TAIPA Response to TRAI Consultation Paper on "Inputs for formulation of National Telecom Policy 2018"

Issue for Consultation

Stakeholders are requested to give their comments on structure and contents of the proposed inputs for National Telecom Policy, 2018, clearly outlining the specifics along with justification.

Preamble

1. The growth in the telecom sector has been unprecedented in the past decade and a half. The telecom sector success is attributed to growth in the wireless services aided by the presence of robust telecom infrastructure sector. Some of the key drivers for the growth of the telecom services include affordable tariffs plan, low-cost handsets, expansion of wireless networks, and sharing of telecom infrastructure on a non-discriminatory basis.
2. The reach and spread of the telecom services has been phenomenal and the telecom services in the far-flung areas is the primary means of access for both voice and data services. With the surge in the data consumption and internet usage, telecom will remain a key driver for the growth of the Indian economy. Telecom towers are the backbone of wireless networks facilitating connectivity in far flung areas of the nation.
3. India's Telecom Infrastructure Industry came into existence when the Department of Telecommunications (DoT) invited applications for IP-I registrations in the year 2000. India has made substantial progress in comparison to its global peers of developing countries in terms of growth of telecom infrastructure which have quadrupled from around 1,00,000 telecom towers in 2006 to 4,60,000 telecom towers in 2017 which houses over 17 lakh BTSs at a tenancy ratio of above 2 enabling connectivity to around 1.2 billion mobile subscribers
4. With the advancements in the telecom sector, it has become one of the leading contributors to the growth of Indian economy and contributes around 6.2% to the Indian GDP. Besides being a propeller for economic growth, the telecom sector is also a key employment generator and has created around 4 million direct and indirect jobs as on FY16 – 17. A robust communications infrastructure is the backbone for many other sectors in the economy and hence, it has been accorded with the infrastructure status
5. It is estimated as more users migrate to a high speed broadband, mobile data traffic is expected to grow 12 fold between 2015 and 2020 at a CAGR of 63%. The telecom infrastructure industry will continue to roll out next generation networks to meet the increasing demand of various telecom services fuelled by Digital India initiative and Smart Cities mission of the Government.
6. It is needless to mention that the telecom infrastructure is critical for wireless connectivity and there is an urgent need to create policies that would strengthen the telecom infrastructure sector. This is necessary to expand the present telecom infrastructure in the country which will aid the implementation of futuristic technologies such as Digital India, Smart Cities, IoT, M2M, Artificial Intelligence, cloud computing and others.

7. The Indian Government' thrust towards making India a Digitally connected nation aims to transform the country into a knowledge based society and digital economy empowering citizens with a range of service via internet such as education, health and banking etc. Telecom infrastructure is essential for realizing the missions and visions of the Government.
8. Further, with the exponential surge in Data consumption due to 4G expansion and emphasis on 5G in the coming years, the sharing of telecom infrastructure needs to be replicated for fiber and other infrastructure elements also.
9. Accelerating the realization of the Government's mission and vision of creating a digital and smart India will require a robust telecom infrastructure. Only then, can India be transformed into an empowered society and a true knowledge economy. The current Government's ambitious flagship programmes like – Jan Dhan Yojana for Financial Inclusion, Make in India, Start-Up India, Smart Cities and Digital India are leading the country towards revolution.
10. The targets set by NTP 2012 could not be met due to a lack of focus and emphasis on development of a robust telecom infrastructure which is essential and critical for emerging technologies. Further, Right of Way is pivotal for installation of telecom infrastructure and exclusion of infrastructure providers from the purview of Indian Telegraph Right of Way dated 15th November 2016 is a major hindrance and an impediment to the roll-out of the critical telecom infrastructure.
11. The country is at the cusp of digital revolution transforming the country into a digital society will require alignment in the policies and processes at the centre and state level. Challenges faced by the industry demands immediate attention of the Government and needs be resolved expeditiously to create smart & digital ready infrastructure in the States
12. Thus, in order to realise the targets laid out by the NTP – 2018, it must address an active role played by the telecom infrastructure providers in meeting the digital aspirations of the nation.

Objectives – for enhancing roll-out of telecom infrastructure through enabling policies

A. Improve the quality of telecom services and reduce network gaps by expediting right of way permissions to the telecom infrastructure providers through implementation of uniform Policy for Common Telecom Infrastructure.
B. Enhance RoW for IP-1s and redefine Active/Passive infrastructure and delink Common Telecom Infrastructure from any licensing regime.
C. Enhance coverage inside buildings, coverage spaces and public spaces by installation of in buildings solutions and Wi-Fi hotspots
D. Improve the financial viability of the sector and make it more sustainable
E. Ensure regulatory certainty by ensuring the implementation of central government guidelines across the State which will enhance the ease of doing business for the sector.
F. To ensure protection of critical telecom infrastructure by imposing stringent penal actions for damage to critical assets
G. Make India future ready with a robust communication infrastructure for provisioning of technologies like 5G, AI, etc.

