BROADBAND INDIA FORUM
"Think Tank for Digital Transformation"

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16th September 2019

Dr. R. S. Sharma
Chairman
Telecom Regulatory Authority of India (TRAI)
Mahanagar Doorsanchar Bhawan (next to Zakir Hussain College)
Jawaharlal Nehru Marg (Old Minto Road)
New Delhi: 110 002

Sub: Submission towards inputs invited on the Consultation Paper on Review of Scope of Infrastructure Providers Category-I (IP-I) Registration

Respected Sir,

In response to the inputs invited from various stakeholders on the **Consultation Paper regarding Review of Scope of Infrastructure Providers Category-I (IP-I) Registration, as issued by the TRAI on 16th August 2019**, please find enclosed our submission for your kind perusal and consideration.

We are hopeful that the relevance of the vital points shared by us shall be deliberated upon in detail, in the process of culminating a prolific decision regarding this critical issue for the industry, as well as the consumers.

Sincere regards,

TV Ramachandran
President
Broadband India Forum

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Response to Consultation Paper ON IP-1

Preamble

1. To cope with the ongoing huge data explosion as well as data growth likely to arise out of Next Generation Services such as 5G and IoT/M2M, a huge amount of growth of Digital Infrastructure is required. To meet the challenges arising out of this situation, the opportunity is ripe for review of the scope for IP1s, who have been so far providing only passive infrastructure. In this context, we would like to thank the Authority for bringing out this Consultation paper for discussion on enhancement of scope for Infrastructure Providers category-1 (IP-1).

2. Enhancing the scope of IP1s to provide and share active infrastructure would result in the following:
    i. more efficient utilization of resources
    ii. reduce cost for all players
    iii. make available affordable tariffs to the end consumer besides leading to expeditious rollout of Next Generation Services, viz. 5G, IoT, etc.

    TRAI, in its white paper on "Making India 5G ready", estimates the savings on account of active infrastructure sharing to the extent of 25-35% in operating expense (opex) and 33-35% in capital expenditure (capex). This is also being done internationally across many countries, as has been highlighted in the Consultation paper itself.

3. There is a misconception that enhancement of scope of IP1s would necessarily lead to regulatory and legislative challenges. We respectfully submit that this is incorrect and is completely mis-understood.

4. A careful study of the Indian Telegraph Act 1885 suggests that Registration is also a form of Licensing and that **IP1 License is granted by means of a Registration**. Under Relevant Section 4 of the Indian Telegraph Act, it is clearly stated that the Govt. has wide and all-encompassing power that embraces all possibilities, and a License can be granted on any terms and conditions as deemed necessary by DOT and a simple Registration. We quote from proviso to Section 4 (1) of the Act, which reads:
    "Provided that the Central Government may grant a license, on such conditions and in consideration of such payments as it thinks fit, to any person to establish, maintain or work a telegraph within any part of [India]"

From the above, it is clear that the Central Govt. has full powers to grant a license on any terms and conditions and as a matter of fact, licenses such as to the Local Cable Operators (LCOs), IP1 providers, OSPs, etc. are granted by means of a registration.

5. While a license may be in the form of a commercial license agreement or a simple registration, the obligations/payments terms should be commensurate with the rights given under such licenses. To attempt to draw any analogy of IP1 Registration to TSP license is not correct. We respectfully submit that TSPs stand on an entirely different footing, holding at least 3 precious and unique rights viz. -
    i. Right to Licensed Spectrum
    ii. Right to PSTN Interconnection on regulated terms
    iii. Right to Numbering Resources
    iv. Right to establish, maintain & provide telegraph

    None of the above precious rights are available to IP1s. Nor do the IP1s access the end customers. However, Right of Way needs to be provided to them for enabling expeditious rollout of the infrastructure.

6. In Appendix 1 to this Response, we are enclosing the following in support of the points made above in 4 & 5:
    i. Article co-authored by Dr. Kuldip Singh, ex-CMD, MTNL & former Member, TDSAT; & Mr. T.V. Ramachandran, President, BIF, on "Registration as a form of liberal Licensing"
    ii. Submission made by BIF to TRAI in this regard

Question by Question Response

Q1: Should the scope of Infrastructure Providers Category–I (IP-I) registration be enhanced to include provisioning of common sharable active infrastructure also?

