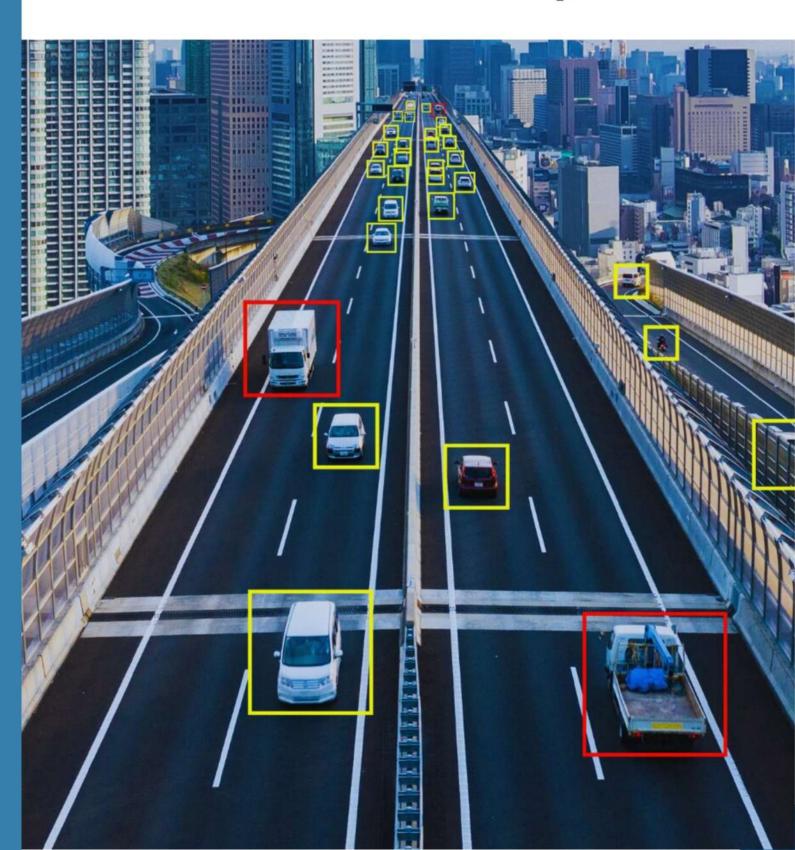


"SHAPING THE FUTURE OF MOBILITY IN INDIA"

AUGUST DIGEST, 2024





International Conference on "Reshaping Mobility in India" 28th July 2024

ITS India Forum held an international conference at New Delhi in Collaboration with The Institution of Electronics and Telecommunication Engineers (IETE)

Shri Akhilesh Srivastava, President of the ITS India Forum, highlighted the Forum's success in reshaping mobility with projects like the CV2X Green Corridor and Safe Driving Score system. He outlined collaborations with BIS, IEEE, ITU, and ISO for Indian ITS standards, upcoming capacity-building programs, and innovative funding models.





Prof. Naoyuki Yoshino, former dean ADBI, gave a detailed presentation on the 'Spillover Impact of Infra and ITS on Transportation & Financing'. Prof. Yoshino's highlighted that digitalization will boost the total factor of productivity and GDP. Citing high PPP failure rates in Latin America (40.8%) and Developing Asia (54.5%), he attributed conflicts to low user fees and high private investor return expectations, he said these failures could be averted and proposed sharing ITS infrastructure spillover effects of taxes with developers

Macro Marechal from Arcadis highlighted the role of Mobility Digital Twin technology in creating sustainable smart cities. Indian leaders included Mr. Sudhendu J. Sinha, who emphasized quality and safety in ITS; Shri B.N. Puri, who spoke on equitable infrastructure distribution; Prof. K.K. Aggarwal, who addressed technology and cybersecurity balance; and Mr. Arun Saxena, who shared insights on ITS in railways, including Project Kavach's Automatic Protection System. The event featured a discussion session moderated by Dr. Shiv Kumar, a podcast with Mr. Parikshit Puri and Ms. Simran Pandey, and a book promotion by Dr. Satya N. Gupta.



