



05 January 2024

**Shri Tejpal Singh,
Advisor (QoS-I)
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan
Jawahar Lal Nehru Marg
New Delhi – 110 002**

Subject: Tata Communications Ltd. comments to TRAI Consultation Paper on 'Regulation on Rating Framework for Digital Connectivity in Buildings or Areas'

Dear Sir

This is with reference to the TRAI Consultation Paper dated 27-09-2023 on '**Regulation on Rating Framework for Digital Connectivity in Buildings or Areas**'.

In this regard, please find enclosed herewith Tata Communication Limited's comments for your kind consideration as Annexure.

We request you to kindly consider our submissions while finalizing the recommendations and would be happy to provide any additional information, if required.

Thanking You,

Yours Sincerely,
For Tata Communications Limited,

**Alka Selot Asthana
Vice President and Head Regulatory Affairs
(Authorized Signatory)**

Enclosed: As mentioned above

TATA COMMUNICATIONS

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**Tata Communications Limited's response to TRAI Consultation Paper on
“Regulation on Rating Framework for Digital Connectivity in Buildings or Areas”**

At the outset, we thank TRAI for providing us an opportunity to share our comments/inputs on rating framework and regulation for Digital connectivity in the buildings or areas. TRAI has importantly highlighted in the paper that Digital connectivity has become an integral part of personal, professional, and social life. The exponential growth in digitalization of services and manufacturing sectors has revolutionized the world impacting everything, from economy, innovation, science, and education, to health, sustainability, governance, and lifestyle. This has led to an exponential increase in the demand for digital connectivity in recent years. Moreover, the proportion of data consumed inside buildings and outside is shifting significantly towards consumption of data inside the buildings. Accordingly, there is immense need to have robust and good quality telecom network coverage/ connectivity in indoor areas.

Tata Communication being a digital ecosystem enabler is catering Enterprises by way of meeting their digital connectivity requirements. As submitted earlier in response to TRAI Consultation on *Rating of Buildings or Areas for Digital Connectivity Infrastructure*, we reiterate that while this proposed Regulation is more relevant for TSPs offering retail mobile services and IP-I entities who are providing telecom infrastructure in terms of dark fiber, towers etc. to these TSPs. However, considering the future of telecommunications with the introduction of 5G technology, Enterprise Broadband, M2M/IoT services, private networks and the business interest of Tata Communications in these areas, this regulatory framework would support the industry in significant improvement of Digital Connectivity infrastructure (DCI) across the country and would be a win-win situation for all the stakeholders including Tata Communications.

TRAI in this paper has also rightly envisaged that the desired objective of consumer satisfaction would not be achieved unless the proposed rating framework is implemented. Therefore, TRAI in its recommendations dated 20-02-2023 on “Rating of Buildings or Areas for Digital Connectivity” had also proposed a mechanism to be introduced that would nudge the Property Managers to come forward and implement solutions to provide seamless digital connectivity in Buildings. The initiative on ‘Rating of Buildings’ would provide the much needed impetus to the readiness of digital connectivity and create the environment/ conditions to nudge the property managers to implement solutions for digital connectivity. We are of the view that with the aim of the introduction of rating system for buildings should enable equal access rights without any discrimination to the building(s) and office (s) for all licensed telecom service providers. Further, the flexibility and capacity to adapt to new technology would also make the building future ready, which is much needed, due to the pace of technological advancement and innovations taking place in the sector.

It is well envisaged by TRAI that Such framework would promote development of DCI on a larger scale and would also facilitate improving ranking of areas such as cities, towns, villages, and States from the perspective of digital readiness. The cities, towns, villages, and States having good digital connectivity will eventually lead to raising of standards of living of the inhabitants. Further, such leading cities and states would be seen as attractive destinations for investments



in various fields. With the bulk of traffic originating and terminating inside the buildings/ campuses etc. the Quality of telecom services would get the much-needed impetus. Not many countries have implemented this framework, and this reflects the strength of telecom sector and the importance the country is providing to the digital readiness.

