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Shri S. K. Singhal

Advisor (BB&PA)

Telecom Regulatory Authority of India

Mahanagar Door Sanchar Bhawan,

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New Delhi-110002

Ref: ACTO's Response to TRAI's Consultation Paper dated August 16, 2019 on "Review of scope of Infrastructure Providers Category-I (IP-I) Registration"

Dear Sir,

With reference to the *Consultation Paper on "Review of scope of Infrastructure Providers Category-I (IP-I) Registration"* issued by Hon'ble Authority, Association of Competitive Telecom Operators (ACTO), is pleased to provide its comments.

We hope that our comments (enclosed as Annexure - I) will merit consideration of the Hon'ble Authority.

Thanking you,
Respectfully submitted

Yours sincerely,
for **Association of Competitive Telecom Operators**



Tapan K. Patra
Director

Encl: As above

Annexure-I

ACTO's comments on TRAI Consultation Paper on Review of Scope of Infrastructure Providers Category-I (IP-I) Registration

The Association of Competitive Telecom Operators (ACTO) is pleased to submit the following comments to the Telecom Regulatory Authority of India (TRAI) in response to its suo-motu Consultation Paper on "Review of Scope of Infrastructure Providers Category-I (IP-I) Registration" dated 16th August, 2019.

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

ACTO's response:

Yes, the scope of Infrastructure Providers Category – I (IP-1) registration should be enhanced to include provisioning of common sharable active infrastructure also. Currently, IP-1s are allowed to deploy passive infrastructure that is shared between telecom licensees on mutually agreed terms and conditions. Further, DoT via letter dated 28.11.2016 clarified that IP-1s are allowed to deploy active infrastructure on behalf of telecom licensees, however, DOT stipulated that such infrastructure has to be owned by a telecom licensee. Thus, provisioning of active infrastructure under the scope of the IP-1 registration would allow them to own, build, buy, sell, rent active infrastructure also apart from passive infrastructure which they are currently permitted under their registration. Infact once permitted they should be allowed to provide the active infrastructure to all licensed telecom service providers who can they use the same to provide telecom services under their respective licenses. Such permissibility should be technology neutral, platform neutral and service agnostic. The infrastructure thus created to be shared needs to be interoperable and should permit seamless interconnection between IP-1s and TSPs apart from IP-1 to IP-1. This is important in order to ensure more choice to other TSPs who leased infrastructure from other TSPs.

The next wave of growth is data. Therefore, it is important that there should be additional players in the eco-system who could fill the supply of digital infrastructure to enable licensed telecom service providers to offer services backed by high bandwidth, resilient infrastructure. The sector now has limited players and in order to maintain competition in the sector, it is imperative that scope of IP-1s who have been providing passive infrastructure be enhanced to provide/own/build active infrastructure also which should be sharable across all licensed entities.

ACTO consistently supports for full fledged infrastructure sharing irrespective of the category be it licensed or under registration. It is the era of sharing and the same has been adopted across the globe in all sectors like Transport, Hospitality, Software, Tourism etc which are not necessarily restricted to Telecom. Sharing yields in saving of both capital and operating

expenditure cost. Thus it enables service providers to provide cost effective service to the customers.

Based on various TRAI recommendations (dated April 11, 2007, April 17, 2015 and March 9, 2017), DoT issued guidelines for active infrastructure sharing in 2008 and permitted sharing of active infrastructure amongst service providers based on the mutual agreements entered amongst them. The license amendments to allow active sharing were issued on 11th February 2016.

But still there are restrictions on the sharing of infrastructure between various telecom operators and infrastructure providers including ISPs. This has resulted in unnecessary duplication of infrastructure. Policy must allow sharing the telecom infrastructure for optimum usage subject to mutual agreement between TSPs/ISPs/IP-1s. It will lead to higher utilization as well as reduction in OPEX for service providers and better business case for infrastructure creators.

The clause no. 1.1(f) of NDCP-2018 has rightly stated as -

"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."