Intelligent Transport System Workshop: International Experts Talk & Round Table 2 Discussion on Comprehensive National ITS Policy

On July 29, 2024, NITI Aayog and the ITS India Forum held conference Comprehensive on National ITS Policy, at Niti Aayog headquarter, focusing on funding measurable outcomes. and Chaired by Mr. Sinha, the event saw participation from senior officials across various ministries and over 30 top executives and chairpersons from the ITS India Forum.

Mr. Akhilesh Srivastava, President of ITS India Forum, presented the Forum's achievements, including the CV2X Green Corridor project for emergency vehicles and the Safe Driving Score system. He also outlined ongoing collaborations to draft Indian ITS specifications and future capacity-building programs, alongside exploring innovative funding models like public-private partnerships (PPP).



Discussion on Comprehensive National ITS policy at NITI Aayog



Prof. Naoyuki Yoshino, former dean of ADBI Japan discussed the financial impacts of ITS and the potential of PPP models, revealing a 14.6% positive spillover effect. Mr. Macro Maréchal highlighted the use of Digital Twin technology for smart city planning, emphasizing its role in predicting and visualizing various scenarios. Round table discussions, moderated by Mr. Sinha, addressed creating a flexible ITS

Round table discussions, moderated by Mr. Sinha, addressed creating a flexible ITS policy framework, balancing consistency with adaptability, and aligning it with existing national policies. The conference highlighted the crucial role of integrating ITS solutions into broader transport infrastructure strategies.



Leading the Future of Urban Mobility: DG ITS India Chairs Session at PHDCCI Sustainable Cities Summit 2024

PHDCCI Sustainable Cities Summit: Building Resilient Cities of Tomorrow On August 6, 2024, the PHD Chamber of Commerce hosted the PHDCCI Sustainable Cities Summit: Viksit Bharat@2047 - Building Resilient Cities of Tomorrow at the PHD House in New Delhi. The summit brought together thought leaders and policymakers to explore sustainable urban development strategies.

Dr. Shiv Kumar, Director General of ITS India, chaired the session on "Sustainable Mobility and Transportation." where kev discussions focused on integrating smart mobility solutions into India's rapidly growing urban landscape. The session underscored the need sustainable for resilient and transport systems to achieve the Viksit Bharat Vision for 2047.



DG ITS India Chairs Session at PHDCCI Sustainable
Cities Summit 2024

Navigating Urban Safety and Mobility: Safe City & Intelligent Mobility India 2024 Organised by Bharat Exhibitions at New Delhi

Navigating Challenges and Opportunities Dr. Shiv Kumar, Director General of ITS India, Chaired and moderated a pivotal session on "Challenges and Opportunities of Safe City and Leveraging IoT Sensors and AI for Traffic & Public Transport Management" during the Safe City & Intelligent Mobility India 2024 event.



Organized by Bharat Exhibitions on August 22, 2024, at Le Meridien, New Delhi, the event served as a platform for industry experts to discuss innovative approaches to urban safety and intelligent mobility. The session highlighted the critical role of IoT sensors and AI in enhancing public safety and optimizing transportation systems in India's evolving smart cities. Mr Rahul Sawardekar from Ador Power, a member of ITS India Forum was key



Enhancing Road Safety Research and Practice: Highlights from the WHO Pre-Conference Workshop at World Safety 2024"

WHO Pre-Conference Workshop: Enhancing Road Safety through Media and Technology In the lead-up to the World Safety 2024 conference, a one-day WHO Pre-Conference Workshop titled Strengthening Capacity for Research and Practice in Road Safety through Media was held. Dr. Shiv Kumar, Director General of ITS India, delivered the welcome address and chaired a technical



session focused on the Safe System_{WHO Pre-Conference} Workshop at World Safety 2024 Approach to road safety.

