model:

1. **International Practice**:
   - In several countries, regulatory authorities issue authorizations instead of entering into license agreements.
   - Authorizations are generally less detailed but still require compliance with overarching regulations and standards.
2. **Benefits**:
   - **Efficiency**: Streamlines the process, reducing bureaucratic delays and fostering quicker market entry.
   - **Flexibility**: Allows for more flexible adaptation to technological changes and market dynamics.
   - **Reduced Administrative Burden**: Lowers the administrative burden on both the government and the applicants.

3. **Challenges**:
    - **Regulatory Oversight**: Requires robust mechanisms to ensure compliance and address non-compliance effectively.
    - **Safeguarding Interests**: Needs specific safeguards to protect the interests of authorized entities and ensure a level playing field.

Recommendations and Safeguards

If the Central Government decides to adopt the authorization model, several safeguards should be implemented to protect the reasonable interests of authorized entities and ensure effective regulatory oversight:

1. **Comprehensive Regulatory Framework**:
    - Develop a detailed regulatory framework that specifies the requirements, standards, and obligations for authorized entities.
    - Include provisions for service quality, consumer protection, and technical standards.
2. **Periodic Reviews and Audits**:
    - Implement periodic reviews and audits to ensure compliance with regulatory requirements.
    - Establish clear consequences for non-compliance, including fines, suspension, or revocation of authorization.
3. **Transparent Processes**:
    - Ensure transparency in the authorization process, including clear criteria for granting, renewing, and revoking authorizations.
    - Publish guidelines and decisions to maintain accountability.

4. **Consumer Protection**:
    - Enforce stringent consumer protection regulations to safeguard the interests of users.
    - Establish mechanisms for handling consumer complaints and disputes efficiently.
5. **Market Competition**:
    - Monitor market competition to prevent monopolistic practices and ensure a level playing field for all entities.
    - Introduce measures to promote fair competition and prevent anti-competitive behavior.
6. **Technical and Operational Standards**:
    - Mandate adherence to international technical and operational standards.
    - Regularly update standards to keep pace with technological advancements.
7. **Financial Security**:
    - Require authorized entities to provide financial guarantees or performance bonds to ensure they can meet their obligations.
    - Implement mechanisms for financial oversight and accountability.

Justification

Efficiency and Innovation:

- The authorization model is more conducive to fostering innovation and efficiency in the telecommunications sector.

- It reduces entry barriers for new players, encouraging competition and technological advancement.

Regulatory Oversight:

- While the authorization model offers flexibility, the implementation of robust safeguards ensures that regulatory oversight remains effective.
- Periodic reviews and transparent processes maintain accountability and compliance without stifling growth.

International Best Practices:

- Adopting practices observed in successful international markets can enhance the competitiveness and dynamism of the telecommunications sector.
- Aligning with global standards and practices facilitates international cooperation and investment.

In conclusion, transitioning to an authorization model under the Telecommunications Act, 2023, can provide significant benefits in terms of efficiency and flexibility. However, it is crucial to implement comprehensive safeguards to protect the reasonable interests of authorized entities and ensure robust regulatory oversight.

Impact on Consumers :

The impact of the License Agreement Model versus the Authorization Model on consumers can be analyzed in terms of various factors such as

service quality, market competition, consumer protection, and innovation. Here's a detailed comparison to determine which model is better for consumers:

License Agreement Model

Benefits for Consumers:

1. **Quality Assurance**:
    - The detailed terms and conditions in license agreements often include specific requirements for service quality and reliability.
    - Consumers can expect a higher standard of service due to stringent regulatory oversight.
2. **Accountability**:
    - Clear accountability mechanisms are in place, ensuring that service providers adhere to their commitments.
    - Consumers have formal channels for recourse if providers fail to meet their obligations.
3. **Consumer Protection**:
    - License agreements typically include robust consumer protection provisions.
    - There are often detailed processes for handling consumer complaints and resolving disputes.

Challenges for Consumers:

1. **Market Entry Delays**:

- The bureaucratic nature of the licensing process can delay the entry of new service providers, potentially limiting consumer choice.
- Innovation and adoption of new technologies may be slower due to the rigidity of the licensing process.

2. **Limited Competition**:
    - The complexity and cost of obtaining a license may deter new entrants, reducing market competition.
    - Consumers may face higher prices and fewer choices if competition is limited.

Authorization Model

Benefits for Consumers:

1. **Increased Competition**:
    - The streamlined authorization process can encourage more entities to enter the market, fostering greater competition.
    - Increased competition typically leads to better service offerings, lower prices, and more choices for consumers.
2. **Innovation and Flexibility**:
    - The authorization model is more adaptable to technological advancements and market changes.
    - Consumers benefit from faster implementation of new technologies and services.
3. **Efficiency**:

- Reduced bureaucratic delays mean that new services and providers can enter the market more quickly.
- Consumers gain access to new and innovative services sooner.

Challenges for Consumers:

1. **Consistency of Service Quality**:
   - Without detailed license agreements, there may be variability in the quality of service provided by different entities.
   - Ensuring consistent service quality across providers can be challenging.
2. **Regulatory Oversight**:
   - Ensuring compliance and accountability may be more complex without the detailed framework provided by license agreements.
   - Consumers might face difficulties in seeking recourse if regulatory oversight is not robust.
3. **Consumer Protection**:
   - The authorization model needs strong safeguards to ensure consumer protection.
   - Without detailed agreements, there might be gaps in consumer rights and protections.

Conclusion

Authorization Model:

- **Better for Consumers** if it successfully promotes competition, innovation, and efficiency while implementing strong regulatory oversight and consumer protection mechanisms.
- **Benefits**: More choices, lower prices, faster adoption of new technologies, and potentially better service offerings due to competitive pressures.

License Agreement Model:

- **Better for Consumers** if the primary concern is consistent service quality and strong regulatory accountability.
- **Benefits**: Higher assurance of service quality, clear accountability mechanisms, and robust consumer protection.

Key Considerations:

- **Regulatory Framework**: For the authorization model to be better for consumers, it must be supported by a comprehensive and effective regulatory framework that ensures service quality, compliance, and consumer protection.
- **Market Dynamics**: The success of either model depends on the specific market dynamics and how effectively the regulatory authority can oversee and enforce compliance.

In summary, while the authorization model has the potential to offer more benefits to consumers in terms of competition and innovation, it requires a strong regulatory framework to ensure these benefits are realized without

compromising service quality and consumer protection. The license agreement model, on the other hand, provides greater assurance of quality and accountability but may limit competition and innovation.

Safeguards required to protect the reasonable interests of authorized entities :

If the Central Government opts to issue an authorization to applicant entities instead of entering into a license agreement under Section 3(1) of the Telecommunications Act, 2023, several safeguards can be instituted to protect the reasonable interests of the authorized entities. These safeguards might include:

1. Clear and Transparent Criteria for Authorization:

- **Defined Guidelines:** Establish explicit, well-documented criteria for granting, renewing, and revoking authorizations to ensure transparency and consistency.
- **Public Consultation:** Engage stakeholders in a public consultation process before finalizing guidelines to incorporate diverse perspectives and enhance acceptance.

2. Regulatory Certainty and Stability:

- **Long-Term Validity:** Provide authorizations with a reasonable duration to ensure business stability and predictability.
- **Amendment Procedures:** Clearly outline the process and conditions under which authorization terms can be amended.

3. Fair and Non-Discriminatory Treatment:

- **Equal Access:** Ensure that all eligible entities have equal access to the authorization process.
- **Non-Discriminatory Practices:** Implement measures to prevent discriminatory practices by the government or competitors.

4. Dispute Resolution Mechanisms:

- **Arbitration and Mediation:** Establish independent arbitration and mediation mechanisms for resolving disputes related to authorizations.
- **Appeal Process:** Provide a clear, accessible process for entities to appeal against decisions related to authorizations.

5. Protection Against Arbitrary Revocation:

- **Due Process:** Ensure that authorizations can only be revoked for clearly defined reasons and through a due process.
- **Notice and Hearing:** Require advance notice and the opportunity for a hearing before any revocation or significant modification of authorizations.

6. Fair Financial Obligations:

- **Reasonable Fees:** Set reasonable authorization fees and ensure they are transparently communicated.
- **Predictable Payments:** Establish predictable payment schedules for any ongoing fees or contributions.

7. Data Protection and Privacy:

- **Compliance Requirements:** Ensure that authorized entities comply with data protection laws and best practices to safeguard consumer privacy.
- **Government Oversight:** Implement oversight mechanisms to monitor compliance without being overly intrusive.

8. Consumer Protection:

- **Quality of Service Standards:** Mandate adherence to predefined quality of service standards to protect consumers.
- **Grievance Redressal:** Require entities to have robust grievance redressal mechanisms for consumer complaints.

9. Interconnection and Access:

- **Fair Access:** Ensure fair interconnection and access rules to promote competition and prevent monopolistic practices.
- **Cost-Based Pricing:** Mandate cost-based pricing for interconnection and access services.

10. Periodic Review and Assessment:

- **Regular Audits:** Conduct regular audits and assessments of authorized entities to ensure compliance with authorization terms and regulatory standards.

- **Feedback Mechanism:** Establish a mechanism for authorized entities to provide feedback on regulatory practices and challenges.

11. Support for Innovation and Investment:

- **Incentives:** Provide incentives for innovation and investment in telecommunications infrastructure and services.
- **Regulatory Flexibility:** Allow for regulatory flexibility to accommodate emerging technologies and business models.

12. Transparency in Decision-Making:

- **Publication of Decisions:** Publish all decisions related to authorizations, including the rationale behind them, to ensure transparency.
- **Stakeholder Engagement:** Engage with stakeholders regularly to discuss regulatory changes and developments.

By implementing these safeguards, the Central Government can ensure that the interests of authorized entities are protected while fostering a competitive and dynamic telecommunications sector.

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.

Comments :

Granting authorizations under Section 3(1) of the Telecommunications Act, 2023, in the form of an authorization document that includes essential aspects, along with terms and conditions specified in rules made under the Act, can be an appropriate approach. Here is a detailed analysis with justifications:

Proposed Approach

1. **Authorization Document**:
    - This document can outline the essential aspects of the authorization, including:
        - Service area
        - Period of validity
        - Scope of service
        - List of applicable rules
        - Authorization fee
    - The document provides clarity and certainty to the authorized entity regarding the fundamental parameters of their authorization.
2. **Terms and Conditions in Rules**:

- The detailed terms and conditions should be specified in rules made under the Telecommunications Act, 2023.
- These rules should cover operational, technical, and financial obligations, ensuring comprehensive regulatory oversight.

3. **Safeguards for Authorized Entities**:
    - Include provisions to protect the reasonable interests of authorized entities in case of any amendments to the rules.
    - This should involve mechanisms for stakeholder consultation, reasonable notice periods for changes, and transitional arrangements.

Justifications :

Clarity and Certainty:

- **Authorization Document**:
    - Provides a clear and concise summary of the key elements of the authorization.
    - Helps authorized entities understand their primary obligations and the scope of their authorization without wading through extensive legal texts.
- **Terms and Conditions in Rules**:
    - Detailed rules ensure that all necessary regulatory requirements are comprehensively covered.

- Offers flexibility to update and adapt the terms and conditions as needed, without requiring amendments to each individual authorization document.

Flexibility and Adaptability:

- **Dynamic Regulation**:
  - Rules can be more easily amended to reflect technological advancements, market changes, and evolving regulatory needs.
  - Allows the regulatory framework to remain current and relevant, benefiting both the market and consumers.
- **Stakeholder Consultation**:
  - Introducing amendments through a transparent process involving stakeholder consultation ensures that changes are well-informed and consider the interests of all parties.
  - Provides authorized entities an opportunity to provide input and adapt to changes smoothly.

Protecting Interests of Authorized Entities:

- **Reasonable Notice**:
  - Providing reasonable notice periods before implementing rule changes allows authorized entities to comply without undue disruption.
  - Ensures a smooth transition and minimizes operational impacts.
- **Transitional Arrangements**:

- Transitional arrangements can help entities adjust to new requirements, reducing compliance burdens and avoiding sudden disruptions.
- Facilitates a balanced approach where regulatory objectives are met without compromising the stability and predictability needed by businesses.

International Best Practices:

- **Alignment with Global Standards**:
  - Many countries use a similar approach, balancing clear, stable authorizations with adaptable, detailed rules.
  - This model supports international best practices, encouraging investment and fostering a competitive telecommunications market.

Legal and Regulatory Efficiency:

- **Simplified Administration**:
  - A streamlined authorization process reduces administrative burdens for both the regulatory authority and the authorized entities.
  - Ensures a more efficient regulatory environment, promoting quicker market entry and innovation.
- **Enforcement and Compliance**:
  - Clearly defined rules facilitate better enforcement and compliance monitoring.

- Ensures that all entities operate under the same regulatory standards, promoting fairness and transparency.

Conclusion

Granting authorizations under Section 3(1) of the Telecommunications Act, 2023, in the form of an authorization document containing essential aspects, supplemented by detailed rules made under the Act, is an appropriate and effective approach. This model provides clarity and certainty to authorized entities while allowing regulatory flexibility and adaptability. The inclusion of suitable safeguards ensures that the reasonable interests of authorized entities are protected, fostering a balanced and dynamic telecommunications market.

Granting authorizations under Section 3(1) of the Telecommunications Act, 2023, in the form of an authorization document containing essential aspects can be appropriate for several reasons. Here's an analysis of its appropriateness, how such authorizations can be structured, and how they can be challenged:

Appropriateness of Authorization Documents

Benefits

1. **Clarity and Transparency**:
    - **Essential Information**: Authorization documents can clearly outline essential aspects such as service area, period of validity, scope of service, applicable rules, and fees.

- **Simplified Understanding**: This approach simplifies the understanding of obligations and rights for the authorized entities, avoiding extensive legal and bureaucratic language.

2. **Efficiency**:
   - **Streamlined Process**: It reduces bureaucratic delays associated with extensive licensing processes, fostering quicker market entry and operational commencement.
   - **Administrative Ease**: Simplifies the administrative burden on the regulatory body by standardizing the essential components of authorizations.
3. **Flexibility**:
   - **Adaptability to Changes**: Allows for easy updating and modification of detailed terms and conditions through rules under the Act, rather than amending each authorization document.
   - **Innovation Encouragement**: Facilitates a more adaptable environment for technological advancements and market innovations.
4. **Regulatory Oversight**:
   - **Robust Framework**: Combining essential aspects in the authorization document with detailed rules ensures a comprehensive regulatory framework that can be effectively enforced.

Safeguards

1. **Consultation and Transparency**:

- **Stakeholder Involvement**: Amendments to rules should involve stakeholder consultations to ensure the interests of authorized entities and other stakeholders are considered.
- **Publication and Notice**: Changes to rules should be published with reasonable notice periods, providing time for entities to comply.

2. **Transitional Provisions**:
   - **Grace Periods**: Implement transitional provisions to allow entities time to adapt to new requirements.
   - **Support Mechanisms**: Provide guidance and support to entities to ensure smooth transitions.

Granting authorizations under Section 3(1) of the Telecommunications Act, 2023, in the form of an authorization document containing essential aspects is appropriate and can be highly beneficial in terms of clarity, efficiency, and flexibility. However, it is essential to ensure that the process includes robust safeguards to protect the interests of authorized entities and allows for due process in the event of challenges. By establishing clear mechanisms for consultation, notice, and transitional provisions, along with well-defined pathways for administrative and judicial review, the regulatory framework can balance the need for streamlined authorizations with the protection of legal and equitable interests of all stakeholders.

Potential Drawbacks for Consumers

1. Service Quality Variability

- **Inconsistent Quality**: Without detailed individual license agreements, there might be variability in the quality of service provided by different entities. Consumers could face issues if some providers do not meet expected service standards.

2. Regulatory Oversight Challenges

- **Compliance Issues**: Ensuring compliance with broad rules rather than specific license agreements might be more challenging, leading to potential lapses in service standards and consumer protection.
- **Enforcement Difficulties**: Enforcement of rules may require significant regulatory resources and robust mechanisms to address non-compliance effectively.

3. Consumer Protection Concerns

- **Limited Recourse**: If the authorization process or rules are not clearly defined or enforced, consumers might have limited recourse in cases of disputes or service failures.
- **Ambiguity in Rights**: Broad rules may lead to ambiguities in consumer rights and protections, making it harder for consumers to understand and assert their rights.

4. Transition and Adaptation Issues

- **Implementation Gaps**: During transitions to new rules or authorizations, there could be gaps in service or protection, impacting consumers negatively.

- **Communication Issues**: Consumers may not be adequately informed about changes in service terms or regulatory protections, leading to confusion and potential dissatisfaction.

Mitigation Strategies

1. Strengthening Regulatory Oversight

- **Regular Audits and Inspections**: Conduct regular audits and inspections to ensure compliance with service standards and consumer protection regulations.
- **Clear Enforcement Mechanisms**: Establish clear and robust mechanisms for enforcement, including penalties for non-compliance.

2. Enhancing Consumer Protection

- **Detailed Consumer Rights**: Clearly define consumer rights and protections in the rules and ensure they are easily accessible and understandable.
- **Effective Dispute Resolution**: Provide effective and accessible mechanisms for consumers to resolve disputes and seek redress.

3. Ensuring Transparency and Communication

- **Regular Updates**: Ensure that consumers are regularly updated on any changes to rules or service terms.

- **Stakeholder Engagement**: Engage with consumer groups and other stakeholders to understand their concerns and ensure their interests are protected.

4. Implementing Transitional Provisions

- **Grace Periods**: Provide grace periods for implementing new rules to ensure smooth transitions without disrupting services.
- **Support Mechanisms**: Offer support and guidance to both providers and consumers during transitions to new regulatory frameworks.

Conclusion

Granting authorizations under Section 3(1) of the Telecommunications Act, 2023, in the form of an authorization document containing essential aspects is an appropriate and beneficial approach. It streamlines processes, encourages competition, and fosters innovation. However, to protect consumers, it is crucial to address potential drawbacks such as service quality variability, regulatory oversight challenges, consumer protection concerns, and transition issues. By strengthening regulatory oversight, enhancing consumer protection, ensuring transparency and communication, and implementing transitional provisions, these drawbacks can be mitigated, ensuring a balanced and effective regulatory framework that benefits all stakeholders, particularly consumers.

Potential Drawbacks for the Regulatory Authority :

1. Compliance and Enforcement Challenges

- **Monitoring and Enforcement**: Ensuring that all authorized entities comply with broad rules can be more challenging than monitoring compliance with detailed, entity-specific license agreements. This may require more robust compliance monitoring systems and increased regulatory resources.
- **Standard Enforcement Mechanisms**: Developing and implementing effective enforcement mechanisms that apply uniformly across all entities can be complex.

2. Risk of Inconsistency

- **Service Quality Variability**: Without detailed license agreements, there may be inconsistencies in service quality and compliance levels among different entities. Ensuring uniform service standards might be difficult.
- **Interpretation of Rules**: Broad rules might be interpreted differently by different entities, leading to variability in compliance and enforcement challenges.

3. Increased Regulatory Burden

- **Rule Amendments**: Frequently updating and amending rules to keep pace with technological and market changes can place a significant burden on the regulatory authority.
- **Stakeholder Management**: Managing consultations and feedback from multiple stakeholders during rule changes can be resource-intensive and time-consuming.

4. Legal and Administrative Risks

- **Challenges to Authorization Decisions**: Authorizations can be challenged on grounds of fairness, reasonableness, or legality, potentially leading to legal disputes and administrative reviews.
- **Ambiguity in Authorizations**: If authorization documents are not sufficiently detailed, there may be ambiguity in the scope and conditions of the authorization, leading to disputes and compliance issues.

5. Transition and Implementation Issues

- **Adaptation by Entities**: Ensuring that entities adapt to new rules and conditions smoothly may require additional regulatory support and oversight.
- **Communication and Transparency**: Maintaining clear and transparent communication with all stakeholders during transitions and rule updates is critical but can be challenging.

Mitigation Strategies

1. Strengthening Compliance and Enforcement Mechanisms

- **Regular Audits and Inspections**: Conduct regular audits and inspections to ensure compliance with regulatory standards.
- **Clear Penalties**: Establish clear and consistent penalties for non-compliance to deter violations and ensure accountability.

2. Enhancing Regulatory Framework

- **Detailed Rules and Guidelines**: Develop detailed rules and guidelines that provide clarity and reduce ambiguity in interpretations.
- **Stakeholder Engagement**: Engage with stakeholders regularly to understand their concerns and ensure that rules are practical and enforceable.

3. Building Capacity

- **Training and Resources**: Invest in training and resources for regulatory staff to handle compliance monitoring and enforcement effectively.
- **Technology and Tools**: Utilize technology and tools to streamline compliance monitoring and data collection.

4. Legal and Administrative Safeguards

- **Transparent Processes**: Ensure that the processes for issuing authorizations and amending rules are transparent and include stakeholder consultations.
- **Legal Support**: Provide legal support and clear guidelines for handling disputes and challenges to authorization decisions.

5. Effective Communication

- **Clear Communication Channels**: Maintain clear communication channels with authorized entities and stakeholders to provide timely updates and support.
- **Public Awareness**: Increase public awareness about regulatory changes and their implications to ensure smooth transitions.

Conclusion

While granting authorizations under Section 3(1) of the Telecommunications Act, 2023, in the form of an authorization document containing the essential aspects is beneficial for efficiency and flexibility, it poses several challenges for the regulatory authority. These include compliance and enforcement difficulties, risks of inconsistency, increased regulatory burden, legal and administrative risks, and transition issues. However, by strengthening compliance mechanisms, enhancing the regulatory framework, building capacity, implementing legal safeguards, and ensuring effective communication, these drawbacks can be mitigated. This approach can help balance the need for streamlined authorizations with the necessity of maintaining robust regulatory oversight and protecting consumer interests.

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 justification.

Comments :

(a) Which essential aspects of authorisation should be included in authorisation documents?

Comments :

If it is decided to implement the authorization structure under Section 3(1) of the Telecommunications Act, 2023, in the form of authorization documents, it is crucial to include certain essential aspects to ensure clarity, compliance, and effective regulation. Here are the key components that should be included in the authorization documents:

Essential Aspects to Include in Authorization Documents

1. Service Area

- **Geographical Scope**: Clearly define the geographical boundaries within which the authorized entity is permitted to operate. This includes specifying regions, cities, or specific areas.
- **Coverage Obligations**: Outline any minimum coverage requirements within the service area to ensure broad and inclusive access to services.

2. Period of Validity

- **Duration**: Specify the duration of the authorization, including the start and end dates.
- **Renewal Terms**: Provide details on the terms and conditions for renewal, including any prerequisites or procedures that must be followed.

3. Scope of Service

- **Service Description**: Clearly describe the types of services the entity is authorized to provide (e.g., mobile telecommunications, internet services, fixed-line services).
- **Service Standards**: Outline any required service standards, including quality of service benchmarks and performance metrics.

4. List of Applicable Rules

- **Regulatory Framework**: Include a comprehensive list of all relevant rules, regulations, and guidelines that the authorized entity must comply with.
- **Updates and Amendments**: Specify how updates and amendments to these rules will be communicated and enforced.

5. Authorization Fee

- **Fee Structure**: Detail the fee structure, including initial authorization fees, annual fees, and any other applicable charges.
- **Payment Terms**: Specify the terms and conditions for payment, including deadlines and penalties for late payments.

6. Technical and Operational Requirements

- **Infrastructure Standards**: Outline technical requirements for network infrastructure, equipment standards, and interoperability.
- **Operational Protocols**: Provide guidelines on operational protocols, including data privacy, security measures, and emergency response protocols.

7. Compliance and Reporting Obligations

- **Regular Reporting**: Define the reporting requirements, including the frequency and format of reports on service performance, financial status, and compliance with regulatory standards.
- **Audit Provisions**: Specify the provisions for regulatory audits and inspections to ensure compliance with authorization terms.

8. Consumer Protection Provisions

- **Consumer Rights**: Detail the rights of consumers, including service quality guarantees, complaint handling procedures, and dispute resolution mechanisms.
- **Transparency Obligations**: Require the authorized entity to provide clear and transparent information to consumers regarding services, pricing, and terms of service.

9. Amendment and Revocation Conditions

- **Amendment Procedures**: Outline the procedures for amending the terms of the authorization, including stakeholder consultation and notification requirements.
- **Revocation Terms**: Specify the conditions under which the authorization can be revoked, including non-compliance, insolvency, or breach of critical terms.

10. Dispute Resolution Mechanisms

- **Resolution Processes**: Provide details on the mechanisms for resolving disputes between the regulatory authority and the authorized entity, as well as between the entity and consumers.
- **Arbitration and Mediation**: Include options for arbitration and mediation to resolve conflicts efficiently and fairly.

11. Environmental and Social Obligations

- **Sustainability Requirements**: Include any environmental sustainability requirements, such as guidelines for reducing the carbon footprint and managing e-waste.
- **Corporate Social Responsibility**: Outline expectations for corporate social responsibility initiatives, particularly those that benefit underserved communities.

12. Legal and Compliance Assurance

- **Legal Compliance**: Reiterate the requirement for compliance with all applicable laws and regulations, including telecommunications laws, competition laws, and other relevant legal frameworks.
- **Insurance and Liability**: Specify insurance requirements and liability provisions to cover potential damages or service disruptions.

In short Including these essential aspects in the authorization documents under Section 3(1) of the Telecommunications Act, 2023, will provide a comprehensive and clear framework for authorized entities. This approach ensures that all critical areas are covered, promoting transparency, compliance, and consumer protection while enabling the regulatory authority to effectively monitor and enforce the terms of the authorization. By addressing these key components, the regulatory framework can support a competitive, innovative, and consumer-friendly telecommunications market.

(b) What should be the broad category of rules, under which, terms and conditions of various authorisations could be prescribed?

Comments :

Under Section 3(1) of the Telecommunications Act, 2023, the terms and conditions of various authorizations could be prescribed under the following broad categories of rules:

1. **Licensing and Authorizations**:
    - Types of licenses and authorizations.
    - Procedures for applying, granting, renewing, and transferring licenses.

- Eligibility criteria for applicants.
- Duration and conditions of licenses and authorizations.

2. **Spectrum Management**:
    - Allocation and assignment of spectrum.
    - Spectrum pricing, auctions, and trading.
    - Spectrum usage and efficiency standards.
    - Interference management and spectrum sharing.
3. **Infrastructure and Network Management**:
    - Requirements for building and maintaining telecommunications infrastructure.
    - Standards for network quality, reliability, and security.
    - Interconnection obligations between service providers.
    - Infrastructure sharing and co-location requirements.
4. **Service Provision and Consumer Protection**:
    - Quality of service standards.
    - Customer service and complaint resolution mechanisms.
    - Tariff regulations and transparency requirements.
    - Data protection and privacy obligations for service providers.
5. **Universal Service and Accessibility**:
    - Obligations for providing universal service.
    - Requirements for ensuring accessibility to persons with disabilities.
    - Programs and initiatives to bridge the digital divide.
6. **Security and Lawful Interception**:
    - Requirements for network and data security.

- Obligations for lawful interception and cooperation with law enforcement agencies.
- Measures to combat cyber threats and fraud.

7. **Compliance and Enforcement**:
   - Monitoring and compliance mechanisms.
   - Penalties and sanctions for non-compliance.
   - Procedures for dispute resolution and adjudication.
8. **Research and Development**:
   - Support for innovation and R&D in telecommunications.
   - Collaboration with academic and research institutions.
   - Promotion of indigenous technology development.

These categories ensure comprehensive coverage of all aspects of telecommunications regulation, promoting a fair, secure, and efficient telecommunications environment.

(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?

Comments :

Yes, it would be appropriate to incorporate the information currently provided through the extant Guidelines for Grant of Unified License and Unified

License for VNO into the General Rules under the Telecommunications Act, 2023. This incorporation can provide several benefits:

1. **Consolidation of Regulatory Framework**:

    - Integrating the guidelines into the General Rules ensures that all relevant regulations are housed within a single, comprehensive document. This consolidation simplifies the regulatory landscape for stakeholders, making it easier to understand and comply with the requirements.

2. **Clarity and Transparency**:

    - Including detailed information on the application process, eligibility conditions, and conditions for transfer/merger of licenses within the General Rules promotes transparency. This clarity helps applicants and licensees understand the regulatory expectations and processes more effectively.

