



BIF Response to TRAI Pre-Consultation Paper on
"Enabling Unbundling of Different Layers
Through Differential Licensing" .

Preamble

At the outset, BIF wishes to compliment TRAI for bringing out a very important and timely Consultation Paper that if steered appropriately and implemented accordingly, has the potential to usher in Next Generation Policy & Regulations in accordance with the principles propounded by NDCP which are necessary for achieving Digital India. The current licensing framework is based on a legacy command and control framework, wherein connectivity cannot be provided without express permissions coupled with burdensome license terms. Since the sector has now matured and new innovative technologies are increasingly changing the landscape, there is need for an ideological shift to greater deregulation wherein we permit all services without hard and explicit licensing requirements, unless expressly barred. This will allow innovation to thrive and new services to proliferate within the country. In our opinion, license conditions should be rationalized to make levies and fees proportional to actual costs incurred in regulation. As an overarching theme, policy decisions in this field should be governed by the need to prioritize economic impact over budgetary support.

Regulation is required for any one or more of the following reasons, namely,

- where it is clear that competitive outcomes cannot be achieved by market forces alone;
- where deviation from economic efficiency is deemed socially desirable;
- where private and social benefits are clearly different;
- to enforce adherence to technical standards.

The question to be asked therefore is whether to continue with the command and control mechanisms in place or introduce changes that will benefit the sector and the people. The intense competition within the industry has allowed, at least, in the short term, for a

seeming coalescence of enterprise and social benefits and hence there does not seem to be a need to review the same from the economic efficiency of a marketplace. If anything there is now the opportunity to review the onerous tax elements that have placed an enormous financial burden on the sector. While there is every recognition of the urgent need for change, this also requires calibration to avert any fiscal impact. .

The Central Government has the privilege for establishing, working and maintaining telecom services in India. It can part with this privilege under a licensing / regulatory regime. The exclusive privilege/right can be parted with in any of the multiple ways, including the following:-

- i. under a written license with prescribed conditions
- ii. under a written license agreement, with certain terms that are written and certain others that are inferred from the policy
- iii. under a written license agreement with terms that are not so stringent
- iv. under a regime that requires merely a registration
- v. under a regime that requires no licensing or even a registration.

In view of such a wide power / discretion available with the Central Government, this debate is very timely, since the technological advances, internet based services and multitude of other applications and services, have proliferated at such a pace in the last 5-7 years that any incorrect policy decision could have a huge negative setback on the stated purpose of regulation, i.e., whether it has the effect of allowing or facilitating acquisition by consumers of the benefits of technological advances.

This is especially so, since a whole host of such technologies/innovations, applications & services are invaluable, not only to end-users, but also to all the stakeholders in the value chain and the economy. This has been borne out by the ICRIER-BIF joint study on the benefits of the economy as a whole which estimated that a 10% increase in the use of the Internet and the associated applications & services, results in a 3.3 % increase in the GDP. Given the fact that by placing Mobile Phones in the hands of over 90% Indians has resulted in a mere 6.5% contribution to the GDP, the Internet economy has the potential to provide manifold times contribution to the GDP. Hence liberalization of the Internet economy and the next generation applications including new & emerging technologies viz. 5G, M2M, IoT, ASI, Cloud , etc will provide the impetus that is required for these services to take off and flourish. Resorting to a rigid explicit licence in such cases would perhaps only negate most benefits. It will, moreover, unnecessarily increase the administrative workload and delay service deployment. If we are to realise Digital India, policy & regulation must work hand in hand to promote innovation and fair competition.

While advocating a liberal approach for new technology based next generation services, to have some sort of parity between incumbents and startups, it needs to be ensured that the existing licensing/regulatory framework be amended so that it has conditions that are more liberal than earlier for any existing player in the ecosystem. It should insist on "licenses" being required only when these are accompanied with exclusive rights such as access to spectrum, numbering resources, Right of Way etc.

For the TSPs, it may be apt to even suggest declaring a common sunset date and align all licensees to make pro-rata payments or credits on Licence Fees (LF) and spectrum usage charges (SUC) as one-time fees

- Some examples of license exempt services in the present regime include: With fast expansion of mobile telephone services, the Government decided to do away with the requirement of individual mobile handsets with the customer / subscribers (Public) and licensing of such handsets was subsumed in the overall wireless licence for the cellular infrastructure (BTSs, etc.). This was done considering the practical difficulties in granting licence for millions and millions of handsets.
- The wireless (wifi) modems / routers have played a crucial role in the spread of internet. With their fast deployment and growth, it was considered appropriate by many countries, including India, that the operation of such modems be exempted from licensing requirements,

Due to the huge number of devices involved (estimated at anything between 20-50Bn by year 2022) Under the conventional licensing regime, grant and issue of licenses (including periodical renewal) for such large number of devices is likely to be a mammoth task and might not bring in commensurate benefits for the society or large revenues for the government, this approach seems the most rational one.

