ITS INDIA CONGRESS 2026

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Report

ITS INDIA CONGRESS 2026

Connected, Integrated and Intelligent Mobility for Viksit Bharat 2047

7–8 October 2026

Bharat Mandapam, New Delhi



ITS INDIA Shaping the Future of Mobility

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Executive Summary

The second edition of ITS India Congress 2026 was held on 7–8 October 2026 at Bharat Mandapam, New Delhi, under the theme **"Connected, Integrated and Intelligent Mobility for Viksit Bharat 2047."** Organised by ITS India Forum with Messe Frankfurt Trade Fairs India Pvt. Ltd. and Virtual Info Systems, it convened policymakers, transport authorities, industry, academia and international ITS experts to advance safer, smarter and more integrated mobility. The event featured eight sessions, over 54 company exhibitors at Transport + Traffic Infratech Expo and participation representing more than five nations. The exhibition showcased cutting-edge technologies, innovative solutions, and the latest advancements in Intelligent Transportation Systems (ITS)

The inaugural session, India's Roadmap to 2047 – Intelligent Transportation as a Catalyst, highlighted the importance of technology-driven mobility for road safety, transport efficiency, sustainability and inclusive development alongwith the launch of ITS India Yearbook 2026. Discussions on citizen-centric ITS focused on AI-enabled traffic management, predictive accident-risk identification, electronic enforcement and integrated mobility services. Barrierless tolling deliberations emphasised Multi-Lane Free Flow (MLFF), accurate vehicle identification, interoperability, revenue assurance and sustainable road financing. The connected mobility session highlighted V2X, C-V2X, 5G, cybersecurity and common standards to enable real-time hazard alerts and safer highways.

The PM Gati Shakti plenary emphasised multimodal integration across roads, railways, ports, airports and urban transport through digital platforms, unified ticketing and intelligent logistics. The capacity-building session stressed specialised ITS education, practical certification, industry–academia collaboration, quality assurance and workforce development. The closed-door Global ITS Leadership Dialogue Roundtable examined barriers to technology adoption and recommended technical-first procurement, common evaluation and accreditation standards, proof-of-concept pilots, outcome-based contracts, startup participation and sustainable financing. The valedictory session reinforced road safety as a national priority and the need to translate innovation into measurable field-level improvements. Road Safety Technology Awards recognised innovative, deployable solutions presented at the National Road Safety Technology Conclave (NRSTC) 2026, jointly organised by ITS India Forum and IIT Bombay.

The Congress consolidated its deliberations into five strategic priority areas: citizen-centric ITS, barrierless tolling and road-user charging, connected mobility and V2X, multimodal mobility and logistics, and capacity building. The recommended way forward is to identify priority use cases and pilot corridors; establish interoperable standards and predictable procurement pathways; define measurable performance indicators; strengthen cybersecurity and institutional capabilities; and scale proven solutions through coordinated action by government, industry, academia and ITS India Forum.

The Congress reaffirmed that achieving Viksit Bharat 2047 requires more than infrastructure development. India must build a secure, interoperable, intelligent and citizen-focused mobility ecosystem, with success measured through fewer road crashes and fatalities, reduced congestion, reliable journeys, efficient logistics and sustainable transport services. The roadmaps provide strategic directions for stakeholder consultation and subsequent implementation planning.

Indian ITS on the global stage. The momentum generated at the Congress carried directly onto the world stage. At the 32nd ITS World Congress in Gangneung, South Korea (19–23 October 2026), India's ITS industry and policies were in the spotlight, and India's push for Vehicle-to-Vehicle (V2V) communication to improve road safety was widely appreciated. Partnerships seeded at the Congress were formalised through MoUs with ITS New Zealand and ITS Canada and a bilateral meeting with ITS

Australia. At home, the Union Minister for Road Transport & Highways announced the rollout of AI-based Advanced Traffic Management Systems (ATMS) on national highways, and the 5G Automotive Association (5GAA) held its first global meeting week of this scale in India.

Visionary outcomes. Beyond its session-level recommendations, the Congress set out a bold collective vision for Viksit Bharat Mobility @2047: predictive, technology-led road safety in line with the goal of halving road deaths; every new vehicle connected and every major corridor intelligent; stop-free, fair road-user charging; 'One Nation, One Journey' multimodal travel; a national ITS architecture functioning as digital public infrastructure for mobility; and a world-class ITS workforce through '100 Minds, 10,000 Hands'. A phased pathway to 2047 is set out in Section 4.

1. Introduction

The second edition ITS India Congress 2026, organised by ITS India Forum in collaboration with Messe Frankfurt Trade Fairs India Pvt. Ltd. and Virtual Info Systems, was held on 7–8 October 2026 at Hall No. 1, Bharat Mandapam, New Delhi, under the theme "Connected, Integrated and Intelligent Mobility for Viksit Bharat 2047." The Congress brought together senior government officials, policymakers, transport authorities, industry leaders, technology innovators, researchers and international ITS experts to deliberate on the future of intelligent transportation in India.

Discussions focused on AI-driven mobility, Vehicle-to-Everything (V2X) communication, connected infrastructure, electronic enforcement, barrierless tolling, multimodal transport integration, road safety, sustainable mobility and capacity building. Through technical sessions, a Global ITS Leadership Dialogue Roundtable and industry engagement, the Congress provided a collaborative platform to exchange global best practices, strengthen stakeholder partnerships and advance technology-led solutions for safer, smarter, more efficient and sustainable mobility in India.

One Mission: Road Safety through Technology

8	54	5+
Sessions	Companies Showcasing at Transport + Traffic Infratech Expo	Nations Represented

The initiative brought together key national and state-level stakeholders, including MoRTH, MeitY, DoT, SCCoRS, State Police Directors General, Transport Commissioners and Secretaries, industry representatives, and academia, to foster coordinated action towards safer, smarter, and more integrated mobility.

International perspectives from New Zealand, Australia, Singapore, the United Kingdom and Taiwan enriched the dialogue through the exchange of global best practices, international cooperation, and shared learning to advance intelligent transportation and road safety in India.

1.1 The Congress at a Glance

Event	ITS India Congress 2026 (2nd Edition)
Theme	Connected, Integrated and Intelligent Mobility for Viksit Bharat 2047
Dates	7–8 October 2026
Venue	Hall No. 1, Bharat Mandapam, New Delhi
Organiser	ITS India Forum, with Messe Frankfurt Trade Fairs India & Virtual Info Systems
Format	Inaugural session · 1 Plenary · 4 Technical sessions · 1 Closed-door Leadership roundtable · Valedictory & Award Ceremony
Co-located	Exhibition running alongside the Congress
Signature Launch	ITS India Year Book 2026

Table 1: The Congress at a Glance

1.2 Programme Overview

Day 1 opened with a joint lamp-lighting for the Traffic Infratech exhibition and ITS India Congress, followed by the inaugural session and three technical sessions on citizen-centric ITS, barrierless tolling and connected mobility. Day 2 opened with a plenary on PM Gati Shakti and multimodal logistics, followed by a technical session on capacity building, the Global ITS Leadership Dialogue Roundtable, and the valedictory session with the Road Safety Technology Awards.

2	5	1
Days of Deliberation	Thematic Sessions	Global Leadership Roundtable

The event commenced with the ceremonial lamp-lighting, marking the auspicious inauguration of the ITS India Congress 2026 and TrafficInfraTech Expo, symbolising a collective commitment to advancing intelligent, safe, sustainable, and connected mobility in India.





Images 1&2: Lamp lighting of the exhibition and conference

The strategic integration of the ITS India Congress with Transport + Traffic Infratech Expo created a compelling, integrated platform for India's intelligent transportation and mobility ecosystem, bringing together policymakers, government authorities, industry leaders, technology providers and other key stakeholders. The 14th edition of this annual exhibition showcased emerging technologies, innovative products and solutions across the Intelligent Transportation Systems domain, demonstrating their potential to enhance road safety, improve traffic management, strengthen transport infrastructure and accelerate the development of a smarter, safer and more connected mobility ecosystem.