BIF Response:

1. To cope with the data explosion and growth in Digital Infrastructure required for seamless and resilient networks to meet the same, BIF is of the opinion, that **there is an immense opportunity to allow provisioning of common shareable active infrastructure to IP1s by reviewing their scope of services**, since, thus far, they have been providing only passive infrastructure. This is an inefficient and sub-optimal situation which needs to be reviewed for correction.

2. BIF therefore recommends that the **scope of the IP1s should be enhanced immediately to include provisioning of common sharable active infrastructure also.** This will result in the following:
   i. **more efficient utilization of resources**
   ii. **reduce cost for all players**
   iii. **make available affordable tariffs besides leading to expeditious rollout of Next Generation Services, viz. 5G for customers**

3. Incidentally, the same is **already provisioned in the NDCP-2018 Gazette Notification issued by the Government of India in Oct'2018**, and agreed unanimously by all stakeholders. The relevant provision vide para - 1.1(f) of NDCP-2018 is given as below: *"Encourage and facilitate sharing of active infrastructure by enhancing the scope of Infrastructure Providers (IP) and promoting and incentivizing deployment of common sharable, passive as well as active, infrastructure."*
4. Moreover, **TRAI itself also recommended enhancement of scope of IP1s, vide its recommendations to the Government on 2nd February 2018, regarding "Input for formulation of NTP-2018"**.

Q2: In case the answer to the preceding question is in the affirmative, then

i) What should be common sharable active infrastructure elements which can be permitted to be owned, established, and maintained by IP-I for provisioning on rent/lease/sale basis to service providers licensed/ permitted/ registered with DoT/ MIB? Please provide details of common sharable active infrastructure elements as

well as the category of telecommunication service providers with whom such active infrastructure elements can be shared by IP-I, with justification.

BIF Response:

1. In view of the various benefits of infrastructure sharing such as faster rollout, cost sharing/reduction, etc., **any/every active infrastructure element that is possible to be shared, should be included in the enhanced scope of IP-1.**
2. We recommend that IP-1 should be allowed to share the infrastructure in a non-discriminatory manner with all legal entities.

ii) Should IP-I be allowed to provide end-to-end bandwidth through leased lines to service providers licensed/ permitted/ registered with DoT/ MIB also? If yes, please provide details of category of service providers to it may be permitted with justification.

BIF Response

IP-1s should also be allowed to provide end-to-end bandwidth through leased lines and provisioning of common sharable active infrastructure to all legal entities.

iii) Whether the existing registration conditions applicable for IP-I are appropriate for enhanced scope or some change is required? If change is suggested, then please provide details with reasoning and justification.

BIF Response

1. The existing Registration Conditions applicable for IP1 are appropriate.

2. **It is a misconception that there is a regulatory or legislative challenge**.

3. A careful study of the Indian Telegraph Act 1885, suggests that Registration is a form of Licensing and that **IP1 License is granted by means of Registration**. **Under Relevant Section 4 of the Indian Telegraph Act, the Govt clearly has wide and all-encompassing power that embraces all possibilities and the License can be granted with terms and conditions as deemed necessary by DOT or a Registration**. We quote from proviso to Section 4 (1) of the Act, which reads:
   "Provided that the Central Government may grant a license, on such conditions and in consideration of such payments as it thinks fit, to any person to establish, maintain or work a telegraph within any part of [India]"

From the above, it is clear that the Central Govt. has full powers to grant a license on any terms and conditions and as a matter of fact, licenses such as to the Local Cable Operators (LCOs), IP1 providers, OSPs, etc. are granted by means of a simple registration.

4. **While a license may be in the form of a commercial license agreement or a simple registration, the obligations/payments terms must be commensurate with the rights given under such licenses**. To attempt to draw any analogy of IP1 Registration to TSP license is not correct. We respectfully submit that TSPs stand on entirely different footing, holding at least 3 precious and unique rights viz. -
    a. Right to Licensed Spectrum
    b. Right to PSTN Interconnection on regulated terms
    c. Right to Numbering Resources

    None of the above precious rights are available to IP1s. Also, the IP1s presently do not have access to end customers. However, **Right of Way needs to be provided to them for enabling expeditious rollout of the infrastructure**.

5. It may kindly be noted that **expeditious introduction of Next Generation Services would require more and more of sharing of expensive resources**, which India can ill-afford to waste otherwise.

