



Government of the People's Republic of Bangladesh

**National Telecommunications Policy (Draft)
August 2015**

**Posts and Telecommunications Division
Ministry of Posts, Telecommunications and Information Technology**

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Draft

List of Acronyms

AS Number – Autonomous System Number

BDNIC – Bangladesh Network Information Centre

ccTLD – Country Code Top-Level Domain

DTTB – Digital Terrestrial Television Broadcasting

EMC – Electromagnetic Compatibility

EMI – Electromagnetic Interference

EMF – ElectroMotive Force

ICT – Information and Communication Technology

IDN – Internationalized Domain Name

IP – Internet Protocol

IP v4 – Internet Protocol Version-4

IP v6 – Internet Protocol Version-6

IT – Information Technology

ITU – International Telecommunication Union

LEA – Law Enforcement Agency

NFAP – National Frequency allocation Plan

QoS – Quality of Service

R&D – Research and Development

SOF – Social Obligation Fund

VSAT – Very Small Aperture Terminal

1. Preamble

- 1.1** Telecommunications and associated applications have long been recognized as key enablers of the three dimensions of sustainable development- economic growth, environmental balance and social inclusion. The Government of Bangladesh has declared the 'Vision 2021', to become a middle income country by 2021. As part of realizing this vision, the 'Digital Bangladesh' agenda of the Government embodies the philosophy of effective use of modern technology in implementing Government's plans in education, agriculture, health, job creation and poverty reduction. Existence of a robust Telecommunications and IT ecosystem is mandatory to achieve our long cherished development goals.
- 1.2** To leverage the enabling role of Telecommunications, the National Telecommunications Policy, 1998 laid the basic design of a liberalized telecommunication sector in Bangladesh. It paved the way for separation of the policy, regulation, and operational functions that were centralized at that time.
- 1.3** Based on the 1998 Policy, the government enacted the Bangladesh Telecommunication Regulation Act, 2001 (the Act). Several amendments have been made to this Act so far, to address the growing needs of the sector. For further improvement in the service delivery, the government integrated Telecommunications and IT activities and formed the Ministry of Posts, Telecommunications and Information Technology following the strategy of the 6th five year plan¹.
- 1.4** Substantial development has taken place on all fronts in telecommunication services including internet, mobile and broadband since the adoption of the 1998 Policy. However, the expansion momentum of broadband in rural areas has been slower than urban areas. Due to rapid technological changes in recent years, the sector became more interdependent with the global trends of regulation, market structure, and customer needs. Along with the prospects of the new technologies, citizens are being exposed to different new threats from the cyberspace. The issues related to telecommunications and ITs are not remain confined within the boundary of the country. Hence, the 1998 Policy and associated legislations requires revision to reflect the demands of the present day and the future.
- 1.5** The aspirations associated with this new National Telecommunications Policy is to involve next generation by establishing all-inclusive telecommunications and IT services equally in rural and urban areas to accelerate national economic growth for a prosperous digital Bangladesh.

¹ Stated under the heading 'Institutional Reforms for Facilitating the Expansion of ICT' on page '284' of the Part-2 of Sixth Five Year Plan (2011-2015) of Bangladesh

2. Vision

Provide affordable and universally accessible quality telecommunication services to support the nation's sustainable development goals and to integrate the country with the global knowledge economy.

3. Mission

- 3.1 To ensure affordable and integrated telecommunication networks and services for all the individuals, households and businesses in Bangladesh.
- 3.2 To facilitate an efficient and innovative modern telecommunications industry through effective competition across all parts of the sector.
- 3.3 To maintain certainty and transparency in the governance of the telecommunication sector.
- 3.4 To Integrate Bangladesh in the new global knowledge economy through affordable high quality broadband services which will enable research and development activities and development of human capacity to achieve global competitiveness.
- 3.5 To harmonize the policies and legislations in the fields of Telecommunications, IT and broadcasting.
- 3.6 To adopt a whole of Government approach to the growth and development of the telecommunications sector.
- 3.7 To encourage strong and continuing foreign investment along with the domestic investment.
- 3.8 To Promote local manufacturing of telecommunication products and to facilitate the development of software, applications and content for the domestic and global market.
- 3.9 To maintain safety, security and quality of networks and services through standardization and enforcing strict compliance to the standards.
- 3.10 To safeguard the social and cultural fabric of the nation by directing the expected influence of the technology towards the greater benefit of the society.
- 3.11 To ensure proper utilization and management of the national resources in the telecommunication sector.

