BROADBAND INDIA FORUM 's Response to TRAI Pre-Consultation paper on Ease of Doing Business in the Broadcasting Sector

At the outset, BIF wishes to laud the Authority for suo moto deciding to go for Pre-consultation in the Broadcasting Sector with a view to create conducive & business friendly environment in the sector. This is keeping in view Govt. of India's general overall efforts to improve the ease of doing business across all the sectors.

Keeping in view the general need to improve the climate of trust, growth and investment is the need to identify bureaucratic/procedural bottlenecks that affect the Ease of doing business & suggest measures to simplify the rules & regulations, thereby bringing about more transparency & clarity. Such an environment is likely to facilitate innovation & also encourage adoption of new and latest technologies thereby enabling a better consumer experience.

Broadband India Forum BIF's principal objective is to promote policy & regulation for expeditious proliferation of affordable broadband eco-system throughout the country in a technology agnostic, holistic and all inclusive manner that fully embraces carriage, content & manufacturing segments in an equitable and harmonious manner. BIF's aim is to promote the overall and rapid growth and development of broadband in India. It consists of an eminent think tank of distinguished thought leaders from different sections of the industry, the Govt., the regulator, academia, legal luminaries, etc. It comprises members from the field of Fibre, Mobile Service Providers, Internet Service Providers, Wifi Service Providers, Satcom Service Providers, Satcom Equipment Providers, OTT Platform Providers, and Computer Software Providers etc. It works closely with all arms of the Government –Policy, Regulatory & Licensing arms for influencing Public Policy, Technology advocacy, Regulatory guidelines in alignment with its objectives and views of its members.

The march of technology has brought about changes in every sector and thus necessarily must require a review of existing provisions of the Policy framework and allocation of business rules as well. One of the significant changes that has engulfed the broadcasting sector is the convergence of broadcasting & communications and specifically in ability to provide internet based services viz. broadband. None of the three traditional media used for broadcasting is aloof from this concept . They are Terrestrial Broadcasting using UHF spectrum, Cable TV Broadcasting which after digitization is capable of providing broadband along with Cable TV on the same Hybrid

Fiber Co-ax cable , or Satellite broadcaster or popularly known as DTH operator . We wish to table their respective issues one by one

Cable Broadband

It is well known that Cable is a potent source for broadband delivery that has not been tapped adequately. It is the one that is making1 Gigabits per second (Gbps) speed wired broadband connectivity a reality in India. There have been individual efforts by MSOs to provide Broadband that are gathering steam, now that they are seeing this as a fast growing and profitable area.

In India, Cable TV industry in India is presently connecting over 100 million households.

Some of the benefits of Cable Broadband over Traditional Wireline technologies viz. DSL are a) Higher speeds b) more reliable c) Higher peak rates for downloads. However, its implementation is. not without challenges. Cable modem technology has advanced rapidly with the new DOCSIS 3 specification that allows a wide range of services. However, this needs people with a good handle on technology and also investments in up gradation and in new modems. Cable modems also are terminal devices like STBs and are currently becoming more affordable. Direct Internet over fiber, the other alternative from Cable Companies has become very popular, as it is cheap, quick to deploy and easier to handle. However, there are - two issues one is that the unstructured Aerial cable method, while cheap, quick and adequate, need to have permission from municipalities or DISCOMs to lay aerial cable over electricity poles.

The second is the Underground ducting and fiber deployment, which call for Right of Way (RoW) to be made available and for digging permissions to be made easy and in a timely manner. In spite of the RoW being now mandated by DoT's Gazette notification, this is yet to be fully implemented by the local bodies and State Governments.

For accelerated growth of cable broadband, a harmonized effort is required by the industry, policy makers, regulators and other stakeholders.. Local bodies need to be encouraged to set up common ducting where a large fiber bundle can be deployed that can be leased by them to all users, particularly data providers- cable, Telco& ISP. This circumvents the RoW issue and ensures that everyone will benefit from this infrastructure sharing. Shared Common Telecom infrastructure (CTI) is also the best available option for proliferating Cable Broadband in rural areas.

An MSO (Multi System Operator) or an LCO (Local Cable Operator) starting Broadband services today has to apply for a license to provide broadband services over cable or fiber (UL-VNO) Though these license fees are not too high they are still prohibitive as Cable Operators are small entrepreneurs, used to working with low Capex and Opex with low returns. Hence creating entry barriers viz. compulsory License Fees to provide an essential service viz. broadband is perhaps counter-productive.

The next important factor is availability of Bandwidth at reasonable price. There is a possible solution and that is to allow BBNL to procure direct access from Tier 1 global ISPs in USA in bulk, which will translate into lower retail prices for all the service providers including the small MSO & LCOs. Integrated Offerings in the convergent domain of broadcasting & broadband can be provided by LCOs & MSOs to maximize the benefits for all and reduce the cost to the end consumer. However, it would **need a convergent or unified regulatory framework**. For spearheading the growth of cable broadband in India, focused initiatives are required from policy makers.

Our key policy recommendation/suggestions for accelerating the growth of Cable Broadband in India are as follows:

1. Impediments to be removed:
   a. MSOs who provide cable broadband generally have the Internet Service Provider (ISP) license and hence the DoT gazette notification issued on November 18, 2016 on Right of Way, applies to them automatically and they merely need to leverage this for rollout.
   b. For MSOs and LCOs who do not have an ISP license, suitable amendment to the gazette notification should be issued by I&B Ministry for including them as the beneficiary of the new ROW rules also.
   c. The need of having a license for providing cable broadband which is prohibitive for smaller operators should be done away with.
2. Financial support for small MSOs and LCOs through the USO Fund should be provided. Financial support through banks/institutions should also be facilitated.
3. Encourage Local Govt. Agencies to provide citywide ducting & dark fiber on lease to cable companies.
4. Facilitate permission for aerial cables to be strung on electricity poles through local Discoms.
5. Allow BBNL to negotiate and purchase Bulk Bandwidth directly from Tier-1 global bandwidth suppliers & distribute Internet access to cable companies at lower rates.