Image 3: Exhibition at a glance

2. Congress Proceedings and Session Highlights

This section summarizes the proceedings of each session across the two days — the inaugural session, four technical sessions, the Day 2 plenary, the Global ITS Leadership Dialogue Roundtable and the valedictory session — capturing key addresses, presentations, panel discussions, takeaways and the roadmap outcome emerging from each.

2.1 Day 1 — Inaugural Session: India's Roadmap to 2047

Overview

The Congress was inaugurated with the session "India's Roadmap to 2047 — Intelligent Transportation as a Catalyst." Dr. Shiv Kumar, Director General, ITS India Forum, opened the session and welcomed the dignitaries. Mr. Akhilesh Srivastava, President, ITS India Forum, set the context with the message that technology is no longer optional for India's mobility. The inaugural brought together international, government and industry leaders, culminating in the Chief Guest's address on India's intelligent mobility vision.

The session convened distinguished dignitaries and leaders from government, law enforcement, road safety, academia, the automotive and telecommunications industries, and the international ITS community, setting the tone for the Congress's deliberations on advancing connected, integrated and intelligent mobility towards Viksit Bharat 2047.

Key Addresses

- **Mr. Akhilesh Srivastava, President, ITS India Forum**

  Delivered the welcome address, emphasising that technology is no longer optional but fundamental to shaping India's mobility future. The address highlighted the critical role of intelligent transportation systems, digital innovation, connected mobility, and data-driven solutions in improving road safety, enhancing traffic management, strengthening transport efficiency, and supporting sustainable and inclusive mobility. It also underscored the need for stronger collaboration among policymakers, industry, academia, and technology providers to accelerate the adoption of innovative solutions and advance India's vision of a safer, smarter, and more integrated mobility ecosystem.

- **Ms. Lee McKenzie, Vice Chair & International Lead, ITS New Zealand**

  She gave the international keynote. Opening with a Te Reo Māori greeting, she said the world should be watching India's journey to Viksit Bharat 2047, citing India's climb in the Global Innovation Index (66th in 2016 to 38th today) and its position as the world's largest ICT-services exporter since 2017. She urged cross-border collaboration and invited delegates to the ITS Asia-Pacific Forum (Auckland, 5–7 May 2027).

> ***"Transforming India for Viksit Bharat 2047 demands a vision to lead globally, and digital infrastructure must anchor that vision. The world is watching India as a pillar of development: economic, social and environmental."***

- **Mr. Debashish Debsikdar, SVP & Business Head – TTT, Jio Platforms**

  He framed 5G-to-6G connectivity as the "digital nervous system" of future mobility and presented SAMP 2047 (Strategic Architecture for India's Mobility Platform), a five-pillar framework spanning connected infrastructure, competitive logistics, safe and seamless

mobility, green mobility, and intelligent digital transformation, building on PM Gati Shakti, the National Logistics Policy, ULIP and the FASTag-to-MLFF transition.

> ***"Innovation and transformed logistics will define India's global competitiveness. Logistics and transportation fuel Viksit Bharat 2047, with connected infrastructure the most important enabler."***

- **Mr. K. K. Kapila, President, IRF**

  He spoke on India's infrastructure development journey and the shift from reactive to predictive road safety.

> ***"We are moving from reactive safety to predictive safety. The vehicle is becoming intelligent, the road is becoming intelligent, now they must talk to each other."***

- **Smt. Malini Aggarwal, IPS, DGP, Rajasthan Police**

  She highlighted the role of AI and digital enforcement, including predictive hotspot mapping, in road safety.

> ***"Technology can transform road safety — predictive hotspot mapping and early identification of accident-prone areas. Siloed data must be connected; only then can it protect lives."***

- **Shri Mahmood Ahmed, Additional Secretary, MoRTH**

  He shared perspectives on intelligent highways and electronic enforcement.

> ***"Electronic enforcement is instrumental to road safety. SOPs and strategically placed equipment are key, and MLFF and e-enforcement must leverage technology for effective implementation."***

- **Prof. K. K. Aggarwal, President, South Asian University**

  He emphasized developing India's ITS talent for 2047.

> ***"Transport has always been a catalyst for development, and ITS is where technology meets transport. The full involvement of ITS India is instrumental for Viksit Bharat 2047."***

- **Shri Sanjay Bandopadhyaya, IAS(Retd) Member, SCCoRS**

  He underscored the role of technology in reducing road fatalities.

> ***"The main objective of ITS is to increase efficiency in transport and logistics, with road safety never compromised. The four Es of road safety are Enforcement, Education, Engineering and Emergency Care."***



Images 4: Inaugural Session – Key Addresses

ITS Yearbook Launch

The ITS India Yearbook was officially launched during the ITS India Congress 2026, marking an important milestone in documenting the growth, achievements and evolving landscape of Intelligent Transportation Systems in India. The Yearbook brings together key developments, initiatives, innovations and contributions of stakeholders across the ITS ecosystem, serving as a valuable reference for policymakers, industry leaders, researchers and technology providers working towards a connected, integrated, intelligent and sustainable mobility ecosystem for Viksit Bharat 2047.



Images 5: Inaugural Session and ITS India Yearbook Launch

2.2 Technical Session 1: Citizen-Centric Intelligent Transportation Systems (Day 1)

Overview

The session examined how AI, digital enforcement, data analytics, digital twins, MaaS platforms and Integrated Command & Control Centres can make mobility safer, greener and more citizen-centric. Sub-themes covered AI-enabled traffic management, predictive safety analytics and Vision Zero, and the ANPR / digital enforcement / e-challan ecosystem.

Presentations

Speaker	Organisation	Topic
Dr. Amit Kumar Jain, Director – Ops & Services	DMRC	AI for Seamless Citizen Mobility
Mr. Senturan Karthikeyan, Director – Innovations	Datacorp Traffic	Enforcement That Follows the Risk
Mr. Vijay Khuspe, Director	SenSen Networks	Video Analytics for Smarter Enforcement
Dr. Jaya Shankar Pathmasuntharam, Councillor	ITS Singapore	CRUISE: Next-Generation AI-Based Traffic Control

Table 2: Technical Session 1 – Citizen-Centric ITS: Presentations

Key Highlights

- **Dr. Amit Kumar Jain (DMRC) —** Showcasing the Delhi Metro Sarthi app, he set out a "metro-to-doorstep" vision for Mobility-as-a-Service — a single platform integrating multi-modal transit (metro, DTC and interstate buses, IRCTC, NCRTC and Noida Metro) with door-to-door journey planning across first, middle and last mile. Used by 19.2 lakh commuters monthly with over 1 crore downloads, it adds on-demand taxi booking, nearest-station guidance and accessibility features, powered by CHETNA, a multilingual LLM-based AI assistant handling around 10,000 queries a day.
- **Mr. Senturan Karthikeyan (Datacorp Traffic) —** Arguing that "enforcement that follows the risk" saves lives, he drew on the Bengaluru–Mysuru Expressway, where ANPR/AI cameras and an ATMS cut road deaths from 188 in 2023 to 50 in 2024 (down 73%). Gains plateaued in 2025 as drivers learned to beat fixed cameras — making the case for portable, unpredictable enforcement and for closing the e-challan recovery gap (only ~40% of some 31 crore challans are paid) through faster notification, instant UPI payment and linkage to Vahan, Sarathi, insurance and tolls.
- **Mr. Vijay Khuspe (SenSen Networks) —** In "Eyes That Never Blink," he argued India faces a 2026 problem running on a 1990s, manpower-based enforcement model, even though the law now permits electronic enforcement. The real bottleneck is institutional adoption — who owns, runs, validates, audits and appeals the system — and he showcased Pune's "Watch, Detect, Enforce" AI traffic sentinel tackling micro-congestion between junctions.
- **Dr. Jaya Shankar Pathmasuntharam (ITS Singapore) —** He introduced CRUISE (Cooperative and Unified Smart Traffic System), a data-driven platform for dense urban networks. Moving beyond fixed sensors and preset plans, CRUISE combines flexible sensing — cameras, radar, LiDAR, loop detectors and connected-vehicle data — with distributed, adaptive control, letting neighbouring junctions coordinate locally and dynamically. Drawing on its Singapore testbed, he showed how richer real-time awareness and flow-based analytics

improve journey reliability, cut delays and stops, and support connected and autonomous transport.

