राष्ट्रीय ब्रॉडबेंड अभियान



NATIONAL BROADBAND MISSION



Department of Telecommunications,
Ministry of Communications, Government of India
New Delhi



रविशंकर प्रसाद RAVI SHANKAR PRASAD



मंत्री
विधि एवं न्याय, संचार
एवं
इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी
भारत सरकार
MINISTER OF
LAW & JUSTICE, COMMUNICATIONS
AND
ELECTRONICS & INFORMATION, TECHNOLOGY
GOVERNMENT OF INDIA



MESSAGE

The vision of Digital India programme is to transform India into a digitally empowered society and knowledge economy. Providing broadband connectivity to each village of the country our goal. National Broadband Mission shall be a game changer in realizing the vision and objectives of Digital India Programme.

The Mission will facilitate creation of vast digital infrastructure required for universal broadband connectivity by addressing the challenges and removing the bottlenecks in coordination with all stakeholders.

I am sanguine that with the concerted efforts of the Department of Telecommunications and all stakeholders, the National Broadband Mission will ensure equitable access to Digital Communications across all sections and strata of our society, and help in bridging the Digital Divide.

I convey my best wishes for success of the Mission.

(Ravi Shankar Prasad)

New Delhi 17th December, 2019







संजय धोत्रे SANJAY DHOTRE



राज्य मंत्री इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी, संचार एवं मानव संसाधन विकास मंत्रालय भारत सरकार

Minister of State
Electronics & Information Technology,
Communications and
Human Resource Development
Government of India



MESSAGE

I am glad to know that the Department of Telecommunications is launching the National Broadband Mission. This Mission will enable fast track growth of digital communications infrastructure which is necessary for the socio-economic development of the country and its citizens.

The Mission is structured with strong emphasis on the three principles of universality, affordability and quality to facilitate universal access to broadband services throughout the country, especially in rural and remote areas.

My best wishes for the success of the Mission.

(Sanjay Shamrao Dhotre)

New Delhi 17th December, 2019







अंशु प्रकाश, आई.ए.एस. स्रिव Anshu Prakash, I.A.S Secretary



भारत सरकार संचार मंत्रालय दूरसंचार विभाग Government of India Ministry of Communications Department of Telecommunications



MESSAGE

Telecommunications Sector provides the critical infrastructure vital for progress of economic growth and development. A well connected Digital India is imperative for ushering in Industry 4.0, Machine to Machine Communication, Internet of Things and promoting various existing and emerging sectors which ride on the Telecom connectivity. The significance of Telecommunications and Broadband pervades all sectors and all sections of the society.

Enabling Broadband connectivity across the country is essential to bridge the Digital divide between rural-urban and rich-poor. This will also promote egovernance, transparency, financial inclusion and ease of doing business.

In the above context, the Department of Telecommunications is taking an important step by launching the National Broadband Mission with a vision to provide affordable and universal access of Broadband to all.

The National Broadband Mission can achieve the envisaged goals only with active support of all stakeholders including other Central Government Ministries/Departments, State Governments, Local Bodies, Telecom Industry and the Civil Society.

I wish the National Broadband Mission all success.

(Anshu Prakash)

New Delhi 17th December 2019





राष्ट्रीय ब्रॉडबैंड अभियान National Broadband Mission

1 Background

Digital Connectivity is a key factor for holistic growth across sectors. Enabling Broadband connectivity across the country is essential to bridge the Digital divide between rural-urban and rich-poor. This will also promote egovernance, transparency, financial inclusion and ease of doing business. It has led tosocio-economic development of citizens across developing and developed economies. For India, the connectivity is the key requirement across all infrastructure sectors such as water, electricity, communication, gas, highways, ports, airports etc.

