

संचिति

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National Communications Academy-Finance
Department of Telecommunications
New Delhi

NCA-F



HIGHLIGHTS OF SEPTEMBER, 2026

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From Training to Public Service: IP&TAFS Batch 2024 Takes the Next Step

02 September 2026



The Valedictory Session of IP&TAFS Officer Trainees (Batch 2024) at NCA-F marked the culmination of a rigorous 104-week training journey, spanning classroom learning, field exposure, OJT, Bharat Darshan and professional attachments. The programme equipped trainees with a broad understanding of telecom, public finance, governance and field administration.

Dr. Sanjiwan Sinha, DG, NCA-F, urged the trainees to carry forward the values of integrity, continuous learning and excellence in public service. Dr. Mandeep Singh, DDG, NCA-F, highlighted financial prudence, accountability and innovation as essential to effective public administration.

As the newly trained officers move to assignments across the country, they carry with them the knowledge, experience and professional values cultivated during their training at NCA-F.









Curating Knowledge, Creating Impact: iGOT Knowledge Connect

30 September 2026



A one-day workshop on iGOT Knowledge Connect was conducted at NCA-F to enhance officers' understanding of course development on the iGOT Karmayogi platform. The workshop covered competency mapping, instructional design, content curation, assessment methodologies and learner engagement. Dr. Sanjiwan Sinha, DG, NCA-F, highlighted the platform's role in institutional capacity building and encouraged brainstorming on new and relevant topics for future iGOT courses. Dr. Mandeep Singh, DDG, NCA-F, emphasised collaborative knowledge-sharing and the contribution of domain expertise. Officers who made sustained contributions to research and iGOT course development at NCA-F were also felicitated.





Shaping Leaders for a Changing Public Service

September 14-September 25, 2026



The Mid Career Training Programme-I (MCTP-I) for 12 IP&TAFS Group 'A' officers was conducted by NCA-F in collaboration with IIM Shillong from 14th to 25th September 2026. The programme focused on contemporary leadership, behavioural competencies, public policy, digital transformation and decision-making, using case-based and activity-based learning. It also provided insights into Indian Knowledge Systems and leadership in a VUCA environment, equipping officers to translate their experience into greater impact in public service.



Prevention First: Building a Culture of Vigilance

September 17-September 18, 2026



As part of Vigilance Awareness Week, a two-day capacity-building programme on “Preventive Vigilance: Promoting Integrity, Transparency & Accountability” was conducted at NCA-F, bringing together 44 officers from field units of DoT and DoP along with experts. The programme focused on preventive vigilance, ethical conduct, accountability, risk identification and emerging challenges in public administration. Shri Awadhesh Kumar, Advisor (Finance), DoT, highlighted the importance of financial prudence, transparency and early identification of vulnerabilities, while Dr. Sanjiwan Sinha, DG, NCA-F, emphasised the role of ethical governance and preventive safeguards in fostering institutional accountability and public trust.



Reconnecting with the Field: Refreshing Expertise, Renewing Perspective

September 23-September 24, 2026





A two-day refresher programme on “Reconnecting with the Field: Current Issues in Licensing Finance, SUC and CCA Operations” was conducted at NCA-F for officers from Pr. CCA/CCA offices across the country. The programme focused on updating professional knowledge and enhancing understanding of evolving field-level financial and operational requirements, covering areas such as Digital Bharat Nidhi (DBN), SUC and License Fee assessment, SARAS, SAMPANN, the new Licensing/Authorisation regime, Bank Guarantees and Internal Audit.



