17th October 2014

To,
Shri. Sudhir Gupta,
Secretary,
Telecom Regulatory Authority of India,
<u>New Delhi</u>

Subject: TAIPA's response to TRAI consultation paper No: 12/2014 on delivering Broadband Quickly: What do we need to do?"

Dear Sir,

Please find herewith attached TAIPA's response to TRAI Consultation paper No: 12/2014 on "Delivering Broad band quickly: What do we need to do?

We request you to please take TAIPA's views into consideration while TRAI comes out with its recommendations on the subject.

Thanking you

Yours sincerely,
for Tower and Infrastructure Providers Associations

Tilak Raj Dua
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Annexure "A"

TAIPA Response on TRAI Consultation Paper on Delivering Broadband Quickly: What do we need to do?

1.0 Introduction:

1.1 Telecommunication has played a key role in economic and social development of the country. The Government has realized the need for creating a robust telecommunication infrastructure with adequate bandwidth at affordable rates in order to promote development and proliferation of Information Technology, e-governance, e-Commerce, in providing m-health, m-education, m-banking, m-governance, safety and security etc. so as to improve the state of economy, enhance the quality of life of the citizen and to ensure development of urban & rural areas with equity throughout the country. In this direction, Govt. of India approved Digital India Project to prepare India for a knowledge future. The overall scope of this programme is to prepare India for a knowledge future, focusing on being transformative, making technology central to enabling change. Digital India aims to transform India into a digitally empowered society and knowledge economy.

1.2 One of the key areas for the vision of Digital India is Digital Infrastructure as a utility to every citizen. High speed Internet is a core need and one of the pillars of Digital India is broadband Highways. High-speed, affordable broadband connectivity to the Internet is a foundation stone of modern society, offering widely recognized economic and social benefits. High-speed broadband is no longer just cutting-edge technology for an elite few; instead, the steady march of connectivity among the broader population is slowly but surely transforming our society with new ways of accessing services and information. Broadband consists of three main elements: core network, access and devices. To make broadband successful, the devices should be made affordable for users. Affordable broadband is necessary to make Digital India programme successful so everyone can benefit from the advantages offered by broadband.

1.3 The telecom passive infrastructure providers are registered as Infrastructure Providers–Category-I (IP-I) "**to establish and maintain the assets such as Dark Fibres, Right of Way, Duct Space and Tower for the purpose to grant on lease/rent/sale basis to the licensees of Telecom services licensed under Section 4 of the Indian Telegraph Act, 1885**". TAIPA believes that both the public and private sectors can, and should, work together to achieve broadband for all. In practice, this means the government acting with the regulator to pass legislation, establish appropriate competition and provide government services over the web, as well as education and public healthcare services online. Governments have to take advantage of the efficiencies and marginal cost savings offered by telecommunications.

1.4 The proliferation of smart phones and laptops has increased many folds in recent years. The affordable devices will drive the success of broadband services. As per study of Ericsson, the number of devices will reach more than 6.2 billion by end of 2019.
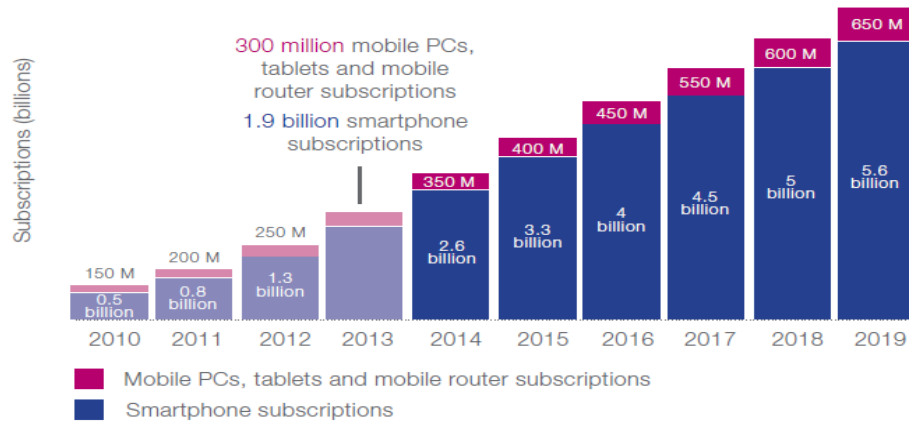
Source: Ericsson Mobility Report June 2014