A radically liberalized approach in the form of a simple online registration for service providers and those that wish to provide integrated services including the network layer through a choice of licensed spectrum and other associated rights viz. RoW, Numbering resources, right to interconnection, etc may be subjected to operate under a framework of some form of licensing.

Our response below is based on the principles and thoughts as contained above. It may be noted that the views/position taken is based on consensus and unified view of BIF, though not unanimous.

Q1. In your view, what could be the possible benefits and anticipated problems in having an unbundled licensing regime? Kindly suggest the measures that can be taken to overcome the anticipated problems (if any).

BIF Response

There would be innumerable benefits of an unbundled licensing regime . Notably it would unlock the potential of the transformative power of Digital Communications, which otherwise would have been stifled as the full potential of Next generation technologies

would not be realised. Unbundling will lead to so many benefits that the sum of the parts is likely to far exceed the total.

The NDCP 2018 mentions that to enable the transformation in the sector, it is imperative to review the existing licensing & regulatory frameworks. It envisages enabling unbundling of different layers i.e. infrastructure, network, services and application layers through differential licensing as one of the strategies for catalyzing investments for the Digital Communications Sector. Unbundling of different layers will offer opportunities for sharing telecom resources (including networks) and thereby lead to its optimum utilization, which will contribute to achieving the objectives of NDCP along with additional revenue streams for the service providers. Unbundling, therefore becomes important from the point of view of all stakeholders viz. IP-1s, OTTs and service providers for next generation services

There are umpteen examples of the benefits of unbundling from existing studies & reports. The ICRIER-Vodafone joint study of 2009 showed how mobile connectivity led to a GDP growth of 1.2%. The World Bank-Mckinsey study of 2010 shows that a 10% increase in the usage of the internet leads to a growth of 1.3% of GDP. Further, the ICRIER-BIF joint study of 2017 shows the benefits of the internet on the economy as a whole which estimated that a 10% increase in the use of the Internet and the associated applications & services, results in a 3.3 % increase in the GDP. Given the fact that by placing Mobile Phones in the hands of over 90% Indians has resulted in a substantial contribution to the GDP, the Internet economy has the potential to provide manifold times contribution to the GDP and could lead to doubling or tripling of benefits.

It is obvious that such a move to unbundle licenses or permit different layers to hold different licenses is likely to encounter resistance from incumbents. Today's scenario permits one entity to hold all categories of licenses. This 'Railway Compartmentalisation' approach on part of the operators is understandable and clearly needs to be reviewed and the imbalance arising out of the growing needs of the sector, is clearly required to be addressed. Part of it is due to onerous conditions in the existing licensing regime, burdens of levies and taxes. Of course, they have received benefits of monopoly/oligopoly and high valuation, migration to beneficial regime, etc. However, this approach is far from optimal when it comes to attracting new generation players in the areas of Next generation Infrastructure providers viz. IP1s, DataCentres, OTTs, Cloud Services, besides Wifi and Satcom players

To overcome the anticipated resistance from the incumbent players, we suggest that a migration package be offered to the existing operators to migrate to a more beneficial regime. However, this migration should be a settlement, for it to be sustainable and should be based on a 'no worse off' philosophy. For the sake of re-iteration, we wish to state that this does not require any change in the Licensing Regime or the Indian Telegraph Act as mentioned from some quarters. This is based on the view expressed by BIF in its letter to the Authority in February 2017 which is premised on the view that Registration and even License exemption is a prerogative that is vested with the Licensor (DOT) under Section 4 of the Indian Telegraph Act* to establish, maintain and work a telegraph within

any part of India. (Refer Article on Differential Licensing by Dr. Kuldip Singh & Mr. T.V. Ramachandran -copy attached)

As a part of the ongoing consultation process, BIF supports the move to enhance the scope of the IP1s to include active infrastructure elements along with passive as well w/o imposing onerous licensing burden on them and w/o envisaging change in the existing Registration conditions. OTTs and Next gen apps have been hugely successful in fuelling the broadband era and BIF suggests that the status quo of license-exemption for such players must therefore be continued to be maintained.

Q2. In case it is decided to unbundle the different layers of licensing, (a) what should be the different layers and their scope? What changes would be required in licensing regime to enable such a framework? (b) Should there be a new regime of licensing on which the existing licensees should migrate within a specified time frame or there should be a parallel incentivized licensing regime for unbundled layers of license?

BIF Response

(a) We fully support TRAI's 4-Tier Licensing Structure as mentioned in the CP for each of the following layers viz.