From Digital Tools to Greater Workplace Efficiency

September 21-September 22, 2026

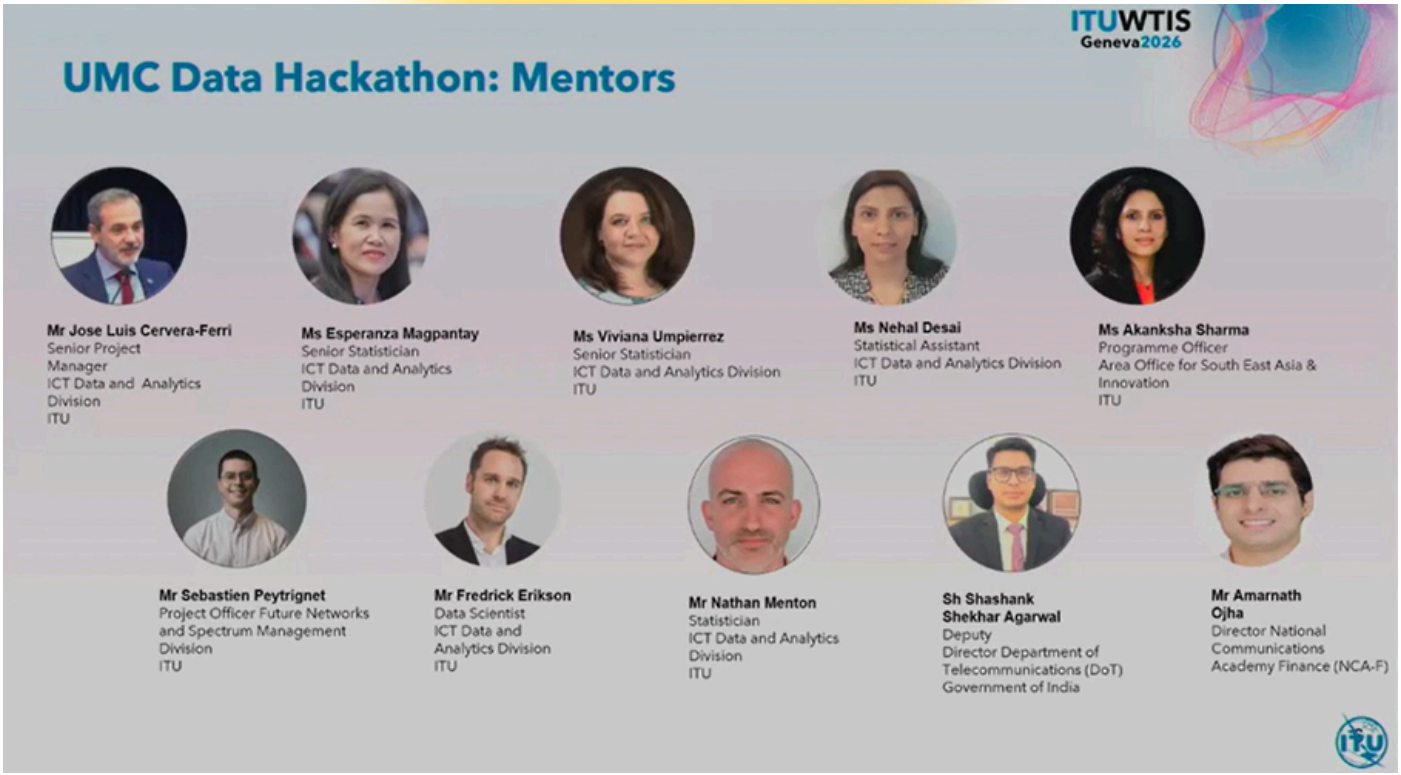


A two-day workshop on “E-Governance & Workplace Efficiency” was conducted at NCA-F, focusing on the effective use of digital tools to enhance workplace productivity, transparency and service delivery. The programme provided practical insights into e-Office, PFMS and GeM, keeping in mind the growing focus on timely file processing and payments. Dr. Sanjiwan Sinha, DG, NCA-F, highlighted the importance of adaptability, technology-enabled governance and lifelong learning, while Shri Shashank Shekhar Agarwal, Director, NCA-F, underscored the need for deeper understanding of PFMS and GeM for effective workplace functioning.