3. **Consistency and Standardization**:

    - Embedding these guidelines within the General Rules ensures consistency in their application. It standardizes the procedures and conditions across the telecommunications sector, reducing the risk of varied interpretations and implementations.

4. **Ease of Access**:

- Having all relevant information in one place makes it more accessible to potential licensees, regulatory bodies, and other stakeholders. It streamlines the process of finding and referencing the necessary regulatory information.

5. **Legal Certainty**:

   - By formalizing these guidelines within the General Rules, they gain a higher level of legal certainty and enforceability. This incorporation can provide a stronger legal basis for the actions and decisions of the regulatory authorities.

6. **Regulatory Flexibility**:

   - While incorporating the guidelines, provisions can be made to allow for updates and amendments as the telecommunications landscape evolves. This flexibility ensures that the regulations remain relevant and adaptive to technological and market changes.

Incorporating the guidelines into the General Rules under the Telecommunications Act, 2023 would therefore enhance the coherence, transparency, and effectiveness of the regulatory framework for the telecommunications sector.

(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?

Comments :

The broad topics for which conditions may be required to be prescribed in the form of guidelines under the respective rules under the Telecommunications Act, 2023, can include:

1. **Licensing and Authorization**:

- ❖ Application procedures and documentation.
- ❖ Eligibility criteria for obtaining licenses.
- ❖ Types of licenses and authorizations.
- ❖ Fees and charges associated with licenses.
- ❖ Conditions for license renewal, suspension, and cancellation.

2. **Spectrum Management**:

- ❖ Procedures for spectrum allocation and assignment.
- ❖ Spectrum auction and bidding processes.
- ❖ Spectrum pricing and fee structures.
- ❖ Spectrum sharing and trading regulations.
- ❖ Measures to prevent spectrum interference.

3. **Infrastructure and Network Deployment**:

- ❖ Standards for network infrastructure development.
- ❖ Guidelines for the installation and maintenance of telecommunications equipment.
- ❖ Infrastructure sharing and co-location requirements.
- ❖ Right of way policies and procedures.

- ❖ Environmental and safety standards.

4. **Quality of Service**:

- ❖ Minimum service quality standards.
- ❖ Performance monitoring and reporting requirements.
- ❖ Customer service and support guidelines.
- ❖ Service outage and fault rectification procedures.
- ❖ Penalties for non-compliance with quality standards.

5. **Consumer Protection**:

- ❖ Tariff transparency and billing practices.
- ❖ Complaint handling and resolution mechanisms.
- ❖ Data privacy and protection measures.
- ❖ Advertising and marketing practices.
- ❖ Protections against unfair trade practices.

6. **Universal Service Obligations**:

- ❖ Obligations for extending services to underserved and rural areas.
- ❖ Funding mechanisms for universal service programs.
- ❖ Performance targets and monitoring.
- ❖ Accessibility requirements for persons with disabilities.
- ❖ Initiatives to promote digital inclusion.

7. **Security and Lawful Interception**:

- ❖ Network and information security standards.

- ❖ Requirements for lawful interception and monitoring.
- ❖ Cooperation with law enforcement agencies.
- ❖ Guidelines for handling security breaches and incidents.
- ❖ Measures to combat cyber threats and fraud.

8. **Mergers, Acquisitions, and Transfers**:

- ❖ Conditions for the transfer of licenses.
- ❖ Procedures for mergers and acquisitions.
- ❖ Regulatory approval processes.
- ❖ Impact assessment and reporting requirements.
- ❖ Guidelines for maintaining competition and preventing monopolies.

9. **Research and Development**:

- ❖ Encouragement of innovation in telecommunications.
- ❖ Support for R&D initiatives and collaboration.
- ❖ Funding and grants for research projects.
- ❖ Standards for testing and deployment of new technologies.
- ❖ Intellectual property management.

10. **Compliance and Enforcement**:

- ❖ Monitoring and compliance procedures.
- ❖ Reporting and audit requirements.
- ❖ Penalties and sanctions for non-compliance.
- ❖ Dispute resolution mechanisms.
- ❖ Appeals processes and judicial review.

By covering these broad topics, the guidelines under the respective rules of the Telecommunications Act, 2023, can ensure comprehensive regulation and oversight of the telecommunications sector.

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.

Comments :

To ensure long-term regulatory stability and business continuity for service providers while making authorizations and associated rules dynamically aligned with contemporary developments, the following safeguards can be put in place under the Telecommunications Act, 2023:

1. Clear and Consistent Regulatory Framework

- **Detailed Rules and Guidelines**: Establish comprehensive and clear rules and guidelines that outline the regulatory expectations and requirements for service providers. This clarity helps in reducing ambiguity and provides a stable regulatory environment.
- **Consistency in Application**: Ensure that rules and regulations are applied consistently to all service providers to maintain a level playing field.

2. Predictable and Transparent Policy Making

- **Stakeholder Consultations**: Involve stakeholders, including service providers, **Consumer Advocacy Groups**, and industry experts, in the policy-making process through regular consultations. This transparency ensures that the views of all parties are considered.
- **Impact Assessments**: Conduct thorough impact assessments before implementing new regulations to understand the potential effects on the industry and ensure that changes are justified and beneficial.

3. Regulatory Flexibility and Adaptability

- **Regular Reviews and Updates**: Establish a mechanism for regular review and updates of rules and regulations to keep pace with technological advancements and market developments. This helps in maintaining the relevance of the regulatory framework.
- **Sunset Clauses**: Implement sunset clauses in regulations, where appropriate, to ensure that outdated rules are periodically reviewed and either updated or repealed.

4. Stable Licensing and Authorization Processes

- **Long-term Licenses**: Provide long-term licenses with clear renewal criteria to ensure business continuity. Long-term licenses offer stability and encourage investment in the sector.
- **Transparent Transfer and Merger Rules**: Create clear and transparent guidelines for the transfer and merger of licenses to facilitate business continuity during corporate restructuring or market consolidation.

5. Dispute Resolution and Compliance Mechanisms

- **Efficient Dispute Resolution**: Establish efficient and fair dispute resolution mechanisms to handle conflicts between service providers and regulators, as well as between service providers and consumers. This ensures that disputes are resolved quickly and fairly, maintaining business continuity.
- **Robust Compliance Monitoring**: Implement robust compliance monitoring and enforcement mechanisms to ensure adherence to regulations without causing undue disruption to service providers.

6. Financial Stability and Incentives

- **Reasonable Fees and Charges**: Ensure that the fees and charges associated with licenses and regulatory compliance are reasonable and do not impose an excessive financial burden on service providers.
- **Incentives for Innovation**: Provide incentives for research, development, and innovation in the telecommunications sector to encourage service providers to adopt new technologies and improve services.

7. Data Privacy and Security

- **Strong Data Protection Regulations**: Implement strong data protection and cybersecurity regulations to safeguard consumer data and build trust in the telecommunications sector.

- **Guidelines for Lawful Interception**: Establish clear guidelines for lawful interception and cooperation with law enforcement agencies to ensure national security while protecting the rights of service providers and consumers.

Justifications:

- **Investment Confidence**: A clear, consistent, and predictable regulatory framework boosts investor confidence, encouraging long-term investments in the telecommunications sector.
- **Technological Adaptation**: Regular reviews and updates ensure that the regulatory framework remains relevant and adaptive to new technologies and market trends, preventing obsolescence.
- **Consumer Trust**: Strong data protection and security measures build consumer trust, which is crucial for the sustained growth of the telecommunications industry.
- **Fair Competition**: Consistent application of rules and transparent policy-making processes ensure fair competition, preventing monopolistic practices and fostering a healthy market environment.
- **Business Continuity**: Efficient dispute resolution and stable licensing processes ensure that service providers can operate without undue interruptions, maintaining business continuity and service reliability for consumers.

By implementing these safeguards, the Telecommunications Act, 2023, can ensure long-term regulatory stability and business continuity for service

providers while remaining flexible and responsive to contemporary developments.

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.

Comments :

Introducing a unified service authorization at the national level for the provision of end-to-end telecommunication services with a pan-India service area under the Telecommunications Act, 2023, can be beneficial. Here are the reasons and justifications:

1. Simplification and Streamlining of Regulatory Processes

- **Reduced Bureaucracy**: A unified service authorization at the national level would significantly reduce the administrative burden associated with obtaining multiple service-specific authorizations for different service areas. This simplification can lead to faster approvals and reduced compliance costs for service providers.
- **Single Point of Contact**: It would provide a single regulatory point of contact, making it easier for service providers to navigate regulatory requirements and maintain compliance across the entire country.

2. Enhanced Operational Efficiency

- **Seamless Operations**: A pan-India authorization allows for seamless operation across all service areas without the need for separate licenses. This can lead to more efficient network planning, deployment, and management.
- **Economies of Scale**: Service providers can achieve economies of scale in infrastructure deployment, maintenance, and service provision, leading to cost savings and potentially lower prices for consumers.

3. Encouragement of Investment and Innovation

- **Attractive Market**: A unified national license makes the Indian telecommunications market more attractive to investors by providing clarity and reducing regulatory complexity. This can attract both domestic and foreign investment, spurring innovation and growth in the sector.
- **Innovation in Services**: With a unified license, service providers can more easily introduce innovative services and technologies nationwide, promoting a more competitive and dynamic telecommunications market.

4. Improved Quality of Service

- **Consistent Standards**: A national authorization can help ensure consistent quality of service standards across the country, as service providers will be subject to the same regulatory requirements nationwide.

- **Broader Coverage**: It can facilitate broader network coverage, including in underserved and rural areas, by allowing service providers to operate seamlessly across different regions.

5. Enhanced Consumer Benefits

- **Better Services**: Consumers are likely to benefit from improved service quality and more competitive pricing due to the operational efficiencies and cost savings achieved by service providers.
- **Uniform Experience**: A unified license ensures that consumers receive a consistent service experience nationwide, irrespective of their location.

6. Regulatory Flexibility

- **Dynamic Adaptation**: A unified service authorization can be designed to adapt to changing market conditions and technological advancements more easily, ensuring that the regulatory framework remains relevant and forward-looking.

Justifications:

- **Market Growth**: By simplifying the regulatory landscape, a unified national license can stimulate market growth and drive the expansion of telecommunications infrastructure and services.
- **Consumer Protection**: Ensuring a consistent regulatory framework across the country enhances consumer protection and builds trust in the telecommunications sector.

- **Global Competitiveness**: A streamlined and efficient regulatory environment can enhance India's global competitiveness in the telecommunications sector, attracting international businesses and fostering global partnerships.

Considerations:

- **Implementation Challenges**: While the benefits are significant, the transition to a unified national license must be managed carefully to address potential challenges, such as harmonizing existing regional licenses and ensuring regulatory consistency.
- **Stakeholder Engagement**: Involving stakeholders, including service providers, consumers, and industry experts, in the design and implementation of the unified license can help address concerns and ensure a smooth transition.

In conclusion, introducing a unified service authorization at the national level under the Telecommunications Act, 2023, is justified as it can lead to significant benefits in terms of regulatory simplification, operational efficiency, investment attraction, service quality, and consumer benefits, thereby fostering a more robust and dynamic telecommunications sector in India.

Precautions :

Introducing a unified service authorization at the national level under the Telecommunications Act, 2023, requires careful consideration and

implementation to ensure a smooth transition and avoid potential pitfalls. The following precautions should be taken:

1. Stakeholder Consultation

- **Engage Stakeholders**: Conduct extensive consultations with all stakeholders, including service providers, consumers, industry associations, and experts, to gather insights and address concerns.
- **Transparent Communication**: Maintain open and transparent communication channels to keep all parties informed about the proposed changes, timelines, and expected impacts.

2. Regulatory Alignment and Harmonization

- **Review Existing Licenses**: Conduct a thorough review of existing regional and service-specific licenses to identify overlaps and inconsistencies.
- **Harmonize Regulations**: Develop a harmonized regulatory framework that aligns existing licenses with the new unified license to ensure consistency and avoid regulatory gaps.

3. Phased Implementation

- **Gradual Transition**: Implement the unified service authorization in phases to allow service providers time to adjust their operations and comply with new requirements.

- **Pilot Programs**: Consider launching pilot programs in select regions to test the new framework and address any issues before a full-scale rollout.

4. Clear Guidelines and Compliance Requirements

- **Detailed Guidelines**: Provide clear and detailed guidelines on the application process, eligibility criteria, compliance requirements, and enforcement mechanisms for the unified license.
- **Compliance Support**: Offer support and resources to help service providers understand and comply with the new regulations, including training programs and advisory services.

5. Infrastructure and Investment Considerations

- **Incentives for Investment**: Create incentives to encourage investment in infrastructure development, particularly in underserved and rural areas, to ensure nationwide service coverage.
- **Infrastructure Sharing**: Promote infrastructure sharing to reduce costs and improve efficiency, especially during the transition period.

6. Consumer Protection and Quality of Service

- **Maintain Standards**: Ensure that the unified license framework includes stringent quality of service standards to protect consumer interests.
- **Complaint Resolution**: Strengthen mechanisms for consumer complaint resolution and dispute handling to maintain trust and confidence in the telecommunications sector.

7. Legal and Financial Precautions

- **Legal Framework**: Ensure that the legal framework for the unified license is robust, clear, and enforceable, with provisions for addressing any legal challenges that may arise.
- **Financial Stability**: Assess the financial impact of the new licensing framework on service providers and ensure that fees and charges are reasonable and do not impose an excessive burden.

8. Security and Data Protection

- **Strengthen Security Measures**: Incorporate robust security and data protection measures into the unified licensing framework to safeguard consumer data and network integrity.
- **Compliance with Laws**: Ensure that the unified license complies with national and international data protection and cybersecurity laws.

9. Monitoring and Evaluation

- **Regular Monitoring**: Establish mechanisms for regular monitoring and evaluation of the implementation process to identify and address issues promptly.
- **Feedback Loops**: Create feedback loops to gather input from stakeholders and make necessary adjustments to the framework based on real-world experiences.

10. Flexibility and Adaptability

- **Allow for Adaptation**: Design the unified licensing framework to be flexible and adaptable to future technological advancements and market changes.
- **Review Mechanisms**: Implement periodic review mechanisms to update and refine the licensing framework as needed.

By taking these precautions, the transition to a unified service authorization at the national level under the Telecommunications Act, 2023, can be managed effectively, ensuring regulatory stability, business continuity, and the continued growth and development of the telecommunications sector.

Disadvantages :

Introducing a unified service authorization at the national level under the Telecommunications Act, 2023, while having many advantages, can also present several disadvantages. These potential drawbacks include:

1. Complex Transition Process

- **Operational Disruption**: Transitioning from multiple regional and service-specific licenses to a unified national license can be complex and may disrupt the operations of service providers temporarily.
- **Adjustment Period**: Service providers will need time and resources to adjust their internal processes and systems to comply with the new unified framework.

2. Regulatory Challenges

- **Loss of Local Focus**: A national-level license may overlook specific regional issues and needs, potentially leading to inadequate regulatory attention to local market conditions and challenges.
- **Uniform Regulations**: Applying uniform regulations across diverse regions can be challenging, as different areas may have unique requirements that a single framework might not adequately address.

3. Market Competition and Monopolies

- **Entry Barriers**: A national license could create higher entry barriers for smaller or new service providers who may find it difficult to compete with established players operating on a national scale.
- **Potential Monopolies**: Larger service providers may dominate the market, reducing competition and potentially leading to monopolistic practices.

4. Investment and Cost Concerns

- **High Costs**: The cost of obtaining and maintaining a national license may be higher than regional licenses, posing financial challenges, especially for smaller providers.
- **Uneven Investment**: Service providers might focus their investments in more profitable urban areas, neglecting rural and less economically viable regions.

5. Regulatory and Administrative Burden

- **Increased Burden for Regulators**: Managing a unified national license may increase the regulatory and administrative burden on authorities, requiring more resources and coordination to effectively oversee compliance.
- **Potential for Regulatory Overlap**: There may be overlaps or conflicts with existing regional regulations and policies, leading to confusion and legal disputes.

6. Consumer Impact

- **Service Disruptions**: The transition period may cause temporary service disruptions or inconsistencies in service quality, negatively affecting consumers.
- **Price Increases**: Higher compliance and operational costs for service providers might be passed on to consumers in the form of increased service prices.

7. Technological and Infrastructure Gaps

- **Varied Technological Needs**: Different regions may have varying technological needs and infrastructure capabilities, making it challenging to implement a one-size-fits-all licensing approach.
- **Infrastructure Disparities**: National licensing might not adequately address existing disparities in telecommunications infrastructure across different regions.

8. Legal and Policy Uncertainties

- **Legal Challenges**: The transition to a unified license may face legal challenges from stakeholders who are adversely affected or oppose the new framework.
- **Policy Uncertainty**: Frequent changes to adapt the unified framework to local needs might create policy uncertainty, affecting long-term planning and investment decisions.

Mitigating the Disadvantages:

To mitigate these disadvantages, the following strategies could be considered:

- **Phased Implementation**: Gradually introduce the unified license with pilot programs and phased rollouts to manage the transition effectively.
- **Regional Considerations**: Incorporate mechanisms within the unified framework to address specific regional needs and conditions.
- **Support for Smaller Providers**: Provide financial and technical support to smaller service providers to help them transition and compete in the unified market.
- **Robust Monitoring and Feedback**: Implement robust monitoring and feedback mechanisms to continually assess and refine the unified licensing framework based on stakeholder input and real-world experiences.
- **Clear Communication**: Maintain clear and transparent communication with all stakeholders throughout the transition process to manage expectations and address concerns.

By carefully planning and implementing these strategies, the potential disadvantages of introducing a unified service authorization at the national level can be minimized, ensuring a smoother transition and more balanced regulatory environment.

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.

Comments :

(a) What should be the scope of service under such an authorisation?

Comments :

If a unified service authorization at the national level for the provision of end-to-end telecommunication services is introduced under the Telecommunications Act, 2023, the scope of service should be comprehensive and inclusive of various telecommunications services. This will ensure that the authorization covers all relevant aspects of modern telecommunications and can adapt to future technological advancements. The scope of service under such an authorization can include:

1. Core Telecommunications Services

- **Voice Services**: Including landline, mobile voice, VoIP (Voice over Internet Protocol), and other voice communication services.
- **Data Services**: Broadband, mobile data, and internet services, including fixed and wireless broadband services.

2. Infrastructure Services

- **Network Infrastructure**: Deployment, operation, and maintenance of telecommunications networks, including fiber optic cables, satellite links, towers, and other supporting infrastructure.
- **Infrastructure Sharing**: Provision for infrastructure sharing among service providers to promote efficient use of resources and reduce costs.

3. Value-Added Services

- **Messaging Services**: SMS, MMS, and other messaging services.

- **Content Delivery**: Delivery of multimedia content, such as streaming services, IPTV (Internet Protocol Television), and digital content distribution.
- **Cloud Services**: Cloud computing, storage, and other cloud-based services.

4. Advanced and Emerging Technologies

- **5G and Beyond**: Deployment and operation of next-generation networks, including 5G, and future technologies such as 6G.
- **IoT Services**: Internet of Things (IoT) services, including machine-to-machine communication, smart devices, and connected solutions.
- **Artificial Intelligence (AI) and Automation**: Services leveraging AI and automation technologies for enhanced network management and service delivery.

5. Consumer Services

- **Customer Support and Service**: Provision of customer support services, including help desks, complaint resolution, and service management.
- **Data Privacy and Protection**: Ensuring data privacy, security, and protection for consumers using telecommunication services.

6. Security and Emergency Services

- **Cybersecurity**: Implementation of robust cybersecurity measures to protect networks and data.

- **Emergency Services**: Provision of emergency communication services, including access to emergency numbers and disaster management communication.

7. International Services

- **International Roaming**: Provision of international roaming services for voice, data, and messaging.
- **International Connectivity**: Establishing and managing international gateways and undersea cables for global connectivity.

8. Universal Service Obligations

- **Rural and Underserved Areas**: Provision of telecommunications services in rural, remote, and underserved areas to bridge the digital divide.
- **Accessibility Services**: Ensuring accessibility for persons with disabilities and other special needs.

9. Regulatory and Compliance Services

- **Compliance Monitoring**: Adherence to regulatory requirements, including quality of service standards, spectrum management, and licensing conditions.
- **Reporting and Audits**: Regular reporting and auditing of service provision and operational practices.

Justifications for Comprehensive Scope:

- **Consumer Benefits**: A wide-ranging scope ensures that consumers have access to a full suite of telecommunication services, promoting convenience and enhancing user experience.
- **Technological Adaptation**: Including advanced and emerging technologies within the scope allows service providers to innovate and adapt to new technological trends, keeping the telecommunications sector forward-looking and competitive.
- **Operational Efficiency**: A unified authorization simplifies regulatory compliance for service providers, allowing them to focus on service delivery and network improvements.
- **Investment Attraction**: A comprehensive and clear authorization framework can attract investment by providing clarity and reducing regulatory uncertainty, fostering growth in the telecommunications sector.
- **Universal Access**: Including universal service obligations ensures that telecommunications services are accessible to all, promoting inclusivity and bridging the digital divide.

By defining a broad and inclusive scope for the unified service authorization, the Telecommunications Act, 2023, can ensure that the regulatory framework supports the comprehensive development and delivery of telecommunications services across India.

(b) What terms and conditions (technical, operational, security related, etc.) should be made applicable to such an authorisation?

Comments :

To ensure that a unified national authorization for the provision of end-to-end telecommunication services is effective and comprehensive, the following terms and conditions can be made applicable, encompassing technical, operational, security, and other relevant aspects:

1. Technical Conditions

- **Network Standards**: Compliance with international and national telecommunications standards for network infrastructure, equipment, and services.
- **Interoperability**: Ensuring interoperability of networks and systems with other service providers to facilitate seamless communication.
- **Spectrum Usage**: Adherence to spectrum allocation and usage regulations, including efficient utilization and prevention of interference.
- **Quality of Service (QoS)**: Meeting specified QoS parameters for voice, data, and other services, including latency, jitter, packet loss, and call drop rates.

2. Operational Conditions

- **Service Deployment**: Guidelines for the deployment, expansion, and maintenance of telecommunications infrastructure, including timelines and milestones.
- **Infrastructure Sharing**: Encouragement and regulation of infrastructure sharing among service providers to optimize resources and reduce costs.

- **Customer Support**: Provision of adequate customer support services, including help desks, complaint resolution mechanisms, and service level agreements (SLAs).
- **Service Continuity**: Measures to ensure uninterrupted service delivery, including disaster recovery and business continuity plans.

3. Security Conditions

- **Cybersecurity Measures**: Implementation of robust cybersecurity protocols to protect networks and data from cyber threats, including regular security audits and vulnerability assessments.
- **Data Privacy**: Compliance with data protection laws and regulations, ensuring the privacy and security of customer data.
- **Lawful Interception**: Providing mechanisms for lawful interception of communications as required by national security and law enforcement agencies, while safeguarding user rights and privacy.
- **Emergency Services**: Ensuring access to emergency services and communication during disasters and national emergencies.

4. Compliance and Reporting Conditions

- **Regulatory Compliance**: Adherence to all regulatory requirements, including licensing conditions, spectrum management, and service provision standards.
- **Regular Reporting**: Submission of regular reports to the regulatory authority on network performance, service quality, compliance status, and other operational metrics.

- **Audits and Inspections**: Cooperation with regulatory audits and inspections to verify compliance with terms and conditions of the authorization.

5. Financial Conditions

- **License Fees**: Payment of applicable license fees, spectrum charges, and other regulatory levies in a timely manner.
- **Universal Service Obligations**: Contribution to the Universal Service Obligation Fund (USOF) to support the expansion of telecommunications services in rural and underserved areas.
- **Financial Reporting**: Submission of regular financial statements and reports to ensure transparency and accountability.

6. Consumer Protection Conditions

- **Transparency**: Ensuring transparency in billing, tariffs, and service terms, including clear and accurate information for consumers.
- **Fair Practices**: Prohibiting unfair trade practices, such as misleading advertising, hidden charges, and discriminatory tariffs.
- **Dispute Resolution**: Establishing mechanisms for effective and timely resolution of consumer disputes and grievances.

7. Environmental and Health Conditions

- **Environmental Compliance**: Adherence to environmental regulations and standards for the deployment and operation of telecommunications infrastructure.

- **Health and Safety**: Ensuring compliance with health and safety standards, including the safe installation and operation of telecommunications equipment to minimize health risks.

8. Innovation and Technological Advancement Conditions

- **Research and Development**: Encouragement of investment in research and development to foster innovation in telecommunications services and technologies.
- **Adoption of New Technologies**: Facilitating the adoption of new and emerging technologies, such as 5G, IoT, AI, and blockchain, to enhance service offerings and operational efficiency.

Justifications:

- **Operational Efficiency**: Clear and comprehensive terms and conditions ensure that service providers operate efficiently, maintain high standards, and deliver reliable services.
- **Consumer Protection**: Stringent consumer protection measures build trust and confidence in telecommunications services, ensuring customer satisfaction and loyalty.
- **Security and Privacy**: Robust security and data privacy measures are critical to protecting sensitive information and maintaining the integrity of telecommunications networks.
- **Regulatory Oversight**: Regular compliance and reporting ensure that regulatory authorities can effectively monitor and oversee the telecommunications sector, addressing issues promptly.

- **Sustainable Development**: Environmental and health conditions promote the sustainable development of telecommunications infrastructure, minimizing negative impacts on the environment and public health.

By implementing these terms and conditions, the unified national authorization can create a balanced regulatory environment that promotes growth, innovation, and consumer protection while ensuring the stability and security of telecommunications services across the country.

(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?

Comments : Yes.

Yes, even with a unified national authorization for the provision of end-to-end telecommunication services, it would be necessary to retain some conditions or obligations at the telecom circle/metro area level. This ensures that regional variations, specific local needs, and practical considerations are adequately addressed. Here are the key reasons and specific conditions that might need to be retained at the telecom circle/metro area level:

Reasons for Retaining Regional Conditions

1. **Regional Diversity**: India is geographically and demographically diverse, with varying needs and challenges across different regions.

2. **Local Regulatory Environment**: Some regulatory requirements may be specific to local or state-level authorities and need to be managed at the circle level.
3. **Quality of Service**: Maintaining consistent service quality standards across different regions may require localized monitoring and enforcement.
4. **Infrastructure Development**: Regional infrastructure development needs and priorities can vary, requiring localized obligations to ensure balanced growth.
5. **Consumer Protection**: Addressing specific consumer issues and complaints may be more effective at a local level.

Specific Conditions to Retain at Telecom Circle/Metro Area Level

1. **Quality of Service (QoS) Monitoring**
    - **Local Performance Metrics**: Establish and monitor performance metrics specific to each telecom circle or metro area to ensure consistent service quality.
    - **Consumer Feedback**: Collect and address consumer feedback and complaints at the local level to improve service quality.
2. **Infrastructure Deployment**
    - **Local Permits and Approvals**: Ensure compliance with local permits and approvals for the deployment of telecom infrastructure, including towers and fiber optic cables.
    - **Right of Way (RoW)**: Manage right of way permissions and issues at the local level to facilitate infrastructure deployment.

3. **Spectrum Management**
    - **Regional Spectrum Allocation**: Ensure that spectrum allocation and usage are managed effectively at the local level to prevent interference and optimize network performance.
4. **Consumer Protection and Service Delivery**
    - **Local Consumer Grievance Redressal**: Maintain regional offices or representatives to handle consumer complaints and issues effectively.
    - **Tariff and Billing Transparency**: Ensure transparency in billing and tariffs specific to each telecom circle, considering regional economic conditions.
5. **Universal Service Obligations**
    - **Regional Service Coverage**: Ensure that universal service obligations are met in underserved and rural areas within each telecom circle to bridge the digital divide.
6. **Disaster Management and Emergency Services**
    - **Local Emergency Response**: Establish protocols for disaster management and emergency services at the regional level to ensure timely and effective communication during emergencies.
7. **Health and Environmental Regulations**
    - **Local Compliance**: Ensure compliance with local health and environmental regulations related to telecom infrastructure deployment and operations.
8. **Security Requirements**

- **Local Law Enforcement Coordination**: Coordinate with local law enforcement agencies for security measures, including lawful interception and monitoring.

9. **Economic and Social Development Goals**
    - **Local Initiatives**: Support regional economic and social development goals through targeted telecom initiatives, such as digital literacy programs and local content development.

