The formation of the digital transport space of Russia through the Platon’s system

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Abstract. The article is devoted to the issues of digitalization of the motor transport complex through the Platon’s system. This system is designed to charge owners of vehicles with a permitted mass of more than 12 tons for travelling on federal highways. The article focuses on domestic experience in organizing the collection of tolls, calculating the tariff, the positive and negative sides of the implementation of this system. Based on the analysis, the authors draw conclusions about the prospects of this system in Russia and abroad.

1. Introduction
Road transport is a type of transport that carries goods and passengers on trackless tracks. The main areas of the increasingly expanding expedient use of automobile transport are the transportation and transportation of goods to main modes of transport, the transportation of industrial and agricultural goods over short distances, domestic transportation, transportation of goods for trade and construction, and the possibility of delivering goods “door to door”. Over long distances, road transport transports perishable, especially valuable, requiring fast delivery, inconvenient for overloading by other means of transport cargo. At present, without a motor transport, the activity of any branch of the economy is impossible.

Therefore, it is quite natural that road transport needs the most modern technologies in order to be competitive not only in the domestic market for road transport, but also with a swipe to the world market; meet the need for undefined increasing volumes of cargo transportation, as well as ensuring the availability and quality of services provided [5]. One of the main points in the transition to the “figure” for freight is digital control. Paper invoices, declarations should be replaced by electronic payments, paperwork should be electronic. This will allow you to choose the most optimal delivery methods, depending on traffic congestion, to track the location and condition of the cargo and optimize staff work.

2. Freight Market Digitalization
2.1. Domestic experience
The digitalization of the freight transportation market, according to the authors, is primarily the safety of freight transportation, their convenience, accessibility for people and businesses. This also includes measures to reduce costs, expand transit traffic and export opportunities [1]. More recently, in Russia, there was a system for collecting fees from freight vehicles for using the Platon motorway. In our country, the Plato system has recently appeared. It can be deciphered as “pay per ton”. It is intended to
charge owners of vehicles with a permitted mass of more than 12 tons for travelling on federal roads in
order to comply with Article 31 of Federal Law No. 257-FZ “On Roads and Road Activities in the
Russian Federation”. RT-Invest Transport Systems LLC is the sole executor of the project.
This system was launched on November 15, 2015. The toll was undefined 1.53 roubles for every
1 km of the way.

The system operator maintains a register, which is a structured database of users of the charging
system, to organize the procedure for making a payment for damages. Registration of the vehicle and
its owner in the registry of the charging system is performed by the operator free of charge.

2.2. Technical base
Payment for travel is carried out in two ways – using a route map or an on-board device. The
calculation is made depending on the actual mileage of the vehicle.

Route map is a document formed on the basis of data on the planned route provided by the owner
of the vehicle, and which is the basis for calculating the fee for damages in the absence of the on-board
device [4].

The route map contains the following data:
- Route card number;
- state vehicle registration plate;
- the beginning of the validity period of the Route map with the date and exact time;
- date and time of issue of the Route map;
- validity period;
- the total length of sections of public roads of federal importance included in the route;
- description of the route in relation to sections of federal roads for the passage of which this
document was issued;
- amount of payment.

Payment methods for route cards:
- from settlement record undefined Owner of a vehicle open in the Charging System;
- by bank / fuel card in the Personal Account and the Platon Mobile Application, in the Platon
Self-Service Terminals, in the Information Support Centers of the Charging System users, through
Qiwi e-wallet, as well as through the Internet bank and Sberbank Online mobile application;
- in cash at partner agent terminals: Qiwi, Sberbank, Moscow Credit Bank, Eleksnet, in the
network of Euroset stores;
- using a mobile phone, using the payment service MOBI.Money [2, 3].

Ways to replenish an account:
- non-cash bank transfer according to the details of the Operator of the Charging System;
- by credit / fuel card in the Personal Account and Platon Mobile Application, in Platon Self-
Service Terminals, in the Information Support Centers of the Charging System users, through Qiwi e-
wallet, as well as through the Internet bank and Sberbank Online mobile application;
- cash in agent undefined partner terminals: Qiwi, Sberbank, Moscow Credit Bank, Eleksnet, in
the network of salons Euroset;
- using a mobile phone, using the payment service MOBI.Money.

On-board device - an object of the Charging System, which is a technical device that allows using
the GLONASS or GLONASS / GPS satellite navigation technologies to determine the route of the
vehicle along federal highways [6].