Bridging Digital Divides: NCA-F Mentors Innovation at ITU-WTIS 2026

SEPTEMBER 07-SEPTEMBER 08, 2026



At World Telecommunication ICT Indicators Symposium (WTIS) 2026 in Geneva, Switzerland, NCA-F contributed to the ITU Data Hackathon "Bridging the Digital Divide by Uncovering Digital Deserts" by mentoring innovators in using data and technology to identify hidden connectivity inequalities. Shri Amarnath Ojha and Shri Shashank Shekhar Agarwal, Directors, NCA-F, mentored participating teams in developing and refining data-driven solutions. With 104 applications and 21 shortlisted teams, three teams emerged as winners, including India's Team QBits.



हिंदी से संवाद, संस्कृति से जुड़ाव:
हिंदी पखवाड़ा 2026

सितंबर 14- सितंबर 25, 2026

राष्ट्रीय संचार अकादमी–वित्त में हिंदी पखवाड़ा 2026 का आयोजन विभिन्न रचनात्मक एवं साहित्यिक गतिविधियों के साथ किया गया। शुभारंभ हस्ताक्षर अभियान से हुआ, जिसमें अधिकारियों एवं कर्मचारियों ने उत्साहपूर्वक सहभागिता करते हुए राजभाषा हिंदी के प्रति अपनी प्रतिबद्धता व्यक्त की। काव्य पाठ कार्यक्रम में अधिकारियों, प्रशिक्षुओं एवं परिसरवासियों ने अपनी रचनात्मक प्रस्तुतियों से आयोजन को जीवंत बनाया।हिंदी पखवाड़ा 2026 के अंतर्गत NCA-F में आयोजित काव्य पाठ कार्यक्रम का शुभारंभ मुख्य अतिथि सुश्री वंदना गुप्ता, महा नियंत्रक संचार लेखा, विशिष्ट अतिथि श्री राजीव कुमार, वरिष्ठ उप महानिदेशक, डाक विभाग तथा डॉ. संजीवन सिन्हा, महानिदेशक, NCA-F द्वारा दीप प्रज्ज्वलन के साथ किया गया।















अभिव्यक्ति से सम्मान तक:
हिंदी पखवाड़ा 2026

सितंबर 14- सितंबर 25, 2026







समापन अवसर पर निबंध, भाषण, चित्रकला एवं काव्य पाठ सहित विभिन्न प्रतियोगिताओं के विजेताओं तथा राजकीय कार्यों में हिंदी के अधिकाधिक प्रयोग को प्रोत्साहित करने हेतु चयनित अधिकारियों एवं कर्मचारियों को प्रमाण-पत्र एवं पुरस्कार प्रदान किए गए। डॉ. संजीवन सिन्हा, महानिदेशक, NCA-F, ने राजकीय कार्यों में हिंदी के सहज एवं अधिकाधिक प्रयोग तथा इसे अकादमी की कार्य-संस्कृति का अभिन्न अंग बनाने पर बल दिया।