The Indian telecommunications sector has historically been a strong performer and more so in the recent past where it has witnessed a higher growth. As of September, 2019the broadband penetration in India stood at 625.42 million, an increase of over 100% since the introduction of the first 4G networks in the country in 2015. During the same period, the data usage is now nearly 10 GB per subscriber per month. The quantum jump in broadband subscribers has catapulted India to be the largest consumer of mobile data in the world, overtaking USA and China in peak consumption. While the significant coverage of 4G is now a reality, there is still room to grow, and strengthen the underlying infrastructure. It is also important that such universal access to broadband is affordable and of high quality.

Accordingly, National Digital Communications Policy – 2018 (NDCP-18) recognizes digital communications infrastructure and services as key enablers and critical determinants of India's growth and well-being. One of the objectives of NDCP-18 is to provision 'Broadband for All' so that the resulting benefits of wide-spread, equitable and inclusive growth are enjoyed by all. The policy aims to empower citizens by effectively bridging the digital divide.

In order to operationalize 'Broadband for All' a "National Broadband Mission" or "Rashtriya Broadband Abhiyan" needs to be set up to secure universal broadband access. The objective of this document is to outline the need, objectives, functions and the proposed structure of the National Broadband Mission.

2 Importance of Broadband

The importance of broadband cannot be overstated, and the transformative potential of the technology has far reaching implications for the society, industry, Government and the economy.

For the agrarian sector, broadband is well equipped to deliver increased outputs, lower costs, easier administration, remote monitoring of livestock and better security. Broadband also has a proven track record in enabling the emergence of Small and Medium Enterprises (SMEs), stimulating job creation, driving operational and business efficiencies that accrue from enterprises' use of cloud computing, and facilitating changes and improvements in work practices. From bringing healthcare and education services to the remote regions, to stimulating environmental responsibility by reducing the need to travel, and revamping transportation, energy, and even the very nature of work, broadband has assumed a position of great import for all nations.

Over the last decade, there has been a global escalation in the penetration and usage of broadband and internet because of its vital role in the functioning of modern societies. It has also been repeatedly stressed by economists and academicians, in their effort to quantify the effects mentioned above, that socio-economic welfare has a direct link with broadband penetration. A recent report published by the Indian Council for Research on International Economic Relations (ICRIER) found that a 10% increase in Internet subscribers in India results in a 3.2 percent increase in the rate of growth of State per capita GDP and a 10 percent increase in India's mobile Internet traffic, delivers on an average a 1.6 percent increase in India's GDP. India has been classified as a mobile first economy since over 90 percent Indian subscribers are accessing the broadband on mobile.

Widespread use of digital communications to supplement the physical infrastructure and availability of quality basic services for a large part of the population, makes broadband a biggest transformational opportunity, not only enabling leapfrogging from currently deficient citizen services delivery system to a universal services delivery system, but also opening up a plethora of economic opportunities for everyone. It is undeniable that a digital revolution does offer a



massive opportunity to change the status quo. The direction we take from hereon, will determine whether we exploit this opportunity or miss it.

Every sector and all countrymen stand to benefit significantly from the adoption of broadband. Using this opportunity to our advantage would require conscious, well thought out interventions from policy makers. This will include interventions in the areas of digital communications, digital content, digital services, digital regulations, security etc.

3 Present State of Broadband in India

The current state of broadband in the nation is vibrant and signals potential for exponential growth in years to come. Compounded by the cascading positive impact of broadband on the economy and society, this growth will be a critical contributor to national progress, and thus the sector needs to be nurtured.

Several challenges are faced in the rollout of networks in unserved and underserved areas which largely includes rural and remote areas. These arise due to low reach of infrastructure in rural areas, low population density and the consequent lack of a viable business case – all of which may be addressed with suitable policy prescriptions. Such mechanisms are fundamentally linked to the objectives of the mission and form a critical part of this document.