The proposed rating regulation would also benefit cross section of stakeholders including end users, service providers, besides opening new opportunities/ start-ups engaged in designing and implementing in building solutions, survey, assessment, and evaluation of areas for award of ratings. A homogenised, regulated system of ratings would ensure that the practices/ tools/ score cards used by various agencies would be comparable for buildings falling under a specific category.

We believe that the rating concept of buildings and areas for digital connectivity is at nascent stage and therefore, such regulatory rating framework should be very lightly regulated in a strict manner at present. In the initial stage, it is recommended that the regulation needs to be implemented with a light touch approach in line with practices adopted globally and let the ecosystem evolve over a period of time, post which the implementation status of the regulation can be reviewed by TRAI.

With the above submissions, we are hereby providing our inputs on the issues raised in the Consultation Paper:

Q.1. Do you agree with the broad classification of Buildings or Areas (also referred as Buildings) from Digital Connectivity perspectives provided in Section-3 of this chapter? If not, what could be other yardsticks to classify Buildings for provisions of near uniform Digital Connectivity Infrastructures in similar types of Buildings. Please justify your answer with suitable examples.

Tata Communications Response:

TRAI has defined the building into five broad categories – Residential, Public Area, Government building, commercial establishment and transport corridors. We do agree with the broad classification of Buildings or areas which is quite comprehensive and covers the entire spectrum of building infrastructure from digital connectivity perspective. It may be however seen whether hotels, exhibition venues/ halls, sports complex can also be fitted into any five of these categories or a separate category needs to be carved out.

Q.2. How can the Infrastructure Providers (IPs) and Digital Communication Infrastructure Providers (DCIPs) play an instrumental role in the effective development and deployment of DCI in Buildings or Area? Please provide your answers supporting the best practices followed internationally or national level in this regard.

Tata Communications Response:

The licensed service providers and IP-I registered entities are playing a critical and dominant role in effective development and deployment of digital communication infrastructure (DCI) as they



have the required domain knowledge and experience on this matter. In fact, TRAI in the consultation paper has also elaborated into the role that can be played by Infrastructure service providers as these entities would be eligible to provide the active infrastructure on sharing basis, which would be in enhancement of the scope presently permitted under Infrastructure Provider regime. Presently these recommendations are being reviewed by DoT. Further, the new Telecommunication Act, 2023 has replaced the earlier Indian Telegraph Act, 1885 which also emphasis on the creation of digital infrastructure in the country and provided renewed focus on ROW framework and laying of common ducts.

For establishing Digital Communication Infrastructure (DCI) in any building infrastructure involves significant capital investment towards building various DCI elements such as, ducting, optical fiber/ethernet cabling, DAS (Distributed antennae systems for cellular as well as Wi-Fi networks, access points, active elements such as radio access networks, power supply and distribution, adequate redundancy to ensure desired availability and quality of services, etc. Over and above, there are maintenance costs, rentals being charged by each building or property owners, etc. Currently for rentals for DCI there are no guidelines or regulation, and these are typically agreed mutually by the IPs/DCIPs and the property owners on a case to basis. In order to address the same, TRAI is requested to issue necessary guidelines on this matter for different categories of the buildings and Areas.

For IPs or DCIPs, these capital & operational investments are dominant factors to assess the ROI for any specific building before implementing the DCI. TSPs also play a major role in utilization of DCI in any specific building as they are the ones who assess the potential revenue from the end users residing / using the building infrastructure.

There is need of certain policy framework which will enable/facilitate technically and commercially IPs and DCIPs to take the decision of investing in building the DCI across the buildings / areas. It is suggested that the present regulatory framework should be further strengthened to include the terms and Condition so as to support a transparent, cost effective, neutral and nonexclusive approach to be adopted by property managers which will lead to an effective eco system comprising of property managers, IPs and telecom service providers.

Q.3. What should be the key eligibility conditions including experience requirements for the Digital Connectivity Rating Agency (DCRA) proposed under the rating framework? Should there be any performance security for an agency to be DCRA and what should be criteria to evaluate their performances? Please also indicate broad scope of work covering additional aspects of Rating of Buildings for Digital Connectivity, if any, including area of operations [Nation-wide, State(s)/Union Territories(UTs) or Combination of States/UTs] of a DCRA.