6. TRAI in its white paper on "Making India 5G ready" estimates the **savings on account of active infrastructure sharing, shall accrue to the extent of 25-35% in Opex and 33-35% in Capex**.

iv) Should IP-I be made eligible to obtain Wireless Telegraphy Licenses from Wireless Planning and Coordination (WPC) wing of the DoT for possessing and importing wireless equipment? What methodology should be adopted for this purpose?

BIF's Response:

1. **IP-1s should be allowed to obtain Wireless Telegraphy Licenses from WPC wing for possessing and importing wireless equipment**. This will entail exemption from the applicability of the provisions of the Indian Wireless Telegraphy Act 1933, using Section 4 of the same act which empowers the government to exempt any one from the applicability of the provisions of the said act.

2. However, **as envisaged in NDCP-2018, the process for obtaining WPC import license needs to be further simplified to facilitate and incentivize investment for faster rollout/expansion of telecom infrastructure/network**. We recommend that the WPC introduces transparent, online, market friendly processes to help deploy wireless equipment without unnecessary delays in obtaining approvals.

v) Should Microwave Backbone (MWB) spectrum allocation be permitted to IP-I for establishing point to point backbone connectivity using wireless transmission systems?

BIF's Response:

1. Our understanding of Backhaul is of that between the BTS (Access Network) and the Core Network. Backbone extends beyond that, for intra-city and inter-city networks as well.

2. With this understanding that it shall be used primarily for backhaul, BIF recommends that **both Microwave and Millimetre Wave spectrum shall be included in the scope of IP1 for establishing point-to-point to multipoint backhaul connectivity** using wireless transmission systems.

Q3. In case the answer to the preceding question in part (1) is in the negative, then suggest alternative means to facilitate faster rollout of active infrastructure elements at competitive prices.

BIF Response

Not applicable in view of the response above

Q4. Any other issue relevant to this subject.

BIF Response

1. The existing TSP license carries a vast set of onerous conditions which need to be reviewed.

2. As mentioned in the Preamble, in support of the argument that there is no Regulatory or Legislative Challenge in enhancing the scope of IP1, we are annexing the following documents:

APPENDIX 1

Article co-authored by Dr. Kuldip Singh, ex-CMD, MTNL & former Member, TDSAT & Mr. T.V. Ramachandran, President, BIF, on "Registration as a form of liberal Licensing".

APPENDIX 2

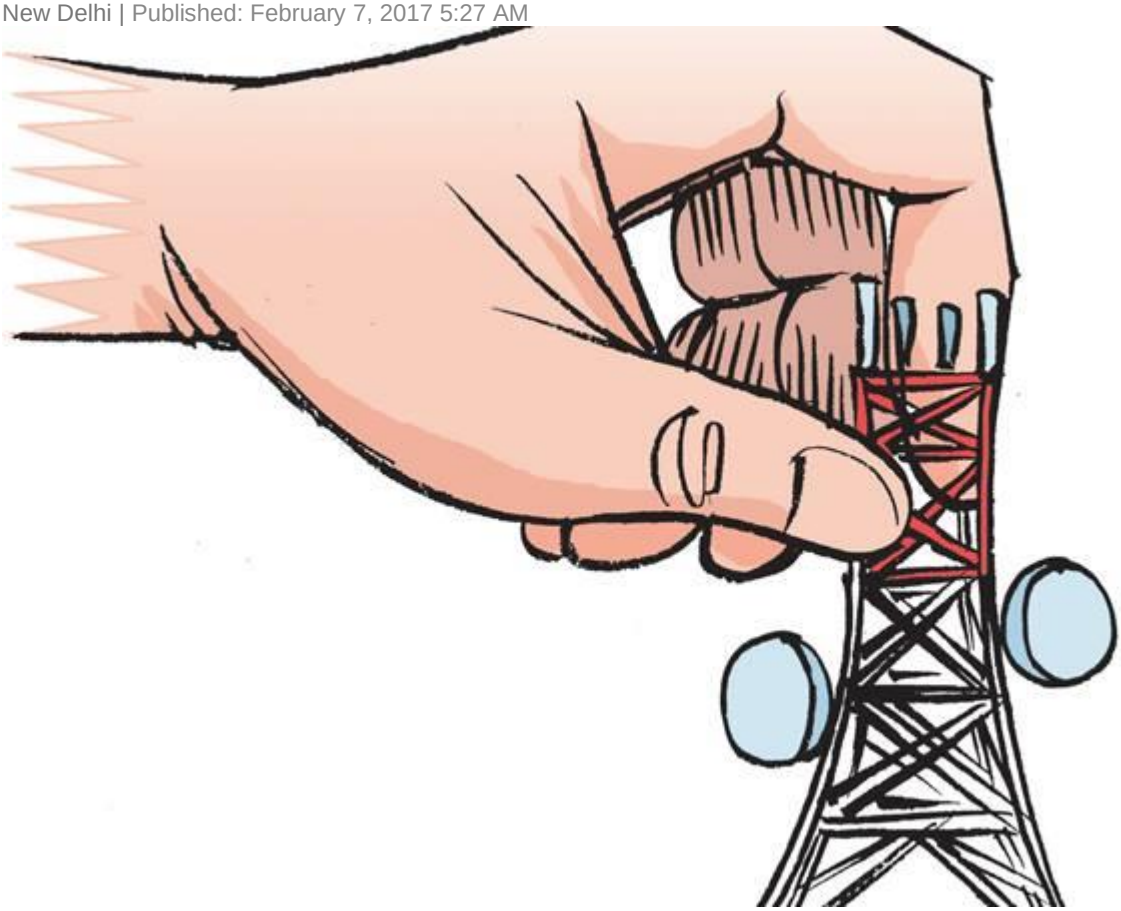
Submission made by BIF to TRAI in this regard.

