



Annexure-A

**VII Comments to the TRAI's Consultation Paper on "Review of Rating of Properties for Digital Connectivity Regulations, 2024" dated 27.02.2026**

At the outset, we are thankful to the Authority for giving us this opportunity to provide our comments to the TRAI's Consultation Paper on "Review of Rating of Properties for Digital Connectivity Regulations, 2024" issued on 27.02.2026.

In this regard, we would like to submit our comments as follows, for Authority's kind consideration.

1. At the outset, we submit that the Framework on Rating of properties is a welcome initiative by the Authority and it reflects a proactive step towards improving the in-building digital connectivity and infrastructure standards. This will further enhance the overall experience of the consumers.
2. **Integrated digital ecosystem:**
  - a. In today's time, the mobile connectivity has become a necessity and consumers expect to be connected at all places. It is well proved now, that if the digital connectivity infrastructure is not enabled during the design stage itself, it becomes very cumbersome and comparatively costly to build that infrastructure post construction. Enabling digital connectivity at the pre-construction stage is critical because it avoids inefficiencies and ensures buildings are future-ready.
  - b. This will help the Property Managers of the said building/premises to build more trust with the consumers and also influence the consumer's choices. The building/premise with better digital connectivity will always be preferred more by the consumers as compared to the ones having lesser connectivity.
  - c. The Rating framework will unlock value in providing in-building coverage. With growth in economy and focus on infrastructure, huge number of buildings, premises, malls, metro-stations, airports etc. have come up in last few decades, with ever increasing growth. With such expansions and growth in number of buildings and premises, there comes a problem of digital connectivity inside them, especially in indoors, basements, parking, high-rises etc.



3. While the initiative is commendable and step in the right direction, some of the aspects which needs to be reviewed, are mentioned as below:
4. **Rating Framework should accept both Wireless and Fibre based Backhaul:**
  - a. While fiber backhaul is desirable however, in many cases it might not be possible to have fiber availability till the building/premises and/or the microwave/spectrum based backhaul would be sufficient.
  - b. Restricting backhaul only to fiber may theoretically appear optimal, but practically a flexible, technology neutral approach allowing both fiber and spectrum based backhaul is much more efficient and realistic due to below factors:
    - i. **Feasibility across diverse geographies:** The deployment of fiber is often constrained by RoW issues, high costs and time-consuming trenching. In comparison wireless backhaul provides a quick alternative especially in dense urban areas or difficult terrains.
    - ii. **Cost efficient:** The high cost of trenching and other costs leads to higher CAPEX and civil works. Whereas, the spectrum based backhaul comparatively may be more cost- effective due to low capacity requirements.
    - iii. **Network Redundancy:** The Global practices lay more emphasis on combining both Fiber and wireless backhaul for more redundancy. Relying only on fiber backhaul might increase the risk of failure.
    - iv. **Technology Neutral framework:** The regulatory frameworks should generally focus on a flexible approach which encourages innovation and optimal network design by TSPs, hence mandating a specific technology may defeat this principle.
    - v. **Readiness for advanced technologies:** While the fiber is ideal for high capacity needs, wireless backhaul technologies are evolving rapidly and can support high throughput use cases.
    - vi. **Alignment with Global practices:** The global advanced markets adopt multi layered backhaul strategies which combines both fiber and wireless technologies to optimize performance and cost.
  - c. In view of the above, we recommend that **in the early years of roll-out of rating framework, the choice of backhaul should be kept flexible and open to commercial relationship between Property Managers and TSPs/ISPs.**