4. Guiding Principles

The following five principles guide the National Telecommunications Policy to ensure the development and sustainability of a vibrant telecommunications sector in Bangladesh:

- 4.1 **Open and Competitive market:** Telecommunication infrastructure provision and service delivery shall be conducted through the operation of open and competitive market along with the substantial role of the government to maximize aggregate social benefits.

- 4.2 Universal Access:** Modern telecommunication services shall be accessible to all citizens and communities. All aspects of access which includes but not limited to availability, affordability and capacity to use shall be addressed to ensure that universal access is achieved.
- 4.3 Effective Governance:** The government shall facilitate high regulatory standards in the telecommunication sector and shall be proactive for taking timely decisions on telecommunications and IT related policy adjustments.
- 4.4 Appropriate Regulation:** Regulation of the sector shall be certain, transparent and non-discriminatory. The purposes of the regulations are to promote competition, sector development and migration to more efficient means of delivering quality services.
- 4.5 Forward Looking:** Provision of contemporary and proven new technologies, concepts, applications and converged services shall be promoted to develop and maintain global competitive advantage in all telecommunications embedded industries for creating a digitally inclusive knowledge based economy.

5. Policy Time Horizon

The National Telecommunications Policy is intended to be relevant for the next 10 years at least. However, the policy may be reviewed time to time and revised, if necessary, to preserve its effectiveness and relevance. The associated strategies, and the activities listed herein, shall also be monitored, reviewed and revised regularly.

6. Policy Objectives

The objectives of the National Telecommunications policy, *inter alia*, include:

6.1 Affordable and Universal Access

- 6.1.1 Ensure affordability through scale and efficiency of the sector.
- 6.1.2 Facilitate comprehensive social inclusion and cohesion through affordable telecommunication and IT services to bridge the Digital Divide.
- 6.1.3 Inculcate Brand-Bangladesh culture and traditions in the architecture of telecommunications and associated applications to provide citizen centric services.
- 6.1.4 Expand network and services in marginal areas to enable economic and social inclusion through redirecting some portion of industry revenues.
- 6.1.5 Ensure effective and non-discriminatory interconnections amongst the service providers.
- 6.1.6 Ensure secured and efficient international connectivity for the telecommunication networks.

6.2 Quality of Service and Customer protection

- 6.2.1 Establish proper grievance redressal mechanism to provide effective customer friendly environment.

- 6.2.2 Establish mechanism for service providers to ensure their accountability and transparency for quality of service, fixing tariff, charging etc. and uphold the customer interest.
- 6.2.3 Ensure customers' legitimate privacy and protection of personal information.
- 6.2.4 Keep telecommunications and platforms protected and capable of effective and expedient recovery in the event of criminal acts or threats.
- 6.2.5 Uphold the national security interest in the overall telecommunication sector.

6.3 Development of Telecommunications market and services

- 6.3.1 Ensure that licensing is technology and network neutral in line with the guiding principle of the government.
- 6.3.2 Move towards stable and effective licensing scheme to facilitate flexible response to opportunities and technologies in future.
- 6.3.3 Introduce licensing for the commercial satellite operations and services.
- 6.3.4 Introduce authorizations and class licenses for certain telecommunication services and applications.
- 6.3.5 Create environment for migration to digital broadcasting from analogue.
- 6.3.6 Formulate a suitable ownership transfer mechanism in licensing framework.
- 6.3.7 Ensure appropriate regulatory measures to create and maintain competitive environment in the telecommunication sector.
- 6.3.8 Address market failures through appropriate government intervention.

6.4 Management of scarce resources

- 6.4.1 Ensure effective and equitable best practice processes for the planning, allocation and assignment of spectrum to maximize social and economic benefits.
- 6.4.2 Promote efficient and flexible use of spectrum with provision of regular audit of spectrum usage.
- 6.4.3 Support the emergence of future telecommunication services by ensuring proper management of spectrum.
- 6.4.4 Emphasize on appropriate and best practice processes for the planning, allocation and assignment of numbering schemes and other resources.
- 6.4.5 Establish the rights in obtaining access to the space orbit resources and spectrum for satellite operations and applications.