3. TSPs buying infrastructure in any form from IP1s should be allowed to deduct such payments while arriving at AGR for license fee payment purposes. This will ensure removal of double taxation. This is already permitted in the case of VNOs

Registration or implied licensing legally feasible for new generation services

Resorting to a rigid explicit licence would negate most benefits. It will, moreover, unnecessarily increase administrative workload and delay service deployment.

New Delhi | Published: February 7, 2017 5:27 AM



Till 1990, Indian telecommunications were the monopoly of the government's department of telecommunications (DoT).

There have been furious debates and disputes around the matter of licensing of telecom services. 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 the 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 (Proviso to Section 4(1), Indian Telegraph Act, 1885). Clearly, a wide, all-encompassing power that embraces all possibilities (including 'no terms').

Till 1990, Indian telecommunications were the monopoly of the government's department of telecommunications (DoT). The telecom sector was opened up for private sector participation in the early 1990's and in the early stages, DoT understandably entered into elaborate license agreements with private players to provide various telecom services, especially full-blown carrier services. Today, however, in the context of burgeoning innovative new generation applications like Messenger, Skype, WhatsApp, FB, etc, and for public-WiFi hotspot services, this policy needs review with a deeper understanding of underlying priorities. Unless understood correctly and dealt with expeditiously by the authorities, harnessing the enormous benefits of the new-gen services and Digital India could well come to nought.

We need to first establish the precise meaning of the term 'licence'. Black's Law Dictionary, one of the most long-standing, reputed and trusted sources worldwide for definitions of legal terms—the veritable gold standard for the legal language, defines a license as "a permission, accorded by a competent authority, conferring the right to do some act which without such authorisation would be illegal, or would be a trespass or a tort"(thelawdictionary.org). Generally, this permission is given in writing as an express license. Under certain circumstances, in place of the express license can be an implied license. An implied license is an unwritten license which permits a party (the licensee) to do something that would normally require the express permission of another party (the licensor). Implied licenses may arise by operation of law from actions by the licensor which lead the licensee to believe that it has the necessary permission. In 2008, the Ninth US Circuit Court held that a non-

exclusive license to use copyrighted material can be granted by implied license (www.revolvy.com). In this sense, for today's world, a 'virtual license' could fittingly be a legal reality.

A practical example of the above is that, till recently, possession of any wireless transmitter was in contravention of the provisions of Wireless Telegraphy Act and punishable with imprisonment of three years, a fine of R1,000, or both. However, today, no explicit license is required for the possession and use of a radio, or a TV, or even a mobile handset which is capable of two-way communication (as per section 2A of the wireless Telegraphy Act, 'wireless transmitter' means any apparatus, appliance, instrument or material used or capable of use for transmission or omission of wireless communication), as there is an implied permission (licence) to possess and use it. In another illustration, PCO operators, as franchisees of the licensed TSPs, provide telecommunications services to end users. EPABXs are set up in housing societies providing voice and data services to end users under franchise from licensed TSPs like BSNL. The licence to provide services is implicit in these cases.

