

**SOI: 1.1/TAS**

**DOI: 10.15863/TAS**

**Scopus ASJC: 1000**

**ISSN 2308-4944 (print)**

**ISSN 2409-0085 (online)**

**№ 02 (118) 2023**

**Teoretičeskaâ i prikladnaâ nauka**

---

**Theoretical & Applied Science**



---

**Philadelphia, USA**

**Teoretičkaâ i prikladnaâ  
nauka**

---

**Theoretical & Applied  
Science**

**02 (118)**

**2023**

# International Scientific Journal Theoretical & Applied Science

Founder: **International Academy of Theoretical & Applied Sciences**

Published since 2013 year. Issued Monthly.

International scientific journal «Theoretical & Applied Science», registered in France, and indexed more than 45 international scientific bases.

Editorial office: <http://T-Science.org> Phone: +777727-606-81

E-mail: [T-Science@mail.ru](mailto:T-Science@mail.ru)

Hirsch index:

**Editor-in Chief: Alexandr Shevtsov**

**h Index RISC = 1 (78)**

## Editorial Board:

1	Prof.	Vladimir Kestelman	USA	<b>h Index Scopus = 3 (47)</b>
2	Prof.	Arne Jönsson	Sweden	<b>h Index Scopus = 10 (33)</b>
3	Prof.	Sagat Zhunisbekov	KZ	-
4	Assistant of Prof.	Boselin Prabhu	India	-
5	Lecturer	Denis Chemezov	Russia	<b>h Index RISC = 2 (61)</b>
6	Associate Prof.	Elnur Hasanov	Azerbaijan	<b>h Index Scopus = 8 (11)</b>
7	Associate Prof.	Christo Ananth	India	<b>h Index Scopus = - (1)</b>
8	Prof.	Shafa Aliyev	Azerbaijan	<b>h Index Scopus = - (1)</b>
9	Associate Prof.	Ramesh Kumar	India	<b>h Index Scopus = - (2)</b>
10	Associate Prof.	S. Sathish	India	<b>h Index Scopus = 2 (13)</b>
11	Researcher	Rohit Kumar Verma	India	-
12	Prof.	Kerem Shixaliyev	Azerbaijan	-
13	Associate Prof.	Ananeva Elena Pavlovna	Russia	<b>h Index RISC = 1 (19)</b>
14	Associate Prof.	Muhammad Hussein Noure Elahi	Iran	-
15	Assistant of Prof.	Tamar Shiukashvili	Georgia	-
16	Prof.	Said Abdullaevich Salekhov	Russia	-
17	Prof.	Vladimir Timofeevich Prokhorov	Russia	-
18	Researcher	Bobir Ortikmirzayevich Tursunov	Uzbekistan	-
19	Associate Prof.	Victor Aleksandrovich Melent'ev	Russia	-
20	Prof.	Manuchar Shishinashvili	Georgia	-
21	Prof.	Konstantin Kurpayanidi	Uzbekistan	<b>h Index RISC = 8 (67)</b>
22	Prof.	Shoumarov G'ayrat Bahramovich	Uzbekistan	-
23	Associate Prof.	Saidvali Yusupov	Uzbekistan	-
24	PhD	Tengiz Magradze	Georgia	-
25		Dilnoza Azlarova	Uzbekistan	-
26	Associate Prof.	Sanjar Goyipnazarov	Uzbekistan	-
27	Prof.	Shakhlo Ergasheva	Uzbekistan	-
28	Prof.	Nigora Safarova	Uzbekistan	-
29	Associate Prof.	Kurbonov Tohir Hamdamovich	Uzbekistan	-
30	Prof.	Pakhrutdinov Shukritdin Il'yasovich	Uzbekistan	-

# International Scientific Journal Theoretical & Applied Science

---

## Editorial Board:

Hirsch index:

31	PhD	Mamazhonov Akramzhon Turgunovich	Uzbekistan	-
32	PhD	Ravindra Bhardwaj	USA	<b>h Index Scopus = 2 (5)</b>
33	Assistant lecturer	Mehrinigor Akhmedova	Uzbekistan	-
34	Associate Prof.	Fayziyeva Makhbuba Rakhimjanovna	Uzbekistan	-
35	PhD	Jamshid Jalilov	Uzbekistan	-
36		Guzalbegim Rakhimova	Uzbekistan	-
37	Prof.	Gulchehra Gaffarova	Uzbekistan	-
38	Prof.	Manana Garibashvili	Georgia	
39	D.Sc.	Alijon Karimovich Khusanov	Uzbekistan	
40	PhD	Azizkhon Rakhmonov	Uzbekistan	
41	Prof.	Sarvinoz Kadirova	Uzbekistan	
42	Prof., D.Sc.	Shermukhamedov Abbas Tairovich	Uzbekistan	
43	PhD	Bekjanova Ainura	Uzbekistan	
44		Anzhelika Bayakina	Russia	<b>h Index RISC = 3 (18)</b>
45	PhD	Abdurasul Martazayev	Uzbekistan	
46	PhD	Ia Shiukashvili	Georgia	
47	Associate Prof.	Lali Elanidze	Georgia	<b>h Index Scopus = 0 (1)</b>

**International Scientific Journal  
Theoretical & Applied Science**

---



ISJ Theoretical & Applied Science, 02 (118), 574.  
Philadelphia, USA



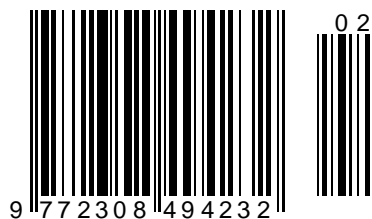
**Impact Factor ICV = 6.630**

**Impact Factor ISI = 0.829**  
based on International Citation Report (ICR)

The percentage of rejected articles:



ISSN 2308-4944



© Collective of Authors  
© «Theoretical & Applied Science»

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIHLI (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

## International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2023 Issue: 02 Volume: 118

Published: 09.02.2023 <http://T-Science.org>

Issue

Article



**Sodiq S. Rasulov**  
Ministry of Higher Education, Science and Innovation of Republic of Uzbekistan  
Researcher

100174, Tashkent city, Almazor district, University str., 7, Republic of Uzbekistan  
[Sodiq\\_rasulov@mail.ru](mailto:Sodiq_rasulov@mail.ru)

## CONCEPTUAL FOUNDATIONS FOR THE DEVELOPMENT OF INNOVATIVE PROCESSES IN THE AGRO-INDUSTRIAL COMPLEX

**Abstract:** Innovative processes determine the future of agricultural producers in terms of the social significance of the agricultural sector in the country's economy, the concentration of production, the development of new types of products, the comprehensive improvement of the quality of products and stimulating demand for new products is the main factor in achieving a high level of competitiveness. Due to the fact that many innovative changes require large-scale investments, the bulk of innovation in the agricultural sector is carried out not by farmers or farms, but by large enterprises in the agricultural sector.

The state innovation policy is aimed at ensuring the growth of the country's gross domestic product based on the development of the production of fundamentally new products and technologies, as well as expanding the sales markets for locally produced products, the main directions of the state innovation policy were determined.

The introduction of high technologies in the production of agricultural products, the development of processing networks, the improvement of the use of land and other resources, the elimination of price disparity between industrial and agricultural products, the development of industrial and social infrastructures, the improvement of internal economic relations, the improvement of service maintenance, network management, the use of modern science-intensive methods, the implementation of a number of functions, such as innovative, educational, environmental, social, information and advertising.

**Key words:** Agrotechnopark, the main directions of the state innovation policy, organizational and economic model of the Agrotechnopark, Estimated sources of income for the agrotechnopark, Model of the mechanism for the development of innovative processes in the agro-industrial complex, Stages of developing a strategic program for organizing innovative potential.

**Language:** English

**Citation:** Rasulov, S. S. (2023). Conceptual foundations for the development of innovative processes in the agro-industrial complex. *ISJ Theoretical & Applied Science*, 02 (118), 101-107.

**Soi:** <http://s-o-i.org/1.1/TAS-02-118-14> **Doi:** <https://dx.doi.org/10.15863/TAS.2023.02.118.14>

**Scopus ASCC:** 2000.

### Introduction

One of the main priorities for the sustainable development of the economy of our country and one of its main sectors, the agricultural sector, is to bring economic growth to a new stage based on innovative development.

In the context of the formation of an innovative economy, state support is incomparable in terms of organizing economic associations that work effectively in a difficult competitive environment in the domestic and foreign markets, and channeling funds to the most promising areas. directions of

economic development. At the same time, it is important that the regulatory levers of the state be aimed at supporting innovation and creative initiatives aimed at improving the welfare of society.

In general, practical research, renewal of production forces and technologies, modernization of fixed assets, full use of scientific and technical potential, increasing the competitiveness of local agricultural products, improving industrial and social infrastructure are the main factors of sustainable development. agricultural sector. Innovation processes should determine the future of agricultural

## Impact Factor:

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	PIHIQ (Russia)	= 3.939	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.771	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

producers in terms of the social significance of the agricultural sector in the country's economy.

In such conditions, it is necessary to work for the long term, conduct fundamental and applied research, diversify innovation activities, make the most of the creative activity of people as one of the main aspects of managing agricultural enterprises. Concentration of production, mastering the production of new types of products, a comprehensive improvement in the quality of products and stimulating demand for new products are the main factors in achieving a high level of competitiveness. Due to the fact that many innovative changes require large-scale investments, the bulk of innovation in the agricultural sector is carried out not by farmers or farms, but by large enterprises in the agricultural sector.

From this point of view, one of the conceptual directions for the development of innovative processes in the agricultural sector is the improvement of the management of innovative processes, which is explained by the specifics and complexity of the management of the agricultural sector, in particular, agricultural enterprises. Nature, environment, economic and social knowledge necessary for agricultural production are the unique features of the network.

## 2. MATERIAL AND METHODS

At present, despite the fact that positive results are being achieved in the agricultural sector of our country, this sector lags far behind in a number of indicators that determine the competitiveness of agricultural products. The current situation and the conditions of a market economy make it necessary to introduce an innovative approach to the management of the agricultural sector. In such conditions, the main strategy for the sustainable development of the agricultural sector is the use of innovations and modern technologies.

All of the above requires the development of new theoretical developments on the methodology for determining the prospects for sustainable development of the agricultural sector, developing target indicators and analyzing its development. At the same time, special attention should be paid to improving the management of innovative processes in the agricultural sector.

The main goal of managing innovation processes is expressed in achieving the goals set to expand the scope of activities of producers of agricultural products, gaining a place in the markets, improving the quality of agricultural products, reducing costs, ensuring competitiveness and solving social problems.

The fundamental economic, social, legal and organizational reforms carried out in the agricultural sector of Uzbekistan cover all aspects of the industry and influence the regulation of innovation processes. In the conditions of market relations and network

reforms, the issues of effective use of scientific and technological achievements are becoming increasingly relevant. At present, as it is observed in developed and developing countries, in Uzbekistan, the main success factor for enterprises that are resistant to strong competition in market conditions and develop their activities is innovation, and its result is the main efficiency factor. Therefore, it is necessary that market participants, primarily manufacturers of goods, formulate and implement a clearly targeted innovation policy in order to ensure their current and future competitiveness.

Based on the foregoing, it is worth noting that increasing the efficiency and sustainability of agriculture in our country requires the introduction of high technologies in the production of agricultural products, the use of modern technology, the development of processing industries, the improvement of the use of land and other resources, the elimination of price disparity between industrial and agricultural products, directly associated with the development of industrial and social infrastructures, the improvement of intra-economic relations, the improvement of the service sector, the use of modern scientifically based methods in network management. Compared with the existing system, such a promising business management system is distinguished by a unique feature of organization and functioning, which is based on an innovative approach.

In other words, bringing the development of the agricultural sector to a new stage depends only on the introduction of innovations in directly agricultural production and the improvement of the management of innovative processes. It should be noted that in cases where product manufacturers use their own funds, it is advisable to cooperate with other enterprises that have basic technologies, but do not have investment funds and experience in gross production. This element of innovation in the agricultural sector is of great importance. This view of cooperation can be implemented in the following areas:

- investment in research and development;
- providing management support;
- identification of independent enterprises when creating similar and imperfect technologies;
- combining the priorities and opportunities of large and small enterprises;
- Creation of an independent structural structure that develops promising and high-risk non-traditional technologies.

Each of these options is selected in specific conditions and represents a unique "technological set" for the development of technical, production and marketing policies for the long term. The feasibility study and approval of these technologies will make it possible to develop methodological recommendations for the organization of innovations, which, in turn, will provide a systematic approach to the

## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

implementation of modern strategies for innovation policy in the development of the agricultural sector. In our opinion, to address this issue, it would be expedient to create agro-industrial parks.

In general, in the development and regulation of innovation processes, the creation of a new management system that has a complex impact on agricultural production, brings the development of the industry to a qualitatively new stage, and increases its competitiveness, is considered one of the decisive ones. questions. This, in turn, requires a new approach to planning the innovative development of the agro-industrial complex and the development of innovation policy.

### 3. RESULT AND DISCUSSION

As a new organizational and managerial mechanism for the development of innovative processes in the agricultural sector, a large integrated agrotechnopark is an agro-oriented enterprise that has a large-scale innovative link in its structure, as well as a structural unit in the direction of production. We offer its new innovative organizational and economic model. Agrotechnopark is a management company (may be in the form of an LLC or a joint-stock company) and performs the tasks of coordinating business and science to conduct agricultural production on the principles of innovative development and taking into account the specifics of the agricultural industry (picture 1).

The organizational model of the Agrotechnopark provides for the performance of a number of functions, such as innovative, educational, environmental, social, information and advertising, which are not compatible with the activities of standard agricultural holdings, but are very necessary for the country. From this point of view, the participation of state bodies in the creation of agrotechnoparks is considered necessary, which is explained by the fact that this business model provides for benefits for the self-development of the region by activating the intellectual and agrarian potential of the territory where the agrotechnopark is located.

In the conditions of market relations of economic management, constant budget financing of agrotechnological parks does not bring the expected economic effect, therefore, the main link in its composition are agricultural producers (farm and peasant farms) and processing enterprises that receive income from their main activities. activities. In this structural aspect, the proposed agrotechnopark resembles an agroholding.

The main difference between them is the presence in the organizational structure of the agrotechnological park of a scientific link responsible for the implementation of research and development work in the agro-industrial complex, the introduction of innovations into practice, and the training of qualified personnel. The next main difference is that

agrotechnoparks are focused not only on making a profit, but also on solving social problems. Also, the availability of free funds significantly expands financial opportunities. Thus, the agrotechnological park, as a new model of production, farming and innovation, can become one of the main forms of farming, which in the future will allow introducing innovations in the agricultural sector of our country and ensuring their full functioning.

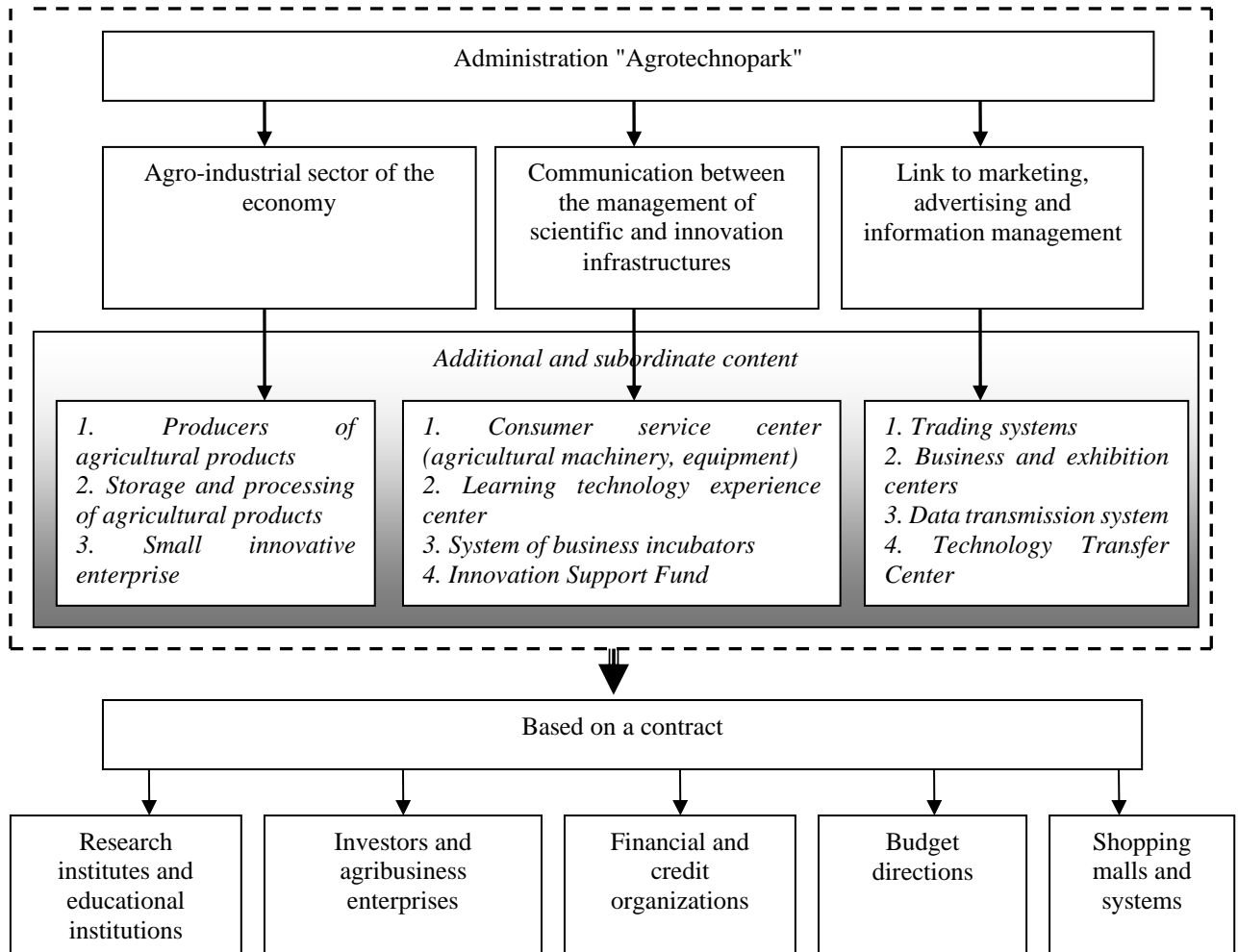
The results of studying and analyzing trends in the development of the agricultural sector and the main areas of innovation in the industry, the principles and scientific approaches to regulating innovation processes made it possible to develop a model of mechanisms for the development of innovation processes. in the agricultural sector and determine the main directions for improving the system of regulation and management of innovative processes in agricultural enterprises. At the same time, it is necessary to intensify investment policy for the sustainable development of the agricultural sector and the implementation of innovative projects in the industry. It should be noted that today investment processes in agriculture lag behind other sectors of the economy. It is necessary to improve the management and regulation system, using the investment potential of our country's agriculture, in order to intensify agricultural production in every possible way and increase its efficiency. One of the main directions for solving this issue is the systematic identification of opportunities to improve the efficiency of the investment potential of agricultural production and their effective use.

The primary task in identifying investment opportunities is the timely and systematic identification of opportunities to attract investment in agricultural production based on more efficient use of the economic, natural, resource, social and innovative potential of the agricultural sector of the country and specific regions. , the use of highly effective means of regulation and control should be in their identification and economical use.

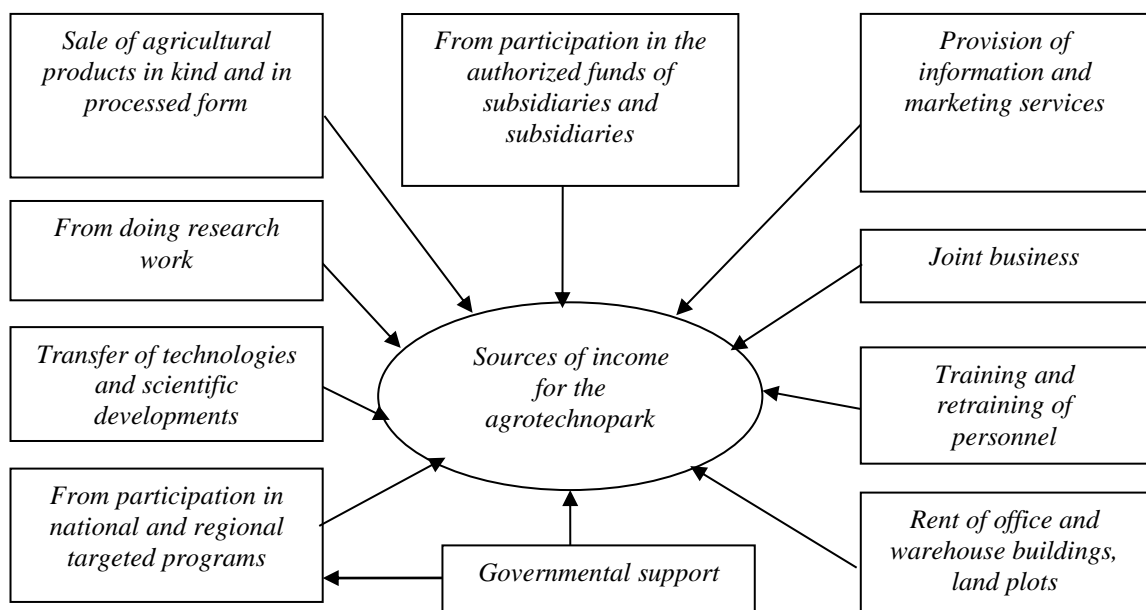


**Impact Factor:**

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	PIHIQ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350



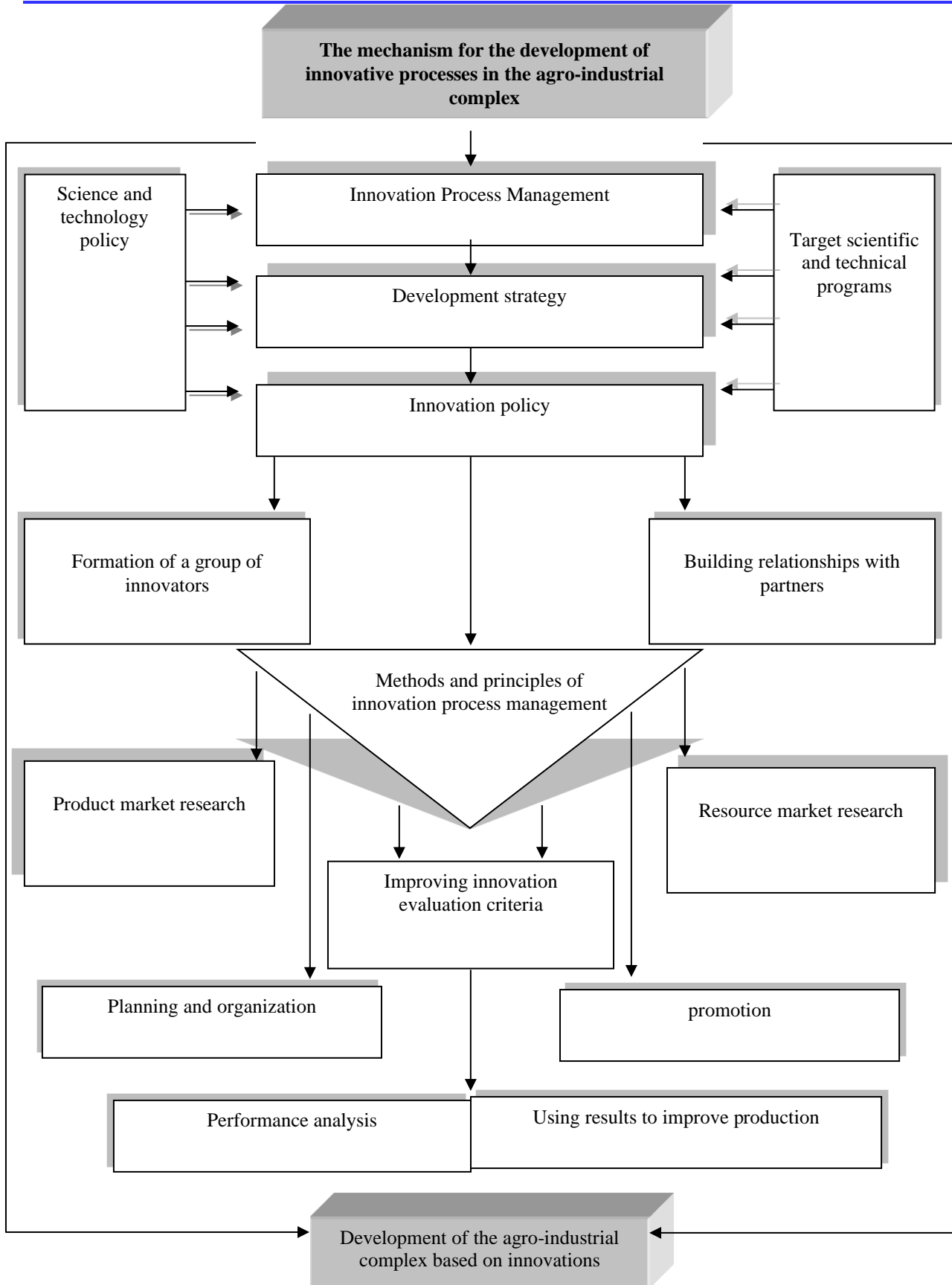
**Picture 1. Organizational and economic model of the agrotechnopark**



**Picture 2. Estimated sources of income for the agrotechnopark**

**Impact Factor:**

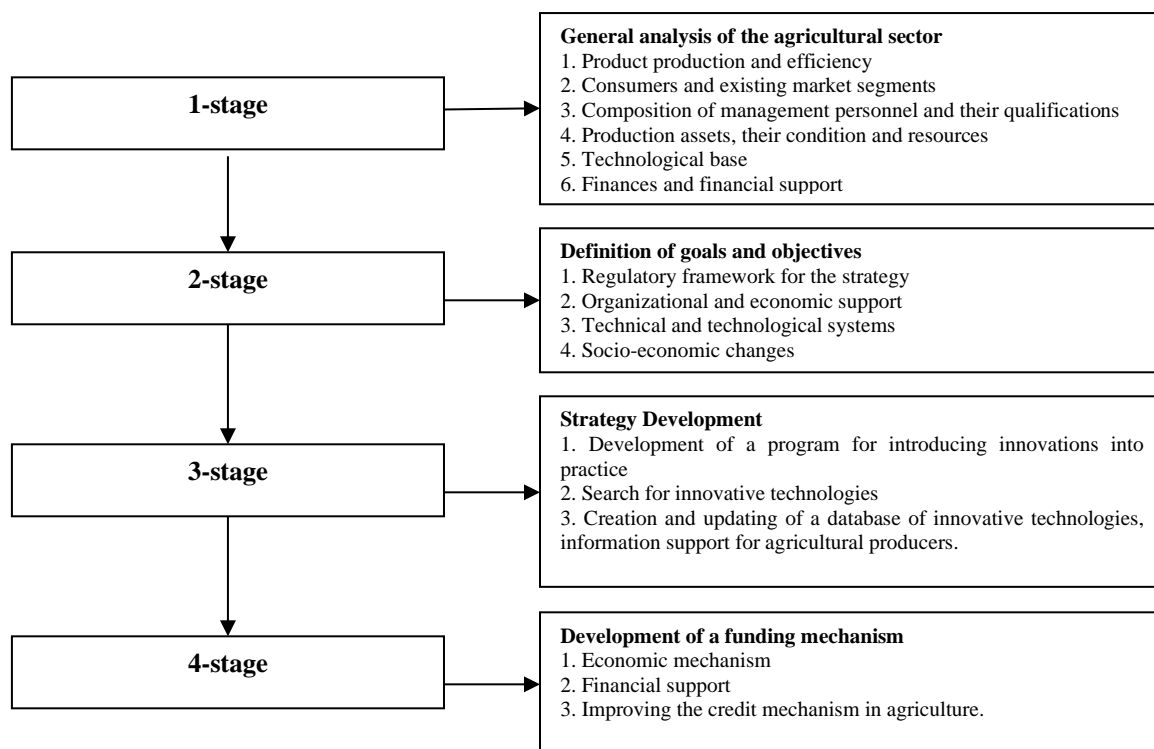
<b>ISRA (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 8.771	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350



**Picture 3. Model of the mechanism for the development of innovative processes in the agro-industrial complex.**

**Impact Factor:**

<b>ISRA (India)</b> = 6.317	<b>SIS (USA)</b> = 0.912	<b>ICV (Poland)</b> = 6.630
<b>ISI (Dubai, UAE)</b> = 1.582	<b>ПИИИ (Russia)</b> = 3.939	<b>PIF (India)</b> = 1.940
<b>GIF (Australia)</b> = 0.564	<b>ESJI (KZ)</b> = 8.771	<b>IBI (India)</b> = 4.260
<b>JIF</b> = 1.500	<b>SJIF (Morocco)</b> = 7.184	<b>OAJI (USA)</b> = 0.350



**Picture 4. Stages of developing a strategic program for organizing innovative potential**

This means systematically and comprehensively studying the possibilities of increasing the level of use of available labor, material and investment resources, ensuring their more effective harmony with the new equipment introduced in the process of reproduction, new types of labor tools, materials, etc., systematically increasing the competitiveness and quality of products requires increasing, accelerating the processes of research and development work and their introduction into production. In this process, it is important to create a favorable investment environment, consisting of the legal protection of investors, financial guarantees and tax incentives from the state and local governments.

The state investment policy should be focused on solving tactical and strategic tasks within the framework of socio-economic policy. An objective necessity is the development of the Strategy for Innovative Development of the Republic of Uzbekistan until 2025 for the sustainable development of the economy of our country and joining the ranks of developed countries based on the formation of an innovative economy through production based on high technologies and scientific research. In this regard, the state should create a favorable investment environment for the participation of enterprises from all industries and sectors of the economy in innovation processes and participation in them.

The strategy for the innovative development of the agro-industrial complex until 2025 should be implemented as a structural link in the overall innovation system of the economy of the Republic of Uzbekistan. The implementation of the Strategy for Innovative Development of the Agro-Industrial Complex until 2025 should ensure priority demand for agricultural products of our country in the world markets.

Thus, at this stage, it is important for government bodies of the republic and regions to create a favorable investment climate and coordinate the development and implementation of the Strategy for Innovative Development of the Agro-Industrial Complex for the long term, a more active influence on the development of investment processes. In addition, the governing bodies of the agricultural sector should perform such key strategic tasks as enhancing the introduction of innovative technologies, establishing a search for new innovative developments in universities and research institutions, and increasing the efficiency of agricultural production through innovative development.

Based on the foregoing, we propose the following stages in the development of a strategic program for the formation of innovative potential in the agro-industrial complex (picture 4).

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИИ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

### CONCLUSION AND RECOMMENDATION

In general, the state innovation policy should be aimed at ensuring the growth of the country's gross domestic product based on the development of the production of fundamentally new products and technologies, as well as expanding the sales markets for locally produced products. In this regard, the main directions of the state innovation policy should include the following:

1. Development and improvement of the regulatory framework for innovation, mechanisms for its stimulation, a system of institutional changes, protection of intellectual property in the field of innovation and its implementation in production.

2. Organization of an integrated system for supporting innovation, development of production, increasing competitiveness and exporting products with high scientific potential. Ensuring the participation of not only government bodies, commercial structures, financial and credit institutions, but also public organizations at the republican and regional levels in enhancing innovation.

3. The analysis shows that the reason for the insufficient development of innovation processes in the agro-industrial complex is not the low level of efficiency of domestic research and development, but the result of such problems as the insufficient development of the innovation activity infrastructure, the insufficient functioning of levers for stimulating the use of innovation as a factor in increasing the competitiveness of product manufacturers. This does not allow the wide use of the results of domestic practical scientific research. From this point of view, special attention should be paid to the development of

infrastructures for innovation processes, information support, expertise, finance and economics, production and technological support, promotion of certification and scientific developments, training and retraining systems.

4. Development of small innovative entrepreneurship through the formation of small high-tech institutions and the creation of favorable conditions for their efficient operation and the implementation of state support measures at the initial stage of their activities.

5. Improving the system for selecting innovative projects and programs. The implementation of relatively small and short-term self-sustaining innovative projects with the support of the state and the participation of private investors would make it possible to support promising production facilities and increase the flow of private investment to them.

6. The implementation of priority tasks and the introduction of high technologies that ensure the stable development of the relevant sectors of the economy of our country and regions, in particular, the agricultural sector. One of the main issues in the formation and implementation of innovation policy is the choice of a relatively small number of necessary technologies that have a fundamental impact on improving the efficiency of production and the competitiveness of products in sectors of the economy and ensuring the transition to new technological processes.

