INCREASING THE LEVEL OF MODERN DEVELOPMENT OF INTELLIGENT TRANSPORT SYSTEM OF CITIES AND REGIONS

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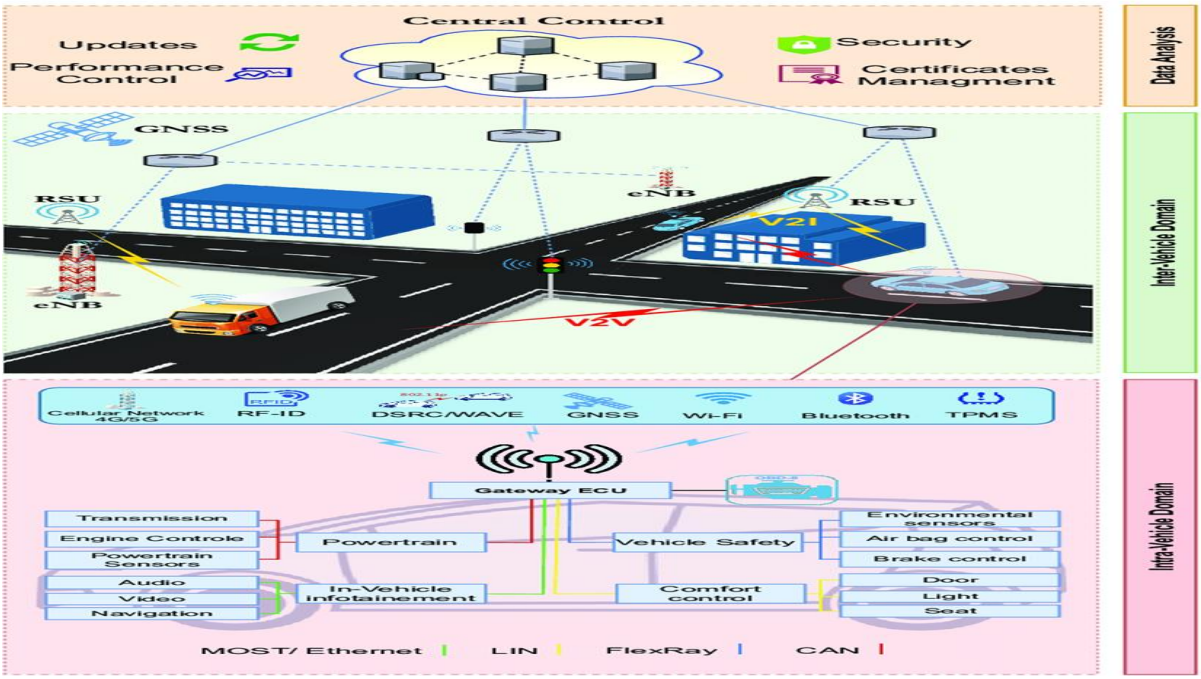
Abstract: The article discusses the main tasks of ITT at the regional (city) level. Urban transport networks and technical equipment. Tasks for organizing and ensuring road safety. Increasing the modern development of intelligent transport systems in cities and regions is important to improve efficiency, safety and stability in transport. Several key strategies have been identified to achieve this goal.

Key words: Telematics, GPS, traffic monitor, integration, ITT, strategy, engine and temperature, pressure, battery charging, odometer, speedometer.

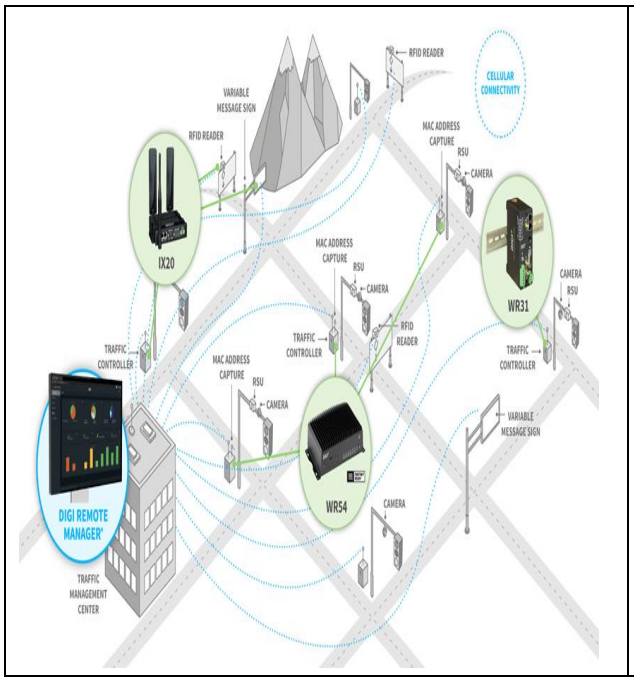
Introduction: Telematics refers to the general use of telecommunications and information devices to receive, transmit and store information from remote objects. Telematics has become widespread in the automotive industry for the creation, operation, maintenance and monitoring of vehicles.