Mobile data communication is omnipresent. The *Mobile Internet* connects people anywhere and allows for voice services and the exchange of data and multimedia content at any time. Numerous innovations in the information and communication technology (ICT) sector have enabled exponential growth in network capacity, leading to the emergence of smart phones and a user-experience rich in multimedia. The *Internet of Things (IoT)* connects devices, or objects, to increase their efficiency by exploiting the potential of networking. The next wave of innovation will create the *Tactile Internet*. Extremely low latency in combination with high availability, reliability and security will define the character of the *Tactile Internet*. It will have a marked impact on business and society, introducing numerous new opportunities for emerging technology markets and the delivery of essential public services.

2.0 Defining Broadband:

2.1 The earlier broadband was defined as an "always on" connection with downloads speeds of 256 kbps or more. Department of Telecommunications has revised the definition of broadband in July 2013 Internet access with the capability of the minimum download speed of 512 kbps to an individual subscriber from the point of presence (POP) of the service provider intending to provide Broadband service. NTP-2012 states that 'to revise the existing broadband downloadable speed to 2 Mbps by 2015 and higher speeds of at least 100 Mbps thereafter. ITU has defined broadband as a capacity of at least 256 kbps in the uplink or downlink speed. The Broadband Commission for Digital Development (United Nations Educational, Scientific and Cultural Organisation and ITU) has defined broadband using a cluster of concepts, as high-speed Internet access which is always-on and capable of multiple service provision simultaneously. ITU's Radiocommunication Bureau (ITU-R) maintains a categorical definition of clusters of wireless broadband terrestrial and satellite technologies as IMT-2000 (3G) and IMT-Advanced (encompassing most 4G technologies), while IMT-2020 will establish the technical criteria for 5G technologies.

2.2 As per NTP-2012, the target and strategies as envisaged "Provide affordable and reliable broadband-on-demand by the year 2015 and to achieve 175 million broadband connections by the year

2017 and 600 million by the year 2020 at minimum 2 Mbps download speed and making available higher speeds of at least 100 Mbps on demand. To achieve such target and complete the mission and vision of Digital India, it is absolutely essential and necessary to have enabling policy for all the components of eco-system of broadband. However, analysis of the growth and current status of broadband depends partly on how broadband is defined, since the exact definition of broadband affects subscriber and growth statistics.

3.0 Broadband technologies:

The broadband connectivity can be provided by using any one of the following technologies:
1. Wired Access Network like DSL, Cable TV, OFC, using power line
2. Fixed wireless access networks like Wi-Fi, Satellite, Wi-Max
3. Mobile Wireless Access Networks

Each technology has its own advantages and can be deployed upon the availability of resources. Govt. has to explore all the technologies for deployment of broadband connectivity.

4.0 Global Scenario:

4.1 On global scenario, present status of broadband in India is not encouraging rather it is dismal. The Republic of Korea has the highest household Internet penetration in the world, at 98.1%. Household penetration is now above 50% in 27 developing economies worldwide where as India ranks 75 with 13% in 2013. **As per report by the Broadband Commission September 2014 (United Nations Educational, Scientific and Cultural Organisation and ITU) on "The State of Broadband 2014: Broadband for all" India ranks 125 in fixed (wired)-broadband subscriptions, 113 in active mobile-broadband subscriptions, 75 in percentage of households with Internet, Developing Countries, 142 in percentage of individuals using Internet, 95 in percentage of individuals using Internet, Developing Countries, 2013.**

4.2 The Broadband Commission report mentions "Countries should use appropriate policies and strategies to make broad band available, affordable and accessible, as a vital development enabler for building inclusive, resilient and sustainable modern-day knowledge societies. It is increasingly essential to integrate everyone into modern life, with access to digital education services, culture, entertainment, healthcare, financial and commercial services. To achieve this, the public and private sectors have to work together in close partnership broadband for all can transform policy, social, and development outcomes around the world. Indeed, broadband infrastructure and services are essential for national competitiveness and success in the modern economy – broadband is a key enabler of national competitiveness through greater efficiency.