“एक दिन, एक घंटा, एक साथ”: स्वच्छता से सहभागिता तक

30 सितंबर, 2026



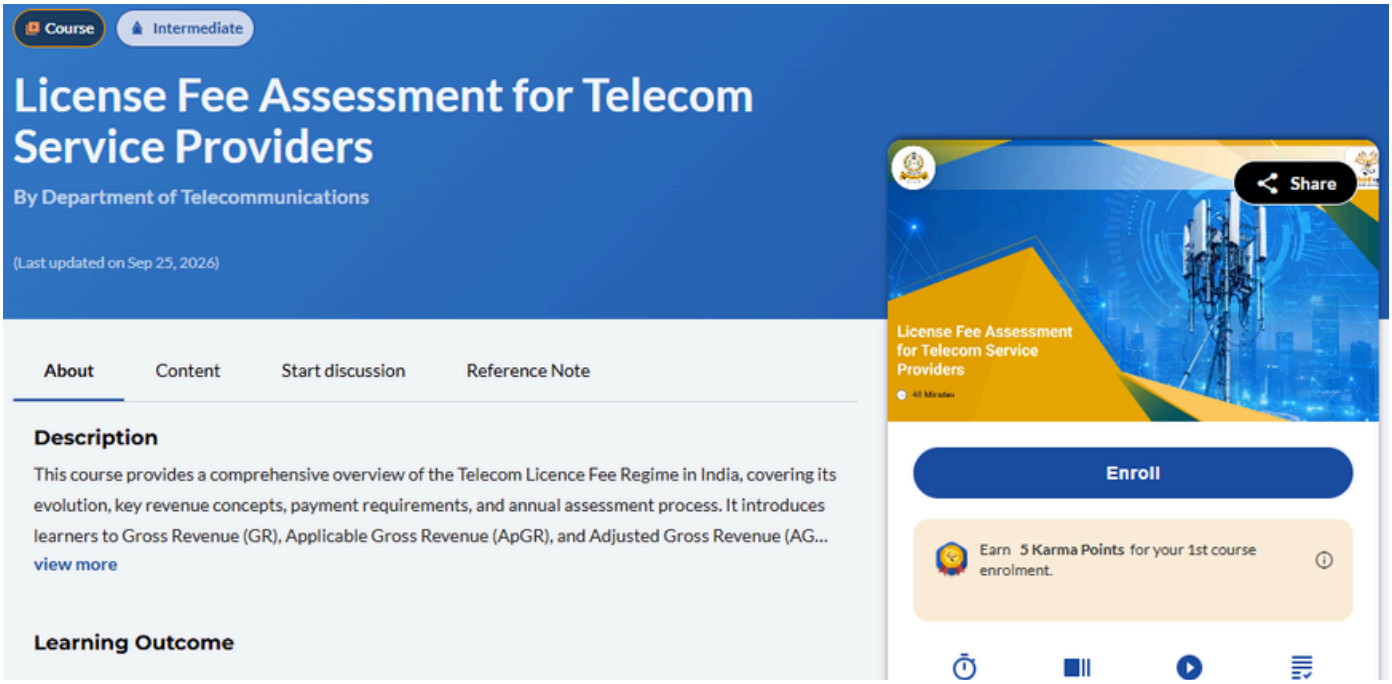
स्वच्छता ही सेवा 2026 अभियान के अंतर्गत NCA-F, घिटोरनी में 30 सितंबर 2026 को “एक दिन, एक घंटा, एक साथ” श्रमदान कार्यक्रम आयोजित किया गया। अधिकारियों, कर्मचारियों एवं परिसरवासियों ने परिसर की परिधीय सड़क की सफाई, प्लास्टिक कचरे एवं मलबे के निस्तारण में सक्रिय सहभागिता की, जिसके बाद पौधारोपण किया गया। आउटसोर्स कर्मचारियों के लिए “सफाई मित्र सुरक्षा एवं सम्मान शिविर” के अंतर्गत निवारक स्वास्थ्य जांच शिविर भी आयोजित किया गया। यह पहल स्वच्छता, पर्यावरणीय उत्तरदायित्व, जनभागीदारी और सहयोगी कार्यसंस्कृति के प्रति NCA-F की प्रतिबद्धता को दर्शाती है।







New iGOT Courses by NCA-F



NCA-F has published a new iGOT course on "Licence Fee Assessment for Telecom Service Providers", offering a comprehensive overview of India's Telecom Licence Fee regime. The course covers key revenue concepts including GR, ApGR and AGR, licence fee payments and assessment, reconciliation with financial statements, scrutiny of records, and the process of demand, representation, appeals and recovery of licence fee dues.



NCA-F has published a new iGOT course on "Introduction to Spectrum Valuation and Assignment", providing an overview of the principles and approaches used to assess the economic value of spectrum as a scarce public resource. The course covers key valuation methodologies, the evolution of spectrum assignment in India, factors influencing auction outcomes, and major international spectrum assignment and auction frameworks.

