Draft National Digital Communications Policy 2018

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Overview

India's digital profile and footprint is one of the fastest growing in the world. With over a billion mobile phones and digital identities and half a billion internet users, India's mobile data consumption is already the highest in the world. Over 200 million Indians regularly use social media and in the last year alone, over 200 million Indians took to mobile banking and digital payments. At the current pace of digitisation it is estimated that India's digital economy has the potential to reach one trillion USD by 2025.

It has been broadly estimated that a 10% increase in broadband penetration in a country could potentially lead to an over 1% increase in GDP. However, studies in India estimate that the impact could be significantly higher for the country, given the increased productivity and efficiency gains that are likely to accrue to the economy.

The objective of this document is to lay out a policy and principles framework that will enable creation of a vibrant competitive telecom market to strengthen India's long term competitiveness and serve the needs of our aspiring nation.

Main drivers

The rapid and unprecedented proliferation of the mobile phone, the internet, social media platforms, digital payments, data consumption and generation across India indicate that the data economy and digital technologies and services are no longer the prerogative of the privileged few; but that they have indeed evolved into widespread instruments of access and empowerment for more than a billion Indians.

Digital infrastructure and services are increasingly emerging as the key enablers and critical determinants of a country's growth and well-being. With significantly advanced capabilities in both telecommunications and software, India, more than most countries, stands poised to benefit from harnessing the new digital technologies and platforms; as a means to unlock productivity, as well as to reach unserved and underserved markets.

Challenges

The task before India's policy makers is to ensure that the advantages of the new technologies are accessible to all equitably and affordably; while securing them against existing and emerging threats.

India needs to particularly ensure that its communications infrastructure supports the entire population, whose demographic profiles vary widely across various indices such as literacy, economic conditions and urbanisation.

It is important for India to remain sensitive to these factors and promote policies that increase opportunities for their social and economic development.

Strategic objectives of National Communications Policy: Looking at 2022

- Provisioning of broadband for all
- Creating 4 million additional jobs in the digital communications sector
- Enhancing the contribution of the digital communications sector to 8% of India's GDP from ~ 6% in 2017
- Propelling India to the top 50 nations in the ICT development index of ITU from 134 in 2017
- Enhancing India's contribution to global value chains
- Ensuring digital sovereignty

Mission

In order to achieve these objectives, the policy envisages three missions (Connect India, Propel India, and Secure India) and strategies for these missions.

Connect India: Creating a robust digital communication infrastructure

The goals to be achieved under this strategy by 2022 includes

- Provide universal broadband coverage at 50 Mbps to every citizen
- Provide 1 Gbps connectivity to all Gram Panchayats of India by 2020 and 10 Gbps by 2022
- Enable 100 Mbps broadband on demand to all key development institutions; including all educational institutions
- Enable fixed line broadband access to 50% of households
- Achieve 'unique mobile subscriber density' of 55 by 2020 and 65 by 2022
- Enable deployment of public Wi-Fi hotspots; to reach 5 million by 2020 and 10 million by 2022
- Ensure connectivity to all uncovered areas

Some of the strategies to meet these goals

- Establishing of National Broadband Mission that involves implementing initiatives like Bharat Net, Gram Net among others, establishing National Grid, facilitating establishment of mobile tower infrastructure etc.
- Recognising spectrum as a key natural resource which would envisage optimal pricing of spectrum, transparent and fair mode of spectrum allocation, efficient spectrum utilisation and management.
- Strengthening satellite communication technologies in India which would include reviewing regulatory regime, optimising these technologies and developing ecosystem for satellite communication.
- Ensuring inclusion of uncovered areas and digitally deprived segments of society by channelizing the Universal Service Obligation Fund (USOF) and reviewing the scope and modalities of this fund.
- Ensuring customer satisfaction, quality of service and effective grievance redressal.

Propel India: Enabling next generation technologies and services through investments, innovation, indigenous manufacturing and IPR generation

The goals to be achieved under this strategy by 2022 includes

- Attract investments of USD 100 billion in the digital communications sector
- Increase India's contribution to global value chains
- Creation of innovation led start-ups in digital communications sector
- Creation of globally recognized IPRs in India
- Development of standard essential patents (SEPs) in the field of digital communication technologies
- Train/ re-skill 1 million manpower for building new age skills
- Expand IoT ecosystem to 5 billion connected devices
- Accelerate transition to Industry 4.0

Some of the strategies to meet these goals

- Catalysing investments for digital communications sector by according telecom infrastructure the status of critical and essential infrastructure at par with other connectivity infrastructure like roadways, airlines etc., reforming licensing and regulatory regime to catalyse investments (it will involve reviewing levies and fees including license fee, Universal Service Obligation Fund (USOF) levy, rationalising Spectrum Usage Charges (SUCs) etc.) and simplifying compliance obligations.
- Ensuring a holistic and harmonised approach for harnessing emerging technologies by synergising deployment and adopting new and emerging technologies.
- Promoting research & development in digital communication technologies by creating a fund for R&D in new technologies for start-ups and entrepreneurs among others.
- Promoting start-ups by supporting them with various fiscal and non-fiscal benefits, reducing entry barriers and prescribing a simple and enabling regulatory framework.
- Local manufacturing and value addition by maximising India's contribution to global value chains and by ensuring strict compliance to preferential market access requirements like incentivizing private operators to buy domestic telecom products.
- Capacity making by building human resource capital to facilitate employment opportunities in digital communications sector.
- Strengthening of PSUs by building focus on technical expertise and knowledge management for them.
- Accelerating Industry 4.0 by creating a roadmap for transition to Industry 4.0, developing market for IoT/ M2M connectivity services in sectors including agriculture, smart cities, intelligent transport networks etc., among others.