The session, explored topics on road design, gender mobility, and the use of technology interventions to achieve Sustainable Development Goals (SDG) 3.6 and 11.2. The workshop emphasized the importance of media in advancing road safety practices and shaping public perception to foster safer transportation environments.

ITS India Specialist Standing Committees on Core Areas of Intelligent Transportation Systems

The ITS India Forum is spearheading a transformative initiative to develop comprehensive national policy for Intelligent Transportation Systems (ITS) in India. This strategic endeavour aims to revolutionize how transportation is managed and experienced by the consumers. To achieve this, the Forum has constituted following specialized committees focusing on various critical aspects of ITS.

- 1. ITS India Standing Committee on Advanced Traffic Management Systems (ATMS)
- 2. ITS India Standing Committee on Connected Vehicles, Vehicle-to-Everything (V2X) Solution
- 3. ITS India Standing Committee on Data Privacy & Cyber Security in ITS Solutions
- 4. ITS India Standing Committee on Integrated Multimodal Transport and Logistics
- 5. ITS India Standing Committee on Intelligent Parking Solutions
- 6. ITS India Standing Committee on Intelligent Traffic Information Systems (ITIS)
- 7. ITS India Standing Committee on Intelligent Camera Surveillance (ICS)
- **8.** ITS India Standing Committee on Next Generation Road Safety Solutions, utilizing ADAS integrated with IoT and AI



- **9.** ITS India Standing Committee on Intelligent Multimodal Communication and Control Systems (IMCCS)
- 10. ITS India Standing Committee on EV Ecosystem with Existing Mobility Systems

Webinar on Transforming Urban Mobility: MaaS

On August 30, 2024, the ITS India Forum, in collaboration with Traffic InfraTech, hosted an insightful webinar on Mobility as a Service (MaaS). This event gathered experts from India and Australia to delve into how MaaS is transforming urban mobility.

The webinar offered participants critical insights into both the strategic and operational dimensions of MaaS. It showcased how MaaS can create seamless travel experiences, address existing challenges, and drive the future success of transportation systems. This session emphasized the significance of cross-border collaboration in the intelligent transportation sector, with India and Australia leading the charge.

Key Takeaways:

- Mr. Anil Chikkara, former Transport Commissioner of Delhi, shared valuable insights into the challenges faced by bus operators in India and discussed the integration of public transport within the MaaS framework.
- Ms. Stacey Ryan, Policy and Strategy Lead at ITS Australia, provided a thorough overview of MaaS implementation in Australia, highlighting the crucial role of policy in fostering innovation and adoption.
- Mr. Akhilesh Srivastava, President of ITS India, moderated the session, guiding the discussion and offering his perspective on how MaaS can revolutionize transportation in India.





Forthcoming Events

(A) Intelligent Transportation Systems: Revolutionizing Emergency Response: The Green Corridor for Ambulance Project in Bengaluru

Webinar on 10th September, 2024 at 12:00 - 13:15 Hour

Key Speakers (Proposed):

- NITI Aayog: Shri Sudhendu J. Sinha, Adviser (Infrastructure Connectivity Transport and Electric Mobility), NITI Aayog, Gol,
- Oualcomm
- Danlaw Technologies
- Centre For Development of Advanced Computing (CDAC)
- Arcadis, IBI Group
- Mahindra
- IIT Hyderabad, Validation and Knowledge Partner

(B) Showcasing India's ITS Innovations: Join Us at the ITS World Congress 2024 in Dubai

The ITS India Forum is poised to make a significant impact at the ITS World Congress, the premier global event dedicated to smart mobility and the digitalization of transport, taking place from September 16-20, 2024, at the World Trade Centre in Dubai.

As part of our participation, we are excited to present the India Pavilion—a dedicated space where key players from India's Intelligent Transportation Systems (ITS) sector will showcase their latest technologies and innovations. This pavilion will offer an exceptional opportunity for international attendees to engage with cutting-edge solutions designed to enhance urban transportation, making it safer, more efficient, and sustainable.