Telematics has reached its modern development by collecting vehicle usage data using GPS of commercial fleets and developing business processes. Transport monitoring began to develop in 2008 with the advent of the existing 2G (GPRS) format and became quite accessible for transmitting data packets. In the past, traffic control consisted of paper tachographs, data recorders, anti-theft technology and satellite positioning.



The use of telematics in the transport market marked the beginning of a technological leap in the development of the industry. As a result, new companies began to appear producing telematics devices with new functionality. The state's interest in this area awakened and support began to form, as a result of which the creation of regional navigation and information centers began.

Telematics is a complex system of equipment, both a system for remote control (monitoring) of the condition of a vehicle, satellite navigation, and technologies that provide computer solutions to transport logistics problems based on modern communication technologies, widely used in parking lots in general.



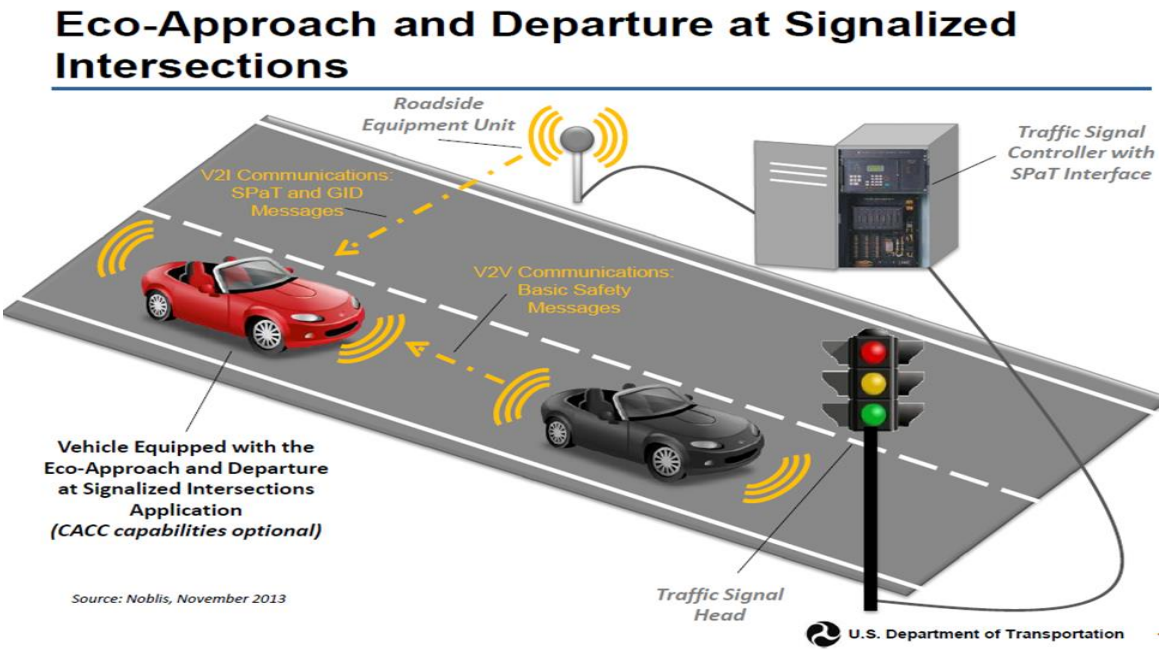
The main directions of distribution of the transport monitoring system at the moment are the following:

- placement and receipt of a car;
- remote engine warm-up;
- diagnostics of the vehicle condition;
- obtain readings from all sensors (temperature, pressure, battery charging, odometer, speedometer);
- control of vehicle location (walking path, parking, speed, walking time).

Modern widespread transport telematics systems are designed to solve the following problems:

- increasing the capacity of the road network of individual regions and its optimization;
- reducing the occurrence of risks and emergency situations on the road network and preventing possible consequences;
- ensuring awareness of road users about the state of the road network, road infrastructure, road traffic and road activity;
- improvement of all road service activities, prevention of emergencies and incidents;
- development of automation of transport process management to improve the

efficiency of transport and the entire transport system.