A CPSR PERSPECTIVE

When Green Rules Meet Ground Realities: Strengthening Telecom Governance in India

Abstract: India's telecommunications sector faces a governance concern that mirrors, in structure, the country's better-studied plastic-waste regime. A national regulator identified an environmental risk early and issued ambitious targets, yet implementation has proved uneven at the level of the individual tower, circle office and operator. This paper applies a governance-reform framework organised around transparency, accountability and efficiency, of the kind used in analyses of India's plastic-waste regime (MoEFCC, 2016; 2021; 2022), to green telecom. It traces the regime from TRAI's 2011 recommendations, through DoT's 2012 directions on green technology and carbon-footprint reporting and the 2017 TRAI recommendations reflected in DoT's January 2019 instructions, to the E-Waste (Management) Rules, 2022, which came into force in April 2023. It reads the resulting implementation gap through Beck's risk society thesis, Luhmann's risk/danger distinction and Foucault's governmentality. It argues that the shortfall between regulatory targets and demonstrable outcomes is best understood as a combined transparency, accountability and efficiency deficit, with important questions concerning implementation capacity, financing and verification. The paper closes with reform recommendations organised around three pillars (transparency, accountability and efficiency), with ethics placed at the centre that shapes how each pillar is designed and applied.

Keywords: green telecom; governance reform; diesel dependence; e-waste; EPR; India

Introduction

Telecom infrastructure is usually discussed in the vocabulary of connectivity and tariff, not environmental risk, yet operating a mobile network is energy-intensive, and in a country where parts of the rural grid remain unreliable, that energy has historically come from diesel. The same properties that make diesel generators attractive to a tower operator (availability, portability, insensitivity to grid outages) are exactly what make the resulting carbon footprint, and the e-waste generated as towers and handsets are replaced, difficult to govern through voluntary action alone. Moving from diesel dependence to green governance is therefore not only a technological transition but a regulatory one: the question is how a risk produced by the network's own design choices is made visible, attributable and governable.

This presents an interesting parallel to the challenge India's plastic-waste literature has already diagnosed: risk that is well understood technically but weakly routed into sustained accountability, with implementation varying across administrative levels. Both the plastic-waste regime and the telecom e-waste regime share a regulatory trajectory: an early framework recommendation, quantitative targets,

and a later shift toward EPR administered through centralised systems. In plastics, this ran from the 2016 Rules to the 2021 single-use-plastic restrictions and 2022 EPR guidelines. In telecom, it ran from TRAI's 2011 recommendations, through DoT's 2012 directions, to the E-Waste (Management) Rules, 2022, effective from April 2023. This paper reads that trajectory as the basis for a governance-reform agenda drawn from regulatory, industry and academic sources.

Theoretical Foundations

Because telecom risk is concentrated among a relatively small set of institutional actors (DoT, TRAI, licensed operators, tower companies and equipment providers) rather than dispersed across millions of consumer decisions as with plastic, it is, in principle, a more concentrated governance object and a useful test of the same theoretical lens.

Beck's risk society thesis frames the starting point. Diesel dependence is a manufactured risk: a by-product of the modernisation of connectivity itself, produced by the very decisions that extended networks into areas with unreliable grids. Beck's notion of "organised irresponsibility" is a useful warning, since a sector in which many actors contribute to a risk can end up with no actor clearly answerable for it. Luhmann's risk/danger distinction then explains why governance matters: harm becomes a governable "risk" where it can be attributed to a decision, and a tower's carbon footprint is the accumulated consequence of siting, power-sourcing and maintenance decisions by identifiable actors, not an act of nature. Licensee-level targets and carbon-footprint reporting are designed to facilitate exactly this attribution. Foucault's governmentality, which treats risk management as a "technique of governing" operating through targets, certification and reporting rather than direct command, describes TEC's Green Passport/Energy Consumption Rating (ECR) framework with particular precision.