Justifications:

- **Addressing Regional Variations**: Different regions may have unique challenges and needs that require specific conditions and obligations to be effectively addressed.
- **Improving Service Quality**: Localized monitoring and enforcement help maintain high standards of service quality and consumer satisfaction across all regions.
- **Facilitating Infrastructure Development**: Managing local permits, right of way issues, and other regional considerations ensures smoother and faster infrastructure deployment.
- **Enhancing Consumer Protection**: Local consumer grievance redressal mechanisms provide quicker and more effective resolution of issues, enhancing consumer trust and confidence.
- **Ensuring Regulatory Compliance**: Localized regulatory oversight ensures that service providers comply with both national and regional regulations, maintaining a balanced and fair telecommunications environment.

By retaining certain conditions and obligations at the telecom circle/metro area level, the unified national authorization can ensure that regional needs and challenges are adequately addressed, while maintaining the benefits of a streamlined and comprehensive national regulatory framework.

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

Comments :

Yes, the assignment of terrestrial access and backhaul spectrum should continue at the telecom circle/metro area level even under a unified national authorization for the provision of end-to-end telecommunication services. Here are the reasons and justifications for this approach:

Reasons for Maintaining Regional Spectrum Assignment

1. **Regional Demand Variations**: Spectrum demand can vary significantly between different regions due to factors like population density, urbanization, and market conditions.
2. **Efficient Spectrum Utilization**: Localized spectrum management allows for more efficient utilization and minimizes interference, ensuring better service quality.
3. **Addressing Local Interference Issues**: Managing spectrum at the local level helps in promptly addressing interference issues, which can be more effectively handled by regional authorities.

4. **Infrastructure and Geography Considerations**: Different regions have unique geographical and infrastructural challenges that impact spectrum planning and management.
5. **Regulatory Flexibility**: Maintaining regional spectrum assignment provides flexibility to adapt to specific regional requirements and regulatory environments.

Justifications for Continued Regional Spectrum Assignment

1. **Optimizing Network Performance**:
    - Localized spectrum assignment allows for fine-tuning network performance to meet the specific needs and traffic patterns of each region.
    - Ensures that high-density urban areas receive sufficient spectrum to handle heavy traffic, while rural areas get coverage that matches their specific needs.
2. **Minimizing Interference**:
    - Regional spectrum management helps in controlling and mitigating interference between networks operating in close proximity.
    - Ensures better coordination and compatibility between different service providers operating within the same region.
3. **Adapting to Regional Variations**:
    - Allows for spectrum allocation that considers regional differences in demand, geography, and infrastructure.

    - Enables tailored solutions for regions with unique challenges, such as remote areas, mountainous regions, or densely populated urban centers.
4. **Enhancing Regulatory Efficiency**:
    - Local authorities are better positioned to understand and manage regional spectrum needs and issues.
    - Provides a more responsive and adaptive regulatory framework that can quickly address regional spectrum-related challenges.
5. **Supporting Local Innovation and Development**:
    - Encourages local innovation by allowing regional authorities to allocate spectrum in ways that support regional development goals.
    - Facilitates the deployment of new technologies and services that cater to specific regional requirements.
6. **Ensuring Equitable Access**:
    - Helps ensure that all regions, including underserved and rural areas, have access to necessary spectrum resources.
    - Supports balanced development and reduces the digital divide between urban and rural areas.

Operational Considerations

- **Coordination with National Framework**: While spectrum assignment remains at the regional level, it should be well-coordinated with the national regulatory framework to ensure consistency and alignment with broader national objectives.

- **Spectrum Auction and Allocation**: Regional spectrum auctions and allocations should be designed to reflect local demand and conditions, ensuring fair competition and optimal resource utilization.
- **Monitoring and Compliance**: Regional authorities should work closely with national regulators to monitor spectrum usage and compliance, ensuring adherence to regulations and addressing any issues promptly.

Continuing the assignment of terrestrial access and backhaul spectrum at the telecom circle/metro area level is essential for addressing the unique needs and challenges of different regions. It ensures efficient spectrum utilization, minimizes interference, and supports tailored solutions that enhance network performance and service quality. This approach, combined with a unified national authorization framework, provides a balanced and flexible regulatory environment that promotes the growth and development of the telecommunications sector across all regions.

(e) Any other suggestion to protect the interest of other authorised entities/ smaller players upon the introduction of such an authorisation.

Comments :

To protect the interests of other authorized entities and smaller players upon the introduction of a unified national authorization for the provision of end-to-end telecommunication services, a balanced and supportive regulatory framework should be established. This framework should ensure fair

competition, prevent market monopolization, and provide opportunities for smaller players to thrive. Here are some suggestions:

1. Spectrum Allocation and Pricing

- **Fair Spectrum Allocation**: Ensure a fair and transparent process for spectrum allocation that provides equal opportunities for smaller players to acquire spectrum.
- **Tiered Spectrum Pricing**: Implement tiered pricing structures for spectrum based on the size and financial capacity of the service provider, making it more affordable for smaller players.

2. Infrastructure Sharing

- **Mandatory Infrastructure Sharing**: Enforce mandatory sharing of critical telecom infrastructure, such as towers, fiber optic networks, and data centers, to reduce entry barriers and operational costs for smaller players.
- **Regulated Access Charges**: Regulate access charges for shared infrastructure to ensure they are reasonable and non-discriminatory.

3. Financial and Technical Support

- **Subsidies and Grants**: Provide subsidies, grants, or low-interest loans to smaller players for infrastructure development, technology upgrades, and market expansion.

- **Technical Assistance**: Offer technical assistance and training programs to help smaller players enhance their capabilities and compete effectively.

4. Regulatory Measures

- **Anti-Monopoly Regulations**: Implement and enforce strict anti-monopoly regulations to prevent market dominance by a few large players and ensure fair competition.
- **Market Entry Support**: Simplify licensing and regulatory requirements for smaller players to reduce administrative burdens and facilitate easier market entry.

5. Universal Service Obligations (USO)

- **USO Funding**: Provide access to the Universal Service Obligation Fund (USOF) to support smaller players in expanding services to underserved and rural areas.
- **Equitable Contribution**: Ensure that USO contributions are proportionate to the size and revenue of the service providers, preventing excessive financial burdens on smaller entities.

6. Consumer Protection and Quality of Service

- **Quality Standards**: Enforce uniform quality of service standards across all service providers, ensuring that smaller players can compete on a level playing field.

- **Consumer Awareness**: Promote consumer awareness campaigns to highlight the benefits and services offered by smaller players, encouraging a competitive market.

7. Innovation and Differentiation

- **Innovation Incentives**: Encourage innovation by providing incentives for research and development, particularly for smaller players developing unique or niche services.
- **Support for Niche Markets**: Recognize and support smaller players that cater to niche markets or specific consumer segments, allowing them to differentiate and compete effectively.

8. Dispute Resolution Mechanisms

- **Fair Dispute Resolution**: Establish fair and efficient dispute resolution mechanisms to address conflicts between service providers, ensuring that smaller players have a platform to raise and resolve issues.
- **Regulatory Ombudsman**: Appoint a regulatory ombudsman to oversee and mediate disputes, providing a neutral party to ensure fair outcomes.

9. Collaboration and Partnerships

- **Encourage Partnerships**: Facilitate partnerships and collaborations between smaller players and larger entities for resource sharing, technology transfer, and market access.

- **Consortium Models**: Promote consortium models where multiple smaller players can come together to bid for spectrum, share infrastructure, and offer services collectively.

10. Monitoring and Compliance

- **Regular Audits**: Conduct regular audits and assessments to ensure compliance with regulations, fair competition practices, and protection of smaller players' interests.
- **Transparency in Regulations**: Maintain transparency in regulatory changes and decisions, providing clear communication and ample notice to all stakeholders, including smaller players.

Implementing these measures can create a supportive and competitive environment where smaller players and other authorized entities can thrive alongside larger national service providers. This approach ensures that the telecommunications market remains dynamic, innovative, and inclusive, ultimately benefiting consumers and the overall industry.

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.

Comments : Yes.

Within the scope of Internet Service authorization under the Telecommunications Act, 2023, it is essential to include the provision of leased circuits and Virtual Private Networks (VPNs) within its service area for several reasons:

1. **Enhanced Connectivity**: Leased circuits provide dedicated, high-speed, and secure communication links, which are crucial for businesses requiring reliable and uninterrupted internet access. Including them ensures that service providers can offer comprehensive connectivity solutions.
2. **Security and Privacy**: VPNs play a critical role in ensuring secure and private communications over the internet. They are essential for businesses and individuals who need to protect sensitive data and maintain privacy, especially in sectors like finance, healthcare, and government.
3. **Service Diversification**: Offering leased circuits and VPNs allows Internet Service Providers (ISPs) to diversify their service portfolio, catering to a broader range of customers, from small businesses to large enterprises, enhancing their market competitiveness.
4. **Regulatory Compliance**: Including these provisions ensures that ISPs comply with regulatory requirements for secure and reliable communication infrastructure, supporting national security and data protection policies.
5. **Market Demand**: There is a growing demand for secure and dedicated connectivity solutions as more businesses transition to digital

operations and remote work environments. Addressing this demand is essential for meeting customer needs and driving economic growth.

In conclusion, incorporating the provision of leased circuits and VPNs within the service area of Internet Service authorization under the Telecommunications Act, 2023, is necessary to meet the connectivity, security, and regulatory needs of modern digital economies.

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?

Comments :

If the scope of Internet Service authorization under the Telecommunications Act, 2023 is enhanced, the terms and conditions that should be made applicable can be categorized into technical, operational, and security-related aspects. Here are detailed suggestions for each category:

1. Technical Terms and Conditions

1. **Quality of Service (QoS)**: Define minimum QoS standards, including latency, jitter, packet loss, and throughput to ensure reliable and consistent internet service.
2. **Network Infrastructure**: Specify requirements for infrastructure such as the types of acceptable network equipment, redundancy measures, and resilience against failures.

3. **Interconnection Standards**: Ensure that ISPs follow established protocols and standards for interconnection with other networks and service providers to maintain interoperability.
4. **IPv6 Adoption**: Encourage or mandate the adoption of IPv6 to ensure future scalability and address depletion issues.

2. Operational Terms and Conditions

1. **Licensing and Compliance**: ISPs must obtain proper licenses and comply with all regulatory requirements. They should regularly update their licenses and report any changes in their operations.
2. **Service Continuity**: Implement measures to guarantee continuity of service in case of maintenance or unexpected outages, including customer notification protocols and backup solutions.
3. **Customer Service Standards**: Define customer service obligations such as response times, support availability, and dispute resolution mechanisms.
4. **Reporting and Transparency**: Require regular reporting of service performance metrics, outages, and other relevant data to regulatory authorities. ISPs should also maintain transparency with customers about their service terms and network management practices.

3. Security-Related Terms and Conditions

1. **Data Protection and Privacy**: Enforce strict guidelines on data protection and privacy, ensuring ISPs implement robust encryption and secure handling of user data.

2. **Cybersecurity Measures**: Mandate the implementation of cybersecurity measures to protect against threats such as DDoS attacks, malware, and unauthorized access. This includes regular security audits and updates.
3. **Lawful Interception**: Establish protocols for lawful interception of communications by authorized entities while ensuring compliance with privacy laws and regulations.
4. **Incident Reporting**: Require ISPs to report security incidents to relevant authorities promptly and provide necessary support for investigation and mitigation efforts.
5. **VPN and Leased Circuit Security**: Ensure that VPN services and leased circuits provided by ISPs adhere to security standards that protect data integrity and confidentiality during transmission.

Additional Considerations

1. **Environmental Standards**: Encourage or require ISPs to adopt sustainable practices, such as energy-efficient equipment and infrastructure to minimize environmental impact.
2. **Universal Service Obligation (USO)**: Include provisions to ensure ISPs contribute to universal service funds and provide service to underserved or rural areas.
3. **Emergency Services**: Ensure that ISPs provide reliable access to emergency services and support mechanisms during disasters or critical situations.

By addressing these technical, operational, and security-related aspects comprehensively, the enhanced scope of Internet Service authorization can ensure a robust, secure, and efficient internet service framework that meets the needs of all stakeholders.

(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.

Comments :

Protection of Consumer Interest :

To protect the reasonable interests of consumers upon enhancing the scope of Internet Service authorization under the Telecommunications Act, 2023, several measures should be put in place to ensure transparency, fairness, and accessibility. Here are some key suggestions:

1. Transparency and Information Disclosure

1. **Clear Service Agreements**: Require ISPs to provide clear and detailed service agreements that outline terms of service, pricing, data usage limits, and any applicable fees.
2. **Transparent Billing**: Ensure that billing practices are transparent and easy to understand. Itemized bills should be provided, and any changes in pricing or service terms should be communicated well in advance.
3. **Public Availability of Performance Metrics**: Mandate ISPs to publish regular performance reports including speed, latency, and uptime, which can be easily accessed by consumers.

2. Quality of Service (QoS) Guarantees

1. **Minimum Service Standards**: Define and enforce minimum quality of service standards to ensure that consumers receive reliable and consistent internet connectivity.
2. **Service Level Agreements (SLAs)**: Encourage ISPs to offer SLAs that guarantee certain levels of performance, including uptime commitments and compensation mechanisms for service outages.

3. Consumer Protection Mechanisms

1. **Complaint and Dispute Resolution**: Establish a robust mechanism for handling consumer complaints and resolving disputes. This should include accessible channels for lodging complaints and a clear process for resolution.
2. **Regulatory Oversight**: Create or strengthen regulatory bodies tasked with monitoring ISP compliance with consumer protection standards and addressing consumer grievances.

4. Privacy and Security

1. **Data Protection Policies**: Enforce strict data protection regulations to ensure ISPs handle consumer data responsibly and protect it from unauthorized access or breaches.
2. **Consumer Education**: Provide resources and education to consumers about online safety, data privacy, and how to secure their personal information.

5. Fair Pricing and Accessibility

1. **Affordable Pricing Plans**: Encourage ISPs to offer a range of pricing plans, including affordable options for low-income households.
2. **Non-Discriminatory Practices**: Prohibit discriminatory practices such as throttling or blocking access to specific services or websites, ensuring net neutrality.

6. Service Continuity and Reliability

1. **Redundancy and Backup Solutions**: Require ISPs to have redundancy measures and backup solutions in place to minimize service disruptions.
2. **Maintenance Notifications**: Ensure consumers are notified in advance of any planned maintenance or upgrades that may affect service availability.

7. Universal Service and Inclusivity

1. **Universal Service Obligation (USO)**: Mandate ISPs to contribute to universal service funds aimed at expanding internet access to underserved and rural areas.
2. **Accessibility for Disabled Users**: Ensure that internet services and related customer support are accessible to users with disabilities.

8. Consumer Choice and Competition

1. **Promote Competition**: Foster a competitive market environment by reducing barriers to entry for new ISPs and preventing anti-competitive practices by dominant players.
2. **Ease of Switching Providers**: Make it easier for consumers to switch between ISPs without facing excessive costs or procedural hurdles.

9. Customer Support

1. **Accessible Customer Support**: Require ISPs to provide easily accessible customer support through multiple channels, including phone, email, and live chat, with reasonable response times.
2. **Technical Support and Troubleshooting**: Ensure that technical support is readily available to assist consumers with any connectivity issues or technical problems.

Implementation and Monitoring

1. **Regulatory Audits and Assessments**: Conduct regular audits and assessments to ensure ISPs are adhering to the stipulated terms and conditions.
2. **Feedback Mechanisms**: Establish mechanisms for collecting consumer feedback on ISP performance and use this feedback to inform regulatory policies and improvements.

By implementing these suggestions, the enhanced scope of Internet Service authorization can effectively protect consumer rights and promote a fair, secure, and high-quality internet service environment.

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.

Comments :

Merging the scopes of the existing National Long Distance (NLD) Service authorization and International Long Distance (ILD) Service authorization into a single Long Distance Service authorization under the Telecommunications Act, 2023, could be beneficial for several reasons. Here are some considerations to determine the need and potential benefits of such a merger:

Potential Benefits of Merging NLD and ILD Authorizations

1. **Simplification of Regulatory Framework**
    - **Unified Licensing**: A single Long Distance Service authorization can simplify the regulatory framework, reducing administrative overhead for both the regulators and the service providers.
    - **Easier Compliance**: Service providers would have a single set of regulatory requirements to comply with, making it easier to ensure adherence to legal and operational standards.
2. **Operational Efficiency**
    - **Streamlined Operations**: Combining NLD and ILD services under one authorization could streamline operations, allowing providers

to optimize their network infrastructure and resources more effectively.

- **Cost Savings**: Service providers may achieve cost savings by consolidating operations, reducing the need for separate management teams and infrastructure for NLD and ILD services.

3. **Enhanced Service Offerings**
   - **Integrated Services**: Providers can offer integrated long-distance services, potentially leading to better service packages and pricing for consumers.
   - **Innovation and Flexibility**: A merged authorization could encourage innovation, allowing providers to develop new service offerings that span both national and international long-distance communication.
4. **Market Competitiveness**
   - **Level Playing Field**: A unified authorization can create a more level playing field, encouraging competition among service providers and potentially leading to better services and lower prices for consumers.
   - **Attracting Investment**: Simplifying the regulatory landscape may attract more investment into the telecommunications sector, fostering growth and technological advancement.

Considerations and Challenges

1. **Regulatory Alignment**

- **Harmonizing Regulations**: The merger would require careful alignment of existing regulations governing NLD and ILD services to ensure a smooth transition to the new unified authorization.
- **International Agreements**: Special consideration must be given to international agreements and treaties that may affect ILD services, ensuring compliance and avoiding conflicts.

2. **Consumer Protection**
   - **Quality of Service**: Ensuring that the quality of service for both national and international long-distance communication remains high is crucial.
   - **Fair Pricing**: Regulations should be in place to prevent price gouging and ensure that consumers benefit from the efficiencies gained through the merger.
3. **Infrastructure and Technological Considerations**
   - **Network Upgrades**: Service providers may need to invest in network upgrades to handle the combined traffic efficiently, ensuring reliability and performance.
   - **Interoperability**: Ensuring interoperability between different networks and technologies used for NLD and ILD services will be important for seamless communication.

Conclusion

Merging the scopes of NLD and ILD service authorizations into a single Long Distance Service authorization under the Telecommunications Act, 2023, appears to offer several advantages, including regulatory simplification,

operational efficiency, enhanced service offerings, and improved market competitiveness. However, careful planning and consideration of regulatory, technical, and consumer protection aspects are essential to ensure a successful transition and maximize the benefits of such a merger.

Consumer Protection :

Merging the National Long Distance (NLD) Service authorization and International Long Distance (ILD) Service authorization into a single Long Distance Service authorization under the Telecommunications Act, 2023, can be beneficial for consumer protection if it is executed thoughtfully. Here are specific measures to ensure consumer protection in this merged framework:

1. Transparent and Fair Pricing

- **Price Regulation**: Implement regulatory oversight to ensure that pricing remains fair and competitive. This includes monitoring for anti-competitive practices and price gouging.
- **Clear Billing Practices**: Mandate that service providers offer clear, itemized bills so consumers can easily understand charges for both national and international long-distance services.

2. Quality of Service (QoS) Standards

- **Unified QoS Metrics**: Define and enforce consistent quality of service standards for both national and international communications. This includes metrics for latency, uptime, call quality, and data transfer speeds.

- **Regular Monitoring**: Establish mechanisms for regular monitoring and public reporting of QoS metrics to ensure compliance and transparency.

3. Consumer Rights and Complaint Resolution

- **Consumer Protection Framework**: Develop a robust consumer protection framework that outlines the rights of consumers in the context of long-distance services. This should include protections against misleading advertising and unfair contractual terms.
- **Complaint Resolution Mechanism**: Create an efficient and accessible complaint resolution mechanism, including a clear process for lodging complaints, timely resolution, and the ability to escalate unresolved issues to a regulatory authority.

4. Privacy and Data Security

- **Data Protection Regulations**: Enforce stringent data protection regulations to ensure the privacy and security of consumer data. This includes measures for data encryption, secure data handling practices, and regular security audits.
- **Transparency in Data Use**: Require service providers to be transparent about their data collection, usage, and sharing practices, and to obtain explicit consent from consumers for any non-essential data processing.

5. Accessibility and Inclusivity

- **Universal Service Obligation (USO)**: Ensure that the merged authorization includes provisions for universal service obligations to

guarantee that underserved and rural areas have access to long-distance services.

- **Services for Disabled Users**: Mandate that long-distance services be accessible to users with disabilities, including accessible customer support and service interfaces.

6. Regulatory Oversight and Compliance

- **Regular Audits**: Conduct regular audits of service providers to ensure compliance with regulatory requirements and consumer protection standards.
- **Penalties for Non-Compliance**: Implement a system of penalties for non-compliance with consumer protection regulations to ensure that service providers adhere to the required standards.

7. Consumer Awareness and Education

- **Information Campaigns**: Conduct information campaigns to educate consumers about their rights, available services, and how to protect themselves from fraud and other issues related to long-distance services.
- **Online Resources**: Provide accessible online resources where consumers can find information about service standards, how to file complaints, and other relevant topics.

8. Emergency Services and Reliability

- **Emergency Access**: Ensure that long-distance services include reliable access to emergency services, with protocols in place for prioritizing emergency communications.
- **Service Continuity Plans**: Require service providers to have robust continuity plans to minimize service disruptions and ensure quick recovery in case of outages.

In short, Merging the NLD and ILD service authorizations into a single Long Distance Service authorization can simplify the regulatory landscape and potentially enhance service offerings. However, to protect consumer interests, it is crucial to implement comprehensive measures covering pricing transparency, quality of service, complaint resolution, data security, accessibility, regulatory oversight, consumer education, and emergency services. By addressing these areas, the merged authorization can deliver benefits while ensuring that consumers are protected and their rights upheld.

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?

Comments :

If the scopes of the existing National Long Distance (NLD) Service authorization and International Long Distance (ILD) Service authorization are merged into a single Long Distance Service authorization under the

Telecommunications Act, 2023, the scope of service should comprehensively cover the following areas:

1. Service Coverage

- **National Long Distance (NLD) Services**: Provision of long-distance communication services within the national boundaries, including voice, data, and multimedia communications.
- **International Long Distance (ILD) Services**: Provision of communication services that connect users across national borders, facilitating international voice, data, and multimedia communications.

2. Types of Services

- **Voice Communication Services**: Both national and international voice calling services, including traditional telephony and Voice over Internet Protocol (VoIP) services.
- **Data Communication Services**: High-speed data transmission services for both national and international communications, including internet access, leased lines, and dedicated data circuits.
- **Multimedia Communication Services**: Services that support the transmission of video, audio, and other multimedia content over long distances, including video conferencing and streaming services.

3. Technical Capabilities

- **Network Interconnection**: Ensure seamless interconnection with other national and international networks to facilitate uninterrupted communication.
- **Quality of Service (QoS)**: Maintain high standards of quality, including low latency, high reliability, and consistent performance across all types of long-distance communications.
- **Network Redundancy and Resilience**: Implement robust network infrastructure with redundancy and resilience to minimize service disruptions and ensure continuous availability.

4. Operational Requirements

- **Licensing and Compliance**: Service providers must obtain the necessary licenses and comply with all regulatory requirements, including those related to service quality, consumer protection, and data security.
- **Service Provisioning**: Include clear guidelines on the provisioning of services, including activation times, maintenance schedules, and support for network upgrades and expansions.
- **Reporting and Transparency**: Regular reporting of service performance metrics to regulatory authorities, including details on network uptime, service quality, and consumer complaints.

5. Security and Privacy

- **Data Protection**: Adhere to stringent data protection laws to ensure the privacy and security of user data, including encryption and secure handling practices.
- **Cybersecurity Measures**: Implement comprehensive cybersecurity measures to protect against threats such as hacking, malware, and data breaches.
- **Lawful Interception**: Establish protocols for lawful interception by authorized entities, ensuring compliance with national security and law enforcement requirements while protecting user privacy.

6. Consumer Protection

- **Transparent Billing**: Provide clear, itemized billing to consumers, with detailed explanations of charges for national and international services.
- **Fair Pricing Practices**: Ensure that pricing for long-distance services is fair, competitive, and transparent, with protections against hidden fees and price gouging.
- **Complaint Resolution**: Offer efficient and accessible mechanisms for resolving consumer complaints and disputes, including clear escalation paths and regulatory oversight.

7. Universal Service and Accessibility

- **Universal Service Obligations (USO)**: Contribute to universal service funds to ensure the availability of long-distance services in underserved and rural areas.

- **Accessibility for All**: Ensure that long-distance services are accessible to users with disabilities, providing necessary accommodations and support.

8. Service Innovation and Evolution

- **Support for New Technologies**: Encourage the adoption and integration of emerging technologies such as 5G, IoT, and advanced data analytics to enhance service offerings.
- **Flexibility for Future Changes**: Build flexibility into the authorization to accommodate future technological advancements and changes in the telecommunications landscape.

9. Emergency Services

- **Reliable Access to Emergency Services**: Ensure that long-distance services provide reliable access to emergency services, including the ability to prioritize emergency communications.
- **Disaster Recovery and Continuity**: Implement disaster recovery and business continuity plans to ensure that long-distance services remain operational during emergencies and disasters.

The scope of service under the proposed Long Distance Service authorization should be comprehensive, covering all aspects of national and international long-distance communication services. It should include provisions for technical capabilities, operational requirements, security and privacy, consumer protection, universal service, service innovation, and

emergency services. By addressing these areas, the merged authorization can provide a robust framework that supports high-quality, reliable, and secure long-distance communication services for all users.

(b) What terms and conditions (technical, operational, security related, etc.) should be made applicable on the proposed Long Distance Service authorisation?

Comments :

If the scopes of the existing National Long Distance (NLD) Service authorization and International Long Distance (ILD) Service authorization are merged into a single Long Distance Service authorization under the Telecommunications Act, 2023, the following terms and conditions can be applied to ensure comprehensive coverage across technical, operational, security, and other relevant areas:

Technical Terms and Conditions

1. **Quality of Service (QoS)**
    - Define minimum QoS standards, including metrics for latency, jitter, packet loss, and throughput.
    - Regular monitoring and reporting of QoS metrics to regulatory authorities.
2. **Network Interconnection**
    - Ensure seamless interconnection with other national and international networks.

- Adhere to established protocols and standards for interconnection.

3. **Infrastructure Requirements**
    - Mandate the use of high-quality, resilient infrastructure capable of supporting both national and international long-distance communications.
    - Require redundancy and failover mechanisms to ensure network reliability.
4. **IPv6 Compatibility**
    - Ensure that all network infrastructure is IPv6 compatible to support future scalability.

Operational Terms and Conditions

1. **Licensing and Compliance**
    - Service providers must obtain the necessary licenses and comply with all regulatory requirements.
    - Regular audits and compliance checks by regulatory authorities.
2. **Service Provisioning**
    - Clear guidelines on service activation times, maintenance schedules, and network upgrades.
    - Ensure minimal service disruption during maintenance and upgrades.
3. **Billing and Transparency**
    - Transparent billing practices with clear itemization of charges.
    - Advance notice of any changes in pricing or service terms.

4. **Customer Service Standards**
    - Define customer service obligations, including response times and support availability.
    - Accessible channels for customer support and complaint resolution.

Security-Related Terms and Conditions

1. **Data Protection**
    - Enforce strict data protection regulations, including encryption and secure data handling practices.
    - Regular security audits and compliance with data protection laws.
2. **Cybersecurity Measures**
    - Implement comprehensive cybersecurity measures to protect against threats such as DDoS attacks, malware, and unauthorized access.
    - Regular updates and patches to address security vulnerabilities.
3. **Lawful Interception**
    - Establish protocols for lawful interception by authorized entities.
    - Ensure compliance with privacy laws and regulations while allowing for necessary security measures.
4. **Incident Reporting**
    - Require service providers to report security incidents to relevant authorities promptly.
    - Provide necessary support for investigation and mitigation efforts.

Additional Terms and Conditions

1. **Universal Service Obligation (USO)**
    - Ensure contributions to universal service funds to expand access to underserved and rural areas.
    - Mandate the provision of services in these areas as part of the authorization.
2. **Accessibility for Disabled Users**
    - Ensure that services and customer support are accessible to users with disabilities.
    - Provide necessary accommodations and accessible interfaces.
3. **Emergency Services**
    - Reliable access to emergency services, with protocols for prioritizing emergency communications.
    - Implement disaster recovery and business continuity plans to ensure service availability during emergencies.
4. **Environmental Standards**
    - Encourage or require sustainable practices, such as energy-efficient equipment and infrastructure.
    - Regular reporting on environmental impact and measures taken to reduce it.