Secure India: Ensuring digital sovereignty, safety and security of digital communications

The goals to be achieved under this strategy by 2022 includes

- Establish a comprehensive data protection regime for digital communications that safeguards the privacy, autonomy and choice of individuals and facilitates India's effective participation in the global digital economy
- Ensure that net neutrality principles are upheld and aligned with service requirements, bandwidth availability and network capabilities including next generation access technologies

- Develop and deploy robust digital communication network security frameworks
- Build capacity for security testing and establish appropriate security standards
- Address security issues relating to encryption and security clearances
- Enforce accountability through appropriate institutional mechanisms to assure citizens of safe and secure digital communications infrastructure and services

Some of the strategies to meet these goals

- Establishing a strong, flexible and robust data protection regime by harmonising communications law and policy with the evolving legal framework and addressing issues of data protection and security in digital communications sector.
- Providing autonomy and choice for every citizen and enterprise by recognising the need to uphold the core principles of net neutrality.
- Assuring security of digital communications by addressing security issues across layers, developing security standards for equipment and devices, formulating a policy on encryption and data retention, by harmonising the legal and regulatory regime in India pertaining to cryptography with global standards among others.
- Developing a comprehensive plan for network preparedness, disaster response relief, restoration and reconstruction by developing a Unified Emergency Response Mechanism, enhancing the Public Protection and Disaster Relief (PPDR) plan for India by facilitating the establishment of a pan-India network for Public Protection and Disaster Relief (PPDR).

Some observations

The policy is broadly classified into three areas which aim to connect every citizen in the country. Also, it seeks to introduce new technologies for betterment of the country with an aim to keep the digital communications sector up to date and at the same time, the policy also focuses on security standards and frameworks.

The policy does focus on rural-urban divide and emphasises on covering all uncovered areas. For this, the policy has also mentioned about channelizing the Universal Service Obligation Fund (USOF). As on February 2018, the total teledensity stands at 90.9%. While for urban areas, the teledensity stands at 163.2%, it stands at 57.5% for rural areas.

There is also mention of optimal pricing of spectrum. This can be linked to the October 2016 spectrum auction where there were few takers for the spectrum on account of its high price cited by the government.

The policy seeks to accord telecom infrastructure the status of critical and essential infrastructure which would support its better development as it would enable low cost financing of communication infrastructure.

There is also some hope for the telecom service providers as the policy mentions about reviewing license fees, USOF levy along with rationalising spectrum levy, as the telcos have been seeking for a cut in license fee and spectrum levy.

The policy lays focus on domestic manufacturing as it aims to maximise India's contribution to global value chains.

It supports net neutrality and aims to develop better network connectivity during an event of crisis or disaster.

CARE Ratings' views

1. The goals proposed by the government though appear very bright are challenging considering certain facts at present. The government aims to provide connectivity in all the uncovered areas by 2022. For this target to be achieved, it becomes very necessary for all the areas to be electrified. However as of April 2017, 25.4% of rural households are unelectrified as per NITI Aayog.

2. If the government succeeds in providing 1 Gbps connectivity to all Gram Panchayats of India by 2020 and 10 Gbps by 2022, it will significantly improve the administrative functioning of the villages. Also, if the network connectivity is improved in development institutions in the country, it will result in more skilled human resource.

3. As per TAIPA, the number of Wi-Fi hotspots in India was 31,518 as on March 2016 and as per the proposed policy, the government aims to increase it to 5 million by 2020 and 10 million by 2022 which looks quite challenging.

4. As per TRAI MySpeed App, the average download speed by the top telcos was in the range of 8.9 Mbps to 18.4 Mbps according to a White Paper by TRAI on wireless data speeds as on February 2018. The policy aims it to increase it to 50 Mbps for each citizen. This also sounds a challenge.

5. The government aims to achieve unique mobile subscriber density of 55 by 2020 and 65 by 2022. Unique mobile subscriber refers to one individual who have subscribed to mobile service and have multiple connections. Considering the growth to be achieved during 2020-22 and assuming that the unique subscriber addition growth rate would be higher during 2018-20 calculating backward, it is estimated that the unique mobile subscriber addition at present would be around 45.

6. The policy seeks investments of USD 100 billion. So in order to make sure that the investments flow in the industry, the government needs to ensure that they undertake proper implementation of the strategies mentioned in the policy. In addition to this, the government needs to work on ease of doing business and see to it that there is regulatory certainty. The cumulative FDI in the telecommunications sector has been USD 30.1 billion during April 2000-December 2017. Around $ 6 bn had come in 2017 and hence FDI can only partly contribute to this effort. A lot of it has to come from within the country, which will be another challenge.

On the whole while the objectives are laudable, there would be several challenges that have to be overcome to achieve them. Funding would be the most important link here.