## 5. 'Availability of Service Providers'

- a. The Manual mentions that for availability of 3 or more wireless service providers, the score of 7.5 would be given and for availability of 2 wireless service providers, the score of 5 would be given.
- b. Awarding a relatively high weightage of 5 for coverage by only two mobile service providers may not adequately safeguard consumer interests, as it does not ensure sufficient competition, redundancy, or quality of service within the property.
  - i. **Limited Choice for Consumers:** If a high weightage of 5 is awarded with only two operators, consumers may not find their preferred service provider available indoors. This restricts freedom of choice and may force users to rely on sub-optimal networks.
  - ii. **Risk of Sub-optimal Quality of Experience:** Even if coverage exists (>75%), performance (speed, latency, congestion) may vary significantly. Fewer operators may increase the likelihood of network congestion, especially in high-density buildings. Thereby, impacting the experience of consumer in the property.
  - iii. **Lack of Competitive Pressure:** Presence of only two TSPs reduces competitive intensity, which can impact service quality, innovation, and responsiveness to consumer issues.
  - iv. **Reduced Network Resilience:** In case of outage or degradation in one network, consumers are left with limited fallback options. Choice of operators may provide better redundancy and service continuity.
  - v. **Misaligned Incentives for Developers:** A higher weightage at the "two-operator" level may discourage developers from enabling infrastructure for additional operators. This can lead to minimum compliance behaviour rather than optimal consumer-centric design.
- c. **Given that each of the mobile service providers in India is serving crores of subscribers, the focus and efforts should be that the mobile connectivity from at least three service providers is made available. In the overall weightage framework and consolidating it to arrive at the Rating, the gap between weightage of '5' and '7.5' will not be seen as significant enough to nudge and encourage the Property Managers for having connectivity from at least 3 mobile service providers.**
- d. **Hence, the weightage for "If at least two mobile service providers have integration with DCI in the property or more 75% coverage in indoor areas" the weightage of should be made '3' instead of '5'.**



## 6. Public -wifi weightages to be Removed / Reduced

- a. We once again submit that giving weightages for public wifi could give a bypass opportunity to the Property managers and they might become willing to have lower scores on mobile connectivity as scores on public wifi could compensate and give them higher ratings.
- b. The TSPs have deployed next generation technologies (i.e. 4G/5G) in mobile networks giving good data speeds and thus enhanced user experience.
- c. The Indian telecom industry has built a robust and ubiquitous digital mobile network and its infrastructure which connects lakhs of towns, districts and villages including deep rural interiors and hinterlands across the country, over the last decade, especially last 7-8 years. This digital mobile network and infrastructure, entailing massive investments, is the backbone that delivers high quality data services and has also proved its resilience and scale during the Covid-19 times.
- d. **High Quality Mobile Networks diminish need for Public Wi-fi Usage**
  - i. With the widespread availability of 4G services in the country and rollout of 5G, there is ubiquitous coverage of 4G and 5G mobile networks as such, public at large now have access to fast and reliable mobile internet.
  - ii. With ubiquitous coverage, enhanced Data speeds, affordable tariffs, there is marginal utility left for availing data service through public Wi-Fi. Further, if Mobile coverage is adequately ensured by the Property manager then, there is hardly any utility left for the consumers to use public wifi.
  - iii. The mobile data is available with convenient recharge options and at affordable prices, which are one of the cheapest across the world. For last many years, the industry is also providing x GB/day kind of data plans, which has further made the tariffs more affordable.
  - iv. Public wifi are not seen with the same level of trust in security as is the case of mobile services. Thus, the consumers are most likely to continue to mobile services than switching to public-wifi.
- e. **Improved Mobile Connectivity in Buildings will further limit Public-wifi Usage:** In addition to above, if a property would have seamless, ubiquitous and high-speed Mobile coverage, there would be no reason for consumers to switch to public wi-fi networks and thus, leading to such networks being left unused and unattended to in long run.



- f. **Deploying inefficient technology – Its influence on Property Manager:** Seeking to give Rating based on deployment of inefficient technology which may not get utilized in long run, would discourage the Property Managers from adoption of the Rating framework as it would need them to bear costs on the public wifi infrastructure.
- g. **Given this, we strongly oppose equal sub-weightage being given to Public wifi as is being given for Mobile coverage. It is strongly recommended that no inefficient use case (i.e. Public wi-fi) is pushed under the Rating framework, which can jeopardize the adoption of such a novel policy measure and collaboration of all stakeholders.**
- h. **Therefore, there should not be any weightage for public wifi. If that is not possible, it should not be more than 10% of the weightage being provided for mobile coverage, irrespective of public or non-public areas. Suitable adjustments should accordingly be made to the weightages and mobile coverage/infrastructure weightages are accordingly increased.**

In addition to above-mentioned comments, kindly find enclosed provision-wise comments at *Annexure-B*, in the format prescribed in the consultation.