5.0 Awareness and General education:

There are still key gaps in the Internet eco-system. India has inherent suppressed demand for any service but the demand increases exponentially when launched. Broadband is no exception and needs **Awareness and General Education** apart from availability, affordability and accessibility. Awareness and lack of knowledge of web technologies are primary reasons for low penetration of broadband services. The Internet eco-system in India is still to go long way in providing local language and contents of interest to

local populations. E-learning education system should be promoted to make the people aware about the benefits of broadband and e-governance applications. Digital literacy rate in India is very low and large percentage of people does not have knowledge and skills to use the computers as per their needs and requirements. Computer penetration in rural areas is very low. This may be due to its cost and affordability by rural population. The prices of access devices are to be brought down whether it is computer, lap top or smart phone. There less number of point of presence for broadband connectivity and needs to be increased. There is an urgent need to promote the rural entrepreneurship for Govt. sponsored Common Service Centres (CSCs) programme so local community is involved in promoting the broadband services.

6.0 Enabling Regulations/Environment:

TRAI has issued National Broadband Plan in December 2010 and application services in 2012. NTP-2012 has the vision of Broadband on demand and envisages leveraging telecom infrastructure to enable all citizens both in rural and urban area to participate in equitable and inclusive development across the nation. It is absolutely necessary to incentivize the plan or policy to make it successful. Government should provide suitable incentives to TSPs for successful implementation of broadband services. Govt. should finance the deployment of infrastructure to meet the policy objectives. We should have enabling regulations and well defined infrastructure sharing policy. This will reduce the cost of provisioning of services. Tower sharing has been the example for reducing the cost of infrastructure and thereby reducing the services in the hand of consumers. Tower infrastructure sharing has been adopted by most of the TSPs as a successful business model. We also need transparent, simplified and fair process for permission from civil authorities for various activities e.g. for laying of OFC, installation of telecom towers etc and therefore a enabling and enforceable RoW policy is the need of hour.

7.0 The National Optical Fibre Network (NOFN):

The NOFN project approved by the Government of India to provide the connectivity to all 2,50,000 Gram Panchayats is not progressing well even after signing RoW MOU with most of States and Union Territories. Work only 6,410 Gram Panchayats have started in Phase-I. Public Private Partnership (PPP) model should be adopted for early implementation of NOFN project in order to harness the benefits of broadband services. In order to expedite NOFN project, PPP model should be adopted for completion of the project.

8.0 Steps for successful implementation of Broadband:

The following steps should be followed for successful implementation of broadband plan/policy:

1. **To have complete eco-system for broadband, it is necessary to have enabling regulatory framework, well defined policy for infrastructure sharing, enabling Right of way policy for laying OFC and installation of telecom towers, adequate availability of spectrum and goal oriented implementation of plan.**
2. **Encourage infrastructure sharing**
3. **Over and above relevant local contents and applications are needed to make broadband a success.**

4. It is essential to promote the awareness and education for the use of broadband as well as the skills and talents necessary for broadband.
5. Accelerate investment in broadband infrastructure.
6. Reduction of taxes and import duties on telecommunication equipment and services.
7. Enhancing demand for broadband services through new initiatives.
8. Utilizing Universal Service Obligation Funds (USOFs) to reduce digital divide
9. Incentivizing the implementation of Broadband Plan and Policies.
10. Framing of enforceable guidelines to mandate compulsory deployment of duct space for fibre/ telecommunications cables and space for telecommunication towers in all major physical infrastructure construction projects such as building or upgrading highways etc.

