

IAMAI Response to TRAI Consultation Paper Review of Scope of Infrastructure Providers Category – 1 (IP – 1) Registration

Background

The Internet and Mobile Association of India welcomes the consultation initiated by TRAI on reviewing the scope of IP-1 Registration. IAMAI concurs with the Authority on the need to relook existing provisions in order to boost the ambitious vision of providing 50 Mbps universal broadband connection to every citizen, as envisaged in the National Digital Communication Policy (NDCP) 2018. These initiatives will also be critical for preparing the groundwork for future technologies like 5G, IoT/M2M, which will involve higher volumes of data transit, and thereby higher capacity for backhaul.

IP-1 is a critical category for telecommunication and digital communications, as it forms the backbone of the entire ecosystem. The role played by the extant IP-1 in promoting the digital revolution in India is well acknowledged. IAMAI response to the present consultation paper is in the spirit of the consultation process, which is to explore possibilities to enhance the scope of IP-1 registration to promote and incentivize deployment of common shareable (passive and active) infrastructure. IAMAI believes this is critical to ensure suitable incentives for investment in the 5G infrastructure for the country, which in turn will be critical for much of the digital progress envisioned for India.

While we share our inputs to the specific questions raised in the consultation paper, we would like to highlight certain concerns we felt on the basis of the context set in the consultation paper. Our submission is to be read in the context of the concerns as listed below:

- i. The consultation paper suggests the Government is of the view that owning of active elements like the antenna, feeder cable, Node B, Radio Access Network (RAN) and transmission media should only be permitted to the companies that have been licensed under Section 4 of the Telegraph Act. 2. Further, the fact that IP-Is will require a license under Indian Wireless Telegraphy Act 1933, to own, establish and rent/lease active network infrastructure pertaining to "wireless telegraph". This seem to imply that the fulfillment of the goal of NDCP-2018 should be sought within the framework of Unified License framework. This in turn suggests that the provisions of licensing, either under the ambit of existing UL provisions (or any extension thereby) needs to be first resolved, or else there may arise certain legal challenges.
- ii. The issues involved with sharing of active infrastructure are more complex as compared to passive infrastructure. Provision of exit clause in case of dispute will be almost impossible in active infrastructure sharing as separation of networks between



service providers may not be easy. Hence maintaining a single network by multiple TSPs, through an IP-I, can be detrimental for the consumer and nation in long term in case of dispute between the TSPs.

iii. The assumption that TSPs may be more comfortable in sharing of the telecom infrastructure, owned and maintained by a non-competing entity, may not completely be true. The largest tower companies (IP-I registered) in the country are majority owned by the prevailing telecom companies. TSPs continue to share the passive infrastructure of such IP-Is despite such IP-Is being competing entities for all practical reasons (due to underlying majority commercial interest of the TSPs). The sharing of towers between TSPs is primarily driven by technology neutral nature of passive infrastructure and not due to its ownership lying with an IP-I company. The same may not hold true for active infrastructure sharing, which in turn may generate unforeseen market dynamics that need to be taken into consideration.

IAMAI Response

Question 1: Should the scope of Infrastructure Providers Category – I (IP-I) registration be enhanced to include provisioning of common sharable active infrastructure also?

IAMAI Submission: In order to meet the NDCP 2018 objectives, unbundling of Active Infrastructure by IP-1 Providers is important. However, the proposed regime is still restricted to allow such sale of active infrastructure to telecom licensees only, which needs to be relooked into.

IAMAI would also suggest that sharing of active infrastructure by IP-1 along with selling of active infrastructure directly to enterprises for their private/captive use should also be allowed. Such large enterprises or Data Centre providers or Cloud Service Providers or CDN providers contribute enormously to digital growth in the country and are currently constrained to buy the same (network services) from a handful of TSPs.

Current Indian law does not allow unlicensed entities, including CSPs, to access passive infrastructure such as dark fibre from IP-I companies for any purpose. Thus, CSPs are unable to buy or lease dark fibre in order to construct, operate and efficiently manage their own networks (configured to their own specialist requirements and optimized for customers).

