IMPLEMENTATION OF SMART TRANSPORTATION SYSTEMS IN SAMARKAND REGION

Negmatov S.Yu.
Director, Shodiyev IB – Chief Engineer, State Enterprise "Operation of Tram Lines"
Soliyev A.T.
deputy director for professional education,
Nazarov A.M.
teacher, Samarkand Transport Technical College.
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Abstract

In the article, the issues of implementing "Intellectual transport systems" in the regional transport system, preventing traffic jams, increasing the efficiency of the transport infrastructure and creating convenience for the population were considered.

Keywords: system, infrastructure, transport, Intelligent, efficiency .

Entrance

Regarding the issues specified in the Resolutions of the President of the Republic of Uzbekistan No. PQ3589 dated March 6, 2018 on Measures to Further Improve the Road Transport Management System and No. PQ-4703 dated May 4, 2020 on Measures to Radically Improve the Personnel Training System in the Transport Sector, the development of society and the economy has increased the requirements for vehicles, which is accompanied by an increase in the number of vehicles. As a result of motorization, urbanization, population growth and changes in population density around the world, traffic congestion has increased over the past few decades. This situation reduces the efficiency of transport infrastructure and increases average travel time, air pollution and fuel consumption. It is to solve such issues that intelligent transport systems are called for, within which a person interacts - a driver or passenger, a vehicle and road infrastructure [1]. To improve the use of public transport in Samarkand, employees of the limited liability company bus enterprises that currently provide transport services are not satisfied with the services they provide, as well as experts who operate buses. It can be said that the bus stops are not fully equipped, there are no amenities for passengers. A number of works should also be carried out in Samarkand to improve the culture of the population, but in order to establish a public transport service, it is necessary to study computer programming systems and create programs to improve the knowledge and skills of specialists. First of all, to establish the issue of management: - to organize scientifically based management systems in practice; - to regulate the regulations of route traffic. In Samarkand, mainly if the stops are placed correctly and a sufficient number of public transport (minibuses, buses) are provided for each route, when constructing markets, shops and similar consumer service facilities, first of all, after the carriageway, up to the non-traffic section of the road, in order not to interfere with traffic safety, buildings and structures for trade, commerce and consumer services are being built. They were built without studying the needs of customers coming to them, that is, without considering temporary and permanent storage areas for employees and cars of customers coming to them, which is interfering with the carriageway, which leads to subsequent problems, namely, gross disruption of traffic, and the occurrence of road accidents. Without paying attention to such cases and road irregularities, without analyzing them, the causes of the accidents that occur remain the

driver or the victim. It is worth noting that the management procedures of private motor transport enterprises should be improved, and the routes along which buses operate should be gradually regulated. It is also worth noting that when building stops, it is necessary to study the flow and establish the construction of stops based on the requirements for the stop, and regulate regulated actions. By establishing a control management procedure by launching “smart stops” on routes with high passenger flow, it is possible to regulate the entry and exit of public transport by constructing the necessary stops in areas with medium passenger flow and ordinary stops in areas with low passenger flow, at an angle of 45 ° (carman-shaped) roadsides. One of the real consequences of the information revolution can be said to be the expansion of the globalization process. Based on this, three global technologies; The integration of information technologies, telecommunications and transport helps. This combines the global technologies of the future. The convergence of information technologies and telecommunications has become the practical basis for the formation of a global information society. The terms "infocommunication" and "telematics" have become important concepts of the integration process. The most striking indicators of an integrated approach to the development of information and telecommunications technologies - Security, Services, Ecology - give good results in solving the issues of "Intelligent Transport Systems" (ITS) - a system that combines modern information, communication and telematic technologies, control technologies and is designed to implement automated search and the most effective processes for managing the transport system of the region (city, road). A specific vehicle or group of vehicles in order to ensure the mobility of the population, maximize the use of the road network, increase the safety and efficiency of the transport process, and provide comfort for drivers and transport users. In other words, ITT is an integrated intelligent system that creates comfortable and safe conditions for all participants in the transport process, including the environment and service infrastructure. The ITT architecture combines all the tools that solve the problems of traffic flow, takes into account safety in the road network, mobility of traffic flows and environmental aspects. Thanks to the ITT architecture, the robustness of traffic control subsystems at any level is ensured. The architecture of intelligent transport systems can be divided into the following components: - supporting the inclusion of the main elements and processes of the transport system, its main target properties and its interaction with the environment; - functional, which determines the individual functions of elements, modules and subsystems, including the relationships between them, allowing the creation of applications as a result; - physical, which includes devices that perform individual functions to provide applications, etc., elements, modules and subsystems in a functional architecture with separate related devices (objects); - the principles of forming the structure of the communication, corresponding information subsystem, ensuring the transfer of information within the system in accordance with the physical architecture, including the requirements for the placement, encoding and transmission of information; - the module architecture, which includes the relationship between the individual functions of the ITT and the functioning of the system as a whole; - the organizational situation, which determines the principles for selecting the structure and functions of individual active components (or levels of control) of the system, are considered. The construction of the ITT architecture. In addition, each stage is considered in detail.

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