Panel Discussion

Moderated by Mr. Akhilesh Srivastava (President, ITS India Forum), with Col. Sanjiv Sharma (Retd.), CoERS, IIT Madras; Mr. Srinivas Ganji, Arcadis – Bharat; Mr. Prashant S. Hegde, Prama; Mr. Syed Ghouse Nazeerudeen, Katomaran Technologies; Mr. Vijay Kumar, Applied Information; and Mr. Prashant Banerjee, EKA Mobility.

- **From records to risk-based prevention.** Col. Sanjiv Sharma (Retd.) described moving beyond black spots to emerging and perceived risks, using field surveys and AI-enabled multilingual road-user education.
- **Performance after go-live.** Mr. Srinivas Ganji stressed that commissioning is only the start; ITS needs clear operational ownership, user adoption, continuous monitoring and adaptation.
- **Safer, affordable and faster mobility.** Mr. Prashant Banerjee highlighted the potential of connected vehicles and V2X for crash avoidance, alongside seamless metro and last-mile integration.
- **Make vehicles and infrastructure V2X-ready.** Mr. Amit Kumar (GLASS) noted that connected vehicles must be matched by communicative signals, school zones and pedestrian crossings.
- **AI, improvement and public trust.** Mr. Vijay Kumar (Applied Information) called for post-deployment learning from driver behaviour and system failures, with transparent reporting of performance and corrective action.
- **Practical tools for Indian conditions.** Mr. Prashant S. Hegde (Prama) stressed multilingual interfaces, easy field operation and domestic manufacturing to support scalable deployment.

Key Takeaways

- Move from historical crash records alone to risk identification that combines recorded data with field observations and perceived risks.
- Treat commissioning as the beginning of operational delivery: assign ownership, monitor performance and continuously improve deployed systems.
- Connect vehicles with traffic signals, school zones, pedestrian crossings and other roadside infrastructure to realise the wider safety value of V2X.
- Use AI and enforcement data to identify behavioural patterns and road-design weaknesses, and communicate system performance transparently.
- Make citizen-facing ITS practical to operate at scale through multilingual interfaces, adaptable systems and technologies suited to Indian conditions.



Images 6: Technical Session 1 – Citizen-Centric Intelligent Transportation Systems

Roadmap Outcome: *ITS Roadmap for Citizen-Centric Mobility and Viksit Bharat 2047 — combine risk-based AI enforcement, continuous post-deployment performance monitoring and transparent systems with V2X-ready infrastructure, multilingual tools and citizen trust to deliver safer, more reliable mobility.*



Images 7: Audience at ITS India Congress

2.3 Technical Session 2: Barrierless Tolling and Road User Charging (Day 1)

Overview

Building on the success of FASTag, this session discussed Multi-Lane Free Flow (MLFF), GNSS-based tolling, congestion pricing and mobility-based charging — covering technology readiness, enforcement, policy frameworks, privacy and the roadmap for nationwide rollout. Sub-themes ran from the FASTag-to-MLFF transition and GNSS road-user charging to congestion pricing, revenue assurance, global best practices and sustainable infrastructure financing.

Chair: Shri A. R. Chitranshi, COO, IHMCL

Co-Chair: Smt. Malini Aggarwal, IPS, DGP, Rajasthan Police

Presentations

Speaker	Organisation	Topic
Ms. Susan Harris, CEO	ITS Australia	Road User Charging Down Under: Lessons for India's MLFF Journey
Mr. Dilip Kumar, Head – ITS Business Unit	e-con Systems	Road User Charging: Lessons for India
Mr. Richard Wu, Vice President & CTO	FETC	Global Experience on MLFF

Table 3: Technical Session 2 – Barrierless Tolling and Road User Charging: Presentations

Key Highlights

- **Ms. Susan Harris (ITS Australia) —** highlighted Australia's experience in intelligent tolling, national interoperability and road-user charging, stressing the need for fair and sustainable road-infrastructure funding amid growing EV adoption, and shared insights into common technical standards and emerging road-user charging policies.

> ***"ITS India Forum has united stakeholders behind the mission of road safety, and ITS Australia looks forward to collaborating with the Forum."***
> **— Ms. Susan Harris, CEO, ITS Australia**

- **Mr. Dilip Kumar (e-con Systems) —** focused on stopping toll-revenue loss from spoofed number plates — reflective paint, smudging films and blackout films that defeat conventional ANPR, costing an estimated USD 42 million a year in New York and GBP 49.8 million in London. The answer: multi-spectral imaging that combines visible and infrared light with AI and vehicle "fingerprinting," delivered through India-built AI ANPR cameras purpose-made for MLFF tolling.
- **Mr. Richard Wu (FETC) —** shared Taiwan's nationwide MLFF experience — 341 gantries, 100% ETC usage and 99.98% detection accuracy across 17–22 million daily transactions — and mapped the road beyond free-flow tolling: sustainable "smart highways" fusing AI, IoT, big data and C-V2X/5G, dynamic road pricing evolving into full road-user charging, and the newly established Asia-Pacific Road User Charging Alliance.



Images 8: Technical Session 2 – Barrierless Tolling and Road User Charging

Panel Discussion

Moderated by Shri Amrit Singha (CPO, IHMCL), with Mr. Amit Dudeja (Head Enterprise, Interise); Mr. Vishal Darad, Tecsidel; Shri Sankar Narayanan, IRB Infrastructure; Mr. Srikant Kurup, IDFC First Bank; and Mr. Niranjan Patil, Wizpro Consultech.

- **Interoperability as the foundation.** Shri A. R. Chitranshi stressed that FASTag's nationwide reach demonstrates the value of one interoperable system; new technologies, including V2X and EV charging, should be designed to work across regions and operators.
- **Barrierless tolling and smoother journeys.** Smt. Malini Aggarwal highlighted the potential of free-flow tolling to reduce stopping, waiting time and congestion, benefiting everyday, commercial and emergency travel.
- **Protect revenue and enforcement integrity.** Mr. Dilip Kumar explained how AI-enabled, multispectral ANPR can help detect spoofed number plates and strengthen evidence for toll enforcement.
- **Fair and sustainable road funding.** Ms. Susan Harris described Australia's interoperable tolling arrangements and the growing need for road-user charging as EV adoption changes traditional fuel-tax revenues, noting the importance of sound legal and policy design.
- **Build regional collaboration.** Mr. Richard Wu described the Asia-Pacific Road User Charging Alliance as a platform to share experience and support innovation across tolling, congestion charging and broader road-user charging.

Key Takeaways

- Make interoperability a core requirement for all tolling and mobility technologies.

- Progress towards MLFF with accurate vehicle identification, effective anti-spoofing and reliable enforcement.
- Assess road-user charging through the lenses of fairness, legal readiness, privacy and sustainable infrastructure funding.

> **Roadmap Outcome:** *India Road User Charging and MLFF Roadmap 2047 — prioritise nationwide interoperability, secure and accurate vehicle identification, phased barrierless tolling, and fair, legally sound road-user charging.*



Images 9: Audience at ITS India Congress

2.4 Technical Session 3: Connected Mobility Ecosystem (V2X) (Day 1)

Overview

The session explored India's roadmap for connected mobility — V2V, V2I, V2N, V2P and V2X — covering 5G and C-V2X, cybersecurity, spectrum, standards and interoperability, connected corridors, smart highways, freight applications and emergency-vehicle prioritisation. Sub-themes spanned connected-vehicle technologies, connected highways and smart infrastructure, 5G/edge/communication networks, safety and automation (ADAS, cooperative driving), and the policy, standards and deployment roadmap.