- a. Infrastructure
- b. Network
- c. Application
- d. Service

It has been suggested in some quarters to seek a review and possible change in the licensing regime and the Indian Telegraph Act. This in our humble opinion, is neither warranted nor desired. The available legislative framework is all encompassing and has sufficient provisions to allow for unbundling and a facilitating regime for Next generation services. Copy of BIF submission to the Authority in this respect and joint article on merits of Differential Licensing by Dr. Kuldip Singh-former Member, TDSAT & Mr. TV Ramachandran -President, BIF is also attached * herewith to help understand and support the case. Unless the issue is understood correctly and dealt with expeditiously by the authorities, harnessing the enormous benefits of the New Gen Services and thereby expediting the vision of Digital India could well come to nought

Existing licenses are non-exclusive licenses .While the licensees have unique rights, other licensees(* Refer to Article of Dr. Kuldip Singh & Mr. TV Ramachandran on Diferential Licensing attached) who have simple registration do not have any such exclusive rights and any incentives. UL Licensees are already privileged and have a number of unique rights

associated with them viz. access to spectrum, numbering resources, Right of Way etc. This licensing regime would need to extend the scope of service provisioning for next generation services and value-added services through new entrants and players besides the existing licensed ones. The issue is focussed on whether and what kind of licensing is required for these new breed of service providers, who could potentially be used to offer these services to the masses. .

While the Indian Telegraph Act, 1885, gives exclusive privilege to the Central Government for establishing, maintaining and working telegraphs (telecommunication system), it is important to understand that it also empowers Government to grant a license to any person “on such terms and conditions and in consideration of such payments as it deems fit” , to establish, maintain and work a telegraph within any part of India. Clearly, a wide, all encompassing power that embraces all possibilities (including ‘no terms’) viz. through a simple ‘ Registration.

While unbundling the above layers, the following could be envisaged in terms of scope for each layer. The scope of the Infrastructure Layer as envisaged through the enhanced scope of IP1 so as to include active infrastructure besides passive infra is perhaps sufficient. The Network Layer could possibly include Radio Access Network (RAN) through MORAN (Multi-Operator Radio Access Network) , Backhaul and Core-MOCN (Multi Operator Core Network) sharing . The Network layer could possibly be hived off as an independent entity which could then be used to provide on a wholesale basis in a equitable and non-discriminatory manner to a host of Service operators/providers offering Legacy or Next Generation /Digital Services . The Network Providers would be responsible for owning, building, operating, managing and maintaining the network.

The Application Layer would be like an overlay on the network layer. The OTTs would be typically operating in this layer. OTT services are mere *applications* provided to end users over the internet using the network infrastructure of licensed Telecom Service Providers (TSP). They neither operate on a network nor lease network capacity from a network operator for the provision of their services. The application layer consists of other application providers who are providing application services to different verticals using telecom resources. Applications viz. M2M, IoT, Cloud Services, Data centres, E-Commerce, etc. It is suggested that in the light of promotion of the defined objectives of this exercise, license exempt regulation may be enabled for this layer.

(b) As already mentioned above, to overcome the anticipated resistance from the incumbent operators to this differential licensing framework, we suggest migration package be offered to the existing operators to migrate to a more beneficial licensing regime. However, this migration should be a settlement , for it to be sustainable and should be based on a ‘no worse off ‘philosophy. However, we wish to state that this does not require any change in the Licensing Regime or the Indian Telegraph Act. We however, do not advocate any incentives nor any parallel incentivised licensing regime for this purpose

Q3. In case you are of the opinion that there is no need of unbundling of different layers of the license, what changes should be made in the existing licensing regime to (i) promote sharing to increase utilization of the existing resources, and (ii) catalyse investments and innovation in Digital Communications sector?

BIF Response

Since we are in favour of unbundling of different layers of the license, this is not applicable.

Q4. What other reforms / changes are required in the existing licensing regime?

BIF Response

Telecom is the backbone for many other industries. A robust and competitive telecom sector is essential for the national economy, and it is important for the government to revive the health of the telecom sector by adopting suitable long term measures that are sustainable over a period of time. One of the key measures would be to review the existing structure of taxes and levies in the current Licensing Regime . Our suggestions in this regard are given below :

Scrapping of the current system of licence fee (LF) as a percentage of AGR is a key requirement. A high LF% is a major anachronism. It was appropriate when licences were packaged with spectrum. But, this principle should have been scrapped in 2012 itself, when licences and spectrum were separated, and the latter only allocated through e-auctions. It is universally accepted that, without spectrum, licence is a mere piece of paper, not worth anything practically. With spectrum bought in an open and transparent manner, licence fee could be an annual fixed fee that just covers the cost of administration and regulation. This cost is a small figure—currently equal to about 0.1% of the present AGR. The abovementioned cost also includes the cost to the wireless planning and coordination department, and that of regulating spectrum. Hence, the current levy of spectrum usage charges as a percentage of AGR also needs to be scrapped.

Customers and the public must, above all others, secure a big win since it is they who would ultimately bear the stiff cost of a full-blooded resolution through taxes, etc.