The proposed Long Distance Service authorization under the Telecommunications Act, 2023, should incorporate comprehensive terms and conditions across technical, operational, and security-related areas. By addressing these aspects, the merged authorization can ensure high-quality,

reliable, and secure long-distance communication services that meet the needs of all stakeholders, including consumers, service providers, and regulatory authorities.

(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.

Comments :

Suggestions for Consumer Protection :

Merging the scopes of the extant National Long Distance (NLD) Service authorization and International Long Distance (ILD) Service authorization into a single Long Distance Service authorization can offer several consumer benefits if proper consumer protection measures are implemented. Here are detailed suggestions to ensure consumer protection:

1. Transparency and Fair Pricing

1. **Clear Service Agreements**:
    - Mandate clear, detailed service agreements that outline terms of service, pricing, data usage limits, and any applicable fees.
    - Ensure consumers are fully informed about the conditions and prices of both national and international services.
2. **Transparent Billing**:
    - Require ISPs to provide clear, itemized bills so consumers can easily understand charges.

- Notify consumers in advance of any changes in pricing or terms of service.

2. Quality of Service (QoS) Guarantees

1. **Minimum Service Standards**:
   - Define and enforce minimum quality of service standards for both national and international communications, including metrics for latency, jitter, packet loss, and throughput.
   - Regularly monitor and publish QoS metrics to maintain transparency and accountability.
2. **Service Level Agreements (SLAs)**:
   - Encourage ISPs to offer SLAs that guarantee certain levels of performance, including uptime commitments and compensation mechanisms for service outages.

3. Consumer Rights and Complaint Resolution

1. **Robust Complaint Mechanism**:
   - Establish a clear, accessible mechanism for handling consumer complaints and resolving disputes.
   - Ensure consumers have multiple channels (e.g., online, phone, in-person) to lodge complaints and track their resolution.
2. **Regulatory Oversight**:
   - Strengthen the role of regulatory bodies in monitoring ISP compliance with consumer protection standards.

- Implement penalties for non-compliance to ensure adherence to regulations.

4. Privacy and Data Security

1. **Data Protection Regulations**:
   - Enforce strict data protection laws to ensure ISPs handle consumer data responsibly.
   - Implement robust encryption and secure handling practices to protect user data from unauthorized access and breaches.
2. **Transparency in Data Use**:
   - Require ISPs to be transparent about their data collection, usage, and sharing practices.
   - Obtain explicit consent from consumers for any non-essential data processing.

5. Accessibility and Inclusivity

1. **Universal Service Obligation (USO)**:
   - Mandate contributions to universal service funds to ensure access to long-distance services in underserved and rural areas.
   - Include provisions to guarantee service availability and affordability in these areas.
2. **Accessibility for Disabled Users**:
   - Ensure that long-distance services and customer support are accessible to users with disabilities.

- Provide necessary accommodations and accessible interfaces for these users.

6. Service Continuity and Reliability

1. **Redundancy and Backup Solutions**:
   - Require ISPs to implement redundancy measures and backup solutions to minimize service disruptions.
   - Ensure continuous service availability during maintenance and unexpected outages.
2. **Emergency Services**:
   - Guarantee reliable access to emergency services through long-distance communications.
   - Prioritize emergency communications and have protocols in place for disaster recovery and business continuity.

7. Consumer Education

1. **Information Campaigns**:
   - Conduct public information campaigns to educate consumers about their rights, available services, and how to protect themselves from fraud and other issues.
   - Provide clear, accessible information about the benefits and terms of the merged long-distance service authorization.
2. **Online Resources**:

- Offer comprehensive online resources where consumers can find information about service standards, how to file complaints, and other relevant topics.

8. Customer Support

1. **Accessible Customer Support**:
   - Require ISPs to provide easily accessible customer support through multiple channels, including phone, email, and live chat.
   - Ensure customer support is available during reasonable hours and offers timely responses to inquiries and issues.
2. **Technical Support and Troubleshooting**:
   - Provide robust technical support to assist consumers with connectivity issues and other technical problems.
   - Offer resources and guidance for troubleshooting common issues.

Conclusion

To effectively protect consumer interests, the Long Distance Service authorization under the Telecommunications Act, 2023, should incorporate comprehensive measures covering transparency, fair pricing, QoS guarantees, consumer rights, privacy and data security, accessibility, service continuity, consumer education, and robust customer support. By addressing these areas, the merged authorization can provide a secure, high-quality, and consumer-friendly framework for long-distance communication services.

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.

Comments :

The potential merger of the extant Global Mobile Personal Communications by Satellite (GMPCS) authorization and Commercial Very Small Aperture Terminal (VSAT) Closed User Group (CUG) Service authorization into a single Satellite-based Telecommunication Service authorization under the Telecommunications Act, 2023, can be analyzed by considering the benefits and challenges involved. Here are some key points to consider:

Potential Benefits of Merging GMPCS and Commercial VSAT CUG Authorizations

1. **Simplification of Regulatory Framework**
    - **Unified Licensing**: Combining these authorizations into a single license can simplify the regulatory landscape, reducing complexity for both the regulators and service providers.
    - **Streamlined Compliance**: Service providers would have a single set of regulatory requirements to follow, making compliance easier and more straightforward.
2. **Operational Efficiency**

- **Optimized Resource Utilization**: Service providers can optimize the use of satellite resources and infrastructure, potentially lowering operational costs and improving service efficiency.
- **Integrated Services**: A unified authorization could facilitate the development of integrated services that combine GMPCS and VSAT capabilities, enhancing service offerings.

3. **Enhanced Market Competitiveness**
   - **Level Playing Field**: A single authorization can create a more level playing field, encouraging competition among service providers and leading to better services and pricing for consumers.
   - **Attracting Investment**: Simplifying the regulatory framework may attract more investment into satellite telecommunications, fostering innovation and growth.
4. **Technological Advancements**
   - **Encouraging Innovation**: A unified authorization could drive innovation by allowing service providers to develop new solutions that leverage both GMPCS and VSAT technologies.
   - **Future-Proofing**: This approach can be more adaptable to future technological advancements, ensuring that regulatory frameworks keep pace with industry developments.

Challenges and Considerations

1. **Regulatory Harmonization**

- **Aligning Standards**: Careful alignment of existing standards and regulations governing GMPCS and VSAT services will be necessary to ensure a smooth transition.
- **International Agreements**: Consideration of international agreements and treaties that impact satellite communications, ensuring compliance and avoiding conflicts.

2. **Consumer Protection**
   - **Quality of Service**: Maintaining high standards for quality of service for both GMPCS and VSAT communications.
   - **Fair Pricing**: Ensuring that pricing remains fair and competitive, with protections against monopolistic practices.
3. **Infrastructure and Technological Considerations**
   - **Network Compatibility**: Ensuring that network infrastructure is compatible and can support the combined services effectively.
   - **Investment in Upgrades**: Service providers may need to invest in network upgrades to handle the combined service offerings efficiently.

Merging the GMPCS and Commercial VSAT CUG authorizations into a single Satellite-based Telecommunication Service authorization under the Telecommunications Act, 2023, could offer several advantages, including regulatory simplification, operational efficiency, enhanced market competitiveness, and encouragement of technological advancements. However, careful planning and consideration of regulatory alignment, consumer protection, and infrastructure requirements are essential to ensure a successful transition and maximize the benefits of such a merger.

Additional Steps

1. **Stakeholder Consultation**: Engage with key stakeholders, including service providers, industry experts, and consumer groups, to gather input and ensure that the new framework meets the needs of all parties involved.
2. **Pilot Programs**: Consider implementing pilot programs to test the new regulatory framework and identify any potential issues before full-scale deployment.
3. **Regular Review**: Establish mechanisms for regular review and update of the regulatory framework to ensure it remains relevant and effective in the face of evolving technologies and market conditions.

Overall, while there are clear benefits to merging the GMPCS and Commercial VSAT CUG authorizations, the decision should be made with careful consideration of the specific context and needs of the satellite telecommunications industry.

Merging the scopes of the extant Global Mobile Personal Communications by Satellite (GMPCS) authorization and Commercial Very Small Aperture Terminal (VSAT) Closed User Group (CUG) Service authorization into a single Satellite-based Telecommunication Service authorization under the Telecommunications Act, 2023, may offer several advantages. However, it also poses certain disadvantages and challenges. Here are some potential drawbacks to consider:

Disadvantages of Merging GMPCS and VSAT CUG Authorizations

1. **Regulatory Complexity and Transition Challenges**
    - **Integration Issues**: Combining two distinct regulatory frameworks can be complex, potentially leading to regulatory overlaps or gaps that could complicate compliance for service providers.
    - **Transition Period**: The transition period may involve significant adjustments for both regulators and service providers, including potential disruptions in service during the integration process.
2. **Loss of Specialized Focus**
    - **Diverse Requirements**: GMPCS and VSAT services cater to different market segments and have distinct technical and operational requirements. A unified authorization may dilute the focus on addressing the specific needs and challenges of each service type.
    - **Regulatory Ambiguity**: The merged authorization might create ambiguity in regulatory provisions, making it harder for service providers to understand and comply with the regulations.
3. **Market Competition and Consumer Impact**
    - **Market Dominance**: A single authorization might lead to market consolidation, potentially reducing competition and leading to higher prices or fewer choices for consumers.
    - **Service Quality**: The focus on merging regulations might divert attention from maintaining and improving service quality for both GMPCS and VSAT services.
4. **Technological and Operational Differences**

- **Technical Compatibility**: GMPCS and VSAT technologies operate differently, and a unified regulatory framework might struggle to adequately address the specific technical standards and requirements of each technology.
- **Operational Challenges**: Combining operational protocols for both services could create inefficiencies or conflicts, impacting the overall performance and reliability of satellite-based communications.

5. **Investment and Innovation Risks**
   - **Increased Costs**: Service providers might face increased costs related to adapting their operations to comply with the new unified authorization, which could be passed on to consumers.
   - **Innovation Stagnation**: The focus on regulatory integration might slow down innovation, as service providers may need to invest significant resources into compliance rather than research and development.
6. **International Compliance and Coordination**
   - **Global Standards**: GMPCS and VSAT services often need to comply with different international standards and agreements. Merging the authorizations might complicate compliance with these global requirements.
   - **Coordination Challenges**: Ensuring consistent coordination with international regulatory bodies for both service types under a single authorization could become more challenging.
7. **Consumer and User Group Concerns**

- **Diverse User Needs**: GMPCS services often target individual consumers and mobile users, while VSAT services cater to corporate and enterprise customers. A unified authorization might struggle to adequately address the distinct needs and expectations of these different user groups.
- **Service Customization**: The ability to customize services to meet specific user requirements might be reduced under a single authorization framework, impacting service satisfaction.

Conclusion

While the merger of GMPCS and VSAT CUG authorizations into a single Satellite-based Telecommunication Service authorization has potential benefits, it also presents several disadvantages and challenges. These include regulatory complexity, loss of specialized focus, market competition concerns, technological and operational differences, investment and innovation risks, international compliance issues, and diverse user needs. Careful consideration and planning are essential to mitigate these drawbacks and ensure a smooth transition that benefits all stakeholders in the satellite telecommunications ecosystem.

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?

Comments :

If it is decided to merge the scopes of the extant Global Mobile Personal Communications by Satellite (GMPCS) authorization and Commercial Very Small Aperture Terminal (VSAT) Closed User Group (CUG) Service authorization into a single Satellite-based Telecommunication Service authorization under the Telecommunications Act, 2023, the scope of service should be comprehensive and inclusive of all relevant aspects of both services. Here are detailed suggestions for the scope of service under the proposed authorization:

1. Service Coverage

1. **Global Mobile Personal Communications by Satellite (GMPCS)**
    - Provide mobile satellite communication services for voice, data, and multimedia applications.
    - Support seamless connectivity for users across different regions and countries.
    - Ensure compatibility with a wide range of mobile devices, including smartphones, satellite phones, and portable terminals.
2. **Commercial VSAT Closed User Group (CUG) Services**
    - Offer VSAT services for dedicated communication links within closed user groups, typically for corporate and enterprise customers.

- Provide high-speed data, voice, and video communication solutions.
- Support fixed and mobile VSAT installations for diverse applications, including remote offices, oil rigs, maritime vessels, and more.

2. Technical Capabilities

1. **Interoperability**
   - Ensure that satellite-based communication systems are interoperable with terrestrial networks and other satellite systems.
   - Support seamless handover between satellite and terrestrial networks to maintain continuous connectivity.
2. **Bandwidth Management**
   - Provide efficient bandwidth allocation and management to optimize network performance and ensure fair usage among all users.
   - Support dynamic bandwidth allocation based on real-time network conditions and user demand.
3. **Quality of Service (QoS)**
   - Define and maintain high standards for QoS, including metrics for latency, jitter, packet loss, and throughput.
   - Implement mechanisms to prioritize critical communication services, such as emergency communications and disaster response.

3. Operational Requirements

1. **Licensing and Compliance**
    - Service providers must obtain necessary licenses and adhere to regulatory requirements set by national and international bodies.
    - Regular audits and compliance checks to ensure adherence to licensing terms.
2. **Service Provisioning**
    - Clear guidelines on service activation, maintenance schedules, and network upgrades.
    - Minimize service disruptions during maintenance and upgrades through effective planning and communication.
3. **Reporting and Transparency**
    - Regular reporting of service performance metrics to regulatory authorities.
    - Transparency in service terms, pricing, and any changes in service conditions.

4. Security and Privacy

1. **Data Protection**
    - Implement stringent data protection measures to ensure the privacy and security of user data.
    - Employ encryption and secure data handling practices to prevent unauthorized access and data breaches.
2. **Cybersecurity Measures**

- Establish comprehensive cybersecurity protocols to protect against threats such as hacking, malware, and DDoS attacks.
- Regularly update and patch systems to address emerging security vulnerabilities.

3. **Lawful Interception**
   - Define protocols for lawful interception by authorized entities, ensuring compliance with national security and law enforcement requirements while protecting user privacy.

5. Consumer Protection

1. **Transparent Billing**
   - Provide clear, itemized billing to consumers, detailing charges for services rendered.
   - Advance notice of any changes in pricing or service terms to ensure consumers are informed.
2. **Complaint Resolution**
   - Establish accessible mechanisms for consumers to file complaints and resolve disputes.
   - Ensure timely and effective resolution of consumer issues, with clear escalation paths.
3. **Fair Pricing Practices**
   - Ensure that pricing for satellite-based services is fair, competitive, and transparent.
   - Implement measures to prevent hidden fees and price gouging.

6. Accessibility and Universal Service

1. **Universal Service Obligation (USO)**
    - Contribute to universal service funds to expand access to satellite-based services in underserved and rural areas.
    - Guarantee service availability and affordability in these areas.
2. **Accessibility for Disabled Users**
    - Ensure that services and customer support are accessible to users with disabilities.
    - Provide necessary accommodations and accessible interfaces for these users.

7. Service Innovation and Evolution

1. **Support for Emerging Technologies**
    - Encourage the adoption and integration of emerging technologies, such as 5G, IoT, and advanced data analytics, to enhance service offerings.
    - Promote innovation through research and development initiatives.
2. **Flexibility for Future Changes**
    - Build flexibility into the authorization to accommodate future technological advancements and changes in the telecommunications landscape.

8. Emergency Services

1. **Reliable Access to Emergency Services**

- Ensure that satellite-based services provide reliable access to emergency services.
- Implement protocols to prioritize emergency communications and support disaster response efforts.

2. **Disaster Recovery and Continuity**
    - Develop disaster recovery and business continuity plans to ensure service availability during emergencies and disasters.
    - Regularly test and update these plans to address new risks and challenges.

Conclusion

The scope of service under the proposed Satellite-based Telecommunication Service authorization should be comprehensive, covering all aspects of GMPCS and VSAT CUG services. It should include provisions for technical capabilities, operational requirements, security and privacy, consumer protection, accessibility, service innovation, and emergency services. By addressing these areas, the merged authorization can provide a robust framework that supports high-quality, reliable, and secure satellite-based communication services for all users.

(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?

Comments :

If the GMPCS and Commercial VSAT CUG Service authorizations are merged into a single Satellite-based Telecommunication Service authorization under the Telecommunications Act, 2023, the terms and conditions should be comprehensive and cover all relevant aspects to ensure a smooth transition, compliance, and high-quality service provision. Here are the detailed terms and conditions that should be applicable:

Technical Terms and Conditions

1. **Interoperability and Compatibility**
    - Ensure that satellite systems are interoperable with terrestrial networks and other satellite systems.
    - Mandate compatibility with existing and emerging technologies, including 5G and IoT.
2. **Quality of Service (QoS)**
    - Define minimum QoS standards, including metrics for latency, jitter, packet loss, and throughput.
    - Regular monitoring and reporting of QoS metrics to regulatory authorities.
3. **Bandwidth Management**
    - Implement efficient bandwidth allocation and management practices.
    - Provide dynamic bandwidth allocation based on real-time network conditions and user demand.
4. **Network Redundancy and Reliability**

- Require redundancy and failover mechanisms to ensure network reliability.
- Mandate robust disaster recovery and business continuity plans.

Operational Terms and Conditions

1. **Licensing and Compliance**
   - Service providers must obtain necessary licenses and comply with all regulatory requirements.
   - Regular audits and compliance checks by regulatory authorities.
2. **Service Provisioning and Maintenance**
   - Clear guidelines on service activation times, maintenance schedules, and network upgrades.
   - Ensure minimal service disruption during maintenance and upgrades.
3. **Customer Service Standards**
   - Define customer service obligations, including response times and support availability.
   - Provide multiple channels for customer support and complaint resolution.
4. **Billing and Transparency**
   - Require transparent billing practices with clear itemization of charges.
   - Notify consumers in advance of any changes in pricing or service terms.

Security-Related Terms and Conditions

1. **Data Protection and Privacy**
    - Enforce strict data protection regulations, including encryption and secure data handling practices.
    - Regular security audits and compliance with data protection laws.
2. **Cybersecurity Measures**
    - Implement comprehensive cybersecurity measures to protect against threats such as DDoS attacks, malware, and unauthorized access.
    - Regular updates and patches to address security vulnerabilities.
3. **Lawful Interception**
    - Establish protocols for lawful interception by authorized entities.
    - Ensure compliance with privacy laws and regulations while allowing for necessary security measures.
4. **Incident Reporting and Response**
    - Require service providers to report security incidents to relevant authorities promptly.
    - Provide necessary support for investigation and mitigation efforts.

Consumer Protection Terms and Conditions

1. **Fair Pricing and Transparency**
    - Ensure that pricing is fair, competitive, and transparent.
    - Prohibit hidden fees and unfair pricing practices.
2. **Quality Assurance**

- Maintain high standards for service quality and reliability.
- Implement mechanisms for regular monitoring and reporting of service performance.

3. **Complaint Handling and Dispute Resolution**
    - Establish a clear, accessible mechanism for handling consumer complaints and resolving disputes.
    - Ensure timely and effective resolution of consumer issues.
4. **Universal Service Obligation (USO)**
    - Contribute to universal service funds to expand access to satellite-based services in underserved and rural areas.
    - Guarantee service availability and affordability in these areas.

Accessibility and Inclusivity Terms and Conditions

1. **Accessibility for Disabled Users**
    - Ensure that services and customer support are accessible to users with disabilities.
    - Provide necessary accommodations and accessible interfaces for these users.
2. **Diverse User Needs**
    - Cater to the distinct needs of different user groups, including individual consumers, corporate customers, and specialized applications.

Innovation and Future-Proofing Terms and Conditions

1. **Support for Emerging Technologies**

- Encourage the adoption and integration of emerging technologies to enhance service offerings.
- Promote innovation through research and development initiatives.

2. **Flexibility for Future Changes**
    - Build flexibility into the authorization to accommodate future technological advancements and changes in the telecommunications landscape.

Emergency Services and Disaster Response Terms and Conditions

1. **Reliable Access to Emergency Services**
    - Ensure that satellite-based services provide reliable access to emergency services.
    - Implement protocols to prioritize emergency communications and support disaster response efforts.
2. **Disaster Recovery and Continuity Plans**
    - Develop comprehensive disaster recovery and business continuity plans.
    - Regularly test and update these plans to address new risks and challenges.

Environmental and Sustainability Terms and Conditions

1. **Sustainable Practices**
    - Encourage or require sustainable practices, such as energy-efficient equipment and infrastructure.

- Regular reporting on environmental impact and measures taken to reduce it.

2. **Compliance with Environmental Regulations**
    - Ensure compliance with relevant environmental regulations and standards.

Conclusion

The terms and conditions for the proposed Satellite-based Telecommunication Service authorization should be comprehensive and address technical, operational, security, consumer protection, accessibility, innovation, emergency services, and environmental sustainability. By implementing these terms and conditions, the merged authorization can ensure high-quality, reliable, and secure satellite-based communication services that meet the needs of all stakeholders, including consumers, service providers, and regulatory authorities.

(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.

Comments :

Consumer Protection :

To ensure that the merging of GMPCS and Commercial VSAT CUG Service authorizations into a single Satellite-based Telecommunication Service authorization under the Telecommunications Act, 2023 benefits consumers, specific terms and conditions should be established. These

should focus on consumer protection, service quality, transparency, and accessibility. Here are detailed terms and conditions that should be made applicable:

Technical Terms and Conditions

1. **Quality of Service (QoS)**
    - **Minimum Standards**: Establish minimum standards for service quality, including metrics such as latency, jitter, packet loss, and throughput.
    - **Service Level Agreements (SLAs)**: Require SLAs with clearly defined QoS parameters and penalties for non-compliance.
2. **Reliability and Continuity**
    - **Redundancy**: Mandate network redundancy and failover mechanisms to ensure uninterrupted service.
    - **Disaster Recovery Plans**: Require comprehensive disaster recovery and business continuity plans.
3. **Interoperability**
    - **Compatibility**: Ensure that satellite systems are compatible with terrestrial networks and other satellite systems.
    - **Seamless Handover**: Support seamless handover between satellite and terrestrial networks to maintain continuous connectivity.

Operational Terms and Conditions

1. **Service Provisioning**

- **Activation Timelines**: Define clear timelines for service activation to ensure prompt provisioning.
- **Maintenance Schedules**: Require transparent communication about maintenance schedules and efforts to minimize service disruptions.

2. **Customer Support**
   - **Availability**: Provide 24/7 customer support through multiple channels (phone, email, chat).
   - **Response Time**: Establish maximum response times for customer inquiries and issues.
3. **Billing and Transparency**
   - **Itemized Billing**: Provide detailed, itemized bills that clearly explain all charges.
   - **Advance Notification**: Require advance notification of any changes in pricing or service terms.

Security-Related Terms and Conditions

1. **Data Protection**
   - **Encryption**: Mandate encryption for data in transit and at rest to protect consumer data.
   - **Privacy Policies**: Implement clear privacy policies and obtain consumer consent for data collection and usage.
2. **Cybersecurity Measures**
   - **Regular Audits**: Conduct regular security audits and vulnerability assessments.

    - **Incident Response**: Develop and maintain robust incident response plans.
3. **Lawful Interception**
    - **Compliance**: Ensure compliance with lawful interception requirements while protecting consumer privacy.

Consumer Protection Terms and Conditions

1. **Fair Pricing**
    - **Transparent Pricing**: Require clear and transparent pricing structures with no hidden fees.
    - **Affordable Plans**: Offer a range of service plans to cater to different consumer needs and budgets.
2. **Complaint Resolution**
    - **Accessible Mechanisms**: Establish easy-to-access mechanisms for consumers to file complaints.
    - **Timely Resolution**: Set timelines for resolving consumer complaints and disputes.
3. **Service Quality Assurance**
    - **Regular Monitoring**: Implement regular monitoring of service quality and publish performance reports.
    - **Compensation**: Provide compensation for consumers in case of service disruptions or failure to meet SLAs.

Accessibility and Inclusivity Terms and Conditions

1. **Universal Service Obligation (USO)**

- **Coverage**: Ensure service availability in underserved and rural areas.
- **Affordability**: Maintain affordable pricing for services in these areas.

2. **Accessibility for Disabled Users**
   - **Accommodations**: Provide necessary accommodations and accessible interfaces for users with disabilities.
   - **Support Services**: Offer specialized customer support for disabled users.

Innovation and Future-Proofing Terms and Conditions

1. **Support for Emerging Technologies**
   - **R&D Investment**: Encourage investment in research and development for new technologies.
   - **Innovation Incentives**: Provide incentives for service providers to adopt and integrate emerging technologies.
2. **Flexibility for Future Changes**
   - **Regulatory Flexibility**: Build flexibility into the authorization to accommodate future technological advancements.

Emergency Services and Disaster Response Terms and Conditions

1. **Reliable Access to Emergency Services**
   - **Emergency Connectivity**: Ensure reliable access to emergency services.

- **Priority Handling**: Implement protocols to prioritize emergency communications.

2. **Disaster Response Plans**
    - **Preparedness**: Develop disaster response plans to ensure service continuity during emergencies.
    - **Regular Testing**: Regularly test and update disaster response plans.

Environmental and Sustainability Terms and Conditions

1. **Sustainable Practices**
    - **Energy Efficiency**: Encourage the use of energy-efficient equipment and infrastructure.
    - **Environmental Impact Reporting**: Require regular reporting on environmental impact and measures taken to reduce it.
2. **Compliance with Environmental Regulations**
    - **Regulatory Compliance**: Ensure compliance with relevant environmental regulations and standards.

Conclusion

The terms and conditions for the proposed Satellite-based Telecommunication Service authorization should prioritize consumer protection, service quality, transparency, accessibility, and innovation. By implementing these terms and conditions, the authorization can ensure that consumers benefit from reliable, high-quality, and secure satellite-based communication services.

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.

Comments :

The need for merging the scopes of the extant Infrastructure Provider-I (IP-I) and Data Centre Infrastructure Provider (DCIP) authorization into a single authorization under the Telecommunications Act, 2023, as recommended by the Telecom Regulatory Authority of India (TRAI), can be examined from multiple perspectives, including regulatory simplification, operational efficiency, and alignment with global best practices. Here's a detailed response with justifications:

1. Regulatory Simplification

Rationale:

- **Reduced Complexity:** Combining IP-I and DCIP authorizations can streamline the regulatory framework, reducing the administrative burden on both service providers and the regulatory body. This simplification can lead to a more straightforward and transparent licensing process.
- **Easier Compliance:** A single authorization can make it easier for infrastructure providers to comply with regulations, as they would need to adhere to one set of rules rather than navigating multiple, potentially overlapping regulatory requirements.

2. Operational Efficiency

Rationale:

- **Integrated Services:** Many infrastructure providers are already operating in both IP-I and DCIP domains. Merging these scopes can facilitate integrated service offerings, enabling providers to optimize their operations and reduce redundancies.
- **Cost Savings:** A unified authorization can reduce costs associated with obtaining and maintaining multiple licenses. This can also lower the barriers to entry for new players in the market, fostering competition and innovation.

3. Alignment with Global Best Practices

Rationale:

- **Global Trends:** Many countries have moved towards unified licensing regimes to cope with the convergence of telecommunications, media, and information technology. A single authorization for infrastructure providers can help align India's regulatory framework with international best practices, potentially attracting foreign investment.
- **Facilitating Growth:** As the digital economy grows, the lines between traditional telecom services and data center services are increasingly blurred. A unified approach can better support the development of emerging technologies and services that require robust and integrated infrastructure.

4. Encouraging Investment

Rationale:

- **Attracting Investment:** Simplified and integrated regulatory frameworks can create a more attractive investment environment. Investors are more likely to invest in markets with clear, consistent, and predictable regulatory environments.
- **Infrastructure Development:** A single authorization can encourage the development of critical infrastructure, such as data centers and network facilities, which are essential for supporting digital transformation and the growth of the digital economy.

5. Enhanced Regulatory Oversight

Rationale:

- **Streamlined Oversight:** A unified authorization can enhance regulatory oversight by providing a holistic view of the infrastructure sector. This can improve monitoring and enforcement of regulations, leading to better service quality and reliability.
- **Coordinated Policy Implementation:** A single authorization can facilitate more coordinated and effective implementation of policy initiatives, ensuring that infrastructure development aligns with national objectives and priorities.

