Mag. Josef Schieder
CEO

Date: 16 September, 2019

Attention to:

Mr. Shri S.K. Singhal
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Telecom Regulatory Authority of India
Mahanagar Door Sanchar Bhawan,
Jawahar Lal Nehru Marg,
New Delhi – 110002

Subject: RadioLED response to Consultation Paper on Review of Scope of Infrastructure Providers Category-I(IP-I) Registration

Dear Sir,

We would like to thank TRAI for undertaking consultation to clarify on the Scope of Infrastructure Providers Category-I IP-I) Registration. With new technology available to Infrastructure providers and (local) governments, and the evermore increasing demand on performance of users, it is of critical to create more options for the introduction cost effective and innovative solutions.

RadioLED in collaboration with our local partners in India, welcome this opportunity to provide inputs based on our experience in core network development and operation, in partnership with (local) governments.

Furthermore, we have provided our perspectives on how (local) governments in urban and rural communities can foster innovation, network neutrality and sharing, digital inclusion and economic growth in collaboration with service providers, to enable cost efficient areawide and nationwide benefits of enhanced service and new applications, such as IoT, ultra-speed broadband, etc.

Please find enclosed our detailed submission on the TRAI consultation paper. We look forward to your kind consideration of our contribution and opportunity to discuss further.

Thank You.

Sincerely,
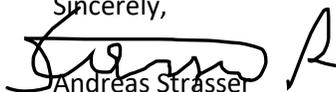
Andreas Strasser

RadioLED response to Consultation Paper on Review of Scope of Infrastructure Providers Category-I(IP-I) Registration.

1) Should the scope of Infrastructure Providers Category – I (IP-I) registration be enhanced to include provisioning of common sharable active infrastructure also?
YES. TRAI should also consider enhancing the registration to include registration of local Municipalities as Infrastructure Providers Category I (IP-I). This will allow a third option (1.IP-I (infrastructure provider), 2.IP-II/TSP, 3.Public-Private Investment) for investment and more rapid expansion of passive and active telecommunication infrastructure, through (local) public-private partnerships, in such encouraging development and empowering the smaller (rural) communities.
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.
Active sharable infrastructure elements: sharable infrastructure would be most practical in the form a service contract. Service providers would rent network as a service. Justification: This would guarantee equal pre-defined terms and prices for all similar network users. Therefore, the IP-I (core network provider) should be able to own, establish, maintain and operate, all elements technically required to provide the connection between (international) backhaul and service owner/provider to the end-user. These elements can wire, wireless or a combination of both. Cost-saving, rapid deployment, accessibility and more competition will benefit the end-users, underserved communities and new business. Category of SP's: YES. In principle, the core network should be neutral and accessible/usable by any service provider of any type of digital service: VNO's, MNO's, MSO's, OSP's, TSP's, including Cable Media and Broadcasting and emergency services as well as government entities or international (retail) parties that require network service.
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.
YES. In principle, the core network should be neutral and accessible/usable by any service provider of any type of digital service: VNO's, MNO's, MSO's, OSP's, TSP's, including Cable Media and Broadcasting and emergency services as well as government entities or international (retail) parties that require network service.
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.

Existing registration conditions seem mostly appropriate. Extension of registration for local/municipal governments would increase the possibilities for (cost efficient) roll-out of shared (neutral) networks and digital connectivity in underserved areas. Conditions should incentivize local and international investment.
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?
YES. IP-I's should have the possibility to import and build networks in the most cost-efficient way and making use of the most advanced and constantly changing technology. This will ensure the highest standard and quality of communication, driven by community and business demand and needs.   Methodology: keeping in mind the concept of network as a service and the objective of cost-efficiency and connectivity for all, the license regime should be kept as simple as possible. Revenue taxation would be the simplest form and would reduce the (upfront) barriers of investment by the infrastructure providers.
v) Should Microwave Backbone (MWB) spectrum allocation be permitted to IP-I for establishing point to point backbone connectivity using wireless transmission systems?
YES. When available, this would help enhance and guarantee the quality of service to the community, whether service is provided to TSP's or to OSP's/network users/applications. With growing demand in use of data, this becomes even more relevant.
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.
No comment.
4) Any other issue relevant to this subject.
Inclusion, active participation and empowerment of local governments/municipalities is relevant in order to increase the momentum of connectivity and digital transformation. Independence from infrastructure providers and service providers can provide the necessary incentive for local public-private partnerships to create new opportunities for normally underserved communities.

For accelerating migration of wireless telecom networks towards 5G technologies
And to improve broadband speeds, the policy should facilitate national fiber to each city as well as local incentives for fibre to-the home/premises rollouts.

With new mesh network wireless technology available a combination of the above can increase the deployment of networks and nationwide broadband connectivity tenfold and reduce the costs by 50-80% compared to conventional wired fibre rollouts. In addition, the implementation of new technology and policy can attract collaboration and investments necessary for inclusion

of rural and underserved areas, providing access to the latest technologies and services (broadband, WiFi, IoT, 5G, etc.) for all.

We fully support the National Digital Communications Policy in its strategy to ''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." to secure universal broadband access. To drive this effort, we believe moving towards similar models as in Europe will enhance competition, improved quality of service and network pricing, this in the end the community/consumer.