7. Implementation of technologies that can be quickly adapted and used for multiple purposes. The use of such technologies makes it possible to produce products that are in high demand, depending on changes in market conditions.

### References:

1. (1991). *Law of the Republic of Uzbekistan "On expropriation and privatization"*. November 19, 1991.
2. (2017). *Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No. PF-4947 "On the Action Strategy for the Further Development of the Republic of Uzbekistan"*.
3. Raitsky, K.A. (2000). *Economic enterprise*. Textbook, Moscow.
4. Romanov, Yu.A. (2006). *Service activity*. (p.399). Moscow: Dashkov-K.
5. Mamatov, A., Khurramov, A., & Sattorkulov, O. (2014). *Development of rural production infrastructure in the context of the formation of an innovative economy*. Tashkent: "Economy - Finance".
6. Fatkhutdinov, R.A. (2010). *Innovation management*. (p.59). Peter.

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

### International Scientific Journal **Theoretical & Applied Science**

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2023 Issue: 02 Volume: 118

Published: 10.02.2023 <http://T-Science.org>

Issue

Article



**Grigory Alexandrovich Zemsky**  
Don State Technical University  
Master

**Olesya Anatolyevna Golubeva**  
Don State Technical University  
Candidate of Technical Sciences, Associate Professor  
Rostov-on-Don, Russia

**Artur Alexandrovich Blagorodov**  
Institute of Service and Entrepreneurship (branch) of DSTU  
Master

**Vladimir Timofeevich Prokhorov**  
Institute of Service and Entrepreneurship (branch) of DSTU  
Doctor of Technical Sciences, Professor  
Shakhty, Russia

**Galina Yurievna Volkova**  
LLC TSPOSN «Ortomoda»  
Doctor of Economics, Professor  
Moscow, Russia

## ON THE IMPACT OF TRANSPORT ON THE EFFECTIVE SOCIO-ECONOMIC DEVELOPMENT OF RUSSIAN REGIONS. MESSAGE 2

**Abstract:** *in the article, the authors proposed a systematic approach to the study of the concept of "movement". We developed a systematic description of this concept, fundamental for the worldview, and determined a place for transport in the traffic system. Transport is a universal tool for the implementation of movement as self-movement, which serves as a sufficient argument to classify transport as a system-forming concept of worldview. It is necessary not only to correct the existing characteristics of transport associated with the limitation of transport by the function of moving goods, but also to supplement it with the function of organizing reality, which well shows its status in the reproduction of the movement of matter. Transport is a universal tool for creating spatial and temporal conditions for development in the system of the movement of matter for the spatial and social development of the regions of the Russian Federation. In the article, the authors set out: the concept of transport science, the basics of technical knowledge, the development and types of transport, the uniqueness of transport as a sphere of economic activity, the problems of transport, the current state of the development of transport in Russia, the stages of development, as well as the methodology of technical and transport sciences; considered the classical technology of research in technical sciences, the methodology of experimental research in technical sciences, in transport, including its technical operation.*

**Key words:** *comfort, spatial development, social development, regions of the Arctic Zone and the Far East, regions of the European part and Siberia, movement, the basis for the movement of matter, universality, organization, worldview, «public or social» transport, conceptual thinking.*

**Language:** English

## Impact Factor:

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	PIIHQ (Russia)	= 3.939	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.771	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

**Citation:** Zemsky, G. A., Golubeva, O. A., Blagorodov, A. A., Prokhorov, V. T., & Volkova, G. Yu. (2023). On the impact of transport on the effective socio-economic development of Russian regions. Message 2. *ISJ Theoretical & Applied Science*, 02 (118), 108-146.

**Soi:** <http://s-o-i.org/1.1/TAS-02-118-15> **Doi:**  <https://dx.doi.org/10.15863/TAS.2023.02.118.15>  
**Scopus ASCC:** 2000.

## Introduction

UDC 629.2(07)

Implementation mechanisms of the Transport Strategy include:

improvement of the legal framework and methods of state regulation of the development of the transport system, ensuring the achievement of the goals of the Transport Strategy;

creation of an effective system for managing the implementation of the Transport Strategy;

advancing innovative development of the scientific, technical and technological base of the transport complex on the basis of advanced world achievements and technologies;

development of providing the industry with labor resources;

federal and regional targeted programs.

Improving the regulatory framework and methods of state regulation of development transport system, ensuring the achievement of goals Ttransport strategy. The main tasks in the field of improving the legal framework and methods of state regulation of the development of the transport system, ensuring the achievement of the objectives of the Transport Strategy, are:

increasing the investment attractiveness of the transport industry, including improving the regulatory framework and introducing state regulation methods aimed at increasing the investment attractiveness of the industry, as well as improving economic and financial mechanisms, including public-private partnerships, aimed at increasing the investment attractiveness of the industry;

formation of a regulatory framework for a competitive market for transport services, including the creation of a regulatory framework and methods for state regulation of the development of the transport services market, the development of a regulatory and legal mechanism that ensures the fulfillment of contractual obligations in terms of the volume and quality of transport services, the development and improvement of methods and mechanisms of state regulation and motivation for the development of transport activity structures in order to ensure the quality of transport services, including motivation for the creation and development of national and international transport companies capable of ensuring innovative development and improving the quality and competitiveness of transport services, creating a regulatory framework that regulates commercial access to transport activities in the region freight transport, as well as promoting the development of

small and medium-sized businesses in the transport sector;

state regulation of the level of specific transport costs in the price of products, including the development and implementation of state regulation methods that stimulate the reduction of total specific transport costs, as well as the development and implementation of mechanisms for state monitoring of total specific transport costs in the price of final products;

domestic and international harmonization of the regulatory and legal support of the transport system;

formation of a legal framework and methods of state regulation aimed at ensuring:

a guaranteed level of accessibility and quality of transport services for the population, including the development and implementation of minimum social transport standards in relation to the possibility of moving the population across the country (communication model for all types of passenger transport, appropriate rolling stock, purchasing power, affordability, standard for the frequency of transport services for each settlement), as well as the development of a regulatory framework governing commercial admission to transport activities in the field of passenger transportation;

integration of Russia into the global transport space and the realization of the country's transit potential, including the development of methods of legal regulation that provide assistance in increasing the share of participation of Russian transport organizations in the export-import transportation of Russian goods, as well as in the transportation of goods between third countries, integration into the global system of regulatory ensuring transport activities, standards and technical regulations, as well as improving the regulatory framework aimed at expanding Russia's participation in the system of international agreements and conventions in the field of transport;

security and sustainability of the transport system, including the improvement of the regulatory framework aimed at ensuring security in the transport industry and the development of the transport system, taking into account the requirements for ensuring the military security of the Russian Federation, as well as improving the regulatory framework governing the harmful effects of transport on the environment and human health, including in terms of determining the conditions for the admission of companies to transport activities.

The state is one of the main participants in the transport services market, acting as a shareholder or

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

owner of organizations operating in the industry. The systemic role of the state in matters of management and disposal of its property in the transport complex is to increase the efficiency of all aspects of state property management in the field of transport, as well as to create conditions that ensure the activities and legal relations of participants in the civil circulation of transport property, taking into account the goals and objectives of the Transport Strategy and state policy in the field of property relations.

The main directions for improving the management of state property in transport are:

improvement of the norms of the legislation of the Russian Federation regulating the issues of registration of ownership rights to state property of the transport industry, as well as issues of the use of land plots by organizations of the transport complex (including the improvement of legal regulation of the procedures for reserving and withdrawing land plots for federal needs);

improvement of the legislation of the Russian Federation regulating issues of shared ownership of the property of the transport industry;

improvement of the legislation of the Russian Federation regulating the issues of investment activities in transport;

improving the forms and methods of transferring state property for use by legal entities and individuals;

improving the norms of the legislation of the Russian Federation in order to prevent the insolvency of the backbone organizations of the transport industry;

carrying out the privatization of the property of the transport industry, taking into account the goals and objectives of the Transport Strategy;

introduction of modern information technologies to solve the problems of accounting for federal property and indicators of the effectiveness of its use;

improvement of the system of professional training and qualification of heads of state unitary enterprises and state institutions;

improvement of the procedure for interaction between authorities in the field of state property management.

State regulation of the development and functioning of the Russian transport system should ensure the achievement of the objectives of the Transport Strategy.

Subject to state regulation:

development and technical improvement of the federal and regional transport infrastructure;

institutional transformations in transport;

issues of technological, transport and environmental safety of transport infrastructure facilities and vehicles;

formation and functioning of the market of transport services;

ensuring the mobilization readiness of transport;

international activity of transport enterprises and structures;

social sphere and labor relations in transport.

State regulation of transport services should be aimed at creating and maintaining the competitive advantages of Russian transport organizations in the domestic and international markets, at providing consumers with high-quality competitive transport services, as well as at introducing direct action legislative norms and mechanisms that guarantee the implementation of quality indicators by transport enterprises.

In the field of railway transport, for the implementation of the Transport Strategy, it is envisaged:

development of long-term target programs with the timing and sources of financing measures for the development of railway transport;

implementation of the mechanism of state participation in the development of railway infrastructure in the Russian Federation until 2035;

improvement of the system of state regulation of the railway industry and prices (tariffs) for regulated types of products and services, deregulation of competitive sectors, taking into account the degree of development of competition in order to protect the interests of consumers of transport services, increase the efficiency of the industry and create conditions for advanced investment development of railway transport;

implementation of the Railway Structural Reform Program and the target model of the railway transport services market at the third stage of the structural reform, including the creation of conditions for the development of competition in the field of railway transport services and the growth of private investment in the railway industry;

ensuring legal, informational and technical interaction between the railway systems of the Russian Federation and other states, taking into account the prospects for Russia's accession to the World Trade Organization, the need to integrate the railway transport of the Russian Federation into the international transportation system and make the most efficient use of its transit potential for these purposes;

determination of the body (bodies) of state power, the competence of which (which) includes the functions of managing mobilization preparation and civil defense in railway transport, imposing duties on the implementation of certain railway transportation and the use of rolling stock on specific owners of infrastructures, carriers and operators in cases of threats to socio-economic stability, defense capability, security of the state and in other cases provided for by the legislation of the Russian Federation;

removal of restrictions on the civil law turnover of railway transport property not involved in ensuring defense capability and mobilization preparation and

## Impact Factor:

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	ПИИИ (Russia)	= 3.939	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.771	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

expected to be involved in turnover in competitive market segments;

development of a set of measures aimed at ensuring the required level of safety of Russian railway transport facilities;

development of a mechanism for the implementation of socially significant, military and special transportation in peacetime and special periods, the implementation of mobilization plans, the maintenance of a mobilization reserve, the implementation of measures for mobilization training in railway transport and increasing the responsibility of participants in the market of railway transport services for failure to meet the requirements of mobilization and defense tasks;

development of corporate strategies for the development of railway transport organizations in accordance with the Transport Strategy.

### Main part

In the field of transport in Russia, in recent years, the necessary modernization of the infrastructure has been carried out, which made it possible to satisfy the growing demand for passenger and freight transportation and create a certain reserve for further development.

Russia has all modern modes of transport, the location and structure of its transport communications generally meet the internal and external transport and economic relations of the country, but need significant improvement.

The length of communication lines of the Russian transport system as of the beginning of 2021 was 85 thousand km of public railways, 42 thousand km of industrial railway transport, 755 thousand km of paved roads (including 597 thousand km of public roads use), 102 thousand km of inland waterways, 2.8 thousand km of tram lines, 439 km of metro lines, 4.9 thousand km of trolleybus lines, 532 thousand km of air routes, of which more than 150 thousand km are international.

Every day, 69.1 million passengers and 33.1 million tons of cargo were transported through these transport communications by all modes of transport.

The growth in the volume of cargo and passenger traffic was reflected in positive changes in the socio-economic situation of the country in recent years.

The volume of cargo transportation in 2018-2021 by all modes of transport (excluding pipelines) increased by 18.1 percent (by public transport - by 23.9 percent). Freight transportation by rail increased most rapidly (by 28.4 percent).

The growth in the volume of cargo transportation was influenced by the revival of the real sector of the economy, the increase in production in the main cargo-forming industries, the development of markets for goods and services, and the favorable external economic situation in the main commodity items of domestic exports.

Railways play an important role in the transport system. Railway transport performs 62 percent of the total volume of freight traffic carried out by public transport, or 84.3 percent of the total freight turnover carried out by all modes of transport (excluding pipelines). Road transport accounts for 47.4 percent of the volume of commercial transportation of goods, and the share of rail transport has been declining in recent years, while road transport has been growing, which indicates an increase in the competitiveness of road transport in certain segments of the transport services market.

Positive changes are observed in the creation of parity between Russian and foreign carriers in the performance of international transportation. The volume of international transportation of goods by road in 2018 reached 40.2 million tons.

The share of automobile (bus) transport in the total volume of passenger transportation by public transport is 57.8 percent. In the structure of passenger traffic, 35.4 percent is occupied by rail transport, 29.4 percent - by road transport and 22.6 percent - by air transport. The decrease in 2018-2021 by 42.5 percent in the volume of passenger transportation carried out by suburban rail transport, road and urban surface electric transport is associated with a decrease in the number of trips of preferential categories of passengers, a change in the accounting system as a result of the introduction of unified social travel tickets, as well as with the transition to personalized accounting.

The constant growth in the number of cars in the personal use of citizens also has an impact on the decrease in the volume of work performed by urban passenger transport. In 2018, the fleet of passenger cars amounted to 29.4 million units.

Since the start of the economic reform program, the non-state sector has dominated the transport sector. Enterprises of non-state forms of ownership currently carry out: in road transport - 94.9 percent of cargo transportation and 18.5 percent of passenger transportation, in sea transport - 88.4 percent and 97.3 percent, respectively, 90.4 percent, by air - 87.1 percent and 77.8 percent, by industrial railway - 85.6 percent of cargo transportation.

Since 2018, the development of the country's transport system has been carried out in accordance with the federal target program "Modernization of the transport system of Russia (2016 - 2021)".

During this period, the construction of the 1st launch complex Tommot - Kerdem of the railway line Berkakit - Tommot - Yakutsk, the border railway station Chernyshevskoye of the Kaliningrad railway, a combined bridge over the river. Lena near the city of Yakutsk. The Lagar-Aul Tunnel on the Far Eastern Railway, the Bolshoy Loop Tunnel at the 1855th kilometer of the Belorechenskaya-Tuapse section, a number of checkpoints across the state border of the Russian Federation on the main directions of



## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

transportation were put into operation. Measures were taken to modernize the railway infrastructure of Sakhalin Island.

More than 15,000 km of federal and regional roads have been built and reconstructed. More than 100,000 km of federal and regional roads have been repaired. 5,000 km of federal roads were overhauled.

The length of federal highways corresponding to the normative transport and operational indicators is 17.7 thousand km.

Construction and reconstruction of federal highways, including Chita - Khabarovsk, M-4 "Don", M-5 "Ural", M-10 "Russia", transport bypass of St. highway), as well as 4 unique out-of-class bridge crossings. Four-lane traffic was introduced along the entire length of the road from Moscow to Nizhny Novgorod.

The growth of passenger turnover in air transport amounted to 70.2 percent, cargo turnover - 14.5 percent. The share of aircraft meeting the noise requirements of the International Civil Aviation Organization in the structure of the fleet's sold carrying capacity increased from 44 percent to 59.1 percent, the share of modern aircraft in the fleet structure increased from 24 to 35 percent.

Reconstruction of runways at Pulkovo, Krasnoyarsk, Khabarovsk, Blagoveshchensk, Kurgan, Cheboksary airports and replacement of lighting equipment at Pulkovo, Khabarovsk, Barnaul, Kurgan, Ulan-Ude airports was completed. Aviation security equipment was purchased for 53 Russian airports.

The volume of cargo transshipment through Russian commercial sea ports increased 2.6 times and amounted to 451 million tons, which exceeded the maximum volume of cargo transshipment by the ports of the Soviet Union in 1989 by 12 percent.

With the participation of seaports, about 60 percent of Russia's foreign trade cargo turnover is carried out.

Restoration and repair work was carried out at 723 hydraulic structures. The conditions for navigation on waterways for the delivery of goods to the regions of the Far North with a total length of 68,160 km have been provided. In 2006, the complex of works of the first stage for the construction of the second line of the sluice of the Kochetovsky hydroelectric complex was completed.

On the inland waterways of the Unified Deep Water System of the European Part of the Russian Federation, 42 percent of communication systems have been updated.

Actual expenses for the implementation of the federal target program "Modernization of the transport system of Russia (2016-2021)" in 2016-2021 amounted to 1.93 trillion. rubles, including at the expense of the federal budget 0.54 trillion. rubles, or 27.7 percent.

Out of the total volume of financing, expenditures on railway transport amounted to 27.1 percent, on roads - 57.4 percent.

In the volume of financing from the federal budget, the share of roads is 89.9 percent, the share of railway transport is 0.4 percent.

Since 2002, the implementation of 13 major infrastructure projects began on the principles of public-private partnership, including at the expense of the Investment Fund of the Russian Federation.

Transport enterprises are gradually adapting to the new business conditions. However, many issues of the work and development of transport in the conditions of the formation of market relations have not yet received a satisfactory solution.

Among the main shortcomings of Russian transport, the low technical level and the unsatisfactory state of its production base stand out.

The reduction in the volume of reconstruction and construction of infrastructure facilities, as well as the rate of replenishment and renewal of fleets of vehicles and other transport equipment has led in recent years to a significant deterioration in their technical condition (age structure, increased wear, etc.) and efficiency.

At present, the length of problem areas in terms of throughput capacity is 8.3 thousand km, or about 30 percent of the length of railways, which provide about 80 percent of all freight work of railway transport.

To date, the formation of a backbone network of federal highways connecting all regions of Russia has not been completed. Only about 38 percent of federal highways meet the regulatory requirements.

The low level of development of the road network in agricultural areas, as well as in the regions of the Far North, the Republic of Sakha (Yakutia), the Magadan Region, the Chukotka Autonomous Okrug, etc., remains low.

Due to the lack of paved roads, more than 10 percent of the population (15 million people) remain cut off from transport communications in the spring and autumn.

Until now, 39 thousand settlements with a total population of up to 2 million inhabitants (including 7.5 percent of the total number of regional centers and 6.7 percent of the central farmsteads of agricultural organizations) have no connection with the country's transport network through highways with hard coated. The formation of a backbone road network in the regions of the North, Siberia and the Far East has not been completed.

Federal highways have exhausted their capacity. 13,000 km of roads are operated in excess of the standard load, especially on the approaches to the largest cities, which is almost 29 percent of the network length. The local road network is underdeveloped, so a significant part of local traffic is carried out on federal roads. The acceleration of motorization of the country has not yet led to a

## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

corresponding increase in the volume of construction and reconstruction of the road network, and the repair of roads has even somewhat decreased in recent years. With an increase in the length of public roads by 15 percent over the past 10 years, the car park has grown by almost 75 percent.

Solving the problem of bringing the length and condition of the road network in line with the needs of the economy and the population is significantly complicated by the influence of the outstripping growth of market prices for road construction materials. The rise in prices for these resources over the past 5 years was 1.5 times higher than the rise in price indices in construction over the same period. Up to 60 percent of the funds allocated for road works are spent on the purchase of materials.

The pace of development of civil aviation in Russia is currently 2-3 times higher than international indicators. Not only the international transportation market is developing dynamically, but also the domestic transportation market (growth - 17 percent). This is due to an increase in real incomes of the population, an increase in the competitiveness of air transport compared to rail transport in the long-distance passenger transportation market, as well as the development of consolidation and integration processes for air carriers.

At the same time, over the years of economic reforms, the number of operating Russian airports and civil aviation airfields has decreased by 2.5 times (mainly due to regional facilities). To a large extent, as a result of this, the configuration of the passenger airline network has developed, within which the largest volume of passenger traffic (up to 80 percent) is accounted for by air communications in Moscow.

Many constituent entities of the Russian Federation have almost completely lost both the network of local airlines and the airfields of local airlines. The reduction of local traffic, the closure of airlines, the collapse of the air transport infrastructure and other negative trends can become irreversible, which will lead to the complete collapse of the system of local airports operating regional aviation aircraft, and the creation of a crisis situation in many regions that are not provided with alternative modes of transport.

There is a sharp backlog of airport infrastructure and equipment from the level of development of international civil aviation, a backlog in the implementation of modern means and technologies recommended by the International Civil Aviation Organization in the field of air traffic management, automatic landing systems and other radio systems.

The systems interacting in air navigation services are not interconnected by a single organizational and technical structure, the transition from the Unified Air Traffic Management System of the Russian Federation to the Air Navigation System of Russia has not been completed, which hinders the

improvement of the quality of air traffic services, the dynamic implementation and development of advanced air navigation facilities and systems recommended International Civil Aviation Organization.

The development of Russian ports and related transport infrastructure is uneven. Significant differences have accumulated in terms of the levels of manufacturability and capitalization of port hubs. This is a consequence of the uneven and unstable cargo base, the insufficient development of the adjacent railway, road and pipeline infrastructure, as well as the rear terminal and warehouse infrastructure.

There is a shortage of port capacities focused on transshipment of imported cargo (containers and ro-ro cargo), which is caused by the rapid development in recent years of port capacities aimed at transshipment of export cargo.

The share of inland waterways that limit the capacity of the Unified Deep Water System of the European part of the Russian Federation is currently 4.9 thousand km (75 percent).

The most important problem is the technical and technological lag of the Russian transport system in comparison with developed countries. It is not ready for the widespread use of modern technologies, primarily container technologies. The growing demand for freight transportation is constrained by the underdevelopment of the country's transport and logistics system. Forwarding services for the population and the economy remain at a low level. There is no high-speed rail service in the country.

The innovative component in the development of rolling stock fleets and technical means of transport remains at a low level, especially in domestic transportation. There is a significant lag in the environmental parameters of transport operation.

Urban public transport does not receive proper development, including its modern high-speed types, which could significantly reduce the severity of the problem of transport development of megacities.

Almost in all sectors of the transport complex, the tendencies of aging of fixed assets and their inefficient use persist. Depreciation of fixed production assets for certain groups of fixed assets has reached 55 - 70 percent and continues to grow.

At the beginning of 2018, the depreciation of fixed production assets of large and medium-sized commercial organizations amounted to: in railway transport - 58.6 percent, in sea transport - 51.2 percent, in inland water transport - 69.7 percent, in automobile transport (without road facilities) - 49.6 percent, air - 50.3 percent.

The state of many technical means of transport has reached a critical level. A significant part of them is operated beyond the normative service life, the other is approaching this period. As a result, the safety and economic efficiency indicators of transport operation are significantly deteriorating.

## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>PIHIQ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

One of the most significant is the problem of imbalance in the development of a unified transport system in Russia. It includes three most important components:

The first is disproportions in the pace and scale of development of different types of transport. The most striking example is the significant lag in the development of inland water transport and the high growth rates of motorization;

the second is the insufficient development of the existing transport infrastructure, most acutely manifested in the discrepancy between the level of development of roads, the level of motorization and the demand for road transport, in a sharp reduction in the number of regional and local airports, as well as in the presence of numerous "bottlenecks" at the junctions of individual modes of transport;

the third is the territorial uneven development of transport infrastructure.

The most significant differences are between the European part of Russia, on the one hand, and the regions of Siberia and the Far East, on the other. Differences between regions in terms of transport provision are becoming unacceptable. For example, 6 constituent entities of the Russian Federation do not have rail links with other regions of the country.

Due to the insufficient development of transport, the integrated development of new territories and the development of mineral deposits, primarily in Siberia and the Far East, are held back.

The solvent demand of the population for transportation is not fully satisfied. Passenger transportation is not provided on socially significant routes, including due to unaffordability of prices (primarily in the regions of the Far North and the Far East).

In connection with the growth of transport tariffs in recent years, there have been certain restrictions on transport and economic relations. Due to the high transport component, the competitiveness of domestic products is reduced not only in the external, but also in the domestic markets. The weakening of ties between the regions of the Russian Federation undermines its unity and reduces the economic security of the country.

The mobility of the population in non-urban traffic in 1995 - 2007 decreased by 60 percent, mainly due to a reduction in trips related to recreation and tourism. For a significant part of the population, travel over long distances has become practically inaccessible, which causes additional social tension in society.

The level of safety of transport activities remains low, primarily in road and air transport. In road traffic accidents, 23.5 people per 100,000 people die every year, in the countries of the European Union this figure is 9-10 people.

The insufficient level of safety of transportation of goods and passengers by domestic transport

companies negatively affects their competitiveness in the international market of transport services.

Road transport is the main air pollutant in large cities (up to 80 percent of total emissions), its share in the total emissions in the country is 40 percent.

The current state and capabilities of the transport system in the field of ensuring the military security of Russia indicate that the most difficult period in its development is over. However, a number of significant problems remain. The needs of the country's defense in the development of modern types of vehicles, the construction of new and the reconstruction of existing transport communications related to dual-use infrastructure facilities are not sufficiently taken into account. A negative impact is exerted by the insufficient throughput and carrying capacity of transport infrastructure facilities and vehicles, the underdevelopment of the railway and road networks in the north and east of the country, as well as in a number of border regions, the passage of the main transport communications in the east of the country near the state border of the Russian Federation.

The resource intensity of transportation and the transport costs of the economy are growing. The increase in the cost of transportation, in turn, causes an increase in transport tariffs.

Due to the shortage and unsatisfactory condition of the rolling stock, many city and intercity bus routes have been closed, and the frequency of bus traffic has decreased. Due to unprofitability and the lack of state support measures, many air lines and part of river passenger routes are closed, which leads to the dissatisfaction of the population's demand for transportation not in full.

The complexity of the financial condition of transport is exacerbated by the outpacing growth in prices for the resources it consumes. The level of the revenue rate for transportation especially began to lag behind the growth in prices for resources after the Government of the Russian Federation made decisions to curb the indexation of railway tariffs without extending a similar procedure to industries supplying transport with material and technical resources.

Despite the multiple increase in tariffs for the transportation of passengers and goods, the financial situation of transport enterprises could not be normalized. Passenger transportation in domestic traffic on all modes of transport (with the exception of intercity bus transportation and regular air lines) is unprofitable, and the profitability of modes of transport for the carriage of goods is minimal. The share of unprofitable large and medium-sized enterprises in 2018 amounted to 32 percent. On the part of the clientele, receivables to transport organizations also increase.

The main reasons for the low profitability and unprofitability of transportation are a decrease in the

## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>PIHIQ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

volume of transportation work while maintaining the entire infrastructure of modes of transport and a slight decrease in the number of production personnel, as well as a lag in the growth of revenue rates from the growth in prices for fuel, electricity, materials and technical equipment consumed by transport. The allocated budget subsidies do not yet fully cover the losses in the income of transport companies resulting from the state regulation of tariffs for passenger transportation.

The influence of these causes affects regardless of the form of ownership of transport organizations. The main railway transport, classified as a natural monopoly industry and owned by the state, also operates with low profitability.

There is an acute problem of attracting investments in the development of the transport industry, which is due to the low investment opportunities of transport enterprises, difficulties in attracting long-term borrowed funds, and the underdevelopment of public-private partnership mechanisms. Currently, in most cases, a non-capital-intensive development model is being implemented, in which the volume of services grows due to an increase in the use of existing fixed assets.

The priority problem remains the improvement of the legal framework for the development of the transport system and the transport services market, including the creation of a regulatory framework that regulates the quality of transport services, ensuring the mobilization training of transport organizations and the fulfillment of their military transport duties, the development of public-private partnership mechanisms that ensure a clear legislative distribution of rights, responsibilities and risks between the state and the investor, as well as the definition of priority areas for the application of these mechanisms in transport.

The shortage of qualified professional personnel is increasing in the transport industry.

Another important problem is the insufficient level of competitiveness of domestic companies and the entire transport system of Russia as a whole in the global market of transport services. This is due to both the listed problems and insufficient opportunities for domestic transport organizations to compete in the world market, including the effective use of Russia's geopolitical advantages in international transit traffic.

The technical and technological parameters of international transport corridors do not ensure their competitiveness in the international market.

Integration into the global and regional markets for transport services will mean increased competition, increased access to the Russian market for foreign carriers, removal of administrative and tariff barriers, and will lead to a more difficult situation for domestic transport companies.

An analysis of global trends in the development of transport shows that no country is able to control

the risks of its own economy without having strong transport positions.

World trends in the development of transport show that:

the period of patronage in relation to modes of transport and carriers has ended. The efforts of most countries are aimed at increasing the competitiveness of national transport and abandoning the quota system, as well as tariff and other restrictions. They are replaced by the harmonization of transport legislation;

The market of transport services has become more complex, all segments of the transport process and logistics have begun to be integrated. This led to the development of a new type of transport infrastructure - transport, storage and commodity transport complexes, which formed an integrated system of interaction;

transport centers became the control elements of the system, which made it possible to optimize "through" tariffs. This has led to the transition of the point of profitability from the processes of physical transportation to the field of transport and logistics services. The concept of transport corridors has been transformed. From a set of routes, they turned into a system of transportation control centers and transport hubs, which gradually acquired the functions of managing the tariff policy;

the quality of transport services and competitiveness have reached a high level of development. In segments of the transport market, the services of which are in demand, competition has stepped over the stage of competition for the quality of transport services. It's guaranteed. The struggle is price-based. Against this background, the requirements for the environmental friendliness of transport are increasing. Hence the desire to maintain an acceptable share of the transport component in the price of the final product, while observing strict environmental and safety standards.

For the Russian transport system, these levels of development are not yet achievable. It is necessary to stimulate a gradual improvement in the quality of transport services, the integration of transport service technologies, and an increase in the competitiveness of carriers and operators of transport hubs. Following this, one can expect an optimization of the affordability of transport services. As restrictions, the given levels of safety and environmental friendliness of transport should act.

The main system-wide problems in the development of the transport industry of the Russian Federation are as follows:

Availabilityterritorial and structural disproportions in the development of transport infrastructure;

insufficient level of accessibility of transport services for the population, mobility of labor resources;

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

insufficient quality of transport services;  
low level of export of transport services,  
including the use of transit potential;  
insufficient level of transport security;  
strengthening the negative impact of transport on  
the environment.

Thus, significant restrictions on economic growth have appeared in Russia, due to the insufficient development of the transport system. A new long-term transport strategy is needed, which defines the main strategic directions and targets for the development of the transport system for the period up to 2030.

Predictive qualitative and quantitative parameters for the development of the transport system of the Russian Federations until 2035

Scenario options for the development of the Russian transport system for the period up to 2035 have been developed in three versions:

- inertial;
- energy raw materials;
- innovative.

The inertial option for the development of the transport system involves:

- implementation of large-scale transport projects that ensure the extraction and development of mineral deposits in new production areas (oil in Eastern Siberia, gas on the Arctic shelf, etc.) and the construction of relevant pipelines;

- development of transport infrastructure that ensures the realization of the transit potential of the economy;

- reconstruction and construction of especially important objects of transport infrastructure, primarily objects that ensure the safety of the functioning of transport systems, as well as the modernization and renewal of the fleet of vehicles;

- advance development of transport infrastructure in the areas of export deliveries of goods, primarily the development of seaports and approaches to them;

- growth in the volume of domestic transportation of raw materials in connection with the increase in coal mining, the development of energy, metallurgy and oil refining;

- low dynamics of export traffic and outstripping growth of import traffic,

- continued dominance in imports of food and consumer goods;

- insufficiently high rates of construction and reconstruction of the road network, the persistence of sharp disproportions in its development in the European and Asian parts of Russia;

- maintaining low mobility of the population, primarily in air transport, which is due to insufficient growth in incomes of the population and the continuing aging of the aircraft fleet;

- lack of transportation and infrastructure reserves in the modes of transport necessary to improve the quality of transport services for the

population and production, the introduction of transport and logistics technologies.

The energy and raw material option involves the accelerated development of transport infrastructure, mainly for transport support for the development of new mineral deposits and the increase in fuel and raw materials exports, the realization of Russia's competitive potential in the field of transport and the growth of exports of transport services. In this case, the following features can be distinguished:

- implementation of large-scale transport projects (including within the framework of public-private partnerships) that ensure the development of mineral deposits in new mining areas, mainly in Siberia, the Far East and the continental shelf;

- diversification of directions for export deliveries of Russian hydrocarbons, including to China, and the creation of an appropriate infrastructure;

- development of transport infrastructure that ensures the implementation of the country's transit potential, including joint projects for the production and export of hydrocarbons within the framework of the EurAsEC, as well as with other states;

- increase in domestic transportation of coal in connection with the development of power generating capacities and metallurgical production;

- increase in transportation volumes and assortment of products of fuel processing and raw materials (petroleum products, concentrates, chemical cargoes, metals, etc.), as well as engineering products;

- low growth rates of export shipments and a significant increase in the volume of import shipments of highly processed goods, primarily products of high-tech sectors of the economy;

- continued increase in the number of private passenger cars, with a decrease in the volume of passenger transportation by public transport (mainly by road) in the period up to 2020 and some growth in 2021-2035;

- an increase in the need for the construction and reconstruction of the road network connecting new residential areas in megacities and suburban areas of large cities with places of application of the labor force.