Q3. The recommendations of the Authority on Microwave backhaul have been recently released. Are there any other issues which need to be addressed to ensure availability of sufficient Microwave backhaul capacity for the growth of broadband in the country?

TAIPA response:

TAIPA suggests that sufficient carriers should be provided for backhaul connectivity using present and future Microwave bands. TRAI recommendation for use of the higher frequency bands should be implemented.

Q7. Are PSUs ideal choices for implementing the National Optical Fibre Network (NOFN) project?

TAIPA Response:

Public Private Partnership (PPP) model which is time tested model may be followed for implementation of NOFN project and should be explored. TAIPA believes that both the public and private sectors should, work together to achieve broadband for all. In practice, this means the government acting with the regulator to pass legislation, establish appropriate competition and provide government services over the web, as well as education, govt. services, public healthcare services etc. online. Governments have to take advantage of the efficiencies and marginal cost savings offered by telecommunications. Private companies, for their part, should be investing in the latest generation networks, both in fixed and mobile.

Such collaboration is even more important in the case of marginalized populations in rural and remote areas. This is where TAIPA believes government can play a vitally important role, by integrating all people into modern life by connecting them, whether via satellite or via existing, private networks. It is essential to integrate everyone into modern life to provide them with access to education services, culture, entertainment, healthcare, financial and commercial services, weather forecasts, the price of agricultural products and fertilizers, local weather services, etc.

> Public Private Partnership (PPP) model may be followed for further implementation of NOFN project.

Q9. Are there any ways in which infrastructure development costs can be reduced? Is it possible to piggyback on the existing private sector access networks so as to minimize costs in reaching remote rural locations?

TAIPA Response:

There are number of ways in which infrastructure development costs can be reduced. Infrastructure Providers-I have successfully reduced the cost of infrastructure through sharing of towers. Tower sharing created a strong incentive to the Indian telecom market, it allowed operators to reduce costs considerably and focus on core marketing activities while enabling new operators to rollout networks in record times, thus reducing the time to go to market for new operators. India currently has more than 400,000 towers at a tenancy ratio of 2.1 and has begun to focus more on operational improvements. Sharing of tower infrastructure has resulted to:

a.   Reduced capex & opex costs resulting in lowest tariff
b.   Ease of Faster rollouts in the far-fetched and rural areas
c.   Reduced diesel consumption per tenant, hence immense contribution to environmental protection
d.   Encouraged innovation in tower designs and implementation of newer technologies.

At present exorbitant levies are being imposed by various municipalities which increases the cost of service provision. Free RoW should be provided to TSPs/IP-I to reduce the costs. TSPs/IP-I would work with government to provide last mile connectivity to remote and rural locations in order to reduce the cost and provide affordable broadband services.

> **Infrastructure development costs can be reduced by sharing of infrastructure and working together i.e. Government and Private to provide last mile connectivity and services in remote rural locations. This sharing should be encouraged by suitably incentivizing through tax holidays, soft loans etc.**

Q10. What can the private sector do to reduce delivery costs? Please provide specific examples.

TAIPA Response:

Private Sector plays an important role in reducing the delivery costs. Tower infrastructure sharing has proved successful business model to reduce the cost of infrastructure and hence the cost of delivery of services to end consumers. Free RoW to be provided to TSPs/IPs for laying OFC and installations of towers the delivery costs of services will get further reduced. Free RoW should be provided to TSPs/IP-I similar to NOFN project provided to Bharat Broadband Network Limited (BBNL). A tripartite MoU has been signed for free Right of Way (RoW) among Central Government, State Government and Bharat Broadband Network Limited (BBNL). A similar methodology for free RoW for laying OFC/ducts and installation of towers for TSPs/IPs for the spread of seamless mobile connectivity and broadband penetration in urban and rural areas may be formulated. This will reduce the cost ultimately.