At our booth (No: H8 E24), visitors will have the chance to explore some of the latest ITS technologies poised to transform transportation. Engage with industry experts from the ITS India Forum, exchange ideas, and explore potential partnerships that could shape the future of transportation in India and beyond.

We are joined by several leading industry companies, including Scita Solutions, Norden Communication, Sirab Technologies Inc., Metro Infrasys Private Limited, Sparsh CCTV, ADOR INTERNATIONAL, Amnex Infotechnologies, Danlaw Inc., AABMATICA TECHNOLOGIES PRIVATE LIMITED, Arcadis, Envoys Electronics Pvt Ltd, and ITS Planners and Engineers. Together, we are committed to advancing smarter, more sustainable solutions for the transportation challenges of tomorrow.



(C) ITS India Celebrates One Year of Achievements

As ITS India marks its first anniversary, we reflect on a year filled with significant milestones and accomplishments. Our journey has been both eventful and rewarding, and we are proud of the progress we have made in advancing intelligent transportation systems in India.

To commemorate this milestone, the Annual General Meeting (AGM) will be held on:

Date: 28th September 2024

Venue: Civil Services Officers' Institute (CSOI), KG Marg, New

Delhi

The AGM will be an opportunity to review the past year's achievements and discuss future plans for the organization.

We look forward to sharing more details about this event as we approach the date.







Articles:

Vehicle Location Tracking Device VLTD (AIS 140) challenges in India

-- Anil Chikkara

AIS 140 (Automotive Industry Standard 140) is a directive from the Ministry of Road Transport and Highways (MoRTH), Government of India, for the implementation of intelligent transport systems (ITS) in public transport vehicles.

It mandates the installation of GPS devices and emergency buttons in public vehicles to enhance road safety. The initial deadline was April 1, 2018, for new vehicles and October 1, 2018, for existing ones. Although the system has numerous benefits and few of them are presented as under:



- Enhanced Passenger Safety: AIS 140 requires emergency buttons in public transport vehicles, enabling passengers, especially women, to quickly alert authorities during emergencies. Real-time GPS monitoring significantly enhances safety.
- Improved Traffic Management: Real-time tracking allows authorities to optimize routes and manage traffic flow, reducing congestion and travel times through data-driven, Al-assisted decisions.
- Enhanced Operational Efficiency: Transport operators can manage fleets more
 efficiently with AIS 140, monitoring performance, optimising routes, reducing
 fuel consumption, and lowering operational costs through timely
 maintenance.
- Improved Law Enforcement and Compliance: AIS 140 data helps law enforcement ensure adherence to traffic rules, detect unauthorised deviations, and prevent theft and crime.
- Passenger Convenience and Confidence: Real-time updates on vehicle locations reduce waiting times and increase confidence in public transport, potentially boosting ridership.



- Support for Smart City Initiatives: AIS 140 aligns with smart city goals, integrating transport systems with real-time data for intelligent traffic management and supporting the development of connected cities.
- Compliance with Global Standards: AIS 140 elevates Indian public transport to international standards, improving safety, efficiency, and service quality.
- State Implementation: While states like Maharashtra, Tamil Nadu, and Karnataka have been proactive in implementing AIS 140, others are still in the process. A key issue is the lack of coordination among transport departments, police, and vehicle owners, which hampers real-time monitoring.
- Challenges: Key challenges include high installation costs, device availability, privacy concerns, and the need for better infrastructure for real-time monitoring. Resistance from drivers and unions, due to privacy issues and costs, further complicates compliance. Some suggest that Vehicle Location Tracking Devices (VLTD) be installed on all vehicles to control crimes.
- Ongoing Efforts: The government continues to push for compliance with efforts to standardize device specifications, train operators, and improve monitoring systems. Some states have started penalizing non-compliant vehicles when they come for fitness or violation of permit conditions. Additionally, there are concerns about the effectiveness of enforcement and the integration of data into central monitoring systems. Unfortunately Control Command Centres have not been installed to have integration to Police Control rooms.



