09 June 2025

To, **Shri Tejpal Singh, Advisor QoS-I** Headquarters, Telecom Regulatory Authority of India (TRAI), 5th floor, Tower F, World Trade Center, MG Road, Nauroji Nagar, New Delhi - 110029

Submission of Suggested Amendments to the 'Draft Manual for Assessment of Digital Connectivity under Rating of Properties for Digital Connectivity Regulations, 2024

Dear Sir,

Altius

SD/ALT/REG/0205

We, at Altius Telecom Infrastructures, are pleased to submit our suggested amendments to the Draft Manual for Assessment of Digital Connectivity under Rating of Properties for Digital Connectivity Regulations, 2024. As the leading IP-1 provider and specialist in in-building solutions (IBS), we have reviewed the draft from the perspectives of IP-1 operations, IBS deployment, and the role of Digital Connectivity Rating Agencies (DCRAs).

2. We appreciate TRAI's proactive initiative in proposing a framework to assess and rate digital connectivity across properties. While we recognize that the Digital Connectivity Infrastructure Provider (DCIP) is still pending a formal adoption by DoT and that Telecom Regulatory Authority of India Act, 1997 does not explicitly confer upon TRAI the authority to ratify Digital Connectivity Ratings of Assets or In- Building Solutions, we understand that such efforts may be interpreted as falling within the broader mandate of the Authority particularly in relation to ensuring quality of service and promoting consumer interest.

3. Given the critical role of IP-Is as entities registered with DoT and significantly contributing towards enabling nationwide telecom infrastructure network, we recommend that the scope of Digital Connectivity Regulations must be broadened from the outset **to formally include IP-1 entities**. This will enhance the framework's inclusivity, operational relevance, and regulatory alignment.

4. Please find attached our detailed submission as **appendix** to this letter. We appreciate the opportunity to contribute and remain available for any further clarification.

Thank you for your attention to this matter.

Regards,

Santanu Das Head - Regulatory Affairs



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Appendix (Refer Altius letter No SD/ALT/REG/0205 dated 02 June 2025)

Name of the Organization: Altius Telecom Infrastructure Trust

Suggested Comments/ Feedback to Draft DCRA Manual

S No	Chapter of	Suggested Modified	Justification for Proposed
	the Draft	Wordings	Change
	Manual		
1.	Chapter 2, Role of Stakeholders	Broaden the stakeholder ecosystem for Digital Connectivity Readiness Assessment (DCRA) framework to encompass IP-1 entities also. Additionally, establish a standardized audit mechanisms to evaluate and ensure the compliance of telecom infrastructure developed under the provisions of IP-1 registration.	The formal recognition of IP- 1 registered entities, as Digital Connectivity Infrastructure Providers (DCIPs) should entail the conferment of statutory Right of Way (RoW) privileges, institutionalize coordinated engagement with municipal authorities, and guarantee non- discriminatory access to public infrastructure assets indispensable for the widespread deployment of digital connectivity networks.
2.	Chapter 2, Section 2.2 – Role of Property Manager (PM)	 (i) Replace "the Property Manager means the person" with "the Property Manager means the person or entity" (ii) Deletion of "and maintain compliance with regulatory standards" (iii) Deletion of 2.2 subsection (ii) – "ii. Documentation and compliance" and include the same in the Role of DCIP (broadened to include IP-1 entities) (iv) Deletion of 2.2 subsection (iii) – "iii. Maintenance of 	Property Manager may not own the DCI and may only facilitate in implementing a Digital Connectivity Infrastructure within a building, owing to the various regulations associated with deployment of a Digital Connectivity Infrastructure. Moreover, a Property Manager is essentially a person (Developer) and / or a Property Management firm which looks into account the various aspects of Building infrastructure including Civil, Electrical, HVAC, Firefighting, Plumbing, Lifts, Security Management etc., but may not possess the capabilities of complex telecom

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		digital connectivity infrastructure" and	infrastructure architecture.
		include the same in the Role of DCIP (broadened to include IP-1 entities)	DoT, vide its communication reference <i>F. No. 20-</i> <i>1341/2023 AS-1 dated</i> <i>19.03.2025</i> on the subject "Back reference on TRAI
		(v) Include a Section in Collaboration with DCRA (broadened to include IP-1 entities)	recommendations dated 20.02.2023 on the 'Rating of Buildings or Areas for Digital Connectivity', has clearly articulated that "Further, equipment like CPEs may be installed on user side based on the demand. However, provisioning of 'IBS for Indoor Mobile Coverage' and Telecommunication Equipment (TE)' may not be mandated as builder/ developer/ Property Manager are not authorized to install 'IBS for Indoor Mobile Coverage' and Telecommunication Equipment (TE)' as per extant licensing and regulatory frameworks. 'IBS for Indoor Mobile Coverage' can be installed, maintained and operated by DCIP (proposed) and licensed TSPs while Telecommunication Equipment (TE)' can be installed, maintained and operated by licensed TSPs only."
3.	Chapter 2, Section 2.4 - Digital Connectivity Infrastructure Providers (DCIPs)	The policy framework should ensure the formal inclusion of IP-1 registered entities, as well by replacing "Digital Connectivity Infrastructure Providers (DCIPs)" with "Digital Connectivity Infrastructure Providers (DCIPs) including IP-1s".	IP-1 entities serve as pivotal enablers in the nationwide digital rollout. Their explicit inclusion within the policy and regulatory architecture will not only accelerate the pace of infrastructure deployment but also promote standardization and ensure long pending equitable and rights-based access to telecom ducts and fibre corridors.