Telecom Towers have been granted Infrastructure Status in 2012 by Department of Economic Affairs, Govt. of India and included in the Harmonised Master List of Infrastructure Sub-Sectors. Govt. incentives, subsidies and tax benefits of infrastructure status should be extended to IP-I such as priority of EB connections at lower rates, loans for longer period at lower rates, ECB etc. which will help in reducing the delivery costs. The following benefits should be extended to IP-Is/TSPs immediately:

1. Allowing higher External Commercial Borrowings Limits
2. Accelerated Depreciation and Tax holiday
3. Viability Gap Funding
4. Reduction in import and exemption in excise duties
5. Electricity supply at the rates applicable to infrastructure sectors
6. Lower insurance premiums
7. Funds at concessional rates for longer period

> **Private Sector has confirmed role to play in reducing the delivery costs by providing free right of way to TSPs/IP-Is for laying OFC and installation of telecom towers and extending all the benefits, tax holidays and incentives of Infrastructure Status on priority to IP-I to reduce the delivery costs.**

Q11. What are the major issues in obtaining right of way for laying optical fibre? What are the applicable charges/ constraints imposed by various bodies who grant permission of right of way? In your opinion what is the feasible solution?

TAIPA Response:

There are number of issues related in obtaining Right of Way (RoW) for laying optical fibre. The requirement for rollout of backhaul fiber networks has increased the importance of RoW. NTP-2012 has recognized the problem and set out an objective to "Address the Right of Way issues in setting up of telecom infrastructure". In addition the strategies enunciated in this regard in the policy are as follows:
"To review and simplify sectoral policy for Right of Way for laying cable network and installation of towers, etc. for facilitating smooth coordination between the service providers and the State Governments/ local bodies".

i)   Key Issues related to RoW are as follows:
a. Exorbitant levies being imposed by various municipalities increase the cost of service provision.
b. Need to approach multiple agencies for obtaining RoW clearance, leading to delays in network rollout.

ii) Many Government authorities and municipalities impose additional levies based on their perception that telecom is a hugely profitable business. This is resulting in heavy financial burden in terms of long delays and increased cost of provision that negates attainment of the vision to provide affordable and timely broadband services across India.

iv) Some action steps and feasible solutions are:
   a) Stipulated time frame with accountability for RoW clearances at reasonable charges will enable timely implementation of telecom networks.
   b) All State governments should extend the facility of rights of way for laying underground Telecom cables, to all licenses without payment of any compensatory charges etc.
   c) The only reasonable admissible charges are reinstatement charges or charges directly linked to the restoration work which should be minimal.
   d) The RoW permission should be granted "on priority" in time bound manner.

> **Government should create enabling and enforceable right of way policy for laying optical cables and installation of telecom towers in a time bound manner.**

Q12. Should the Government consider framing guidelines to mandate compulsory deployment of duct space for fibre/ telecommunications cables and space for telecommunication towers in all major physical infrastructure construction projects such as building or upgrading highways, inner-city metros, railways or sewer networks?

TAIPA Response:
The development of the new cities and real estate development is another area where the Infrastructure Providers (IPs) can play a major role. Integrating the Telecom passive infrastructure at the development stage of the real estate will prove to be highly effective manner to provide the telecommunication services. Similarly, the new township developments can be provisioned with the duct space along the roads along with the other public utility lines / ducts and such ducts may then be shared between different telecommunication service providers/ IPs to provide the services. Similarly, the street lights/ lightening poles on the roads can be used to install the low powered telecommunication devices and they can be connected to a telecommunication hub which may be built by the IPs to service a particular number of devices in a given area. The government should immediately consider framing enforceable legislative guidelines to mandate compulsory deployment of duct space for fibre/telecommunication cables and space for telecommunication towers in all major physical infrastructure construction projects such as building or upgrading highways, inner-city metros, railways or sewer networks. The In-building solutions (IBS) can be used to provide the seamless telecom connectivity.