Tata Communications Response:

In view of the vast geography of our country and the spread of building infrastructure, it is recommended that we should have DCRAs at a regional level. Each region could be combined



with a certain number of LSAs/ States for effective governance under each DCRA. There could be a minimum of 2-3 DCRAs at each regional level to cover the entire region.

Section 4.6.2 of TRAI consultation paper captures a comprehensive list of elements and criterion for DCRA assessment. The domain expertise of DCRA which they need to possess could be categorised in the below sections:

1. Physical DCI infrastructure, technical specifications & quality of installation:
 - Optical fiber/ethernet cabling and related infra.
 - Distributed antennae systems and related infra.
 - Active elements such as Cellular radio access network, Wi-Fi access points, ethernet switches, etc.
 - Power supply systems & distribution to support the active network elements.
 - Redundancy for high availability requirements such as dual optical fiber/power cables / other cable entry and distribution architecture to avoid any isolation & service downtime.
 - Protection from flooding based on the previous history of incidences and future possibilities.
2. Quality of Service & Performance Measurements and how to measure these for below category of services along with KPIs:
 - Cellular networks in 2G/3G/4G/5G technologies.
 - Wi-Fi networks.
 - Optical Transmission networks.
 - Stability of power supply systems and earthing, etc.
3. DCRA will have to have certain tools and systems to carry out the above activities, they could either own themselves or subcontract to domain experts who are already performing such activities for TSPs.

Further, in terms of the scope of testing and validation of telecom services and the DCI infrastructure, this would remain the same irrespective of the categories of building since the assessment is around the standard set of technologies as listed above. The nature of the building does not change the criterion of testing and validation as the KPIs in general will remain same across.

Q.4. With reference to the rating criteria proposed in table at Section 6.2, kindly provide list of possible sub-criteria and corresponding sub-weightage against each criterion with justification? Please also indicate any other aspect which need to be included or modified in the proposed weightage criteria. Please provide your answer with suitable justifications.

Tata Communications Response:

The rating criteria proposed in table at Section 6.2 of the paper is comprehensive. In this regard, we have following suggestions:



- DCRA needs to adopt comprehensive subjective parameters well as objective criteria to measure performance. The subjective parameters to be followed by the rating agency can also be fixed by the authority. While the objective criteria would be based on measurement of technical and QoS parameters, the subjective criteria may also be evolved and implemented by developing suitable questionnaire and based on actual experience of end users. The weightage to user experience (criteria no 9) in the table, section 4.6.2, may be increased from 10 to 15.
- In order to ensure a non-monopolistic, neutral and inclusive approach, higher weightage needs to be provided to the availability of service providers (reference criteria no 8, table, section 4.6.2) . It is suggested that weightage may be increased from 10 to 20.

The rating of building for digital connectivity a new concept, the other criteria if needed along with the weightage could be evolved and reviewed at a later stage as well with proper governance based on the initial experience of launching this policy framework.

Q.5. What should be the template and minimum score for award of ratings i.e., star-based ratings or any other template like Platinum, Gold, Silver, and Bronze? Please justify your suggestions.

Tata Communications Response:

In the consultation paper, TRAI has proposed the award of ratings in numerical value which may be presented in standard form of stars. Further, the minimum rating of one star is represented by a score between 25- 40, which looks reasonable to begin with. The proposed template looks adequate at this stage and the same could be evolved based on the initial experience once the policy framework is rolled out.

Q.6. The proposed workflow and process of Rating of Buildings for digital connectivity is given in Section-8 of this Chapter. Kindly provide your comments or suggestion for improvement of the proposed workflow and process of rating with justification, if any.

Tata Communications Response:

TRAI in the paper has suggested a well laid out structure in the consultation paper for workflow and process of Rating of Buildings for digital connectivity, which has addressed transparency aspects, imparting knowledge to the property manager about the key aspects to be taken care of and providing the property manager a chance to improve upon the performance by adopting 2 stage process- Due diligence Stage I and Due Diligence Stage 2. The process is framed positively as it gives a chance to property owner to improve its performance after due diligence Stage I. We are of the view that the proposed template looks adequate at this stage considering rating of building as a new concept and the same could be evolved based on the initial experience once the regulatory framework is being rolled out.