The use of the device is convenient because in the presence of funds on the Owner’s account of the
vehicle, the calculation and debiting of funds from the account in the payment account is carried out
automatically based on data received from the on-board device.
2.3. Rates
The initial tariff for road damage was set by the Government of the Russian Federation by resolution No. 504 of June 14, 2013 at the level of 3.73 roubles per km. On November 3, 2015, Decree No. 1191 of the Government of the Russian Federation “On Certain Issues of Collection of Payments for Compensation of Damage Caused by Public Highways of Federal Importance by Vehicles with a Permissible Maximum Mass of Over 12 tons”, reducing coefficients were introduced, at that time the charge was 1.53 roubles per km of track.

From April 15, 2017, the tariff began to be instead of 1.53 roubles per 1 km, currently 2.04 roubles per km. Initially, they wanted to set the tariff at 3.06 roubles. The decision on a smoother increase was made on March 23 at a meeting of Russian Prime Minister Dmitry Medvedev with representatives of small and medium enterprises in the field of road transport.

2.4. Advantages and disadvantages
Despite all the advantages of the new system for collecting tolls of heavy trucks on federal roads, carriers call it unfair and note that it is not a payment or a fee fixed in the Tax Code. In fact, this is a fee for driving on federal roads, which in theory should be restored from the means of a paid transport tax, logistics say.

“With the introduction of a duty for driving on highways, the rate and tax base for the transport tax remained unchanged. Until the end of last year, a privilege was applied to logistics companies, but since January 2019 it has been cancelled, and, in fact, freight transport owners pay for road repairs twice; in the form of payments to “Plato” and in the form of a transport tax”.

Then, changes in the system of weight control became a great stress for carriers – a network of automatic posts (automatic weight control system) (ASVGK) was introduced on federal and regional routes undefined in the country since October 1, 2016. “The vehicle drove through this frame, the sensors recorded even a slight excess – get a fine”. Specialists in this field and the authors of the article join believe that Plato only managed to remove carriers from the gray zone. But a qualitative change in the technical condition of the roads did not occur. Until now, the Plato system is controversial; it is still believed that the Plato is a double-edged sword. On the one hand, it is heavy trucks that cause damage to roads – there are about 50 million cars in the country, and their owners pay transport taxes and fuel excise taxes, replenishing road funds at different levels. Of these vehicles, more than 1 million vehicles are heavy vehicles, which are payers in the Platon system. According to various estimates, the damage caused by heavy trucks to roads compared to cars differs thousands of times. “Platon” allows you to compensate for the loss of roads from carriers [5].

“On the other hand, not defining the very principle of the Plato system raises a lot of questions. It is not very clear why, for this, it was necessary to attract some investment capital (on a concession basis, RT-invest transport systems – Regional Economy). In my opinion, it was enough to make Plato a state structure that could do everything at its own expense and receive money directly. And not like it is now – of the money that comes to compensate for the damage to roads, only a part is left to compensate for the damage, and the other part goes to pay off some investments of a private organization.” – Alexey Nosov says.

