

INNOVATIVE TECHNIQUES FOR TRAFFIC DEVELOPMENT

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The country's economic situation depends on the activities and development of the transport system in terms of the direction and volume of freight traffic, the structure of transported goods, the volume of transit, and the ratio of internal transport. However, the stagnation of transport activities significantly hinders the development of the country's economy as a whole. Therefore, during the development of transport and its infrastructure based on innovative directions, an economic crisis occurred, which caused sanctions in Russia. It is advisable to provide several innovative directions for traffic growth, fleet rotation, and fleet structure. In rail transport, for example, the proportion of powerful and fast freight locomotives, and freight cars with high load capacity and reliability is to be increased; increasing the number and share of high-speed passenger transport; It is advisable to implement projects to expand the fleet of passenger cars and electric trains with high comfort.

It is planned to increase the proportion of high-lift highways, specialized semi-trailers for intercity and international transport, the number of specialized cargo chassis with self-loading vehicles, and expand the range of replacement bodies for service retail agriculture and communities.

Currently, the development of rail transport in the direction of increasing the speed of movement is being promoted through the improvement of locomotives, wagons, and individual road elements. The main innovative achievements in road construction have not yet been observed: the traditional technology of railway construction is still in use. However, a more efficient technology for the construction of high-speed and light highways, capable of maintaining the integrity of territories, drains, animal migration routes, etc., has long been known. The construction of such roads does not require the delivery of technological roads for material supply, since their structure can be carried out using a modular method, that is, the manufacture of road modules at enterprises, delivery, and installation using powerful helicopters. Because of the world experience, it is recommended to switch to the use of more efficient structures of rail connections. Thanks to innovative production processes, the latest materials, and resource-saving technologies, the quality indicators of the components of railway sleepers can be increased and their costs reduced. In recent years, various options for elastic sleepers and constructions in which rails are attached directly to sleepers have become widespread, which have several important advantages over other types of sleepers.

One of the innovative ways of cargo delivery is container transportation. Almost all types of cargo can be transported in universal containers. At the same time, fast and reliable loading and unloading and thus the delivery of the freight is guaranteed. The use of standard containers in vehicles of all kinds, especially in intermodal transport, is widespread worldwide. This saves transport costs. Using containers reduces the cost of a ton of cargo by 20-40% and disruptions by 2-3 times. The use of containers in the transport process increases the quality level of transport services, which allows us to increase the competitiveness of our country's transport and logistics system in the domestic and international markets. Container transportation in our country has also been mastered, but its volume is not so large. The expansion of the transport logistics infrastructure is therefore one of the main tasks of our country's economy. Road traffic plays a major role in logistics. However, its engine relies on burning fuel, which releases pollutants and promotes air pollution. In the world's most underdeveloped countries, it has been studied that methanol, biogas, hydrogen, rapeseed oil, electricity, etc. can replace fuels. However, the greatest successes in this direction have been achieved in China, where biogas is used for 80% of rural and 60% of urban freight transport.

In addition, China exports biogas-powered engines (ICE) to more than 20 countries around the world. The use of alternative fuels can take the form of a complete replacement of additives and gasoline. Biogas is a relatively new, promising, environmentally friendly, and economically viable fuel for vehicles. For air pollution, biogas is a fuel that is 75% cleaner than diesel and 50% cleaner than gasoline.

Hydrogen is the most environmentally friendly fuel with unlimited reserves in nature. The main disadvantages as a fuel are high production costs, storage problems, high energy requirements for compression, and low energy consumption. Alternatively, rapeseed oil stands out among the gas stations for its properties. When burning rapeseed oil, the exhaust gases are reduced by 20-25%. The circulation of pollutants, sulfur, and carbon dioxide significantly reduces the risk of greenhouse effects. The development of electric cars is carried out by many car companies. They are already being used at airports, nuclear power plants, seaports, trade fairs, etc. The advantages of electric vehicles are high. Demand for them is increasing due to engine efficiency, the absence of harmful exhaust gases, ease of construction and control, and high reliability and durability. One of the most important advanced areas of development of transport technologies is the integration of production and transport processes in holding companies, and clusters based on logistical principles. In this case, it is necessary to raise the technical level of vehicles and equipment, create and modernize infrastructure, and apply innovative transport, management, and information and telecommunications technologies.

References:

1. Gulamov, A. A., Ozatbekov, Y. F., & Ozatbekova, O. N. (2022). INNOVATION-ORIENTED WAY OF DEVELOPMENT OF A MODERN UNIVERSITY. *Journal of new century innovations*, 15(3), 53-59.
2. Ozatbekova, O., Ozatbekov, Y., & Gulamov, A. (2022). DISTINCTIVE FEATURES OF THE TURKISH INVESTMENT POLICY. *Current approaches and new research in modern sciences*, 1(1), 4-8.
3. Ozatbekova, O., Ozatbekov, Y., & Gulamov, A. (2022). ТЕОРЕТИЧЕСКИЕ ОСНОВЫ ИПОТЕЧНОГО КРЕДИТОВАНИЯ В ЭКОНОМИКЕ. *Solution of social problems in management and economy*, 1(1), 4-6.
4. Ozatbekova, O., Ozatbekov, Y., & Gulamov, A. (2022). THE IMPORTANCE OF THE DEVELOPMENT OF FINANCIAL MARKETS IN THE ECONOMY OF UZBEKISTAN. *Zamonaviy dunyoda ijtimoiy fanlar: Nazariy va amaliy izlanishlar*, 1(20), 40-45.
5. Abdullayevich, G. A., & Qizi, R. S. S. (2022). ИҚТИСОДИЁТНИ РАҚАМЛАШТИРИШ ШАРОИТИДА РАҚАМЛИ МАРКЕТИНГНИНГ ЎРНИ. *Трансформация моделей корпоративного управления в условиях цифровой экономики*, 1(1), 149-154.
6. Abdurakhmanov, O., Gulamov, A., & Shjaumarov, S. (2021). Improving the needs of economic sectors for transport services on the basis of national standards.
7. Abdullaevich, G. A., & Khikmatullaevna, S. M. (2021). A study of increasing the economic efficiency of transport services. *South Asian Journal of Marketing & Management Research*, 11(9), 34-40.
8. Abdurakhmanov, O. K., Gulamov, A. A., Shaumarov, S. S., & Kandakhorov, S. I. (2021). ON THE RETURN ON INVESTMENT FOR THERMAL RENOVATION OF CIVIL BUILDINGS. *ТЕМИР ЙЎЛ ТРАНСПОРТИ*, (3), 99.
9. Gulamov, A., Abdurakhmanov, O., & Shjaumarov, S. (2021). Improving Methodological Approaches to Assessing the Effectiveness of Using Fixed Capital in Railway Transport. *International Journal on Orange Technologies*, 3(10), 1-12.
10. Abdullaevich, G. A. (2020). ECONOMIC VALUATION OF THE SHARE CAPITAL OF THE JOINT STOCK COMPANY" UZBEKISTAN RAILWAYS. *Science and Education*, 2, 3.
11. Гуламов, А. А., & Дадабоева, З. С. К. (2020). Проблемы развития железнодорожного транзитного потенциала Республики Узбекистан. *Universum: технические науки*, (5-1 (74)), 64-67.
12. Abdullaevich, G. A. (2020). ECONOMIC VALUATION OF THE SHARE CAPITAL OF THE JOINT STOCK COMPANY" UZBEKISTAN RAILWAYS. *Science and Education*, 2, 3.

13. Abdullayevich, G. A. (2019). Management of the Reproduction Process of the Main Capital of the Railway Company. *Asian Journal of Technology and Management Research (AJTMR) Volume, 8(02)*.

14. Abdullayevich, G. A. (2019). Depreciation in the aspect of the strategy of modeling investment and analysis of the reproduction processes of fixed capital of railway transport. *Religación. Revista de Ciencias Sociales y Humanidades, 4(14)*, 319-331.

15. Abdullaevich, G. A. (2019). IMPROVEMENT OF ECONOMIC METHODS OF DEPRECIATION IN THE JOINT-STOCK COMPANY “UZBEKISTAN RAILWAYS”. *Methods and problems of practical application*, 143.

16. Гуламов, А. А. (2019). ЎЗБЕКИСТОН РЕСПУБЛИКАСИДА ТЕМИР ЙЎЛ ТРАНСПОРТИНИНГ ЗАМОНАВИЙ РИВОЖЛАНИШ ҲОЛАТИНИНГ ТАҲЛИЛИ. *Ресурсосберегающие технологии на транспорте, 20(1)*, 297-305.

17. Abdullayevich, G. A. (2019). Depreciation in the aspect of modeling strategy of investment and analysis of reproduction processes of fixed capital of railway transport. *Religación: Revista de Ciencias Sociales y Humanidades, 4(14)*, 319-330.

18. Гуламов, А. (2019). Экономическая оценка основного капитала акционерного общества Узбекистон темир йуллари. *Экономика и инновационные технологии, (2)*, 1543-163.

19. Гуламов, А. А. (2019). МОДЕЛЬ ОЦЕНКИ ЭФФЕКТИВНОСТИ ВОСПРОИЗВОДСТВА ОСНОВНЫХ ФОНДОВ В ЖЕЛЕЗНОДОРОЖНОМ ТРАНСПОРТЕ. *Транспорт шелкового пути, (1-2)*, 82-91.

20. Abdulaziz, G. (2019). Retrospective analysis of reproduction processes of fixed capital of railway transport. *Бюллетень науки и практики, 5(2)*, 235-244.

21. Гуламов, А. А., Мерганов, А. М., & Рахматов, З. Н. (2017). Тариф как фактор повышения конкурентоспособности национальной экономики. *Міжнародний науковий журнал Інтернаука, (5)*, 115-19.

22. Расулов, М. Х., Ризаев, А. Н., & Гуламов, А. А. (2016). К вопросу управления кадрами в инновационной среде железнодорожного транспорта акционерного общества " Узбекистон темир йуллари". *Инновационный транспорт, (3)*, 13-16.

23. Гуламов, А. А. (2016). Совершенствование методов целевого использования амортизации в воспроизводственном процессе основных фондов железнодорожной компании. *Міжнародний науковий журнал, (9)*, 103-105.

24. Гуламов, А. А. (2011). Методика оценки воспроизводства основных производственных фондов железнодорожной компании. *Известия Петербургского университета путей сообщения, (1)*, 257-266.

25. Гуламов, А. А. (2011). *Экономическая оценка воспроизводства основных фондов железнодорожной компании* (Doctoral dissertation, Петербургский государственный университет путей сообщения).

26. Гуламов, А. А. (2010). Обоснование рационального метода начисления амортизации в условиях оптимизации воспроизводства грузового вагонного парка транспортной компании. *Известия Петербургского университета путей сообщения*, (2), 163-176.

27. Гуламов, А. А. (2010). Прогнозирование объёмов перевозок грузов на узбекской железной дороге. *Известия Петербургского университета путей сообщения*, (1), 82-93.

28. Gulamov, A. MODEL FOR ASSESSING THE EFFICIENCY OF REPRODUCTION OF FIXED ASSETS IN RAILWAY TRANSPORT.