Unlike visible plastic items, which can generate social resistance even when banned, telecom infrastructure is largely invisible to the end consumer: a subscriber experiences coverage, not the diesel generator or e-waste stream behind it. In Beck's terms, the risk is latent rather than perceived, which places greater weight on formal transparency and accountability instruments in telecom.

Scale of the Problem

TRAI's 2011 work identified the telecom sector's energy use and carbon footprint as a significant environmental concern and proposed measures to increase renewable and hybrid power use and reduce emissions. Historical industry estimates also indicate substantial diesel dependence at telecom sites, particularly in areas with unreliable grid supply. However, estimates of tower numbers, diesel consumption and associated emissions vary considerably across years and sources; these figures should therefore be treated as historical industry estimates rather

than as a single definitive national baseline. This uncertainty is itself a governance finding: a risk that cannot be consistently measured is difficult to attribute, and in Luhmann's sense it remains only partly converted from danger into risk.

A second front is e-waste. India is among the world's largest e-waste generators. The E-Waste (Management) Rules, 2022 apply to manufacturers, producers, refurbishers, dismantlers and recyclers dealing with electrical and electronic equipment listed in Schedule I, and came into force on 1 April 2023. The Rules therefore provide a broader EPR framework within which relevant telecom/network equipment can be regulated, rather than a rule designed exclusively for telecom; it is more precise to describe this as an expansion of EPR coverage under Schedule I than simply as an extension from handsets to "network equipment." EPR is a clear instance of Foucauldian governmentality: it governs producers at a distance, through registration, certificates and financial consequences, rather than through direct inspection of every discarded device.

Regulatory Trajectory

TRAI's April 2011 recommendations proposed that, within the next five years, 50% of rural towers and 33% of urban towers should be powered by hybrid power (renewable energy sources plus grid power). The recommendations also included Green Passport/energy-performance assessment for telecom equipment and measures relating to carbon reduction. The precise 2015/2020 hybrid-power figures should not be attributed to the 2011 recommendations and the 2012 DoT directions interchangeably.

DoT subsequently issued directions in January 2012 on implementation of green technology in the telecom sector and submission of carbon-footprint reports. The later 2017 TRAI recommendations, released on 23 October 2017, retained the broader carbon-credit framework and recommended carbon-emission-reduction targets for mobile networks of 30% by 2019–20 and 40% by 2022-23, using 2011-12 as the base year. DoT's January 2019 instructions on "Approach towards Sustainable Telecommunications" subsequently operationalised the sustainable-telecommunications framework. The evidence therefore supports a trajectory of regulatory recalibration rather than a simple story of targets being repeatedly reduced.

The E-Waste (Management) Rules, 2022 then established an EPR regime in which producers are required to meet applicable EPR obligations through the CPCB system, including registration and EPR certificate mechanisms. Across this trajectory, India's regulatory architecture has moved toward registration, certification, reporting and financial responsibility.

Governance-Reform Analysis

Transparency. Carbon-footprint and EPR information is generated through regulatory reporting systems, but publicly available information is limited and is not disaggregated to the level needed to assess implementation across circles, tower clusters or specific asset categories. Foucauldian governing techniques depend on information that can be seen and compared; where reporting is aggregated, the technique loses its force. The way forward is to disaggregate this information to the circle and, where feasible, tower-cluster level, which also makes a latent risk (in Beck's sense) visible to regulators and the public.

Accountability. The central governance concern is not an absence of evidence of progress. TRAI's 2017 recommendations reported an average reduction of 26.96% in carbon footprint by 2015-16 and noted that some stakeholders claimed to have met earlier targets. The more defensible conclusion, however, is that the publicly available evidence is not independently verified, so it cannot establish sector-wide achievement of the successive targets. The paper does not assume that targets went unmet but points to a third party verification and monitoring gap. In Luhmann's terms, attributing a decision to an actor is meaningful only if the outcome can be verified; in Beck's terms, verification is the safeguard against organised irresponsibility.