Following should be considered while framing guidelines:

a. During development of a sector/town, all roads/bridges/buildings/highways/metros/ railways/sewer networks should have utility ducts provisioned to lay OFC and space for installation of telecom towers at a later stage.
b. All buildings/towers should be provisioned with vertical conduits for carrying out last mile building wiring for Fibre To The Home (FTTH) services.

c. Mandate placing ducts with well-defined access mechanisms, on all new road constructions along national highways, as well as inter & intra city roads.

d. Change building by-laws which currently deem only electricity, water, and fire safety as necessary infrastructure for the issue of a completion certificate. Including mandatory inclusion of either ducts /optical fibre with well-defined access mechanisms in all upcoming office complexes, commercial spaces and residential complexes would have a measurable net positive impact on the goal of constructing national broadband highways.

e. A tower and a common transmission/ equipment room in every panchayat in the village - the rental of tower and room shall fund panchayat running through USOF along with fiber.

f. Incentives to residential societies & Resident Welfare Association (RWA) for deployment of small cells / Wi-Fi networks.

TSPs/IPs are facing difficulties and problems in installation of telecom towers in rolling out mobile networks. Some of the problems being faced by the industry are as follows:

i) High cost, lack of uniformity in obtaining permission and lack of single window clearance is a barrier for timely network rollouts.

ii) Many states have not yet come up with a uniform policy in line with the DoT's guidelines pertaining to mobile towers. Arbitrary and ad hoc guidelines and restrictions in setting up of telecom towers in Different States.

iii) Cumbersome and time consuming procedures.

iv) Difficulties in Land Acquisition: Various state governments are charging Land conversion tax (from agriculture to commercial land) for installing mobile towers while power line towers are exempted from such tax.

v) Different policies framed by state governments, municipal corporations, cantonment board and Gram Panchayats are creating lot of difficulties.

vi) Different states/municipal authorities/local bodies are charging multiple levies such as permission fee, sharing fee, renewal fee and additional charges on sharing of towers etc.

vii) There have also been instances of disruption in tower operations due to demolition or temporary sealing and disconnection of electricity on account of complaints arising out of public perception. Such actions have severe consequences on provision of quality services to customers.

viii) Local laws which restrict the duration of tenancies e.g. tribal Area where tenancy over five years is not permitted.

Suggestions and inputs on critical area of "Erection of Telecom Towers"

The guidelines issued by the Department of Telecommunications "Advisory Guidelines for State Governments for issue of clearance for installation of mobile towers" on 1st August 2013 should be followed by the States/UTs.

a) RoW Charges for Erection of Towers: As mentioned in the guidelines issued by DoT dated 01.08.2013 to charge one time nominal administrative fee to recover the cost of issue of permission for installation of towers. At present various states are charging multiple levies such as permission fee, sharing fee, lease charges, development charges, renewal fee etc. and all these to be abolished.

b) Uniform Policy Guidelines for State: There are differential policies in each of the states/local bodies which should be uniform in line with DoT guidelines so that it can facilitate telecom and broadband services for the people of the state.

c) Permission from Local Authority: There should not be any permission required from the local authority for erection of the towers and should be free right of way from state government side like being given to BBNL in NOFN project.

d) Online Single Window Clearance: There should be single window clearance within 15 days. In order to expedite RoW clearance in a time bound manner through an appropriate and effective approval mechanism, a committee under the Chairmanship of Chief Secretary to the respective State Governments may act as a single window to coordinate all activities in this regard.

e) Single Nodal Authority: Single nodal authority should be identified by the States/UTs to coordinate the grant of permission for installation of towers.

f) Nominal one time Administrative Fee: Fee should be levied to recover administrative costs regarding the issue of permission for installation of telecom towers. Multiple levies should be abolished.

g) Essential documents: The minimum set of documents required by the State Government for granting the permission should be standardized in conformity with DoT guidelines.

h) Setting up of Telecom Committees: In order to effectively address Public Grievances relating to installation of towers and issue related to telecom infrastructure, State Level Telecom Committee and District Level Telecom Committee should be constituted comprising of Representatives from the State Government, Telecom industry, Department of Telecommunications as suggested in DoT guidelines.