Since 2014 broadband connections (mobile and fixed line) have seen substantial growth, -from 61 million in 2014 to 625 million in September 2019. Out of 625 million broadband connections there are almost 97% mobile broadband connections in India which are largely in urban areas. The current overall broadband connections cover around 45% of the population as compared to 70%-80% in a well-connected nation. In our country, the rural broadband connections are at around 27%, thereby clearly indicating the need to enhance broadband infrastructure to serve the rural citizens. Further, average data usage per month has registered an exponential growth rate of 129% over the last three years on the back of increased 4G data traffic. The growth in data usage has been further fuelled by increase in the sources of content, growing migration to smartphones, falling data prices and improved network coverage. In order to meet the increasing data demand and coverage the number of broadband connection have to be nearly doubled to facilitate digital inclusion of citizens for broadband services across the length and breadth of the country.

4 Challenges

However, much needs to be done to reach a stage where digital communications is able to fulfill its potential of becoming a universal platform for equitable and inclusive growth across the country. There is an urgent need to fast track the progress, necessitating fundamental changes in the way we operate, specifically with respect to creation of digital communications infrastructure, which faces several hurdles.

Several challenges delay the roll out of broadband services to the unserved, underserved, rural and remoteregions of India. Investments in infrastructureneed to be enhanced and universal last mile broadband connectivityneeds to be promoted.

Creation of the digital communications infrastructure requires coordination and alignment of work of multiple stakeholders and agencies-the Central Ministries and Departments, State

Governments, Local/Municipal authorities, industry and user communities to achieve the intended objectives. One of the major challenges is implementation of Indian Telegraph Right of Way Rules, 2016. The cost of fiber rollouts remains high in India due to complicated and uncertain Right-of-Way (RoW) policies across the country.

We also need to promote the development and deployment of domestic manufacture of telecom goods for providing broadband infrastructure.

5 Need for National Broadband Mission

The National Broadband Mission is required to design and implement the strategy to be adopted by all stakeholders to achieve the goal of 'Broadband for All'. The National Broadband Mission (NBM), therefore, is expected to enable

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NATIONAL BROADBAND MISSION

holistic measures which will provide equitable access to Digital Communications across all sections and strata of our society, and bridge the Digital Divide.

As the Indian economy accelerates towards achieving its millennium goals, it will require all the critical resources at its disposal for efficient, productive & sustainable development. Amongst the most basic resources that the nation needs to make available to ensure that forward movement is uniform and homogeneous access to broadband services provided over state-of-the-art efficient networks, to connect a large proportion of un-served and serve large volume subscriber traffic.

To fast track the progress for universalization of Digital Communications, coordination is required with a number of concerned stakeholders. The NDCP-2018 has envisaged the constitution of a National Broadband Mission (NBM), with the primary objective of facilitating the creation of digital communications infrastructure and provisioning of services thereon.

6 Vision of the National Broadband Mission

To enable fast track growth of digital communications infrastructure, bridge the digital divide for digital empowerment and inclusion, provide affordable and universal access of broadband for all.

7 Objectives of the National Broadband Mission

It is absolutely essential, given the demographics and the socio-economic dimensions of a vast and diverse nation such as our country, that the three principles of universality, affordability and quality are intrinsic features of broadband services. These three principles may be defined as:

Universality: Ubiquitous availability of broadband services to bridge digital divide

Affordability: Availability of affordable broadband services to every citizen of India to bridge the socio-economic divide

Quality: Availability of high speed and highly reliable broadband access to all

The Mission has been structured with strong emphasis on the above principles and promotes policies and activities to help the sector achieve its true potential.

To achieve the vision of National Broadband Mission in the next five years, the main objectives are:

- (a) To facilitate universal and equitable access to broadband services for growth and development throughout the country and especially in rural and remote areas
- (b) To address policy and regulatory changes required to accelerate the expansion and creation of digital infrastructure and services
- (c) Creation of a digital fiber map of the Digital Communications network and infrastructure, including Optical Fiber Cables and Towers, across the country
- (d) Work with all stakeholders including the concerned Ministries/ Departments/ Agencies, and Ministry of Finance, for enabling investments for the Mission
- (e) Work with the Department of Space, to make available adequate resources required for extending connectivity to far flung areas of country through satellite media
- (f) To encourage and promote adoption of innovative technologies for proliferation of broadband especially by the domestic industry
- (g) Seek cooperation from concerned stakeholders by developing innovative implementation models for Right of Way (RoW)