In short Merging the scopes of IP-I and DCIP authorizations into a single authorization under the Telecommunications Act, 2023, presents several

advantages, including regulatory simplification, operational efficiency, alignment with global best practices, encouragement of investment, and enhanced regulatory oversight. These benefits collectively support a more streamlined, efficient, and forward-looking regulatory framework that can better meet the demands of the rapidly evolving telecommunications and data infrastructure landscape.

14. 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?

Comments :

If the scopes of the extant Infrastructure Provider-I (IP-I) and Data Centre Infrastructure Provider (DCIP) are merged into a single authorization under the Telecommunications Act, 2023, the proposed authorization should cover a comprehensive range of activities to ensure it effectively encompasses all necessary functions and services. Here is a detailed outline of the proposed scope:

1. Infrastructure Deployment and Maintenance

Scope:

- **Telecom Towers:** Establishment, maintenance, and management of telecom towers and associated equipment.
- **Fiber Optic Networks:** Laying, managing, and maintaining fiber optic cables, including underground and overhead fiber networks.

- **Small Cells and Distributed Antenna Systems (DAS):** Deployment and maintenance of small cells, DAS, and other in-building solutions to enhance network coverage and capacity.

2. Data Center Services

Scope:

- **Data Center Infrastructure:** Development, maintenance, and operation of data center facilities, including power supply, cooling systems, and physical security.
- **Hosting and Co-Location Services:** Providing space, power, and cooling for servers and other computing equipment owned by third parties.
- **Managed Services:** Offering managed services such as backup and recovery, disaster recovery, and managed security services.

3. Network Support Services

Scope:

- **Network Planning and Optimization:** Providing services related to network planning, design, optimization, and performance management.
- **Installation and Commissioning:** Installation, commissioning, and integration of telecom and IT infrastructure equipment.
- **Network Monitoring and Maintenance:** Continuous monitoring, troubleshooting, and maintenance of network infrastructure to ensure optimal performance and reliability.

4. Connectivity Services

Scope:

- **Internet Exchange Services:** Operating internet exchange points (IXPs) to facilitate efficient traffic exchange between different networks.
- **Cloud Connectivity:** Providing direct connectivity solutions to cloud service providers and facilitating hybrid cloud solutions.
- **Interconnection Services:** Facilitating interconnection between different telecom operators and internet service providers (ISPs).

5. Support for Emerging Technologies

Scope:

- **Edge Computing:** Deployment and maintenance of edge data centers to support low-latency applications and services.
- **Internet of Things (IoT) Infrastructure:** Providing infrastructure to support IoT deployments, including IoT gateways and connectivity solutions.
- **5G Infrastructure:** Development and deployment of infrastructure necessary for 5G networks, including small cells, millimeter-wave equipment, and Massive MIMO technology.

6. Regulatory and Compliance Responsibilities

Scope:

- **Adherence to Standards:** Ensuring compliance with national and international standards for telecommunications and data center infrastructure.
- **Data Privacy and Security:** Implementing robust data privacy and security measures to protect customer data and comply with relevant regulations.
- **Environmental and Safety Standards:** Ensuring compliance with environmental and safety regulations, including measures for energy efficiency, waste management, and employee safety.

7. Ancillary Services

Scope:

- **Power Management:** Providing solutions for uninterrupted power supply, including renewable energy sources, battery storage systems, and diesel generators.
- **Physical Security:** Ensuring the physical security of infrastructure, including surveillance systems, access control, and disaster management plans.
- **Logistics and Supply Chain Management:** Managing the logistics and supply chain for telecom and data center infrastructure components.

The proposed scope of the merged authorization should be comprehensive, covering all aspects of infrastructure deployment and maintenance, data center services, network support services, connectivity services, support for emerging technologies, regulatory and compliance responsibilities, and

ancillary services. This holistic approach will ensure that the unified authorization adequately addresses the needs of the rapidly evolving telecommunications and data infrastructure landscape, fostering growth, innovation, and efficiency.

(b) What terms and conditions should be made applicable to the proposed authorisation?

Kindly provide a detailed response with justifications.

Comments :

In merging the scopes of the Infrastructure Provider-I (IP-I) and Data Centre Infrastructure Provider (DCIP) into a single authorization under the Telecommunications Act, 2023, it is crucial to establish comprehensive terms and conditions that ensure clarity, compliance, and efficiency. Here are the recommended terms and conditions:

1. General Terms

1.1 Licensing Requirements:

- **Single License:** Entities must obtain a single, unified license to provide infrastructure and data center services.
- **Eligibility Criteria:** Detailed eligibility criteria, including financial stability, technical capability, and experience in the telecom and data center sectors.

1.2 Compliance with Laws:

- **Adherence to Regulations:** Compliance with all relevant national and international laws, standards, and regulations.
- **Regular Audits:** Periodic audits to ensure compliance with licensing terms, data privacy laws, and security standards.

2. Operational Conditions

2.1 Infrastructure Deployment:

- **Standardized Procedures:** Adherence to standardized procedures for the deployment of telecom and data center infrastructure.
- **Quality of Service:** Maintenance of high-quality service standards, including uptime guarantees and performance benchmarks.

2.2 Data Center Operations:

- **Environmental Controls:** Implementation of robust environmental controls, including temperature, humidity, and power management.
- **Security Measures:** Comprehensive physical and cybersecurity measures to protect data and infrastructure.

3. Financial Conditions

3.1 Fees and Charges:

- **License Fees:** Payment of a one-time license fee and annual renewal fees.
- **Revenue Sharing:** Provisions for revenue sharing with the government, if applicable.

3.2 Investment Requirements:

- **Capital Investment:** Minimum capital investment requirements to ensure the deployment of robust infrastructure.
- **Financial Reporting:** Regular financial reporting and disclosure of financial statements.

4. Technical Conditions

4.1 Network Standards:

- **Technical Standards:** Adherence to technical standards for telecom and data center equipment.
- **Interoperability:** Ensuring interoperability of networks and systems with other service providers.

4.2 Technology Upgradation:

- **Innovation Encouragement:** Provisions for regular technology upgrades to keep pace with advancements.
- **Support for 5G and IoT:** Special provisions for the deployment and support of emerging technologies like 5G and IoT.

5. Regulatory Conditions

5.1 Monitoring and Reporting:

- **Regular Reporting:** Submission of regular reports on operational, financial, and technical performance.

- **Compliance Monitoring:** Continuous monitoring by the regulatory authority to ensure compliance with all terms and conditions.

5.2 Dispute Resolution:

- **Dispute Mechanism:** Establishment of a clear mechanism for resolving disputes between the licensee and the regulatory authority or other stakeholders.

6. Consumer Protection

6.1 Service Level Agreements (SLAs):

- **SLAs:** Detailed SLAs with penalties for non-compliance to ensure service quality and reliability.
- **Customer Support:** Provision of 24/7 customer support and a grievance redressal mechanism.

6.2 Data Privacy and Protection:

- **Privacy Policies:** Implementation of strict data privacy policies in line with national and international standards.
- **Breach Notification:** Immediate notification of data breaches to affected parties and regulatory authorities.

7. Environmental and Safety Standards

7.1 Sustainability:

- **Energy Efficiency:** Adoption of energy-efficient technologies and practices to minimize environmental impact.
- **Waste Management:** Proper management and disposal of electronic waste.

7.2 Safety Regulations:

- **Health and Safety:** Ensuring health and safety standards for employees and contractors.
- **Disaster Recovery:** Implementation of comprehensive disaster recovery and business continuity plans.

8. Termination and Renewal

8.1 Termination Clauses:

- **Grounds for Termination:** Clear grounds for the termination of the license, including non-compliance with terms and conditions.
- **Grace Period:** Provision of a grace period to rectify issues before termination.

8.2 Renewal Process:

- **Renewal Criteria:** Detailed criteria and a straightforward process for license renewal.
- **Periodic Review:** Regular review and update of terms and conditions to reflect changes in technology and market conditions.

The proposed terms and conditions for the merged authorization should cover a wide array of areas, including general terms, operational conditions, financial conditions, technical conditions, regulatory conditions, consumer protection, environmental and safety standards, and provisions for termination and renewal. This comprehensive framework will ensure that the unified authorization promotes efficient, secure, and sustainable infrastructure development while protecting consumer interests and fostering innovation.

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.

Comments :

Clubbing the scopes of some other authorizations into a single authorization under the Telecommunications Act, 2023, can indeed bring more efficiency in operations. This approach can simplify regulatory processes, reduce administrative burdens, and foster a more integrated and innovative

telecommunications ecosystem. Here's a detailed analysis of why and how this can be achieved:

Potential Authorizations for Clubbing

1. Unified License (UL)

- Currently covers various telecom services like access services, internet services, and more.

2. Infrastructure Provider (IP-I and IP-II)

- Focuses on passive and active infrastructure respectively.

3. Virtual Network Operator (VNO)

- Provides telecom services without owning network infrastructure.

4. Internet Service Provider (ISP)

- Offers internet connectivity services.

5. Data Centre Infrastructure Provider (DCIP)

- Manages data centers and related services.

Benefits of Clubbing Authorizations

1. Regulatory Simplification

Rationale:

- **Single Point of Regulation:** A unified authorization can create a single point of regulation, making it easier for service providers to understand and comply with regulatory requirements.
- **Reduced Overlap:** Eliminates overlapping regulatory requirements, reducing redundancy and potential conflicts between different authorizations.

2. Operational Efficiency

Rationale:

- **Integrated Services:** Providers can offer a wider range of services under one license, leading to better integration and optimization of resources.
- **Cost Savings:** Reduces the administrative and financial burden of maintaining multiple licenses, including costs related to compliance and reporting.

3. Innovation and Flexibility

Rationale:

- **Encourages Innovation:** A single authorization can foster innovation by allowing providers to more easily experiment with new services and technologies without the need for additional licenses.
- **Enhanced Flexibility:** Providers can quickly adapt to market changes and technological advancements, offering new services as needed.

4. Investment Attraction

Rationale:

- **Simplified Investment Climate:** A unified licensing framework can make the telecom sector more attractive to investors by reducing regulatory complexity and uncertainty.
- **Easier Market Entry:** Lowers barriers to entry for new players, promoting competition and potentially leading to better services for consumers.

Proposed Scope of the Single Authorization

1. Infrastructure Deployment and Maintenance

- **Telecom Towers, Fiber Networks, Small Cells, DAS.**

2. Telecom and Internet Services

- **Voice, Data, Internet Access, Broadband Services.**

3. Network Support Services

- **Network Planning, Installation, Commissioning, Monitoring, Maintenance.**

4. Virtual Network Services

- **Resale of telecom services, MVNO (Mobile Virtual Network Operator) operations.**

5. Data Center and Cloud Services

- **Data Hosting, Co-Location, Managed Services, Cloud Connectivity.**

6. Connectivity and Interconnection

- **Internet Exchange, Interconnection Services, Cloud and Edge Connectivity.**

7. Emerging Technologies

- **5G, IoT, Edge Computing Infrastructure.**

Proposed Terms and Conditions

1. General Terms

- **Eligibility Criteria, Licensing Requirements, Compliance with Laws.**

2. Operational Conditions

- **Quality of Service Standards, Environmental Controls, Security Measures.**

3. Financial Conditions

- **License Fees, Revenue Sharing, Financial Reporting.**

4. Technical Conditions

- **Adherence to Technical Standards, Interoperability, Technology Upgradation.**

5. Regulatory Conditions

- **Monitoring and Reporting, Dispute Resolution.**

6. Consumer Protection

- **Service Level Agreements (SLAs), Customer Support, Data Privacy.**

7. Environmental and Safety Standards

- **Energy Efficiency, Waste Management, Health and Safety.**

8. Termination and Renewal

- **Termination Clauses, Renewal Process, Periodic Review.**

Clubbing the scopes of various authorizations into a single authorization under the Telecommunications Act, 2023, can significantly enhance operational efficiency, regulatory simplicity, and market flexibility. This unified approach can better support the rapid evolution of the telecommunications landscape, fostering innovation, attracting investment, and ultimately benefiting consumers with improved services.

(c) What terms and conditions (technical, operational, security, etc.) should be made applicable?

Comments :

In clubbing the scopes of various authorizations into a single authorization under the Telecommunications Act, 2023, it is essential to establish comprehensive terms and conditions to ensure smooth operations, technical compliance, security, and overall efficiency. Here are the detailed terms and conditions that should be made applicable:

1. General Terms and Conditions

1.1 Licensing Requirements:

- **Unified License:** Entities must obtain a single, unified license to provide multiple telecom and data center services.
- **Eligibility Criteria:** Applicants must meet specified financial stability, technical capability, and experience criteria.

1.2 Compliance with Laws:

- **Adherence to Regulations:** Compliance with all relevant national and international laws, standards, and regulations.
- **Regular Audits:** Periodic audits to ensure compliance with licensing terms, data privacy laws, and security standards.

2. Operational Conditions

2.1 Infrastructure Deployment:

- **Standardized Procedures:** Adherence to standardized procedures for deploying telecom and data center infrastructure.
- **Quality of Service:** Maintenance of high-quality service standards, including uptime guarantees and performance benchmarks.

2.2 Data Center Operations:

- **Environmental Controls:** Implementation of robust environmental controls, including temperature, humidity, and power management.

- **Security Measures:** Comprehensive physical and cybersecurity measures to protect data and infrastructure.

2.3 Network Support Services:

- **Network Planning and Optimization:** Providing services related to network planning, design, optimization, and performance management.
- **Installation and Commissioning:** Installation, commissioning, and integration of telecom and IT infrastructure equipment.
- **Network Monitoring and Maintenance:** Continuous monitoring, troubleshooting, and maintenance of network infrastructure to ensure optimal performance and reliability.

3. Technical Conditions

3.1 Network Standards:

- **Technical Standards:** Adherence to technical standards for telecom and data center equipment.
- **Interoperability:** Ensuring interoperability of networks and systems with other service providers.

3.2 Technology Upgradation:

- **Innovation Encouragement:** Provisions for regular technology upgrades to keep pace with advancements.
- **Support for 5G and IoT:** Special provisions for the deployment and support of emerging technologies like 5G and IoT.

4. Security Conditions

4.1 Cybersecurity:

- **Security Framework:** Implementation of a robust cybersecurity framework that includes regular vulnerability assessments and penetration testing.
- **Data Protection:** Adherence to data protection regulations, including encryption, access controls, and regular security audits.

4.2 Physical Security:

- **Access Control:** Strict access control measures to protect physical infrastructure, including biometric and card-based access systems.
- **Surveillance:** Implementation of 24/7 surveillance systems with video monitoring and incident response protocols.

5. Financial Conditions

5.1 Fees and Charges:

- **License Fees:** Payment of a one-time license fee and annual renewal fees.
- **Revenue Sharing:** Provisions for revenue sharing with the government, if applicable.

5.2 Investment Requirements:

- **Capital Investment:** Minimum capital investment requirements to ensure the deployment of robust infrastructure.
- **Financial Reporting:** Regular financial reporting and disclosure of financial statements.

6. Consumer Protection

6.1 Service Level Agreements (SLAs):

- **SLAs:** Detailed SLAs with penalties for non-compliance to ensure service quality and reliability.
- **Customer Support:** Provision of 24/7 customer support and a grievance redressal mechanism.

6.2 Data Privacy and Protection:

- **Privacy Policies:** Implementation of strict data privacy policies in line with national and international standards.
- **Breach Notification:** Immediate notification of data breaches to affected parties and regulatory authorities.

7. Environmental and Safety Standards

7.1 Sustainability:

- **Energy Efficiency:** Adoption of energy-efficient technologies and practices to minimize environmental impact.
- **Waste Management:** Proper management and disposal of electronic waste.

7.2 Safety Regulations:

- **Health and Safety:** Ensuring health and safety standards for employees and contractors.
- **Disaster Recovery:** Implementation of comprehensive disaster recovery and business continuity plans.

8. Regulatory and Compliance Conditions

8.1 Monitoring and Reporting:

- **Regular Reporting:** Submission of regular reports on operational, financial, and technical performance.
- **Compliance Monitoring:** Continuous monitoring by the regulatory authority to ensure compliance with all terms and conditions.

8.2 Dispute Resolution:

- **Dispute Mechanism:** Establishment of a clear mechanism for resolving disputes between the licensee and the regulatory authority or other stakeholders.

9. Termination and Renewal

9.1 Termination Clauses:

- **Grounds for Termination:** Clear grounds for the termination of the license, including non-compliance with terms and conditions.

- **Grace Period:** Provision of a grace period to rectify issues before termination.

9.2 Renewal Process:

- **Renewal Criteria:** Detailed criteria and a straightforward process for license renewal.
- **Periodic Review:** Regular review and update of terms and conditions to reflect changes in technology and market conditions.

The proposed terms and conditions for the merged authorization should cover general, operational, technical, security, financial, consumer protection, environmental and safety standards, and regulatory compliance aspects comprehensively. This approach ensures that the unified authorization promotes efficient, secure, and sustainable infrastructure development while protecting consumer interests and fostering innovation.

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.

Comments :

The enactment of a new telecommunications act often necessitates a review and potential removal of existing authorizations that have become redundant or obsolete. This is typically done to streamline regulatory processes, eliminate outdated requirements, and ensure that the new act is effectively implemented without conflicts or overlaps with previous regulations. Here's a general framework for identifying and justifying the

removal of redundant authorizations after the introduction of a new telecommunications act, such as the Telecommunications Act 2023:

1. **Review of Existing Authorizations**:
    - Conduct a comprehensive review of all existing authorizations, licenses, and permits related to telecommunications.
    - Identify which authorizations are covered under the new act and which are not.
2. **Identification of Redundant Authorizations**:
    - Determine which authorizations have become redundant because their provisions are now included or superseded by the new act.
    - Identify authorizations that address outdated technologies or practices no longer relevant in the current telecommunications landscape.
3. **Justification for Removal**:
    - **Duplication**: If the new act already includes provisions covered by existing authorizations, those authorizations are redundant. Removing them avoids duplication and streamlines compliance for telecommunications operators.
    - **Outdated Provisions**: Authorizations that address technologies, practices, or regulatory needs that are no longer relevant should be removed to reflect the current state of the telecommunications industry.
    - **Conflict Resolution**: Removing redundant authorizations helps prevent conflicts between the new act and older regulations, ensuring a clear and coherent regulatory framework.

- **Administrative Efficiency**: Eliminating unnecessary authorizations reduces administrative burdens for both regulatory authorities and industry stakeholders, improving overall efficiency.

4. **Examples of Potential Redundant Authorizations**:
   - **Licenses for Legacy Technologies**: Authorizations specifically for older telecommunications technologies (e.g., analog systems) that are no longer in use or have been replaced by newer technologies.
   - **Permits for Outdated Practices**: Permits related to practices that have been replaced by more modern and efficient methods under the new act.
   - **Overlap with New Provisions**: Any authorizations whose functions and requirements are explicitly covered by new provisions in the Telecommunications Act 2023.
5. **Consultation and Transition**:
   - Engage with stakeholders, including telecommunications operators, industry experts, and legal advisors, to ensure a smooth transition.
   - Provide a clear timeline and guidance for the phasing out of redundant authorizations to ensure compliance and avoid disruption.
6. **Legislative and Regulatory Updates**:
   - Update legal and regulatory documents to reflect the removal of redundant authorizations.

- Ensure that all changes are communicated clearly to all stakeholders involved.

By following this framework, regulatory authorities can ensure that the implementation of the Telecommunications Act 2023 is effective and that the regulatory environment remains relevant and efficient.

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.

Comments :

The introduction of a new Telecommunications Act often brings new regulatory requirements and technological advancements that necessitate the creation of new authorizations or sub-categories of authorizations. This helps to address the evolving needs of the telecommunications sector, ensure proper oversight, and foster innovation while maintaining compliance and protecting consumers. Here are potential new authorizations or sub-

categories that might be needed under the Telecommunications Act, 2023, along with their justifications:

Potential New Authorizations

1. **Authorization for 5G and Future Technologies**
    - **Justification**: As 5G networks are deployed and future technologies like 6G are developed, specific authorizations are needed to regulate these advanced networks. This ensures proper spectrum management, security standards, and compliance with technical requirements.
2. **Internet of Things (IoT) Networks**
    - **Justification**: With the proliferation of IoT devices, dedicated authorizations for IoT networks can address specific issues such as device interoperability, security, and data privacy.
3. **Data Center Operations and Cloud Services**
    - **Justification**: As data centers and cloud services become critical infrastructure for telecommunications, specific authorizations can ensure these facilities meet standards for security, uptime, and data protection.
4. **Cybersecurity Compliance**
    - **Justification**: Given the increasing threat of cyberattacks, new authorizations focusing on cybersecurity measures for telecommunications operators can ensure that robust protection mechanisms are in place.
5. **Over-The-Top (OTT) Services**

- **Justification**: OTT services like streaming platforms and communication apps are not always covered under traditional telecom regulations. Specific authorizations can address issues related to data usage, net neutrality, and service quality.

6. **Telecommunications Infrastructure Sharing**
    - **Justification**: To promote efficient use of resources and reduce costs, authorizations for infrastructure sharing (e.g., towers, fiber networks) can facilitate agreements and set standards for shared use.

Potential Sub-Categories of Authorizations

1. **Specialized Spectrum Licenses**
    - **Justification**: Sub-categories for different types of spectrum use (e.g., millimeter-wave for urban areas, sub-1 GHz for rural coverage) can ensure optimized spectrum allocation and usage.
2. **Rural and Remote Area Connectivity**
    - **Justification**: Authorizations specifically for providing services in underserved areas can incentivize investment and ensure equitable access to telecommunications services.
3. **Emergency and Public Safety Communications**
    - **Justification**: Specialized authorizations for emergency services communications can ensure reliable and prioritized connectivity during crises and disasters.
4. **Green and Sustainable Telecom Operations**

- **Justification**: With a growing focus on sustainability, authorizations promoting environmentally friendly practices (e.g., renewable energy use, e-waste management) can support industry efforts to reduce their carbon footprint.

5. **Wholesale and Retail Service Differentiation**
   - **Justification**: Differentiating between wholesale and retail service providers can ensure proper regulatory oversight tailored to the specific roles and responsibilities of each type of provider.

Framework for Introducing New Authorizations

1. **Stakeholder Consultation**: Engage with industry stakeholders, including telecom operators, technology providers, consumer groups, and experts, to identify the need for new authorizations and sub-categories.
2. **Regulatory Impact Assessment**: Conduct impact assessments to understand the potential benefits, costs, and challenges associated with the introduction of new authorizations.
3. **Drafting and Review**: Develop detailed guidelines and criteria for each new authorization or sub-category, and review them through public consultations and expert evaluations.
4. **Implementation and Compliance**: Establish clear procedures for obtaining new authorizations, including application processes, compliance requirements, and monitoring mechanisms.

5. **Periodic Review and Adaptation**: Regularly review and update the authorizations to keep pace with technological advancements and industry changes.

By introducing these new authorizations and sub-categories, the Telecommunications Act, 2023, can effectively address current and future needs, fostering innovation while ensuring regulatory oversight and consumer protection.

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.

Comments :

To align the provisions of the Telecommunications Act, 2023 with technological and market developments, it is essential to review and update the scopes of service for each service authorization under the Unified License framework. The goal is to ensure that the regulatory framework remains

relevant, comprehensive, and capable of addressing new technological paradigms and market needs. Here are some suggested changes (additions, deletions, and modifications) that can be incorporated:

General Considerations

1. **Technology Neutrality**: Ensure that service scopes are technology-neutral to accommodate future technological advancements without the need for frequent updates.
2. **Convergence**: Reflect the convergence of telecom services, media, and IT to allow for integrated service offerings.
3. **Consumer Protection**: Enhance provisions related to consumer rights, data privacy, and security.
4. **Innovation Facilitation**: Create a conducive environment for innovation by reducing regulatory barriers and enabling new business models.

Suggested Changes to Service Authorizations

1. Access Service Authorization

Additions:

- Include provisions for 5G and future technologies (e.g., 6G), detailing spectrum management, network deployment standards, and interoperability requirements.
- Add specific provisions for IoT services, focusing on device connectivity, security, and data management.

- Incorporate requirements for deploying and managing smart city infrastructure.

Deletions:

- Remove outdated references to legacy technologies no longer in use (e.g., 2G and certain 3G technologies).

Modifications:

- Update quality of service (QoS) metrics to reflect the higher performance standards expected from modern networks, including low latency and high reliability.
- Revise infrastructure sharing guidelines to promote efficient use of resources and reduce duplication of infrastructure.

2. Internet Service Authorization

Additions:

- Introduce guidelines for high-speed broadband deployment, including fiber-to-the-home (FTTH) and next-generation wireless technologies.
- Include provisions for network neutrality to ensure fair access to internet services.

Deletions:

- Remove specific technology mandates that limit innovation, allowing ISPs to choose the most efficient technologies.

Modifications:

- Update cybersecurity requirements to address the growing threat landscape and ensure robust protection measures are in place.
- Enhance data privacy regulations to align with global best practices and protect user data.

3. National Long Distance (NLD) and International Long Distance (ILD) Service Authorization

Additions:

- Add provisions for managing and monitoring cross-border data flows, ensuring compliance with international data protection regulations.
- Include guidelines for interconnection with international content delivery networks (CDNs) and cloud service providers.

Deletions:

- Remove legacy circuit-switched network requirements, focusing instead on packet-switched networks.

Modifications:

- Update interconnection standards to facilitate seamless global connectivity and support emerging services such as international IoT applications.

4. Virtual Network Operator (VNO) Authorization

Additions:

- Introduce provisions for offering MVNO services tailored for specific niches, such as IoT or enterprise solutions.
- Include guidelines for integrating with cloud-based telecom services.

Deletions:

- Remove restrictions that limit the flexibility of VNOs to offer innovative service bundles.

Modifications:

- Update regulatory compliance requirements to ensure VNOs adhere to the same cybersecurity and data protection standards as traditional network operators.

5. Broadcasting Services Authorization

Additions:

- Include provisions for Over-The-Top (OTT) broadcasting services, addressing licensing, content regulation, and revenue-sharing models.
- Introduce guidelines for interactive and on-demand media services.

Deletions:

- Remove outdated analog broadcasting provisions, focusing on digital and IP-based broadcasting.

Modifications:

- Update content regulation standards to reflect the convergence of media and telecom services, ensuring consistent regulation across platforms.

Framework for Implementation

1. **Stakeholder Engagement**: Conduct consultations with industry stakeholders, consumer groups, and technology experts to gather input on the proposed changes.
2. **Regulatory Impact Assessment**: Evaluate the potential impacts of the changes on the industry, consumers, and the regulatory body.
3. **Drafting and Review**: Develop detailed guidelines and criteria for each updated service authorization, and review them through public consultations and expert evaluations.
4. **Implementation and Monitoring**: Establish clear procedures for transitioning to the updated authorizations, including timelines, compliance requirements, and monitoring mechanisms.
5. **Periodic Review and Adaptation**: Regularly review and update the authorizations to keep pace with technological advancements and industry changes.

By incorporating these changes, the Telecommunications Act, 2023, and the corresponding Unified License framework can effectively address current and future needs, fostering innovation while ensuring regulatory oversight and consumer protection.

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.

Comments :

Virtual Network Operators (VNOs) play a crucial role in the telecommunications ecosystem by providing a range of services without owning the underlying network infrastructure. Given the provisions of the Telecommunications Act, 2023, and recent technological and market developments, it is important to update the scopes of service for VNO authorizations under the Unified License. The goal is to ensure that VNOs can operate efficiently, innovate, and meet consumer demands while adhering to regulatory standards. Below are the suggested changes for VNO service authorizations:

Suggested Changes to VNO Service Authorizations

1. Scope Expansion for Advanced Services

Additions:

- **5G Services**: Include provisions for VNOs to offer 5G services, detailing access to 5G infrastructure, spectrum sharing, and service quality standards.
- **Internet of Things (IoT)**: Authorize VNOs to provide IoT-specific services, including device connectivity, data management, and security protocols tailored for IoT ecosystems.
- **Cloud and Edge Services**: Allow VNOs to offer cloud-based telecom services and edge computing solutions, enabling them to provide enhanced services such as low-latency applications and localized data processing.

Justification: These additions will enable VNOs to tap into emerging market opportunities, provide cutting-edge services, and meet the evolving needs of consumers and businesses.