i) Location Area Restriction: Permission for installation of towers in Cantonment areas, forest, near heritage buildings, in and around schools, colleges, hospitals, highly dense area etc. is not being given by many states. Such restrictions hamper the rollout of seamless mobile services. Policy should enable to place towers in such areas also to provide continuous seamless coverage without call drops.

j) Consultative Working: A committee should be constituted comprising of Representatives from the State Government, Telecom Industry, and Department of Telecommunications to align all the stakeholders for a uniform approach.

k) Electricity Connection: Electricity connection to tower installation to be provided on priority basis in a time bound manner by the State Electricity Distribution Companies.

l) Zoning and Land Use Conversion: The installation of towers being a part of essential services and public utility, land conversion requirements/restructure for installation/ construction of towers should be altogether removed.

m) All infrastructure construction authorities must make provision for space for towers/mast erection for telecom utility at a later stage.

TAIPA would like to submit the following:

i. We strongly suggest that Right of Way policy so framed should encompass laying of OFC, erection of telecom towers and installation of telecom infrastructure in all real estate development, buildings and town planning as a integrated approach for provisioning of telecom infrastructure. It is further reiterated that RoW facility for erection/installation of towers, laying of OFC should be made available on non-discriminatory basis to IP-I like it has been done for implementation of NOFN project by signing of MOU among Central Govt., State Govt. and BBNL for free RoW on fast track basis.

ii. There is a need for uniform RoW policy which is to be integrated with Urban Development Policy as there have been instances of differences in DoT's guidelines for installation of towers and States/UTs tower installation policy hampering tower infrastructure rollout. State governments should follow DoT's guidelines for installation of towers, submission of documents, limiting Permission/Processing fee to a 'nominal one-time administrative fee' only, to recover its costs on the issue of permission for installation of tower, single window clearance in time bound manner etc.

iii. Bharat Broadband Network Limited is creating National Optical Fibre Network (NOFN) connecting all the Gram Panchayats (GPs) in the country through Optical Cable (OFC). A tripartite MoU has been signed for free Right of Way for laying OFC among Central Government, State Government and Bharat Broadband Network Limited (BBNL). A Uniform RoW Policy across the country, in line with the NOFN Project must be formulated, mandating the state governments to provide free RoW to all TSPs/IP-1s in line with BBNL in time bound manner for the spread of seamless mobile connectivity and broadband penetration in urban and rural areas. This will provide the last mile connectivity, helping to achieve "Digital India" in a true sense. A mechanism or methodology can be evolved so that the DoT guidelines or policy can be implemented by the state governments through an Act or Rules which should be statuary in nature mandating state governments to adopt the policy so formulated by the DoT.

iv. Cabinet Committee on Infrastructure (CCI), Government of India, has recognized the significance of telecommunication infrastructure and a highly capital intensive business. In order to give requisite benefits to this sector, it has already included it in the Harmonized Master List of Infrastructure sub-sectors vide its gazette notification dated 27 March, 2012 by Department of Economic Affairs. Government incentives, subsidies and tax benefits should be extended on priority to IP-I. The following benefits of infrastructure status should be provided to tower industry:

   a. Allowing higher External Commercial Borrowings Limits
   b. Accelerated Depreciation and Tax holiday
   c. Viability Gap Funding
   d. Reduction in import and exemption in excise duties
   e. Electricity supply at the rates applicable to infrastructure sectors
   f. Lower insurance premiums
   g. Funds at concessional rates for longer period

v. There should be legislation/enforcement mechanism for implementing the Government guidelines.

> **Government should immediately frame guidelines to mandate compulsory deployment of duct space for fibre/telecommunications cables and space for <u>Telecom Towers</u> in all major physical infrastructure construction projects. There should be legislation/enforcement mechanism for implementing Government guidelines by States/UTs/local Bodies. Govt. incentives, subsidies and tax benefits of Infrastructure Status should immediately be extended to tower industry**