H. Ensure provision of 24x7 electricity to Telecom towers to enable operations of telecom services 24x7 resulting in less use of diesel, reduction in carbon footprint and adding value to green environment significantly.

a. Strategy to improve the quality of telecom services and reduce network gaps by expediting right of way permissions to the telecom infrastructure providers

i. In order to expedite tower installations and improve the Quality of Service (QoS) and call drops, IP-Is must be included in the Indian Telegraph Right of Way Rules, 2016 by the government without any further delay
ii. To enable this, the government must urgently consider suitable amendments in the Indian Telegraph Act, 1885
iii. Non – discriminatory access to Right of Way to IP-Is for both underground and overground telecom infrastructure must be facilitated by the Government
iv. Availability of government lands and buildings must be facilitated by the government for installation of telecom infrastructure by IP-Is to help cover the dark spots and improve coverage by sharing the infrastructure on a non – discriminatory with the TSPs.
v. Emphasis also needs to placed on evolving and implementing Common Utility Ducts which can host fibres which are shareable with multiple TSPs and are deployed by the IPs. With the emerging technologies, this will be crucial for seamless operation for high speed internet and telecom services as well as Smart Cities development

b. Enhance coverage inside buildings, public places by installation of in buildings solutions and Wi-Fi hotspots

i. The telecom infrastructure should be completely de-linked from the licensing regime. Telecom Infrastructure which is the enabler for provisioning of telecom services must be allowed to be owned and installed by IP-Is for the service providers.
ii. Re-classify/ redefine 'Common Telecom/ Digital Infrastructure to include Antenna, Feeder Cable, Node B, RAN and Transmission System, coaxial cable, combiners, splitters, directional couplers and passive antennas etc. any telecom Infrastructure/equipment till it is not lit up by the TSPs, must be considered in the ambit of common infrastructure.
iii. Common telecom digital infrastructure must also be allowed to be owned and maintained by IP-1s and shared amongst the TSPs under its existing registration certificate
iv. Mandating provisioning of spaces and ducts in all commercial, residential and office spaces for installation of telecom infrastructure such as IBS, Wi-Fi hotspots, Cables by IP-Is on sharing basis.

c. **Make India future ready with a robust communication infrastructure for provisioning of technologies like 5G, AI, etc**.
   i. Making expeditious Right of Way available for laying of optical fibre cable and telecom towers by IP-Is which is a vital requirement for seamless 4G connectivity as well as future proofing from a 5G implementation perspective.
   ii. Reclassification of common telecom / digital infrastructure under a common umbrella in order to allow IP-1s to deploy and lease the common telecom infrastructure as part of the infrastructure sharing model under existing registration certificates.
   iii. By promoting sharing of telecom infrastructure among telecom service providers on the infrastructure deployed by IP-Is

d. Enhancing Ease of Doing Business for the telecom infrastructure providers
   i. Uniform and seamless implementation of Right of Way Rules 2016, across central, state governments and local municipal bodies will help ease deployment of over ground and underground infrastructure to have digital ready cities/states for digital India
   ii. There is a crucial need for uniformity in guidelines around installation of telecom towers across states both in general and in government premises in particular as there are either multiple or no guidelines in states which are not aligned with the RoW notification issued by Department of Telecommunications (DoT) in November 2016.
   iii. The government must implement corresponding infrastructure status benefits (such as availability of funds at concessional rates, allowing higher ECB limits, extension of VGF, etc.) to infrastructure providers to help them further invest to expand the existing telecom network.
   iv. By engaging with the State Governments and Local Bodies for faster rollout of communication infrastructure
   v. For ensuring non-discriminatory time bound RoW permissions to IP-Is, a nation-wide common portal for application and approval

e. Ensure protection of critical telecom infrastructure by imposing stringent penal actions for damage to critical telecom assets
   i. Reduce the vandalism and thefts of the critical telecommunication infrastructure such as towers, cables
   ii. Imposing stringent penal actions for damage to critical assets
   iii. The state government must also have a mechanism to impose these protection measures

f. Improve the financial viability of the sector and make it more sustainable
   i. Standardize nominal fee structure for installation of telecom infrastructure to make it more sustainable and improve the financial viability of the sector
   ii. Reclassification of telecom towers as temporary movable infrastructure
   iii. Reduce complexities in the existing tax framework by formulation of guidelines to ensure uniform property tax rates across various states and regional authorities

iv. Inclusion of telecom towers for availing the input tax credit under the current GST regime

g. Ensure operations of telecom services 24x7

i. The government must improve the grid electricity provided to telecom towers
ii. Prioritising new electricity connections and ensuring a continuous supply at par with emergency services.
iii. Also look at incentivising production of Li-ion batteries in India which would reduce the reliance on imports, lower the carbon emissions and promote the 'Make in India' initiative
iv. Financial incentives for the sector for deploying energy efficient solutions

Potential Outcomes

A. Improve the quality of telecom services and reduce network gaps by expediting right of way permissions to the telecom infrastructure providers

I. Inclusion of the IP-1s in Right of way rules would help in deployment of the necessary telecom infrastructure and expand connectivity in unconnected areas. This would provide adequate infrastructure and services to TSPs and assist in the smooth implementation of various government initiatives under the 'Digital India' initiative. Further, faster deployment of telecom infrastructure by IP-Is will help TSPs leverage the advent of emerging technologies such as 5G, IoT, etc. to cater to exponential data demand.