6.5 Investment

- 6.5.1 Encourage local private sector and foreign direct investment in the growing telecommunication and IT sector especially into broadband and other new convergent services.
- 6.5.2 Emphasize on allocative efficiency in public sector investment as well as maximizing social benefits and elimination of gender inequalities.

6.6 Efficiency and innovation

- 6.6.1 Facilitate the service providers to utilize their full potentials and innovate new convergent services.
- 6.6.2 Ensure regulatory measures to remove the barriers to the efficiency of the telecommunication sector.
- 6.6.3 Support innovative e-services and m-services in important social sectors.
- 6.6.4 Encourage development of secure and reliable applications to facilitate online transactions.

- 6.6.5 Increase efficiency in business transactions through e-commerce.
- 6.6.6 Encourage innovative use of telecommunications and related technologies and services.

6.7 Employment and Entrepreneurship

- 6.7.1 Create sustainable employment opportunities within the telecommunication sector.
- 6.7.2 Facilitate job opportunities and entrepreneurship in other sectors of the economy.
- 6.7.3 Promote local ownership and extend support for the provision of tele-centres or e-centres in under-served areas and encourage the development of local employment opportunities around such initiatives.

6.8 Standardization and Local hardware and software production

- 6.8.1 Support the development as well as use of best practice standards.
- 6.8.2 Promote indigenous Research and Development (R&D) for hardware manufacturing and software development to serve local and global market.
- 6.8.3 Develop institutional framework to support the R&D and manufacturing industry.

6.9 Environment-friendly networks

- 6.9.1 Establish and strengthen the framework to address the environmental and health related concerns pertaining to the telecommunications sector.
- 6.9.2 Promote, enhance and continue adoption of environment-friendly activities in telecommunications arena.
- 6.9.3 Encourage use of renewable energy sources to create green telecommunication sector.

7. Strategy

7.1 Customer friendly telecommunication framework

- 7.1.1 Formulate mechanisms to ensure competitive environment.
- 7.1.2 Assess the feasibility of function based classification of licenses and identify the services suitable for authorizations and class licenses considering sustainability of existing license holders.
- 7.1.3 Encourage all licensed operators to share facilities without any discrimination as approved by the government.
- 7.1.4 Determine the regulatory remedies to reduce the risk of harm to competition and customers from the dominance of the service provider with Significant Market Power.
- 7.1.5 Formulate a suitable ownership transfer mechanism of the license with necessary thresholds while maintaining licensing framework and adequate competition.

7.2 Facilitate introduction of efficient telecommunication infrastructures and services

- 7.2.1 Facilitate high speed broadband services for all individuals, communities, educational institutions, homes, and businesses in the country.

- 7.2.2 Develop a comprehensive roadmap on transition to Digital Terrestrial Television Broadcasting (DTTB) to provide information and recommendations on policy, regulation, technologies, network planning, customer awareness and business planning for smooth migration.
- 7.2.3 Introduce a code for the construction of ducts and associated access points for all concerned authorities.

7.3 Effective Use of Social Obligation Fund

- 7.3.1 Develop principles for the prioritization of Social Obligation Fund allocations to provide services to the neglected areas in Bangladesh.
- 7.3.2 Include shared services amongst tele-centers, e-centers and broadband access under Social Obligation Fund.
- 7.3.3 Prepare a guideline or rule for the use of Social Obligation fund to develop various Telecommunication and IT devices and applications, particularly for educational, scientific, cultural, and communication and information purposes intended for the persons with disabilities and special needs.

7.4 Improve regulatory certainty, transparency and effectiveness

- 7.4.1 Ensure that best practice standards for both policy making and regulation are reflected in the legislation.
- 7.4.2 Strengthen the human resource and institutional capacity of the regulator.
- 7.4.3 Review the Bangladesh Telecommunications Regulating Act, 2001 to align it with this policy.
- 7.4.4 Develop a framework for technology, service and network neutrality in consultation with the stakeholders to apply it in all areas of licensing scheme and regulation.

7.5 Protection of Customer rights and Service quality

- 7.5.1 Ensure that all licensees develop and circulate their customer dealing policies which includes the expectations of service delivery and billing.
- 7.5.2 Establish effective, accessible and expedient customer complaint and dispute resolution arrangements.
- 7.5.3 Move towards the full Number Portability at the earliest.
- 7.5.4 Maintain a National Mobile phone and related equipment Register for addressing security threat, theft and other concerns including reprogramming of mobile handsets.
- 7.5.5 Mandate online disclosure of detailed area coverage by telecommunication service providers.
- 7.5.6 Formulate a Code of Practice for Marketing and Sales Communications to ensure transparency and address security issues relating to Customer Acquisition.
- 7.5.7 Ensure that the service providers shall comply the performance standards and Quality of Service (QoS) parameters.
- 7.5.8 Prepare a guideline to safeguard the rights of the persons with disabilities and special needs.