2. Flexibility and Innovation

Additions:

- **Customizable Service Bundles**: Permit VNOs to create and offer customizable service bundles, including voice, data, and value-added services (VAS), without being constrained by rigid regulatory categories.
- **Wholesale Service Provision**: Allow VNOs to operate as wholesale service providers, enabling them to sell network capacity to other VNOs or service providers.

Justification: Greater flexibility in service offerings will foster innovation, allow VNOs to differentiate themselves in the market, and better meet diverse consumer preferences.

3. Enhanced Consumer Protection and Compliance

Additions:

- **Data Privacy and Security**: Strengthen requirements for data privacy and security, ensuring VNOs implement robust measures to protect consumer data.
- **Quality of Service (QoS)**: Define clear QoS metrics specific to VNOs, including minimum standards for service reliability, latency, and customer support.

Justification: Enhanced consumer protection and QoS standards will build trust in VNO services and ensure a high level of customer satisfaction.

4. Streamlined Regulatory Requirements

Deletions:

- **Outdated Compliance Mandates**: Remove outdated compliance mandates that no longer align with current technologies or market practices, such as specific mandates for legacy network equipment.

Modifications:

- **Simplified Licensing Processes**: Streamline the licensing processes for VNOs, reducing administrative burdens and expediting market entry for new players.

Justification: Simplifying regulatory requirements and removing outdated mandates will reduce barriers to entry, lower operational costs, and promote a competitive market environment.

5. Infrastructure Sharing and Collaboration

Additions:

- **Infrastructure Sharing**: Encourage and facilitate infrastructure sharing agreements between VNOs and traditional network operators, including access to towers, fiber networks, and other essential infrastructure.
- **Public-Private Partnerships**: Enable VNOs to participate in public-private partnerships aimed at expanding network coverage, particularly in underserved and rural areas.

Justification: Infrastructure sharing and collaboration will optimize resource use, reduce costs, and accelerate network expansion, benefiting both operators and consumers.

6. Specialized Authorizations

Additions:

- **Niche Market Services**: Create specialized authorizations for VNOs targeting niche markets, such as enterprise solutions, smart cities, and connected vehicles, with tailored regulatory requirements.

Justification: Specialized authorizations will allow VNOs to focus on specific market segments, offering customized solutions that meet unique needs and drive innovation.

Framework for Implementation

1. **Stakeholder Engagement**: Engage with VNOs, traditional network operators, consumer groups, and technology experts to gather input on the proposed changes.
2. **Regulatory Impact Assessment**: Evaluate the potential impacts of the changes on the VNO sector, including benefits, costs, and any potential challenges.
3. **Drafting and Review**: Develop detailed guidelines and criteria for the updated VNO authorizations, and review them through public consultations and expert evaluations.
4. **Implementation and Monitoring**: Establish clear procedures for transitioning to the updated authorizations, including timelines, compliance requirements, and monitoring mechanisms.
5. **Periodic Review and Adaptation**: Regularly review and update the authorizations to keep pace with technological advancements and industry changes.

By incorporating these changes, the Telecommunications Act, 2023, and the corresponding Unified License framework can effectively support the growth and innovation of VNOs, ensuring they can provide high-quality, diverse, and secure services to consumers.

(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?

Comments :

To ensure that Virtual Network Operators (VNOs) can operate effectively and innovatively under the Telecommunications Act, 2023, it is necessary to update the terms and conditions associated with their service authorizations. The aim is to align with current technological and market developments while maintaining robust regulatory oversight. Here are suggested changes in the General, Technical, Operational, and Security terms and conditions for VNOs:

General Terms and Conditions

Additions:

1. **Technology Neutrality**: Incorporate a clause that explicitly states the authorizations are technology-neutral, allowing VNOs to utilize any suitable technology to deliver services.

2. **Consumer Protection**: Introduce enhanced consumer protection measures, including clear guidelines on dispute resolution, transparent billing practices, and mandatory service level agreements (SLAs).
3. **Sustainability Practices**: Require VNOs to implement environmentally sustainable practices, such as reducing e-waste and promoting energy efficiency.

Deletions:

1. **Obsolete Technology References**: Remove references to outdated technologies and practices no longer in use, such as legacy telecommunication systems.
2. **Redundant Compliance Requirements**: Eliminate redundant or overlapping compliance requirements that are covered under other regulations or the new act.

Modifications:

1. **Licensing and Reporting**: Simplify the licensing process and reduce the frequency and complexity of reporting requirements to ease the administrative burden on VNOs.
2. **Market Entry and Exit**: Update terms to facilitate easier market entry and exit for VNOs, including clearer procedures for transferring licenses and assets.

Technical Terms and Conditions

Additions:

1. **5G and Advanced Networks**: Include specific technical standards and requirements for 5G networks, IoT, and other advanced technologies.
2. **Interoperability**: Mandate interoperability standards to ensure VNOs can seamlessly integrate with multiple network operators and technologies.
3. **Quality of Service (QoS)**: Define new QoS metrics tailored for modern services, including latency, jitter, packet loss, and uptime guarantees.

Deletions:

1. **Legacy Equipment Standards**: Remove technical standards that pertain to legacy equipment and networks no longer widely used.
2. **Redundant Testing Protocols**: Eliminate redundant or outdated testing protocols that are no longer relevant in the current technological landscape.

Modifications:

1. **Network Infrastructure**: Update infrastructure requirements to support shared and virtualized network environments, enabling efficient resource utilization.
2. **Service Upgrades**: Modify requirements to allow for dynamic service upgrades and scaling, reflecting the flexible nature of modern telecommunications.

Operational Terms and Conditions

Additions:

1. **Dynamic Spectrum Access**: Introduce guidelines for dynamic spectrum access, allowing VNOs to efficiently use available spectrum resources.
2. **Disaster Recovery**: Implement comprehensive disaster recovery and business continuity plans to ensure service resilience in case of emergencies.
3. **Innovation Encouragement**: Encourage innovation by providing regulatory sandboxes for testing new services and technologies in a controlled environment.

Deletions:

1. **Outdated Operational Procedures**: Remove operational procedures that are no longer applicable due to advancements in technology and changes in market practices.

Modifications:

1. **Infrastructure Sharing**: Update terms to facilitate and mandate infrastructure sharing agreements, promoting cost efficiency and faster deployment of services.
2. **Customer Service**: Enhance customer service standards, requiring VNOs to provide 24/7 support and timely resolution of issues.

Security Terms and Conditions

Additions:

1. **Cybersecurity Framework**: Introduce a robust cybersecurity framework, including mandatory security assessments, incident response protocols, and regular audits.
2. **Data Protection**: Strengthen data protection measures, ensuring compliance with global data privacy standards and protecting consumer data from breaches and misuse.
3. **Network Security**: Mandate the implementation of advanced network security measures, such as end-to-end encryption, multi-factor authentication, and intrusion detection systems.

Deletions:

1. **Outdated Security Practices**: Remove security practices that are no longer effective or relevant given current threat landscapes.

Modifications:

1. **Security Compliance**: Update security compliance requirements to reflect modern threats and vulnerabilities, ensuring that VNOs adopt the latest security technologies and practices.
2. **Incident Reporting**: Modify incident reporting procedures to ensure timely and comprehensive reporting of security incidents, including breaches and cyberattacks.

Implementation Framework

1. **Stakeholder Engagement**: Involve VNOs, traditional network operators, consumer groups, and cybersecurity experts in the consultation process to gather comprehensive input on proposed changes.
2. **Regulatory Impact Assessment**: Conduct a detailed assessment to understand the potential impacts of the changes, including benefits, costs, and implementation challenges.
3. **Drafting and Review**: Develop detailed guidelines and criteria for the updated terms and conditions, followed by public consultations and expert evaluations.
4. **Phased Implementation**: Implement changes in phases to allow VNOs adequate time to comply with new requirements and ensure smooth transitions.
5. **Monitoring and Feedback**: Establish mechanisms for ongoing monitoring and feedback to continuously improve the regulatory framework based on industry developments and stakeholder experiences.

By incorporating these changes, the Telecommunications Act, 2023, and the corresponding Unified License framework can effectively support the growth and innovation of VNOs, ensuring they can provide high-quality, diverse, and secure services to consumers.

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.

Comments :

Allowing Access Service VNOs (Virtual Network Operators) to partner with multiple NSOs (Network Service Operators) holding Access Service authorization for providing wireless access services can have several significant benefits. However, it also requires careful consideration of regulatory, operational, and competitive aspects to ensure it fosters a fair and efficient telecommunications environment. Here are the key considerations and potential benefits:

Key Considerations

1. **Regulatory Framework**:
    - **Compliance and Licensing**: Update the licensing framework to explicitly allow VNOs to partner with multiple NSOs. Ensure clear guidelines on compliance, reporting, and monitoring.
    - **Interconnection Agreements**: Define standard interconnection agreements and terms to ensure seamless integration and fair practices between VNOs and multiple NSOs.
2. **Operational Aspects**:
    - **Network Management**: Develop protocols for network management, including traffic routing, quality of service (QoS), and service-level agreements (SLAs) to ensure consistent service delivery.

- **Customer Support**: Establish guidelines for customer support to handle issues arising from multiple network partnerships, ensuring a seamless experience for end-users.

3. **Competitive Environment**:
    - **Market Competition**: Assess the impact on market competition to prevent anti-competitive practices and ensure that smaller NSOs have an equal opportunity to partner with VNOs.
    - **Pricing Models**: Regulate pricing models to avoid price manipulation and ensure fair pricing for consumers.

Potential Benefits

1. **Enhanced Coverage and Service Quality**:
    - **Network Redundancy**: Partnering with multiple NSOs can provide VNOs with network redundancy, improving service reliability and reducing downtime.
    - **Improved Coverage**: VNOs can leverage the combined coverage of multiple NSOs to offer better geographical coverage, particularly in rural or underserved areas.
2. **Increased Competition and Innovation**:
    - **Market Innovation**: By allowing multiple partnerships, VNOs can create innovative service offerings, including customizable plans and value-added services.
    - **Competitive Pricing**: Increased competition among NSOs to partner with VNOs can lead to more competitive pricing and better deals for consumers.

3. **Consumer Benefits**:
    - **Service Flexibility**: Consumers can benefit from more flexible service options and potentially better pricing plans.
    - **Quality of Service**: Enhanced QoS due to network redundancy and improved coverage can lead to higher customer satisfaction.
4. **Operational Efficiency**:
    - **Resource Optimization**: Efficient use of existing network infrastructure through shared access can optimize resource utilization and reduce overall costs.
    - **Business Continuity**: Enhanced business continuity for VNOs in case one NSO faces operational issues, ensuring uninterrupted service delivery.

Implementation Strategy

1. **Regulatory Approval and Guidelines**:
    - Amend the Telecommunications Act, 2023, and the Unified License framework to explicitly permit Access Service VNOs to partner with multiple NSOs.
    - Develop detailed guidelines and compliance requirements for such partnerships, ensuring transparency and fairness.
2. **Stakeholder Consultation**:
    - Engage with industry stakeholders, including VNOs, NSOs, consumer groups, and regulatory bodies, to gather feedback and ensure the regulatory framework addresses all concerns.
3. **Infrastructure and Technology**:

- Encourage the adoption of advanced technologies like Software-Defined Networking (SDN) and Network Functions Virtualization (NFV) to manage the complexities of multi-NSO partnerships.
- Promote the development of interoperable systems and standards to facilitate seamless integration and operation.

4. **Monitoring and Evaluation**:
    - Establish robust monitoring mechanisms to oversee the implementation and operation of multi-NSO partnerships, ensuring compliance with regulations and maintaining service quality.
    - Conduct regular reviews and updates to the regulatory framework based on industry developments and feedback.

Permitting Access Service VNOs to partner with multiple NSOs holding Access Service authorization for providing wireless access services can significantly enhance service quality, coverage, and competition in the telecommunications market. However, it requires a carefully designed regulatory framework to manage the operational complexities and ensure fair competition. By addressing these considerations, the Telecommunications Act, 2023, can effectively support the growth and innovation of VNOs while providing substantial benefits to consumers.

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.

Comments :

To mitigate possible adverse outcomes while allowing Access Service VNOs (Virtual Network Operators) to partner with multiple NSOs (Network Service Operators) holding Access Service authorization for providing wireless access services, a comprehensive authorization framework with clear conditions should be established. This framework should address regulatory, technical, operational, security, and competitive concerns to ensure a balanced and efficient telecommunications environment. Below are the recommended conditions:

Regulatory Conditions

1. **Clear Licensing Requirements**:
    - Define explicit licensing terms for VNOs partnering with multiple NSOs, including application processes, fees, and duration of licenses.
    - Require VNOs to disclose all NSO partnerships and obtain approval for any changes or additions.
2. **Reporting and Compliance**:
    - Mandate regular reporting of service quality metrics, customer complaints, and financial disclosures.
    - Conduct periodic audits to ensure compliance with regulatory standards and conditions.
3. **Fair Interconnection Agreements**:
    - Establish standard interconnection agreements to ensure fair and non-discriminatory access to NSO networks.

- Set guidelines for dispute resolution mechanisms to handle conflicts between VNOs and NSOs.

Technical Conditions

1. **Network Interoperability**:
   - Require VNOs to ensure interoperability between different NSO networks to provide seamless service to end-users.
   - Implement standards for network handover, roaming, and service continuity.
2. **Quality of Service (QoS) Standards**:
   - Define minimum QoS standards that VNOs must meet, including metrics for latency, packet loss, jitter, and uptime.
   - Monitor and enforce QoS compliance through regular assessments and penalties for non-compliance.

Operational Conditions

1. **Infrastructure Sharing**:
   - Encourage infrastructure sharing agreements to optimize resource use and reduce operational costs.
   - Set guidelines for shared use of network elements like towers, backhaul, and spectrum.
2. **Customer Service and Support**:
   - Mandate VNOs to provide 24/7 customer support and establish clear procedures for handling customer complaints and service issues.

- Require transparent billing practices and timely communication of any service changes to customers.

Security Conditions

1. **Cybersecurity Measures**:
   - Enforce robust cybersecurity protocols, including regular security audits, incident response plans, and data protection measures.
   - Require VNOs to implement end-to-end encryption and other security measures to protect customer data.
2. **Data Privacy Regulations**:
   - Ensure compliance with data privacy laws and regulations, including obtaining customer consent for data usage and implementing data anonymization techniques.

Competitive Conditions

1. **Anti-Competitive Practices**:
   - Prohibit exclusive agreements that restrict VNOs from partnering with multiple NSOs or limit NSOs from partnering with multiple VNOs.
   - Monitor market practices to prevent anti-competitive behavior, such as predatory pricing or collusion.
2. **Equal Opportunity**:
   - Ensure smaller NSOs have equal opportunities to partner with VNOs, promoting a level playing field in the market.

- Set guidelines for transparent and fair selection processes for NSO partners.

Monitoring and Evaluation

1. **Regulatory Oversight**:
   - Establish a dedicated regulatory body or unit to oversee VNO-NSO partnerships, ensuring compliance with all conditions.
   - Conduct regular reviews and updates of the authorization framework based on industry developments and stakeholder feedback.
2. **Feedback Mechanisms**:
   - Create channels for consumers, VNOs, and NSOs to provide feedback on the partnership framework, helping to identify and address issues promptly.
   - Implement a continuous improvement process to refine and enhance the regulatory framework over time.

Implementation Strategy

1. **Stakeholder Consultation**:
   - Engage with industry stakeholders, including VNOs, NSOs, consumer groups, and technology experts, to gather input on the proposed conditions.
   - Conduct public consultations to ensure transparency and inclusivity in the regulatory process.
2. **Phased Implementation**:

- Roll out the new authorization framework in phases, allowing for adjustments based on initial feedback and performance.
- Provide adequate transition periods for existing VNOs and NSOs to comply with the new conditions.

3. **Training and Awareness**:
   - Offer training programs and workshops to educate VNOs and NSOs on the new framework and compliance requirements.
   - Raise awareness among consumers about their rights and the benefits of VNO-NSO partnerships.

By incorporating these conditions into the authorization framework, the Telecommunications Act, 2023, can effectively support the growth and innovation of Access Service VNOs partnering with multiple NSOs, while mitigating potential adverse outcomes and ensuring a fair, secure, and efficient telecommunications environment.

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.

Comments :

Permitting service-specific parenting of Virtual Network Operators (VNOs) with Network Service Operators (NSOs) in place of the current authorization-specific parenting could be an effective approach to address the overlaps in the set of services under various authorizations. This approach can

provide several benefits, including greater flexibility, improved service offerings, and more efficient use of network resources. However, it also requires careful consideration of regulatory, technical, and competitive aspects. Here's an analysis of this proposal:

Benefits of Service-Specific Parenting

1. **Flexibility and Innovation**:
    - **Customized Service Offerings**: VNOs can tailor their services more precisely to meet market demands, allowing for more innovative and specialized service offerings.
    - **Efficient Resource Utilization**: Service-specific parenting enables better allocation of network resources, optimizing the use of available infrastructure.
2. **Improved Consumer Experience**:
    - **Enhanced Service Quality**: VNOs can partner with the best-suited NSOs for specific services, ensuring higher quality and reliability.
    - **Broader Service Range**: Consumers can benefit from a wider range of services, as VNOs can seamlessly integrate offerings from multiple NSOs.
3. **Market Competitiveness**:
    - **Increased Competition**: Allowing VNOs to partner with different NSOs for different services can foster competition, leading to better pricing and service quality.

- **Reduced Barriers to Entry**: New entrants can more easily find niche markets to serve, promoting innovation and diversity in the telecommunications sector.

Potential Challenges and Mitigation Strategies

1. **Regulatory Complexity**:
   - **Unified Licensing Framework**: Develop a unified licensing framework that clearly defines the rules and guidelines for service-specific parenting. This framework should ensure compliance with overall regulatory standards while allowing flexibility in service partnerships.
   - **Clear Compliance Requirements**: Establish clear compliance and reporting requirements for VNOs and NSOs to ensure transparency and accountability.
2. **Technical Integration**:
   - **Interoperability Standards**: Implement strict interoperability standards to ensure seamless integration of services from different NSOs.
   - **Quality of Service (QoS) Management**: Define and enforce QoS metrics specific to each service type, ensuring consistent service delivery across different NSOs.
3. **Operational Coordination**:
   - **Standardized Service Level Agreements (SLAs)**: Develop standardized SLAs to manage the expectations and responsibilities between VNOs and NSOs for each service type.

- **Efficient Customer Support**: Ensure that customer support systems are equipped to handle issues arising from multi-NSO partnerships, providing a smooth experience for end-users.

4. **Competitive Fairness**:
   - **Anti-Competitive Safeguards**: Implement safeguards against anti-competitive practices, such as exclusive agreements that limit VNOs from partnering with multiple NSOs for different services.
   - **Equal Opportunity for NSOs**: Ensure that all NSOs, including smaller operators, have equal opportunities to partner with VNOs, promoting a level playing field.

Proposed Framework for Service-Specific Parenting

1. **Regulatory Guidelines**:
   - Develop a comprehensive set of guidelines that outline the conditions and requirements for service-specific parenting of VNOs with NSOs.
   - Include provisions for licensing, compliance, reporting, and penalties for non-compliance.
2. **Technical and Operational Standards**:
   - Define technical standards for interoperability and QoS specific to each service type.
   - Establish standardized SLAs and customer support protocols to manage service delivery and consumer interactions.
3. **Market and Competitive Policies**:

- Implement policies to prevent anti-competitive practices and ensure fair competition in the market.
- Promote transparency in the selection and partnership processes between VNOs and NSOs.

4. **Implementation and Monitoring**:
   - Roll out the new framework in phases, allowing for adjustments based on initial performance and feedback.
   - Establish a regulatory body or unit to monitor compliance, address issues, and continuously improve the framework based on industry developments and stakeholder input.

Conclusion

Permitting service-specific parenting of VNOs with NSOs can provide significant benefits, including enhanced flexibility, improved service quality, and increased market competitiveness. By addressing potential challenges through a well-defined regulatory framework, technical and operational standards, and competitive policies, this approach can create a more dynamic and consumer-friendly telecommunications environment. The Telecommunications Act, 2023, can be updated to incorporate these changes, ensuring that VNOs and NSOs can effectively collaborate to deliver high-quality services to consumers.

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.?

Comments :

The Telecommunications Act, 2023, necessitates a comprehensive review and update of the scopes of service for each service authorization to align with technological advancements and market developments. This involves making specific additions, deletions, and modifications to ensure that the regulatory framework remains relevant and effective. Below is a detailed analysis of the required changes for the respective scopes of service:

Additions

1. **Inclusion of Emerging Technologies**:
    - **5G and Beyond**: Explicitly include provisions for 5G, IoT, AI-driven networks, and other emerging technologies to ensure these are covered under new authorizations.
    - **Satellite Communications**: Incorporate guidelines for satellite-based internet services, reflecting the growing role of low Earth orbit (LEO) satellites in providing connectivity.
2. **Dynamic Spectrum Allocation**:

- **Spectrum Sharing**: Allow for dynamic spectrum sharing and allocation to optimize the use of available spectrum and support advanced communication technologies.
- **Unlicensed Spectrum Use**: Expand the use of unlicensed spectrum for innovative applications like Wi-Fi 6 and IoT.

3. **Service-Specific Authorizations**:
   - **Specialized Services**: Introduce service-specific authorizations for niche markets such as IoT networks, enterprise solutions, and smart city infrastructure.
   - **Flexible Licensing Models**: Develop flexible licensing models to accommodate different service types and business models, including temporary or experimental licenses.
4. **Environmental and Sustainability Requirements**:
   - **Green Technologies**: Mandate the use of energy-efficient and environmentally sustainable technologies in network deployment and operations.
   - **E-Waste Management**: Include provisions for responsible e-waste management and recycling practices.

Deletions

1. **Obsolete Technologies**:
   - **Legacy Systems**: Remove references to outdated technologies and services, such as 2G and 3G networks, to streamline the regulatory framework.

- **Outdated Protocols**: Eliminate requirements for legacy protocols and standards that are no longer in use.

2. **Redundant Authorizations**:
    - **Overlapping Licenses**: Consolidate or remove redundant licenses and authorizations that have overlapping scopes, simplifying the regulatory landscape.
    - **Deprecated Services**: Delete authorizations for services that have been deprecated or replaced by newer technologies.

Modifications

1. **Enhanced Quality of Service (QoS) Standards**:
    - **Updated Metrics**: Revise QoS metrics to reflect current technological capabilities and user expectations, including latency, bandwidth, and reliability.
    - **Service-Level Agreements (SLAs)**: Strengthen SLAs to ensure consistent and high-quality service delivery across different service types.
2. **Interoperability and Integration**:
    - **Network Interoperability**: Mandate interoperability between different network operators and technologies to ensure seamless service delivery.
    - **Integrated Services**: Encourage the integration of various communication services (e.g., voice, data, video) into unified offerings.
3. **Data Privacy and Security**:

- **Stronger Data Protection**: Enhance data protection and privacy requirements to comply with global standards and protect user data.
- **Cybersecurity Measures**: Update security protocols to address modern threats, including requirements for regular security audits and incident response plans.

4. **Consumer Protection**:
   - **Transparent Pricing**: Require transparent pricing models and clear communication of costs to consumers.
   - **Dispute Resolution**: Improve mechanisms for consumer dispute resolution and establish stricter penalties for non-compliance with consumer protection regulations.
5. **Market Competition and Fairness**:
   - **Anti-Monopoly Provisions**: Introduce measures to prevent monopolistic practices and promote fair competition among service providers.
   - **Equal Access**: Ensure that smaller operators and new entrants have fair access to essential network resources and infrastructure.

Implementation Framework

1. **Regulatory Harmonization**:
   - Align new service scopes with international standards and best practices to facilitate global interoperability and competitiveness.
   - Engage with industry stakeholders to ensure the changes reflect the needs and realities of the telecommunications sector.

2. **Phased Rollout**:
    - Implement changes in phases to allow for smooth transition and adaptation by service providers.
    - Provide sufficient transition periods for existing license holders to comply with new requirements.
3. **Continuous Review and Update**:
    - Establish a mechanism for regular review and update of service scopes to keep pace with technological advancements and market dynamics.
    - Solicit ongoing feedback from industry players, consumers, and other stakeholders to ensure the regulatory framework remains effective and relevant.

Conclusion

Updating the scopes of service for each authorization in light of the Telecommunications Act, 2023, and current technological and market developments involves a strategic blend of additions, deletions, and modifications. By including provisions for emerging technologies, deleting obsolete references, and modifying existing standards to enhance service quality, interoperability, and security, the regulatory framework can better support the evolving needs of the telecommunications industry. The proposed implementation framework ensures a smooth transition and continuous alignment with global standards and best practices.

(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.

Comments :

The Telecommunications Act, 2023, along with advancements in technology and evolving market conditions, necessitates updates to the terms and conditions associated with each service authorization. This involves making strategic additions, deletions, and modifications to general, technical, operational, and security conditions to ensure they are relevant, efficient, and secure. Here's a comprehensive breakdown of the required changes:

General Conditions

Additions

1. **Consumer Rights and Protection**:
    - **Clear Communication**: Mandate clear and transparent communication of terms, pricing, and service conditions to consumers.
    - **Dispute Resolution Mechanisms**: Strengthen and streamline dispute resolution mechanisms, including faster resolution times and more accessible complaint filing processes.
2. **Environmental and Sustainability Requirements**:

- **Green Technology Usage**: Encourage or mandate the use of sustainable and energy-efficient technologies.
- **E-Waste Management**: Require comprehensive e-waste management and recycling protocols.

Deletions

1. **Obsolete Terms**:
   - Remove terms related to outdated technologies and services that are no longer in use, such as 2G and 3G services.
   - Eliminate any redundant compliance requirements that have been superseded by newer regulations.

Modifications

1. **Licensing and Fees**:
   - Update licensing fee structures to reflect current market conditions and technological advancements.
   - Introduce flexible licensing periods and renewal processes to better accommodate the dynamic nature of the telecommunications sector.

Technical Conditions

Additions

1. **Support for Emerging Technologies**:

- **5G and Beyond**: Include technical requirements for 5G, IoT, AI-driven networks, and other emerging technologies.
- **Interoperability Standards**: Mandate adherence to interoperability standards to ensure seamless communication across different networks and technologies.

2. **Quality of Service (QoS) Enhancements**:
   - **Updated Metrics**: Introduce updated QoS metrics to ensure high performance, including latency, throughput, and reliability standards.
   - **Service Level Agreements (SLAs)**: Define more rigorous SLAs to ensure consistent service delivery.

Deletions

1. **Outdated Technical Specifications**:
   - Remove specifications related to obsolete technologies and protocols that are no longer in use.

Modifications

1. **Network Management**:
   - Enhance requirements for network management to include support for advanced traffic management techniques, such as network slicing and software-defined networking (SDN).
   - Update protocols for spectrum management, including dynamic spectrum sharing.

Operational Conditions

Additions

1. **Customer Experience**:
    - **24/7 Customer Support**: Require 24/7 customer support for critical services.
    - **Service Flexibility**: Encourage the provision of flexible service packages that can be tailored to individual consumer needs.
2. **Infrastructure Sharing**:
    - Promote infrastructure sharing to optimize resource use and reduce costs, including shared access to towers, backhaul, and other critical infrastructure.

Deletions

1. **Redundant Procedures**:
    - Eliminate redundant operational procedures that do not add value or have become irrelevant due to advancements in technology.

Modifications

1. **Operational Efficiency**:
    - Streamline operational processes to improve efficiency, such as simplifying the procedures for network deployment and maintenance.
    - Update requirements for disaster recovery and business continuity planning to reflect best practices.

Security Conditions

Additions

1. **Enhanced Cybersecurity Measures**:
    - **Regular Audits**: Mandate regular cybersecurity audits and assessments.
    - **Incident Response**: Require detailed incident response plans and timely reporting of breaches.
2. **Data Privacy**:
    - **Stricter Data Protection**: Implement stricter data protection measures in line with global standards, including GDPR-like regulations.
    - **User Consent**: Ensure clear and explicit user consent for data collection and usage.

Deletions

1. **Outdated Security Practices**:
    - Remove outdated security practices that are no longer effective against current cyber threats.

Modifications

1. **Security Protocols**:
    - Update security protocols to include modern encryption standards and authentication mechanisms.

- Enhance requirements for secure software development and supply chain security.