Can an operator be permitted to provide services through simple registration? As per English Language and Usage Stack Exchange, the words 'licensing' and 'registration' are linked and sometimes used interchangeably, simply because in order for something to be registered, it often has to be licensed, and vice-versa. Registration can be evidence that something is licensed (www.englishstackexchange.com). This matter was deliberated at length by TDSAT in Reliance Infratel Ltd. versus Etisalat DB Telecom Pvt Ltd, Mumbai (petition no 75 of 2012, order of the Tribunal, April 10, 2012). One of the contentions in the case was that the petitioner, therein, being a registrant could not render telecommunication service not only because it was specifically debarred from doing so but also in view of the fact that it was not a licensee within the meaning of the provisions of Section 4 of the ITA. The

Tribunal found in regard to a registrant being a licensee that the parting of the exclusive privilege vested in the central government through a registration certificate or otherwise, implied licensing. “..If, whether by way of grant of registration certificate or otherwise, any part of the exclusive privilege vested in the central government is to be parted with or outsourced in favour of any other entity, the same would mean a license…”(para 125 of the Order). In a somewhat analogous case, the Delhi High Court (Viom Network Ltd and Anr versus S Tel Pvt Ltd [2013-(004)-ARBLR-0551-DEL]) also ruled that registration is another form of licence.

It is arguable whether even full-blown carrier services need detailed licences to define licensee rights such as the scope of allowed services, right to interconnection, etc. The case for detailed licences for next-generation/value-added services that ride over already licensed bearer services provided by TSPs is even less clear. In some cases, a simple online registration may suffice for the purpose record-keeping. Examples of these abound in broadcasting services, which also fall under telecommunications. For example, a Local Cable Operator (LCO), providing last-mile connectivity and service to end users, is only required to register with the postal authorities.

Virtual licensing may well sound blasphemous, but, George Bernard Shaw observed, “All great truths begin as blasphemies”. Nothing legally prevents the government from parting with its exclusive privilege to provide telecommunications services through simple registration. With advancing technology and the proliferation of applications, next-generation and value-added services are rapidly emerging that use the networks/services of existing TSPs at higher layers. These next-gen VAS and applications are invaluable, not only to end-users, but also to all the stakeholders in the value chain and the economy as a whole. Resorting to a rigid explicit licence in such cases would perhaps only negate most benefits. It will, moreover, unnecessarily increase administrative workload and delay service deployment. If we are to

realise Digital India, policy must always scrupulously promote innovation and fair competition.

Kuldip Singh is former member, TDSAT and former CMD, MTNL, while TV Ramachandran, is honorary fellow of the IET (London) & president, Broadband India Forum.

Views are personal

Dated: 17th February, 2017

Chairman-TRAI
Mahanagar Door Sanchar Bhawan
Jawahar Lal Nehru Marg
New Delhi-110002

Sub: Licensing for new and value-added services that ride over licensed bearer services

Dear Sir,

We at BIF wish to submit our views on a topic which we believe will have great significance as we seek 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. There have been intense debates and disputes around the matter of licensing of telecom services for quite some time now. 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[1]. Clearly, a wide, all-encompassing power that embraces all possibilities (including 'no terms').

Till 1990, Indian telecommunications were the sole monopoly of the Government's Department of Telecommunications. The telecom sector was opened up for private sector participation in the early 1990's and in the early stages, DoT understandably entered into elaborate license agreements with private players to provide various telecom services, especially full-blown carrier services. Today, however, in the context of burgeoning innovative New Generation Applications like Messenger, Skype, WhatsApp, FB, etc., and for Public Wi-Fi

[1] Proviso to Section 4(1), Indian Telegraph Act, 1885.

hotspot services, this policy needs review with a deeper understanding of underlying priorities. Unless understood correctly and dealt with expeditiously by the authorities, harnessing the enormous benefits of the NewGen Services and thereby expediting the vision of Digital India could well come to nought.

Definition of the term 'license'

We need to first establish the precise meaning of the term 'licence'. Black's Law Dictionary, one of the most longstanding, reputed and trusted sources worldwide for definitions of legal terms - the veritable gold standard for the legal language, defines a license as "a permission, accorded by a competent authority, conferring the right to do some act which without such authorization would be illegal, or would be a trespass or a tort[2]". Generally, this permission is given in writing as an express license. **Under certain circumstances, in place of the express license can be an implied license.** An implied license is an unwritten license which permits a party (the licensee) to do something that would normally require the express permission of another party (the licensor). Implied licenses may arise by operation of law from actions by the licensor which lead the licensee to believe that it has the necessary permission. In 2008, the Ninth US Circuit Court held that a non-exclusive license to use copyrighted material can be granted by implied license[3]. In this sense, for today's world, a 'virtual license' could fittingly be a legal reality.