6. State SPVs & PPP Companies that are involved in building the state leg of the Bharatnet backbone networks should be encouraged to deploy village last mile networks on Hybrid Fiber Co-axial (HFC) of Cable Cos.
7. Actively promote Wi-Fi & other services on Cable that will enhance operator revenues, increase Governments revenues and also provide additional bouquet of new services to consumers at a cost effective price.
8. Promote the concept of enabling broadband over cable by conducting multiple awareness programs and skill development & training programs amongst Cable operators (LCOs).

Satellite Broadband

Provision of Telecom Services using Satellite

a) Modern Satellite Technologies are well suited to meet High Speed High throughput broadband applications & services scattered over a vast geographical area and also where it is required to deliver a number of services simultaneously in a cost effective manner over rural and remote areas, either as a complement to terrestrial infrastructure or used in conjunction with it

b) Existing Satcom Policy (1997) does not permit a DTH provider to take capacity from a foreign satellite provider until it receives NOC from DOS which it rarely does. This does not let the user directly interact with the capacity provider, thereby resulting in much of the idle capacity over India going waste.

This process is highly bureaucratic, cumbersome and fraught with long delays and creates needlessly a huge shortage of artificial satellite capacity, thereby leading to slowing down in introduction of new services besides increase in prices due to some procedural flaws.

c) There is need to streamline the procedure/process of allocation of satellite capacity and the frequency allocation for DTH service providers. The timeline needs to be capped for this exercise and provided according to a scheduled time bound manner.

d) Duration of foreign satellite capacity contracts with Antrix are for only 3 years. This is required to be extended for a period of at least 10-15 years or till the end of life of the satellite whichever is earlier. This shall lead to more competitive satellite capacity prices.

d) Single window clearance for all clearances/approvals/payments through a transparent online mechanism in a time bound manner is strictly required.

e) Antrix/ISRO should charge the DTH/VSAT Service Provider for bandwidth from date of getting Uplink permission from WPC and not from date of allocation of bandwidth.

f) The process of obtaining SACFA/WPC clearance at terminal level should be done away with, after the Service Provider has obtained a Network Operating License. This will enable the process of expediting of broadband connectivity for the purpose of consumer broadband. As in the case where User terminal license is not applicable in the case of Smartphones/Cellular Mobile handsets(broadband terminals), the same should be permitted here as well to facilitate expeditious proliferation of broadband penetration .

DIGITAL TERRESTRIAL BROADCASTING

The world of broadcasting is changing rapidly. In India , the Satellite based DTH and Cable TV service are the dominant players in the market with continuously growing market share. So much so, the DTH players have started to offer TV channels on other devices viz. Smartphones & Tablets .

With modernisation/digitisation of Cable TV, they are now ready to offer two way service. This includes High Speed fixed Broadband along with Broadcasting as well.

Also, with the deployment of LTE -A (Advanced) and LTE-Broadcast technologies and also deployment of 700mhz band in the near future, we shall see more broadcast services along with that of Broadband using conventional IMT services

With Internet proliferation happening in the country and with gradual reach of ubiquitous and reliable Wifi service everywhere, Internet TV is going to be more and more popular. Also downloading of live video streams & TV channels via Apps and Platforms on the Internet is going to be the way forward

In India, unlike in other countries, there is only one public broadcaster who uses terrestrial broadcasting technologies. Though the technology used is analog today, the broadcaster is in the

process of migrating to digital technology. While advocating the need and several advantages of Digital Terrestrial Technologies over that of other Multiple broadcasting distribution platforms , one must bear in mind that

a) Popularity of Terrestrial Broadcasting platforms in India are on the wane with the advent of Cable TV & Satellite (DTH) platforms . The drop in market share is so significant that from almost 100% share about 15 years back, the broadcaster's share in terrestrial broadcasting has dropped to barely 6%. A majority of the remaining connections are restricted to rural & remote areas only where either Cable or DTH is yet to reach. In fact , the public broadcaster himself has been forced to switch over to DTH(Satellite) platform to compensate for the loss of subscribers on the terrestrial platform.

b) Associated with the declining interest and market share of terrestrial broadcasting is the issue of precious spectrum being held captive by the public broadcaster in UHF band IV (470-585Mhz) and UHF Band V (582-698Mhz). With the declining market share and subscriber interest in terrestrial broadcasting and ascending market share of alternative technologies viz. Satellite (DTH) & Cable TV and given the fact that almost 250Mhz of spectrum in a band which has excellent signal propagation characteristics thereby making it ideal for deep in-building penetration in dense urban areas besides providing cost effective coverage to remote and rural areas, there is a clear case for a serious re-think as to whether the market is interested in the migration to digital terrestrial broadcasting and also for the Govt. to invest any further into making the sole 'monopoly' i.e. the public broadcaster go down this path with expectation of little or no returns. Also the band characteristics lends itself to providing ubiquitous and cost effective mobile broadband and has been marked for IMT applications in future. This is also in sync with the NFAP-2011 guidelines which projects these bands for availability for the purpose of fixed , mobile & broadcasting services in India.

Thus, BIF is of the discerning view **that there is need to permit Digital Terrestrial broadcasters to also offer broadband services in the precious UHF band**