TRAI had also recommended for infrastructure sharing in the recommendation for In Building Access by TSPs on 20.01.2017 as -

"(i) Considering the requirement of ubiquitous voice and data network inside the large public places/commercial complexes/residential complexes and considering the fact that it is not practical for each TSP to put its IBS and other telecom infrastructure inside such complexes, the requirement of sharing the In-building telecom infrastructure including IBS has become inevitable. Therefore, TSPs/IP-Is should be mandated to share the in-building infrastructure (IBS, OFC and other cables, ducts etc) with other TSPs, in large public places like Airports, hotels, multiplexes, etc., commercial complexes and residential complexes."

On similar line, ACTO supports for Infrastructure Providers Category – I (IP-I) registration be enhanced to include provisioning of common sharable active infrastructure also. IP-1 have expertise to build the infrastructure. Sharing of common sharable active infrastructure should be allowed among the IP-1s as well. It will facilitate to create infrastructure and increase the competition, thereby benefiting the consumers. We also suggest that Infrastructure sharing with IP-1 should be on non discriminatory basis.

ACTO suggests TRAI should recommend for allowing full fledged sharing of active and passive infrastructure between various telecom operators and infrastructure providers. In addition to IP-1, the ISPs should be allowed to sell connectivity to other TSPs. Currently ISPs are not allowed to sell connectivity to other ISPs alone. ISPs can buy connectivity from other TSPs including ISPs. This anomaly should also be addressed.

Q.2 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.**

ACTO's response:

DoT has earlier laid down the active elements that are permitted to be shared, viz. antenna, feeder cable, Node B, RAN, Transmission Systems. However, in view of evolving technologies which may necessitate transition of networks from brick and mortar to software defined networks as well as network virtualization functions, creating an exhaustive list may not help. Perhaps the best approach would be to permit every piece of infrastructure which may be considered as active and sharable. The exclusions from the list will be those elements which have been specifically identified by DoT/TRAI as not falling in the definition of activation infrastructure.

It may include the Switch, Router, RAN, Network roaming, Core network. These are considered forms of active sharing as they require operators to share elements of the active network layer including, for example, radio access nodes and transmission equipment, Wi-Fi Network, MPLS/Ethernet and Optical Network like GPON/EPON/GEAPON. For RAN sharing, Mobile Network Operators (MNOs) continue to keep separate logical networks and the degree of operational co-ordination is less than for other types of active sharing.

It is not practical for each TSP to put its own equipment in all places like In-Building Solution (IBS) and other telecom infrastructure inside such complexes, the requirement of sharing the In-building telecom infrastructure including IBS has become inevitable. Therefore, TSPs/IP-Is should be mandated to share the in-building infrastructure (IBS, OFC and other cables, ducts etc) with other TSPs, in large public places like Airports, hotels, multiplexes, etc., commercial complexes and residential complexes.

As stated in response to Q. 1 above, the infrastructure thus created should be neutral from service provider perspective. The same should be technology neutral, platform neutral and service agnostic.

- 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.

ACTO's response:

No. IP-1 should not be allowed to provide end-to-end bandwidth through lines to service providers licensed/permitted/registered with DoT/MIB or similar ministries.

Provision of end to end bandwidth was initially permitted to IP-II providers and they were covered under the licensing regime. In 2005, IP-II license was discontinued and the then existing IP-II licensees were asked to migrate to NLD (National Long Distance) licence, which allows NLD licensees to provide leased circuit connectivity to end customers. Hence provisioning of end-to-end bandwidth continues to be a licensed activity as per DOT.

Thus, Provision of bandwidth (is a right granted under section 4 of Indian Telegraph Act, 1885) to operate the telegraph. This is a form of telecom service permitted to select telecom service providers like NLDO, VNO with NLD authorization, Access etc. Therefore permitting IP-1s to provide end to end bandwidth will be an infringement on the scope of existing licensed telecom service providers many of whom solely provide end to end bandwidth to their end customers.

Bandwidth may not qualify under the definition of active infrastructure. Therefore if entities operating as IP-1 desire to provide end to end bandwidth, they should be directed to take suitable license as currently exists and not under the existing scope of IP-1 even after including active infrastructure.

ACTO strongly believes regulator/policy makers should ensure level playing field among the service providers while making any recommendation. TSP's license condition permits buying the telecom resource from another licensed TSPs.