		Responsibilities of a	
		DCIP under sub-section	
		(i) Infrastructure	DoT, vide its communication
		Development	reference F. No. 20-
		1	1341/2023 AS-1 dated
		Addition of	19.03.2025 on the subject
		responsibilities as	"Back reference on TRAI
		covered under 2.2	recommendations dated
		covered under 2.2	100 00 0002 on the 'Deting of
		Subsection (n) = n.	20.02.2023 on the Rating of
		Documentation and	Buildings or Areas for
		compliance" and	Digital Connectivity, has
		include the same in the	clearly articulated that
		Role of DCIP (broadened	"Further, equipment like
		to include IP-1 entities)	CPEs may be installed on
			user side based on the
		Addition of	demand. However,
		responsibilities as	provisioning of 'IBS for
		covered under 2.2	Indoor Mobile Coverage' and
		subsection (iii) – "iii.	Telecommunication
		Maintenance of digital	Equipment (TE)' may not be
		connectivity	mandated as builder/
		infrastructure" and	developer/ Property
		include the same in the	Manager are not authorized
		Pole of DCIP (broadened	to install 'IBS for Indoor
		to include ID 1 optition)	Mobile Coverage' and
		to include IP-1 enuties)	Mobile Coverage and
			Telecommunication
			Equipment (IE) as per
			extant licensing and
			regulatory frameworks. 'IBS
			for Indoor Mobile Coverage'
			can be installed, maintained
			and operated by DCIP
			(proposed) and licensed
			TSPs while
			Telecommunication
			Equipment (TE)' can be
			installed, maintained and
			operated by licensed TSPs
			only."
4	Chanter 3	A provision should be	This ensures that the
	Section 33	incorporated requiring	assessment process duly
	General	Digital Connectivity	incorporates the distinct
	Obligations for	Digital Connectivity	incorporates the distinct
	Obligations for	(DODA)	operational requirements
	DCKA	(DCKAS) to engage in	and strategic contributions
		structured collaboration	of IP-1 entities and In-
		with IP-1 registered	Building Solution (IBS)
		entities and In-Building	providers, thereby fostering
		Solution (IBS) providers	a more holistic and
		/ DCIPs throughout the	representative evaluation of
		assessment process.	digital infrastructure
			readiness.

5	Chapter 3	Wherever technical	Property Manager may not
5.	Chapter 3, Section 3.7 – Rating Process	Wherever technical documentation is required to be uploaded by the Property Manager, he may be allowed to be assisted by the DCIP (broadened to include IP-1 entities). Similarly, a Property Manager should be allowed to seek assistance from and allow a DCIP (broadened to include IP-1 entities) to represent him for any clarification during the Due Diligence process and for taking Corrective Actions.	Property Manager may not have any IBS expertise at all and may not own the DCI. A Property Manager may only facilitate in implementing a Digital Connectivity Infrastructure within a building, owing to the various regulations associated with deployment of a Digital Connectivity Infrastructure. Actual Design, Build and Maintenance of DCI may be done by a DCIP (broadened to include IP-1 entities)
6.	Chapter 4, Section 4.2.1 -	The framework should mandate the allocation	This ensures that IP-1 entities are afforded
	Provision for	of dedicated space	adequate and designated
	expansion of	within telecom rooms for	space for the installation
	and cable	operation of IP-1 / DCIP	their equipment, thereby
	pathways	equipment.	facilitating streamlined
			infrastructure management
			thus enhancing the overall efficiency of digital
			connectivity operations.
7.	Chapter 4,	Mandate the	The implementation of
	Section 4.2.2 –	provisioning of In-	shared IBS mitigates the
	Mobile and	by neutral hosts (DCIP)	individual Telecom Service
	Wireline	or IP-1 registered	Providers (TSPs), ensures
	Connectivity	entities within	equitable and enhanced
		dwelling premises.	occupants, and aligns with
			emerging Smart Building
			standards designed to
			support next-generation
			Fibre-to-the-Home (FTTH).
8.	Chapter 4,	Power redundancy	This ensures that IP-1
	Section 4.3.1 -	protocols must explicitly	equipment remains fully
	Reaundancy of	extend to include	operational during power
	power source	1 equipment also.	safeguarding service
			continuity and reinforcing