Presentations

Speaker	Organisation	Topic
Mr. Rojer Kavin Ram S. R., Technical Director – V2X & Connected Systems	Danlaw Technologies India	Making C-V2X Real on Indian Roads
Shri Soundra Pandian Kaliappan, Scientist E & Additional Director	MeitY	Digital Technologies for Connected Mobility in Viksit Bharat 2047

Table 4: Technical Session 3 – Connected Mobility Ecosystem (V2X): Presentations

Key Highlights

- **Shri Soundra Pandian Kaliappan (MeitY) —** highlighted the role of Public Key Infrastructure (PKI) and digital certificates in securing V2X, noting the need to align India's certificate framework with global ITS standards while ensuring interoperability, ease of implementation and national sovereignty.
- **Mr. Rojer Kavin Ram S. R. (Danlaw Technologies India) —** showed how real-time vehicle and infrastructure data can address crash risks that on-board ADAS may miss — including obstructed views and the detection of two-wheelers — drawing on global C-V2X deployments and their relevance to Indian roads.
- **Dr. Reji Mathai, Director, ARAI (Chair) —** emphasised bringing stakeholders together around a clear national case for connected mobility.
- **Dr. N. Subramanian, ED, SETS (Special Address) —** highlighted three linked priorities — safety, security and privacy — and stressed addressing cybersecurity across the 5G-to-6G communication journey.
- **Mr. Titas Roy (Moderator) —** framed transport infrastructure as a data-driven, intelligent ecosystem in which AI, spatial intelligence and digital infrastructure work together.

Panel Discussion

Chair: Dr. Reji Mathai, Director, ARAI

Special Address: Dr. N. Subramanian, Executive Director, SETS

Moderator: Mr. Titas Roy, Geospatial World

The panellists highlighted the following priorities:

- **Safety-first deployment.** Mr. Giri Kumar stressed that safety must be central to India's technology choices, citing more than 1.8 lakh road deaths and around 80,000 two-wheeler fatalities. AI, connected vehicles and V2X can help detect hazards beyond a sensor's line of sight.

- **Preventing incidents, not just recording them.** Mr. Sachin Bhatia noted that many highway sections are connected, but data is often used after an incident — infrastructure-to-vehicle (I2V) alerts could deliver more immediate safety benefits.
- **Interoperability and common alerts.** Mr. Rojer Kavin Ram S. R. emphasised standardisation so that vehicles beyond those supplied by OEMs can receive consistent alerts and notifications.
- **Secure and trusted data sharing.** Dr. Sarat Chandra Babu highlighted the links between V2X, AI, IoT and blockchain; PKI proof-of-concept work; V2X simulation at C-DAC's Bengaluru experience centre; and interfaces with traffic-control systems — identifying safety, security, privacy and trust as essential.
- **Stakeholder alignment.** Dr. Reji Mathai called for stakeholders to come together around the national benefits of V2X, reinforced by Mr. Titas Roy's framing on connecting digital and spatial intelligence with transport infrastructure.
- **Skills and standards for intelligent infrastructure.** Shri Mahendra Srivastava (RailTel) called for integration and intelligence to be built into digital-infrastructure standards from the design stage, and recommended a government-led multi-stakeholder skills-development council to strengthen India's talent pipeline.

In closing, Mr. Akhilesh Srivastava, President, ITS India Forum, underlined that connected-mobility solutions are not a distant prospect but an urgent need, given India's high share of global road fatalities.



Images 10: Technical Session 3 – Connected Mobility Ecosystem (V2X)

Key Takeaways

- Prioritize road safety in V2X policy and deployment, particularly for vulnerable road users.
- Build interoperable systems and common standards so alerts reach all road users and vehicle types.
- Embed cybersecurity, privacy, trust and PKI-based security into the connected-mobility architecture.
- Move from post-incident analysis towards real-time, preventive warnings using connected highways and I2V/V2X.
- Align government, industry, academia and technology providers around a phased India Connected Mobility Roadmap 2047.



Images 11: Presentation at Technical Session 3 – Connected Mobility Ecosystem (V2X)

> **Roadmap Outcome:** *India Connected Mobility Roadmap 2047, emphasis on V2X deployment, safety, interoperability, cybersecurity, privacy and trusted data sharing.*

2.5 Day 2 — Plenary: Smart Transport Integration through PM Gati Shakti

Overview

Day 2 opened with a plenary on integrating roads, railways, ports, airports, logistics parks, inland waterways and urban transport under the PM Gati Shakti framework. Discussion focused on how digital technologies, geospatial intelligence, multimodal planning, AI-powered logistics and MaaS platforms can cut logistics costs and strengthen India's competitiveness. Sub-themes covered the National Master Plan, multimodal integration, the National Common Mobility Card and digital ticketing, AI/digital logistics platforms, digital twins and predictive planning, and freight corridors.

Chair: Mr. Harish Sabharwal, President, AIMTC

Presentations

Speaker	Organisation	Topic
Mr. Pankaj Bhatia, Managing Director	Hitachi Rail	Digital Rail at the Heart of Multimodal India
Mr. Abhijeet Sinha, Program Director – EoDB & NHEV	NHEV	Electric Highways for Greener Freight
Mr. Alagappan Ramanathan, Director – Global Design Centre	Datacorp Traffic	Smart Systems for Seamless Logistics
Mr. Jitender Kaushik, Founder & CEO	Onnyx Electronisys	Intelligent Mobility for Viksit Bharat

Table 5: Day 2 Plenary – PM Gati Shakti: Presentations

Key Highlights

- **Mr. Alagappan Ramanathan (Datacorp Traffic) —** under "One Nation, One Network," framed urban mobility as both a capacity and a safety gap — 13.3 city buses per lakh people against a benchmark of 44, 1.73 lakh road deaths in 2023 (65% of them pedestrians and two-wheeler riders), and 40% of urban women feeling unsafe — proposing PM Gati Shakti be used to plan, connect and pay across modes, turning infrastructure into one safe, inclusive network.
- **Mr. Pankaj Bhatia (Hitachi Rail) —** in "One Nation, One Journey," argued India has integrated its infrastructure through PM Gati Shakti's seven engines and must now integrate the journey — with digital rail at the centre and a single credential (one QR or NCMC card) carrying passengers seamlessly across rail, metro, RRTS and bus.
- **Mr. Jitender Kaushik (Onnyx Electronisys) —** opening with "smooth traffic is to a nation what blood circulation is to a human body," drew on three decades in traffic signals to argue India needs more intelligent infrastructure — signals that sense, decide and respond — and urged an ambulance-priority system that can start today to cut avoidable fatalities.
- **Mr. Abhijeet Sinha (NHEV) —** in "Electric Highways for Greener Freight," presented the NHEV Intelligent Roadside Assistance (RSA) network — connected safety-and-energy nodes roughly every 50 km combining EV charging, RSA vehicles, connectivity and monitoring — which uses real-time vehicle telemetry to predict stranding risk and dispatch the best-fit RSA rather than merely the nearest.
- **Mr. Harish Sabharwal, President, AIMTC (Chair's address) —** noted that PM Gati Shakti has moved infrastructure planning from faster to integrated decision-making, but stressed that infrastructure growth must translate into practical benefits for transport operators, calling for seamless integration across road, rail, waterways and air to reduce costs, waiting time and inventory.

> ***"Integration of systems extends well beyond the transport sector. Logistics, energy, urban planning, telecom and industry are all instrumental stakeholders. Even marginal delays in transport ripple across supply chains and carry a disproportionate cost to GDP."***
> **— Mr. R. Shakya, (Former DDG DoT & Core team, South Asia Area Office of ITU)**



Images 12: Day 2 Plenary – Smart Transport Integration through PM Gati Shakti

Panel Discussion

Moderated by Shri Anil Chikkara (Former Deputy Commissioner – Transport, Govt. of Delhi), with Shri Mubashir Jan and Shri Umar Bhatt (Govt. of J&K); Shri Mahendra Srivastava (RailTel); Mr. Jitender Kaushik (Onnyx Electronisys); Prof. E. Madhu (CSIR-CRRI); Mr. Aakash (AHA Automotive Innovations); and Mr. Chaitanya (Sego Auto). The discussion connected multimodal integration with practical road safety, enforcement, technology adoption and the needs of transport operators.