II. Installation of towers in government premises would reduce the installation time on account of reduced time invested in site acquisition and increase connectivity which will subsequently benefit the users in the rapidly increasing technology space. This will also address the problem of call drops, quality of services and coverage gaps.

B. Enhance coverage inside buildings, coverage spaces and public spaces by installation of in buildings solutions and Wi-Fi hotspots

I. Reclassification of common infrastructure would result in cost efficiencies for not only IP-1s but also the service providers. For example, sharing of towers resulted in potential savings of INR 23,000 crores due to lesser investment in deployment of differential towers. Similarly, a huge amount of capex can be saved on account of sharing of common infrastructure such as antenna, feeder cable, node B, RAN and transmission system, coaxial cable, combiners, splitters, directional couplers and passive antennas etc.

II. The potential savings on account of reclassification of common infrastructure can further be utilized to deploy towers in rural / unconnected areas, in turn resulting in achievement of the larger objective of providing basic telecommunication services to all.

III. Apart from the savings made by IP-1s, TSPs will also save a huge amount of capex due to utilisation of common infrastructure. These savings may further be passed

on to the end consumers or be utilised to deploy emerging technologies to provide advanced telecom services.

C. Ensure regulatory certainty by ensuring the implementation of central government guidelines across the State which will enhance the ease of doing business for the sector

I. In order to achieve the objectives laid out in the National Telecom Policy 2018, passing infrastructure status benefits to IP-1s would result in deployment of more towers in the country and expand rural tele-density to 100 by 2020 as per NTP 2012.

II. Lower cost of deployment would also result in lower cost of tenancy for the TSPs and the cost savings may be used for providing better QoS to end consumers and increased investments in network upgradation.

III. Furthermore, from an environment conservation perspective, the amount of money saved by IP-1s owing to subsidised cost of finance could be used on energy saving projects such as implementation of alternate energy sources, deployment of power back up solutions etc. which in turn will lead to reduction of carbon footprint

IV. Uniform guidelines for enabling ease of installation of telecom towers in government premises and level playing field for IP-1s can facilitate faster deployment of telecom towers due to reduction in site acquisition lead time. Faster roll out of towers would result in better connectivity and QoS thereby increasing customer satisfaction.

V. Uninterrupted electricity at the site would essentially facilitate ease of doing business for the telecom sector and largely contribute towards protection of environment. It can also help in reducing the import bill of fuel used by tower sites.

D. Improve the financial viability of the sector and make it more sustainable

I. Reduction in cost of tower sites will help the industry to re-invest the savings into provisioning of newer technologies making telecommunication services affordable and contribute towards overall achievement of the targets in NTP-12. The cost savings would further help the industry in deploying additional telecom infrastructure in meeting the digital aspirations of the nation.

II. A few examples wherein the savings may be utilised are listed below:

a. Investment in optical fibre deployment to provide high speed broadband access and increase in overall broadband penetration by ensuring seamless connectivity to consumers
b. Investment to optimise network capabilities in order to provide better Quality of Service (QoS) and reduce call drops
c. Investments in emerging telecom technologies to be at par with global economies
d. Contribution towards government's flagship initiative such as 'Digital India' initiative and 'Smart Cities Mission'

E. Ensure operations of telecom services 24x7

I. Increasing the power supply availability at the telecom sites would result in improved quality of telecommunications services and would support in seamless implementation of emerging telecom technologies.

II. Amount of up to INR 3,000 crore per year can be saved in terms of power and fuel cost if the electricity availability at the site is increased up to 20 hours a day. Increased availability of electricity would result in negligible diesel consumption at the site in turn resulting in reduction of carbon dioxide emissions by up to 24.88 lakh tons per annum.

III. Potential savings from the operation of sites can be further utilized to invest in deployment of telecom towers and ensure better connectivity across the country's landscape. This will help the government to achieve its goal listed in NTP-12 of having a rural density of 100 by 2020. A few areas wherein the potential savings may be utilised are listed below:

a. Investment towards green site conversion and in turn reduction of carbon footprints

b. Investment towards laying out the telecom infrastructure like towers and optical fibre to enhance the connectivity. For instance, savings of about INR 3,000 crore can facilitate deployment of additional towers

c. Investment in R&D to promote alternative energy sources for cell sites

d. Reduction in cost of tenancy which may be passed on to the TSPs

F. Ensure protection of critical telecom infrastructure by imposing stringent penal actions for damage to critical assets

I. Reducing the number of cases of diesel and electricity theft and vandalism would result in lower overhead costs which in turn would allow IP-1s to invest in deploying more telecom sites.

II. This could also benefit TSPs to maintain 99.95 per cent uptime as mandated by DoT. The potential savings thus recognized could be invested in R&D and for conducting trials to roll out new technologies