Based on the location of urban road networks, they are divided into street and non-street, as well as tracked and inhumane. The density of transport networks refers to the length of public passenger transport networks, measured in kilometers, in relation to the area of the city, measured in square kilometers. When developing modern urban transport networks, the following must be taken into account:

- Economy and adaptation of individual city thoroughfares to one-way or two-way roads for the fastest and most moderate movement of passengers or goods and other requirements;
- installation of special equipment that monitors modern traffic rules;
- organize the flow of transport units into a two-story structure where traffic does not intersect in many places;
- organization of off-street roads to speed up traffic; connecting roads inside and

outside the city.

In addition to the main functions, small systems, when implementing tasks for organizing and ensuring road safety, perform the following tasks:

- Warning about road accidents (accidents).
- Warn the driver about blind spots (intersections, etc.).
- Passage of special services vehicles (ambulance, police and fire and rescue vehicles) in the direction of travel.
- Warn other road users about the movement of special services vehicles (ambulance, police and fire and rescue vehicles).
- Vehicle speed limit.
- mist warning.
- Frozen road warning.
- Warning about driving on a dangerous road.
- Intelligent traffic control on difficult road sections.

Intelligent control of traffic lights.

Smart Technology Integration: Implementing smart technologies such as sensors, cameras, and real-time data analytics to monitor traffic flows, optimize routes, and improve overall system performance.

Connected infrastructure. Development of connected infrastructure that ensures interaction between different modes of transport and continuous exchange of information.

Public-Private Partnerships: Partnering with private sector companies to implement and implement innovative solutions for intelligent transportation systems.

Solutions for sustainable mobility. Encourage the use of environmentally friendly modes of transportation such as electric vehicles, bike-sharing programs, and public transit to reduce emissions and congestion.

Data-driven decision making: Using data analytics to make informed decisions about infrastructure planning, policy development, and resource allocation.

User-centered design: Designing transportation systems with an emphasis on user experience, accessibility, and convenience for greater social acceptance.

Education and Awareness: Educate citizens about the benefits of intelligent transportation systems and help change behavior toward greener transportation options.

Conclusions and offers:

In conclusion, by implementing these strategies, cities and regions can improve their transportation systems to meet the growing needs of their populations while reducing their environmental impact and improving overall quality of life.

References:

1.Solimuhammadov Jamshidbek Sohibjon o‘g‘li, & To‘lqinboyev Sardorbek Hakimjon o‘g‘li. (2024). CLASSIFICATION OF CARGO FOR INTERNATIONAL TRANSPORTATION. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 44(2), 126–129. Retrieved from https://www.newjournal.org/index.php/01/article/view/13101

2.Raximov Raxmatullo Rafuiqjon o‘g‘li, & Solimuhammadov Jamshidbek Sohibjon o‘g‘li. (2023). Transportda logistika xarajatlarini va tariflarni shakllantirish. Butun dunyo ilmiy tadqiqotlar nazariyasi, 2(2), 106 114.

https://esiconf.com/index.php/TOSROWW/article/view/543
3. Raximov, R., G'ulomova, Z., & G'ulomov, I. (2023). Shisha ishlab chiqarish va uni klasifikatsiyasi. Yangi O'zbekiston talabalari axborotnomasi,1(2), 9-15.
4.Odiljonova, O., Ro'zioxunova, O., & Raximov, R. (2023). Polimerlarning ishlatilish soxasi. Бюллетень студентов нового Узбекистана, 1(3), 24-26.
5.Rakhimov, R., & Saidahmedov, R. (2023). Intellectual diagnosis of the technil state of directional taxis. International Conference On Higher Education Teaching,1(1), 80–85. Retrieved from https://aidlix.com/index.php/de/article/view/89
6. Solimuhammadov Jamshidbek Sohibjon o'g'li, & To'lqinboyev Sardorbek Hakimjon o'g'li. (2024). AERODROMLAR TURIGA QARAB POLOSALAR UZUNLIK VA KENGLIK O'LCHAMLARI. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 44(2), 121–115. Retrieved from https://www.newjournal.org/index.php/01/article/view/13099
7. Solimuhammadov Jamshidbek Sohibjon o'g'li, & To'lqinboyev Sardorbek Hakimjon o'g'li. (2024). LOGISTIKA KOMPANIYALARINING TA'MINOT ZANJIRINI SIMULYATSIYALASH. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 44(2), 115–120. Retrieved from https://www.newjournal.org/index.php/01/article/view/13100