With the implementation of this option, measures to develop the country's transport system will be carried out primarily in the metropolitan agglomerations, as well as in regions with high growth rates - in the South of Russia, Siberia and the Far East.

Rail transport will have to ensure unhindered growth in the transport of raw materials to the main centers of consumption, including transport for export.

Of decisive importance will be the specialization of seaports through the creation of so-called "layered ports" following the Rotterdam model, when the port system will include remote railway junctions and transport and logistics complexes. This will require the development of access roads to ports and port

## Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	PIHIQ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

production and storage areas focused on the processing of cargo, the formation of port zones that ensure the processing of incoming cargo.

An additional impetus will be given to the development of transport in the Arctic zone (territories located mainly to the north of the 60th parallel).

The development of the country's transport system will become one of the main sources of economic growth. The impetus for technological development will be received by a part of the manufacturing industries associated with ensuring the development of transport.

At the same time, the implementation of the energy and raw material option will have a number of negative consequences for the prospective socio-economic development of the country and ensuring national security, in particular:

it will be necessary to create significant reserves of the capacity of the transport network in the main directions due to possible sharp fluctuations in demand for the transportation of export bulk cargoes in terms of volumes, nomenclature and directions due to changes in the situation in the world markets for fuel and raw materials;

a decrease in the economic efficiency of transportation is possible due to an increase in the imbalance in export-import cargo flows. The imbalance will be associated with an increase in exports of bulk and liquid cargoes and imports of finished products. Specialized and universal types of rolling stock will have low performance in terms of the coefficient of mileage with a load, that is, significant flows of empty stock are possible;

population mobility will grow at a slow pace, which will be one of the reasons for the insufficient dynamics of improving the quality of human capital in the country. The level of passenger traffic will be lower than the level with the innovative option by 14.3 percent, and passenger turnover - by 11.5 percent. This is due to lower rates of growth in real incomes of the population, a decrease in the population and a smaller scale of development of infrastructure and rolling stock of passenger transport. Lower growth in the welfare of the population will cause a slower growth in the number of personal cars;

there will be significant differentiation in ensuring the availability of transport services for different regions and social groups of society;

low investment activity will cause a significant burden on the budgetary system associated with financing the construction, repair and maintenance of roads.

The innovative option involves the accelerated and balanced development of the country's transport system, which, along with the achievement of the goals envisaged in the implementation of the energy and raw material option, will provide transport conditions for the development of the innovative component of the economy, improving the quality of

life of the population, and the transition to a polycentric model of Russia's spatial development.

For the innovative option, a number of features characteristic of the energy and raw material option are retained, in particular:

implementation of large-scale transport projects that ensure the development of mineral deposits in new mining areas;

diversification of directions for export deliveries of Russian hydrocarbons;

development of transport infrastructure that ensures the realization of the country's transit potential, including joint projects within the framework of the Eur Az EC, as well as with other states;

increase in domestic transportation of coal in connection with the development of power generating capacities and metallurgical production;

an increase in the volume of transportation and the range of products of fuel processing and raw materials, as well as engineering products due to the increase in innovative activity in the energy, fuel and raw materials industries, and related machine-building industries.

At the same time, the distinctive features of the development of the transport system according to the innovative option will be:

a significant increase in export transportation of highly processed goods, primarily products of high-tech sectors of the economy, the growth rate of which will be 2.5 times higher than the growth rate of transportation of similar imported goods;

increasing the role of transport and logistics infrastructure in organizing the movement of goods;

growth in the volume of passenger transportation by public transport. The highest growth rates are expected in air transport, and the main absolute increase will be provided by road transport;

the emergence of the need to build and reconstruct a road network connecting new residential areas in megacities and suburban areas of large cities with places of application of labor in a significant number of large and medium-sized cities due to an increase in the level of income and quality of life of the population;

increasing the demand of the economy and the population for high-speed transportation services (with a predetermined delivery time) and passengers (with maximum freedom of movement and the possibility of planning personal time).

When implementing this option, measures to develop the country's transport system will be concentrated, along with metropolitan agglomerations, also in cities where significant innovation and human capital is concentrated. In the east of the country, such a scenario will give a selective impetus to the development of cities with a significant amount of accumulated innovation potential - Tomsk, Novosibirsk, Krasnoyarsk, Irkutsk.

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИИ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

At the same time, the "infrastructural effect" of the formation of urban agglomerations associated with the implementation of projects for the construction of large transport complexes, multimodal logistics centers and information hubs will be of paramount importance.

Along with the South of Russia, Siberia, the Far East and the Arctic zone, the Volga and Ural macroregions will become zones of priority transport development. Spatial development will become multipolar, not rigidly tied to the established energy and raw materials and financial centers.

Regional aspects of the development of the country's transport system will be related to:

creation of a network of territorial production clusters focused on high-tech industries (in the aviation industry, shipbuilding, nuclear industry, in the production of new materials, in computer science and telecommunications), with the concentration of such clusters in urbanized regions;

the creation of territorial production clusters focused on deep processing of raw materials and energy production, ensuring the development of new territories; formation and development of tourist and recreational zones on the Black Sea coast, in Altai, Baikal, Kamchatka, regions of the North;

the development of large transport, logistics and production hubs in the North-West, the South of Russia and the Far East.

The development of railway and maritime transport, along with the tasks of ensuring the transportation of bulk cargo, including export ones, will increasingly focus on improving the quality of transport services for cargo owners and strengthening interaction in the framework of ensuring efficient logistics chains of goods movement.

An important role will be played by the development of the Northern Sea Route, primarily for commercial transportation, with the creation of an appropriate infrastructure on the northern coast of Russia.

Measures to increase the competitiveness of maritime transport will significantly increase the share of the fleet flying the State Flag of the Russian Federation in the world's maritime fleet and significantly increase the export of transport services.

Transportation by road will grow at a high rate, which provides the most flexible response to the demands of the economy, especially the sectors of high- and medium-tech industries.

Measures aimed at the development of air transport and the use of significant advantages (primarily environmental) of inland water transport will significantly increase their share in the country's transport balance.

Of decisive importance for the formation of a modern commodity distribution network in Russia will be the creation of an integrated network of transport and logistics complexes that provide a wide

range of competitive services, the accelerated development of intermodal transportation and the formation of territorial production clusters.

The development of public passenger transport will receive a significant impetus. First of all, this applies to the development of high-speed and high-speed rail transportation, all types of air transportation, urban and suburban transport.

When implementing this option, the country's transport system should develop at a faster pace than the sectors of the economy and the social sphere in order to remove the infrastructural restrictions on the country's future socio-economic development, which depend on transport.

The implementation of an innovative option for the development of the transport system will solve the main tasks facing the country, namely:

indicators of population mobility will approach the level of developed countries, which will be one of the most important factors in improving the quality of human capital in the country;

differentiation in ensuring the availability of transport services for different regions and social groups of society will decrease;

the competitiveness of domestic goods and services in world markets will increase due to the balanced development of the country's transport system;

the growth of the economic efficiency of passenger and freight traffic will optimize the transport costs of the economy and increase the availability of transport services for the population.

Comparison of scenario options leads to the conclusion that the innovative option acts as a target for the long-term state transport policy, since it fully allows to realize the strategic interests of Russia.

When moving to an innovative option, the requirements for the nature and directions of development of the transport system are most determined by the following fundamental factors:

strengthening of global competition covering the markets for goods, services, capital, and other factors of economic growth. Structural restructuring of the world economy associated with a change in the balance between economic centers, an increase in the role of regional economic unions, the expected spread of new information, nano and biotechnologies. This will entail a change in national and world cargo and passenger flows, an increase in the requirements for the quality of transport services;

exhaustion of sources of export-raw material type of development, based on increasing fuel and raw material exports, the need for a transition to intensive innovative development.

On the agenda is the need to diversify the Russian economy, increase the share of products with high added value in the structure of the gross domestic product, and the share of the processing industry.

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИИ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

As a result, the question arises of the transition from a predominantly extensive to an intensive model of development of the transport system based on innovative breakthrough technologies that improve the quality of transport services.

The second important trend is the globalization of the economy and Russia's entry into the World Trade Organization. This factor causes an increase in international and intra-industry competition, which requires an increase in the competitiveness of the transport industry.

Considering these factors and the current state of the Russian transport system, we can conclude that transport is a priority point for the growth of the national economy.

When switching to an innovative option for the development of the transport system, it is necessary to ensure:

development of a competitive market for transport services;

availability of transport services for the population;

an increase in the share of domestic transportation and transportation of finished products in the overall transport balance of the country;

expanding the range and improving the quality of transport services based on the use of modern transport, logistics and infocommunication technologies, the development of new forms of organizing the transport process and interaction between modes of transport;

multiple increase in labor productivity and energy efficiency in transport;

revitalization of the activities of domestic transport organizations in the world market of transport services, transnationalization of their activities, the transformation of Russia into the largest exporter of transport services;

integration of the transport system of Russia into the Eurasian transport space, development of multi-vector transport links with world economic centers;

transport support for new centers of socio-economic development of the country;

high territorial mobility of the population;

increasing the innovative activity of transport companies, a radical renewal of transport and technical means, taking into account the development of domestic transport engineering, strengthening the role of scientific and technical support in the development of the transport industry;

increase in the level of professional training and qualifications of transport workers, improvement of their material and social security, creation of safe working conditions;

ensuring the reliability and safety of the functioning of the transport system, including in the field of ecology, reducing the number of accidents and disasters, injuries and deaths in transport accidents;

development and application of effective mechanisms for state regulation of the functioning and development of transport;

improvement of the investment climate in the transport industry.

At a new stage, the transport strategy should determine the active position of the state in improving the transport system of Russia as a key factor in the socio-economic development of the country. This concerns, first of all, improving the quality of transport services, reducing the total costs of society dependent on transport, increasing the competitiveness of the domestic transport system, strengthening the innovative, social and environmental orientation of the development of the transport industry.

Based on this, the goals, priorities and objectives of the strategic development of transport are formulated.

The main task of the state in the field of functioning and development of transport is defined as creating conditions for economic growth, increasing the competitiveness of the national economy and the quality of life of the population through providing access to safe and high-quality transport services, turning the geographical features of Russia into its competitive advantage.

The strategic goal of the development of the transport system is to meet the needs of innovative socially oriented development of the economy and society in competitive high-quality transport services.

The achievement of this strategic goal will be ensured through the effective development of a competitive environment in the transport industry, the creation of optimal reserves in the development of infrastructure, the achievement of an advanced level of development of engineering and technology, increased attention to social and environmental factors, and an increase in the national, economic and other types of security of the country, depending on transport.

To create an efficient competitive transport system, 3 main components are needed:

competitive high quality transport services;

high-performance, safe transport infrastructure and vehicles, which are needed to the extent that they will provide competitive high-quality transport services;

creation of conditions for exceeding the level of supply of transport services over demand (otherwise there will be no competitive environment).

For the formation of high-quality transport services, it is necessary, first of all, to determine the parameters and quality standards, to provide incentives for their implementation and the creation of highly efficient technologies that meet quality standards, to work out the elements of technologies, the regulatory framework and methods of state



## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИИ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

regulation, to introduce a number of pilot highly efficient technologies in the regions.

It is necessary to create conditions for the development of both internal competition (between carriers, modes of transport) and external competition (with international transit systems). Internal competition will increase the rhythm and speed up the movement of goods, reduce transport costs, increase the availability of transport services, improve the investment climate and develop market relations. This will have a positive impact on the external competitiveness and realization of the country's transit potential.

Creating a market for competitive transport services involves:

- development of the regulatory framework in the field of transport services (safety, environmental friendliness, quality of transport services, development of methods of state regulation of the market). At the same time, the creation of effective feedback in the form of a system of control and supervision is of paramount importance for regulation;

- development of a high-performance transport and logistics infrastructure that ensures a competitive level of transport services (primarily commercial speed and reliability);

- achievement of the advanced level of engineering and technology that provides standards of safety, environmental friendliness, efficiency and quality of transport services.

The most important strategic direction in the development of the transport system is the balanced development of the transport infrastructure. The implementation of this direction means the coordinated integrated development of all elements of the transport infrastructure based on a comprehensive analysis of statistics and the use of mathematical methods for predicting the needs of sectors of the economy and the population in transport services, developing a statistical accounting system, building a transport and economic balance, predicting the dynamics of the cargo base, analyzing models of transport development. systems in order to select optimally balanced options.

The development of the regulatory framework should provide for the harmonization of transport legislation, integration into the global system of standards and communications, the definition of standards for the quality of transport services, responsibility for their observance, as well as consumer rights. Improving the quality of transport services will require the creation of reasonable reserves in the transport system, and this, in turn, will allow developing competition in the main directions of freight and passenger traffic.

Of particular importance for the transport strategy is the improvement of the system for providing the transport industry with labor resources,

which should ensure the design and implementation of projects for the development of transport systems, the operation of transport infrastructure and vehicles, the provision of transport and logistics services, etc.

An important role in the implementation of the transport strategy is played by increasing the manageability and controllability of transport development by increasing the efficiency of state regulation and management methods, and developing project management mechanisms.

In accordance with these main strategic directions of development, the structure of the main targets of the Transport Strategy of the Russian Federation for the period up to 2035 (hereinafter referred to as the Transport Strategy), its goals, priorities, tasks and implementation mechanisms is being formed.

The main targets of the Transport Strategy are: general social, general economic, general transport and by type of transport activity.

General social guidelines are:

- the mobility of the population and the availability of transport services;

- reduction of accident rate, risks and security threats by means of transport;

- reducing the share of transport in environmental pollution.

General economic guidelines are:

- provision by the transport industry in full of high-quality transport services that ensure the planned growth rates of the gross domestic product;

- competitive level of specific transport costs in the price of final products;

- increasing the commercial speed and rhythm of the promotion of consignments of goods;

- use of innovative technologies for the construction and maintenance of transport infrastructure;

- implementation of an effective state tariff policy;

- use of modern mechanisms for the development of an economic competitive environment, including public-private partnerships;

- coordination with strategies and programs for the development of related industries.

General transport landmarks are:

- development of the transport network in accordance with the needs of the economy and society;

- increasing the productivity and profitability of transport systems;

- increasing the return on assets of the transport infrastructure;

- reduction of energy intensity;

- creating priority competitive conditions for national carriers and increasing their competitiveness;

- innovative commodity transport technologies corresponding to the best world achievements;

- preparation for transportation of high-tech products;

## Impact Factor:

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	ПИИИ (Russia)	= 3.939	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.771	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

formation of the necessary conditions for investing in the transport industry, ensuring its development at a faster pace;

development of transport engineering and allied industries - suppliers of resources to the level necessary for the implementation of the Transport Strategy.

By type of transport activity, the guidelines are:

until 2035 - addressing issues related to the elimination of "bottlenecks", the development of throughput and transportation capabilities in accordance with federal targeted programs, as well as strategies and concepts for the development of various types of transport;

from 2024 - adjustment of these strategies and concepts, development of federal targeted programs in accordance with the results achieved, new conditions and the Transport Strategy in order to develop a single comprehensive integrated balanced transport system that meets the needs for high-quality competitive transport services.

The main targets by types of transport activities for the period 2024-2035 are determined by the federal target program "Development of the transport system of Russia (2024-2035)" and its subprograms by types of transport. It is envisaged that the main targets for the types of transport activities should be updated in accordance with the goals and objectives of the Transport Strategy. It is advisable to carry out these adjustments in 2024, taking into account the results achieved and new features of transport development. The objectives of the development of the transport system in Russia are as follows.

Goal 1. Formation of a single transport space in Russia based on the balanced development of an efficient transport infrastructure.

Achieving this goal will ensure the dynamic growth of the Russian economy, social development and strengthening of ties between its regions by eliminating territorial and structural imbalances in transport, involving new territories in the economic turnover by creating additional transport links, increasing the competitiveness and efficiency of other sectors of the economy by providing opportunities unhindered entry of business entities to regional and international markets, the growth of entrepreneurial and business activity, which directly affects the quality of life and the level of social activity of the population.

The single transport space of Russia should ensure the functioning of a single balanced system of transport communications, an integrated system of commodity transport technological infrastructure for all modes of transport and cargo owners, the use of uniform standards for the technological compatibility of various modes of transport that optimize their interaction, uniform standards for the technical compatibility of various modes of transport and vehicles, as well as create a unified information

environment for the technological interaction of various modes of transport.

Thus, within the framework of this goal, the development of transport infrastructure refers not only to the development of transport communications and hubs. A qualitatively new level of system development is assumed within the framework of a single transport space in combination with a commodity transport technological infrastructure, transport infrastructure of cargo owners, technical compatibility standards, as well as an information environment for the interaction of various modes of transport.

Within the framework of this goal, at the first stage of the implementation of the Transport Strategy, the construction and reconstruction of the main directions of roads and railways, the infrastructure of sea and river ports, inland waterways and airports, the elimination of the most significant gaps and "bottlenecks" of the transport network, including in the Asian parts of Russia. The development of transport approaches to border checkpoints and large transport hubs will be ensured, their comprehensive development in the main directions of transportation will be ensured. Infrastructural conditions will be created for the development of potential points of economic growth, including the integrated development of new territories and the development of mineral deposits, primarily in Siberia and the Far East.

At the next stage of the implementation of the Transport Strategy, within the framework of this goal, a transition to the formation of a single transport space in Russia will be ensured. Based on the differentiated development of communication routes for all types of transport, the creation of a single balanced system of transport communications of the country will be ensured. The throughput and speed parameters of the transport infrastructure will be raised to the level of the best world achievements, the share of high-speed communications will be increased. In order to form a modern commodity distribution network that ensures the volume and quality of transport services, an interconnected integrated system of commodity transport technological infrastructure for all types of transport and cargo owners, an integrated system of logistics parks will be created on the territory of the country, as well as a unified information environment for the technological interaction of various modes of transport and participants in the transport process. During the development of the transport system, innovative technologies for the construction, reconstruction and maintenance of infrastructure will be mastered.

Goal 2. Ensuring the availability, volume and competitiveness of transport services according to quality criteria for cargo owners at the level of the needs of the innovative development of the country's economy.

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIIHQ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

Achieving this goal will make it possible to fully meet the needs of the population and business entities in high-quality transport services through the introduction of advanced transport technologies and the development of passenger and freight rolling stock fleets, as well as to ensure the provision of transport services of social and economic significance of proper quality and at affordable prices.

Achieving this goal involves, first of all, the development and implementation of a model of the transport services market for the needs of all sectors of the economy. This model is innovative for the domestic transport system. It should define the parameters of the quality of transport services, the framework of quality standards for various categories of goods and sectors of the economy, the requirements for the development of the regulatory framework in the field of transport services and technological models for ensuring the quality of transport services.

In order to form a market for competitive transport services, it is necessary to create conditions for the excess of the supply of transport services over demand, as well as launch the "price - quality" mechanism, which will ensure the formation of a competitive environment and the growth of competitiveness.

Motivation mechanisms for the structural modernization of existing transport systems should be developed and put into effect in order to ensure the quality of transport services, leading, in particular, to the creation of national and international competitive transport companies.

Realization of this goal presupposes the achievement of the commercial speed of movement of goods and the rhythm of their delivery "from door to door" at the level of the best world achievements. Due to this, the economy of the country is expected to reduce the costs of circulation of goods, expressed in large volumes of working capital, as well as in significant amounts of crediting goods in transit and in stock. In seaports and checkpoints across the state border of the Russian Federation, as well as in the entire terminal network, the time for processing consignments of goods will be reduced to the level of the best world achievements.

To do this, it is necessary to introduce mechanisms to motivate the use of innovative logistics technologies, develop a system of related services and fleets of freight rolling stock that provide the specified criteria for the volume and quality of transport services at the level necessary for the implementation of the Transport Strategy. It is necessary to develop and experimentally develop highly efficient commodity transport technologies that provide quality criteria for the entire range of transport services and increase the productivity of the transport system. An important role will be played by the expansion of the use of container transportation

technologies, including for regional and interregional transportation, small and medium-sized businesses.

Goal 3. Ensuring the availability and quality of transport services for the population in accordance with social standards.

Achieving this goal means meeting in full the growing needs of the population for transportation, as well as special requirements, in particular from citizens with disabilities, ensuring a stable connection of settlements with the main network of transport communications, as well as ensuring the affordability of transport services of social importance.

First of all, within the framework of this goal, it is supposed to ensure the transportation of passengers on socially significant routes, including ensuring their affordability, including in the regions of the Far North, the Far East, Transbaikalia and the Kaliningrad region.

It is planned to develop systems of urban and suburban passenger transport, fleets of passenger rolling stock, comparable in technical and economic parameters with the world level, as well as the development of systems that provide high-speed and high-speed transportation of passengers.

At the next stage of the implementation of the Transport Strategy, the industry should take part in the development of minimum social transport standards to ensure the possibility of movement of all segments of the population throughout the country. These standards in terms of their transport component should determine the requirements for the development of the necessary communications for all types of passenger transport, the corresponding rolling stock, indicators of the affordability of transport services for the population, as well as requirements for the frequency and schedule of transport services for each settlement.

The state policy in the field of ensuring the availability and quality of transport services for the population involves the fixing of minimum social transport standards at the legislative level and the use of mechanisms to compensate for losses in the income of transport companies resulting from state regulation of tariffs for passenger transportation.

The development and implementation of a program for the implementation of minimum social transport standards throughout the country should be ensured. At the same time, these minimum standards should provide for a progressive scale, taking into account the gradual improvement in the conditions of transport services to the population.

Goal 4. Integration into the global transport space and realization of the country's transit potential.

Achieving this goal will mean laying a solid foundation for Russia's successful integration into the global transport system, expanding the access of Russian transport service providers to foreign markets, strengthening Russia's role in shaping international transport policy, and turning the export

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHIQ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

of transport services into one of the country's largest sources of income.

The implementation of this goal involves, first of all, the development of technical and technological parameters of international transport corridors that ensure their competitiveness at the level of world analogues. This requires monitoring the market for the export of transport services, studying the advantages of competitors, developing a set of measures to improve the technical and technological parameters of international transport corridors, planning their development and harmonizing within the framework of international cooperation on transport corridors.

Integration into the international transport space, first of all, can be effectively implemented within the framework of the EurAsEC and the countries of the Shanghai Cooperation Organization. One of the promising ways to implement this initiative is the formation of container "bridges". In addition, integration into the global transport space involves the development of international cooperation with other international transport organizations and other trading partners of Russia, the expansion of participation in the system of international agreements and conventions in the field of transport, as well as in major international transport projects. It is also expected to develop and put into effect appropriate mechanisms of state regulation, motivating the creation of national and international competitive transport companies.

An increase in the share of participation of Russian transport organizations in the transportation of domestic export and import cargo, as well as cargo between third countries, requires the development and implementation of appropriate legislative and other regulatory methods that ensure the competitiveness of Russian transport.

In order to increase the receipt of foreign exchange funds from the export of transport products, taking into account international experience and economic interests in the protection of transport services in the national and international markets, it is planned to develop legislative standards that provide for:

preferential (and in some cases exclusive) admission of Russian carriers to the carriage of goods for the needs of the state, constituent entities of the Russian Federation and municipalities, as well as strategic cargo;

advantages of national carriers and forwarders over foreign ones when investing in the construction of facilities in Russia, as well as in the development of raw materials, including those developed in accordance with the Federal Law "On Production Sharing Agreements".

Goal 5. Increase the level of safety of the transport system.

The implementation of this goal will improve the safety of traffic, flights and navigation, ensure the

efficient operation of emergency rescue services, civil defense units, special services, achieve a safe level of functioning of transport infrastructure facilities, increase the level of compliance of the transport system with the tasks of ensuring the country's military security and thereby create the necessary conditions for an appropriate level of national security and reduction of terrorist risks.

Within the framework of this goal, due to a set of measures, it is supposed to achieve a level of traffic, flight and navigation safety that meets international and national requirements.

Ensuring transport security will improve the state of protection of transport infrastructure facilities and vehicles from illegal actions, including terrorist activities, that threaten the safe operation of the transport complex.

The activity of specialized emergency rescue services in cooperation with the Ministry of the Russian Federation for Civil Defense, Emergency Situations and Elimination of Consequences of Natural Disasters will be carried out at the level of international and national requirements.

The level of protection of the transport infrastructure and vehicles from acts of unlawful interference will be increased, a higher level of security for the transport of goods requiring special conditions will be ensured.

The implementation of measures to ensure the military security of the Russian Federation in order to timely meet the needs of the military organization of the state in transport services will make it possible to achieve the required level of mobilization readiness of public transport (including dual-use facilities), stocks of state and mobilization reserves, preparation of a set of measures for technical cover and restoration all types of transport communications, preparation and maintenance of all types of vehicles.

In addition to the means and measures of direct transport security, the development of means and effective systems of supervision in the field of transport is of great importance in achieving this goal. Without their improvement, management in the field of ensuring the safety of the transport system will be deprived of effective feedback.

The level of safety of the transport system within the framework of this goal will be increased through the development of systems for professional admission to transport activities through licensing or declaration (notification).

An important role in achieving a high level of safety should also be played by meeting the needs of the transport complex for specialists with a high level of professional training that meet the requirements for the safety and stability of the transport system.

Goal 6. Reducing the harmful impact of transport on the environment.

Achieving this goal will contribute to creating conditions for reducing the level of technogenic

## Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	PIHIQ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

impact of transport on the environment and human health and ensuring compliance with international environmental standards for the industry.

To this end, it is planned to develop and put into effect mechanisms of state regulation that provide motivation for the transfer of vehicles to environmentally friendly fuels, as well as a decrease in the level of energy intensity of transport to the level of indicators of advanced countries.

An important reserve for reducing the volume of impacts, emissions and discharges, the amount of waste in all modes of transport is the professional training of personnel operating vehicles. Another reserve for reducing the harmful effects of transport on human health within the framework of this goal is the rationalization of traffic routes.

The implementation of these goals involves the implementation of a set of research subprograms that ensure the development of new models, methods, technologies, tools and systems. These works form the scientific support of the Transport Strategy. The introduction of developments, the implementation of projects and activities is provided for within the framework of a set of subject subprograms aimed at achieving the specified general economic, general social and general transport strategic targets, as well as within the development subprograms by modes of transport and subprograms aimed at putting into operation the main mechanisms for the implementation of the Transport strategies.

Goals for the development of the Russian transport system for the period up to 2035 and the values of the indicators for the implementation of the Transport Strategy, for which statistical information is currently available.

In addition, it is planned to carry out research work on the creation of statistical tools, monitoring and evaluation of values for such new indicators as:

- reserve capacity of the transport network by type of transport in the main directions of freight and passenger traffic;

- commercial speed of movement of main commodity flows;

- urgency of cargo delivery;

- the level of containerization of transported goods;

- development of transport and logistics technologies;

- specific transportation costs in the final price of products;

- ensuring the affordability of transport services for the population;

- the level of security of the state of transport infrastructure facilities;

- reducing the energy intensity of the transport system.

The implementation of the goals of the Transport Strategy will ensure the satisfaction of the needs of the innovative socially oriented development of the

Russian economy and society in high-quality competitive transport services. The main expected results of the implementation of the Transport Strategy were assessed by groups of main targets.

The general social results of the implementation of the Transport Strategy are:

- ensuring the availability and quality of transport services for all segments of the population in accordance with social standards that guarantee the possibility of movement throughout the country;

- increasing the mobility of the population to 13.2 thousand km per person per year, which is 2.2 times higher than in 2018 (the current level of developed countries is more than 10,000 km);

- ensuring a permanent year-round connection of all rural settlements with development prospects via paved roads with a network of public roads;

- reducing the proportion of the population without access to public transport services to 2 percent by 2035 (up to 10 percent in 2010);

- ensuring the affordability of transport services for all segments of the population in accordance with social standards, including through an effective flexible state tariff policy. The coefficient of availability of air transportation will increase in 2010 - 2035 - from 1.75 to 5;

- a significant reduction in accidents, risks and security threats for all modes of transport. The number of deaths per year in road traffic accidents per 100 thousand people will be reduced from 23.5 people to 8 people, that is, almost 3 times. The number of air crashes per 100,000 flight hours on regular flights in 2035 will decrease from 0.18 to 0.008 (0.01 in the USA);

- a significant reduction in the harmful effects of transport on the environment. The volume of emissions and discharges of harmful pollutants from the motor transport complex will be reduced by 40 percent, in railway transport - by more than 3 times.

The general economic results of the implementation of the Transport Strategy are:

- reduction in the level of specific transportation costs in the price of products by 2035 by 30 percent;

- increase in the commercial speed of promoting goods by road transport up to 1400 km/day, and by rail transport (container transportation) - up to 1000-1200 km/day;

- increasing the timeliness (urgency, rhythm) of the delivery of goods will reach the level of developed countries, which will reduce stocks for guaranteed commodity production to 3-6 days;

- increase in the export of transport services by 2035 by 7.8 times. Transit traffic through the territory of Russia will increase from 28 million tons to 100 million tons;

- ensuring the planned growth rates of the gross domestic product by providing organizations and the population with the full volume of necessary high-quality transport services;

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

providing incentives for the intensive development of related industries in the country's economy through coordination with strategies and programs for the development of related industries - suppliers of resources for the development and operation of transport.

The general transport results of the implementation of the Transport Strategy are:

significant (by 2 - 4 times) increase in the productivity of transport systems. The share of time for the movement of goods in transit will increase to 16 - 20 hours a day (by road transport in international and intercity traffic);

increasing the return on assets of transport infrastructure and increasing profitability;

reduction by 30 percent of the level of energy intensity of transport;

creation of a backbone network of public roads of federal significance, connecting all administrative centers of the constituent entities of the Russian Federation along a paved road network, transformation of the structure of the road network from radial to network;

ensuring the passage of vehicles with an axle load of 11.5 tons along federal highways that are part of international transport corridors along their entire length;

ensuring the increase of competitiveness of national carriers. The share of Russian carriers in the volume of international road transport of goods will increase from 41 percent in 2021 to 50 percent in 2035, and the share of foreign trade transportation by ships under the Russian flag will increase from 6 to 40 percent. The share of Russian-flagged ships in the total deadweight of the Russian-controlled sea transport fleet will increase from 38.5 percent in 2021 to 70 percent in 2035. The share of exports in the total volume of air transport services of Russian airlines will increase from 14 percent in 2018 to 29 percent in 2035;

introduction of innovative commodity transport technologies that correspond to the best world achievements, ensuring the optimization of technological interaction between various modes of transport and all participants in the transport process. By 2035, the delivery time of goods in multimodal (mixed) traffic will be reduced by 25 percent compared to 2017;

development of a competitive environment, public-private partnerships, purposeful formation of conditions for investment will ensure an intensive growth of the investment attractiveness of the industry.

The transport industry at the turn of 2035 will become a backbone industry, growing at a rate that outpaces the growth rate of the national economy. The industry will come to a competitive position in terms of the level of specific transport costs, safety, environmental friendliness and quality of transport

services. The level of developed countries will be reached in terms of commercial speed and timeliness of delivery of goods, availability of transport services for the population. The formation of a unified transport system in Russia, its integration into the world transport system will ensure an increase in the efficiency of transport services within the country, the growth of their exports, a more complete realization of the transit potential, and the satisfaction of the needs of the economy and society in high-quality and competitive transport services. Tasks for the development of the transport system Russian Federation for the period up to 2035.

1. Formation of a single transport space Russia on the basis of balanced development of effective transport infrastructure.

The main objectives of the Transport Strategy in the formation of a single transport space of Russia based on the balanced development of an efficient transport infrastructure are:

elimination of gaps and "bottlenecks" in the transport network, including in the Asian part of Russia;

development of transport approaches to major transport hubs and border checkpoints;

integrated development of large transport hubs in the main directions of transportation;

formation of a single road network, year-round accessible to the population and business entities;

creating conditions for economic growth, including the integrated development of new territories and the development of mineral deposits, primarily in Siberia and the Far East;

creation of a unified balanced system of transport communications of the country on the basis of a differentiated development of communication routes for all types of transport;

increasing the capacity and speed parameters of the transport infrastructure to the level of the best world achievements, taking into account the creation of reasonable reserves, increasing the share of high-speed communications;

creation of an integrated system of logistics parks on the territory of the country as the basis for the formation of a modern commodity distribution network;

creation of an interconnected integrated system of commodity transport technological infrastructure of all types of transport and cargo owners, ensuring the volume and quality of transport services;

development of innovative technologies for the construction, reconstruction and maintenance of transport infrastructure;

creation of a unified information environment for the interaction of various types of transport, participants in the transport process, customs and other state control bodies.