- **Safe highways and effective enforcement.** Shri Anil Chikkara noted that the scale of highway construction must be matched by safer roads; Prof. E. Madhu stressed that rising fatalities demand stronger attention to road infrastructure, enforcement and ITS, as manual processes alone cannot address the challenge.
- **Solutions for hilly regions.** Shri Mubashir Jan highlighted J&K's distinct terrain, noting safety requires administration, enforcement and stakeholders working together, including through PPPs; Shri Umar Bhatt added that AI, IoT, 5G, V2X and intelligent traffic management can improve safety in hilly areas.
- **ADAS retrofitment.** Mr. Aakash called for a regulatory pathway for ADAS retrofitment not dependent solely on government; Mr. Chaitanya suggested government could consider mandating retrofitment for public transport and commercial vehicles, alongside wider access and public awareness.

- **Transport education and public awareness.** Panellists emphasised educating road users rather than relying only on penalties, with road-safety education beginning in schools.
- **Cybersecurity and system integration.** Shri A. R. Chitranshi cautioned that integration creates system-wide risks if cybersecurity is overlooked, calling for common protocols and safeguards to prevent a single malware incident from disrupting interconnected transport systems.



Images 13: Day 2 Plenary – PM Gati Shakti (Panel Discussion)

Key Takeaways

- Measure infrastructure progress by safety outcomes and real benefits for road users and operators not construction alone.
- Strengthen road safety through better infrastructure, enforcement, ITS and public education, including traffic-safety awareness from school age.
- Improve multimodal integration across roads, rail, waterways and air to reduce logistics costs, waiting time and inventory, involving transport operators in planning.
- Develop practical ADAS retrofitment pathways, prioritise suitable public transport and commercial vehicles, and tailor solutions to hilly regions.
- Make cybersecurity, system protocols and public-private collaboration integral to connected and integrated transport planning, with common standards and structured skills development.

> **Roadmap Outcome:** *National Multimodal Mobility and Logistics Roadmap 2047 — seamless multimodal connectivity, safer highways, stronger ITS and enforcement, context-specific solutions for hilly regions, practical ADAS retrofitment, road-safety education, cybersecurity and meaningful transport-sector participation.*

2.6 Global ITS Leadership Dialogue Roundtable (Day 2)

Overview — From Innovation to Implementation

The closed-door roundtable examined why promising Intelligent Transportation Systems technologies often face delays between development and deployment. Participants focused on procurement policy, technical evaluation, interoperability, financing and the need to create pathways for innovation.

Moderator: Mr. Akhilesh Srivastava, President, ITS India Forum

Key Discussion Points

- **Procurement that enables innovation.** Mr. Akhilesh Srivastava noted that government agencies are major buyers of ITS, but conventional tendering can struggle with technologies that have no established precedent. Ms. Lee McKenzie highlighted how funding pressures can limit room for innovation, while Ms. Susan Harris described approaches such as long-term deliver-operate-maintain contracts and unsolicited proposals.
- **Technical qualification before commercial bidding.** Mr. Debashish Debsikdar recommended a two-stage process define and freeze requirements, assess technical capability against a common checklist, and invite only qualified bidders to submit commercial offers alongside a clear national mobility architecture.
- **Outcome-based procurement and proof of concept.** Mr. Mahendra Srivastava advocated outcome-based and managed-service models, noting detailed specifications can become outdated quickly, with proof-of-concept trials selected according to project needs.
- **Common evaluation and standards.** Mr. Senturan Karthikeyan proposed a central evaluation and accreditation mechanism to reduce repeated demonstrations across cities; Prof. Archak Mittal called for academic and industry domain experts in technical evaluation; and Shri Manoranjan Parida stressed interoperability across standards and institutions.
- **Startups and innovation pathways.** Mr. Chaitanya described the difficulty of procuring integrated solutions when tenders do not reflect their added value; Mr. Avinash Trivedi recommended hackathons, challenge-based problem statements and small pilots, alongside eligibility criteria that do not exclude younger companies.
- **Performance measurement and financing.** Mr. Jitendra Kaushik urged authorities to measure real outcomes reduced travel time and fatalities, not simply installed equipment; Shri Gaurav Upadhyay emphasised viability analysis and sustainable funding, including revenue-sharing models, multilateral soft loans and CSR support.

Key Takeaways

- Adopt two-stage procurement: technical qualification first, then commercial competition among qualified bidders.
- Develop a common national ITS architecture and interoperable standards, coordinated across ministries, states and agencies.
- Consider central evaluation and accreditation, proof-of-concept trials and outcome-based or managed-service contracts where suitable.
- Enable startups through hackathons, challenge-based problem statements, pilots and proportionate eligibility criteria.
- Measure procurement success through outcomes — safety improvements, reduced travel time, service reliability and logistics efficiency.

- Build sustainable financing using viability analysis and suitable combinations of public funding, revenue-sharing, multilateral finance and CSR.







Images 14, 15 & 16: Round Table Discussion

Roadmap Outcome: *A call for an agile, transparent and outcome-oriented ITS procurement framework that combines technical rigour with innovation, common standards, measurable performance and sustainable financing, a practical path for accelerating deployment while maintaining quality and interoperability across India.*

2.7 Technical Session 4: Capacity Building for a Future-Ready ITS Ecosystem (Day 2)

Overview

The session addressed human capital, standards, quality assurance and interoperability for scalable ITS deployment. Sub-themes covered building the future ITS workforce (skill gaps, academia–industry collaboration, certification and accreditation), QA/QC and performance management (FAT/SAT, SLAs, lifecycle management), standards and interoperability (open ITS architecture, data sharing, open APIs), and institutional readiness (ITS Centres of Excellence, procurement, governance and national scaling).

Presentations

Speaker	Organisation	Topic
Prof. Pooran Pandey, Director – Centre for Climate Change	South Asian University	Climate-Smart ITS and the Skills to Deliver It
Mr. Akhilesh Srivastava, President	ITS India Forum	100 Minds, 10,000 Hands: Building India's ITS Talent Pipeline
Mr. Umang Saraf, Founder	TraffiCure by Lepton Software	Analytics for Smarter Cities

Table 6: Technical Session 4 – Capacity Building: Presentations

Key Highlights

- **Prof. Manoranjan Parida (Chair's address) —** underscored that capacity building is essential to the effective deployment of ITS across India, calling for skilled professionals, dedicated academic programmes, robust standards, research funding and centres of excellence. He commended ITS India Forum and South Asian University for their master's and PhD programmes in ITS, and stressed government support and industry–academia collaboration.
- **Mr. Akhilesh Srivastava (ITS India Forum) —** under "100 Minds, 10,000 Hands," reported the Forum's Capacity Building Programme is already under way — the Executive PhD and the international Global MS pathway in ITS have both launched with the first cohort enrolled — aiming to build 100 ITS thought leaders (PhD / Global MS) and 10,000 skilled ITS professionals spanning field engineers, supervisors and middle-management.
- **Dr. Rajesh Krishnan (ITS Planners & Engineers) —** reviewed traffic-operations certification models worldwide (PTOE and IMSA in the USA, provider-led courses in the UK), noting India has no equivalent credential today, and urged ITS India Forum to lead a structured traffic-operations certification pathway blending theory with hands-on skills.

> ***"India has a 6.3 million-kilometre road network, and deploying intelligent transportation technologies across such an extensive network requires significant human resources and sustained capacity building."***
>
> **— Prof. Manoranjan Parida, IIT Roorkee**



Images 17: Technical Session 4 – Capacity Building for a Future-Ready ITS Ecosystem

Panel Discussion

Chair: Prof. Manoranjan Parida, Professor, IIT Roorkee

Co-Chair: Dr. Chalumuri Ravi Sekhar, Director, CSIR-CRRI

The panel included Prof. Archak Mittal, IIT Bombay; Shri Suresh Chandra, Former DG, STQC; Dr. Mukti Advani, CSIR-CRRI; and Dr. Rajesh Krishnan, ITSPE.

