

system in urban passenger transport and electronic accounting system passengers are entitled to travel privileges.

Acceptance of the project will help implement electronic cashless payment for travel in urban passenger transport, which will contribute to solving some problems of transport companies and create new opportunities for passengers (improve the system of financing transport companies, increase revenue from the sale of travel documents, reduce operating costs, will keep records privileged categories of records and actually performed the transport operation, etc.).

References

1. Bilichenko V.V. Problems and prospects of urban passenger transport / V. V. Bilichenko, B. V. Slomnyuk // Journal of East Ukrainian National University. Dal. – 2013. –№ 5 (194). –Part 2. –C. 35-38.
2. Buryachenko A.E. International experience in financing municipal passenger transport / A.E. Buryachenko formation of a market economy. 2014. № 32. –P. 234-246.
3. E-ticket: Polish realities and dreams Lutsk [electronic resource] // Volyn agency investigations. Access: <https://ar.volyn.ua/2016/06/25/136565/> 83
4. Miller L. Adaptation of contactless passenger service in terms of road passenger transport / L. Miller, B.I. Kernychnyy // Simulation economy: challenges, trends, experiences: VII Intern. nauk. method. Conf. Young cybernetic (m. Ternopil, 21-22.10. 2016). –P. 44-46.
5. View the benefits system for public transport in Ukraine based on the experience of other countries - CASE Ukraine, 2010. –37 p.

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MODERN LEGAL PROBLEMS IN AERIAL LOGISTIC AUTOMATION AND ROBOTIZATION

New technologies can serve logistics for creation multilayer transport nets, where transportation of different goods can be made by automated systems and mechanisms, starting at storing facility and ending next to the parcel recipient door. The world is expanding and sometimes existed transport nets are overloaded. This situation will be more complicated in the nearest 5-10 years. That is why the new solution for delivery should be made. So can drones directed by special AI be the next main mode for delivery and how the

government will regulate it [3].

Before analyzing and supporting future trends and demand for building new transport nets, the question is needed to be asked: what influences the logistics of the future. In fact, there are many things that affect logistics directly or indirect, but there are several factors that are most important to us. The first factor is expansion of assortment of goods and quality requirements. For a long time, we have seen a significant increase in people's demands for quality, quantity and a set of product properties (no matter how we treat this, it seems that this trend will continue). Every day thousands of new products are invented and launched into production. At the same time, the growth in the number of new goods is accompanied by a reduction in their life cycle.

The second is the globalization, development of customs unions, where new economic entities are being formed that will influence logistics in the coming decades.

There are organizations which responsible for formation of a single economic space, providing for the effective functioning of the common market for goods, services, capital and labor, security, development of unified transport, energy, information systems, etc. For instance, the Customs Union and the Eurasian Economic Community (EurAsEC), European Union.

The third is dissemination of information technologies. Information technologies have led not only to the emergence of "digital goods" and "digital logistics" (example: iTuns, Steam, IVI, etc.), but also to the emergence of new opportunities for obtaining and processing information. The speed of information transfer, the methods of transmission allow the business to obtain previously unavailable information.

All these factors change the picture of the future logistics, form new challenges, new requirements to improve the efficiency of supply chain management. At present it has become more difficult to make forecasts, it is needed to highlight the main directions of the logistics movement in the future.

The most promising directions are the unmanned mechanisms and unmanned air transportation. At the moment, there is seen the emergence of a completely new type of transport logistics, such as the delivery of goods by air using drones.

Unmanned aircraft is developing not only in the field of transportation, but in other areas. But they will remain outside the scope of the article on logistics.

There is a rapid development of "drones" cars.

"We see that there is not a single world automobile company that plans to have cars with a man behind the wheel" (Dmitry Peskov, Director of the "Young Professionals", Agency for Strategic Initiatives for the Promotion of New Projects (ASI)).

At the moment, the standards of communication machines, standards of software interaction, regulatory framework and road infrastructure development strategy are being formed.

"A huge, standardized and fault-tolerant standard for communicating machines among themselves and with traffic control centers would be a huge help in creating a 100% autopilot. At the moment, such does not exist, each company is testing its own development. But there are certain progresses in this matter. In January 2014, the consortium AdaptIVe was organized, which included 29 companies from various automotive and scientific fields. Over the next few years, they will work together with government representatives, develop and implement common standards. The Volkswagen concern coordinates the work." (drom.ru)

Not only delivery sector can be influenced by drone technology integration. Agriculture was considered to be the first big commercial drone market, but pricing and economic dynamics around tighter yields and returns on investment mean that the commercial agricultural drone market is not growing at the pace of other commercial drone markets. Gartner predicts that through 2020, the high cost sensitivity of the agriculture market will limit drone adoption to 7 per cent of commercial market growth.

In recent years, a trend has emerged related to the introduction of unmanned or autonomous technologies into all spheres of our life. One of the most popular trends is the use of drones.

References

1. IEEE International Conference on Mechatronics and Automation (ICMA), 2015
2. Optimizing Transportation Processes at DHL, [Электронный ресурс]/ Режим доступа: http://laurenbossers.writersresidence.com/system/attachments/files/3754/original/DHL_case_study.pdf
3. International Journal of Transportation Science and Technology, Volume 5, Issue 3, October 2016, Pages 111-122 [Электронный ресурс]. – Режим доступа: <https://www.sciencedirect.com/science/article/pii/S2046043016300533>
4. Hulse J.H. Sustainable Development at Risk: Ignoring the Past / J.H. Hulse. – New Delhi: Cambridge University Press India Pvt. Ltd. Ottawa: International Development Research Centre.
5. Modelling and optimization of transportation costs / Gediminas Davulis – Mykolas Romeris University
6. Transportation Research Procedia, Volume 22, 2017, Pages 541-55 [Электронный ресурс]. – Режим доступа: <https://www.sciencedirect.com/science/article/pii/S2352146517301783>