- (h) To work with States/UTs for having consistent policies pertaining to expansion of digital infrastructure including for RoW approvals required for laying of OFC
- (i) To develop a Broadband Readiness Index (BRI) to measure the availability of digital communications infrastructure and conducive policy ecosystem within a State/UT.
- (j) Promote direct and indirect employment as a result of development of Digital Communications infrastructure across the country and through the digital economy

8 Deliverables and Outcomes

Implementation of the National Broadband Mission is expected to catapult India to the next phase of digital revolution thereby enabling inclusive participation of all citizens to create a truly digital society. Outcomes of National Broadband Mission are envisaged to fulfill the vision of 'Broadband for All' and fulfill the goals of the National Digital Communications Policy 2018.

The outcomes and deliverables of the Mission are:

(a) All villages to have access to broadband by 2022

To institutionalize Public Private Partnerships for leveraging the optical fiber networklaid under BharatNet and to provide last mile connectivity and broadband services to all villages by 2022 utilizing appropriate technologies, including optical fiber, radio networks, and satellite.

To make available benefits of broadband infrastructure to everyone in villages.

To provide high speed broadband access to key developmental institutions in rural areas viz. schools, colleges, health centers, anganbaricenters, police stations, post offices, government offices and other public institutions/associations.

(b) Availability of high broadband speeds

To provide infrastructure capable of delivering higher speeds of broadband upto 50 Mbps in a phased manner at par with those of emerging and developed countries and with availability across the country, wherever necessary. This will enable the interactions between Government, businesses and citizens become more digital based with high speed connectivity.

To provide high speed broadband for quality services on digital platforms, especially services centered around education, skilling, healthcare and financial services.

(c) Accelerate Fiberization

To increase the present route length of 22 lakh kilometer the Optical Fiber Cable (OFC) to 50 lakh kilometer. This will be achieved through suitable incentive measures.

To work withthe States/UTs to have their RoW policy aligned with the Right of Way Rules notified by the Central Government.

To work with States/UTs and their agencies for supporting viable financial model for common duct.

To create a Broadband Readiness Index, to instill competition amongst States/UTs for a significant growth of fiber in the country.

(d) To enhance connectivity and improve Quality of Service by increasing tower density

To increase the tower density, to be at par with countries, leading in telecom infrastructure. The existing tower density is 0.42 towers per thousand population with around 5.65 lakh towers. This needs to be increased to 1.0 per thousand population, with setting up of an additional 10 lakh towers.



To address the demands of new and emerging technologies such as 5G more telecom towers will be added.

To cater to high mobile data consumption and phenomenal increase in the number of broadband users, the number of towers needs to be increased.

(e) Increase fiberization of telecom towers

To increase by around two and half times the number of fiberized telecom towers in the country. At present around 30% of telecom towers are connected on fiber which needs to be enhanced to at least at least 70% of the towers to be fiberised.

To address demands of large bandwidth as the average data consumption for each subscriber is continuously increasing.

To facilitate telecom towers to have robustbackhaul to cater to high volume data requirement and better quality of services.

(f) Mapping of Fiber

To create a Geographic Information System (GIS)based tool for accurate planning for new networks and seamless management of the entire integrated infrastructure.

To set up a National Fiber Grid for keeping record of the entire optical fiber network, within the country.

To compile such information which is both of strategic and tactical importance from the point of view of broadband proliferation andenhancing the security of digital communications infrastructure to Government and relevant stakeholders.

(g) Facilitate rollout of 5G network and strengthening of 4G network

To address high bandwidth required for deployment of 5G network.

To rollout 5G networks with the ability to completely transform the digital experience of all users and also to open more use cases across sectors – education, healthcare, agriculture, mobility, manufacturing, public safety etc.