Implementation and Compliance

1. **Regulatory Oversight**:
   - Establish a dedicated regulatory body or unit to oversee the implementation of new terms and conditions, ensuring compliance and addressing any issues promptly.
2. **Stakeholder Engagement**:
   - Regularly engage with industry stakeholders, including service providers, technology experts, and consumer advocacy groups, to gather feedback and make necessary adjustments.
3. **Training and Awareness**:
   - Provide training programs and awareness campaigns for service providers to ensure understanding and compliance with new terms and conditions.
4. **Phased Implementation**:
   - Implement changes in phases to allow for smooth transition and adaptation by service providers, with clear timelines and support mechanisms.

Conclusion

Updating the terms and conditions associated with each service authorization in line with the Telecommunications Act, 2023, and current technological and market developments involves a strategic approach. By

incorporating necessary additions, deletions, and modifications, the regulatory framework can better support innovation, ensure high service quality, and protect consumer rights. A well-structured implementation plan, coupled with ongoing stakeholder engagement and regulatory oversight, will ensure these changes are effectively integrated and beneficial to all parties involved.

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) :

Comments :

The Telecommunications Act, 2023 and the market dynamics necessitate a review and possible modification of the service authorizations recommended by TRAI, including the Digital Connectivity Infrastructure Provider (DCIP) Authorization under the Unified License. Key considerations for potential changes include:

1. **Technological Advancements**:
    - Emerging technologies such as 5G, Internet of Things (IoT), and AI necessitate updated infrastructure requirements.
    - Enhanced focus on data security and privacy may require stricter compliance measures.

2. **Market Structure**:
    - Increasing competition and new market entrants could lead to a need for more flexible licensing terms.
    - Consolidation trends within the telecom sector may affect the structure and scope of service authorizations.
3. **Regulatory Environment**:
    - Alignment with international best practices and standards.
    - Ensuring regulatory frameworks support innovation and investment in digital infrastructure.
4. **Consumer Demand**:
    - Growing demand for high-speed internet and reliable connectivity may require modifications in the terms of service to ensure quality and affordability.
5. **Sustainability and Environmental Impact**:
    - Integrating sustainable practices and minimizing environmental impacts of telecom infrastructure development.
6. **Rural and Underserved Areas**:
    - Addressing the digital divide by facilitating better infrastructure deployment in rural and underserved regions.

Specific Areas for Potential Changes:

1. **Scope Expansion**:
    - Broadening the definition of DCIP to encompass new forms of digital infrastructure.
2. **Licensing Terms**:

- Simplifying the licensing process and reducing bureaucratic hurdles.
- Introducing more flexible licensing options, such as shorter-term licenses or regional licenses.

3. **Compliance and Reporting**:
    - Enhancing transparency and accountability through more rigorous compliance and reporting requirements.
4. **Incentives and Support**:
    - Providing incentives for investment in advanced technologies and rural infrastructure development.
    - Support for startups and small enterprises to enter the market.
5. **Collaboration and Partnerships**:
    - Encouraging public-private partnerships and international collaborations for infrastructure development.
6. **Cost Structures**:
    - Revising cost structures to ensure they are conducive to investment while maintaining affordability for consumers.

These considerations and areas for potential changes aim to ensure that the regulatory framework remains robust, adaptable, and supportive of the evolving telecommunications landscape.

(b) IXP Authorization (under Unified License) :

Comments :

The Telecommunications Act, 2023, alongside current market developments, highlights the need to assess and potentially revise the service

authorizations, such as the Internet Exchange Provider (IXP) Authorization under the Unified License, as recommended by TRAI. The following aspects should be considered for any necessary changes:

Technological and Market Dynamics

1. **Technological Evolution**:
    - Advances in network technologies (e.g., 5G, edge computing) impact the infrastructure requirements for IXPs.
    - Increasing data traffic demands efficient and scalable IXP operations.
2. **Market Structure**:
    - Market consolidation or new entrants could necessitate more flexible and adaptive regulatory frameworks.
    - Growing importance of IXPs in content delivery and cloud services calls for updated service scopes.
3. **Regulatory Changes**:
    - Alignment with global best practices and evolving international standards for IXPs.
    - Ensuring compliance with enhanced data protection and cybersecurity regulations.

Consumer and Business Needs

4. **User Demand**:
    - Increasing expectations for low latency, high-speed connectivity necessitate robust IXP infrastructure.

- Growing reliance on online services requires reliable and secure interconnections.

5. **Economic Considerations**:
    - Encouraging competition to lower costs and improve service quality.
    - Supporting small and medium enterprises (SMEs) and startups through accessible licensing.

Specific Recommendations for Changes

1. **Scope and Definition**:
    - Broadening the scope of IXP Authorization to include emerging technologies and services.
    - Defining clear roles and responsibilities for IXPs in the context of modern network ecosystems.
2. **Licensing Flexibility**:
    - Simplifying the licensing process to attract more players and foster competition.
    - Introducing tiered or regional licenses to accommodate different scales of operation.
3. **Compliance and Reporting**:
    - Strengthening compliance requirements to ensure high standards of operation and security.
    - Enhancing transparency through detailed and regular reporting mandates.
4. **Incentives and Support**:

- Providing financial incentives and technical support for the deployment of IXPs in underserved regions.
- Facilitating public-private partnerships to leverage shared resources for IXP development.

5. **Cost Structures**:
   - Revising cost structures to balance the need for investment and operational sustainability with affordability for consumers.
6. **Collaboration and Innovation**:
   - Encouraging collaborations between IXPs, content delivery networks (CDNs), and cloud service providers.
   - Promoting innovation through regulatory sandboxes and pilot projects.
7. **Environmental and Sustainability Considerations**:
   - Integrating sustainable practices in IXP operations to reduce the environmental impact.

Conclusion

Given the rapid evolution of the telecommunications landscape, it is crucial to periodically review and update the terms and conditions associated with IXP Authorization under the Unified License. This ensures that the regulatory framework remains conducive to innovation, competition, and the delivery of high-quality services to consumers and businesses alike.

(c) Content Delivery Network (CDN) Registration :

Comments :

The Telecommunications Act, 2023, along with ongoing market developments, necessitates evaluating and potentially modifying the service authorizations recommended by TRAI, particularly for Content Delivery Network (CDN) Registration. Here are the key areas where changes might be required:

Technological and Market Dynamics

1. **Technological Advances**:
    - Rapid advancements in streaming technology, 5G, and edge computing are influencing CDN requirements.
    - Increasing demand for low latency, high bandwidth content delivery necessitates robust and scalable CDN infrastructure.
2. **Market Structure**:
    - The rise of new content platforms and services, along with consolidation trends in the industry, impacts the competitive landscape.
    - The growing importance of CDNs in delivering content globally requires a reevaluation of regulatory frameworks.
3. **Regulatory Changes**:
    - Ensuring alignment with international best practices and evolving global standards for CDNs.
    - Addressing enhanced data protection, cybersecurity, and privacy regulations.

Consumer and Business Needs

4. **User Demand**:
    - Increased expectations for high-quality, uninterrupted content delivery call for improved CDN performance and reliability.
    - Growth in online services and digital content consumption requires scalable and efficient CDN operations.
5. **Economic Considerations**:
    - Fostering competition to drive down costs and improve service quality.
    - Supporting SMEs and startups through accessible and streamlined registration processes.

Specific Recommendations for Changes

1. **Scope and Definition**:
    - Expanding the scope of CDN Registration to include emerging technologies and services.
    - Clearly defining roles and responsibilities for CDNs in the context of modern digital ecosystems.
2. **Registration Flexibility**:
    - Simplifying the registration process to attract more players and foster competition.
    - Introducing tiered or regional registrations to accommodate different scales of operation.
3. **Compliance and Reporting**:

- Strengthening compliance requirements to ensure high standards of operation and security.
- Enhancing transparency through detailed and regular reporting mandates.

4. **Incentives and Support**:
    - Providing financial incentives and technical support for the deployment of CDNs in underserved regions.
    - Facilitating public-private partnerships to leverage shared resources for CDN development.
5. **Cost Structures**:
    - Revising cost structures to balance the need for investment and operational sustainability with affordability for consumers.
6. **Collaboration and Innovation**:
    - Encouraging collaborations between CDNs, content creators, and service providers.
    - Promoting innovation through regulatory sandboxes and pilot projects.
7. **Environmental and Sustainability Considerations**:
    - Integrating sustainable practices in CDN operations to reduce the environmental impact.

Conclusion

Given the rapid evolution of the digital content landscape, it is essential to periodically review and update the terms and conditions associated with CDN Registration. This ensures that the regulatory framework remains

conducive to innovation, competition, and the delivery of high-quality content services to consumers and businesses alike.

(d) Satellite Earth Station Gateway (SESG) License :

Comments :

In light of the Telecommunications Act, 2023, and ongoing market developments, it is essential to consider whether changes are needed for the Satellite Earth Station Gateway (SESG) License, as recently recommended by TRAI. The following points outline the key areas where changes might be necessary:

Technological and Market Dynamics

1. **Technological Advances**:
    - Developments in satellite technology, such as low Earth orbit (LEO) satellites, require updates to infrastructure and licensing requirements.
    - Increasing integration with terrestrial networks (e.g., 5G) demands seamless and robust satellite gateway operations.
2. **Market Structure**:
    - Market entry of new satellite operators and consolidation trends within the industry impact the competitive landscape and regulatory needs.
    - Growing demand for satellite-based services, including broadband, IoT, and remote sensing, necessitates updated regulatory frameworks.

3. **Regulatory Changes**:
    - Alignment with international best practices and standards for satellite communications.
    - Enhanced focus on data security, privacy, and cybersecurity in satellite operations.

Consumer and Business Needs

4. **User Demand**:
    - Rising demand for reliable and high-speed connectivity in remote and underserved regions requires effective satellite gateway operations.
    - Increasing reliance on satellite services for critical infrastructure and disaster recovery needs robust regulatory support.
5. **Economic Considerations**:
    - Encouraging investment in satellite infrastructure through flexible and supportive licensing frameworks.
    - Supporting SMEs and new entrants with accessible licensing processes.

Specific Recommendations for Changes

1. **Scope and Definition**:
    - Expanding the scope of SESG License to accommodate new satellite technologies and services.
    - Clearly defining roles and responsibilities for satellite gateway operators in the context of modern communication networks.

2. **Licensing Flexibility**:
    - Simplifying the licensing process to attract more players and foster competition.
    - Introducing tiered or regional licenses to accommodate different scales of operation and service areas.
3. **Compliance and Reporting**:
    - Strengthening compliance requirements to ensure high standards of operation and security.
    - Enhancing transparency through detailed and regular reporting mandates.
4. **Incentives and Support**:
    - Providing financial incentives and technical support for the deployment of satellite gateways in underserved regions.
    - Facilitating public-private partnerships to leverage shared resources for satellite infrastructure development.
5. **Cost Structures**:
    - Revising cost structures to balance the need for investment and operational sustainability with affordability for service providers and consumers.
6. **Collaboration and Innovation**:
    - Encouraging collaborations between satellite operators, terrestrial network providers, and technology innovators.
    - Promoting innovation through regulatory sandboxes and pilot projects.
7. **Environmental and Sustainability Considerations**:

- Integrating sustainable practices in satellite gateway operations to minimize environmental impact.
- Encouraging the use of eco-friendly technologies and practices in the satellite industry.

Conclusion

Considering the rapid evolution of satellite technology and the increasing demand for satellite-based services, it is crucial to periodically review and update the terms and conditions associated with the Satellite Earth Station Gateway (SESG) License. These updates will ensure that the regulatory framework remains conducive to innovation, competition, and the delivery of high-quality satellite services to consumers and businesses alike.

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;

Comments :

Given the Telecommunications Act, 2023, and the evolving market landscape, further inputs on the provision of data communication services between aircraft and ground stations by organizations other than the Airports Authority of India (AAI) should focus on enhancing safety, efficiency, and innovation while ensuring compliance with regulatory frameworks. Here are some key considerations and recommendations:

Technological and Market Dynamics

1. **Technological Advancements**:
    - Emerging technologies such as satellite-based communications, 5G, and advanced avionics systems can enhance data communication services.
    - Integration of Internet of Things (IoT) devices for real-time data transmission between aircraft and ground stations.
2. **Market Structure**:
    - Increasing competition and entry of new players in the aviation communication sector.
    - Collaboration between aviation and telecommunications sectors to develop innovative solutions.
3. **Regulatory Environment**:
    - Alignment with international aviation standards set by organizations like ICAO (International Civil Aviation Organization) and IATA (International Air Transport Association).
    - Ensuring stringent data security, privacy, and cybersecurity measures to protect sensitive aviation data.

Consumer and Business Needs

4. **Safety and Reliability**:
    - Ensuring uninterrupted and reliable communication services to enhance flight safety and operational efficiency.

- Reducing latency and improving the quality of data transmission for better real-time decision-making.

5. **Economic Considerations**:
    - Encouraging investments in advanced communication infrastructure through supportive regulatory measures.
    - Supporting small and medium enterprises (SMEs) and new entrants with accessible licensing processes and incentives.

Specific Recommendations for Changes

1. **Scope and Definition**:
    - Clearly defining the roles and responsibilities of organizations providing data communication services between aircraft and ground stations.
    - Expanding the scope to include new technologies and innovative communication methods.
2. **Licensing and Compliance**:
    - Simplifying the licensing process to attract more players and foster competition.
    - Strengthening compliance requirements to ensure high standards of operation and data security.
3. **Incentives and Support**:
    - Providing financial incentives and technical support for the deployment of advanced communication infrastructure.
    - Facilitating public-private partnerships to leverage shared resources for infrastructure development.

4. **Collaboration and Innovation**:
    - Encouraging collaborations between aviation companies, telecommunications providers, and technology innovators.
    - Promoting innovation through regulatory sandboxes, pilot projects, and research and development initiatives.
5. **Data Security and Privacy**:
    - Implementing robust data security measures to protect sensitive aviation data from cyber threats.
    - Ensuring compliance with national and international data protection regulations.
6. **Environmental and Sustainability Considerations**:
    - Encouraging the use of eco-friendly technologies and practices in the provision of data communication services.
    - Integrating sustainable practices to minimize the environmental impact of communication infrastructure.

Conclusion

In view of the Telecommunications Act, 2023, and the dynamic market environment, it is essential to periodically review and update the terms and conditions associated with data communication services between aircraft and ground stations provided by organizations other than the Airports Authority of India. This will ensure a robust regulatory framework that supports innovation, competition, and the delivery of high-quality communication services, ultimately enhancing aviation safety and operational efficiency.

(b) Review of Terms and Conditions of PMRTS and CMRTS Licenses;

Comments :

In light of the Telecommunications Act, 2023, and evolving market conditions, a review of the terms and conditions of Public Mobile Radio Trunked Service (PMRTS) and Captive Mobile Radio Trunked Service (CMRTS) licenses is essential to ensure these services remain relevant, efficient, and conducive to market needs. Here are some inputs for the review:

Technological and Market Dynamics

1. **Technological Advances**:
    - Integration of digital and IP-based technologies into PMRTS and CMRTS.
    - Adoption of LTE and other advanced communication standards for improved service quality and reliability.
    - Incorporation of IoT and AI for enhanced operational efficiency and real-time data analytics.
2. **Market Structure**:
    - Increased competition and entry of new players in the radio communication sector.
    - Growing demand for specialized communication solutions in sectors such as transportation, utilities, public safety, and logistics.
3. **Regulatory Environment**:
    - Alignment with international standards and best practices for radio communication services.

- Ensuring compliance with stringent data security, privacy, and cybersecurity measures.

Consumer and Business Needs

4. **User Demand**:
    - Rising need for reliable, high-quality communication services in various industries.
    - Demand for seamless integration with existing communication infrastructure and systems.
5. **Economic Considerations**:
    - Encouraging investments in modern communication infrastructure through supportive regulatory frameworks.
    - Supporting SMEs and new entrants with accessible licensing processes and incentives.

Specific Recommendations for Changes

1. **Scope and Definition**:
    - Expanding the scope of PMRTS and CMRTS licenses to include advanced digital and IP-based communication technologies.
    - Clearly defining roles and responsibilities for service providers to ensure consistent service delivery.
2. **Licensing Flexibility**:
    - Simplifying the licensing process to attract more players and foster competition.

- Introducing tiered or regional licenses to accommodate different scales of operation and service areas.

3. **Compliance and Reporting**:
    - Strengthening compliance requirements to ensure high standards of operation and data security.
    - Enhancing transparency through detailed and regular reporting mandates.
4. **Incentives and Support**:
    - Providing financial incentives and technical support for the deployment of advanced communication infrastructure.
    - Facilitating public-private partnerships to leverage shared resources for infrastructure development.
5. **Cost Structures**:
    - Revising cost structures to balance the need for investment and operational sustainability with affordability for service providers and consumers.
6. **Collaboration and Innovation**:
    - Encouraging collaborations between service providers, technology companies, and industry users.
    - Promoting innovation through regulatory sandboxes, pilot projects, and research and development initiatives.
7. **Data Security and Privacy**:
    - Implementing robust data security measures to protect sensitive communication data from cyber threats.

- Ensuring compliance with national and international data protection regulations.

8. **Environmental and Sustainability Considerations**:
   - Encouraging the use of eco-friendly technologies and practices in PMRTS and CMRTS operations.
   - Integrating sustainable practices to minimize the environmental impact of communication infrastructure.

Conclusion

Considering the rapid evolution of communication technologies and the increasing demand for specialized communication services, it is crucial to periodically review and update the terms and conditions associated with PMRTS and CMRTS licenses. This review will ensure that the regulatory framework remains conducive to innovation, competition, and the delivery of high-quality communication services, thereby enhancing operational efficiency and meeting the needs of various industries.

(c) Connectivity to Access Service VNOs from more than one NSO :

Comments :

Given the Telecommunications Act, 2023, and current market trends, reviewing the provisions for Virtual Network Operators (VNOs) to connect to multiple Network Service Operators (NSOs) is essential. This can help foster competition, improve service quality, and enhance consumer choice. Here are some detailed considerations and recommendations:

Technological and Market Dynamics

1. **Technological Advances**:
    - Increasing adoption of 5G, IoT, and other advanced communication technologies necessitates a flexible and robust VNO-NSO connectivity framework.
    - Enhanced capabilities of NSOs allow for better integration and seamless service provision to VNOs.
2. **Market Structure**:
    - The market is becoming more competitive with the entry of new VNOs and NSOs, requiring a regulatory framework that supports multiple connectivity options.
    - Encouraging competition can lead to better pricing, improved service quality, and more innovative offerings.
3. **Regulatory Environment**:
    - Ensuring compliance with international best practices and standards for VNO-NSO connectivity.
    - Addressing security, privacy, and data protection concerns in a multi-operator environment.

Consumer and Business Needs

4. **User Demand**:
    - Increasing demand for diverse and customized telecom services necessitates flexible connectivity options for VNOs.
    - Consumers expect high-quality, uninterrupted services, which can be achieved through multiple NSO connections.
5. **Economic Considerations**:

- Supporting investment in VNO infrastructure and operations through a flexible regulatory framework.
- Promoting economic efficiency and innovation by allowing VNOs to leverage multiple NSO networks.

Specific Recommendations for Changes

1. **Licensing and Regulatory Framework**:
   - Simplifying the licensing process for VNOs to connect to multiple NSOs.
   - Introducing clear guidelines and conditions for multi-NSO connectivity to ensure fair competition and interoperability.
2. **Interconnection Agreements**:
   - Facilitating the establishment of interconnection agreements between VNOs and multiple NSOs.
   - Ensuring that terms of interconnection are fair, transparent, and non-discriminatory.
3. **Quality of Service (QoS)**:
   - Mandating minimum QoS standards for VNOs connecting to multiple NSOs.
   - Regular monitoring and enforcement to ensure compliance with QoS requirements.
4. **Compliance and Reporting**:
   - Strengthening compliance requirements to ensure high standards of operation and data security.

- Enhancing transparency through detailed and regular reporting mandates from both VNOs and NSOs.

5. **Incentives and Support**:
    - Providing financial incentives and technical support for VNOs to establish and maintain connections with multiple NSOs.
    - Facilitating public-private partnerships to leverage shared resources for network development.
6. **Cost Structures**:
    - Revising cost structures to balance the need for investment and operational sustainability with affordability for VNOs and consumers.
    - Ensuring that interconnection charges are reasonable and reflect the cost of providing the service.
7. **Collaboration and Innovation**:
    - Encouraging collaborations between VNOs, NSOs, and technology innovators to develop new services and business models.
    - Promoting innovation through regulatory sandboxes, pilot projects, and research and development initiatives.
8. **Data Security and Privacy**:
    - Implementing robust data security measures to protect sensitive communication data in a multi-operator environment.
    - Ensuring compliance with national and international data protection regulations.
9. **Environmental and Sustainability Considerations**:

- Encouraging the use of eco-friendly technologies and practices in VNO and NSO operations.
- Integrating sustainable practices to minimize the environmental impact of network infrastructure.

Conclusion

Considering the dynamic telecommunications landscape and the increasing demand for flexible and high-quality services, it is crucial to review and update the regulatory framework for VNOs connecting to multiple NSOs. This will ensure a competitive market, promote innovation, and enhance service delivery, ultimately benefiting consumers and the industry as a whole.

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.

Comments : Yes.

Yes, there is a need for introducing changes in the authorization framework to improve the ease of doing business within the telecommunications sector. The Telecommunications Act, 2023, along with ongoing market developments, necessitates a more streamlined and business-friendly regulatory environment. Here are some recommendations:

Simplification and Streamlining of Processes

1. **Simplified Licensing Process**:

- Introduce a unified and simplified licensing regime that reduces bureaucratic hurdles and accelerates the approval process.
- Implement a single-window clearance system for all licensing and regulatory approvals to reduce delays and improve efficiency.

2. **Clear and Transparent Guidelines**:
    - Develop clear, concise, and transparent guidelines for obtaining licenses and authorizations.
    - Provide detailed information on the requirements, processes, and timelines involved in obtaining various licenses.

Digital Transformation

3. **Online Application and Management**:
    - Implement an online portal for the submission, tracking, and management of license applications and renewals.
    - Enable digital signatures and e-KYC (Know Your Customer) processes to facilitate quick and secure transactions.
4. **Automation and AI Integration**:
    - Utilize automation and AI to streamline routine regulatory processes and reduce the burden on businesses.
    - Implement AI-driven compliance checks to ensure adherence to regulations without manual intervention.

Regulatory Flexibility

5. **Flexible Licensing Options**:

- Introduce flexible licensing options such as regional, sector-specific, or short-term licenses to cater to diverse business needs.
- Allow businesses to upgrade or modify their licenses easily as their operations expand or change.

6. **Provisional Licenses**:
   - Provide provisional licenses that allow businesses to start operations while their full applications are being processed.
   - Ensure that provisional licenses have clear terms and conditions to avoid any regulatory ambiguities.

Support and Guidance

7. **Dedicated Support and Helpdesk**:
   - Establish a dedicated support team or helpdesk to assist businesses with their licensing and regulatory queries.
   - Provide training and resources to help businesses understand and comply with regulatory requirements.
8. **Consultation and Feedback Mechanism**:
   - Create a formal mechanism for regular consultation and feedback from industry stakeholders on regulatory issues.
   - Use stakeholder feedback to continuously improve the licensing and authorization framework.

Compliance and Reporting

9. **Simplified Compliance Requirements**:

- Simplify compliance requirements and reporting obligations to reduce the administrative burden on businesses.
- Develop standardized reporting templates and schedules to streamline the compliance process.

10. **Risk-Based Compliance**:
    - Implement a risk-based approach to compliance, focusing on areas with higher risk and providing leniency in lower-risk areas.
    - Use data analytics to identify compliance trends and proactively address potential issues.

Financial Incentives and Support

11. **Financial Incentives**:
    - Provide financial incentives, such as tax breaks or subsidies, for businesses investing in advanced technologies and infrastructure.
    - Offer grants or low-interest loans for startups and SMEs to support their entry and growth in the telecommunications market.
12. **Public-Private Partnerships**:
    - Encourage public-private partnerships to leverage shared resources and expertise for infrastructure development.
    - Facilitate collaboration between the government, industry, and academia to drive innovation and growth.

Regulatory Sandbox

13. **Regulatory Sandbox**:

- Establish a regulatory sandbox that allows businesses to test new technologies and business models in a controlled environment.
- Provide a framework for businesses to experiment with innovative solutions without the full burden of regulatory compliance initially.

Conclusion

Introducing these changes in the authorization framework can significantly improve the ease of doing business in the telecommunications sector. Simplifying processes, embracing digital transformation, providing flexibility, and offering support will foster a more conducive environment for innovation, investment, and growth, benefiting both businesses and consumers.

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.

Comments :

Given the Telecommunications Act, 2023, and recent market and technological developments, it is prudent to review and potentially revise the extant terms and conditions related to the ownership of network and equipment in the Unified License. Here are some considerations and recommendations for such changes:

Technological and Market Dynamics

1. **Technological Advances**:
    - Adoption of 5G, IoT, and cloud-based technologies necessitates more flexible regulations regarding ownership and use of network equipment.
    - Increasing use of software-defined networks (SDNs) and network function virtualization (NFV) which decouple hardware from software, allowing more dynamic and scalable network management.
2. **Market Structure**:
    - The emergence of new players, including smaller and niche operators, requires a more inclusive regulatory framework.
    - Growing importance of shared infrastructure and network sharing agreements to reduce costs and improve service delivery.
3. **Global Trends**:
    - Alignment with international best practices and standards for network ownership and equipment usage.
    - Addressing cybersecurity and supply chain security concerns associated with global telecom equipment vendors.

Specific Recommendations for Changes

1. **Flexible Ownership Models**:

- Allow for diverse ownership models, including leasing, sharing, and joint ventures, to facilitate easier entry and operation of new players.
- Enable virtual network operators (VNOs) to own certain network components while leasing others, promoting a more flexible operational model.

2. **Shared Infrastructure**:
   - Encourage and facilitate infrastructure sharing among operators to optimize resource use and reduce capital expenditures.
   - Develop clear guidelines and conditions for sharing passive and active infrastructure, ensuring fair access and competition.
3. **Cloud and Virtualization**:
   - Update regulations to accommodate the use of cloud-based and virtualized network functions, recognizing the shift from physical to virtual infrastructure.
   - Ensure that licensing terms reflect the realities of SDNs and NFV, where control and management of networks are increasingly software-driven.
4. **Cybersecurity and Supply Chain Security**:
   - Implement stringent cybersecurity requirements for network and equipment ownership to protect against threats.
   - Establish standards and certifications for equipment from various vendors to ensure supply chain security and integrity.
5. **Technological Neutrality**:

- Ensure that the licensing framework is technologically neutral, allowing operators to deploy the most efficient and effective technologies without regulatory barriers.
- Promote innovation by allowing the use of emerging technologies and business models.

6. **Simplified Compliance and Reporting**:
   - Simplify compliance and reporting requirements related to network and equipment ownership to reduce administrative burdens.
   - Introduce standardized reporting formats and schedules to streamline the process for operators.
7. **Environmental and Sustainability Considerations**:
   - Encourage the adoption of energy-efficient and sustainable network equipment and practices.
   - Provide incentives for operators to invest in green technologies and infrastructure.

Regulatory and Legal Considerations

1. **Alignment with International Standards**:
   - Align ownership regulations with international standards and best practices to facilitate global interoperability and competitiveness.
   - Participate in international regulatory forums to stay updated on global trends and developments.
2. **Legal Clarity and Consistency**:

- Ensure legal clarity in the terms and conditions regarding ownership to avoid ambiguities and disputes.
- Consistently apply regulations across different types of operators and technologies.

3. **Stakeholder Engagement**:
    - Regularly consult with industry stakeholders, including operators, equipment vendors, and consumers, to gather feedback and make informed regulatory decisions.
    - Use stakeholder feedback to continuously improve the regulatory framework.

Conclusion

In view of the Telecommunications Act, 2023, and ongoing market and technological developments, updating the terms and conditions related to the ownership of network and equipment in the Unified License is essential. These changes should focus on promoting flexibility, innovation, and efficiency while ensuring robust cybersecurity and sustainability. This will help create a more dynamic and competitive telecommunications sector that can better serve consumers and businesses.

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.