According to Finam JSC, in 2015, 1.397 billion roubles were received to the Russian budget through the fees of Plato. When comparing the data of the Ministry of Transport of the Russian Federation with the financial statements of the operator of the system available at Spark-Interfax, the result was approximately the same: the revenue of RT-invest transport systems LLC, that is, most likely, the year the revenue system began operating undefined were divided equally [7, 8]. In 2016 and 2017, the operator’s revenue was about 10 billion roubles per year, which looks like a fixed fee. Budget revenues in 2016 amounted to 16.434 billion roubles and in 2017 – 19.836 billion roubles. In 2018, the budget already received 23.182 billion roubles from Platon, and from the beginning of 2019, another 15.829 billion roubles. The reporting of RT-Invest Transport Systems LLC for 2018 is not yet available, but it can be assumed that the revenue should have been the same 10 billion roubles.
2.5. Summary
The results of the implementation of the Platon’s system. In the state system “Platon” in July 2019 more than half a million users were registered (501,913). The number of vehicles is 1.198 million. There are 50.774 km of federal roads in the system. In the road fund of Russia collected 77 billion roubles. The funds received from Platon are spent on improving road transport infrastructure, financing repair and road construction works, and maintaining the state of highways of federal importance. Road tolls are not levied on passenger vehicles, military equipment and trucks used for its transportation, as well as on vehicles operated by emergency services: ambulance, fire department, police, Ministry of Emergencies, etc. almost 80 billion roubles were collected for road repair and bridge construction for the entire period since 2015, according to Platon’s operator, RTITS (RT-invest transport systems). On these funds undefined over 2 thousand km of roads were repaired. More than 30 bridges were restored and built in 40 regions of the country, according to the Ministry of Transport. So, 500 million roubles were allocated for the construction of a bridge across the Volga River in the city of Dubna in the Moscow Region. Another 930 million roubles – for the construction of the Frunze’s bridge in Samara, 625 million roubles – for the construction of a bridge over the river Katun (Gorny Altai), 380 million roubles were allocated for the construction of the bridge across the Cheptsa River in Udmurtia, and more than 330 million roubles were allocated for the reconstruction of the bridge across the Terek River on the Ischerskaya-Grozny highway. It is also planned to build and reconstruct bridges across the Cheptsa River (two overpasses in Udmurtia in the Balezinsky and Kezsky districts), Sosna (the city of Livny, Oryol Oblast), Zusha (Mtsensk), Oka (Oryol Oblast), and the Samara River (Samara Oblast). Also in 2018, funds from the Platon system were used to co-finance the repair of the federal highway R-243 Kostroma – Sharya – Kirov – Perm. The Ministry of Transport of Russia and Rosavtodor made such a decision undefined on the basis of the choice of the carriers themselves in the framework of the project “Map of the killed roads”. More than 2.5 billion roubles were transferred to the Siberian Federal District for the repair of federal roads and bridges over four years. In particular, 750 million roubles were allocated to the Omsk Region, including 625 million roubles – to repair the bridge across the river Katun, 250 million roubles – for road repairs in the Altai Republic, 135 million roubles – for the reconstruction of the bridge over the river. In the Krasnoyarsk Territory, 82 million roubles are to restore the bridge across the river Alley in the Altai Territory and another 63 million roubles are to repair the bridge in Buryatia (in November 2018, the Republic of Buryatia became part of the Far Eastern Federal District). Also, the Siberian region this year received 670 million roubles as compensation for the shortfall in income from the deduction for the transport tax (according to the Tax Code of the Russian Federation, owners of 12-ton heavy trucks registered in the Platon’s system were actually exempted from the transport tax if the amount of the fee for using federal roads exceeded or was equal to it. The norm undefined acted until the end of 2018). These funds were used to build roads, bridges and overpasses. In particular, the Novosibirsk region of this amount offset 108 million roubles. As representatives of the state system noted, freight forwarders themselves determine which roads should be repaired at the expense of the funds transferred by them to the Russian road fund. This happens during an open vote in the framework of the project of the All-Russian Popular Front “Map of killed roads”. For example, 700 km of federal roads of Russia were repaired, including more than 80 km of the R-258 Chita-Ulan-Ude highway repaired in Siberia.

3. Conclusion
Starting July 1, 2019, the Platon’s state system fare for heavy trucks on federal highways increased by 14 kopecks – up to 2.04 roubles per km. From February 1, 2020 it will amount to 2.2 roubles, and in 2021 2.35 roubles. In turn, the Ministry of Transport of the Russian Federation presents this not as an increase, but as a “tariff reform”. “The government met the carriers and last year refused to increase the tariff, and in 2019 decided to make it a phased one – for three years. The applied approach with stretching the increase in the tariff for accumulated inflation will increase the number of roads and bridges being repaired due to additional funds from the Platon’s system, which will positively affect
traffic safety. If we talk about commercial structures, then the Platon’s system will ultimately prove to be more profitable than its absence due to more expeditious cargo delivery and savings on depreciation of vehicles”. In 2019, according to the original plan, the fare was supposed to undefined make up 3.73 roubles. Experts call the spending of funds collected from carriers not transparent enough, and the increase in tariff unreasonable. According to freight forwarders, it is necessary to improve Plato. In particular, legal companies point to unscrupulous competitors who shy away from using the system and receive an influx of additional customers due to low prices and higher profits than those from bona fide entrepreneurs. “Before raising the system’s tariff, it is necessary to ensure high fundraising – at least 95 %, so that legal freight carriers do not suffer from the actions of gray competitors.” According to the data of the Platon’s operator, RTITS, at the moment about 90 % of heavy trucks in Russia are registered in the system. This means that approximately one in ten heavy trucks in the country is still not equipped with an on-board Plato device. Currently, there are proposals to introduce “Plato” in the Tax Code. However, this measure with undefined the prospect of criminal penalties and high fines may not have a positive effect on everyone. “The first category is those who simply have nothing to pay. The second category is those who simply do not pay. And the third option: a person calculates what is more expensive – fare or the amount of fines? Only if the amount of fines exceeds this value, then people will go to pay using the Platon’s system. Digitalization is not a separate move, operation, it is a whole technology, and therefore it is quite obvious why there are so many problems in the development and implementation of the Plato system. But they are overcome. And the authors hope that in the near future the Platon’s system will cover most federal highways and the Platon’s experience will be used abroad. As shown by the successful practice of using it in India.

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