A practical example of the above is that, till recently, possession of any wireless transmitter was in contravention of the provisions of Wireless Telegraphy Act and punishable with imprisonment of three years, a fine of one thousand rupees, or both. However, today, no explicit license is required for the possession and use of a radio, or a TV, or even a mobile handset which is capable of two-way communication[4], as there is an implied permission (license) to possess and use it.In another illustration, PCO operators, as franchisees of the licensed TSPs, provide telecommunications services to end users. EPABXs are set up in housing societies providing voice and data services to end users under franchise from licensed TSPs like BSNL. The license to provide services is implicit in these cases.

Can an operator be permitted to provide services through simple registration? As per English Language and Usage Stack Exchange, the words 'licensing' and 'registration' are linked and sometimes used interchangeably, simply because in order for something to be registered, it often has to be licensed, and vice-versa. Registration can be evidence that something is licensed[5].This matter was deliberated at length by TDSAT in Reliance Infratel Ltd. Vs. Etisalat

[2] See thelawdictionary.org
[3] See www.revolvy.com
[4] As per section 2A of the wireless Telegraphy Act, 'wireless transmitter' means any apparatus, appliance, instrument or material used or capable of use for transmission or omission of wireless communication.
[5] englishstackexchange.com

DB Telecom Pvt. Ltd. Mumbai[6]. One of the contentions in the case was that the petitioner therein being a registrant could not render telecommunication service not only because it was specifically debarred from doing so but also in view of the fact that it was not a licensee within the meaning of the provisions of Section 4 of the ITA. **The Tribunal found in regard to a registrant being a licensee that the parting of the exclusive privilege vested in the Central Government through a registration certificate or otherwise, implied licensing.** "..If, whether by way of grant of registration certificate or otherwise, any part of the exclusive privilege vested in the Central Government is to be parted with or outsourced in favour of any other entity, the same would mean a license…"(Para 125 of Order).

In a somewhat analogous case, the Delhi High Court[7] also ruled that registration is another form of license. In the case, the Delhi High Court ruled that the Tribunal did not have jurisdiction on the case, but this was because the petitioner was specifically barred from providing telecommunication services and not because the registration was not considered a License under section 4. As a matter of fact, the Hon'ble court observed as under:

"……..I have already held above that an infrastructure provider though may be licensed under Section 4(1) of the Telegraph Act to establish and maintain a telegraph, if not licensed to provide telecommunication services to users who are members of the public, would not be a service provider under the TRAI Act……."

From the above, it is clear that registration of an IP1 provider was considered license under Section 4(1).

It is arguable whether even full-blown carrier services need detailed licenses to define licensee rights such as the scope of allowed services, right to interconnection etc. The case for detailed licenses for Next-Generation/Value-Added Services that ride over already licensed bearer services provided by TSPs is even less clear. In some cases, a simple online registration may suffice for the purpose of record-keeping. Examples of these abound in broadcasting services, which also fall under telecommunications. For example, a Local Cable Operator (LCO), providing last mile connectivity and service to end users, is only required to register with the postal authorities.

Virtual licensing

As explained above, nothing legally prevents the Government from parting with its exclusive privilege to provide telecommunications services through simple registration. With

[6] Petition No. 75 of 2012, order of the Tribunal dated 10th April, 2012.
[7] Viom Network Ltd and Anr. Vs. S. Tel Pvt. Ltd. [2013-(004)-ARBLR-0551-DEL]

advancing technology and the proliferation of applications, Next-Generation and Value-Added services are rapidly emerging that use the networks/services of existing TSPs at higher layers. These Next-Generation Value-Added services and applications are invaluable, not only to end-users, but also to all the stakeholders in the value chain and the economy as a whole. Resorting to a rigid explicit license in such cases, would perhaps only negate most benefits. It will, moreover, unnecessarily increase administrative workload and delay service deployment. If we are to realise Digital India expeditiously, Policy must always scrupulously promote Innovation while ensuring Fair Competition.

We hope our above submission merits due & serious consideration at your end.

Thanking you

Yours faithfully,
For Broadband India Forum

T.V. Ramachandran
President