To strengthen the existing 4G network by identifying gaps and augmenting required infrastructure

(h) Promote Make in India

To promote domestic manufacturing through participation of private players through appropriate policy measures to enable proliferation of wireless broadband services.

To incentivize homegrown broadband products in the network, through large scale trials and deployment.

To take forward country in value chain by promoting Make in India.

9 Role of Stakeholders

The creation of Digital Communications infrastructure requires coordination and alignment of work of multiple stakeholders and agencies across the Central Ministries/Departments, State /UT Governments, local authorities, industry and user communities. In order to achieve the objectives of the Mission, each key stakeholder, has a role.

Central Government

Telecommunication falls in Union List as Entry 31 in the Seventh Schedule of the Constitution. Accordingly, the Central Government has a pivotal role in the implementation of the Mission and will co-ordinate with all stake holders. Central Government will design and implement policy and regulatory prescriptions for achieving the objectives of the Mission.

The infrastructure for the Mission will largely be provided by the Service Providers and Infrastructure Providers. The Central Government has to work with the States/UTs to address the challenges faced by Service Providers and Infrastructure Providers in rolling out the Mission. The Central Government will also set up various bodies at Central

level and seek State/UTs also to set up similar bodies for taking forward the Mission. The Central Government willalso help to address the viability gaps in select segments and for incentivizing through fiscal and non-fiscal measures.

State / UT Governments / Local Self Governments

The benefits of connectivity are numerous and significant, especially in the case of less developed States. As part of the Mission, each State/UTwill be urged to support the endeavor for reaching of broadband to all villages. It would also be incumbent upon States/UTs to recognize the potential of broadband and reduce the regulatory hurdles that are considered impediments in proliferation of broadband in the States/UTs. The state must also make all efforts to sensitize local municipalities about the benefits of embracing telecommunications service through regular outreach programmes, designed to inform and encourage private participation at local level.

It is envisaged that the State Governments may leverage BharatNet to provide connectivity to development institutions such as hospitals, police stations, panchayat offices, schools and colleges, anganwadis, etc, from the BharatNet network. This initiative will go a long way in the delivery of e-Governance services such as e-health, e-education, e-commerce, cashless transactions, etc. in rural areas.

Industry

India is one of the fastest growing and among the most affordable telecom markets in the world and industry being the most vital stakeholder will play the most significant role as part of this Mission. Industry is expected to embrace and participate in the policy reform process and play a pivotal role in achieving the vision of the Mission and thereby realizing the dream of Digital India. Huge infrastructure is required to be created for achieving the objectives of the Mission and this is only possible when the required investment is brought into the sector in next five years. This shall only be possible with the partnership of the industry which has to play the key role in maximizing investments, both domestic and foreign.

The Industry will have to work in tandem with the State Governments and other stakeholders to provide high quality, affordable, sustainable and universal access to broadband services to all the citizens.

Civil Society and Non-Governmental Organizations (NGOs)

NGOs and activists can play a key role in hastening the introduction of internet in the lives of the rural masses.

NGOs and activists can go from village to village, spreading the word about the benefits of the internet and digital literacy, which are numerous.

Citizens in rural India can be encouraged to access Government Services, search for information online, undertake cashless transactions, etc. and hence use IT to actively participate in the process of nation building. This shall also help them to read the latest news, become politically aware, read about new farming techniques, sell their produce online, sell their handicrafts online, read about products, services and jobs available in nearby cities, buy household necessities online, and so on.

Citizens

The Citizens of India shall be the ultimate beneficiary of the Mission and its objectives and outcomes. They are the users and the best judge to provide feedback on the nature and quality of services being provided. The user feedback will be the determinant to ascertain that the Mission has achieved its objectives of its reach and spread. The users are the main source of revenue and feedback mechanisms will have to be inbuilt to take their inputs by the Government and the licensees. The demand of citizens and how the Mission has led to ease of living will determine its success.