- **Integrate comfort, safety and inclusion.** Mobility systems should not treat comfort and safety as competing goals. AI-enabled services must serve different generations, abilities and digital-literacy levels, including users who rely on familiar, trusted and cash-based options.
- **Build skills through academia–industry partnership.** Speakers highlighted collaboration between ITS India Forum and South Asian University, including MS, dual-degree and PhD pathways. Prof. Pooran Pandey emphasised scaling these programmes internationally through integration, innovation and practical skills development.
- **Close the workforce and operations gap.** Deploying ITS across India's extensive road network requires trained engineers, operators and maintainers. Practical traffic-operations certification, short applied courses and continuing training should complement postgraduate education and vendor maintenance contracts.
- **Embed standards, quality and security by design.** Standards should require integration and intelligence from the outset. Quality assurance must cover devices, firmware, communications, backend systems, applications and operating processes, supported by interoperability, cybersecurity and measurable performance requirements.
- **Move from reactive to predictive, India-ready ITS.** Speakers called for predictive traffic management, adaptive signals, dynamic speed limits and better public-transport and freight integration. AI solutions should reflect Indian traffic conditions and clear downstream exits, while remaining accessible to diverse road users.
- **Connect climate goals with institutional readiness.** Transport and logistics face major workforce and decarbonisation pressures. Centres of excellence, a multi-stakeholder skills council and closer coordination among government, academia and industry can help scale climate-smart ITS and support implementation beyond major metros.



Images 18: Technical Session 4 – Capacity Building (Panel Discussion)

Key Takeaways

- Establish practical ITS and traffic-operations certification alongside MS, dual-degree and PhD programmes.
- Make interoperability, cybersecurity, accessibility and quality assurance mandatory design principles.
- Develop inclusive, predictive AI applications suited to Indian traffic and user needs.
- Strengthen industry–academia collaboration, centres of excellence and a multi-stakeholder skills-development mechanism.

> **Roadmap Outcome:** *Build a future-ready ITS workforce through industry–academia partnerships, practical certification, MS/dual-degree/PhD pathways and centres of excellence; embed interoperability, cybersecurity, accessibility and quality assurance by design; and scale inclusive, predictive, climate-smart ITS through coordinated standards and measurable operational outcomes.*

2.8 Valedictory Session and Road Safety Technology Awards

Overview

Mr. Akhilesh Srivastava presented a summary of the two-day Congress. The valedictory addresses connected the Congress deliberations to the urgent task of improving road safety and translating mobility technology into field-level results. The session was followed by the Road Safety Technology Awards recognising solutions selected at the National Road Safety Technology Conclave (NRSTC), held at IIT Bombay on 25–26 August 2026. Dr. Shiv Kumar, Director General, ITS India Forum, delivered the vote of thanks and concluding remarks.

With the roadmaps now defined, ITS India Forum will work with government, industry, academia and international partners to translate recommendations into action, building the institutions, standards and talent that Viksit Bharat 2047 demands.

> ***"This second edition of ITS Congress is scaled to a new level. Road safety is an urgent national priority, and ITS must play a central role in addressing it."***
>
> **— Shri Akhilesh Srivastava, President, ITS India Forum**

Road Safety Technology Awards

The Road Safety Technology Awards at the ITS India Congress 2026 recognised innovative and deployable solutions presented at the National Road Safety Technology Conclave (NRSTC) 2026, organised by ITS India Forum in collaboration with IIT Bombay. The awardees were honoured across their respective technology categories, acknowledging contributions to practical, technology-driven approaches to road safety and reinforcing the importance of scaling proven technologies to make India's roads safer.

> ***"We have recognised technologies rather than ranking anyone as winner and runner-up, because we believe the real winner is every human who is able to reach home safe every child who can safely go to school and come back home."***
>
> **— Prof. Archak Mittal**

On this basis, category-wise solutions were recognised and awarded by the dignitaries present at the award ceremony.

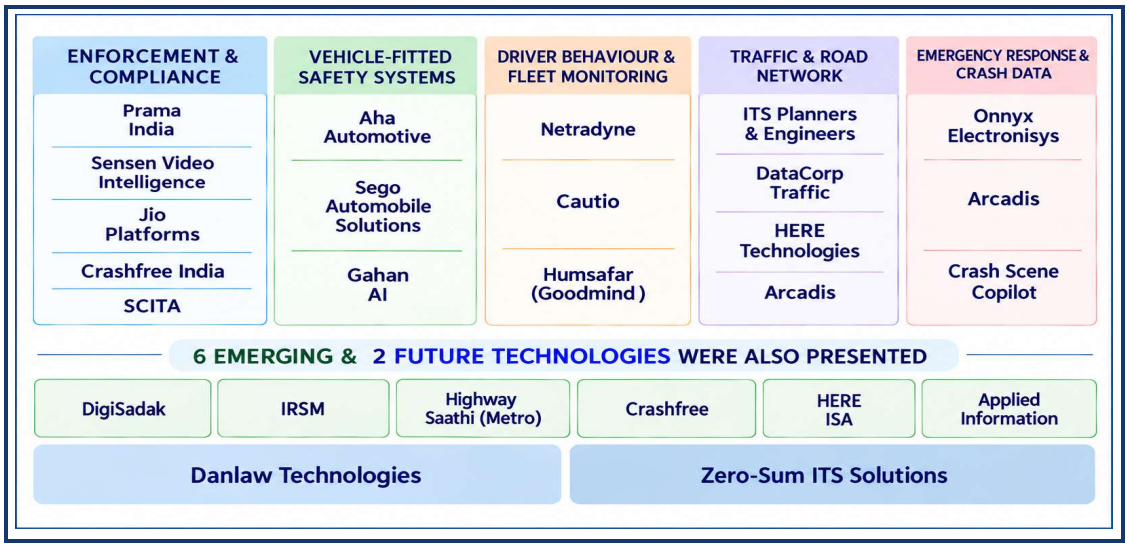


Image 19: National Road Safety Technology Solution Awards – Recognised Technology Categories

Valedictory Addresses (Guests of Honour)

Message of Justice Abhay Manohar Sapre (read by Dr. Shiv Kumar). The message emphasised the human cost of road crashes and called for technology to become a force multiplier for road safety. It urged anticipatory policy, interoperability across jurisdictions and platforms, faster adoption of effective innovations, and practical training for police, transport officials, engineers and emergency responders. It also highlighted the need to turn the national road-safety commitment into implementation and lives saved.

Mr. Andy Hamer, Sales Director, Simplifai Systems commended India's top-level vision, planning and investment, while urging that public transport remain central to mobility policy. He cautioned that road construction alone cannot resolve congestion and recommended early deployment of technology to deliver practical improvements.

Shri Gaurav Upadhyay, IPS, Secretary, Transport Department, Government of Assam praised ITS India Forum for creating a practical interface between government, industry and academia. He stressed that technology is essential for addressing highway fatalities and overspeeding at scale, and called for solutions shaped by user needs, collaboration and adaptation of proven international practices to Indian conditions.

Valedictory implications for the roadmap. The closing addresses reinforced four cross-cutting priorities: policy and regulation should keep pace with connected and AI-enabled mobility; interoperability and cybersecurity should be built in from the outset; procurement and deployment should enable proven innovations to scale; and public agencies must have the skills to operate systems effectively. Congestion-management strategies should also place public transport and multimodal integration at the centre, alongside targeted technology deployment.



Images 20: Valedictory Session and Road Safety Technology Awards

3. Strategic Roadmap Outcomes for Viksit Bharat 2047

The Congress identified five strategic roadmap areas aligned with Viksit Bharat 2047. The valedictory addresses added a clear implementation test across all five: policy must lead rather than lag; systems must interoperate securely across cities, states and platforms; innovators need predictable procurement and opportunities to scale; and frontline institutions need the capacity to use technology effectively. Public transport and multimodal integration should remain central to congestion reduction, with progress assessed through measurable safety and service outcomes.