Improvement of the infrastructure is supposed to be carried out in relation to all modes of transport.

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

In the field of railway transport, it is necessary to carry out measures to modernize and develop infrastructure to eliminate bottlenecks.

Until 2025, it is envisaged:

construction of second tracks with a length of 2407.9 km, including 1478.6 km on the main routes;

construction of third and fourth tracks on the main routes with a length of 348.5 km;

development of railway approaches to seaports and border stations;

construction of bypasses for St. Petersburg, Krasnodar, Omsk, Saratov, Chita and Yaroslavl railway junctions;

electrification of sections with a length of 3918 km (including the sections Syzran - Sennaya, Trubnaya - Aksaraiskaya, Rtishchevo - Kochetovka, Yurovsky - Temryuk - Kavkaz - Taman, etc.);

equipping sections with an automatic blocking system with a length of 1851 km;

development of stations and nodes;

reconstruction of the Ulaanbaatar railway, including the electrification of the main passage with the equipment of an automatic blocking system, the laying of second tracks (100 km) and other activities.

In relation to the Moscow railway junction, it is planned:

strengthening of the head sections of the main directions of the main railways;

development of suburban and interregional transportation of passengers in luxury trains in all radial directions in communication with the regional centers of the Moscow region and neighboring subjects of the Russian Federation;

development of railways bypassing the city of Moscow for the withdrawal of transit freight traffic;

development of container technologies for the transportation of goods, the creation of a network of container terminals and transport and distribution centers that provide the supply of Moscow and the Moscow Region with goods and the formation of network cargo flows;

organization of railway communication between the airports of the Moscow Aviation Hub and the railway stations of Moscow;

organization of passenger traffic along the small ring of the Moscow railway with the organization of transfer points to radial railway lines and metro stations.

In 2025 - 2035, it is envisaged:

construction of second tracks with a length of 3055.6 km;

construction of bypasses of the Irkutsk, Perm, Novosibirsk railway junctions, a deep bypass of the Moscow railway junction (third ring), a northern bypass of the Sverdlovsk railway junction;

electrification of sections with a length of 3580 km (including sections Kandra - Inza, Ulyanovsk - Syzran, Sonkovo - Dno - Pechory-Pskov, etc.);

equipping sections with an automatic blocking system with a length of 3128 km;

strengthening and reconstruction of railway lines and sections;

liquidation of restrictions on the capacity of network sections caused by the defectiveness of large artificial structures, through their reconstruction and construction of new ones;

replacement and modernization of power supply facilities equipment for 50.9 thousand km of the extended length of the contact network, for 40.7 thousand km of main directions, including the modernization and reconstruction of 763 traction substations, modernization of the automatic blocking system with a length of 1171.4 km;

equipment of double-track and multi-track hauls on the main directions with a length of 11,515 km with permanent devices for organizing traffic along the "wrong" track according to the signals of a locomotive traffic light;

modernization and increase in the capacity of the digital technological communication network at the 12,600 km test site;

replenishment and renewal of materials and structures for the technical cover of railway transport facilities, restoration of the railway infrastructure in the Chechen Republic;

organization of intermodal communication on the section airport Mineralnye Vody - Mineralnye Vody - Kislovodsk with the reconstruction of railway lines;

modernization of the section Ussuriysk - Grodekovo with laying of second tracks 48 km long on the limiting section;

modernization of the section Ulan-Ude - Naushki to ensure transportation in the direction of the Ulan-Bator railway.

In order to ensure the safe and uninterrupted movement of trains with established speeds and loads until 2025, it is necessary to carry out:

reconstruction of the tunnel under the river. Cupid near the city of Khabarovsk;

construction of a second bridge across the river. Ob in the section Ryama - Kamen-on-Obi, in the section Sayanskaya - Koshurnikovo to reconstruct 3 tunnels - the First Dzhebsky, Krolsky and Mansky;

reconstruction of the Kiparisovsky, Obluchinsky, Vladivostok, Lagar-Aulsky tunnels on the Trans-Siberian Railway;

reconstruction of bridges across the rivers Zeya, Bureya and the bridge at 125 km of the section Uglovaya - Nakhodka;

reconstruction of the Bolshoi and Maly Novorossiysk tunnels;

reconstruction of tunnels at the sections Krivenkovskaya - Belorechenskaya and Tuapse - Adler;

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

reconstruction of bridges across the river. Volga in the section Aksaraiskaya - Astrakhan, across the river. Kamu in the Perm Knot;

build a second bridge across the river. Shuya on the stretch Myagrenka - Kem direction St. Petersburg - Murmansk;

reconstruction of the bridge over the river. the Volga in the Ulyanovsk-Tsentralny - Akbash section of the Bugulma passage, as well as the bridge in the Syzran - Bezenchuk section due to the heavy load of the Kropachevsky passage;

reconstruction of the bridge over the river. Turu on the section Egorshino - Tavda;

reconstruction of bridges across the river. Oka on the section Zhilevo - Necklace, across the river. Don on the Liski - Rossosh section and the bridge on the Lev Tolstoy - Yelets section.

In 2025 - 2035 it is necessary to carry out:

construction of the second bridge crossings over the river. the Volga in the Ulyanovsk - Dimitrovgrad, Anisovka - Saratov sections and the third bridge crossing in the Kinel - Syzran section;

construction of the second bridge crossings across the rivers Ob, Bolshoi Salym, Demyanka to increase the throughput capacity of the Tobolsk-Surgut cargo-forming line;

construction of the second bridge crossing near the city of Blagoveshchensk on the section Belogorsk - Blagoveshchensk.

In the field of railway transport, it is necessary to carry out a significant amount of work on the arrangement of border crossings for the effective implementation of measures to implement border, customs and other types of control. For this, the construction of buildings and structures, the development of access roads, the installation of lighting, and the installation of fences are envisaged.

In addition, it is necessary to create reserves for the capacity of railway checkpoints to ensure the stable operation of railway transport in the face of fluctuations in freight traffic, which may be caused by market changes in world commodity markets.

It is possible to implement these measures only on the basis of an integrated program approach to the development of the state border, taking into account the use of funds from both budgetary and non-budgetary sources.

The solution of the problem of improving the efficiency of the functioning of railway border crossings should be carried out until 2030 as part of the implementation of federal targeted programs for the development of the state border of the Russian Federation for the relevant periods.

As part of the implementation of international activities by the open joint-stock company Russian Railways, the following major projects are expected to be implemented:

organization of a direct railway connection Moscow - Bratislava - Vienna (1520 mm gauge) and

the creation of a logistics and provider center in the region of Vienna;

creation of logistics centers at the junction points of lines with different gauges and in the seaports of the Far East to ensure trade between the Russian Federation and Japan, the Republic of Korea and other states of the Asia-Pacific region;

reconstruction of a section of the North Korean railway Khasan - Rajin (gauge width 1520 mm) with access to the Trans-Siberian Railway and the creation of a container terminal in the city of Rajin (Korean Democratic People's Republic).

In the field of railway transport, it is necessary to build 20,730 km of new lines by 2035, of which the length of high-speed railway lines by 2030 may be more than 10 thousand km, and high-speed lines - more than 1,500 km.

The priority areas for organizing high-speed and high-speed traffic until 2015 include Moscow - St. Petersburg (with a maximum speed of 200 km/h at the first stage, and later up to 250 km/h), St. stage 160 km / h, and later up to 200 km / h), Moscow - Nizhny Novgorod (with a maximum speed of 160 km / h).

After 2025, it is planned to organize high-speed traffic (140 - 160 km / h) in the directions Moscow - Smolensk - Krasnoye, Moscow - Kursk, Moscow - Kaluga - Bryansk (Suzemka), Moscow - Yaroslavl, Moscow - Ryazan - Michurinsk - Saratov, Rostov - Krasnodar, Rostov - Mineralnye Vody, Krasnodar - Mineralnye Vody, Novosibirsk - Omsk, Novosibirsk - Tomsk, Novosibirsk - Kemerovo, Novosibirsk - Barnaul, Novosibirsk - Novokuznetsk, Yekaterinburg - Chelyabinsk, Samara - Saransk, Samara - Penza, Samara - Saratov, Saratov - Volgograd, Ussuriysk - Vladivostok, Vladivostok - Khabarovsk.

One of the most priority areas for organizing high-speed passenger train traffic is the direction Center - South (Moscow - Adler). In order to organize high-speed traffic in this direction, it will be necessary to modernize the infrastructure of railway lines to ensure a speed of 160-200 km/h, as well as to build a connecting line with the Voronezh passage (Prokhorovka-Zhuravka section), the Zhuravka-Chertkovo section and a bypass of the Rostov railway junction with the construction bridge over the river Don.

To meet the growing needs of the population in transportation, it is planned to build socially significant lines with a total length of more than 1.2 thousand km. It is planned to build the Volgograd - Elista line in the Southern Federal District, the Khanty-Mansiysk - Salym line in the Urals Federal District, the Biysk - Gorno-Altaysk line in the Siberian Federal District, and the Tygda - Zeya and Selikhin - Nysh lines in the Far Eastern Federal District.

It is envisaged to carry out measures to develop railway infrastructure facilities that ensure the functioning of the passenger complex (primarily railway stations and railway stations), in order to



## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

ensure high-quality train preparation, passenger traffic safety and a high level of comfort and service. These works should be carried out as part of the development of general schemes for the development of passenger complexes of large transport hubs.

To meet the growing demand for passenger transportation to the southern regions of the country, it is planned to carry out a phased modernization of the infrastructure of the main directions of the Russian railway network to organize the regular circulation of passenger trains up to 22-24 wagons in length.

The priority directions for running passenger 2-deck cars include St. Petersburg - Moscow, St. Petersburg - Vologda - Kirov - Sverdlovsk, Moscow - Nizhny Novgorod, Moscow - Kazan, Moscow - Ryazan - Samara, Moscow - Tambov - Saratov, Moscow - Voronezh - Rostov - Adler (Anapa - Novorossiysk), Rostov - Kislovodsk.

The tasks in the field of development of the road network are:

- creation of a system of motorways and express roads, primarily in the directions of international transport corridors;

- construction of new and reconstruction of existing roads to increase the capacity of the road network, taking into account the predicted traffic intensity;

- development of motor roads of federal importance on the approaches to international automobile checkpoints on the state border of the Russian Federation, to sea and river ports, airports, major transport hubs;

- elimination of "bottlenecks" on the network of federal highways through the reconstruction of artificial structures, the construction of interchanges at different levels, the elimination of soil gaps and a transitional type of pavement;

- the inclusion of new routes in the network of federal highways with the expansion, if necessary, of their composition at the expense of highways of regional, intermunicipal and local significance;

- creation of a road network to ensure the development of potential points of economic growth, including the integrated development of new territories and the development of mineral deposits, primarily in Siberia and the Far East;

- development of the road network in large transport hubs;

Arrangement of sites for service and repair of vehicles, parking lots and rest areas for drivers.

The development of a network of federal highways that are part of international transport corridors will be focused on ensuring free passage of vehicles with a load on the drive axle of 11.5 tons and a total weight of up to 44 tons.

In 2025 - 2035, it is envisaged:

- construction and reconstruction of about 8 thousand km of public roads of federal significance,

- including 3.5 thousand km of roads that are part of international transport corridors;

- construction and reconstruction of 1.9 thousand km of toll highways and express roads, including the Moscow-St. Petersburg express highway, the Central Ring Road in the Moscow Region, the M-4 "Don" highway (Voronezh region);

- construction and reconstruction of 190 km of roads at the entrances to 32 automobile checkpoints;

- conducting engineering surveys to justify the phased creation of a number of new international and interregional road routes, including:

- St. Petersburg - Vologda - Kazan - Orenburg and further through the Republic of Kazakhstan to Western China;

- Moscow - Saransk - Ulyanovsk - Yekaterinburg; Perm - Ivdel - Khanty-Mansiysk - Tomsk (Northern latitudinal corridor);

- construction and reconstruction of 10,000 km of regional roads with co-financing from the federal budget;

- providing 3.3 thousand rural settlements with hard-surfaced entrances (all settlements with a permanent population of more than 125 people and the absence of a year-round connection with the network of public roads over the shortest distance of no more than 5 km);

- solution of priority transport problems of Moscow, St. Petersburg and Sochi transport hubs.

The formation of a promising road network in Russia in 2016 - 2035 provides for the inclusion in the network of federal roads:

- new directions of highways that are part of the routes of federal importance, providing interregional communication and allowing the integration of a disconnected road network of individual regions into a single transport system of Russia:

- Center - Ural (Moscow - Saransk - Ulyanovsk - Yekaterinburg);

- "Europe - Western China" (St. Petersburg - Vologda - Yoshkar-Ola - Kazan - Orenburg - border with the Republic of Kazakhstan);

- "North-West - Siberia" (St. Petersburg - Kotlas - Syktyvkar - Perm - Khanty-Mansiysk - Tomsk);

- "North-East - Polar Urals" (Syktyvkar - Vorkuta with an entrance to Naryan-Mar);

- "Ural Industrial - Ural Polar" (Tyumen - Salekhard);

- highways connecting the administrative centers of the constituent entities of the Russian Federation over the shortest distance, including the highways Syktyvkar - Arkhangelsk - the border of Finland, Kazan - Perm, Abakan - Gorno-Altai - Barnaul, Pskov - Smolensk and others;

- regional highways that are part of international transport corridors and provide access to automobile checkpoints "Mamonovo-2", "Ubylinka", "Krupets", "Ozinki", "Karaozek" and others;

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

highways providing motor transport connection of subjects located in the north-east of the country with the road network of Russia: Khabarovsk - Nikolaevsk-on-Amur (with an entrance to Komsomolsk-on-Amur), Yuzhno-Sakhalinsk - Tymovskoye - Okha - Moskalvo port;

highways providing access from the federal network of Russia to the seaports of Olya, Vanino, Vostochny and others;

highways that ensure the unloading of large transport hubs (for example, the creation of roads connecting, bypassing Moscow, the administrative centers of the subjects of the Russian Federation neighboring the capital, for example, Kaluga - Tver - Vladimir - Ryazan - Tula, which will significantly relieve the Moscow transport hub).

Modernization of existing and construction of new roads in the regions of the North and new development of Kolyma, Lena, Vilyuy, Salekhard - Novy Urengoy - Surgut are envisaged, which will help ensure Northern delivery and improve the socio-economic situation in the region.

A comprehensive modernization and development of the road network is planned in the largest transport hubs in Russia - the cities of Nizhny Novgorod, Kazan, Yekaterinburg, Perm, Rostov, Novorossiysk, Murmansk, Vladivostok and others.

It is planned to build and reconstruct in 2016-2035 more than 7,000 km of roads that form a system of toll highways and express roads, including:

construction of a high-speed highway Moscow - Rostov-on-Don - Novorossiysk;

reconstruction of the highway M-10 "Scandinavia" on the section St. Petersburg - Vyborg - the border of Finland with the organization of paid travel;

construction and reconstruction of road sections forming the road route, Moscow - Tula - Orel - Kursk - Belgorod - border with Ukraine;

construction and reconstruction of road sections forming the road route, Moscow - Smolensk - border with the Republic of Belarus;

construction and reconstruction of road sections that form the road route, Moscow - Nizhny Novgorod - Kazan - Chelyabinsk - the border with the Republic of Kazakhstan with a branch Chelyabinsk - Yekaterinburg;

construction and reconstruction of road sections forming the road route, Moscow - Yaroslavl - Vologda;

construction and reconstruction of road sections that form the road route St. Petersburg - Pskov - the border with the Republic of Belarus (automobile checkpoint "Lobok").

The implementation of measures to develop the road sector in 2025 - 2035 will achieve the following results:

increase in the density of the public road network from 5.1 km per 1000 people in 2021 to 10 km per

1000 people in 2030 and from 42.6 km per 1000 sq. km in 2021 to 79 km per 1000 sq. km in 2035;

an increase in the length of public roads of federal significance that meet the regulatory requirements for transport and operational indicators from 37.5 percent in 2021 to 80 percent in 2035;

an increase in the share of the length of public roads of the highest categories (I and II) in the total length of federal roads from 47.8 percent in 2021 to 80 percent in 2035;

an increase in the length of public roads of federal significance serving traffic in the overload mode will increase from 12.8 thousand km in 2021 to 14.2 thousand km in 2035 (from 27.3 percent to 15 percent of the total length of federal roads values);

providing about 20 thousand prospective rural settlements with permanent year-round communication with the network of public roads on paved roads by 2035;

transformation of the configuration of the federal highway network from radial to network, which will create additional bandwidth reserves.

In the field of road transport, it is necessary to carry out measures to develop the infrastructure for passenger transportation, including the creation of high-speed connections.

The placement and arrangement of infrastructure facilities for public passenger transport (terminal and intermediate stopping points, bus stations, bus stations, interchange nodes, dedicated lanes and streets for the movement of route transport, etc.) should have an advantage in solving land use issues.

In order to reduce the time of transport communication in 10 cities of Russia, development and implementation of pilot projects will be carried out to separate traffic flows and bus transport in space by allocating special lanes and streets for the movement of fixed-route passenger transport, as well as to separate these flows in time through the use of traffic control methods that provide priority for public transport traffic.

Until 2035, it is planned to develop a dedicated infrastructure for public passenger transport, including the development of new for Russia projects for the construction of route bus routes.

The main projects for the construction of new interchange hubs integrated into the transport communications of other modes of transport (railway, air, water) will be implemented by 2020. By this period, it is planned to build up to 60 new bus stations and about 900 bus stations. As part of the development of private investment projects, the network of specialized service centers will expand.

It also provides for the construction of cargo terminals and transport and logistics centers, service stations and repair of vehicles, parking lots, as well as campsites and hotels in the roadside zone.

In the field of air transport, it is planned to increase the number of operating airports to 357 by

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

2020, if by 2025 it is possible to reverse the trend towards a reduction in the airfield network and maintain at least 315 airfields as a result of an active investment policy. By 2035, the airfield network should include more than 500 airports, mainly due to the development of regional air transport infrastructure.

A special place in the modernization and development of the ground infrastructure of air transport will be occupied by the national backbone network of airfields, consisting of airfields of international and domestic hub airports and non-hub airports that ensure network connectivity, strategic unity and security of aviation communications. It is envisaged to form a three-level network of airfields according to the types of served lines, including airfields of federal, regional and local significance.

The organization of air transportation on the basis of hub airports, which ensure the concentration and distribution of passenger and cargo flows, will allow optimizing the route network, increasing the efficiency of transportation, and specializing airports. Regional and local airports are an integral part of the nodal scheme for servicing air transportation.

The development of socially significant airfields (airports) is envisaged, a significant part of which is located in the northern regions and the Far East.

Until 2035, it is planned to implement:

- development of the ground infrastructure of airports included in the national core airport network;
- construction and reconstruction of facilities at major international hub airports of the Moscow Aviation Hub (Domodedovo, Vnukovo, Sheremetyevo), in the cities of Yekaterinburg, Novosibirsk, Khabarovsk, Krasnoyarsk, Samara, St. Petersburg, Kaliningrad and others;

- construction and reconstruction of facilities at the airports of Volgograd, Omsk, Blagoveshchensk, Nizhny Novgorod, Ufa, Perm, Chelyabinsk, Sochi, Anapa, Mineralnye Vody, Astrakhan, Penza, Saratov, Nizhnevartovsk, Barnaul, Magnitogorsk, Kemerovo, Novokuznetsk, Bratsk, Voronezh, Vorkuta, Khanty-Mansiysk, Bykovo airport and others;

- equipment of airfields in accordance with the requirements of I, II and III categories of the International Civil Aviation Organization;

- creation of infrastructure for business aviation;

- creation of 12 consolidated air traffic management centers (Moscow, St. Petersburg, Rostov, Samara, Yekaterinburg, Tyumen, Novosibirsk, Krasnoyarsk, Irkutsk, Yakutsk, Khabarovsk, Magadan) and modernization of the Kaliningrad integrated air traffic management center;

- modernization of the air traffic management system, development of meteorological support for air navigation and a unified system of aerospace search and rescue.

In 2025 - 2035, it is planned to develop the infrastructure of airports that are not part of the core

network, and maintain the operational readiness of the airports of the core network.

Further development of the infrastructure of the air navigation system of Russia is envisaged through the construction of new and reconstruction of existing facilities.

An important task is to ensure a balanced development of the entire air transport infrastructure - ground air transport infrastructure, civil aviation fuel support systems, aircraft maintenance and repair infrastructure, air navigation services and meteorological support for aircraft flights, aerospace rescue systems, medical support for flights and non-aviation airport business.

It is necessary to implement systematic measures to adapt airports in the regions of the North, Siberia and the Far East of the country in order to operate modern aircraft for regional transportation at low temperatures, complete the range of aviation fuels and lubricants, create centralized aircraft refueling systems and equip them with technological equipment for processing air ships with anti-icing fluids that ensure the safety and regularity of flights.

In the field of maritime transport, it is necessary to develop the capacities of seaports, taking into account the creation of economically justified reserves to ensure the increasing volumes of cargo transshipment.

Until 2035, it is planned to implement:

- in the Northern basin - reconstruction of the approach channel of the port of Arkhangelsk, development of the port of Murmansk, construction of a seaport in the city of Belomorsk;

- in the Baltic basin - the development of federally owned infrastructure facilities in the ports of St. Petersburg, Vysotsk, Ust-Luga, Baltiysk, the development of the ports of Vyborg and Kaliningrad, the construction of new transshipment complexes in the ports of the basin, including to ensure the operation of the Baltic pipeline system, creation of a modern international passenger complex in the seaport of St. Petersburg;

- in the Azov-Black Sea basin - the development of the ports of Novorossiysk, Taganrog, Kavkaz, Temryuk, Azov, Rostov-on-Don, the construction of the port of Taman, the creation of a modern international passenger complex in the seaport of Sochi;

- in the Caspian basin - the completion of the infrastructure facilities of the port of Olya, the development of the ports of Makhachkala and Astrakhan;

- in the Far East basin - the development of the ports of Vanino, Petropavlovsk-Kamchatsky, Nakhodka, Magadan, Kholmsk, Anadyr, port points of the Kamchatka Territory and the Sakhalin Region, the construction of a port near the village of Nabil and terminals that ensure the operation of the pipeline system, Eastern Siberia - the Pacific Ocean.

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИИ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

Reconstruction and construction of terminals that ensure the operation of the Northern Sea Route are envisaged.

In 2016 - 2035, the development of seaports in all sea basins of the country continues. New transshipment complexes are being built, primarily in the North and Far East of the country in connection with the development of hydrocarbon deposits, including those on the continental shelf, and their export to foreign countries.

To increase the efficiency of work and increase the throughput of seaports, it is planned to link their development with the creation of a logistics system, which includes both port terminals for various purposes and terminals in large transport hubs of the country, including dry ports.

The socio-economic development of the regions of the North and the Far East of the country requires measures to strengthen the infrastructure of the Northern Sea Route.

In the field of inland water transport, the reconstruction of river ports and the reform of port activities will be carried out by:

improving the technical condition of berthing facilities in ports, equipment of berthing and coastal facilities in cities, places of "green" parking on tourist routes;

modernization and replacement of morally and physically worn-out handling equipment and other technical means and devices;

creation of specialized port facilities for the development of new types of cargo flows;

construction of new berths and terminals, primarily for the processing of containers, mineral fertilizers, chemical cargoes and liquefied gas;

creation in river ports (in Moscow, Yaroslavl, Nizhny Novgorod, Samara, Togliatti, Volgograd, Novosibirsk, Omsk, Krasnoyarsk, Osetrovo, etc.), serving international transport corridors and working with foreign trade cargo, container terminals and logistics centers;

overhaul and development of port railway and automobile access roads.

The development of the system of inland waterways of Russia will be carried out by:

elimination of limiting sections of the throughput capacity of inland waterways of the Unified deep-water system of the European part of the Russian Federation;

development of a water transport connection of the Azov-Black Sea and Caspian basins;

complex reconstruction of inland waterways and hydraulic structures of the Ob - Irtysh, Yenisei, Lena and Amur basins;

increasing the length of inland waterways with guaranteed dimensions of ship passages and illuminated conditions;

creating navigable conditions for the delivery of goods to newly developed hard-to-reach areas,

primarily to the regions of the Far North, including along small and rapidly shallowing rivers;

modernizing the technical fleet and increasing the intensity of its use to improve the parameters of waterways;

development of communication and navigation through the modernization of existing and the introduction of new means of communication, satellite navigation and informatization.

In the field of industrial transport, it is necessary to modernize non-public tracks to ensure the processing of promising types of rolling stock of the federal railway transport with increased carrying capacity and axle loads and to improve the technology for transporting rock mass from deep pits.

Ensuring availability, volume and competitiveness transport services for cargo owners in accordance with the needs of innovative development of the country's economy.

In order to ensure the availability, volume and competitiveness of transport services for cargo owners in accordance with the needs of the innovative development of the country's economy, the following activities will be carried out:

development of a model of the transport services market to meet the needs of all sectors of the economy, including the parameters of the quality of transport services, quality standards for transport services for various categories of goods and sectors of the economy, requirements for the regulatory framework in the field of the transport services market, technological models for ensuring the quality of transport services;

providing motivation for the structural modernization of transport systems in order to ensure the quality of transport services, the creation of national and international transport companies that can compete in the world market, and the improvement of procedures for admission to the implementation of freight traffic;

bringing the commercial speed of movement of goods and the rhythm of their delivery "from door to door" to the level of the best world achievements, thereby reducing the costs of circulation of goods, expressed in large volumes of working capital, as well as in significant amounts of crediting goods in transit and in stock;

reduction in the processing time of consignments in the terminal network, including at seaports and checkpoints across the state border of the Russian Federation, to the level of world indicators;

motivation for the use of innovative logistics commodity transport technologies, development of technologies for the transportation of goods, including the use of logistics parks;

development of forwarding services and a system of transportation operators;

development of a system of related services;

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

development and implementation of highly efficient technologies that improve the quality of the entire range of transport services and the productivity of the transport system;

use of modern information and telecommunication technologies to ensure the quality of transport services.

The development of the transport services market requires, first of all, the formation of new transport services that meet quality requirements. To do this, it is necessary to define the parameters and standards for the quality of transport services and provide incentives for the implementation of such standards in transport. This will require market participants to create highly efficient technologies that meet quality standards, as well as quality management systems. The participation of the state in this process will require the development of an appropriate regulatory framework and methods of state regulation.

The development of a competitive market for transport services will require the creation of conditions for exceeding the level of supply of high-quality transport services over demand, as well as ensuring publicity and information openness of the market in terms of prices and quality of services. This will provide consumers with the opportunity to freely choose transport services, make the "price-quality" mechanism work, and make price and quality a subject of competition. Such a mechanism will ensure a continuous increase in the productivity of transport companies, which will contribute to their self-sufficiency. The mechanism "price - quality" will stimulate market participants to study the demand for various categories of services and analyze the level of competitors, improve the quality of transport services provided, and find the optimal balance between their price and quality.

The state policy for the formation of a competitive market for transport services provides for administrative and economic methods.

Administrative methods should ensure the regulation of the activities of natural monopolies, the access of vehicle owners, as well as freight forwarders and carriers to professional activities using licensing or declaration mechanisms (notice of obligations of a market participant).

Economic methods should stimulate the creation of freight forwarding and transport companies of all types and levels in the field of freight and passenger traffic, which could provide competitive transport services in the field of freight and passenger traffic. In particular, it is advisable to consider a mechanism for stimulating the creation of sufficiently large transport companies capable of investing in the development of highly efficient transport technologies and modern vehicles. It is necessary to provide state support for increasing the competitiveness of national transport companies.

The tariff policy should provide for a combination of free pricing mechanisms with control functions in the interests of protecting consumers from unreasonable discriminatory tariffs, and market participants from dumping tariffs.

The investment policy should be aimed at creating an efficient transport and logistics infrastructure and re-equipping companies with modern rolling stock, technical means and information systems, including on the basis of public-private partnerships.

The development of administrative methods for regulating the transport services market, as well as mechanisms for tax, tariff and investment policy of market formation, is included in the scientific support for the implementation of the Transport Strategy, and their final development, taking into account the relevant changes in the regulatory framework, should be carried out in the process of implementing pilot projects.

It is envisaged to implement measures aimed at significant structural changes in the market of transport services of railway transport, the regulatory legal framework for its functioning. This stage is an investment and innovative stage of transformations in the field of railway transport.

The main principles of formation of the market of railway transport services are:

- maintaining the network carrier as a single economic entity providing services in terms of infrastructure and transportation services;

- presence in the rail transportation market of local carriers that carry out transportation on the terms of a public contract in certain segments of the rail transportation market;

- separation of services for the provision of wagons and containers for the implementation of rail transportation from the complex service for rail transportation while maintaining the services for the provision of locomotives as part of this complex service;

- ensuring the organization of railway transportation with the participation of 2 or more railway infrastructures, and carriers;

- formation of the institution of owners of railway rolling stock (locomotives, wagons, containers, etc.) and determination of the requirements for them, as well as the legal basis for their interaction with the owners of the railway transport infrastructure, carriers, users of railway transport services;

- formation of a competitive market for passenger and cargo terminal services;

- formation of a competitive market for freight forwarding services;

- the possibility for business entities to carry out certain works and services at the request of infrastructure owners, carriers, owners of cargo and passenger terminals.

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

In the field of improving the quality of transport services, it is envisaged:

an increase in the speed of delivery of freight shipments up to 350 km per day, or by 23 percent, including containers - up to 1000 km per day, or 3.5 times, containers in transit traffic - up to 1200 km per day, or 2 times, route shipments - up to 420 km per day, or by 29 percent;

increase in the share of shipments delivered within the standard (contractual) period up to 97 percent.

As new railways of general and non-public use are being built, it is necessary to form a system for regulating tariffs for their services, to improve the system of interaction between the owners of adjacent infrastructures of general and non-public use.

In the field of air transport, the main directions for improving market relations are:

reduction of monopoly areas of activity with the gradual replacement of direct regulation by market methods of regulation and control;

involvement of organizations of operators, users and their associations in the formation of requirements in terms of the provision of services and conditions for their access;

exclusion of restriction by government bodies of operators' access to the market when they meet the established requirements.

Improving the regulation of the activities of natural monopolies will be carried out in the following main areas:

completion of the separation from the market of air transport transportation and airport services, which have different characteristics and strategies for the development of competition;

improving the methods and procedure for establishing the norms and conditions for establishing the boundaries of the natural monopoly of airport activities within the framework of the core network of airports (airfields), based on ensuring the sustainable functioning of the air transport of the Russian Federation;

improving methods of real control and assessment of the actual level of competition in the airport services market;

improvement of methods of tariff regulation of natural monopolies;

limiting the competition of airport activities with the expansion of differentiation by subjects of regulation of airport charges;

introduction of regulatory procedures that make it possible to form requirements and conditions for access to the provision of airport services with the involvement of organizations of operators, users and their associations;

regulation of interaction between airports and the air traffic management system;

development of competition in potentially competitive areas of airport activity (fuel refueling,

aircraft maintenance, baggage, cargo and mail handling);

regulation of the activities of refueling companies of all airports to prevent discrimination in the service of airlines and other fuel owners, as well as to ensure transparency in the formation of aviation fuel prices and their reduction by organizing purchases through auctions involving at least 3 suppliers.

In the field of road transport, in order to improve the quality of transport services, it is planned to accelerate the movement of goods during the transportation and storage of finished products, which requires:

development, approval and implementation of new rules for the carriage of goods by road;

development and implementation of complex projects for the organization of cargo transportation on intercity routes in the most cargo-intensive directions (with the time of movement of freight vehicles on these routes at least 20 hours a day);

development of rational systems for the transportation of goods in large transport hubs to reduce empty runs, reduce vehicle downtime at loading and unloading points, increase the utilization rate of vehicle load capacity (by 2030, these transportations should account for up to 40 percent of intra-hub traffic by road).

For the development of a competitive market for transport services, it is necessary to ensure the priority development of public road transport, which has a modern production and technical base and an optimal structure of the fleet of vehicles, taking into account the increase in its share in the transportation performed.

The share of commercial transportation of goods in the total volume of transportation of goods by road by 2035 should double, or up to 60 percent.

In the field of tariff regulation, in order to increase the availability of road transport services for consumers of road transport, it is necessary to ensure:

prevention of short-term sale of motor transport services below cost in order to obtain competitive advantages (dumping);

improvement of mechanisms for financing road safety activities.