In the past, TRAI Recommendation on Telecommunications Infrastructure Policy dated 12th April 2011 had also states that-

"4.2 Department of Telecommunications should immediately bring the IP-1 under Unified License".

ACTO suggests to place IP-1 under general category of license by creating a new category meant only for creating and providing all types of infrastructure so that it can cater to the requirements of all TSPs. The license should be light touch in nature. IP-1 should remain as infrastructure provider not to be service providers like other TSPs/ ISPs. They should not be allowed to provide service to the end users/ customers as it will infringe upon the scope of service allowed in other license category like NLD and UL VNO. TSPs buying infrastructure in any form from IP-1s should be allowed to deduct such payments while arriving at AGR for license fee payment purposes.

In case IP-1 wishes to provide service to end users than other licenses are already available like UL VNO, NLD etc. It would be unfair, if IP-1s are allowed to provide services which are being already served by other licensees.

- iii. Whether the existing registration conditions applicable for IP-1 are appropriate for enhanced scope or some change is required? If change is suggested, then please provide details with reasoning and justification.**

ACTO's response:

No. ACTO view is that the current four page registration guidelines are not appropriate for enhanced scope of changes i.e., to permit IP-1s to provide sharable active infrastructure. The same needs to be upgraded in the form a revised registration/authorization/license to permit creation and sale of active infrastructure. The current framework of IP-1 registration can at best cater to passive infrastructure. The current licenses are meant for various telecom service. There is no single document which provides framework for provisioning of infrastructure (active and passive). NTP 2012 has envisaged a category called NSO – network service providers. This is similar to what we have suggested as above. If not possible, then the existing framework needs to be amended as the infrastructure thus created to be sold, needs to ensure that it is secured, not vulnerable from cyber security and network perspective, is audited as per international accredited standards etc. All requirements related to network and cyber security including lawful intercept as mandated to TSPs need also to be complied in the proposed framework of IP-1s.

ACTO suggests to place IP-1 under general category of license by creating a new category meant only for creating and providing all types of infrastructure so that it can cater to the requirements of all TSPs. The license should be light touch in nature. IP-1 should remain as infrastructure provider not to be service providers like other TSPs/ ISPs. They should not be allowed to provide service to the end users/ customers as it will infringe upon the scope of service allowed in other license category like NLD and UL VNO. TSPs buying infrastructure in any form from IP-1s should be allowed to deduct such payments while arriving at AGR for license fee payment purposes.

- iv. Should IP-1 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?**

ACTO's response:

We have no comments.

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

ACTO's response:

We have no comments.

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.

ACTO's response:

Our response to Q1 is affirmative and thus we have no further comments apart from what has been stated in Q2 as above.

Q4. Any other issue relevant to this subject

ACTO's response:

Infrastructure sharing should be looked into in a holistic manner rather in piece meal approach. Active and passive infrastructure should be allowed to share to the maximum possible extent in order to get the full advantage of sharing. It also involves the removal of restrictions on the interconnection in the network. By having restrictions of interconnection in the network, it blocks the concept of sharing. NDCP-2018 has also given emphasis under the strategy section as:

"E. Strategies:

(i) (d) By restructuring of legal, licensing and regulatory frameworks for reaping the benefits of convergence;

E (iii) (w) By reviewing the policy of IP- PSTN connectivity;"

1.1 " (g) Enabling Infrastructure Convergence of IT, telecom:

i Amending the Indian Telegraph Act, 1885 and other relevant acts for the purpose of convergence in coordination with respective ministries

iii Restructuring of legal, licensing and regulatory frameworks for reaping the benefits of convergence.

iv Allowing benefits of convergence in areas such as IP-PSTN switching."

TRAI should also recommend for allowing full fledged sharing of active and passive infrastructure between various telecom operators and infrastructure providers. More so, ISPs should be allowed to sell connectivity to other TSPs. Currently ISPs are not allowed to sell connectivity to other ISPs alone. ISPs can buy connectivity from other TSPs including ISPs.

We request TRAI to look into the sharing of infrastructure by enhancing the scope of other licenses in view of NDCP-2018 in addition to the enhancement of scope for IP-1. Sufficient incentives need to be built in to create value in creation of infrastructure.