The roadmaps below consolidate the priorities documented across the sessions. They are presented as strategic directions emerging from the Congress deliberations; detailed implementation plans, responsible agencies and timelines should be established through subsequent stakeholder consultation.

S.No.	Session	Roadmap Outcome
1	**Citizen-Centric ITS**	ITS Roadmap for Citizen-Centric Mobility — AI deployment, digital enforcement, citizen services, interoperability and governance
2	**Barrier less Tolling**	India Road User Charging and MLFF Roadmap 2047
3	**Connected Mobility**	India Connected Mobility Roadmap 2047 (V2X, 5G/C-V2X, standards)
4	**PM Gati Shakti Plenary**	National Multimodal Mobility and Logistics Roadmap 2047
5	**Capacity Building**	Workforce and institutional-readiness strategy for a future-ready ITS ecosystem

Table 7: Strategic Roadmap Outcomes for Viksit Bharat 2047

3.1 Citizen-Centric Intelligent Transportation Systems

Key priorities

- AI-enabled traffic management and predictive safety analytics.
- Electronic enforcement and integrated citizen services.
- Active travel and interoperable ITS architecture and governance.

Strategic direction. Shift from fragmented, reactive traffic management towards risk-based, data-led and citizen-focused systems, with continuous performance monitoring, transparent enforcement and infrastructure that can support interoperable V2X services.

3.2 Barrierless Tolling and Road User Charging

Key priorities

- Multi-Lane Free Flow (MLFF) and GNSS-based road-user charging.
- Accurate vehicle identification, revenue assurance and enforcement.
- Interoperability, privacy and sustainable infrastructure financing.

Strategic direction. Build a phased, trusted and interoperable road-user charging ecosystem, building on FASTag's nationwide reach, strengthening ANPR and revenue assurance against spoofing, and addressing fair, sustainable road funding as vehicle technologies and usage patterns evolve.

3.3 Connected Mobility and V2X

Key priorities

- V2V, V2I and wider V2X deployment; 5G/C-V2X; spectrum and standards.
- Cybersecurity and digital trust; interoperability.
- Connected corridors and smart infrastructure.

Strategic direction. Establish the technical, policy and trust foundations needed for vehicles and infrastructure to exchange reliable information and enable proactive safety applications.

3.4 Multimodal Mobility and Logistics Integration

Key priorities

- PM Gati Shakti-enabled planning and integration of road, rail, ports, airports and urban transport.
- Digital ticketing and mobility services; data-driven logistics.
- Intelligent traffic systems and greener freight.

Strategic direction. Move from infrastructure integration towards seamless passenger journeys and coordinated, efficient logistics networks.

3.5 Capacity Building and Institutional Readiness

Key priorities

- ITS education and certification; skilled technical and operational workforce.
- Industry–academia collaboration; quality assurance, standards and interoperability.
- Centres of excellence and stronger institutional capability.

Strategic direction. Develop the human capital and institutional systems required to deploy, operate, maintain and scale ITS across India. Combine academia–industry programs, practical certification and a multi-stakeholder skills council with quality assurance, cybersecurity, interoperability and inclusive AI designed in from the outset.

3.6 Visionary Outcomes of the Congress

Taken together, the deliberations point to a transformational vision for how India will move by 2047. The Congress articulated the following visionary outcomes, which extend beyond individual sessions and frame the nation's mobility ambition:

- **From reactive to predictive road safety.** Road Safety 2.0 — AI, connected data and electronic enforcement used to anticipate and prevent crashes, in line with India's commitment to halve road deaths by 2030 and to move steadily towards Vision Zero.
- **Every new vehicle connected.** A national V2V/V2X ecosystem built on the 5.9 GHz band, common standards and PKI-based trust, so that vehicles warn each other — and vulnerable road users — beyond the driver's line of sight.
- **Every major corridor intelligent.** AI-based ATMS, automated incident detection and predictive traffic management turning highways from passive assets into self-monitoring, intelligent infrastructure.
- **Stop-free, fair road-user charging.** A phased journey from FASTag to Multi-Lane Free Flow and GNSS-based road-user charging, with robust anti-spoofing, privacy and sustainable

infrastructure financing, shaped through regional cooperation such as the Asia-Pacific Road User Charging Alliance.

- **One Nation, One Journey.** PM Gati Shakti-led integration of roads, rail, ports, airports and urban transport, with a single credential (NCMC/QR) and MaaS platforms delivering seamless door-to-door journeys and lower logistics costs.
- **A national ITS architecture as digital public infrastructure.** Open APIs, interoperable standards, common evaluation and accreditation, and secure data exchange that let every city and state plug in — the mobility equivalent of India's digital public infrastructure success.
- **Innovation-friendly procurement.** Technical-first, outcome-based procurement, proof-of-concept pathways and challenge-based problem statements that allow proven innovations and startups to scale quickly.
- **100 Minds, 10,000 Hands.** A world-class ITS workforce — 100 thought leaders and 10,000 skilled professionals — supported by certification, centres of excellence and a multi-stakeholder skills council.
- **India as a global ITS partner.** India not only adopting global best practices but shaping standards and exporting solutions, through partnerships with ITS bodies across the Asia-Pacific, Europe and North America.

4. Way Forward: Towards Viksit Bharat Mobility @2047

The Congress was a milestone, not an end point. Its roadmaps now need to be converted into a time-bound national programme, with clear ownership, measurable outcomes and sustained collaboration among government, industry, academia and international partners.

4.1 Momentum Since the Congress

Within weeks of the Congress, several developments reinforced its direction and gave the roadmaps fresh urgency:

- **Regulatory push for V2V.** MoRTH's draft notification (August 2026) proposes V2V communication systems conforming to AIS-230 from 1 October 2027, and fitment in all newly manufactured two-wheelers, passenger and commercial vehicles from 1 October 2028, using the 5.875–5.925 GHz band.
- **Global recognition at the ITS World Congress, Gangneung (19–23 October 2026).** India's ITS industry and policies were in the spotlight and India's V2V push was widely appreciated. ITS India Forum contributed to technical sessions, signed MoUs with ITS New Zealand and ITS Canada, held a bilateral meeting with ITS Australia, and engaged with ADB and the Car 2 Car Communication Consortium — building directly on partnerships begun at this Congress.
- **AI-based ATMS on national highways (27 October 2026).** At the CII conference 'Highways of India's Future: Smart, Safe and Sustainable', the Union Minister for Road Transport & Highways announced the accelerated rollout of AI-based ATMS, with a first phase of about 1,000 km, and technology-led quality monitoring through Network Survey Vehicles. ITS India Forum led the session on 'Smart Highways, Connected Mobility: The ATMS-V2V Revolution'.
- **5GAA Global Meeting Week in New Delhi (26–29 October 2026).** The first 5GAA gathering of this scale in India focused on V2V/V2X deployment. ITS India Forum organised keynotes by the Additional Secretary, MoRTH, and a Member of the Hon'ble Supreme Court Committee on Road Safety, with panels and round tables involving DoT, MeitY, CRRI, ARAI and industry.
- **Institutionalising the roadmaps.** ITS India Forum has constituted 14 thematic committees — spanning V2X, ADAS, AI, cybersecurity, ATMS, e-enforcement, MLFF, road-user charging, inclusive and active mobility, public transport, capacity building and market research — to carry the Congress recommendations forward.

4.2 Phased Pathway to 2047

The following indicative pathway translates the Congress's vision into three phases. Timelines are aspirational and subject to stakeholder consultation and government policy.