Q.7. Do you agree with the eligibility conditions for registration of DCRA, proposed in regulation 4? If no, what additional eligibility conditions for registration of DCRA may be incorporated, considering the present rating ecosystem in other domains in the country, with suitable justifications?

Tata Communications Response:

The eligibility conditions for registration of DCRA, as proposed in regulation 4 by TRAI in its Draft Regulation for implementation of rating framework for digital connectivity, has provided for the following criteria:

1. Applicant must be a company registered under Companies Act, 2013 and should have specified digital connectivity rating activity as one of its main objectives.
2. The applicant should have a net worth of Rs 2 Cr.
3. The applicant should have sufficient people with adequate professional and other relevant experience.

In this regard, it is submitted that since this activity will be a new venture for any of the interested entities, we agree with the above stipulated criterion. However, we do feel that in order to promote startups, the net worth requirement may be reviewed and same should be brought down to Rs 1 Crore considering the fact that IT tools play an important role in proficiency of a digital agency, the experience in adoption of AI/ ML and other related IT tools may be added. Additionally, it also needs to be ensured that in order to maintain the neutrality of Digital Connectivity Rating Agency, there should not be any shareholding of builders/ real estate developers in the ownership of rating agency to ensure transparent and non-discriminatory access to the building.

TRAI in its recommendations dated 20th February 2023 on “*Rating of Buildings or Areas for Digital Connectivity*” has also recommended that a Council of DCI (CoDCI) should be established. TRAI has recommended that *CoDCI, within one year of its establishment or three years from the date of these recommendations, whichever is earlier, should establish a mechanism for certification, registration and capacity building of DCI Professionals including setting up of digital platform for the cohesive implementation of DCI. Till the time CoDCI is established, the provisions in new building bye-laws for DCI as recommended herein must be implemented by utilizing the services of the existing professionals already working in the field of design and development of Buildings and DCI.* (Para 2.7.6)

It is suggested that in line with above mentioned TRAI recommendation, DCRA should also have professionals working in the field of design and development of building and DCI, to begin with.

Q.8. Do you agree with the process of registrations of DCRA proposed under regulation 7? If not, kindly suggest proposed changes with justifications.

Tata Communications Response:



TRAI draft Regulation (7) provides for conditions of registration of DCRA. The following conditions are there:

- (i) Compliance to TRAI circulars/ directions/ instructions issued by regulator from time to time
- (ii) Information provided by DCRA should not be false and misleading.
- (iii) In case of management control, the DCRA shall obtain prior approval of the Authority for its continued operations.

It is suggested that apart from the above conditions, one more condition may also be added that DCRA should not be a subsidiary company of real estate developers/ builders etc. and / or there should not be any business interest of of real estate developers/ builders in the DCRA. This will ensure transparency and non-discriminatory access to a building or area at a reasonable charge.

Q.9. Please suggest code of conduct for DCRA's proposed to be included under regulation 8 including the criteria for fees to be charged by DCRA's from Property Managers for different types of Buildings.

Tata Communications Response:

The suggested Code of Conduct for DCRA's proposed to be included under regulation 8 has been attached as Appendix – 1.

Q.10. Do you agree with the general obligations of DCRA provided in Section III of the draft regulations? If not, please provide suggested changes with justifications.

Tata Communications Response:

It is suggested that the general obligations of DCRA may cover the following aspects as well:

- (i) DCRA shall develop an efficient and responsive system to yield timely and accurate ratings.
- (ii) DCRA shall not offer fee-based services to the rated entities / its clients, beyond building ratings.
- (iii) DCRA shall keep itself updated about technological advancement in IT tools/ use of AI/ ML and other predictive digital tools.

Some of the obligations are included in the suggested code of conduct, which would have to be adhered to by DCRA in accordance with the clause 8 of the proposed regulation.