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**Annexure-B**

S.No.	Rating Manual reference	Subject	Comments/Suggested modified wordings	Justification for Comments/ Suggestions
1	2.4	Digital Connectivity Infrastructure Providers (DCIPs)/Infrastructure Providers Category 1 (IP-1s)	Both TSPs/ISPs and DCIPs can support Property Manager. Therefore, TSPs/ISPs are also to be included.	Both TSPs/ISPs are empowered through license, for developing and maintenance of digital infrastructure other than DCIP. Hence, TSPs/ISPs can't be excluded.
2	Clause 3.2	Registration Process of DCRA	The registration process of DCRA or any review thereafter, should also involve evaluation of their application by an Empowered Committee, which should also include Technical experts from TSPs.	As the major part of the rating framework would be to set up digital connectivity infrastructure and connectivity, from mobile and wireline broadband point of view, it is important that a collaborative approach is adopted and TSPs are also involved in examining the registration of DCRA. The technical experts from TSPs can provide rich insights during evaluation process as well as subsequently during any review of the working of any DCRA.
3	Clause 3.7 iii. & vi.	Rating Process-Due-Diligence Stage I & II:	The Property Manager should be given flexibility to directly opt for Due Diligence Stage II or to opt for Stage I and Stage II together, without going through a linear and sequential process.	<ol style="list-style-type: none"><li>1. The Rating framework has to be flexible and user-friendly especially during initial few years.</li><li>2. As the evaluation is to be done by the DCRA based on a commercial relationship between Property Manager and DCRA, there should not be any time limits of submission of additional information or mandatory two phases of due diligence etc.</li><li>3. It could be a clear case that the Property Manager takes services of DCRA during designing and/or construction phase itself, and may want to reach Rating Platform straight for Rating evaluation.</li><li>4. Therefore, the Rating Platform should also allow the same, without having to go through two stages of Due Diligence.</li></ol>



S.No.	Rating Manual reference	Subject	Comments/Suggested modified wordings	Justification for Comments/ Suggestions
4	Table 4.1, Point no. 4.8.2 & 4.8.4	Assessment Methodology for Category 'A' Properties	There should not be any weightage for public wifi. If that is not possible, it should not be more than 2 score, irrespective of public or non-public areas. Suitable adjustments should accordingly be made to the weightages and mobile coverage/infrastructure weightages are accordingly increased.	<p>1. Giving weightages for public wifi could give a bypass opportunity to the Property managers and they might become willing to have lower scores on mobile connectivity as scores on public wifi could compensate and give them higher ratings.</p> <p>2. The Indian telecom industry has built a robust and ubiquitous digital mobile network and its infrastructure which connects lakhs of towns, districts and villages including deep rural interiors and hinterlands across the country, over the last decade, especially last 7-8 years.</p> <p>3. Public wifi are not seen with the same level of trust in security as is the case of mobile services. Thus, the consumers are most likely to continue to mobile services than switching to public-wifi. For detailed justification, kindly refer to the point no.6 of the comments given in the <b>Annexure-A</b>.</p>
5	Clause 4.5.1(ii),(a), 4.6.2	Sub-Criteria: Availability of the latest generation of mobile connectivity	Backhaul should be kept flexible and both backhaul through fibre or through spectrum, should be permissible.	For justification, kindly refer to the point no. 4 of the comments given in the <b>Annexure-A</b> .
6	4.8.1 ii. &	Sub-Criteria: Mobile network coverage and performance in public areas of property	1. It should be clearly mentioned that RF testing, coverage maps, speed tests etc should be arranged by Property Manager directly or through a 3 <sup>rd</sup> Party.	1. RF testing, maps, speed tests etc can be done by 3 <sup>rd</sup> Parties and it should be clearly defined in the manual that the Property Manager has to ensure this, without loading the same on TSP.
	4.8.3 ii.	Sub-Criteria: Mobile network coverage and performance in non-public areas	2. Reference to Test Probes should be removed.	2. Test probes are not possible at TSPs end. Instead cell level KPIs can be checked, if needed.