7.6 Effective Utilization of Spectrum and other telecommunications resources

- 7.6.1 Enhance use of effective and equitable best practice processes for the planning, allocation and assignment of spectrum.
- 7.6.2 Periodically identify additional frequency bands for operation of low power devices for public use which is exempted from licensing requirements.
- 7.6.3 Assess the feasibility of Fixed-Mobile Convergence thus making available valuable spectrum for other wireless services.
- 7.6.4 Refarm² spectrum from time to time to make spectrum available and allot alternative frequency bands or media to service providers.
- 7.6.5 Develop the capacity and necessary institutional framework for Advanced Radio Spectrum Engineering and Management Studies and policy research.
- 7.6.6 Develop a detail regulatory roadmap for the utilization of spectrum
- 7.6.7 Maintain open and participatory allocation process and management of radio frequency.
- 7.6.8 Move towards the use of allotted spectrum to provide service in any technology subject to Radio Regulation of ITU, National Frequency Allocation Plan (NFAP) and non-interference with other user or bands.
- 7.6.9 Enhance the spectrum monitoring capacity to address any unauthorized use of spectrum.

7.7 Coordinate with other policies and strengthen International cooperation

- 7.7.1 Establish a national forum with representatives of all stakeholders to work on sustainable development of the telecommunication sector in Bangladesh.
- 7.7.2 Coordinate with the Board of Investment, the Bangladesh Bank, the Securities and Exchange Commission and other relevant agencies to attract domestic and foreign direct investment into the telecommunication sector and for stable and predictable environment of investment.
- 7.7.3 Play an active role in the international and regional co-operation, standardization, policy formulation and resource management bodies.

7.8 Enable proper Management of Cyberspace

- 7.8.1 Establish the institutional framework for Bangladesh Network Information Centre (BDNIC) for the management of the ccTLD, IDN, IP addresses, AS Numbers, other internet resources and for performing as an institutional base in relation to Cybersecurity.
- 7.8.2 Prepare a plan of action for the transition to IPv6 and guide the co-existence of IPv4 and IPv6.

7.9 Enhance Research and Development and manufacturing of Telecommunications and IT equipment and products

² The abolition of existing band allocations in the radio spectrum and the more efficient reallocation of the spectrum into other bands.

- 7.9.1 Promote synergy amongst manufacturers, R&D centers, academia, service providers and other stakeholders for the development of high quality new products and equipment.
- 7.9.2 Assist entrepreneurs to develop and commercialize locally assembled or manufactured products.
- 7.9.3 Establish institutional framework for Telecommunications Standards Development, which shall be a testing and certification body of all telecommunication products for conformance, performance, interoperability, health, safety, security, EMF, EMI, EMC etc.
- 7.9.4 Encourage global software and equipment vendors to set up meaningful local presence in Bangladesh.
- 7.9.5 Establish a National Institute for research and human Resource Development in Telecommunications which may be of public-private partnership.

7.10 Enhance the competitiveness of State Owned Enterprises

- 7.10.1 Encourage the state owned telecommunications enterprises to adopt competitive business strategies including human resource development, management restructuring, partnering with private sector and attracting local or foreign investment.
- 7.10.2 Encourage the state owned enterprises to identify and explore the scope of strategic and operational synergies among themselves for infrastructure creation, manufacturing and service provision.
- 7.10.3 Establish key public telecommunications infrastructure in collaboration with the state owned enterprises to enhance capabilities in the matters of national security, disaster management, e-service delivery and serving the underserved.

7.11 Ensure Security

- 7.11.1 Enforce telecommunications service providers to take adequate measures for the security of the communication flowing through their networks.
- 7.11.2 Provide assistance to Law Enforcement Agencies (LEAs) within regulatory framework in tune with the prevailing license guidelines and in conformity with the Act for fulfilling national security needs.
- 7.11.3 Mandate standards in the areas of safety and security in all possible building blocks of the telecommunication networks i.e. devices, elements, components, physical infrastructure like towers, buildings etc.