Efficiency. Rural and urban towers face fundamentally different challenges in replacing diesel, which is why targets have historically been set by segment. Further, an even more efficient approach would rely on regionally calibrated implementation strategies, shaped by grid reliability, site characteristics and the cost-effectiveness of renewable or hybrid solutions, with public support directed to places where market incentives alone fall short. Governmentality works best when the conduct it seeks to shape lies within an actor's realistic capacity. Uniform targets applied to dissimilar sites risk producing paper compliance rather than genuine diesel substitution.

Ethics. The EPR framework puts environmental responsibility into practice through legally defined producer obligations and financial consequences for non-compliance. This strengthens the case for building environmental ethics and sustainability into the continuing professional education of telecom engineers and other relevant officials, alongside existing technical certification and compliance systems. Governmentality is most effective when actors internalise the norms they are governed by. Ethics therefore acts as the cross-cutting foundation linking the three pillars, shaping how transparency is practised, how accountability is accepted and how efficiency is pursued.

Recommendations

The recommendations below move the sector from diesel dependence toward green governance by addressing each gap identified above.

Transparency (making a latent risk visible): (1) disaggregate relevant carbon and EPR reporting to the circle level where legally and technically feasible; (2) publish hybrid-power and energy-efficiency indicators by circle and segment on a public DoT dashboard; (3) explore interoperability between TEC certification information and relevant EPR data.

Accountability (sustaining attribution of risk to decision-makers): (4) institutionalise a standing TEC–TRAI–DoT–industry technical coordination mechanism; (5) ground future TRAI target reviews in independently verified implementation data, supplemented by industry submissions rather than relying on industry submissions alone; (6) integrate environmental-ethics and sustainability modules into relevant continuing professional education.

Efficiency (calibrating governing techniques to site realities): (7) target viability-gap or other public support mechanisms at grid-poor rural clusters identified through reliable disaggregated data; (8) calibrate hybrid-power and e-waste implementation timelines by segment and asset type; (9) improve interoperability between DoT/TRAI monitoring and the CPCB EPR system so that reporting requirements use common definitions and avoid unnecessary duplication.

International Lessons for Green Telecom Governance

International experience offers useful lessons for strengthening India's green-telecom governance. China's Information and Communications Industry Green and Low-Carbon Development Action Plan (2022–2025) provides a centrally coordinated example of target-based energy-efficiency and green-development policy for the communications industry. The European Union's Code of Conduct for the Sustainability of Telecommunications Networks, published on 28 January 2026, provides a common assessment framework built around energy, climate and environmental indicators and reporting practices. The United Kingdom's Wireless Infrastructure Strategy addresses network sustainability through net-zero ambitions, supply-chain challenges, rare materials, repairability, recyclability and the full life cycle of network equipment and connected devices. The United States provides an additional governance lesson through broadband programmes: recent Government Accountability Office (GAO) work has highlighted the importance of reliable mapping data, documented data-quality processes and inter-agency coordination when infrastructure information is used to target public funding.

Read through the paper's theoretical lens, these examples are different governing techniques for making risk attributable: China through targets, the EU through common indicators and lifecycle governance, the UK through supply-chain and life-cycle accountability, and the US through data quality. Taken together, they suggest that India could strengthen its TRAI–DoT–TEC–CPCB architecture by introducing common, comparable indicators at the operator, circle and infrastructure level covering diesel dependence, energy consumption, renewable-energy adoption, carbon emissions, network energy efficiency, EPR compliance

and equipment reuse or recycling. Rather than replicating foreign models, India could adapt these lessons to its own regulatory and infrastructure context, in order to reinforce the three pillars proposed in this paper: transparency, accountability and efficiency.

Conclusion

The journey from diesel dependence to green governance in India's telecom sector is incomplete. India's green-telecom and plastic-waste regimes share a regulatory trajectory (framework recommendations, quantitative targets, and a later shift toward EPR-based registration and polluter-pays mechanisms) and a broader governance challenge: technical risk is reasonably well understood, while transparent, independently verifiable and publicly disaggregated evidence of implementation remains limited.