Comments :

Given the provisions of the Telecommunications Act, 2023, and the need to promote digital connectivity, modifications to the extant PM-WANI (Prime Minister's Wi-Fi Access Network Interface) framework could significantly encourage the proliferation of Wi-Fi hotspots in the country. Here are some recommendations for such modifications:

Enhancing Ease of Deployment

1. **Simplified Registration Process**:
    - Streamline the registration process for Public Data Office Aggregators (PDOAs) and Public Data Offices (PDOs) to reduce administrative burdens.
    - Introduce a single-window clearance system for faster approvals and deployments.
2. **Support for Small Entrepreneurs**:
    - Provide financial incentives, subsidies, or grants for small entrepreneurs and local businesses to set up PDOs.
    - Offer low-interest loans or microfinance options to support initial setup costs.

Technical and Infrastructure Support

3. **Infrastructure Sharing**:
    - Encourage infrastructure sharing among PDOs and internet service providers (ISPs) to reduce costs and enhance coverage.
    - Develop guidelines for shared use of existing infrastructure such as poles, buildings, and other public utilities.

4. **Backhaul Connectivity**:
    - Ensure affordable and reliable backhaul connectivity for PDOs, especially in rural and underserved areas.
    - Consider subsidizing backhaul costs or providing government support for setting up necessary infrastructure.

Incentives and Financial Support

5. **Subsidies and Tax Benefits**:
    - Provide subsidies for the purchase of Wi-Fi equipment and devices.
    - Offer tax incentives or rebates for businesses that deploy and maintain Wi-Fi hotspots under the PM-WANI framework.
6. **Revenue Sharing Models**:
    - Develop attractive revenue-sharing models between PDOAs and PDOs to incentivize participation.
    - Allow flexible pricing and revenue generation strategies to suit different market conditions and consumer needs.

Public Awareness and Education

7. **Awareness Campaigns**:
    - Conduct nationwide awareness campaigns to educate the public about the benefits and availability of PM-WANI Wi-Fi hotspots.
    - Use local languages and media channels to reach a broader audience, especially in rural areas.
8. **Training and Capacity Building**:

- Provide training programs for local entrepreneurs and businesses on setting up and managing Wi-Fi hotspots.
- Offer technical support and resources to ensure smooth operations and maintenance.

Regulatory and Policy Support

9. **Regulatory Clarity**:
    - Ensure clear and consistent regulations to avoid ambiguities and conflicts between different stakeholders.
    - Regularly update and refine guidelines based on feedback from the ground to address emerging challenges.
10. **Ease of Compliance**:
    - Simplify compliance requirements for PDOs to encourage more participants.
    - Develop user-friendly tools and platforms for easy submission of compliance reports and documentation.

Technological Innovation

11. **Encouraging Innovation**:
    - Promote the use of innovative technologies and business models to enhance the efficiency and reach of Wi-Fi networks.
    - Support research and development in areas like spectrum efficiency, network optimization, and low-cost equipment.
12. **Interoperability Standards**:

- Ensure interoperability standards are in place to allow seamless connectivity across different Wi-Fi networks and devices.
- Promote the development and adoption of open standards to facilitate integration and scalability.

Conclusion

Modifying the extant PM-WANI framework to enhance ease of deployment, provide financial and technical support, raise public awareness, and offer regulatory clarity can significantly boost the proliferation of Wi-Fi hotspots across the country. These changes will help bridge the digital divide, promote digital inclusion, and drive economic growth by enabling widespread internet access.

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.

Comments :

Developing a broad framework for captive authorisations, which are issued on a case-to-case basis, involves setting clear, specific terms and conditions to ensure consistency, transparency, and compliance with regulatory standards. Here is a suggested framework:

1. Objective and Scope

- Define the purpose of the captive authorisation and its intended use.

- Specify the scope of activities and operations allowed under the authorisation.

2. Eligibility Criteria

- Outline the qualifications and requirements an entity must meet to be considered for a captive authorisation.
- Include criteria such as financial stability, technical expertise, and previous experience.

3. Application Process

- Detail the steps involved in applying for a captive authorisation.
- List the documents and information required for submission.
- Specify the timelines for application review and decision-making.

4. Review and Approval Process

- Establish a committee or authority responsible for reviewing applications.
- Define the evaluation criteria and scoring system.
- Outline the process for conducting site visits or interviews, if necessary.

5. Terms and Conditions

- **Duration**: Specify the validity period of the authorisation and conditions for renewal.
- **Operational Limits**: Define the geographic, operational, and technical limits within which the captive entity can operate.

- **Compliance**: List the regulations, standards, and guidelines the captive entity must adhere to.
- **Reporting**: Require regular reporting on activities, performance, and compliance status.
- **Audit and Inspection**: Allow for periodic audits and inspections by the authorising body to ensure compliance.

6. Obligations and Responsibilities

- **Operational**: Specify the operational obligations, including safety, environmental, and quality standards.
- **Financial**: Outline the financial obligations, such as fees, levies, and insurance requirements.
- **Record Keeping**: Require maintaining detailed records of operations and activities for a specified period.

7. Monitoring and Compliance

- Define the mechanisms for ongoing monitoring of the captive entity's compliance with the authorisation terms.
- Establish penalties and sanctions for non-compliance, including fines, suspension, or revocation of the authorisation.

8. Amendments and Modifications

- Provide a process for requesting amendments or modifications to the authorisation terms.

- Specify the conditions under which amendments can be granted and the approval process.

9. Dispute Resolution

- Outline the procedure for resolving disputes related to the captive authorisation.
- Include options for mediation, arbitration, or legal action.

10. Termination and Revocation

- Define the conditions under which the authorisation can be terminated or revoked.
- Specify the process for voluntary surrender of the authorisation by the captive entity.

11. Confidentiality and Data Protection

- Ensure compliance with data protection regulations.
- Specify the confidentiality obligations of the captive entity regarding proprietary information.

12. Public Disclosure

- Determine what information about the captive authorisation should be made publicly available.
- Ensure transparency while protecting sensitive or proprietary information.

13. Training and Capacity Building

- Encourage or mandate training programs to ensure that the captive entity's personnel are adequately trained to meet the operational and regulatory requirements.

14. Feedback and Continuous Improvement

- Implement a mechanism for obtaining feedback from stakeholders.
- Regularly review and update the framework to address emerging challenges and incorporate best practices.

This framework aims to ensure that captive authorisations are granted and managed effectively, promoting accountability, transparency, and adherence to regulatory standards.

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.

Comments :

Amendments to the terms and conditions for authorisations to provide telecommunications services using satellite-based resources, in light of evolving policies and legislation in the Space Sector, should address the following key areas:

1. Compliance with Space Policy and Legislation

- **Alignment with National Space Policy**: Ensure that the terms and conditions are updated to comply with the latest national space policy and any relevant space legislation.
- **International Obligations**: Include provisions to comply with international treaties and agreements, such as those set by the International Telecommunication Union (ITU).

2. Spectrum Management

- **Spectrum Allocation and Usage**: Define clear guidelines on the allocation, usage, and management of spectrum for satellite-based telecommunications services.
- **Interference Management**: Establish protocols for managing and mitigating interference with other satellite and terrestrial communication systems.

3. Licensing and Authorisation

- **Unified Licensing Framework**: Incorporate amendments to align with any new or unified licensing frameworks introduced by space policy changes.
- **Cross-Sector Coordination**: Ensure coordination with other regulatory bodies overseeing telecommunications, aviation, and maritime sectors to avoid regulatory overlaps and conflicts.

4. Satellite Network Operations

- **Orbital Slot Allocation**: Define conditions for the allocation and usage of orbital slots, ensuring compliance with national and international regulations.
- **Operational Standards**: Update operational standards to include requirements for satellite network reliability, quality of service, and safety.

5. Data Protection and Cybersecurity

- **Data Privacy**: Incorporate provisions to ensure compliance with data protection laws and regulations, safeguarding user data.
- **Cybersecurity**: Include stringent cybersecurity measures to protect satellite communication networks from cyber threats and attacks.

6. Environmental and Space Debris Mitigation

- **Sustainability Practices**: Update terms to include requirements for sustainable practices in satellite operations, such as minimizing space debris.
- **End-of-Life Protocols**: Define protocols for the safe decommissioning and disposal of satellites at the end of their operational life to prevent space debris.

7. Research and Development (R&D)

- **Innovation Incentives**: Include provisions that encourage and support R&D in satellite-based telecommunications technology.

- **Collaboration**: Foster collaboration with academic and research institutions to advance technological innovations.

8. Insurance and Liability

- **Liability Clauses**: Clarify liability clauses to address damages caused by satellite operations, including collision risks and service disruptions.
- **Insurance Requirements**: Mandate appropriate insurance coverage for satellite operators to cover potential liabilities and risks.

9. Public Safety and Emergency Services

- **Priority Services**: Ensure that satellite-based telecommunications services prioritize public safety and emergency services.
- **Disaster Response**: Include provisions for the use of satellite communications in disaster response and recovery operations.

10. Reporting and Monitoring

- **Compliance Reporting**: Require regular compliance reporting from satellite operators to regulatory authorities.
- **Monitoring Mechanisms**: Establish monitoring mechanisms to ensure continuous compliance with updated regulations and standards.

11. Dispute Resolution and Enforcement

- **Dispute Mechanisms**: Update dispute resolution mechanisms to address conflicts arising from the implementation of new space policies and regulations.

- **Enforcement Actions**: Define clear enforcement actions for non-compliance, including fines, sanctions, and license revocations.

12. Public Engagement and Transparency

- **Stakeholder Consultation**: Ensure ongoing consultation with stakeholders, including industry players, policymakers, and the public, when amending terms and conditions.
- **Transparency**: Enhance transparency in the authorisation process and decision-making to build trust and accountability.

13. Flexibility for Future Changes

- **Adaptive Framework**: Create an adaptive framework that allows for periodic reviews and updates to terms and conditions in response to technological advancements and policy changes.
- **Pilot Programs**: Include provisions for pilot programs to test and validate new technologies and regulatory approaches before full-scale implementation.

By incorporating these amendments, the terms and conditions for authorisations to provide telecommunications services using satellite-based resources will be better aligned with contemporary space policies and legislative requirements, ensuring robust and sustainable development of the space sector.

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.

Comments : No Comments.

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.

Comments :

To ensure a smooth transition for existing licensees to the new authorisation regime under the Telecommunications Act, 2023, several conditions should be established. These conditions should aim to maintain service continuity, compliance, and fairness while aligning with the updated regulatory framework. Here are the recommended conditions:

1. Notification and Transition Period

- **Official Notification**: Provide an official notification to all existing licensees regarding the transition to the new authorisation regime.
- **Transition Period**: Establish a reasonable transition period during which existing licensees must comply with the new authorisation requirements. This period should be sufficient to allow licensees to adapt their operations and administrative processes.

2. Eligibility and Application Process

- **Eligibility Criteria**: Define clear eligibility criteria for existing licensees to migrate to the new authorisation regime.
- **Simplified Application Process**: Implement a streamlined application process for existing licensees to transition, reducing administrative burden and facilitating a smooth migration.

3. Compliance and Standards

- **Regulatory Compliance**: Require existing licensees to comply with all regulatory standards and conditions outlined in the Telecommunications Act, 2023.
- **Technical Standards**: Ensure that technical standards and operational protocols of existing licensees align with the new regulatory framework.

4. Financial Obligations

- **Fee Structure**: Clearly outline the new fee structure and any changes in financial obligations for existing licensees. Provide details on how existing fees paid under the previous regime will be adjusted or credited.
- **Outstanding Dues**: Require the settlement of any outstanding dues or financial obligations under the old licensing regime before transitioning to the new authorisation.

5. Service Continuity and Consumer Protection

- **Service Continuity**: Mandate measures to ensure uninterrupted service to consumers during the transition period.
- **Consumer Protection**: Enforce consumer protection regulations to safeguard the interests of users, including clear communication regarding any changes in terms of service.

6. Infrastructure and Spectrum Management

- **Spectrum Reallocation**: Address any spectrum reallocation or re-farming issues. Provide guidelines on how existing spectrum allocations will be managed under the new regime.
- **Infrastructure Compatibility**: Ensure that existing infrastructure and equipment comply with the new regulatory requirements. Provide guidelines for necessary upgrades or modifications.

7. Reporting and Monitoring

- **Transition Reporting**: Require regular reporting on the progress of the transition from existing licensees to the new authorisation regime.
- **Monitoring and Compliance**: Establish mechanisms for monitoring compliance with the new authorisation conditions during the transition period.

8. Dispute Resolution

- **Dispute Mechanisms**: Provide clear mechanisms for resolving disputes that may arise during the transition process. Include options for mediation, arbitration, or legal recourse.

9. Training and Capacity Building

- **Training Programs**: Offer training and capacity-building programs to help existing licensees understand and comply with the new regulatory requirements.
- **Guidance and Support**: Provide guidance documents, FAQs, and support channels to assist licensees in the transition process.

10. Public Disclosure and Transparency

- **Transparent Communication**: Ensure transparent communication of the transition process, including timelines, requirements, and any potential impacts on services.
- **Public Consultation**: Engage in public consultation to gather feedback from stakeholders and address any concerns related to the transition.

11. Flexibility and Adaptation

- **Adaptive Framework**: Allow for flexibility and adaptation in the transition process to address unforeseen challenges or unique circumstances faced by existing licensees.
- **Pilot Programs**: Implement pilot programs to test the transition process and gather insights for improvement before full-scale implementation.

By incorporating these conditions, the migration of existing licensees to the new authorisation regime under the Telecommunications Act, 2023, can be managed effectively, ensuring regulatory compliance, service continuity, and protection of stakeholder interests.

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.

Comments :

The migration of existing licensees to the new authorisation regime under the Telecommunications Act, 2023, should follow a structured and transparent procedure to ensure smooth transition and compliance with the new regulatory framework. Here is a recommended step-by-step procedure:

Step 1: Notification and Information Dissemination

1. **Official Announcement**: The regulatory authority should issue an official announcement detailing the migration process, timeline, and requirements.
2. **Information Sessions**: Conduct information sessions and workshops to educate existing licensees about the new authorisation regime and the migration procedure.

Step 2: Application Submission

3. **Eligibility Confirmation**: Existing licensees should confirm their eligibility to migrate based on the criteria outlined in the Telecommunications Act, 2023.
4. **Application Form**: Provide a standardized application form for existing licensees to apply for migration. The form should be accessible online.

5. **Supporting Documents**: Licensees must submit all required supporting documents, such as proof of current license, financial statements, technical compliance reports, and any other relevant documentation.

Step 3: Review and Verification

6. **Initial Review**: The regulatory authority should conduct an initial review of the submitted applications to ensure completeness and compliance with the eligibility criteria.
7. **Verification**: Conduct a detailed verification process, including site visits and technical audits if necessary, to validate the information provided by the licensees.

Step 4: Fee Assessment and Payment

8. **Fee Calculation**: Assess the applicable fees for migration to the new authorisation regime. This includes any transition fees, adjusted annual fees, or spectrum usage fees.
9. **Payment**: Notify the licensees of the fee amount and provide instructions for payment. Licensees should make the payment within the stipulated timeframe.

Step 5: Issuance of New Authorisation

10. **Grant of Authorisation**: Upon successful review, verification, and fee payment, issue the new authorisation to the licensees. The authorisation should clearly state the terms and conditions, validity period, and any specific requirements.

11. **Public Disclosure**: Publish the list of licensees who have successfully migrated to the new authorisation regime on the regulatory authority's website for public transparency.

Step 6: Transition Management

12. **Implementation Plan**: Licensees should submit an implementation plan detailing how they will comply with the new authorisation terms and any necessary adjustments to their operations.
13. **Monitoring**: The regulatory authority should monitor the licensees' transition progress, providing guidance and support as needed.

Step 7: Compliance and Reporting

14. **Regular Reporting**: Require licensees to submit regular reports on their compliance status, operational changes, and any issues faced during the transition.
15. **Inspections and Audits**: Conduct periodic inspections and audits to ensure ongoing compliance with the new authorisation conditions.

Step 8: Dispute Resolution

16. **Dispute Mechanisms**: Establish clear procedures for addressing disputes that may arise during the migration process. This includes mediation, arbitration, or legal recourse options.

Step 9: Feedback and Continuous Improvement

17. **Feedback Collection**: Gather feedback from licensees and other stakeholders on the migration process to identify any challenges or areas for improvement.
18. **Process Review**: Regularly review and update the migration procedure based on feedback and evolving regulatory requirements to ensure it remains effective and efficient.

Step 10: Finalisation and Documentation

19. **Final Verification**: Conduct a final verification of all migrated licensees to ensure full compliance with the new authorisation regime.
20. **Documentation**: Maintain comprehensive records of the migration process, including applications, verifications, payments, and compliance reports.

By following this detailed procedure, the migration of existing licensees to the new authorisation regime under the Telecommunications Act, 2023, can be managed systematically, ensuring transparency, regulatory compliance, and minimal disruption to telecommunications services.

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.

Comments :

Yes, it is logical and prudent to first establish a comprehensive framework for the authorisations to be granted under the Telecommunications Act, 2023, before formulating guidelines for the transfer or merger of these authorisations. Here are the reasons why this approach makes sense:

1. Foundation of Consistency

- **Baseline Framework**: Having a clear and well-defined authorisation framework establishes a consistent baseline from which transfer or merger guidelines can be developed.
- **Uniform Standards**: Ensures that all transfers or mergers are evaluated against uniform standards and criteria established in the authorisation framework.

2. Clarity and Certainty

- **Clear Regulations**: Ensures that all parties understand the conditions and requirements of the authorisations before considering transfers or mergers.
- **Legal Certainty**: Provides legal certainty for both the regulatory authority and the entities involved in the transfer or merger.

3. Compliance and Alignment

- **Regulatory Compliance**: Guarantees that any transfer or merger adheres to the fundamental principles and regulations of the authorisation framework.

- **Alignment with Objectives**: Ensures that transfers or mergers align with the overall objectives and strategic goals outlined in the Telecommunications Act, 2023.

4. Risk Mitigation

- **Reduced Risks**: Minimizes the risk of regulatory gaps or inconsistencies that could arise if transfer or merger guidelines are developed without a solid authorisation framework in place.
- **Smooth Transition**: Facilitates a smoother transition process by ensuring all parties are operating under the same regulatory expectations.

5. Stakeholder Confidence

- **Transparency**: Enhances transparency and builds confidence among stakeholders, including licensees, investors, and consumers.
- **Fair Treatment**: Ensures fair treatment of all parties involved in the transfer or merger process.

6. Operational Efficiency

- **Streamlined Process**: Helps streamline the transfer or merger process by providing clear guidelines that are rooted in the established authorisation framework.
- **Resource Allocation**: Allows the regulatory authority to allocate resources efficiently, focusing first on establishing the authorisation framework and then on developing the transfer or merger guidelines.

7. Legal and Regulatory Framework

- **Legal Framework**: Ensures that the legal framework for authorisations is fully in place, which is essential for any subsequent legal procedures related to transfers or mergers.
- **Regulatory Consistency**: Maintains regulatory consistency and coherence across all aspects of telecommunications regulation.

Conclusion

In conclusion, formulating new guidelines for the transfer or merger of authorisations under the Telecommunications Act, 2023, should logically follow the establishment of a comprehensive authorisation framework. This sequential approach ensures clarity, consistency, compliance, and stakeholder confidence, thereby promoting a stable and predictable regulatory environment for the telecommunications sector.

To ensure the development of comprehensive, fair, and effective guidelines for the transfer or merger of authorisations under the Telecommunications Act, 2023, it is essential to take precautions both before and after formulating the guidelines. Here are the key precautions to consider:

Precautions Before Formulating the Guidelines

1. **Establish a Robust Authorisation Framework**
    - **Clear Definition**: Ensure the authorisation framework is clearly defined, outlining all types of authorisations, eligibility criteria, and compliance requirements.

- **Comprehensive Coverage**: Make sure the framework addresses all aspects of telecommunications services, including spectrum allocation, infrastructure usage, and service delivery.

2. **Stakeholder Engagement**
   - **Consultation Process**: Conduct comprehensive consultations with stakeholders, including existing licensees, industry experts, consumer advocacy groups, and other relevant parties.
   - **Feedback Mechanism**: Implement a mechanism to gather and incorporate feedback from stakeholders into the guidelines.
3. **Legal and Regulatory Analysis**
   - **Legal Compliance**: Review existing laws and regulations to ensure the new guidelines will be compliant with national and international legal frameworks.
   - **Policy Alignment**: Ensure alignment with broader telecommunications policies and strategic goals of the government.
4. **Risk Assessment**
   - **Identify Risks**: Conduct a thorough risk assessment to identify potential challenges and risks associated with the transfer or merger of authorisations.
   - **Mitigation Strategies**: Develop strategies to mitigate identified risks, ensuring they are integrated into the guidelines.
5. **International Best Practices**
   - **Benchmarking**: Study international best practices and standards for the transfer and merger of telecommunications authorisations.

- **Adaptation**: Adapt relevant best practices to the local regulatory and market context.

Precautions After Formulating the Guidelines

1. **Clear and Transparent Communication**
   - **Guideline Publication**: Publish the guidelines clearly and make them easily accessible to all stakeholders.
   - **Stakeholder Briefing**: Conduct briefings and informational sessions to explain the guidelines and their implications to stakeholders.
2. **Implementation Planning**
   - **Transition Plan**: Develop a detailed transition plan for implementing the new guidelines, including timelines and milestones.
   - **Support Mechanisms**: Provide support mechanisms, such as help desks or advisory services, to assist stakeholders in understanding and complying with the new guidelines.
3. **Monitoring and Enforcement**
   - **Compliance Monitoring**: Establish robust mechanisms for monitoring compliance with the new guidelines.
   - **Enforcement Actions**: Define clear enforcement actions for non-compliance, including penalties, fines, and potential revocation of authorisations.
4. **Periodic Review and Update**

- **Regular Review**: Implement a process for the regular review and update of the guidelines to ensure they remain relevant and effective.
- **Continuous Improvement**: Create a feedback loop for continuous improvement, allowing stakeholders to provide input on the effectiveness of the guidelines.

5. **Dispute Resolution Mechanism**
   - **Resolution Framework**: Establish a clear framework for resolving disputes related to the transfer or merger of authorisations.
   - **Access to Recourse**: Ensure that stakeholders have access to mediation, arbitration, or legal recourse if disputes arise.
6. **Data Protection and Privacy**
   - **Data Privacy Compliance**: Ensure that the guidelines comply with data protection and privacy regulations, particularly concerning the transfer of customer data.
   - **Confidentiality Measures**: Include measures to protect the confidentiality of sensitive business information during the transfer or merger process.
7. **Consumer Protection**
   - **Consumer Rights**: Safeguard consumer rights by including provisions that protect consumers from service disruptions or negative impacts resulting from the transfer or merger.
   - **Transparency to Consumers**: Ensure that consumers are informed about any changes to their services resulting from the transfer or merger.

8. **Training and Capacity Building**
    - **Training Programs**: Offer training programs for regulatory staff and stakeholders to ensure they understand and can effectively implement the new guidelines.
    - **Capacity Building**: Invest in capacity-building initiatives to strengthen the regulatory authority's ability to oversee the transfer and merger process.

By taking these precautions before and after formulating the guidelines for the transfer or merger of authorisations under the Telecommunications Act, 2023, the TRAI can ensure a smooth transition, maintain regulatory compliance, and protect the interests of all stakeholders involved.

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.

Comments :

Yes, there is a need to formulate clear 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. Here are a few reasons why this is necessary:

1. **Clarity and Consistency**: Guidelines ensure that there is a clear and consistent understanding of what constitutes a violation and how

different types of violations are categorized. This helps in maintaining fairness and transparency in enforcement.

2. **Regulatory Compliance**: Well-defined guidelines assist telecommunications providers in understanding their obligations and the consequences of non-compliance. This can lead to better adherence to the rules and fewer violations.
3. **Efficient Enforcement**: Regulatory bodies can more efficiently and effectively enforce the Act when there are clear guidelines. This ensures that penalties and other enforcement actions are appropriately applied based on the severity and nature of the violation.
4. **Legal Certainty**: Guidelines provide legal certainty for both the regulatory bodies and the telecommunications providers. This helps in reducing disputes and legal challenges related to the interpretation of the terms and conditions of the Act.
5. **Consumer Protection**: Clear guidelines help in protecting the interests of consumers by ensuring that violations that impact consumer rights and services are appropriately addressed and penalized.
6. **Technological and Market Changes**: The telecommunications sector is rapidly evolving. Guidelines can be periodically updated to reflect technological advancements and changes in market practices, ensuring that the regulatory framework remains relevant and effective.

In summary, formulating detailed guidelines for categorizing violations under the Telecommunications Act, 2023, is essential for ensuring effective regulation, compliance, and protection of stakeholders' interests in the telecommunications sector.

The guidelines required for deciding on the types of violations of terms and conditions under the Second Schedule of the Telecommunications Act, 2023, should be comprehensive and specific. Here are the types of guidelines may be needed:

1. Categorization of Violations

- **Minor Violations**: Define minor infractions such as administrative errors, delays in reporting, or minor breaches that do not significantly impact service or compliance.
- **Moderate Violations**: Specify violations that have a moderate impact on compliance or service, such as repeated minor infractions, moderate service disruptions, or failure to meet certain quality standards.
- **Major Violations**: Detail severe breaches that significantly impact service, consumer rights, or compliance, such as data breaches, major service outages, fraudulent activities, or gross negligence.

2. Description and Examples of Violations

- Provide detailed descriptions and examples for each type of violation to ensure clarity and understanding among stakeholders. This includes specifying actions or omissions that constitute each type of violation.

3. Criteria for Severity Assessment

- Establish criteria to assess the severity of violations, considering factors like:
    - Impact on consumers and services

    - Frequency and recurrence of the violation
    - Intent and negligence
    - Compliance history of the provider

4. Procedures for Detection and Reporting

- Outline procedures for detecting and reporting violations, including:
    - Monitoring and auditing processes
    - Reporting mechanisms for consumers and stakeholders
    - Timelines for reporting and addressing violations

5. Penalties and Enforcement Actions

- Define the range of penalties and enforcement actions for each category of violation, including:
    - Fines and financial penalties
    - Suspension or revocation of licenses
    - Corrective measures and compliance requirements
    - Public disclosure of violations and penalties

6. Appeals and Dispute Resolution

- Provide guidelines for appeals and dispute resolution processes, ensuring that telecommunications providers have a clear pathway to contest decisions and seek resolution.

7. Regular Review and Updates

- Establish a mechanism for regular review and updates of the guidelines to reflect changes in technology, market practices, and regulatory needs.

8. Stakeholder Involvement

- Include provisions for involving stakeholders in the formulation and periodic review of guidelines to ensure they are practical, fair, and effective.

9. Training and Awareness

- Implement training programs and awareness campaigns to ensure that all stakeholders, including regulatory staff and telecommunications providers, understand the guidelines and their application.

By developing and implementing these types of guidelines, the regulatory framework under the Telecommunications Act, 2023, can be more effective, transparent, and fair in addressing and managing violations of terms and conditions.

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

Comments : No.

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 net worth of the Authorised entity

Please support your response with proper justification.

Comments : No Comments.

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 net worth of the Authorised entity

Please support your response with proper justification.

Comments : No Comments.

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.

Comments : 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.

Comments : 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 net worth of the Authorised entity

Please support your response with proper justification.

Comments : No Comments.

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 net worth of the Authorised entity

Please support your response with proper justification.

Comments : No Comments.

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.

Comments : No Comments.

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.

Comments : No Comments.

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.

Comments : No Comments.

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 net worth etc. of the Authorised entity.

Please support your response with proper justification.

Comments : No Comments.

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.

Comments : No Comments.

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

Comments : No Comments.

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.

Comments : No Comments.

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.

Comments : No Comments.

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.

Comments : **No Comments.**

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.

Comments : **No Comments.**

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.

Comments : **No Comments.**

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.

Comments : **No Comments.**

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.

Comments : No 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.

Comments : 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.

Comments : No Comments.

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.

Comments : No Comments.

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.

Comments : No Comments.

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.

Comments : No Comments.

Q60. What should be terms and conditions of security interest which Government may prescribe? Please provide detailed response.

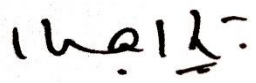
Comments : No Comments.

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.

Comments : No Comments.

Thanks.

Yours sincerely,



(Prof. Dr. Kashyapnath)
President