Table 8: Indicative Phased Pathway to Viksit Bharat Mobility @2047

Phase	Horizon	Indicative milestones
Phase 1: Foundation	2026–2030	• V2V communication rolled out as per MoRTH's final notification (draft proposes AIS-230 compliance from Oct 2027 and fitment in all new vehicles from Oct 2028) • AI-based ATMS on the first ~1,000 km of national highways, then extended to all high-density corridors • MLFF scaled on priority corridors; e-DAR and e-enforcement data integrated nationally • National ITS architecture, common accreditation and traffic-operations certification launched

Phase	Horizon	Indicative milestones
		• Road deaths halved by 2030 (national goal)
Phase 2: Scale	2030–2037	• Connected (I2V/V2X) corridors across national highways and expressways • GNSS-based road-user charging and congestion pricing where appropriate • NCMC/MaaS-based "One Nation, One Journey" in all major cities • ITS centres of excellence in every region; ADAS and driver monitoring widely adopted • Predictive, AI-led traffic management as the norm in cities
Phase 3: Global Leadership	2037–2047	• Cooperative, connected and automated mobility at scale • Road safety on a sustained trajectory towards Vision Zero • Seamless, low-cost multimodal passenger and freight movement nationwide • India a global reference and exporter of ITS solutions, standards and talent

4.3 Measuring Success

Progress should be judged by outcomes for citizens rather than equipment installed. Suggested national indicators include:

- **Safety:** road deaths and serious injuries, especially among pedestrians and two-wheeler riders.
- **Network intelligence:** share of national highways and urban corridors under ATMS and connected (I2V/V2X) coverage, and incident detection and response times.
- **Connected vehicles:** share of new vehicles fitted with V2V/V2X and ADAS.
- **Enforcement and compliance:** e-challan recovery rate (currently around 40% in some systems) and repeat-offense reduction.
- **Seamless travel and logistics:** toll-plaza delay, multimodal journey integration and logistics cost as a share of GDP.
- **Talent:** number of certified ITS professionals and graduates of ITS programs against the '100 Minds, 10,000 Hands' target.

4.4 Role of ITS India Forum

ITS India Forum will act as a neutral national platform to convert these directions into action: convening its thematic committees to develop detailed recommendations; supporting pilots and proof-of-concept corridors; contributing to standards, certification and procurement reforms; publishing the annual ITS India Yearbook; strengthening international partnerships, including India's participation at the ITS Asia-Pacific Forum in Auckland (5–7 May 2027); and reporting progress at the next edition of ITS India Congress.

4.5 Roadmap for ITS India Congress: Next Three and Five Years

To sustain momentum, the ITS India Congress itself must evolve from an annual conference into India's principal platform for tracking, demonstrating and accelerating progress towards Viksit Bharat Mobility @2047. Building on the second edition (10 sessions, 100+ exhibitors and participation from 5+ nations), the following indicative roadmap is proposed.

Table 9: Indicative Roadmap for ITS India Congress, 2027–2031

Edition / Year	Focus theme	Key features and indicative targets
3rd Edition 2027	From Roadmap to Deployment: V2X, ATMS and MLFF	• Live demonstration zone for V2V/V2X, AI-based ATMS and MLFF • Launch of the ITS India Roadmap Scorecard to track progress on the 2047 pathway • First annual reports of the 14 thematic committees • Startup & Innovation Challenge with government problem statements • Indicative scale: 12+ sessions, 150+ exhibitors, 10+ nations
4th Edition 2028	Connected Vehicles at Scale	• Showcase of V2V-ready vehicles aligned with the proposed October 2028 fitment timeline • States' Transport & Police Leadership Conclave on e-enforcement and road safety • Dedicated tracks on cybersecurity/PKI, inclusive and women-centric mobility, and public transport/MaaS • First graduates of the ITS India Forum–SAU programmes showcased; traffic-operations certification awarded • Indicative scale: 15+ sessions, 200+ exhibitors, 15+ nations
5th Edition 2029	Intelligent Corridors and Seamless Journeys	• Mid-term review of road-safety goals and the Phase 1 pathway • India ITS Readiness Index of states and cities released • Global ITS Investment & Procurement Forum with multilateral banks and industry • Indicative scale: 15+ sessions, 250+ exhibitors, 20+ nations
6th Edition 2030	Road Safety 2030: Results and Next Decade	• Assessment against the 2030 goal of halving road deaths; launch of Phase 2 (2030–2037) agenda • Regional ITS summits (South, West, East and North-East) feeding into the national Congress • Bid to host the ITS Asia-Pacific Forum in India
7th Edition 2031	India as a Global ITS Hub	• Established as one of Asia-Pacific's leading ITS events • India ITS export and standards showcase for international partners • Groundwork for a bid to host an ITS World Congress in India • Indicative scale: 20+ sessions, 300+ exhibitors, 25+ nations

Three-year horizon (2027–2029): establish the Congress as the national platform for deployment live demonstrations, a public progress scorecard, committee reports, a startup challenge and a states' leadership conclave — roughly doubling its scale and international participation.

Five-year horizon (2027–2031): make the Congress a recognised Asia-Pacific ITS hub with regional summits across India, an investment and procurement forum, a readiness index of states and cities, and bids to host the ITS Asia-Pacific Forum and, in time, an ITS World Congress in India. Scale targets and features are indicative and will be refined by ITS India Forum with its partners, Messe Frankfurt Trade Fairs India and Virtual Info Systems.

5. Conclusion

The ITS India Congress 2026 reaffirmed that Viksit Bharat 2047 requires more than physical infrastructure: roads, vehicles, communications, digital platforms and transport services must work as an integrated ecosystem that improves safety and delivers measurable benefits. The valedictory addresses sharpened this message: road crashes have a profound human cost, technology must become a force multiplier for prevention and enforcement, and solutions create value only when implemented effectively in the field.

Five connected priorities emerged: deploy AI, predictive analytics and digital enforcement with continuous performance monitoring; establish interoperable V2X and connected infrastructure with cybersecurity, privacy and trusted data exchange; advance barrierless tolling and road-user charging through reliable vehicle identification, revenue assurance and sustainable financing; use PM Gati Shakti to support seamless multimodal journeys and coordinated logistics; and build the skills and institutional capacity needed to operate and scale ITS.

Technical Session 1 emphasised risk-based safety interventions, multilingual and citizen-focused tools, transparency about system performance, and infrastructure readiness for connected vehicles. Technical Session 2 highlighted FASTag as a foundation for nationwide interoperability, the need to prevent ANPR spoofing, and global lessons from Australia and Taiwan on free-flow tolling, coordinated operations and road-user charging. The Day 2 plenary stressed transport-operator needs, road-user education and context-specific solutions. The Leadership Roundtable called for technical-first procurement, common accreditation, pilots, outcome-based contracts, startup access and performance measures tied to safety, reliability and travel time.

The next step is to translate these directions into a practical implementation agenda. Ministries, state authorities, standards bodies, industry, academia and ITS India Forum should identify priority use cases and pilot corridors, agree on interoperable standards and procurement pathways, define outcome indicators, and assess results before scaling. Clear ownership, realistic financing and regular review will be essential; the roadmaps in this report remain strategic directions for further consultation, not a completed implementation plan.

For workforce development, ITS India Forum, South Asian University, industry and government should scale MS, dual-degree and PhD pathways, introduce practical traffic-operations certification, and explore a multi-stakeholder skills council and centres of excellence. Training should cover advanced technology and real-world operations, including inclusive AI and climate-smart mobility. In line with the valedictory recommendations, deployment should be supported by forward-looking policy, predictable market adoption, strong cybersecurity and interoperability, and a public-transport-led approach to congestion management.

The Congress's closing message was practical and urgent: **combine forward-looking policy with secure interoperability, adoption-ready procurement, trained public agencies and collaboration across government, industry and academia.** Success should be judged by fewer crashes and fatalities, safer roads, more reliable journeys, lower congestion, efficient logistics and systems that work seamlessly across regions and modes.

As India moves from building roads to building intelligent mobility, the ITS India Congress 2026 has shown that the country has the vision, the institutions and the partnerships to lead. With connected vehicles, intelligent corridors, seamless journeys and a skilled workforce, Viksit Bharat Mobility @2047 can deliver what matters most every citizen reaching home safely.

"Smart Roads. Connected Vehicles. Zero Fatalities as the Goal."

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