In the field of maritime transport, in order to develop a competitive market for transport services, it is necessary to:

to increase the throughput capacity of Russian seaports and the carrying capacity of the marine transport fleet, which will make it possible to satisfy the predicted quantitative and qualitative demand for transshipment of Russian export-import cargo and international transit cargo in Russian seaports, increase the potential of foreign trade, and significantly increase the volume of exports of transport services;

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIIHQ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

to carry out the transition in the tariff regulation of natural monopolies from the full reimbursement of all reasonable costs, taking into account the provision of profitability, to the determination of the maximum price level for a long period;

gradually abandon the regulation of tariffs for loading and unloading operations due to the development of competition in the markets.

In the field of inland water transport, in order to improve the quality of transport services, improve the safety of goods, increase the speed of delivery and reduce costs, it is planned to introduce and develop transport and technological systems adapted for intermodal transportation (container ships, ro-ro ships, universal barge towing trains).

For the development of a competitive market for transport services, it is necessary to establish economically viable and investment-attractive shipping companies by stimulating the processes of restructuring and reforming enterprises in the industry, increasing their efficiency, facilitating integration processes and the formation of large companies that can compete in the market of inland water transport services.

In the field of tariff regulation, further differentiation of tariffs is envisaged to bring the base tariff closer to objective costs. In this part, the main tasks are:

reduction of tariffs for the transportation of bulk cargo through the use of route technologies;

improvement of tariffs that determine the economy of progressive transportation technologies - intermodal and multimodal transportation;

solution of issues related to regional (territorial) differentiation.

In the field of multimodal transportation, it is necessary to improve the interaction of all modes of transport in their implementation, for which bodies should be created to coordinate the work of all modes of transport and ensure their rational interaction in large transport hubs, as well as the adoption of regulatory legal acts regulating the implementation of mixed (combined) cargo transportation.

In all constituent entities of the Russian Federation, it is necessary to take measures to create a network of transport and logistics centers for the provision of transport and forwarding services, as well as to create a developed freight traffic sales network and expand the scope of services for integrated transport and logistics services with social standards.

In order to ensure the availability and quality of transport services for the population on all modes of transport in accordance with social standards, the following activities will be carried out:

ensuring the transportation of passengers on socially significant routes, the affordability of transport services, including in the regions of the Far North, in the Kaliningrad region, the Far East and Transbaikalia, the development and implementation

of agreed schemes for the development of air transport and motor transport support for transportation along local social routes in remote regions;

development and implementation of a program for the implementation of minimum social transport standards to ensure the possibility of movement of all segments of the population throughout the country, ensuring their implementation on a progressive scale, taking into account the improvement of conditions for transport services to the population;

development of urban and suburban passenger transport systems;

regulation of admission to commercial activities in the field of passenger transportation;

development of a fleet of passenger rolling stock, which is not inferior in terms of technical and economic parameters to world analogues;

development of systems that provide high-speed and high-speed transportation of passengers.

In the field of railway transport in the field of long-distance passenger transportation, a decision was made to stop their cross-subsidization at the expense of freight traffic and to gradually attract federal budget funds for these purposes.

The continuation of the implementation of the state policy in the field of socially significant passenger rail transportation should be the legislative provision for compensation for losses in income arising from the state regulation of tariffs for passenger transportation. At the same time, the formation of an appropriate mechanism for compensating losses in income from the implementation of state tariff regulation in the field of passenger transportation in suburban traffic should be ensured.

With an increase in passenger turnover by 32.9 percent, the quality indicators of passenger traffic will be significantly improved. The sectional speed of long-distance passenger trains will increase on the main routes up to 72 km/h, or by 18.6 percent.

Improving the availability and quality of transport services for the population should be carried out in the following areas:

development of suburban-urban passenger communications with the transformation of railway sections into high-speed and high-speed systems to ensure comfortable travel conditions, reduce passenger travel time, unload in large cities of the subway and ground passenger transport during peak hours, which requires an increase in the number of suburban trains for radial directions in order to reduce intervals and reduce the occupancy of electric train cars during peak hours, the development of intracity transportation by intensifying the use of diametrical directions and increasing their number in the future, increasing the number of compact interchange nodes, developing interregional transportation by trains of increased comfort of the "express" type, organization of passenger transportation between megacities and

## Impact Factor:

**SISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

large regional centers using trains of the "satellite" type, organization of intermodal transportation of passengers by specialized rolling stock to airports;

increasing the availability, quality and volume of services provided by railway stations;

improvement of booking systems using the Internet, as well as the introduction of cashless ticket payment systems;

further improvement of the system of state regulation of tariffs in railway transport.

In the field of road transport, it is necessary to ensure the priority development of public road transport, which has a modern production and technical base and an optimal structure of the fleet of vehicles, taking into account the increase in its share in the transportation performed.

Improving the availability and quality of transport services for the population will be carried out in the following areas:

implementation of a unified transport policy in the field of planning and management in passenger road transport, aimed at eliminating restrictions on public access to passenger road transport services;

creation of entrances to settlements, providing year-round and independent of weather and climate conditions for bus traffic;

improvement of the route network of public passenger motor transport and its arrangement, aimed at ensuring convenience for the population through the introduction of quality standards;

expanding the geographic accessibility of passenger transport by introducing minimum transport standards, including for serving persons with disabilities, and public passenger road transport in rural areas.

By 2035, new infrastructure and technological solutions will reduce the time spent by passengers on public passenger road transport by 25-30 percent compared to 2021.

In the field of tariff regulation, in order to increase the availability of transport services for the population, it is necessary to:

further development of the tariff regulation system for passenger road transport;

improving the system of providing interbudgetary transfers to the budgets of the constituent entities of the Russian Federation for the implementation of expenses to ensure equal accessibility of public transport services to the population;

determination and use of mechanisms to compensate for shortfalls in the regulation of tariffs (for example, on the basis of social state contracts for the provision of transportation on socially significant routes).

In the field of air transport, in order to improve the quality of transport services, it is planned to implement the following measures:

improving the quality of the transportation process, including the certification of Russian airlines according to the standards of the program developed by the International Air Transport Association;

increasing the comfort, frequency and regularity of flights, expanding the list of additional services (food, entertainment, communication services) and ensuring an attractive cost of an air ticket by updating the aircraft fleet and developing competition between airlines, creating aviation alliances (including participation in international ones) and low-cost airlines, equipping aircraft and airfields with equipment that enables operation in adverse weather conditions, introducing an efficient system for the maintenance and repair of new generation aircraft, which are characterized by reduced downtime when troubleshooting and troubleshooting, introducing modern passenger service technologies, including electronic ones, reducing the duration of the passenger's ground transfer to the airport by organizing an efficient transport connection between airports and settlements.

The development of a competitive market for transport services will be carried out in the following areas:

elimination of unjustified administrative and economic barriers to competition among air transport operators;

commercialization of air transport infrastructure services with the involvement of private operators;

market liberalization and improvement of mechanisms for certification, licensing and confirmation of compliance of airlines with the established requirements for admission to activities in the field of air transport, including reducing the use of quantitative quotas and replacing them with qualitative ones, differentiation of certification requirements for airlines, operators and aviation fuel supply organizations of various levels, a gradual transition to softer and more general forms of regulation, the creation of a nationwide system for regulating the time intervals of a flight at the airport (slots);

introduction of accreditation procedures for manufacturers and suppliers of aviation fuels and lubricants and special fluids that ensure the safety and regularity of flights, including the certification of aviation fuels and lubricants for the operation of aircraft at low and ultra-low ambient temperatures.

It is necessary to stimulate structural transformations in the industry in terms of business consolidation in the commercial segment of the air transport market by tightening the requirements for the quality of the work of operators, maintaining the exclusive right for Russian air carriers to perform domestic air transportation until 2020. In 2021-2035, the issue of granting foreign airlines on the territory of Russia broader commercial rights (degrees of freedom of air) may be considered.



## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

Improving the availability and quality of air transport services for consumers will be achieved through:

meeting the demand by expanding the range and geography of air transport services, developing the fleet of modern aircraft, bringing the structure of the supply of air transportation and aviation work to the structure of demand for them;

improving the safety of air transport, including ecological, up to the world level;

ensuring the availability of air transport services for the main part of the population;

expanding the areas of rational use of civil aviation, development of general aviation and business aviation.

Increasing the affordability of air transportation will be carried out through:

reducing the cost of transportation by developing competition between airlines, increasing the intensity of operation and optimizing the aircraft fleet;

curbing the growth of airport charges and ground handling rates for airlines by increasing the additional income of airports from non-aeronautical activities;

implementation of a flexible tariff policy in relation to various categories of consumers of services and classes of service, including through the creation of "cheap" airlines.

The priority is the development of commercial air transport and operations, which should meet the main demand for air transport services.

Within this market segment, the priorities of the state policy are determined on the basis of providing conditions for the development, first of all, of domestic air transportation and work, including socially significant local airlines that do not have a year-round transport alternative, as well as such main airlines that ensure the transport integrity of the state, as airlines connecting the Kaliningrad region, regions of the Far North, Siberia and the Far East with the center of the country. By 2020, the growth rate of this market segment should surpass the development of the international transportation segment of Russian airlines operating in connection with the country's airports.

In the sphere of regulation of aviation tariffs, the following tasks are solved:

limiting tariff limits in order to ensure the availability of services for the majority of potential consumers, preventing short-term sales of air transport and air navigation services below cost in order to obtain competitive advantages (dumping) and long-term use of low prices, which deliberately exclude the possibility of quality service and ensuring the safety of air transportation or providing aviation services;

ensuring price transparency of the market (by expanding the practice of applying the declared tariff principle);

ensuring reasonable tariff stability for the benefit of air transport service users;

gradual reduction in the scope of price regulation and expansion of market pricing mechanisms;

transition to the implementation of the notification (registration) principle of setting tariffs for the services of operators in competitive market segments.

Further liberalization of tariff regulation will be carried out as the competitive environment expands and the types of activities classified as natural monopolies in the field of airport business and air navigation services are reduced due to:

formation of rates of charges and tariffs that really reflect the costs of maintenance and intensity of use of airport facilities and the air traffic management system;

improving the system of control and financial audit of aviation enterprises engaged in airport activities and organizations of the air navigation service system;

ensuring adequate funding for activities to ensure flight safety and aviation security;

increasing the investment attractiveness of airports.

Tariff regulation in the field of socially significant air transportation provides for state support for transport market entities (allowed only in cases where market mechanisms cannot ensure a sufficient level of supply of aviation services or a socially acceptable level of tariffs for them), privileged categories of passengers, socially significant air transportation (by allocating subsidies provided to airlines that ensure the implementation of socially significant air transportation).

State support for socially significant air transportation and work should be coordinated at the expense of budgets at all levels.

In the field of maritime transport, in order to increase the availability of transport complex services for the population, it is required to ensure the growth of transportation of goods and passengers on socially significant routes, which will significantly increase the level of transport provision of such regions of the country as the Far North and the Far East, including using the Northern Sea Route, transport links with the Kaliningrad region, and to ensure the predicted demand for socially significant passenger transportation by sea.

In the field of inland water transport, in order to improve the quality of transport services for passengers, it is planned to improve the organization of the transport process, the condition of the used inland waterways, navigable hydraulic structures and ships, and increase the comfort and level of service.

It is envisaged to develop business trips of passengers by replenishing the fleet with high-speed vessels and creating a market for water taxis (initially in Moscow and the Moscow region).

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHIQ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

To increase the availability of transport services in the field of inland water transport, the following measures should be taken:

- increase in the length of inland waterways with guaranteed dimensions of ship passages with illuminated conditions;

- reconstruction of hydraulic structures;

- elimination of the gap between the increasing demand for passenger transportation and the quantitative and qualitative characteristics of the fleet.

The main objectives of the Transport Strategy in the framework of integration into the global transport space and the realization of the country's transit potential are:

- development of technical and technological parameters of international transport corridors, ensuring their competitiveness at the level of world analogues;

- implementation of legislative and other state methods of regulation that provide assistance in increasing the share of participation of Russian transport organizations in the transportation of export and import cargo, as well as cargo between third countries;

- integration into the international transport space, primarily within the framework of the Eurasian Economic Community and the Shanghai Cooperation Organization, including the formation of container bridges, the development of international cooperation in the field of transport in other international transport organizations and with other trading partners of Russia, the expansion of participation in the system of international agreements and conventions in the field of transport;

- motivating the creation of national and international transport companies that can compete with global companies, expanding participation in major international transport projects.

The implementation of these tasks requires the development of international cooperation in the field of transport, which is a tool for realizing the national interests of the Russian Federation, ensuring its sustainable and consistent integration into the world economic system. In the next 20 years, international cooperation in the field of transport should help intensify the processes of regional economic integration, promote Russian goods and services to world markets, increase the volume and expand the geography of inbound and outbound tourism, simplify border crossing procedures, and increase the prestige of the Russian Federation in international organizations, and expanding its influence on the decisions made in these organizations.

The development of technical and technological parameters of international transport corridors, ensuring their competitiveness at the level of world analogues, requires the implementation of a set of measures to monitor the market for the export of transport services and study the advantages of the

main external competitors, develop a set of measures to improve the technical and technological parameters of international transport corridors, including issues of interaction with customs, border and other state control bodies, planning their development and coordination within the framework of international cooperation along transport corridors.

The expansion of exports of Russian transport services will be of great importance.

The main directions for solving the problems of integration into the global transport space and the realization of the country's transit potential are:

- regional transport integration;

- increasing the competitiveness of Russian suppliers of transport services in the world markets and the growth of exports of transport services;

- participation in international projects and programs aimed at developing interregional, including Euro-Asian transport links, developing international transport corridors and increasing the scale of transit traffic;

- expansion of Russia's participation in the system of international agreements and conventions in the field of transport;

- protection of Russian interests within the framework of participation in the activities of international organizations;

- expansion of bilateral cooperation in the field of transport between Russia and foreign states;

- development of comprehensive and mutually beneficial cooperation in the field of transport with the European Union, including within the framework of the Russia-European Union free trade zone being created.

Regional transport integration is one of the areas that determine the dynamics and results of regional economic integration within the CIS, the Eurasian Economic Community (EurAsEC) and the Union State.

The key direction of regional transport integration will be the formation in full of a transport union and a single transport space within the EurAsEC. Among the measures to form a single transport space of the EurAsEC, the most important will be:

- harmonization of normative legal regulation of transport activities, unification of technical standards and transport technologies in the member states of the EurAsEC, including on the basis of international norms of the EurAsEC and multilateral agreements and conventions in the field of transport;

- elimination of any discrimination of transport service providers from some EurAsEC member states to other EurAsEC member states, as well as in the field of licensing and certification when they establish transport companies, their branches and representative offices, joint ventures throughout the territory of a single transport space, that is, providing them national regime;

## Impact Factor:

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	ПИИИ (Russia)	= 3.939	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.771	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

ensuring free transit of passengers and cargo, efficient use of the transit and transport potential of the EurAsEC member states;

transition within the framework of the EurAsEC to the conclusion of multilateral agreements on air traffic (open skies), international road traffic, navigation on inland waterways and other international acts;

maximum use of the positive experience in the integration of transport systems accumulated in the CIS member states, especially in the field of railway transport, as well as in the field of civil aviation and the use of airspace;

creation of consultation mechanisms within the framework of the EurAsEC to coordinate foreign economic policy in the field of transport;

technical re-equipment of transport systems in order to significantly improve the use of the transport potential of the EurAsEC member states and effectively serve their population and economy, as well as ensure full transport safety and environmental protection;

unification of the principles of tariff policy formation;

unification of the terms of compulsory insurance of civil liability of carriers to passengers of aircraft and owners of vehicles to third parties;

ensuring free access of professional labor force to the market of transport services and joint training of personnel;

implementation of a unified policy in the field of transport security, transportation safety and reducing the harmful effects of transport on the environment.

Increasing the competitiveness of Russian suppliers of transport services in the world markets and the growth of exports of transport services are among the priorities of the Transport Strategy.

The development of the export of transport services is just as important a component of Russia's national product as the export of goods. In 2035, the export of transport services in value terms will increase by 6.8 times (up to 80 billion US dollars) compared to 2021.

The growth in exports of transport services should occur both by increasing the physical volumes of passenger and cargo transportation by Russian transport companies, and by increasing their competitiveness in the domestic and foreign markets for transport services and expanding access to passenger and cargo transportation between third countries.

One of the indicators reflecting the change in the competitiveness of Russian carriers and, in general, the export potential of the national transport system is the share of participation of Russian transport organizations in the transportation of export cargo to world markets, import cargo, transit cargo, as well as cargo from third countries and foreign charterers.

The policy aimed at increasing the competitiveness of Russian carriers and increasing the export of transport services is based on the principle of non-discrimination and is carried out in the following areas:

establishment and support within the framework of trade and transport policy of the state of favorable conditions for Russian exporters of transport services; assistance in realizing the interests of Russian carriers in the global market of transport services;

creation of no less favorable regime for Russian carriers when performing customs and border procedures than for carriers of other countries;

creation of conditions for the acquisition by Russian carriers of modern transport equipment, which ensures not only competitiveness in international markets, but also the fundamental accessibility of these markets for Russian operators;

development of mechanisms for prompt response in cases where Russian carriers are discriminated against abroad;

improvement of the system of state control in the segments of the international transportation market, in which a bilateral licensing system operates.

Participation in international projects and programs aimed at developing interregional, including Euro-Asian, transport links, developing international transport corridors and increasing the scale of transit traffic is envisaged.

One of the most important economic and geopolitical advantages of Russia, which has not been sufficiently used despite the efforts made in recent decades, is the realization of the country's transit potential, including:

attracting cargo for transportation via land transport communications (railways and roads) between the countries of Asia and Europe, primarily along the Euro-Asian international transport corridors "East-West" and "North-South";

integration of inland waterways into the system of cargo transportation between the states of Central and South Asia, the Republic of Kazakhstan, on the one hand, and European states, on the other hand;

use of Russian airspace for organizing transit flights of third-country airlines on trans-Siberian, transpolar, cross-polar and other routes connecting Europe with East and Southeast Asia, as well as North America with South and Southeast Asia;

development of transfer passenger and cargo flows through the international hub airports of the Russian Federation.

The volume of transit traffic by rail, road and inland water transport through the territory of Russia by 2035 will increase by 3.6 times and reach 100 million tons per year.

To realize the transit potential of the Russian Federation, it is necessary:

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHIQ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

improvement of the regulatory and legal framework in order to ensure the effective development of transit traffic;

active state support of Russia's transit projects in the international arena, formation of international alliances beneficial for Russia;

planning the modernization of transport infrastructure, taking into account the increase in transit cargo flows;

support for investment projects, including international ones, aimed at the development of transit traffic;

further development of transport and customs technologies, information systems, the entire infrastructure of transit traffic, accelerating the delivery and border processing of transit cargo;

participation in multilateral projects implemented by international organizations, including the UN, and aimed at developing the potential of Euro-Asian transport links and transit cargo.

The expansion of Russia's participation in the system of international agreements and conventions in the field of transport is a tool for integrating Russia into the global transport system, increasing the competitiveness of Russian carriers, unifying technical and technological norms and standards in the transport sector, as well as harmonizing Russian legislation in the field of transport with generally accepted practice in the world. The most important for Russia is participation in agreements and conventions regulating:

road, rail, inland water transport and road infrastructure (agreements and conventions of the United Nations Economic Commission for Europe);

air transport (agreements and conventions of the International Civil Aviation Organization);

maritime transport (agreements and conventions of the International Maritime Organization).

Much work remains to be done to join a number of agreements and conventions that largely determine the modern face of a safe and efficient global transport system. Non-participation in them threatens to isolate and reduce the competitiveness of Russian transport communications and carrier companies in the global transport services market.

Protection of Russian interests within the framework of participation in the activities of international organizations and multilateral cooperation are the most effective tools in the field of solving problems and developing appropriate policies in the field of transport at the international level. Within the framework of international organizations, multilateral cooperation in the field of transport is being formed and implemented, international agreements and conventions are being developed and adopted, therefore, the active role of Russia in these organizations allows us to most effectively defend and promote the interests of the national transport system and Russian carriers.

Multilateral cooperation of Russia in the field of transport is carried out within the framework of:

international universal and specialized intergovernmental organizations;

international non-governmental organizations;

bodies of regional cooperation in the field of transport.

Of fundamental importance is the active participation of Russia in the work of such international organizations as the Inland Transport Committee of the UN Economic Commission for Europe, the UN Economic and Social Commission for Asia and the Pacific, the International Civil Aviation Organization, the International Maritime Organization, the International Transport Forum - an organ of the Economic Cooperation Organization and Development, Organization for Cooperation of Railways, Intergovernmental Council of Road Workers of the CIS States.

The largest Russian transport companies and their associations take part in the work of international non-governmental organizations, therefore their platform serves to implement a strategy for expanding the access of Russian carriers to world markets and increasing export potential. From this point of view, the most significant for Russia's interests will be the International Air Transport Association, the International Airports Council, the International Road Transport Union, the International Union of Railways, the International Federation of Forwarding Associations and other international non-governmental organizations.

It is necessary to significantly expand regional transport cooperation in the field of transport to realize the interests of the Russian transport business:

in the north-west of Russia - within the framework of the Council of the Barents Euro-Arctic Region and the Council of the Baltic Sea States;

in the south - within the framework of the Black Sea Economic Cooperation;

in the east - within the framework of the Shanghai Cooperation Organization and the Asia-Pacific Economic Cooperation.

The effectiveness of multilateral cooperation in the field of transport within the framework of international organizations will be determined not only by concrete achievements in the interests of the domestic transport system, but also by the growth of Russia's prestige in the world as a great transport power.

It is envisaged to expand bilateral cooperation in the field of transport between Russia and foreign states, the basis of which are agreements between the Russian Federation and foreign states, in particular agreements on air traffic, maritime navigation and road traffic. The main advantage for Russian transport companies will continue to be the use of preferential transportation regimes provided in accordance with these agreements.

## Impact Factor:

**SIRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHIQ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

In the field of civil aviation, work will continue to improve the system of intergovernmental agreements on international air traffic, bringing it into line with the realities of the current stage of development of the world aviation market, standards and recommended practices of the International Civil Aviation Organization. Work should begin on open skies agreements giving designated air carriers additional commercial rights to operate international air services. Open skies agreements will be used in the first stage between Russia and the CIS member states (primarily those of them that are members of the EurAsEC).

In the field of international maritime merchant shipping, work will continue on the conclusion of new bilateral intergovernmental agreements and the renegotiation of agreements signed during the years of the USSR and containing outdated norms. Work to improve the system of bilateral intergovernmental agreements should be carried out in conjunction with the multilateral negotiation process on the liberalization of international maritime transport within the framework of the World Trade Organization.

In the field of international road communications, the improvement of the system of bilateral intergovernmental agreements will be aimed at fixing the norms that contribute to the realization of the advantages of road transport in the field of international passenger and freight transport (ensuring freedom of transit, eliminating quotas for the number of permits issued, etc.). Revision of bilateral intergovernmental agreements on international road transport with the member states of the EurAsEC will be carried out in order to liberalize the sector of international road transport of passengers and goods within the EurAsEC.

It is necessary to significantly modernize the system of international agreements on navigation on inland waterways, primarily in the context of the opening of certain sections of the inland waterways of the Russian Federation for access by ships flying a foreign flag. New bilateral agreements should be developed and concluded with those countries with which it is possible to carry out direct passenger and freight transport by inland waterways. They should reflect the conditions and procedure for mutual access of ships flying the flag of the states - parties by agreement to inland waterways and river ports, the procedure for issuing permits and the commercial rights of shipping companies.

The system of bilateral intergovernmental agreements on railway communication, formed during the years of the USSR, will be improved. After determining the feasibility of the agreement on railway communication will be renegotiated with individual states with which there is the most intensive passenger and freight exchange.

The solution of controversial problems and current issues of transport policy, the creation of conditions for cooperation between economic transport entities of various forms of ownership should be facilitated by the improvement of the work of intergovernmental commissions on trade, economic, scientific and technical cooperation between Russia and foreign states.

The most important task of the Transport Strategy is also to promote the implementation of joint transport projects concluded on a bilateral basis, both with the participation of the state and organizations independently.

The development of comprehensive and mutually beneficial cooperation in the field of transport with the European Union, which is of great importance for Russian and European business, mutual trade, investment and tourism, will continue.

Effective cooperation between Russia and the European Union will make it possible to resolve a whole range of issues arising in Russia's relations with individual member states of the European Union, as well as to find mutually beneficial forms of interaction between the parties' transport operators and their access to the Russian and single European markets.

The objectives of the Transport Strategy in terms of improving the safety of the transport system are:

- ensuring the safety of traffic, flights and navigation;

- ensuring the activities of specialized emergency rescue services in cooperation with the Ministry of the Russian Federation for Civil Defense, Emergency Situations and Elimination of Consequences of Natural Disasters at a level that meets international and national requirements;

- ensuring transport security of transport infrastructure facilities and vehicles from acts of unlawful interference;

- ensuring the mobilization readiness of the transport complex;

- ensuring the safety of transportation of goods requiring special conditions;

- ensuring professional access to transport activities by licensing or declaring (notifying);

- development of means and systems of supervision in the field of transport;

- ensuring the needs of the transport complex in specialists with a level of professional training that meets the requirements of the safety and stability of the transport system.

Implementation of the state transport policy and improvement of its efficiency in the field of ensuring transport security until 2035 will be carried out on the basis of the Federal Law "On Transport Security" and involves the implementation of a system of legal, economic, organizational and other measures in the field of the transport complex that correspond to threats on all modes of transport committing acts of

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

unlawful interference, to improve the state of protection of transport infrastructure facilities and vehicles from illegal actions, including terrorist activities, including:

- accreditation of specialized organizations in the field of transport security;
- approval of the results of the vulnerability assessment of transport facilities;
- carrying out categorization of objects of transport infrastructure and vehicles;
- maintaining a register of categorized objects;
- approval of transport security plans.

The development of the Russian transport system should be focused on ensuring maximum safety, full and proactive consideration of international requirements in the field of transportation safety using formalized criteria and assessments adopted or developed in international practice.

The development of the transport system should be linked to ensuring the security and defense capability of the country.

The tasks of a unified state policy and an integrated approach to the development of the transport system, taking into account the requirements for ensuring the military security of the Russian Federation, are:

ensuring that the level of readiness of the transport system meets the needs of the country, the Armed Forces of the Russian Federation and other troops;

restoration and preparation of dual-use facilities, mainly by coordinating the activities of federal and regional executive authorities, optimizing planning and management;

creation of a balanced transport system of the Russian Federation, taking into account its advanced development, including in terms of dual-use facilities, to meet the needs of the Russian Federation in peacetime and wartime, solving mobilization and special tasks;

preparation of vehicles for use to ensure the military security of Russia;

carrying out measures to maintain the structure of the public railway rolling stock fleet, which ensures the possibility of carrying out mass military transportation in full and on time;

implementation of the Fundamentals of the Policy of the Russian Federation in the field of aviation and maritime activities approved by the President of the Russian Federation, the Military Doctrine and the Plan for the Construction of the Armed Forces of the Russian Federation, the National Security Concept of the Russian Federation;

ensuring information security in transport during the performance of military and special transportation and maintaining the existing procedure for the placement of management bodies for these transportations;

implementation of the provisions of the Federal Law "On Defense", other federal laws and other regulatory legal acts of the Russian Federation that regulate issues of defense and security of the state and determine the procedure for operational equipment of the territory of the Russian Federation for defense purposes;

development of a coordinated system of measures by the concerned state authorities of the federal, regional and local levels, including the provision of mobilization training, improvement of the regulatory framework, etc.;

organization of the necessary training of transport workers, federal and regional executive authorities in the field of transport.

Due to the fact that most of the fleet of vehicles is privately owned, it is necessary to create conditions for the effective participation of organizations - owners of vehicles in solving mobilization tasks. The use of transport in order to solve the problems of ensuring the country's defense should not lead to a decrease in its competitiveness, especially in the market of foreign trade transportation and export of transport services.

To reduce the accident rate and the risk of possible accidents in transport, it is necessary to:

tighten control over compliance with the regulatory requirements for the operation of vehicles, transport infrastructure and make it a mandatory condition to take these requirements into account when certifying and licensing (or declaring) activities in the transport market;

in order to reduce the technogenic component of accidents and disasters, accelerate the write-off of physically obsolete and obsolete technical equipment that can no longer provide the necessary operational reliability;

improve organizational, technological and executive discipline in the implementation of freight and passenger transport activities;

increase the anti-terrorist protection of transport infrastructure facilities and vehicles by equipping them with modern video surveillance systems, other systems for controlling passengers and unauthorized entry of a person and strengthening the administrative regime approach to organizing anti-terrorist activities with the participation of law enforcement agencies and private security structures;

to ensure in difficult weather conditions a guaranteed high-precision location of vehicles that have crashed using space systems equipped with GLONASS / GPS satellite navigation equipment, and on this basis to form regional specialized emergency rescue services in cooperation with the Ministry of the Russian Federation for Civil Defense and Emergencies and elimination of consequences of natural disasters;

increase the mobilization readiness of the transport complex by creating the necessary reserves

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

and replenishing vehicle fleets, which will help strengthen the country's defense capability in special conditions;

it is necessary, with the participation of the Ministry of the Russian Federation for Civil Defense, Emergencies and Disaster Relief, to develop more advanced programs for timely warning of natural disasters affecting transport safety in order to reduce the impact of natural and climatic threats;

strengthen information monitoring during the transportation of dangerous and bulky goods, as well as in the event of a threat in this case in order to prevent them; to systematize cases of incidents with dangerous goods and crashes during the transportation of oversized cargo by transport;

to ensure that the delivered new vehicles, carrying out international export-import transportation of goods and passengers, comply with international standards in the field of transport security. Failure to comply with these requirements limits the admission of domestic carriers to foreign infrastructure facilities and entails corresponding costs for the owners of the rolling stock in the implementation of international trade.

To ensure safety in railway transport, it is necessary to solve the following main tasks:

improvement of the regulatory framework for ensuring the safety of railway infrastructure facilities;

development of a set of measures to implement the state policy in the field of railway transport and priority areas for ensuring the security of the Russian transport system;

development of a methodology for solving problems of ensuring safety at railway transport facilities;

determination of threats to the safety of railway infrastructure facilities;

carrying out categorization and vulnerability assessment of railway transport facilities.

The main tasks in the field of ensuring safety in the road sector are:

ensuring the safety of road transport and pedestrians;

ensuring the activities of specialized emergency rescue services at a level that meets international and national requirements;

ensuring anti-terrorist protection of road facilities;

ensuring the mobilization readiness of the road sector;

ensuring the safety of transportation of goods requiring special conditions;

development of means and systems of supervision in the sphere of road economy;

determination of threats to the safety of road facilities.

To solve these problems, measures are provided for the reconstruction of problem areas, primarily causing a decrease in traffic safety, including:

replacement of railway crossings with transport interchanges at different levels;

reconstruction of unsatisfactory artificial structures, the condition of which cannot be brought up to regulatory requirements by means of major repairs;

raising the level of equipping roads with modern types of barrier fences, building pedestrian crossings at different levels, noise protection structures, avalanche galleries, and other special protective and fortifying structures;

ensuring security at transport infrastructure facilities, means of road transport and road facilities;

improvement of lighting, marking and configuration of the road network;

step-by-step bringing the strength characteristics of federal highways and artificial structures on them in line with the requirements of national standards;

increasing the capacity of streets and main roads;

bringing the right of way of motor roads to the standard state;

creation of a meteorological support system on federal highways;

introduction of universal weight control on federal highways.

Ensuring safety in road transport includes solving the following tasks:

improvement of the system for ensuring road safety in the road transport of goods and passengers;

improvement of the system for ensuring road safety at the federal and regional levels, a clear division of functions and powers of executive authorities and the introduction of their joint responsibility in the field of road safety;

formation of stable sources of financing for road safety activities focused on achieving the final results;

formation of territorial transport systems that ensure the reduction of social risk for road users;

promotion of the use of vehicles that comply with current international safety requirements;

development of a driver training system;

development of requirements for the level of qualification of drivers of vehicles, taking into account the peculiarities of driving various types of vehicles, as well as taking into account the peculiarities of the implementation of specific types of transportation;

improvement of requirements for professional training, retraining, advanced training of managers and specialists in the operation of vehicles and traffic safety;

inclusion of requirements for the qualification of personnel (engineering and technical workers, managers, drivers, workers) in the mandatory conditions for admission to professional activities in the road transport market (primarily passenger transport by public road transport);

expansion of the scope of application of modern technical means of controlling the speed regimes of

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИИ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

vehicles, as well as the modes of work and rest of drivers (including tachographs), meaning their use not only in the international transport of goods and passengers (within the scope of the European Agreement concerning work of crews of vehicles engaged in international transportation), but also in the implementation of intercity, suburban and urban regular transportation of passengers by buses, intercity transportation of goods by vehicles with a total weight of more than 3.5 tons;

improvement of requirements for roads and transport facilities in the field of road safety;

development of systems for the timely detection of road accidents and the provision of emergency medical care to victims;

strengthening responsibility for violation of traffic rules;

improvement of procedures for regulating the admission of road carriers to the market in terms of compliance with road safety requirements;

improving the system of certification and retraining of officials and specialists of road transport organizations in the field of ensuring road safety;

development of acts necessary for the implementation of the provisions of the Federal Law "On Transport Security" and determining the procedure for interaction between organizations of road transport and state executive authorities in terms of ensuring safety in road transport;

determination of threats to the safety of the operation of road transport.