With active participation of citizens the digital potential will lead to sustainable economic development of the country, with equitable and universal access to digital resources and opportunities.

10 Implementation Structure

To steer, drive and achieve the Mission's objectives, the National Broadband Mission will be set up in the Department of Telecommunications. The Mission will consist of a Governing Council for Broadband at Apex level, Broadband Steering Committee and Mission Directorate as the executive arm of the Mission. Further, the States/UTs will be asked to set up a State Broadband Committee.

Governing Council for Broadband

The Mission will be overseen by the Governing Council for Broadband to be headed by the Minister of Communications and will comprise of the following members –

Minister of Communications	Chairperson	
Minister of State for Communications	Co-Chair	
CEO, Niti Aayog	Member	
Secretary, Department of Economic Affairs	Member	
Secretary, Meity	Member	
Secretary, Morth	Member	
Secretary, Petroleum & Natural Gas	Member	
Secretary, Environment & Forest	Member	
Secretary, Power	Member	
Secretary, Housing & Urban Affairs	Member	
Secretary, Department of Space	Member	
Chairman, Railway Board	Member	
Secretary, Department of Telecommunications	Member Convener	

The Governing Council for Broadband will have following functions:

- (a) Provide overall guidance and policy direction
- (b) Decide on forming Sub-Missions in high priority areas, as per requirement
- (c) Review overall progress and development of Mission activities

The Council may incorporate other Ministries and experts as per requirement and will meet twice a year.



Broadband Steering Committee

The BroadbandSteering Committeewill be headed by Secretary (Telecom) comprising of the following members:

The BroadbandSteering Committee will have following functions:

- (a) Facilitate implementation of Mission activities as per the decisions of the Governing Council
- (b) Set targets and approve annual Mission Plan

Secretary, Department of Telecom	Chairperson	
Administrator, USOF	Member	
Representatives from (Not below the level of Joint Secretary)		
Niti Aayog	Member	
Department of Economic Affairs	Member	
MeitY	Member	
MoRTH	Member	
Petroleum & Natural Gas	Member	
Environment & Forest	Member	
Power	Member	
Housing & Urban Affairs	Member	
Department of Space	Member	
Railway Board	Member	
Joint Secretary and Mission Director, Department of Telecom	Member Convenor	

- (c) Review and monitor overall progress of Mission activities
- (d) Address inter-departmental and State related execution issues



The Committee may incorporate representation from other Ministries / Departments and experts as per requirement.

State Broadband Committee

or effective implementation of the mission and proliferation of broadband in the States, the State Governments will also be encouraged to set up a State Broadband Committee with following composition;

Chief Secretary of respective State Government	Chairman
Secretary (Information Technology) of respective State Government	Member
Secretary (Urban Development) of respective State Government	Member
Secretary (PWD) of respective State Government	Member
Secretary (Forest and Environment) of respective State Government	Member
Advisor / Sr. DDG of DoT working in the Licensed Service Area (LSA)	Member Convener
CGM, Bharat Sanchar Nigam Ltd.	Special Invitee
CGM, Bharat Broadband Nigam Ltd.	Special Invitee
	Consolal Invites
Representative of the Cellular Operations Association of India (COAI)	Special Invitee

Functions of State Broadband Committee will be as follows:

- (a) To advice, either suo-moto or on a request from the Governing Council or Steering Committee on the matters relating to accomplishment of the objectives of the Mission concerning the State
- (b) To facilitate implementation of the guidelines issued by the Governing Council or Steering Committee enabling expansion of broadband services for the socio-economic development of the State
- (c) To address all matters regarding Broadband Readiness Index (BRI)
- (d) Monitoring and evaluation of the work of Mission pertaining to the State

The Committee may meet once every quarter and call other Departments of State Government and experts as per requirement.

Mission Directorate

The Governing Council and the Steering Committee will be assisted by a Mission Directorate. Mission will be headed by Mission Director who shall be an officer of the level of Joint Secretary to the Govt. of India. He shall be assisted by one officer of the level of Director who and other subordinate staff and consultants. The manpower from the Mission shall be provided from the existing establishment. However, Mission Director can hire consultants and ministerial staff in

case of functional requirements.