CSPs presently are forced to procure generic network connectivity services from local TSPs. This is problematic because traditional networks operated by TSPs are principally designed for voice or public data services, such as IP services. They are not suitable for cloud services, which require very high availability, bandwidth and low latency for extremely high amounts of data. Providing cloud services utilising TSP services is especially difficult given India's vast geography and relatively limited existing technology infrastructure and broadband deployment. The services provided by TSPs are also substantially more expensive than buying



or leasing dark fibre from IP-I companies, and also significantly more expensive than similar services available in other countries.

However, IAMAI would also like to highlight that the leading IP-Is in the country are directly or indirectly majority owned by the TSPs themselves. Through these IP-Is, TSPs have tried collaborating with each other by sharing of passive infrastructure to reduce cost; whether it has been towers or fiber, for their own commercial interests. In contrast, TSPs have refrained from sharing of active infrastructure, despite existing supportive regulatory environment, as it allows them to maintain a competitive edge over their competitors. Optional sharing of active infrastructure is already allowed as per provisions of Unified License ('UL').

Therefore, merely permitting IP-1 to share active and passive infrastructure may not be enough to ensure that it actually does happen. The valid interests of the TSPs who own the IP-1 must also be taken into consideration, and the long-term concern related to dilution of competitive spirit and lack of product/service differentiation between the TSPs due to sharing of same active infrastructure owned by an IP-I also needs to be looked into.

The telecom sector has undergone a consolidation phase in the last few years and the competition in the sector is now optimum with three private TSPs actively investing for network upgradation. While sharing of active infrastructure through an IP-I is primarily aimed at cost savings for the players, it is likely to impact the long-term interest of the sector. TSPs may be reluctant to improve service requirements, as their coverage area/service level will always be 'equal' to the other sharing the same network. It can also impact introduction of newer technology by the players and reduce future investment in telecom infrastructure. Ultimately it will reduce the competitive spirit of the service providers and harm the interest of consumers and the nation.

Internationally, it is now being increasingly acknowledged that while Competition and/or regulatory authorities may be able to tackle some competitive/collusive concerns (arising from active infrastructure sharing) with remedies, the long-term impact of active infrastructure sharing on competitive parameters such as network coverage and the deployment and spread of new technologies are matters of concern.

Therefore, regulators need to assess and offer proper incentive models for IP-1 and TSPs for a new regime that allows active and passive infrastructure sharing so as to encourage such sharing without adversely affecting the commercials of any stakeholder, so as to ensure the overall objective of developing a robust digital infrastructure does not get undermined in the long run.

Question 2.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.

IAMAI Submission: IP-Is should be permitted to own, establish and maintain following active infrastructure components in identified sparsely populated areas with poor digital connectivity:

- a. Antenna
- b. Feeder cable
- c. Node B
- d. Radio Access Network (RAN)
- e. Transmission systems
- f. IBS
- g. Wired access networks

Such common active infrastructure should also be shared with other enterprises which might not be licensed TSPs but build/use networks purely for their own captive/internal use to connect its sites/nodes/PoPs/DCs i.e private backbone network builds by Banks, Stock Exchanges, Data Centers, CDN Providers, Cloud Service Providers etc.

In this regard we would like to highlight that TRAI has proposed that IP-I companies be allowed to provide infrastructure access to 'other TSPs', subject to them being licensed by or registered with the Department of Telecommunications ("DoT") or Ministry of Information and Broadcasting ("MIB"). The proposal includes CSPs among such 'other TSPs'. IAMAI submits that CSPs are not equitable to TSPs and should not be counted as other TSPs, given the following distinctions:

- i. CSPs (previously recognised by MEITY as a "delivery model for information services") provide information services to customers, which are distinct from telecom services provided by TSPs. CSPs use network infrastructure only for their own internal purposes namely to connect their data centres to each other. Customers access the information services (i.e. cloud services) provided by CSPs using network connectivity provided exclusively by TSPs.
- CSPs do not provide telecom services (e.g. internet connectivity) to customers. Therefore, the regulations pertaining to providing customer telecom services are levied on TSPs should not be imposed on CSPs. All concerns underlying the regulatory restrictions on TSPs still hold good, as the final connectivity for the customer to CSPs is routed through a TSP.
- iii. CSPs are already heavily regulated by the IT Act, and MeitY regulates CSPs through their empanelment as government-approved service providers under its 'MeghRaj' cloud computing initiative, where they have to demonstrate compliance with standards on security, interoperability, data portability, service level agreements, and contractual terms and conditions via a rigorous audit conducted by the MeitY's



Standardisation Testing and Quality Certification Directorate to achieve empanelment for the delivery of their services.