			the reliability of passive digital infrastructure in critical connectivity environments.
9.	Chapter 4, Section 4.4.1 - Availability of alternate entry paths for digital connectivity infrastructure	The infrastructure design guidelines must incorporate a mandatory provision for alternate entry paths specifically designated for DCIP / IP-1 infrastructure	This enhances the structural resilience of IP-1 infrastructure by mandating the provision of multiple, independent entry pathways, thereby mitigating the risk of service disruption arising from physical damage or access constraints to a single point of ingress.
10.	Chapter 4, Section 4.5.1 - Availability of the latest generation of mobile connectivity	The planning and design phases of mobile connectivity infrastructure must incorporate structured consultation with In- Building Solution (IBS) providers (DCIP / IP-1 entities)	IBS providers possess specialized expertise that can significantly influence the design and implementation of mobile connectivity solutions. Their early involvement in the planning process enables the integration of tailored in- building coverage strategies, thereby enhancing signal quality, optimizing network performance, and ensuring seamless user experience across indoor environments.
11.	Chapter 4, Section 4.5.3 – Upgradability of Wireline DCI	Introduce a new scoring parameter—'Multi- Operator Tray and Ducting Layout Accessibility'—to be evaluated with a maximum allocation of 2 points. This criterion will assess the extent to which the infrastructure design facilitates equitable and efficient access for multiple service providers,	This provision enables plug- and-play accessibility for multiple operators, which is essential for the seamless deployment of modern Fibre-to-the-Home (FTTH) networks, Over-the-Top (OTT) content caching infrastructure, and enterprise-grade broadband solutions. By facilitating shared access through a standardized tray and ducting layout, it significantly reduces the need for redundant infrastructure and minimizes the complexity and cost of future retrofitting efforts
12.	Chapter 4, Section 4.6.1 - Backhaul fibre	The framework should mandate that all backhaul fibre	Mandating that backhaul fibre connectivity includes dedicated provisions for IP-1

	o o con o o tivita	a a mar a a tirritar	and IDC marridana (DCID)
	connectivity	connectivity	and IBS providers (DCIP)
	(service	deployments incorporate	ensures that both categories
	provider to	dedicated provisions to	of infrastructure players are
	property)	accommodate the	equipped with the requisite
		infrastructure	physical and network
		requirements of IP-1 and	resources to deliver high-
		IBS providers (DCIP)	quality digital services
		ibo providers (beir):	Furthermore establishing
			Fulthermore, establishing
			clear performance
			benchmarks for IBS
			deployments enables
			consistent evaluation of
			service quality, particularly
			in public and high-density
			indoor environments
			thereby ensuring robust and
			uncreby clisuring robust and
			reliable mobile coverage
			aligned with next-generation
			connectivity standards.
13.	Chapter 4,	The framework should	The establishment of clearly
	Section 4.8.1 -	include the	defined performance
	Mobile network	establishment of	benchmarks for In-Building
	coverage and	standardized	Solution (IBS) providers
	performance in	performance metrics	(DCIP) enables systematic
	nublic areas of	specifically tailored for	evaluation of service quality.
	nronertu	IBS providers (DCIP)	ensuring consistent and
	property	ibe providers (beir):	high performance mobile
			ingn-periormance income
			coverage within public and
			high-occupancy indoor
			environments. These metrics
			serve as critical tools for
			regulatory oversight,
			infrastructure optimization,
			and alignment with national
			digital connectivity
			standards
14	Chanter 4	A dedicated feedback	The inclusion of a dedicated
1	Section 491	mechanism should be	feedback mechanism for IP-
	Hoor foodback	instituted to conture	1 and DCID's IPS sometions
	USET JEEUDUCK	instituted to capture	1 and DCIF'S IBS services
	on aigitat	stakenoider and end-	enables the collection of
	connectivity	user input specific to the	targeted insights on
	experience	performance and service	performance and user
		quality of IP-1 and In-	experience. This structured
		Building Solution (IBS)	input facilitates continuous
		providers (DCIP).	service enhancement,
			promotes accountability
			among infrastructure
			providers, and supports
			evidence-based policy
			refinement to meet overlying
			approximity demonds
1 -	<u>Olemat</u> 7	TZ:	connectivity demands.
15.	Chapter 5 –	Kindly make the	
	Assessment	recommendations as	

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	Methodologies	suggested in points 6, 7,	
	Jor Calegory B	8, 9, 10, 11, 12, 13 and	
	Properties	14 for the Category A	
		buildings also applicable	
		for Category B buildings	
16.	Chapter 6,	Property managers	Such disclosures must be
	Section 6.4 –	should be formally	submitted to the DCRA
	Renewal	empaneled and required	authority for audit and
	Process	to disclose any post-	compliance verification,
		rating exclusivity	thereby promoting
		agreements entered into	transparency, preventing
		with TSPs to the DCRA	anti-competitive practices,
		authority.	and safeguarding equitable
			access to digital
			infrastructure.
17.	Chapter 7	The implementation of a	IP-1s are routinely impeded
	Section 7.2 –	grievance submission	by delays in securing
	Mechanism for	portal, specifically	property access and
	Stakeholder	tailored to IP-1, may be	executing deployment
	Feedback	initiated and integrated	activities in rolling out TSP
		within the designated	neutral digital connectivity
		section pertaining to	infrastructure. The
		feedback mechanisms	institution of a formal
			grievance redressal
			mechanism, routed through
			the DCRA/TRAI, is
			imperative to ensure
			impartial adjudication and
			robust oversight of
			regulatory compliance.