Through Beck, the gap reflects a manufactured risk that institutions have named but not yet made fully visible; through Luhmann, it reflects the need to keep harm attributable to identifiable decisions; and through Foucault, it reflects governing techniques that depend on credible, disaggregated data to work. Closing this gap is therefore less a matter of designing entirely new instruments, since TRAI, DoT, TEC and CPCB have already developed a substantial regulatory architecture, than of connecting existing instruments more tightly to disaggregated, publicly visible and independently credible data, organised around the three pillars of transparency, accountability and efficiency, with ethics at their centre.

References

1. Beck, U. (1992). Risk Society: Towards a New Modernity. London: Sage.
2. Cellular Operators Association of India (COAI). (2022). Industry representation on the E-Waste (Management) Rules, 2022.
3. Central Pollution Control Board (CPCB). (2016). Plastic Waste Management Rules. New Delhi: Government of India.
4. Department of Telecommunications (DoT). (2012). Directive on Green Telecommunications and Carbon Emission Reduction Targets, No. 16-6/2011-CS-III, 4 January 2012.
5. Department of Telecommunications (DoT). (2019). Approach towards Sustainable Telecommunications, No. 16-06/2011-CS-III, January 2019.
6. Foucault, M. (1991). Governmentality. In G. Burchell, C. Gordon & P. Miller (Eds.), The Foucault Effect (pp. 87-104). Hemel Hempstead: Harvester Wheatsheaf.

7. Foucault, M. (1991). Governmentality. In G. Burchell, C. Gordon & P. Miller (Eds.), The Foucault Effect (pp. 87-104). Hemel Hempstead: Harvester Wheatsheaf.
8. Government Accountability Office (GAO). (2025). Broadband Programs: Agencies Need to Further Improve Their Data Quality and Coordination Efforts. GAO-25-107207.
9. Government of the United Kingdom, Department for Science, Innovation and Technology. (2023). UK Wireless Infrastructure Strategy.
10. Luhmann, N. (1993). Risk: A Sociological Theory. New York: De Gruyter.
11. Ministry of Industry and Information Technology (MIIT), National Development and Reform Commission, Ministry of Finance, et al. (2022). Information and Communications Industry Green and Low-Carbon Development Action Plan (2022-2025). China.
12. Ministry of Environment, Forest and Climate Change (MoEFCC). (2021). Plastic Waste Management (Amendment) Rules, 2021.
13. Ministry of Environment, Forest and Climate Change (MoEFCC). (2022). Plastic Waste Management (Amendment) Rules, 2022: Guidelines for Extended Producer Responsibility.
14. Telecom Regulatory Authority of India (TRAI). (2011). Consultation Paper on Green Telecommunications, No. 3/2011, 3 February 2011.
15. Telecom Regulatory Authority of India (TRAI). (2011). Recommendations on Approach towards Green Telecommunications, 12 April 2011.
16. Telecom Regulatory Authority of India (TRAI). (2017). Recommendations on Approach towards Sustainable Telecommunications, 23 October 2017.

NCA-F



Certificate No.
APP/22/N00004-2

CAPACITY BUILDING COMMISSION

Certificate of Accreditation

The training Institute **National Communications Academy - Finance** is accredited as **सर्वोत्कृष्ट/Outstanding** under the Capacity Building Commission's National Standards.

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The Accreditation granted on **14/11/2025** is valid until **13/11/2027**

S.P. Roy
Jt. Secretary
Capacity Building Commission

S. Radha Chauhan
Chairperson
Capacity Building Commission

National Communications Academy-Finance proudly secured the ***Sarvotkrisht*** (highest) rating from the **Capacity Building Commission (CBC)**, becoming one of the first institutes to receive this recognition under the National Standards for Civil Services Training Institutes 2.0 Framework.