The Functions of Mission Directorate will be as follows:

- (a) To monitor Mission activities at the National / State levels
- (b) To coordinate with all the Central Ministries / Departments and State / UT Governments, PSUs, different Wings of DoT, for implementation of all decisions of the Governing Council and the Steering Committee
- (c) Any other work necessary for successful implementation of the Mission

11 Annual Implementation Plan

	1-year	2-year	3-year	4-year	5-year
Broadband Connectivity to villages (%)	50%	60%	100%		
Availability of broadband speeds (Mbps)	4	10	25	30	50
Fiberization (Lakh Kms) Cumulative	24	27	30	40	50
Towers (in lakhs) Cumulative	7	8	10	12	15
Fiberization of Telecom Towers (%) Cumulative	35	45	55	65	70
Mapping of Fiber Cumulative	10%	40%	60%	80%	100%

State/ District specific targets, aligned to the overall targets provided above, maybe defined by the State Broadband Committee for implementation of the National Broadband Mission.

12 Funding

Digital Communications industry is extremely capital intensive by the very nature of the services and products that industry offers. Therefore, the quantum and timelines of investment brought into the sector, generally is a very good indicator of the health and long-term prospects of the sector. The NDCP-18 envisages an investment of around USD100 billion over the next 3 to 4 years in the telecom sector in order to achieve the objectives of the policy.

It is estimated that most of the required investment is estimated to be done in creating the digital communications infrastructure as below –



Infrastructure Component	Investment (In billion USD)
Investment of establishing Telecom Towers	35
Investment in Optical Fiber Infrastructure	30
Investment in other resources like spectrum, R&D and other network resources	35
Total	100

This envisaged investment of \$100 billionis to be catalyzed largely by the industry, with Government contributing around 10% of this through the Universal Service Obligation Fund (USOF).

Keeping in view the large amount of investment required funding through Public Private Partnerships (PPP) will also be explored as there are challenges in extending coverage to remote and far flung areas. Therefore, suitable PPP models may be adopted to help bring last mile connectivity to the unserved and underserved regions of India for providing requiredsustainable technologies to these areas under the Mission.

Since most of the investment will be from private sector in order to attract investment and provide incentives, the strategies outlined in National Digital Communication Policy (NDCP) 2018 will guide the Mission.

13 Monitoring and Evaluation

In order to evaluate and assess the direction in which the Mission is proceeding on the timelines and roadmap and to see that objectives and outcomes of the National Broadband Mission are achieved, there is a requirement to continuously monitor at different levels. In this regard, the Mission may have monitoring at three levels – Central, State and District/Municipal. At the Central level the work may be carried out by the Broadband Steering Committee, while at the State level by State Broadband Committee. For monitoring at the District/Municipal level the States/UTs may require to set up a District level Committee.

Monitoring at Centrallevel -Monitoring and evaluation of the progress of the Mission is one of the functions of the Broadband Steering Committee. One of the standing agenda item during meetings of the Steering Committee to be held every three months shall be to review the implementation status the Mission and to take necessary policy decisions to fast track implementation.

Monitoring at State level - The State Broadband Committee which shall be meeting every quarter will monitor and evaluate the progress of the Mission in respective State and will send report to the Broadband Steering Committee. The State Broadband Committee may also appoint nodal officers in each district / municipal area for better monitoring.

District/Municipal Monitoring Committee -States/UTs may set up a District level Committee to monitor the progress



of the Mission within the District / Municipal area on monthly basis and may submit its report to the State Broadband Committee.

Monitoring Dashboard - For effective and efficient monitoring and reporting of the National Broadband Mission, a common dashboard and reporting tool will be created by Department of Telecommunications, Ministry of Communications, Government of India, to track the progress of the National Broadband Mission across each State and District of the country.