Flight safety is aimed at reducing the number of aviation accidents. The number of aviation accidents should be reduced by about 2.5 times in relation to the flight safety indicators in the Russian Federation in 2007, which will correspond to the level of flight safety in the USA and the countries of the European Union. In 2030, the level of flight safety should not exceed 0.008 air crashes per 100,000 hours of flight during regular flights.

Important elements of flight safety are:

improvement of the airworthiness maintenance system for aircraft in operation;

introduction of a new generation of onboard security systems based on computer technology with elements of artificial intelligence;

compliance by crews with the established rules for aircraft flights;

introduction of modern methods of protecting aircraft from external influences;

introduction of means to ensure the survival of passengers and crew members in case of aviation accidents, methods of preparing crews for actions in emergency situations;

improvement of the search and rescue system in air transport, on-board emergency equipment;

improvement of the system of medical support for flights, the introduction of an automated hardware and software complex for medical and

psychophysiological pre-flight and pre-shift control of aviation specialists;

a significant increase in the number of aviation personnel trained by educational institutions of the Ministry of Transport of the Russian Federation, improving the quality of their training based on equipping educational institutions and aviation training centers with a modern educational technical base;

introduction of new means of identification and control of the characteristics of operated aircraft based on flight information and ground control;

improvement of existing and development of new requirements for the technology of marking components in the process of their manufacture and the system for monitoring their turnover in operation.

To prevent the possibility of terrorist acts, it is envisaged:

formation in Russia of an aviation security system that meets the requirements of the International Civil Aviation Organization and is integrated into the global aviation security system;

determination of threats to the security of air transport facilities;

bringing the equipment of Russian airports with modern technical means to a level that ensures 100% inspection of luggage, cargo, mail and on-board stores; equipping Russian international airports with modern equipment for detecting explosives, including plastic ones;

introduction of new design and technical solutions in the field of aviation security on civil aircraft;

implementation at airports and air traffic management facilities of integrated security systems, protection systems against the effects of electronic interference and interference in the operation of computer systems;

development of the information support system for aviation security;

improving the interaction between federal and regional executive authorities in the field of aviation security, as well as air transport entities; providing professional training for aviation security personnel;

ensuring the safety of technological processes in the implementation of civil aviation activities.

The development of air navigation services for aircraft flights involves:

reforming the Unified Air Traffic Management System of the Russian Federation, departmental services of aeronautical information, meteorological support, implementing measures to organize a unified system of aerospace search and rescue, the creation and gradual development of the Air Navigation System of Russia in accordance with the Concept for the Creation and Development of the Air Navigation System of Russia, approved by the Government Russian Federation in 2018;



## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

development of the infrastructure of the Air Navigation System of Russia, which ensures the implementation in the Russian Federation of the Global Operational Concept for Air Traffic Management, adopted by the International Civil Aviation Organization for the period up to 2035 and based on the use of digital communication technologies, satellite navigation (CNS\ATM);

development of meteorological support for aircraft flights;

development of a unified system of aerospace search and rescue in the Russian Federation.

For the purposes of the sustainable development of air transport in Russia, it is envisaged to carry out a state policy aimed at providing the industry with qualified personnel in all areas of its production and management activities. It is necessary to preserve in the system of the Ministry of Transport of the Russian Federation educational institutions that train specialists for engineering, flight and dispatching personnel in certified and licensed specialties.

It is planned to update the fleet of aircraft in flight schools, supply new and modernize existing simulators, provide educational institutions with modern technical training aids, and implement international training standards.

A higher level of navigation safety and environmental protection is ensured by:

putting into operation the required number of ships of the supporting fleet (rescue, hydrographic, etc.), creating and maintaining at the proper level coastal means of ensuring the safety of navigation, search and rescue, communications;

creation and maintenance of ship surveillance systems at the proper level, participation in international cooperation in the field of global surveillance of ships;

strengthening the safety requirements for the structures of sea vessels, as well as during their operation;

improving the technical equipment for the implementation of the functions of state maritime supervision;

determination of threats to the safety of maritime transport facilities;

ensuring the protection of transport infrastructure facilities and vehicles from acts of unlawful interference by installing specialized equipment;

development of the material base for the training of qualified specialists in accordance with international standards.

Provided:

construction and reconstruction of ship traffic control systems, objects of the global disaster communication system and to ensure safety on the approaches to the seaports of the Russian Federation and on the routes of the Northern Sea Route, stations for receiving and processing information of the

International Search and Rescue System (Space search system for emergency ships - satellite tracking system for search and rescue);

construction of ships of the support fleet (icebreakers, rescue, environmental, hydrographic), shore-based facilities for basin emergency rescue departments, purchase of deep-sea mobile universal equipment. Until 2035, 90 support fleet units will be built. In 2025 - 2035, it is planned to continue the construction and modernization of ships of the service fleet (nuclear and diesel-electric icebreakers, rescue ships, including pontoons, environmental protection, hydrographic and other ships of the support fleet). The need for them is 340 units.

Replenishment of the supporting fleet is provided for by:

3 nuclear icebreakers of a new type with a capacity of 60 MW to ensure year-round operation of transport ships on the routes of the Northern Sea Route;

diesel-electric icebreakers for servicing fields on the shelves of the northern seas and solving other problems, including special-purpose icebreakers with a capacity of 20 - 30 MW for the protection of Russian Arctic waters with modifications for linear operation, auxiliary icebreakers with a capacity of 10 - 12 MW, port icebreakers-tugs power 6 - 7 MW;

multifunctional emergency rescue vessels with a capacity of 7 and 4 MW, new generation tugs, technical means of rescue from offshore oil and gas facilities in ice conditions.

Ensuring maritime security and anti-terrorist protection is achieved by:

formation in the Russian Federation of a system of maritime security that meets the international requirements of the International Maritime Organization and is integrated into the global system of maritime security;

full equipping of seaports and port facilities with modern innovative engineering and technical means of ensuring transport security (security);

introduction of new design and technical solutions in the field of maritime safety on ships used for maritime navigation;

development of the information support system for maritime security;

increasing the level of interaction on maritime security issues between the subjects of maritime transport activities and federal executive authorities and executive authorities of the constituent entities of the Russian Federation;

ensuring professional training of personnel directly related to maritime security.

The safety of navigation on inland waterways is ensured by:

creation of a vessel traffic control system on inland waterways based on innovative technologies;

determination of threats to the security of inland waterways and inland water transport;

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIIHQ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

increasing the level of safety of existing hydraulic structures, ensuring safety in the design, construction, overhaul, commissioning, reconstruction, restoration, conservation and liquidation of hydraulic structures;

regulation and coordination of the control and supervisory functions of state bodies to increase their efficiency in the face of a decrease in the degree of their interference in the activities of market entities;

protection of navigable hydraulic structures and navigational equipment, their protection against illegal encroachments, improvement of a set of anti-terrorist measures;

servicing fleet upgrades;

reconstruction and development of technological communication networks on inland waterways;

acquisition of software and hardware to equip navigation information laboratories.

In inland water transport, it is envisaged to develop insurance for passengers and crews of ships, third-party liability insurance for the transport of dangerous goods and pilotage of ships.

Safety in inland water transport is ensured by:

formation in the Russian Federation of a system for ensuring the safety of river transport infrastructure, including navigable hydraulic structures, and vehicles that meets the requirements of the Federal Law "On Transport Security";

equipping river ports, port facilities and navigable hydraulic structures with modern innovative engineering and technical means of ensuring transport security (security);

introduction of new design and technical solutions in the field of transport security on ships used for navigation on the inland waterways of the Russian Federation;

development of a system of information support for the safety of river transport infrastructure facilities and vehicles;

increasing the level of interaction in order to ensure the transport security of river transport infrastructure facilities and vehicles between the subjects of river transport activities and federal and regional executive authorities;

ensuring professional training of personnel directly related to ensuring the safety of river transport infrastructure facilities and vehicles.

### Conclusion

Financing of the Transport Strategy is envisaged to be carried out at the expense of the federal budget, the budgets of the constituent entities of the Russian Federation and extrabudgetary sources.

Funds from the federal budget are directed to the following purposes:

maintaining in working condition and reproduction of transport infrastructure facilities that are state-owned;

reconstruction and construction of transport infrastructure facilities of great socio-economic importance, as well as ensuring the safe functioning of the transport system;

transport security;

the implementation and stimulation of measures to maintain the mobilization readiness of means, transport facilities and means of communication, as well as measures carried out in the interests of national security;

ensuring the functions of state regulation and management in the transport industry;

conducting fundamental scientific research and implementing innovative scientific and technical projects of national and industry-wide importance.

Along with direct budget financing, state support can be provided in the following forms:

co-financing on contractual terms of investment projects with the registration of property rights of the Russian Federation, including financing the costs of managing investment projects and developing project documentation;

granting subsidies to the budgets of the constituent entities of the Russian Federation for the development of transport infrastructure;

providing subsidies to transport organizations engaged in socially significant transportation;

subsidizing interest rates on attracted loans to transport organizations to finance the costs associated with the purchase of vehicles;

providing, in accordance with the program of state external borrowings of the Russian Federation and the program of state internal borrowings of the Russian Federation and constituent entities of the Russian Federation, state guarantees for loans attracted by domestic organizations in order to implement the most significant investment projects in the field of transport;

allocation of funds to the authorized capital of legal entities;

development and implementation of economic mechanisms that stimulate the accelerated renewal of the fleet of vehicles, including assistance in the development of leasing modern vehicles, insurance and lending to carriers;

provision of benefits when establishing the conditions for the lease of state property, land allocation and land use.

The total volume of capital investments in the Transport Strategy is calculated in the prices of the corresponding years, taking into account the value added tax, and is estimated at 170.6 trillion. rubles.

The share of total capital investments for the implementation of the Transport Strategy in relation to the total gross domestic product of Russia will average 3.97 percent.

The share of total investments in fixed capital in Russia's total investments for 2020-2025 will be 12.7 percent and for the period 2025-2035 - 10 percent.

<b>Impact Factor:</b>	<b>ISRA (India) = 6.317</b>	<b>SIS (USA) = 0.912</b>	<b>ICV (Poland) = 6.630</b>
	<b>ISI (Dubai, UAE) = 1.582</b>	<b>PIHII (Russia) = 3.939</b>	<b>PIF (India) = 1.940</b>
	<b>GIF (Australia) = 0.564</b>	<b>ESJI (KZ) = 8.771</b>	<b>IBI (India) = 4.260</b>
	<b>JIF = 1.500</b>	<b>SJIF (Morocco) = 7.184</b>	<b>OAJI (USA) = 0.350</b>

## References:

- Jaspers, K. (1991). *The meaning and purpose of history*. Per. with him, (p.527). Moscow: Politizdat.
- Hegel, G. (1975). *Encyclopedia of Philosophical Sciences*. Per. with him. T.1. Science of logic. (p.452). Moscow: "Thought".
- Engels, F. (n.d.). *Preface to three editions of "Anti-Dühring"*. Per with him. K. Marx and F. Engels. Soch., Ed. Tue., V.20. (pp.5-15). Moscow: Gospolitizdat.
- Engels, F. (n.d.). *Dialectics of nature. Per with him. K. Marx and F. Engels*. Soch., Ed. Tue., T 20, (pp.339-626). Moscow: Gospolitizdat.
- (2009). *Britannica. Desktop illustrated encyclopedia*. Per. from English. M. AST. Astrel. T. II, 2325 p.
- (2004). *Encyclopedia of technology in 3 volumes*. Transl. from Spanish. T 1. Energy. Transport. Construction. (p.160). Moscow: Mir kn..
- (n.d.). *Big illustrated encyclopedia in 32 volumes, volume 27, 503 p.*
- (n.d.). *Modern explanatory dictionary of the Russian language*.
- Dal, V. I. (1982). *Explanatory dictionary of the living Great Russian language: T. 1 - 4.* Moscow: Rus. lang., 1981 - 1982. T 4, 1982, 683.
- Brockhaus, F.A., & Efron, I.A. (2006). *Illustrated Encyclopedic Dictionary in 24 volumes*. Vol. 20. (p.256). Moscow: Eksmo.
- Galbraith, J. (1969). *New industrial society. Per. from English*. (p.480). Moscow: "Progress".
- Engels, F. (1961). *Preparatory work for "Anti-Dühring"*. Per. with him. K. Marx and F. Engels. Soch., Ed. Tue. T 20, M. Gospolitizdat, M., pp.629 - 654.
- Mishin, Yu.D., & Postnikov, P.M. (n.d.). *History and methodology of transport science*. Uch. settlement M. 20 p.
- Popper, K. (1983). *Logic and growth of scientific knowledge*. Per from English. (p.606). Moscow: "Progress".
- Vereskun, V.D., Mishin, Yu.D., & Postnikov, P.M. (2018). Transport in the context of post-non-classical science. *Scientific Thought of the Caucasus*, No. 1, pp. 87-93.

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

## International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2023 Issue: 02 Volume: 118

Published: 10.02.2023 <http://T-Science.org>

Issue

Article



**Valentina Vladimirovna Pushkareva**  
Don State Technical University  
Master

**Olesya Anatolyevna Golubeva**  
Don State Technical University  
Candidate of Technical Sciences, Associate Professor  
Rostov-on-Don, Russia

**Artur Alexandrovich Blagorodov**  
Institute of Service and Entrepreneurship (branch) of DSTU  
Master

**Vladimir Timofeevich Prokhorov**  
Institute of Service and Entrepreneurship (branch) of DSTU  
Doctor of Technical Sciences, Professor  
Shakhty, Russia

**Galina Yurievna Volkova**  
LLC TSPOSN «Ortomoda»  
Doctor of Economics, Professor  
Moscow, Russia

## ON THE IMPACT OF TRANSPORT ON THE EFFECTIVE SOCIO-ECONOMIC DEVELOPMENT OF RUSSIAN REGIONS. MESSAGE 3

**Abstract:** *In the article, the authors proposed a systematic approach to the study of the concept of "movement". We developed a systematic description of this concept, fundamental for the worldview, and determined a place for transport in the traffic system. Transport is a universal tool for the implementation of movement as self-movement, which serves as a sufficient argument to classify transport as a system-forming concept of worldview. It is necessary not only to correct the existing characteristics of transport associated with the limitation of transport by the function of moving goods, but also to supplement it with the function of organizing reality, which well shows its status in the reproduction of the movement of matter. Transport is a universal tool for creating spatial and temporal conditions for development in the system of the movement of matter for the spatial and social development of the regions of the Russian Federation. In the article, the authors set out: the concept of transport science, the basics of technical knowledge, the development and types of transport, the uniqueness of transport as a sphere of economic activity, the problems of transport, the current state of the development of transport in Russia, the stages of development, as well as the methodology of technical and transport sciences; considered the classical technology of research in technical sciences, the methodology of experimental research in technical sciences, in transport, including its technical operation.*

**Key words:** *comfort, spatial development, social development, regions of the Arctic Zone of the Far East, regions of the European part and Siberia, movement, the basis for the movement of matter, universality, organization, worldview, «public or social» transport, conceptual thinking.*

**Language:** English

## Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	PIIHQ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

**Citation:** Pushkareva, V. V., Golubeva, O. A., Blagorodov, A. A., Prokhorov, V. T., & Volkova, G. Yu. (2023). On the impact of transport on the effective socio-economic development of Russian regions. *Message 3. ISJ Theoretical & Applied Science, 02 (118)*, 147-179.

**Soi:** <http://s-o-i.org/1.1/TAS-02-118-16> **Doi:**  <https://dx.doi.org/10.15863/TAS.2023.02.118.16>  
**Scopus ASCC:** 2000.

## Introduction

UDC 629.2(07)

There are two periods in the history of the quality problem. During the first, serious interest in what quality is was limited mainly to professional theory. Philosophers tried to define quality and its systemic position, however, in numerous philosophical disputes, the concept of "quality" was not one of the main problems. The actualization of the theory of quality turned out to be dependent on the degree of development of the system-forming philosophical concept of "being" in the context of basic concepts derived from it, i.e. those concepts that help to carry out the ascent from an extremely abstract statement of existence with the only distinguishing property to be, to exist, to a concrete understanding with an established content, thanks to answers to derivative questions, such as "What is everything from?", "Due to what does everything exist?", "Is there non-existence?", "In what systemic forms does being find its certainty?". Apparently, it was the last of these questions that brought philosophy onto the "path" of that interpretation of quality, which "hooked" not only those who "equipped" a fundamentally new type of worldview in human history. It is logical to assume that the problem of the substance of being, as the first step towards the theory of quality, was hardly of concern to anyone outside the limited community of philosophers. Everything indicates that it was interesting to those whose gaze was turned to the Cosmos, to the depths of its construction, and the vast majority of fellow countrymen - philosophers were in the grip of earthly problems. For the masses, diversity and the choice of goods were essentially not available. The plebeians demanded: "Bread and circuses!". A small aristocracy enjoyed the celebration of life in all its diversity. The problem of the quality of life was solved in accordance with the socio-cultural architecture of the society. This problem undoubtedly took place, but it could not mature into an actual one for society. The reason is simple - the lack of a sufficient level of mass demand for a quality product.

The problem of quality has acquired the scale of social relevance in the context of the transition to a mass production economy, the democratization of social relations, the development of education, the availability of education and other cultural values. In order for the question of quality to become one of the most important for a society, it was necessary for it to become relevant for the majority of those who form this society. Without the right to freedom and the purchasing power to make a choice, "quality" is not

able to be among the priorities of the mass consciousness. Elite requests for quality are developed in exclusive, non-traditional theories, the main goal of which is not to achieve the truth, but to satisfy the needs of customers.

Of course, the qualitative and quantitative characteristics of phenomena of natural and artificial origin were known long before these signs were actualized in social life and consciousness reflecting its development, but, in the light of our study, the existence of knowledge of quality de facto is not so significant. The subject of research is not the awareness of quality, but the development of an understanding of quality at different horizons of social history.

Development is the universal state of everything that exists, from the simplest material substrates to the highest forms of thinking. Both the quality and its quantitative expression were improved, the dependence of qualitative-quantitative changes was clarified. The emphasis shifted from quantity to quality. Having proved its evolutionary strength, humanity switched to the principle: "take not by number, but by skill." The struggle for survival was replaced by the desire for a quality standard of living in a wide range of interpretations. The struggle for a decent quality life began.

As history shows, having left savagery and barbarism, having laid the foundations of civilization, people have noticeably changed in the external forms of their manifestation, but civilization penetrates into the depths of human nature slowly and heavily. Biological history has laid in the nature of man an active principle, combined with a developed ability of thinking, noticeably superior to all other types of reflection. But this whole superstructure was formed over a fairly rigid animal frame, subordinated to the systemic goal of surviving the struggle. The conditions of the struggle were transformed, making adjustments to the means and forms, but the natural base itself turned out to be very inertial.

The transition from the natural egoism of the biological level to rationally active egoism, despite the well-known civilizational means of cultivation, did not meet the forecasts of either the romantics or the realists-optimists. Civilization was marked by non-civilizational forms of relations in the movement towards a quality life, which further actualized the interest in quality. To be on a par with the most important problems, quality had to appear in several functions: as an end, as a means, as a condition for the development of all social subjects at all levels of life.

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIIHQ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

History for historians is events and participants arranged in time sequence, a kind of chronology of significant facts of social and, in part, personal life. The philosopher and the non-historian specialist see their own interests in history. Philosophical and special interest in history is dictated by the need to understand the dialectics of the process in relation to human activity. The specialist seeks to discover in the past trends ways to solve his problem, sometimes far from private.

Intuitively, even at the dawn of civilization, the term history (historia) was interpreted in the sense of the study of the desired process, as opposed to a chronological description. Among the Ionians, the story, the story of the past, was called logos (logos). Only after a while, already in the works of the founders of philosophy, the logos acquired its modern meaning - a thought, an idea. Both Herodotus and Thucydides understood history as a comprehension of the course of events of the past, necessary for "instructions in the way of life" for those who live in the present. Having passed the test of time, historicism strengthened its positions and became the ideological basis of cultural memory. ON THE. Berdyaev argued: "From the first days of Creation... man is in the historical, and the historical is in man. Diving into the depths of time is diving into oneself."<sup>1</sup>

The past dissolves into time, leaving us, along with the memory of the past, thoughts about the present and responsibility for the future. New is always relative. Goethe was right when he said that everything clever is already known, you just need to think it over again.

History is a treasure trove of ideas, a goldmine for a thinking person, no matter what he does. A different attitude to history is the combined result of two causes: the first is the interpretation of time, the second is oneself in time. In the pre-Christian period of history, time was interpreted cyclically, representing it as the sum of repeating cycles closed on itself. With Christianity, the view of time has changed. Time appeared as an ascent to the infinite, divided into finite terrestrial and infinite extraterrestrial. The opposition between cyclical and non-cyclical consideration of time is characteristic of theological theory. We are not interested in it, however, as well as the properties of time in their abstract form.

After G. Hegel and K. Marx, what is relevant is not the idea of something in general, but immersion in a concrete-objective, or concrete-historical state of what turns out to be the object of research. In the case of time, it is important to analyze not only its universal properties, but to determine where and how it moves. What is important is that everything that exists in time can take place only if it corresponds to these objective characteristics of time. To exist in time means to have the properties of time. This position is universal both for the infinite variety of individual phenomena, and

for necessary L. Berdyaev N. The meaning of history. M. Thought. 1990, with 14 signs of being inherent in them, to which "quality" and "quantity" belong.

The standard understanding of the law of transition of quantitative changes into qualitative ones simplifies the view of their relationship. Both G. Hegel and F. Engels were far from the meaning that spread under the cover of the dialectical theory of development. Quantity does not translate directly into quality. A new quality, a qualitative state arises as a transition from the previous quality. In the changed quantitative conditions, the measure exhausts the reserve for the stability of functioning.

The measure is "qualitative quantity", it indicates the limits of quantity change without significant consequences for the given quality of the phenomenon. The output of quantitative indicators necessary for the achieved quality beyond the limits of the measure inevitably entails qualitative transformations. Simultaneously with the loss of the former quality, there is a process of birth from it, on its basis, of a new quality, commensurate with the changed quantity. The key position in the relationship between quality and quantity is the measure. On the same measure, quality specialists prefer not to talk seriously, reducing the measure to quantitative standards. As if the measure is some kind of passing state of the "quality-quantity" system. It is necessary to clearly understand the objective and functional role of the measure in the management of both quality and quantity.

"Measure" belongs to neither quality nor quantity. It expresses a systematic way of relations between quality and quantity, connects them. So, first: quantity and quality interact through the measure, the measure mediates their connection. What "benefit" will the practitioner gain from this conclusion? Mass production, including its "thrifty" variety, requires dimensional characteristics, otherwise the fairy tale story about a pot of porridge or a "seven-colored flower" has a chance of a real continuation. Chinese consumer goods are a classic example of the destruction of dialectical unity in the "quantity-quality" system.

The market, in its essence, is not capable of being a controller of a measure that regulates relations in the "quantity - quality" system. With the acquisition of wholesale forms of development, the dominance of finance capital and its natural generation - large-scale speculation and mediation, the modern market has opposed itself to production and has lost interest in the state of production. The market, using the specifics of mass production, has become saturated to the extent of its perversity and can afford to set the qualitative characteristics of goods.

The state behaves in the market like a teacher in a kindergarten. It puts the interests of the market above the interests of producers and the mass consumer. Under the "roof" of the general idea - the

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIHII (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

market pulls production along with it, the market and the state are merging. Quality-quantitative assessments are stamped into the zone of subjective arbitrariness.

As long as the theory of quality is not systematically built, the theory of quality management will be based on empirical principles that are not able to cover the subject of management as a whole, and are relatively significant in the limited specifics of production. In the absence of anything better, they are used, extrapolating local experience to other conditions, getting the effect due to the added adaptation measures, unfortunately, again, temporary and partial.

In the kaleidoscope of the history of changing methods of quality management, one can discern a certain logic. Life, on the other hand, requires not a "certain" logic, but logical certainty in the form of a holistic, systematically sound theory of quality as a methodological basis for building universal principles of quality management theory. The starting point here should be the idea of a systematic quality-quantity relationship within the framework of the measure of their coexistence.

Quantity helps to reveal the full quality. A quality thing can be created in one copy, but in order to reveal the qualitative potential of the manufacturer, a single copy (or work) is clearly not enough. The Faberge firm secured fame for itself with the first branded product, but it became a brand due to subsequent success in creating a collection.

An example of a systematic understanding of quality within the framework of a measure - dimensional certainty - is small series, the issue of collectible coins, medals. Quality is fixed within the boundaries of a quantitative value, which serves as a measure of its expression. The point here is not only to provide conditions of preference for the vip-consumer of products. The dependence of objective signs of quality on the number of copies produced is also significant. Mass production is objectively associated with a decrease in product quality. Measure is the frontier service of quality; going beyond the measured quantity is a crime against quality.

A mass domestic manufacturer is hardly interested in the theory of quality. She is irrelevant to him. If, nevertheless, by chance someone stumbles upon our reasoning, then, most likely, they will smile at their naivety. Trying to rebuild the Russian market with the help of theory, to give it a civilized look is classical quixoticism. First, it is necessary to organize the market space through political will, legislative initiatives and effective, rather than sham control over the legal order, to return the producer of goods to the market, removing an unmeasured number of intermediaries - speculators.

A real manufacturer is not interested in speculative transactions. For sustainable development, he needs his own consumer, who, by the

way, in turn, is not at all opposed to having his own specific and accessible producer within the framework of moral and legal relations.

A sense of national dignity is brought up by history and the existing reality. At school, you can learn from the best history textbook, but in addition to school history lessons, there is a current life that is more impressive than historical digressions. In the East they say: "how many times do not repeat halva, it will not be sweet in the mouth." Theory has always been considered the best practical guide, however, in the normalized circumstances of activity. Going into an illegal and semi-legal position, the manufacturer is alienated from quality and, naturally, from the theory of quality. Further, the quality is replaced by pseudo quality and the costs of advertising props grow.

Quality does involve serious costs, but it guarantees a stable market position. By working for quality, the manufacturer creates confidence in his own and national future. A properly built understanding of quality guarantees a perspective even in the conditions of the domestic semi-market.

We will try to formulate practically significant fundamental provisions in the order of introduction to the theory of quality:

- Quality is not reduced to the sum of properties important for the existence of a product; it is their peculiar combination, built on the basis of usually two features - more general and more specific. For example. Shoes - "clothing for the legs", a hat - "clothes for the head", muffler - "clothes for the nose and neck", etc. Therefore, the focus should be on them.

- Quality allows changes that do not lead to a loss of quality, but reduce or increase its consumer value; quality - a set of qualitative states that satisfy system-forming features to varying degrees. The "play" of quality allows you to maneuver in the process of creating a product with a given quality, depending on the specific capabilities of the manufacturer and consumer.

- Quality does not exist outside of quantity, they are dialectical opposites, their opposition is valid only within the limits of unity, from which it follows that, when creating quality, it is necessary to include quantitative expressions in qualitative characteristics both in relation to individual properties of the goods and the quantity of marketable products. A.K. Savrasov, finding himself in a difficult life situation, made several copies of his famous painting "The Rooks Have Arrived". As a rule, author's copies have a high level of craftsmanship and are well paid for. The artist was also paid. When P. Tretyakov was asked a question: would he buy copies of paintings by the artist A.K. Savrasova, what happened to the original? P. Tretyakov's answer turned out to be predictable in terms of categoricalness - no! Quality requires not only skill, but also inspiration. Inspiration with repetitions burns out.

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

- Quality and quantity are linked by a measure that is most often forgotten. Meanwhile, when defining quality, one must simultaneously think about its dimensionality, both from the standpoint of market conjuncture and from the point of view of the signs of quality themselves. "Quality" is concretized in the concept of "quality". "Quality" - a concept that reflects the model image of the product, "quality" - determines the quantitative limits of reality and reasonableness of quality (the physical and moral status of the product).

- Quality and the idea of quality are stable phenomena, but time changes them too. Initially, quality was identified with meaning. The criteria of quality were the usefulness and size of the subject, relations. With the development of consciousness and practical possibilities, the grounds for comparison and choice have developed. Quality is relatively separate from quantity. The differentiation of usefulness is being made, participation is being rethought as quantitative features. The evolution of the understanding of quality is directly conditioned by the embodiment of creative potential in activity. The discrepancy in the intensity of advancement of individual skill, the interests of those who are called upon to clear the way for talent and mass consciousness complicates the understanding of quality and the process of quality management. Of particular importance is the specificity of the interpretation of quality, in particular, such a basic characteristic as objectivity. The social theory of being is built on a natural-historical basis - the canvas was laid by nature, and the historical drawing was created by man. In the natural environment, all signs, including such synthetic ones as quality, are products of spontaneous movement. In society, every phenomenon passes through activity, includes in itself and in its quality the mental and physical labor of a person. Determining the quality of phenomena created by human activity is impossible without sociocultural concretization. As a result, two questions arise: as quality - products of spontaneous movement. In society, every phenomenon passes through activity, includes in itself and in its quality the mental and physical labor of a person. Determining the quality of phenomena created by human activity is impossible without sociocultural concretization. As a result, two questions arise:

- in what status and to what extent does consciousness enter into what is traditionally called the quality of things?

The answers to both questions must be sought in the philosophical theory of alienation. The theory of alienation has no direct relation to the theory of

quality. It contains the keys to the methodology of constructing the theory of quality.

From the above reasoning, it is clear that the authors are not idealists, rather they are balancing on the verge of pessimism and optimism. They are critical of the modern pragmatic approach of market liberals to scientific and philosophically sound theory. A lighter version of the theory, when a fragment torn from the general theory is turned into the theory itself and adjusted to the design of a market distorted to please speculators, economists-theorists and suppliers of a high-quality surrogate to domestic shelves suits. How long the Russian economy will retain this configuration, we (and not only us) are not given to know, however, the world experience of economic development at various stages of economic relations shows that transition periods pass and over time economic life returns to normal.

The trajectory of the process of alienation of human creativity into something that exists outside of it must necessarily preserve and activate the ability to create. Unlike the being of nature, the being of man is not substantial. It is not self-sufficient and can take place solely due to the interchange initially with nature, and subsequently with society, through which human relations with each other and interaction with nature are built. The tool that ensures the existence of a person is labor, the highest quality of labor is manifested in activity.

The quality of activity, on the one hand, is an indicator of the quality of a person's life (it should be so!), On the other hand, high-quality activity is built into the quality of what he transforms. The quality of the "first" (natural) nature is formed by itself as a set of objectively related natural features, spontaneously. The quality of the "second" (reconstructed, adapted by man to suit his interests) nature is synthetic. It seems to be a double helix formed by the natural features of natural material (perhaps in people's relations, knowledge expressed indirectly) and the qualitative characteristics of human activity - knowledge, emotions, will, value orientation, skill. As a result, the quality of the product, as opposed to the product itself, embodies the quality of the individual.

The personality is alienated in quality, and therefore, in principle, alienation is natural and does not oppress the personality. The negative consequence of alienation is caused by the disproportionate compensation for the lost energy of activity. Having discovered the poor quality of the goods, hidden production defects, fraudulent actions of the seller, a normal buyer is upset, first of all, because of his own poor-quality solution. Other losses of the transaction are most often compensated. There is a feeling of imperfection of one's own taste and knowledge.

The quality of everything that is created by activity includes the properties of activity, both practical and spiritual in an objectified (objective or functional) expression. This leads to the conclusion



## Impact Factor:

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	PIHIQ (Russia)	= 3.939	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.771	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

about the need to form and direct the development of the ability of mass consciousness to qualitatively evaluate goods: certain experience in the Soviet era was and showed its effectiveness: "circles", "schools", "universities", including those initiated by television and radio. The place of systematic education of the mass consumer, professional assistance in the development of a culture of high-quality selectivity, today on the air is clogged with aggressive advertising, the quality of which is not controlled or control is not commensurate with the size of the deception. Who should be the main educator? The producer and only he, because only he, in full measure, according to the logic of the formation of understanding, should know what is quality. Taking on the production of goods without understanding the specific quality of this product means a professional failure in the market. The release of a product with fake quality is prosecuted by law, however, formally and ex post facto. Suppliers of pseudo-quality goods hope for the latter.