Therefore, it is suggested that CSPs be recognised independently from TSPs or "Other TSPs" and no further regulations be imposed on such service providers.

Question 2ii: 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.

IAMAI Submission: IP-1 should be allowed to share sharable active infrastructure not only to service providers licensed/ permitted/ registered with DoT/ MIB also but also with parties/enterprise seeking such infrastructure for their private/captive use.

However, keeping in mind the interests of TSPs highlighted earlier, a distinction perhaps needs to be made between rural and urban areas for the following considerations:

- i. TSPs would have higher commercial interests vested in the Urban areas, and any provision that affects their commercials need to be suitably factored in.
- ii. Active sharing may yield better economies of scale in rural areas given these areas are expected to witness maximum IP- 1 investments in the coming days. One of the biggest challenges for heavy capital investments in IP-1 infrastructure in rural regions is low utilisation of resources. Encouraging active and passive sharing of infrastructure may just be the best commercial incentive for such investments.

Question 2 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.

IAMAI Submission: IAMAI suggests enhancing the scope of IP-I registration category to include some performance guarantees and terms as applied to licensed TSPs today for the active infrastructure provided by IP-1. No additional terms or provisions may be required for sharing (rent/lease/sell) of passive infrastructure. This will provide a level playing field for TSPs when IP-1 starts competing with TSPs for offering such active infrastructure services (network services etc.) to a broader set of customers beyond TSPs.

IP-I companies should be allowed to share passive infrastructure not only with licensed/registered service providers, but also with other unlicensed/unregistered entities like CSPs (subject to suitable limitations). The passive infrastructure should not be used for the provision of telecommunications services to customers, and such services should continue to be provided only by properly licensed telecommunications service providers ("TSPs"). IP-1 may be levied similar fee as applicable for licensed TSPs towards the sale/lease/rent of active/passive infrastructure to parties other than TSPs; to ensure that they



do not have any competitive advantage over TSPs when selling/leasing/renting such services to non licensed entities and also Government does not lose its due revenue share.

The current law should be amended to allow CSPs to use passive infrastructure obtained from IP-I companies (or from TSPs) in order to establish, maintain and operate an extended "private telegraph" — a type of private network — connecting two or more data centres in different locations. The current law should be amended to allow private telegraphs to be established beyond the limits of "a single building, compound or estate", and to pass over or under public roads, provided that they are only used for the purposes of an internal/private network (e.g., connecting two or more data centres). It should be clarified that such "private telegraph" would not be used for the provision of telecom services to customers and that such services will continue to be provided only by properly licensed TSPs.

Question 2 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?

IAMAI Submission: IP-I should be allowed to obtain Wireless Telegraphy Licenses from Wireless Planning and Coordination (WPC) wing of the DoT for possessing and importing wireless equipment. The process for obtaining the same should be uniform as applied to licensed TSPs from time to time.

Question 2 v: Should Microwave Backbone (MWB) spectrum allocation be permitted to IP-I for establishing point to point backbone connectivity using wireless transmission systems?

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

Question 3: 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.

Not Applicable

Q4) Any other issue relevant to this subject

Nil

----- Original Message ------

From: Bhanupreet Singh Saini

 bhanupreet@iamai.in>

Date: Oct 1, 2019 1:19:31 PM

Subject: Re: IAMAI Submission on TRAI Consultation Paper on Review of Scope of Infrastructure Provider Category- 1 Registration

To: sksinghal@trai.gov.in Cc: rksingh@trai.gov.in

To Shri S. K. Singhal Advisor (BB&PA) TRAI New Delhi

Sub: IAMAI Submission to TRAI Consultation Paper on Review of Scope of Infrastructure Providers Category- 1 (IP - 1) Registration

Dear Sir,

Further to my mail on the above subject dated 30 September 19, we would like to submit that our member Reliance Jio has views which are divergent to our submission on the consultation Paper.

This is for your kind information and necessary action please.

Regards, Bhanu

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