S.No.	Rating Manual reference	Subject	Comments/Suggested modified wordings	Justification for Comments/ Suggestions
7	Clause 4.8.3 (v) S. No. 2. of the Table 4.47	If at least 2 service providers individually have overall more than 70% mobile coverage (RSRP. -110 dBm) for 4G/5G services in non-public areas, with average minimum download speed of 10Mbps for 4G or 100 Mbps for 5G technology as applicable.	If at least 3 service providers have more than 60% mobile coverage for their latest generation of technology in non-public areas (including lifts and basements) with average minimum download speed of 10Mbps for 4G or 100 Mbps for 5G technology as applicable.	It is imperative that adequate service providers coverage is made available, to ensure universal connectivity.
8	Table 4.41(2)	If at least two mobile service providers individually have overall more than 75% coverage (RSRP. - 110 dBm) for 4G/5G services in the property either through integration with DCI or otherwise.	In the weightage for "If at least two mobile service providers have integration with DCI in the property or more 75% coverage in indoor areas" the weightage of '5' to be reduced to '3'.	<p>1. Given that each of the mobile service providers in India is serving crores of subscribers, the focus and efforts should be that the mobile connectivity from atleast three service providers is made available. In the overall weightage framework and consolidating it to arrive at the Rating, the gap between weightage of '5' and '7.5' will not be seen as significant enough to nudge and encourage the Property Managers for having connectivity from atleast 3 mobile service providers.</p> <p>2. Hence, the weightage for "If at least two mobile service providers have integration with DCI in the property or more 75% coverage in indoor areas" the weightage of should be made '3' instead of '5'. For detailed justification, kindly refer to the point no. 5 of the comments given in the Annexure-A.</p>



S.No.	Rating Manual reference	Subject	Comments/Suggested modified wordings	Justification for Comments/ Suggestions
9	Table 5.1, 5.6.1, 5.6.2, 5.6.4	Weightage for different sub-criteria for category 'B' properties	<p>There should not be any weightage for public wifi. If that is not possible, it should not be more than 2 score/ not more than 10% of the weightage being provided for Mobile coverage, irrespective of public or non-public areas. Suitable adjustments should accordingly be made to the weightages and mobile coverage/infrastructure weightages are accordingly increased.</p>	<p>1. Giving weightages for public wifi could give a bypass opportunity to the Property managers and they might become willing to have lower scores on mobile connectivity as scores on public wifi could compensate and give them higher ratings.</p> <p>2. The Indian telecom industry has built a robust and ubiquitous digital mobile network and its infrastructure which connects lakhs of towns, districts and villages including deep rural interiors and hinterlands across the country, over the last decade, especially last 7-8 years.</p> <p>3. Public wifi are not seen with the same level of trust in security as is the case of mobile services. Thus, the consumers are most likely to continue to mobile services than switching to public-wifi. For detailed justification, kindly refer to the point no.6 of the comments given in the Annexure-A.</p>
10	Clause 5.3.1(ii)(a)	Sub-Criteria: Availability of the latest generation of mobile connectivity: Assessment Methodology	<p>Backhaul should be kept flexible and both backhaul through fibre or through spectrum, should be permissible.</p> <p>In the early years of roll-out of rating framework, the choice of backhaul should be kept flexible and open to commercial relationship between Property Managers and TSPs/ISPs.</p>	<p>1. While fiber backhaul is desirable however, in many cases it might not be possible to have fiber availability till the building/premises and/or the microwave/spectrum based backhaul would be sufficient.</p> <p>2. Restricting backhaul only to fiber may theoretically appear optimal, but practically a flexible, technology neutral approach allowing both fiber and spectrum based backhaul is much more efficient and realistic.</p> <p>3. For justification, kindly refer to the point no. 4 of the comments given in the Annexure-A.</p>



S.No.	Rating Manual reference	Subject	Comments/Suggested modified wordings	Justification for Comments/ Suggestions
11	Table 5.31(2)	Availability of Service Providers: Scoring criteria	In the weightage for "If at least two mobile service providers have integration with DCI in the property or more 75% coverage in indoor areas" the weightage of '5' to be reduced to '3'.	<p>1. Given that each of the mobile service providers in India is serving crores of subscribers, the focus and efforts should be that the mobile connectivity from atleast three service providers is made available. In the overall weightage framework and consolidating it to arrive at the Rating, the gap between weightage of '5' and '7.5' will not be seen as significant enough to nudge and encourage the Property Managers for having connectivity from atleast 3 mobile service providers.</p> <p>2. Hence, the weightage for "If at least two mobile service providers have integration with DCI in the property or more 75% coverage in indoor areas" the weightage of should be made '3' instead of '5'.</p> <p>3. For justification, kindly refer to the point no. 5 of the comments given in the Annexure-A.</p>