For the sake of objectivity, let's say: the true creators of quality products will be outcasts in our market as long as the guardians of order are confident in their own impunity for corrupt activities. However, it is necessary to move forward. The story is ugly, but still moves towards order.

Accession to the WTO did not add quality products to us and did not lower prices for quality goods. The real prospect is connected with the organization of a single economic space within the Customs Union. There is a cross control over quality, the influence of national corrupt forces on the market is weakened. As for the possibility of the growth of interethnic criminal opposition, there is a danger, but different conditions for the organization of crime and intercriminal competition should delay the degradation of the market - the main reason for high-quality national goods, and the market itself, whatever it is, will expand, procedures will be simplified. access to it.

Let's be honest - the problem of quality theoretically remains developed one-sidedly, which is not very noticeable, because there is no normal organization of production and marketing of high-quality commercial products. Current practice is satisfied with this degree of certainty in the theory of quality. The theory of quality management is simplified to the concept of control over the conditions of quality production. While there is no systematic understanding of what is the quality of a product? The market drives production. The market is ruled by speculators - intermediaries. The state strives to minimize its economic function before collecting taxes. There is no real activity aimed at giving the market a civilized form of "purchase and sale" on the principles of real freedom of competition. For signs that are essential for quality, supervision is limited to the point of being practically useless. The market

dictates order to local and regional governments. The store manager ran the defense department. Few people are interested in the culture of the producer and consumer, not up to them. But the external order begins with the internal order, with the awareness of the "political moment" due to the economic situation.

Historically, the understanding of the quality and specificity of its reality, presented in the product, reflect the economic and cultural development of society. Quality in the days of workshop production was determined by the conservatism of manufacturing techniques, but even at that time, the municipal authorities strictly checked the quality of products, as well as the ability of the candidate for the manufacturer, there was an official position approved by the authorities of the city or country. Agricultural products were controlled by the consumers themselves.

The Industrial Revolution simplified the production process and created the conditions for mass production. Adequate quality control measures were required. As the social architectonics leveled out and the range of goods became more accessible, ideas about quality changed in the direction of its quality - quality components. At the same time, the possibility of quality falsification was formed. Further, both de facto and de jure, there was only a step to replace the brand qualities. Going beyond the limits of measure opens the way for legal violations and a moral crisis, up to lawlessness.

Were the trends in the interpretation of quality and attitudes towards quality that developed in the economy of mass production inevitable? No, they were generated by the new nature of production, reflected this nature and, to a certain extent, were an objective reflection, but, in addition to the object reflected by consciousness, there is an angle of reflection, due to the position of the consciousness of the reflecting subject, his interests as a participant in the processes taking place in objective reality.

Objective reality itself, by definition, resides outside and independent of consciousness. Its reflection is subjectivized, which, in general, looks in accordance with the theory of reflection. However, it allows, in private, and subjective distortion - involuntary - due to misunderstanding, and conscious in order to obtain a temporary gain. Competition is always a struggle, unfortunately, the struggle is not always conducted according to the rules.

Quality has been and remains the subject of manipulation in the interests of those who control the market. The consensus about the quality of the creator, producer, seller and consumer is the sweetest fairy tale. Consent is achievable between creator, consumer and producer. This "trinity" embodies the subjective mechanism for resolving the problem of alienation. The creator - the creator of the product finds satisfaction in production and consumption. He realizes in them his human power. The manufacturer

## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

is interested in stable relations with the creator and the consumer. The consumer is satisfied with the quality and proportionality of the price. "Shares" and "sale" do not confuse him or deceive him.

The seller stands on the way to consensus, the subject of relations, which, in essence, has nothing to do with the quality of the goods, but it is he who is the key figure in the market economy. We get everything we need from him. He is a monopolist and, as such, dictates the terms of relations through price interest and profit margins. In twenty years, not a single branded light industry enterprise has appeared in Novosibirsk, on the contrary, a lot of trade brands have appeared. Trade rows are multiplying, and consumers are assured that the production of goods is unprofitable. The culture of the organization of trade is replaced by the concept of "sales quality". The culture of trade is measured by the assortment, price and physical availability of goods, high-quality advisory support, the absence of queues, compliance with sanitary and hygienic standards, the appearance and behavior of staff, after-sales service. The "quality of trade" is determined by the proportionality of the price and quality of the goods, the conformity of the goods sold with its certificate, and the demonstration of the goods. The seller's profit should not exceed the producer's profit. Both should not wait for an increase in consumer activity only by increasing consumer wages, but create the most favored nation regime for the buyer (without colluding with another predator of the market - banks).

Only in Russia, and only liberals - marketers at every opportunity remember how bad it was for the people before the onset of true democracy - they were starving, they were ragamuffins, they lived no one knows where and how. Monitoring the quality of life - through the qualitative possibilities of consumption - is expedient within the framework of the existing time. There is only one criterion - the consumer basket is growing and due to what it is increasing?

The rate of inflation is a necessary but not sufficient indicator of the state of the quality of life. The government has taken inflation reduction as its main benchmark. The indicator is actually socially - economically significant, indicates the culture of the market and indirectly about the state of production. The disadvantage of this indicator is the lack of quality in it. The quality of life is determined through the amount of products consumed in monetary terms. The qualitative composition remains constant and one can only speculate about quality, since quality erodes quality. The quality of shoes, clothes, cereals, fish, vegetables, fruits within the common name varies quite significantly. The reserve of quality manipulation is significant. The main thing is still in understanding the quality, not the name, but the systemic characteristic of the product, reflecting the assortment,

Quality is a system of properties that are essential for a product - this is commonplace and well-known, which is actively used. Replacing properties or their consistency in a quality product. Essential properties are those that are not just inherent in the product, they determine its functionality. Such properties, as a rule, are revealed in the process of "work" of the product for its intended purpose, they are hidden from the unprofessional view of the consumer. In its "pure" form, the market is an intermediary and should not be interested in the quality of products. The task of the market in the theory of the organization of commodity production is the organization of exchange between the producer and the consumer. The development of the market stimulates the increase in production in the interests of the consumer within the infrastructural status of the market.

The monopolization of production led to the accumulation of financial capital, the latter's autonomy, and market control. As a result, the market has turned from an intermediary into a key subject, trying to replace the indicator function - to show the demand for goods - with the role of the organizer of economic activity as a whole, which distorts the economic system.

The economy of commodity production was created by the production of a product and the need for a mass product. The system-forming factor here is the production of goods as a product necessary for consumption by others, that is, the process of alienation of consumption. With natural production, the quality of the product was hardly an actual problem. Quality "dissolved" in the conservatism of technology and technology, traditional assortment. The question of quality was raised by the consumer when he got the opportunity to compare at the fair. The market, which grew out of fair gatherings, gradually enriched the representative status with the advertising business, taking control of the relationship between the producer and the consumer. Management levers - financial policy, directions - the main ones - two: the impact on quantity and quality.

The quality of the product has become relevant in commodity production. It became clear that in the understanding of quality there are sensual and rational thinking (the latter in the form of calculation). The subjective factor is objectified and fetishized. The market is not capable of influencing the objective properties of a product directly (using its own mechanisms), but it can very well influence the objectivization of subjective ideas. So the manipulation of quality was first included in the functions of the market, then became an element of economic policy.

A sound and healthy economic policy is called upon to work on improving quality in two interrelated directions: technical and technological, completed by a rigid legal block of support, and socio-cultural - to

## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>PIHIQ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

provide comprehensive support for the formation of conditions for the subjective perception of quality, to block the negative effect of advertising influence, which has long and thoroughly become an attribute of market speculation on the importance of quality for the buyer. The presence of choice and solvent opportunities do not serve as a basis for the indisputability of a quality acquisition.

In the existing market, price and quality are divorced even at auctions, famous for the thoroughness of the organizational culture. The buyer is turned into an expert and this grimace of the market is not so bad as illogical. The market forces the consumer to develop as a person. From a layman with a wallet, in order not to turn out to be suckers, we unwittingly try to learn more about the subject of interest, we improve our "purchasing qualifications". The term is not new, it is used by journalists, but for them it is a passing, verbal number, and for us it is no longer a new combination of common words, but the most important concept, without which the modern theory of quality does not have a systemic holistic view.

"Purchasing qualification" includes, along with certain knowledge that helps to determine the location of the store, the price range for the goods, requires basic information about the manufacturer, quality features of the product, the manufacturer's market reputation, company traditions, scale of activity. Today, in the consumer market, the naive buyer runs the risk, beyond any reasonable measure, of being the victim not only of deceit, but also of his own carelessness, and therefore without any right to compensation.

The buyer in Russia is formally protected. In real life, one has to be guided by the famous rule "saving the drowning ("buying") is the work of the drowning themselves, read "buying". Raising the "purchasing qualifications", if there is a desire, is a mutually beneficial matter for the state, activating the cultural national heritage and the patriotic mood of the mass consumer. Although there is another way, tested under Mao in China - "the worse, the better."

Imported consumer goods - not Chinese - in the 1980s-90s. we had a bang! The assortment, packaging, external features of the product were impressive. And what is the result? After 10 years, the manufacturer returns Soviet brands, naturally in the absence of effective control, not of Soviet quality.

We know how to make high-quality products and are quite able to regain "our" market. The question is not even the price, the problem is the loss of control over the consumer (and not only consumer, judging by failures in rocketry, aircraft operation, etc.) market. They explain to us: we need economic measures. True, however, it is a half-truth. If you need it, then take it. The government should have power that is not nominal. It's time to understand that economics has

always been politics, economics has always been political economy.

Economic movement is self-movement, but it does not take place in a vacuum. The economy is the basis of social movement. Society provides the conditions for economic movement, and the state has the right to actively engage in the mechanisms of economic self-propulsion, directing the development of the economy in the interests of society.

An amazing thing. When it comes to the future of technological progress, futurologists of various stripes moan that the autonomization of the movement of technology will lead to the dominance of robots over humans, and it is better not to interfere in the development of the economy. For whom is it better? There is only one conclusion: do not disturb the self-movement of the economy in the interests of those who have privatized the economy and in whose service are the "border guards" who prohibit controlling economic processes through politics.

None of the convertible currencies is backed by a high-quality commodity equivalent, and the "free" movement of the currency continues under the guise of politics. Financial self-movement creates favorable opportunities for chaos in the consumer market. The state sluggishly protects the legitimate interests of the national producer, even when the product is a product of interethnic integration. There is no political aggressiveness, politics is dragged along in the wagon train of the economy instead of being ahead of its development on the basis of objective socio-economic trends. I would like to believe the explanations of politicians regarding the duration of entry into the WTO. It's good that they bargained, creating a legal "airbag" for the domestic manufacturer of consumer goods. The problem is: how will they take advantage of the concessions from the WTO?

The time for political action—not decisions — is most propitious. The dope of the nineties and zero seemed to be on the decline. Awareness of the qualitative advantages of many Soviet products of the light and food industries is returning. There is a revival in consumer cooperation, which can stimulate the production of agricultural products in the countryside. There is a growing distrust of consumer imports, including due to their mass production in China. Migration flows are stabilizing.

A harsh assessment of the socio-economic situation and a direct indication of the government's responsibility for non-fulfillment of presidential instructions in 2012. in the Message of V.V. Putin are associated with the determination to "tighten the screws" to keep the movement on track. A clear activation in interethnic economic relations within the Customs Union, a reset of strategic relations with an emphasis on China, India, Iran, and Latin America. The real possibility of full-scale cooperation with Egypt, Syria and Iran, for example, the key states of the Middle East and the African North, all this is a

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

unique international sphere for restoring balance in the domestic market of consumer goods.

### Main part

As part of the implementation of the Transport Strategy, a possible change in macroeconomic indicators of the socio-economic development of the Russian Federation should be envisaged.

In order to form clear priorities for the construction of railway lines and eliminate inefficient decisions in the preparation of specific investment programs and projects, it is necessary to ensure financial, economic and social analysis.

A specific mechanism for attracting funds from the federal budget and the budgets of the constituent entities of the Russian Federation should be implemented in accordance with the legislation of the Russian Federation.

Based on the results of monitoring the pace of socio-economic development of the country, individual regions, industries and industrial zones, it is envisaged to amend the list of new railways of the Russian Federation with the provision of their financing in accordance with the indicated principles.

In the field of road management, a phased introduction of the principle of paying for the use of roads is envisaged, including:

the introduction of a toll on federal roads for trucks with a total mass of more than 12 tons in order to compensate for the damage caused to roads by heavy vehicles, taking into account the harmonization of requirements for the characteristics of heavy vehicles with similar requirements in the states of the European Union;

improvement of mechanisms for compensating for damage caused to roads by vehicles during the transportation of heavy and dangerous goods;

setting tariffs and fees, as well as fees for connecting road service facilities to highways.

The collected funds are expected to be directed to the maintenance and development of road infrastructure.

Large-scale attraction of extra-budgetary investments in the road sector is envisaged through:

development of the mechanism of concessions in the construction of toll roads;

issuance of bonded loans for the purpose of construction and reconstruction of roads, as well as the use of the mechanism of public-private partnership;

development of mechanisms for attracting the resources of organizations interested in the development of territories adjacent to highways for the construction of roads;

income from the commercial use of roadside lanes and the right of way of motor roads by specialized state structures.

The main principles of the formation of state policy in the field of regulation of the development of road transport are:

development of a system of supervision in relation to road transport;

transition from the spontaneous functioning of the motor transport services market to regulation in accordance with social and economic interests, which should be reduced to ensuring a balanced admission to professional (including commercial) activities on a contractual application basis, creating equal conditions for competition in the transport services market, monitoring compliance with established requirements and rules, including within the framework of transferring part of the powers to self-regulatory organizations, taking measures to reduce the negative consequences of the functioning of the transport services market, including through the development of an insurance system, as well as to ensure anti-terrorist security.

The main mechanisms for implementing the Transport Strategy in the field of road transport are:

a mechanism for admission to the market of motor transport services (including quotas for the use of motor vehicles on the territory of the Russian Federation);

the mechanism of admission to the profession and other types of motor transport activities;

a mechanism that stimulates the modernization and renewal of the fleet of vehicles, as well as the improvement of its structure;

a mechanism for creating conditions for the development of efficient modern transport and logistics technologies and transportation systems, encouraging an increase in the capitalization of the road transport business, the development of terminal complexes and information support for cargo transportation;

a mechanism that stimulates the acceleration of decommissioning and recycling of old cars with an excess service life;

a mechanism for paying for the use of road infrastructure, which makes it possible to compensate for the damage associated with the implementation of road transport.

For the modernization and renewal of the fleet of vehicles for all sectors of the Russian economy, it is necessary:

development of a state policy aimed at creating a rational structure of the truck fleet;

improvement of the depreciation policy aimed at ensuring the formation of own sources of financing for the renewal of vehicles;

development of a mechanism for generating the amount of net profit necessary to ensure a given coefficient of renewal of vehicles;

development of proposals for the use of alternative types of energy sources for vehicles;

expanding the practice of acquiring vehicles through loans and leasing.

In addition, it is necessary to form mechanisms for the implementation by Russian car manufacturers

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIIHQ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

of the requirements of the Agreement on the introduction of global technical regulations for wheeled vehicles, items of equipment and parts that can be installed and (or) used on wheeled vehicles (Geneva, 1998), and Agreements on the adoption of uniform conditions for the period of technical inspections of wheeled vehicles and on the mutual recognition of such inspections (Vienna, 1997).

In 2025 - 2035, the main areas of state regulation in the field of air transport will be:

completion of institutional reforms, formation of a regulatory and legal framework for the functioning of air transport, harmonized with international rules;

the creation of a supporting transport infrastructure for air transport, as well as the implementation of a flexible customs policy in terms of the justified removal of protective duties on foreign-made aviation equipment and spare parts for it;

provision by the state of the availability of transport services for the population on the basis of organizing support for socially significant air transportation in local and main routes from the budgets of all levels;

launching a mechanism for self-development of the industry based on providing the prerequisites for achieving investment attractiveness for urgently needed capital-intensive structural transformations related to the aircraft fleet and airfield network.

The measures envisaged for implementation in these years are planned to be carried out within the framework of the federal target program "Development of the transport system of Russia (2025 - 2035)".

The state is actively involved in the structural transformation of civil aviation by subsidizing from the federal budget socially significant mainline passenger traffic and part of socially significant passenger traffic in local traffic, preventing cases of unfair competition and strengthening control over the activities of natural monopolies in the field of air transport, as well as by implementing:

subprogram "Civil Aviation" of the federal target program "Development of the transport system of Russia (2025 - 2035)", including stimulating the reconstruction and construction of important air transport infrastructure facilities, primarily facilities that ensure the safety of the operation of air transport, as well as the modernization and renewal of the fleet of transport funds;

the state program for ensuring the safety of flights of civil aviation aircraft;

federal target program "Modernization of the Unified Air Traffic Management System of the Russian Federation (2025 - 2035)";

federal target program "Improvement of the federal system of reconnaissance and control of the airspace of the Russian Federation (2025 - 2035)";

federal target program "Global navigation system".

In 2025 - 2035, state regulation measures will be aimed at ensuring the sustainable development of civil aviation, including:

completion of a radical renewal of the fleet of Russian airlines;

reconstruction of facilities and re-equipment of the basic airfield network;

introduction of new technologies of the transportation process;

creating favorable conditions for attracting non-state capital for the construction and operation of air transport facilities;

liberalization of the market and reduction of spheres of tariff and price regulation;

reduction in the number of ground infrastructure facilities that are in federal ownership by involving them in civil circulation;

ensuring funding for the maintenance and operation of state-owned facilities that ensure the safe operation of air transport;

maximum reduction of the negative impact of air transport on the environment.

Federal executive authorities in the field of transport will take part:

in determining priority aircraft sizes for the industry, as well as in the implementation of federal support for their development and production programs on a competitive basis;

in improving, on the basis of unified organizational and methodological principles, the system for monitoring the compliance of manufactured and operated aircraft and equipment with established requirements and in increasing the effectiveness of such control.

In the near future, the State Program for Ensuring the Safety of Civil Aviation Flights should be implemented, which, in accordance with the recommendations of the International Civil Aviation Organization on the introduction of a systematic approach to flight safety management, determines priority goals and activities in order to improve flight safety.

With state incentives for the technical re-equipment of the fleet of vehicles based on modern Russian technology, carriers should not experience any restrictions in acquiring foreign vehicles of those standard sizes that are not produced in Russia.

State regulation of the activities of maritime and inland water transport is aimed at protecting the interests of the state and society, provided that the economic independence of enterprises in the industry is maintained. In the process of regulation, government bodies solve the following tasks:

accelerating the economic development of maritime and inland water transport enterprises and increasing their competitiveness in the world market of transport services;

## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

raising the technical and organizational level of maritime and inland water transport based on the latest achievements of scientific and technological progress;

improvement of working conditions for the crew of sea and river vessels and employees of coastal enterprises of the industry;

increasing the level of safety of sea and river transport activities, including the safety of navigation and navigation and environmental protection;

ensuring legal protection of Russian sea and river transport in the field of international shipping.

Accelerating the economic development of enterprises in the industry and increasing their competitiveness is achieved through both direct investment and various indirect measures.

An example of direct investment is the participation of the state in the development and implementation of federal targeted programs.

Indirect measures include a wide range of measures aimed at creating port special economic zones, organizing the effective operation of the Russian International Register of Ships, pursuing a balanced tax, customs, and credit policy, as well as securing part of the cargo base of maritime transport for Russian carriers.

The legal framework as the basis of state regulation of transport activities should ensure effective interaction between transport enterprises, state protection of the rights of consumers of transport services, safety of the transport process and environmental protection.

Normative legal acts regulating the activities of modes of transport are developed taking into account their harmonization with international legal documents.

Legal aspects of regulation of transport activities are relevant at the level of regional and municipal government. The constituent entities of the Russian Federation must regulate the development of the means of communication under their jurisdiction.

The regulatory framework should meet the new business conditions, ensure the coordination of the interests of transport enterprises with public interests, legal consolidation of the rights and obligations of transport enterprises, as well as the status of public transport enterprises (public carriers).

This work should be carried out by amending the regulatory legal acts, as well as by developing new acts that provide for uniform approaches to the regulation of similar relations in the operation of various modes of transport.

The specifics of the transport industry should also be properly reflected in documents of a general economic nature.

Increasing the investment attractiveness of the transport industry requires the development of a regulatory framework that regulates the use of various forms of public-private partnership at the state, interstate and regional levels, which defines issues

related to the distribution of risks, the level of obligations of the public and private sectors, the duration of projects and the right ownership of the assets.

It is necessary to improve the legal framework governing the development of the transport system, taking into account the requirements for ensuring the military security of the Russian Federation, including the use, monitoring and development of the transport system of the Russian Federation, including dual-use facilities, mobilization training and military transport duties of transport enterprises, preparation and use in the interests of the country's defense of transport infrastructure facilities that are in forms of ownership other than federal, the creation of a new system for managing military and special transportation in railway transport, the introduction of changes in the procedure for the development and harmonization of standards, specifications and design estimates for dual-use facilities, reserving land for events, ensuring the operation of transport in emergency and other situations.

In order to ensure the safety of transport infrastructure facilities and vehicles, it is necessary to regulate the process of equipping or retrofitting them with modern engineering and technical means of ensuring transport security (security), including within the framework of technical regulation and transport security requirements.

Priority areas for improving legal regulation in railway transport should be aimed at implementing the target model of the rail transport services market.

The key direction for improving the state tariff regulation in the field of rail transportation is the creation of a differentiated system of state tariff regulation, adapted to various conditions for the functioning of the markets for rail transport services.

In addition, the state tariff policy in the field of rail transportation should be based on the principle of balancing the interests of natural monopoly entities and users of their services and ensure, on the one hand, reducing the negative impact of price increases (tariffs) on products (services) of natural monopolies on economic growth rates. (taking into account the target parameters of inflation), and on the other hand, the establishment of tariffs (prices) that ensure the efficient operation (rendering of services) of subjects of natural monopolies.

In general, the improvement of the state tariff policy should be carried out at the interdepartmental level, systematically and taking into account the ongoing macroeconomic policy, which is associated with the need to develop measures of state support for certain sectors of the economy and the infrastructure complex of railway transport.

One of the priority areas for improving legal regulation in the road sector is the adoption or reapproval by the Government of the Russian Federation of the following regulatory legal acts

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIHII (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

necessary for the state regulation of road activities in accordance with the Federal Law "On highways and road activities in the Russian Federation and on amendments into separate legislative acts of the Russian Federation":

- a list of public roads of federal significance;
- the procedure for the formation of the register of roads and the provision of information from the register;

- list of roads of defense significance;
- a number of regulatory legal acts in relation to roads of defense significance;

- norms of land acquisition for the placement of roads and (or) road service facilities;

- normative legal acts on the payment for connecting road service facilities to public roads of federal significance, on the procedure for establishing and using right-of-ways of federal roads, on the procedure for establishing and using roadside lanes on federal roads;

- the minimum requirements for the provision of public roads with road service facilities, as well as the requirements for the list of minimum necessary services provided at such road service facilities;

- the procedure for carrying out weight and dimensional control, including the procedure for organizing weight and dimensional control points;

- the procedure for establishing a permanent route of a vehicle carrying dangerous, heavy and (or) bulky goods;

- the procedure for establishing a temporary restriction or termination of the movement of vehicles on roads;

- the procedure for compensation for damage caused by vehicles carrying heavy loads, and the procedure for determining the amount of such damage;

- rules for the provision of services for organizing the passage of vehicles on toll roads of general use of federal significance;

- the method of calculation and the maximum amount of the fare for the vehicle;

- the procedure for classifying roads and assigning them to categories of roads (categories 1, 2, 3, 4, 5) depending on the transport performance and consumer properties of roads;

- the composition of the sections of the design documentation of highways and the requirements for their content;

- the procedure for assessing the technical condition of roads.

In addition, the priority areas for improving legal regulation in the road sector are:

- preparation of new documents of technical regulation - technical regulations, national standards, standards of organizations and acts of a recommendatory nature (industry road methodological documents). The unified system of technical regulation of the safety and quality of

materials, products, structures and services in the road sector that is being created should comply with the practice of countries with developed market economies in this area. It is planned to harmonize Russian standards in the field of road infrastructure with advanced international standards;

- development and prompt implementation of new methodological documents that consolidate at the federal level the massive use of Russian technologies for road works, effective road construction materials and modern road equipment;

- improvement of the regulatory and technical base of the road sector in the field of design and survey work, including the development of new norms and rules for the design of roads and artificial structures for the widespread use of progressive designs of road pavements and structures, new materials and technologies.

Priority areas for improving legal regulation in road transport include:

- amendments to the Federal Law "On Licensing Certain Types of Activities" in the part relating to the rules for the admission of carriers to the profession and the market of motor transport services;

- amendments to the Code of Administrative Offenses of the Russian Federation in terms of establishing and, if necessary, tightening administrative responsibility for violations in the field of road transport;

- development and adoption of technical regulations;

- approval at the appropriate level of documents regulating the carriage of goods by road, the carriage of passengers and luggage by road and urban ground electric transport;

- development of a regulatory framework in the field of vehicle recycling.

Priority areas for improving the legal regulation in air transport include:

- amendments to the Federal Law "On Technical Regulation", taking into account international requirements in the field of civil aviation;

- amendments to the Air Code of the Russian Federation in terms of the use of airspace by business and small aviation, as well as the improvement of airport activities;

- development of administrative regulations for the execution of state functions by the federal executive body for the mandatory certification of civil aviation facilities and for the procedures for issuing certificates to aviation personnel;

- harmonization of federal aviation regulations with international standards in terms of the production and operation of aircraft and simulators, the performance of flights and their support, as well as maintaining the airworthiness of aircraft;

- development of new rules or amendments to federal aviation rules that determine the regulation of air transport activities in relation to flight safety;

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

development of federal aviation rules for the certification of types of ground-based radio engineering (radar, radio navigation, radio communications) facilities and complexes, as well as individual subsystems (components) of automated and non-automated air traffic control systems designed to ensure aircraft flights;

improvement of the regulatory and legal framework in the field of flight safety, tougher liability for forgery and falsification of passports and forms of aviation products, certificates of aviation personnel whose activities are related to ensuring flight safety;

development of a normative act establishing the responsibility and procedure for interaction between authorized bodies and interested parties in the field of ensuring and maintaining the airworthiness of civil aviation equipment;

preparation of proposals for improving the airworthiness standards of aircraft and helicopters;

preparation of proposals for the extension until 2035 of the Target Comprehensive Program to maintain the airworthiness of civil aviation aircraft until 2010;

development of an interdepartmental regulatory document that determines the procedure for interaction between the operator and the developer of aviation equipment in terms of organizing authorized maintenance and repair centers;

determination and consolidation in regulatory legal acts of the mechanism for implementing the norms of the Air Code of the Russian Federation in terms of establishing the classification of airspace and the notification procedure for its use;

harmonization of the civil, tax and currency legislation of the Russian Federation in terms of air traffic management;

legislative establishment of criteria for airlines that can be classified as socially significant and transportation, which are carried out using state support funds, as well as fixing the basic mechanisms of the system of state support for socially significant air transportation;

improvement of legislative norms regulating the issues of registration of property rights to state property, as well as issues of land use by organizations of the air transport complex (including the improvement of legal regulation of the procedures for reserving and withdrawing land plots for federal needs);

development of forms of state regulation and control adequate to the purpose and conditions for the operation of general aviation (non-commercial).

Improving the regulatory framework that establishes the legal and organizational foundations for the operation of airports in the Russian Federation includes:

the procedure for establishing an economically acceptable level of rent for land plots that are state and

(or) municipal property and occupied by airfields (airports);

classification of airfields and airports;

the procedure for activities at aerodromes and airports of legal entities and individuals, providing for the possibility of transferring the property of airports (airfields) to the ownership of the constituent entities of the Russian Federation and vesting the constituent entities of the Russian Federation with the appropriate powers to maintain and develop it;

a system of standards that an aerodrome, its activities and facilities must comply with, as well as the procedure for the phased introduction of relevant standards, taking into account international experience;

a system of conducting activities for the provision of refueling services at the airport, focused on generating the main income of refueling complexes at airports by providing services to airlines, and not by reselling fuel;

development of mechanisms for the creation of alternative refueling complexes at major airports;

the procedure for the formation, approval, publication and publication of the aircraft schedule, as well as the mechanism for coordinating slots.

It is planned to improve the regulatory framework in terms of:

development and harmonization of the Russian system of regulatory environmental requirements with the international system;

improving methods for assessing the level of harmful effects of air transport on the population and the environment near airports and during en-route flights;

establishment of balanced environmental requirements governing the activities of air transport on the territory of the Russian Federation, development of a concept and program for their gradual tightening;

development and improvement of mechanisms for state regulation of improving the environmental safety of air transport, including those providing for the possibility of imposing restrictions on flights of aircraft that do not meet environmental requirements, and charging operators for excessive environmental impact of aircraft, establishing criteria and standards for introducing operational restrictions for flights of aircraft that do not meet environmental requirements, as well as determining the tariffs for additional airport charges for servicing such aircraft, the rules for their collection and further spending.

In order to improve the legislative support for the accelerated development of maritime and inland water transport and overcome negative trends, it is advisable to adopt regulatory legal acts that ensure:

assigning part of the cargo base of maritime transport to national carriers;

reducing the tax burden on the infrastructure and transport fleet of maritime and inland water transport;



## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

finalization and adoption of the federal law "On direct mixed (combined) transportation of goods";

amendments to the Law of the Russian Federation "On the organization of insurance business in the Russian Federation" in terms of possible risk insurance on the territory of the Russian Federation;

improving the safety of navigation and navigation;

protection of the environment from pollution from ships, including through procedures

state port control and administrative measures, including the tightening of requirements for safety and environmental protection from entry into the ports of the Russian Federation of old and environmentally unsafe foreign sea vessels.

Improving legal regulation in maritime transport includes:

development and adoption of regulatory legal acts in the field of transport use of the Northern Sea Route;

further harmonization of the provisions of Russian legislation with provisions of international maritime treaties and conventions in which the Russian Federation participates.

The strategic direction for the development of international transportation in inland waterway transport will be the integration of inland waterways of the Russian Federation into the system of international transport communications. The most important task in this area is to create a regulatory framework for organizing transportation along international transport corridors in the context of opening the country's inland waterways for ships flying foreign flags.

The main directions for improving the regulatory framework of industrial railway transport are:

creation of equal conditions for land use and taxation for organizations of railway transport of general and non-public use;

improvement of the system of state regulation of tariffs for works and services provided by organizations of industrial railway transport;

formation of a regulatory framework that defines the requirements in the field of technical and environmental safety and labor protection in industrial transport;

determination of the legal status of industrial transport entities and the procedure for the use of vehicles and equipment by them;

ensuring equal access of all interested persons to industrial transport services;

application of economic measures that stimulate investment in rolling stock, modernization and development of industrial transport infrastructure;

taking into account the peculiarities of the functioning of industrial transport in the development of tariffs for public railway transport organizations and technical regulations;

creation of conditions that prevent discrimination and violations of the antimonopoly legislation of the Russian Federation in relation to counterparties technologically connected with industrial transport railways;

stimulating the creation of voluntary certification systems for industrial transport;

improvement of the legal and economic foundations for the interaction of industrial transport organizations with serviced industries;

coordination of programs and projects for the technical modernization of public railway transport and industrial transport;

coordination of efforts of federal executive authorities and executive authorities of the constituent entities of the Russian Federation, representatives of business and public organizations in solving the problems of developing industrial railway transport;

restoration of the system of statistical monitoring of the work of industrial transport.

The main directions for improving the legislative and regulatory framework governing the functioning of the transport system of the Russian Federation in terms of the development of dual-use facilities are:

introduction of changes in the procedure for the development and implementation of federal target programs and interstate target programs in which the Russian Federation participates, and in federal target programs on issues of ensuring security, defense and other special functions assigned to the state;

amendments to the Federal Laws "On Defense" and "On Mobilization Training and Mobilization in the Russian Federation" related to the reduction in the share of the public sector in the field of transport;

development of proposals for the preparation of regulatory legal acts that allow in practice to implement the provisions of federal laws regulating the procedure for the operational equipment of the territory for defense purposes, except for the objects of the Unified Air Traffic Management System of the Russian Federation, the procedure for solving mobilization tasks and tasks of military transport duty, as well as the procedure for planning, designing, design, construction, operation and use of dual-use facilities;

development of standards and regulations for the operation and (or) use of dual-use facilities at all stages of the life cycle of facilities, in order to make decisions on the transfer of dual-use facilities that are under the jurisdiction of the Ministry of Transport of the Russian Federation or the Ministry of Defense of the Russian Federation for concession, long-term lease and (or) to the jurisdiction of other authorities, and (or) to privatization;

development of proposals for the Ministry of Economic Development of the Russian Federation to include measures related to the technical cover of the transport network of the Russian Federation in the

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIIHQ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

mobilization plan for the economy of the Russian Federation.