Q.11. What should be the terms & conditions for the Property Managers to ensure use of ratings awarded to their buildings, in legalised manner?

Tata Communications Response:

The property managers should adhere to the following guidelines:



- The ratings information to be provided to the end users should include the validity period of the rating accorded by the rating agency.
- In case any resident desires to get a complete criteria wise score card of the rating, the same should be made available.
- The property manager should always indicate the latest rating awarded to the building/ property.

Q.12. Please suggest changes, if any, in the general obligations of Property Managers, provided under Section IV of draft regulations, with justifications.

Tata Communications Response:

Along with the DCRA's right to inspect as included in clause 22 of the proposed regulation, there should be clause to support audit of rating given by the agency by TRAI/ DoT. The property manager should support the regulator's endeavour to audit the rating provided by DCRA.

Q.13. Draft regulation 25 provides broad rating criteria and distribution of weightage out of total rating score at a scale of 100. Please suggest new criteria or changes in proposed criteria if any, and relevant sub-criteria for each criterion and their sub-weightage against respective main criteria with suitable justifications in context of rating of buildings for digital connectivity.

And

Q.14. The score threshold for ratings is provided in draft regulation 26. Do you agree with the proposed thresholds? If no, please suggest changes with justification and global references, if any.

Tata Communications Response to Q13 & Q14:

The proposed template looks adequate at this stage and the same could be evolved based on the initial experience once the policy framework is rolled out.



Appendix – 1

Suggested Code of Conduct for DCRA

1. DCRA in the conduct of its business, shall observe high standards of integrity, dignity, and fairness in the conduct of its business.
2. DCRA shall fulfill its obligations in a prompt, ethical and professional manner.
3. DCRA shall at all times exercise due diligence, ensure proper care and exercise independent professional judgment in order to achieve and maintain objectivity and independence in the rating process.
4. DCRA shall adhere to the process, procedure, directions and instructions issued by TRAI / BIS/ DoT/TEC from time to time.
5. DCRA will employ the latest AI/ ML tools for performing rating evaluation. It should not indulge with any property manager for any preparatory exercise prior to commencement of the rating process.
6. DCRA shall maintain records to support its decisions.
7. DCRA shall have in place a rating process that reflects consistent approach and is aligned with TRAI proposed Regulation on **RATING OF BUILDINGS OR AREAS FOR DIGITAL CONNECTIVITY REGULATIONS, 2023**.
8. DCRA shall not indulge in any unfair competition, nor shall it wean away the clients of any other rating agency on assurance of higher rating.
9. DCRA shall abide by various regulations, circulars, notifications, rules issued by the TRAI from time to time, in true letter and spirit.
10. DCRA shall develop an efficient and responsive system to yield timely and accurate ratings.
11. DCRA shall not make any exaggerated statement, whether oral or written to the client either about its qualification or its capability to render certain services or its achievements with regard to the services rendered to other clients.
12. DCRA shall not make any untrue statement, suppress any material fact or make any misrepresentation in any documents, reports, papers or information furnished to TRAI or any other Government body or public at large.
13. DCRA shall ensure that its clients are promptly informed about any action, legal proceedings etc., initiated against it alleging any material breach or non-compliance by it, of any law, rules, regulations and directions of TRAI or of any other Government authority.
14. DCRA shall maintain, within its organization, an appropriate level of relevant technical knowledge and competence and abide by the provisions of the Act, regulations and circulars, which may be applicable and relevant to the activities carried out by DCRA.
15. DCRA shall ensure that there is no misuse of any privileged information including prior knowledge of rating decisions or changes.
16. DCRA or any of its employees shall not render, directly or indirectly, any rating advice to any client, which are beyond the scope of rating process.



17. DCRA shall maintain an arm's length relationship between its rating activity and any other activity.
18. DCRA shall develop its own internal code of conduct for governing its internal operations and laying down its standards of appropriate conduct for its employees and officers in the carrying out of their duties within the rating agency and as a part of the industry. Such a code may extend to the maintenance of professional excellence and standards, integrity, confidentiality, objectivity avoidance of conflict of interests, disclosure of shareholdings and interests etc.