7.12 Enable Disaster and Emergency management

- 7.12.1 Prescribe sectoral Standard Operating Procedures for aiding effective and early mitigation during disasters and emergencies.
- 7.12.2 Create appropriate regulatory framework for provision of reliable means of public communication by Telecommunication Service Providers during disasters.
- 7.12.3 Encourage use of ITs in prediction, monitoring and early warning of disasters and early dissemination of information.
- 7.12.4 Establish nationwide Unified Emergency Response framework including nationwide single access number for emergency services.

7.13 Encourage Environment protection

- 7.13.1 Facilitate increased use of alternative sources of energy including Renewable Energy for green telecommunications.
- 7.13.2 Promote the use of energy efficient equipment including low power wireless devices in telecom networks and adopt measures for the reduction of carbon footprint in the telecom sector.
- 7.13.3 Undertake periodic review of EMF radiation standards for mobile towers and mobile devices with reference to international safety standards by the telecommunication standards body.

8. Network development and connectivity Targets

8.1 Short term (by 2018)

- 8.1.1 Increase the tele-penetration from about 80% (including fixed and mobile) to 90%.
- 8.1.2 Increase the internet penetration from about 27% to 35%.
- 8.1.3 Increase mobile or fixed broadband penetration to 12% which is about 7% at present.
- 8.1.4 Extend optical Fibre connectivity to all District and Upazila headquarters and 1,200 Unions.
- 8.1.5 Ensure availability of high speed wireless broadband service up-to all Upazila headquarters.
- 8.1.6 Introduce digital broadcasting in the country.

8.2 Medium-term (by 2021)

- 8.2.1 100 % tele-penetration will be achieved.
- 8.2.2 Internet penetration will be increased to 50%.
- 8.2.3 Broadband penetration will be 30%.
- 8.2.4 All of the Unions will have connectivity to information highway through optical fibre.
- 8.2.5 High speed wireless broadband service will be available upto all Union level.
- 8.2.6 20 % of the household and organizations of the country will have access to the high speed Optical Fibre network.

8.3 Long-term (by 2025)

- 8.3.1 Internet penetration will be 90%.
- 8.3.2 60% of the population will enjoy broadband services.
- 8.3.3 50 % of the household and organizations will have access to the high speed Optical Fibre network.

9. The Acts on telecommunications:

A number of Acts govern and regulate various telecommunications activities like the telecommunications between two or more points, audio broadcasting of radio messages or programs for the specified group of people or the public in general and telecasting of simultaneous audio-visual programs.

The Telegraph Act 1885, the Wireless Telegraphy Act 1933, the Radio Broadcasting Act 1975 and 1992, the Television Broadcasting Act 1965 and Bangladesh Telecommunication Regulating Act, 2001 which regulate these activities may be considered for a combined Telecommunication Act applicable for all the allied services of telecommunications.

10. Application of other Policies, etc. relating to Telecommunication

- 10.1 Subject to the provisions of this policy, other policies of the sector shall apply and in case of any conflict with other policy related to telecommunications, the provisions of this policy shall prevail.
- 10.2 If any doubt or complicity arises, the Posts and Telecommunications Division, Ministry of Posts Telecommunications and Information Technology reserves the right to change or modify any clause or sub-clause of this policy.
- 10.3 This Policy shall come into force on the date of commencement and the Policy 1998 shall be deemed to be abrogated from that date.

11. Scope of Interpretation of Policy

- 11.1 The Posts and Telecommunications Division, Ministry of Posts Telecommunications and Information Technology shall take necessary measures for the proper Implementation of this policy. In case of any doubt or conflict, interpretation of Posts and Telecommunications Division shall prevail.
- 11.2 In executing this policy, if it is felt necessary that certain changes or modification of any clause or sub-clause is required, Posts and Telecommunications Division reserves the right to change or modify respective clause or sub-clause.

12. Conclusion

The National Telecommunications Policy is a summary statement of the philosophy, mission, objectives, strategies and the methodology to ensure equitable and judicious execution of the business of telecommunications in the country. This National Telecommunications Policy has been developed to establish clear guidance and settings for the telecommunications industry in Bangladesh. The general guideline embodied in this policy document emphasizes faster development of telecommunications and IT networks and services coupled with ensuring access and quality of service in line with the vision and aspirations of a prosperous Digital Bangladesh.

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