Revolutionizing Travel: From Chaos to Convenience

-- Amnex

Imagine Mr. Rush, a 40-years old man, waking up and realizing that he is late to work, he gets ready, rushes out of the door, waits in the long queue to book a ticket, and catches the bus, take the imagination one notch higher, what if he has to change the buses to reach to the office and ding, he is super late!

Well now move to another situation where, after waking up and getting ready, Mr. Rush opens an application on his phone, figures out the nearest transit option, books his tickets, and plans the way to the office. Well, does this mean no waiting in the lines and getting confused? Yes, it surely does.



This is what efficient journey planning and scheduling is all about. In today's fast-paced world, it has become indispensable for individuals as well as businesses. As urban areas grow and public transport systems expand, with (according to an article in the Times of India,) over 15,000 people traveling by bus daily in Gandhinagar alone, the need for a reliable tool to manage travel becomes more pressing. So, an application that enables this is not only a boon for the mobility industry but also a game-changer for public transport users who seek convenience, efficiency, and real-time information at their fingertips. From relying on months-old printed timetables and telephone inquiries to having every bit of information required in your hands, the world and the way of living have taken a huge leap and come a long distance. The transition was surely a roller coaster but Gujarat State Road Transport Corporation (GSRTC) Live tracking (RapidGo) being the wagon helped. Today, mobile

applications are at the forefront, offering sophisticated features that cater to the dynamic needs of modern travelers.

Talking about Mr. Rush, he loves the simplicity and user-friendliness that the GSRTC Live tracking app promises to provide. It helps him navigate through the different features of the application with utmost ease. According to him, being able to gain real-time and latest information on schedules, delays, and alternative routes, and book the tickets within the same application is like a dream come true.



The app offers a seamless travel experience by allowing the users to customise their journey based on preferences such as the fastest route, the fewest transfers, or the most cost-effective option.

Mr. Rush works in the mobility industry and finds that the journey planning and scheduling app presents numerous advantages and enhanced efficiency takes the first place, as the app helps optimise routes and schedules based on real-time data. This leads to better utilization of transport assets and reduced operational costs, thus also helping with better resource management. The data-driven insights provided by the app are invaluable for the mobility industry, they can analyse travel patterns, identify bottlenecks, and implement improvements to enhance service quality. Along with the industry, public transport users, such as himself, stand to gain immensely from the app, time-saving being the most significant one. The precise information about the departure and arrival times has not only minimised the waiting period and ensured punctuality but also reduced the travel anxiety, by making travel an experience, not a chore. Knowing the real-time information and being able to keep track of the vehicle gives the users a sense of safety and security, thus, making daily commuting stress-free and enjoyable. It also ensures that the

complaints and grievances of the users are heard and looked into through the help desk.

Additionally, the app helps users manage their travel budgets by providing cost comparisons and suggesting economical routes, recharging their smart cards, and generating travel passes.

Mr. Rush, being 42 years old, has seen the world going from traditional to application-based journey planning and scheduling, and was shell-shocked with the numbers. However, in today's time when everything in the world is so data-intensive, this shift was the need of the hour. Mr. Rush, like other millions of commuters, uses the GSRTC Live tracking app. We are truly humbled by the staggering average total and unique visits on the application per week (153,045 and 67,808 respectively) within a year of its launch. We promise to continue offering the seamless mobility experience to our users. says a GSRTC official. The app has surely come in handy to the users, the testimony to which are the reviews like "Such a wonderful application", "Very good app to track the Bus", and "Good app to real-time track GSRTC buses", dropped by them. Looking ahead, the next decade promises significant advancements in journey planning and scheduling. These innovations will not only enhance the user experience but also contribute to the broader goals of sustainable and efficient urban mobility, and Amnex Infotechnologies will make sure to walk hand in hand with these advancements.