The main tasks in the field of creating an effective system for managing the implementation of the Transport Strategy are:

mutual coordination of the strategies of the constituent entities of the Russian Federation with the Transport Strategy;

linking the Transport Strategy with resource-providing industries;

development and adoption of an effective organizational model for the implementation of the Transport Strategy;

development of a system of control and supervision in transport;

development of a system of statistical accounting in transport;

creation of a monitoring system for the implementation of federal targeted programs and strategies;

creation and development of an information and analytical system for managing the implementation of the Transport Strategy;

creation of a strategic planning system based on the transport and economic balance;

creation and development of an automated information and analytical system for managing the transport complex.

An important tool for managing the implementation of the Transport Strategy is its linkage with the constituent entities of the Russian Federation. The main mechanism for implementing the Transport Strategy is federal target programs for the development of transport, regional programs for socio-economic development, as well as regional and municipal programs for the development of transport. Efficient management of the implementation of the Transport Strategy implies mutual coordination of these programs at the stage of their formation. The result should be a general strategic plan for the development of the transport system, which provides for the implementation of activities of various programs within the framework of the Transport Strategy.

At the same time, it is important to link the implementation of program activities with the territorial planning schemes of regions, regions and cities.

The formation of a system of interrelated measures also implies the division of interests and responsibilities between the Russian Federation, regions and municipalities, as well as between the state and organizations.

The transport industry forms a system order for a number of industries, which, on the one hand, receive an incentive for development, and on the other hand, become dependent on the rhythm of the implementation of the Transport Strategy. It is necessary to develop an agreed sequence of

development of all industries involved in the implementation of the Transport Strategy.

It is necessary to develop a program for the development of the Russian production of materials, machinery and equipment for the transport system of the Russian Federation, which provides for measures for state support of their manufacturers through preferential leasing of the necessary equipment and allows for the creation of the production of new materials with the involvement of state investments.

An effective organizational model for managing the implementation of the Transport Strategy should be developed and adopted, which will include a set of administrative and economic methods for motivating the achievement of goals. The creation of this model will require complex systematic research and development.

As part of the organizational model for managing the implementation of the Transport Strategy, appropriate regulatory and methodological support should be formed.

It is advisable to improve the management system for the implementation of the Transport Strategy in the following areas:

attracting extra-budgetary funds along with state funding to solve problems related to the implementation of the Transport Strategy;

the use of modern financial instruments and greater flexibility in the choice of schemes for the implementation of investment projects;

introduction of long-term contracts;

creation of a feedback mechanism to assess the degree of satisfaction of user needs;

optimization of resource allocation by types of work performed;

improvement of competitive procedures and implementation of a flexible pricing policy;

use of mechanisms to stimulate the development of transport industry enterprises and the development of new materials and technologies;

attracting highly qualified specialists in the field of finance, management and staff motivation;

increasing the efficiency and efficiency of managerial decision-making.

It is necessary to form an effective system of economic management of objects and property remaining in the ownership of the state, and to resolve issues related to the improvement of the territorial link in the management of transport and transport activities, the creation of territorial governing bodies and the delimitation of powers between them and the federal transport authorities with the gradual transfer of a significant part of the management functions to the regional level.

The innovative nature of the Transport Strategy determines the need to include special mechanisms and means of managing innovative development in the organizational model for managing its implementation. These mechanisms will ensure the

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

creation of technical, financial, regulatory and organizational conditions for innovative renewal of the industry in all areas of activity. One of such mechanisms is the creation of a network of innovation and implementation centers that would solve problems related to the collection and systematization of information on innovations in transport with their expertise, certification and implementation of the best innovative solutions in the development of the transport system.

The development of the system of control and supervision in transport involves, in addition to the implementation of the functions of the relevant service, the solution of functional tasks related to the new goals and objectives of the Transport Strategy. These include the tasks of supervision and control over the quality of transport services, the quality of the implementation of the measures of the Transport Strategy, the efficiency of the functioning of the transport system, the operation of paid services systems, the safety and environmental friendliness of the transport system.

Of great importance are the mechanisms for strengthening state control and supervision in the field of road transport, taking into account the delineation of powers of various control and supervisory bodies to ensure that all subjects of the market for road transport services comply with the requirements of regulatory legal acts.

The creation of a developed system of statistical accounting in transport is a prerequisite for effective management of the implementation of the Transport Strategy. The coordinated development of all elements of the transport infrastructure requires a comprehensive analysis of statistics and forecasting the needs of sectors of the economy and the population in transport services. To do this, first of all, it is necessary to create a system of statistical accounting, which should include monitoring the parameters that are essential for assessing the indicators and indicators of the Transport Strategy. The creation of such a system will allow organizing effective feedback. The statistical accounting system should ensure the development and monitoring of the transport and economic balance, as well as forecasting changes in the cargo base and traffic flows. Based on this, assessments can be made necessary for making operational decisions on various options for the development of the transport system. The means of forming such estimates should become the basis for creating a strategic planning system based on the transport and economic balance and mathematical modeling.

The planning system should provide for the creation of a system of long-term contracts aimed at achieving the normative indicators of the transport and operational state of transport infrastructure facilities, as well as a system for long-term planning of road activities.

In the road sector, during the period of the Transport Strategy, the development of the main network of federal highways should be completed and a gradual transition to the priority development of regional and local roads, which make up the dominant part of the public highway network of the Russian Federation, should be carried out. Thus, one of the most important organizational tasks is the extension of long-term program-targeted planning to the regional and local levels of government. The system of targets and indicators of the transport and operational condition of roads and the development of the road network should be introduced at all levels of road management. Measures to improve the efficiency of road planning include 4 main blocks:

development of a system of long-term program-targeted planning focused on achieving target indicators of the transport and operational state of roads and indicators of the development of the road network;

introduction of an innovative planning method into the system of program-targeted planning of road activities, based on the variant design of the life cycle of a highway;

introduction of a system of long-term contracts aimed at achieving standard indicators of the transport and operational condition of roads;

improvement of monitoring of the technical and transport-operational state of the road network, primarily at the regional and local levels of government.

Creation of a system for monitoring the implementation of federal targeted programs and projects involves the introduction of principles and modern means of project management. It is necessary to create a vertically integrated system of scheduling, accounting, control and management of a system of projects and programs that ensure the implementation of the Transport Strategy, the ability of the upper level of management to control the integral indicators of the implementation of projects and programs in real time with details of specific objects.

The next step in improving management efficiency is the creation and development of an information and analytical system for managing the implementation of the Transport Strategy. This system should ensure the construction of analytical information in various forms on indicators and indicators, as well as transport development programs, both in territorial and time sections, broken down by objects, nodes, directions and corridors with their characteristics.

Information-analytical support of all these management functions should be provided by a single automated information-analytical system for managing the transport complex. In the context of the increasing complexity of the tasks facing the industry, increasing the efficiency of management requires the use of modern information and telecommunication technologies, and increasing the manageability and

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIIHQ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

controllability of transport development requires a fundamental improvement in information support and raising the level of automation of management tasks, primarily at the level of transport complex management bodies. A unified automated information and analytical system for managing the transport complex should provide an increase in the completeness and quality of analysis of the effectiveness of the development of transport infrastructure,

The transport strategy is innovative in nature. In this regard, its implementation requires advanced intensive innovative development of the scientific, technical and technological base based on advanced world achievements and breakthrough technologies.

The scientific support of the Transport Strategy should be aimed at the implementation of its main goals and objectives and cover all key areas of development of the transport complex. In this regard, the scientific support of the Transport Strategy is presented in the form of 3 blocks of scientific subprograms corresponding to 3 blocks of subprograms for the implementation of the Transport Strategy, specified in subsection 5 of section VI, and includes:

a block of scientific support for subprograms aimed at achieving general economic, general social and general transport main strategic targets of the Transport Strategy, including subprograms that are complex in nature and aimed at the implementation of several goals and mechanisms;

a block of scientific support for subprograms aimed at putting into operation the main mechanisms for the implementation of the Transport Strategy, including the development of scientific support for the transport complex;

a block of scientific support for subprograms aimed at achieving the strategic targets of the Transport Strategy for individual modes of transport.

Scientific support for the implementation of the Transport Strategy provides for research and development work on the development of the transport complex, the implementation of experimental pilot projects that ensure the development of methods, mechanisms for regulatory, technical, technological and information support for scientific work, as well as the performance of work on scientific support implemented results.

Each scientific subprogram included in the corresponding block is either aimed at achieving a specific strategic goal or a specific mechanism for implementing the Transport Strategy, or is complex, aimed at implementing a group of goals and mechanisms.

When implementing the subprograms, scientific, methodological and information technology support should be provided for the implementation of the measures of the Transport Strategy in accordance with Decree of the Government of the Russian Federation

of December 25, 2007 N 931 "On some measures to ensure information interaction between state bodies and local governments in the provision of public services to citizens and organizations", by order of the Government of the Russian Federation dated May 6, 2008 N 632-r, which approved the Concept for the formation of e-government in the Russian Federation until 2010, other legislative and regulatory documents regulating interaction with public authorities and other departments, as well as with requirements for software, information, telecommunications, navigation and scientific and methodological support for the implementation of the Transport Strategy.

The block of scientific support for subprograms aimed at achieving the general economic, general social and general transport main strategic targets of the Transport Strategy, including subprograms that are complex in nature and aimed at the implementation of several goals and mechanisms, includes scientific developments for all 6 goals of the Transport Strategy .

Scientific support for the formation of a single transport space in Russia based on the balanced development of an efficient transport infrastructure will be carried out in the following areas:

development of technical, infrastructural and regulatory principles and models for integrating the country's transport communications based on the differentiated development of communication routes for all modes of transport and combining them into a single balanced system that provides the necessary capacity, volume and quality of transport services;

development of technological and regulatory principles and models for integrating the commodity transport technological infrastructure of all types of transport and cargo owners into a single system that provides the necessary volume and quality of transport services;

development of scientifically substantiated requirements for increasing the throughput capacity and speed parameters of the transport infrastructure to the level of the world's best indicators, as well as scientific justification for creating network bandwidth reserves in various directions;

development of projects for the integrated development of transport hubs, approaches to them and transport corridors in the main directions of transportation, the creation of an integrated system of logistics parks in the country as the basis for the formation of a modern commodity distribution network;

development of scientific foundations for building a unified transport system of the country in a market economy, including analysis and classification of technical, technological, economic and legal inconsistencies in interacting modes of transport, as well as losses at the junctions of interacting modes of transport and the reasons that cause them;

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

development of scientific foundations for the coordinated development of the infrastructure of interacting modes of transport, the construction of agreed technologies for interacting modes of transport (by types of interaction), as well as end-to-end management of cargo flows, in the passage and processing of which several modes of transport are involved;

development of a methodology for building a unified transport network;

development of principles and methodological approaches to harmonize state priorities and economic interests of private participants in order to build a harmonious transport process within a single transport system;

development of scientific foundations for the transport development of new territories (developing regions), including the creation of a theoretical model for building an effective transport network such as "arteries - veins - capillaries", adapting the theoretical model to the conditions of specific developing regions and developing methodological foundations for building an effective transport network in areas of industrial development;

carrying out simulation examination of investment projects for the development of transport infrastructure (especially projects for the development of large transport hubs), including the development of a methodology for conducting simulation examinations, the creation of simulation systems that allow modeling systems of various modes of transport, the development of detailed models of transport systems being designed, the development of dynamic simulation models of transport flows to assess the effectiveness of options for the development of transport infrastructure, a comprehensive study on the models of functioning of the designed transport facilities with the issuance of their real capacity, "bottlenecks" and performance indicators, as well as the development of proposals for adjusting projects based on simulation expertise;

development of navigation systems and systems for telemetric monitoring of traffic flows, traffic management systems and intelligent transport systems;

research, adaptation and development of innovative technologies for the construction and reconstruction of transport infrastructure;

development and creation of effective systems for monitoring the condition and managing the maintenance of transport infrastructure facilities;

development and creation of a unified information environment for the technological interaction of various types of transport and participants in the transport process.

Scientific support for the development of accessibility, volume and competitiveness of transport services according to quality criteria for cargo owners at the level of the needs of intensive and innovative

development of the country's economy will be carried out in the following areas:

development, monitoring, analysis and development of a model of the transport services market for the needs of all sectors of the economy, including the parameters of the quality of transport services, the structure of quality standards for various categories of goods and sectors of the economy, requirements for the regulatory framework of the transport services market, economic characteristics of the market model, means quality control and technological models for ensuring the quality of transport services;

research, development and experimental testing of highly efficient commodity transport technologies that provide quality criteria for the entire range of transport services and increase the productivity of the transport system;

development of methodological foundations, regulations and automated information systems for statistical accounting in transport, including the creation of a statistical data bank that ensures the development and monitoring of the transport and economic balance;

development, scientific support and monitoring of the transport and economic balance;

development of methods and mechanisms to motivate the structural modernization of transport systems in order to ensure the quality of transport services and create competitive transport companies;

development of methods and tools for monitoring and controlling the quality of transport services provided, as well as methods and mechanisms for improving the quality of transport services, including selective statistical monitoring of the fulfillment of contractual obligations on the quality of transport services, as well as monitoring the effectiveness of sanctions for violations of contractual obligations;

development of methods and means for monitoring the time of movement of goods in transit, as well as the time of processing consignments of goods in the terminal network, including at seaports and checkpoints across the state border of the Russian Federation;

development of evidence-based methods and tools for monitoring the level of development of logistics technologies, providing them with a production and technical base and developing a system of related services;

development and improvement of container transportation technologies, as well as a comparative analysis of various technologies for regional and interregional transportation, transportation for small and medium-sized businesses and scientific justification for choosing the best technologies;

development of a fundamentally new, adaptive technology for the operation of transport, corresponding to the high dynamics of the market

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИИ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

economy, including an analysis of the compliance of the existing technology with the new requirements of the market economy - ensuring dynamic economic ties with reliable and efficient transport links, the development of economic foundations, criteria and performance indicators for various modes of transport, corresponding new main task, the development of scientific foundations for flexible forms of organizing the work of transport (for railway transport - a variant plan for the formation, a flexible train schedule, variant technological processes), as well as the development of a methodology for delivering goods to seaports, border crossings and large enterprises, consistent with the regime their work;

development of scientifically based methods and means of monitoring the existing structure of the fleet of freight rolling stock and the provision of needs for rolling stock in order to achieve the specified criteria for the volume and quality of transport services;

development and experimental development of effective information and telecommunication technologies and navigation services to meet the needs of the market for competitive transport services.

Scientific support for the development of accessibility and quality of transport services for the population will be carried out in the following main areas:

development and scientific substantiation of minimum social transport standards to ensure the possibility of movement of all segments of the population throughout the country, development and scientific support of the program for the implementation of minimum social transport standards on a progressive scale, taking into account the gradual improvement of the conditions for transport services to the population, including in the development of urban and suburban passenger transport, as well as regions of the Far North and equivalent territories;

development and scientific substantiation of market regulation parameters in terms of admission to commercial activities in the field of passenger transportation;

research and scientific substantiation of the structure of the ratio of public and private passenger transport in the model of the transport services market, which provides minimum social transport standards, the development of mechanisms for ensuring the implementation of these standards on the basis of social investment state contracts at the federal, regional and municipal levels;

research and development in the field of development of production and equipment of fleets of passenger rolling stock, comparable in terms of technical and economic parameters with the world level, determining the need for fleets, the possibility of producing the corresponding rolling stock and

implementing minimum social transport standards on its basis;

research and development in the development of systems that provide high-speed and high-speed passenger transportation.

Scientific support for the development of Russia's integration into the global transport space and the implementation of the country's transit potential will be carried out in the following main areas:

development and scientific substantiation of regulatory and other state methods of regulation that provide assistance in increasing the share of participation of Russian transport organizations in the transportation of domestic export and import cargo, as well as cargo between third countries;

development and scientific substantiation of technological and regulatory models for integrating Russia into a single international transport space, developing participation in the system of international agreements and conventions in the field of transport, as well as expanding cooperation in international transport organizations and with Russia's trading partners;

development of methods and means for monitoring the technical and technological parameters of international transport corridors and the development and scientific justification for the development of these parameters that ensure the competitiveness of international transport corridors at the level of world analogues;

development and scientific substantiation of mechanisms for motivating the creation of national and international transport companies that are competitive with world companies, as well as expanding the participation of the Russian transport business in major international transport projects.

Scientific support for increasing the level of safety of the transport system will be carried out in the following main areas:

research and development in the field of development of means, technologies and systems for ensuring the safety of traffic, flights and navigation;

development of technological models for improving the efficiency of specialized emergency services in cooperation with the Ministry of the Russian Federation for Civil Defense, Emergencies and Disaster Relief in order to achieve a level that meets international and national requirements;

research and development in the field of ensuring transport security of transport infrastructure facilities and vehicles from acts of unlawful interference;

research and development in the field of increasing the mobilization readiness of the transport complex;

research and development in the field of improving the safety of transportation of goods requiring special conditions;

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

development and scientific substantiation of the parameters of the system for regulating professional admission to transport activities;

scientific and technical support for the development of means and systems of supervision in the field of transport;

development of methods and means of monitoring the level of professional training of specialists in the transport complex in terms of ensuring the safety and sustainability of the transport system.

Scientific support for reducing the harmful effects of transport on the environment will be carried out in the following areas:

research and development in the field of reducing the harmful effects of transport on human health by reducing the volume of impacts, emissions and discharges, as well as the amount of waste in all modes of transport, including issues of professional training of personnel and rationalization of routes;

development and scientific substantiation of technological and regulatory models for motivating the transition of vehicles to environmentally friendly fuels;

selection and scientific substantiation of indicators and criteria for assessing the environmental friendliness of transport, taking into account the level of costs and development of recommendations for their optimization;

research and development in the field of reducing the energy intensity of transport and achieving the level of indicators of advanced countries.

Scientific support for the improvement of the legal framework and methods of state regulation of the development of the transport system, ensuring the achievement of the goals and indicators of the Transport Strategy, will be carried out in the following main areas:

development and scientific substantiation of the legal framework and methods of state regulation of the competitive market of transport services in the field of cargo transportation (including the substantiation of the parameters of admission to commercial transport activities);

research and development of methods and mechanisms for state monitoring of specific total transport costs in the cost of national goods and stimulation of their reduction;

development and scientific substantiation of the legal framework and methods of state regulation to ensure a guaranteed level of accessibility and quality of transport services for the population in accordance with minimum social standards (including the rationale for the parameters of admission to commercial transport activities in the field of passenger transportation);

research and development of the legal framework and methods of state regulation aimed at

increasing the investment attractiveness of the transport industry, including improving the legal, economic and financial mechanisms of public-private partnership;

development and scientific substantiation of the legal framework and methods of state regulation to ensure the integration of Russia into the global transport space and the realization of the country's transit potential;

development and scientific substantiation of the legal framework and methods of state regulation to ensure the safety and sustainability of the transport system, including admission to professional activities;

development and scientific substantiation of the regulatory framework in the field of regulation of the harmful effects of transport on the environment and human health;

research and development in the field of Russian and international harmonization of the legal support of the transport system and the creation of a unified transport code.

Scientific support for the creation of an effective management system for the implementation of the strategy and the development of the transport complex will be carried out in the following main areas:

development and scientific support of the system of strategic planning for the development of the transport industry based on mathematical models and transport and economic balance;

development and scientific substantiation of an effective organizational model for managing the implementation of the strategy;

development of methodological bases and regulations for harmonization of the Transport Strategy with the constituent entities of the Russian Federation and its coordination with regional transport strategies and programs, with territorial planning schemes for regions, regions and cities;

development of methodological bases and regulations for the coordination of the Transport Strategy with resource-providing industries;

development, scientific support and development of an automated information and analytical system for managing the transport complex and other analytical and control systems of the transport complex, including the creation of classes of automated analytical systems for various types of transport and the transport complex as a whole, as well as the development of methodological foundations for the use of analytical systems in transport, development of a methodology for automated control of flows and processes in transport, the creation of new and adaptation to new tasks of transport of existing automated control systems (decision support systems) and the adaptation of technological processes of transport to the use of automated control systems;

research and development in the field of development of systems for monitoring and assessing

## Impact Factor:

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	PIHII (Russia)	= 3.939	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.771	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

the state of the transport complex, control and supervision systems in transport;

research and development of analytical systems and mathematical models that provide support for decision-making on the regulation of the functioning and management of the development of the transport complex;

development, scientific support and development of an automated system for monitoring and project management of the implementation of federal target programs and strategies, creation and development of an information and analytical system for managing the implementation of the Transport Strategy.

The development of scientific support for the transport complex will be carried out in the following main areas:

organization and performance of works on scientific and methodological support of the transport complex;

creation of a scientific base (infrastructure) for scientific support of the transport complex;

training and attraction of personnel for scientific research in the transport complex, development and implementation of innovative transport technologies (primarily through the development of the transport scientific and educational complex);

assistance to the development of scientific schools of the transport complex.

Scientific support for the training and development of labor resources of the transport complex will be carried out in the following main areas:

development and scientific substantiation of methodological foundations and mechanisms of state regulation in the field of staffing of modes of transport, aimed at training, attracting and retaining qualified personnel in the transport industry, as well as scientific research and development in the field of creating competitive conditions for attracting and retaining personnel in the transport industry;

development and scientific substantiation of the methodological foundations for providing transport with professionally trained workers of mass professions, specialists and managers focused on long-term employment relationships and professional career development;

development and scientific substantiation of the methodological foundations for the training of specialists-managers of a wide profile and the development of a high level of competence among personnel of all types of transport to work in a unified transport system, active interaction between modes of transport, logistics complexes, unified technological chains and high quality standards;

research and development in the field of creating corporate personnel management systems focused on motivated and efficient work of employees, improving the quality and productivity of labor, as

well as stimulating the active participation of personnel in the technical modernization and innovative development of transport;

scientific research and development in the field of creating the image of transport professions.

Experimental pilot projects are aimed at developing mechanisms, methods, regulatory, technical, technological, information and personnel support to achieve the goals and solve the problems of the Transport Strategy. Until 2015, it is necessary to implement a number of pilot projects aimed at testing and introducing highly efficient logistics technologies. Such projects are an important part of the development of a competitive market for transport services and a catalyst for the development of highly efficient commodity transport logistics technologies in Russia.

The following projects are envisaged at the federal, regional and municipal levels:

creation of a federal research and development center for integrated transport projects and a network of regional research and development centers;

development of transport corridors;

organization of interregional motor transport conveyors;

development of transport corridors and motor transport conveyors at the regional level;

rationalization of the movement of commodity masses at the municipal level;

development of transport and logistics systems at the junctions between modes of transport;

containerization of the transport system according to intra-regional and interregional traffic flows.

The creation of a federal research and development center for integrated transport projects and a network of regional research and development centers is the main project of state patronage in the creation of transport and logistics systems in order to optimize the provision of commodity flows. The system of centers should provide:

development and monitoring of regional transport balances and, on their basis, the federal transport and economic balance;

strategic research, forecasting and complex modeling of commodity flows and providing them with transport resources;

development of projects of highly efficient competitive logistics technologies, as well as technological infrastructure to ensure the logistics of commodity flows, including in interregional and international traffic;

together with the administrations of regions and municipalities, the development and implementation of pilot projects and ensuring replication of their results.

The development of transport corridors provides for:



## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИИ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

development of a classification of transport corridors throughout the Russian Federation, including international ones;

development of technical, technological and information standards for each type of transport operating in this corridor, meeting the high technical requirements of transport corridors, service and technological infrastructure, ensuring the use of highly efficient goods and passenger transport logistics technologies;

creation of competitive conditions for safety, speed and time of movement of goods and passengers, as well as their service.

This project is supposed to be implemented on the territory of the Russian Federation within the borders of the international transport corridor "North - South".

The organization of interregional motor transport conveyors provides for:

motivation for the creation of national or interregional forwarding and transport companies for the implementation of motor transport conveyors;

development and development of a methodological, regulatory and legal framework to ensure the availability, volume and competitiveness of transport services according to quality criteria for cargo owners at the level of the needs of the innovative development of the country's economy;

creation of transport and logistics infrastructure, including terminals of various types of logistics parks on the principles of public-private partnership.

This project should ensure an increase in the commercial speed of goods in interregional traffic up to 1000 - 1500 km per day with guaranteed rhythm, performance of motor transport systems by 3 - 4 times and, accordingly, profitability, as well as a proportional reduction in the costs of cargo owners for crediting goods in transit and in the warehouse.

At the regional level, the project is supposed to be implemented through regional research and development centers together with the federal research and development center based on its methods.

The development of transport corridors and road transport conveyors at the regional level implies the formation of rational routes for each distribution chain of goods for both modal and multimodal transportation.

The project should reduce the costs of cargo owners for crediting goods in transit by increasing the commercial speed of consignments from the sender to the consumer by 2-3 times and the speed of cargo handling at terminals, increasing the productivity and profitability of motor transport systems by 2-3 times due to the organization of cargo delivery on ring routes, providing an increase in the coefficient of mileage with cargo and the coefficient of utilization of load capacity by 2 - 2.5 times and the use of rolling stock up to 20 hours a day.

The rationalization of the movement of commodity masses at the municipal level provides for the choice of the shortest route, subject to the maximum possible load and mileage with cargo, and the use of ring and pendulum routes and technologies for reloading from side to side of vehicles. Such rationalization should be carried out by regional research and development centers together with the federal research and development center.

The project should ensure an increase in the load capacity utilization factor and the mileage utilization rate by at least 2 times, as well as an increase in the productivity of motor transport systems up to 4 times and a proportional reduction in the costs of commodity producers.

The development of transport and logistics systems at the junctions between modes of transport should ensure the optimization of commodity circulation.

In railway transport, an experimental project is envisaged for the introduction of commodity transport technologies for the delivery of goods from the sender to the consumer in a multimodal version that meets the best world analogues. The aim of the project is the possibility of providing delivery to any cargo owner from the sender to the consumer of any consignment of goods in the country at all railway stations, which is carried out in a multimodal version.

The project should ensure a 2.5-fold reduction in transport costs for cargo owners, a 4-fold reduction in wagon downtime under cargo operations, a 10-fold loss and damage to cargo, a 2.5-fold increase in the cost of cargo handling, and a 2-fold increase in the productivity of vehicles and workers. and a corresponding increase in the cost-effectiveness of road transport systems.

In inland water transport, in order to be in demand on the market, it is necessary to guarantee the predictability, rhythm and reliability of the functioning of commodity flows provided by river transport to cargo owners. The following mechanisms are expected to be worked out:

motivation for the creation of joint-stock forwarding and transportation companies for basin and inter-basin trunk transportation, capable of guaranteeing, together with road and rail transport, the delivery of goods of any batch just in time from the sender to the consumer;

creation of holdings uniting ports into a terminal and transport network coordinated by a single information and dispatching system.

The project should ensure an increase in river transport by 10-12 percent of the volume of all freight traffic (the level of the countries of the European Union), compensation at the expense of the river fleet for an increase in seasonal traffic in the spring-summer-autumn period, a decrease in the need for transport and throughput capacity of road and rail transport and a corresponding reduction in the need to

## Impact Factor:

<b>SISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

create seasonal reserve capacities, as well as a reduction in injuries and environmental impact on the environment.

A pilot project is recommended to be carried out in the Volga basin as one of the highways of the international transport corridor "North - South".

Containerization of the transport system along intra-regional and inter-regional traffic flows is carried out to meet the domestic needs of production and trade based on the use of containers of various types and provides for:

determination on the basis of the transport balance of the type and volume of the need for a container fleet for industrial hubs of regional and interregional commodity flows;

development of regulatory and methodological documents that ensure the functioning of the container system at the federal and regional levels;

development of mechanisms to motivate the production and repair of a container fleet of the required type in the required volumes;

formation of basic requirements for specialized structures for leasing or renting containers;

development of requirements for technical and technological conditions of nodal distribution container terminals and container terminals of cargo owners.

The project should provide an increase in the productivity of transport systems up to 5 times and a corresponding reduction in the costs of the cost of goods.

Pilot projects are expected to be invested on a one-time basis at the expense of federal funds, as well as on the basis of public-private partnership and combined partnership mechanisms at the federal, regional and municipal levels.

Upon reaching the goals of the pilot project, it is assumed that the shares will be sold on the market.

The development of scientific support for the Transport Strategy by means of transport involves the advanced innovative development of their scientific, technical and technological base on the basis of advanced world achievements and breakthrough technologies.

Scientific research in the field of railway transport, the implementation of which, among other sources, provides for financing from the funds of the scientific and technical development plan of the Russian Railways Open Joint Stock Company, provides for:

promising areas of scientific and technical development of railway transport in the Russian Federation, including the development of a set of technical regulations containing requirements for ensuring safety and environmental protection for objects of technical regulation in railway transport, the development of a regulatory and methodological framework for calculating the parameters of operational readiness, strength, safety, resource and

risk, development of new technical requirements for serially supplied products and a regulatory framework for interaction with suppliers based on the principles of quality management;

ensuring the development of infrastructure;  
development of the train traffic control and safety system;

creation of a maintenance system for high-speed and high-speed infrastructure and rolling stock;  
implementation of transport logistics;  
organization of production of a new generation of rolling stock.

The areas, the implementation of which provides for preferential financing at the expense of the investment program of the Russian Railways Open Joint Stock Company, include:

ensuring the development of infrastructure;  
development of the train traffic control and safety system;

commissioning of high-speed electric trains and infrastructure for speeds up to 250 km/h and up to 350 km/h;

implementation of transport logistics.

Areas, the implementation of which provides for preferential financing at the expense of railway equipment manufacturers, include:

promising areas of scientific and technical development of railway transport in the Russian Federation, including the development of new types and models of rolling stock and infrastructure elements that ensure an increase in the reliability and safety of operation and comply with the requirements of international agreements to which the Russian Federation has acceded; development of fundamentally new integrated systems for diagnosing and monitoring infrastructure and rolling stock, as well as the use of high-precision systems for modeling infrastructure elements and rolling stock;

ensuring the development of infrastructure;  
development of a train traffic control and safety system, which provides for the creation of an "intelligent" train with a built-in automatic guidance and self-diagnosis system;

target parameters for the implementation of transport logistics, which provide for the introduction of a positioning system and automated control of the safety of goods along the route;

organization of production of passenger and freight rolling stock of a new generation with increased axle loads, with a decrease in the tare weight of a freight car, using an asynchronous traction drive, a reduction in the specific fuel and electricity consumption for train traction and other progressive technical characteristics, including suitability for servicing disabled passengers .

The areas, the implementation of which provides for preferential financing from the federal budget, include:

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIIHQ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

promising areas of scientific and technical development of railway transport in the Russian Federation, including the creation of a system for the formation and control of regulatory requirements for vehicles and equipment that are developed, manufactured in the Russian Federation or imported into the Russian Federation, the development and application of the metric system of measures, as well as development and implementation of a set of special standards (regulatory framework for voluntary certification systems) for transport industry facilities that are not subject to the main technical regulations; production of new generation rolling stock.

Directions, the implementation of which provides for mixed financing at the expense of the open joint-stock company "Russian Railways", manufacturers of railway equipment and the federal budget, include:

organization of high-speed traffic in selected directions at speeds up to 300 - 350 km/h and the development of domestic production of the main elements of infrastructure and rolling stock;

organization of mixed suburban - urban passenger traffic in large transport hubs.

The main directions for the development of scientific support in the road sector are:

search and fundamental research to improve the design of roads and the theory of designing road networks, the development of mathematical modeling methods in the design of roads, the improvement of methods for improving the reliability and durability of road structures and artificial structures, the improvement of the operation of roads, including methods for predicting the service life of road and bridge structures, and methods for designing the life cycle of roads and artificial structures, as well as economics and planning activities in the road sector, primarily methods for long-term and medium-term planning of activities in the road sector based on cost optimization during the life cycle of the road and the creation of fundamentally new materials, structures and technologies for road workscompetitive in the world market;

applied scientific research within the framework of long-term and medium-term programs, formed taking into account the results of fundamental research, to improve road structures and work production technologies, ensuring an increase in the overhaul life of roads and road structures, the development of energy-saving and resource-saving technologies, improving the quality of road construction materials, primarily bitumen-containing binders and asphalt concrete, in order to increase the durability of road surfaces, as well as improve methods for monitoring technical parameters and the transport and operational condition of roads, methods for automating the collection and processing of road data for use in computer-aided design of roads and

artificial structures and for planning and managing road activities;

improvement of indicators of the transport and operational condition of roads and road safety;

development of methods and computer programs for automated planning of road activities based on variant mathematical modeling of indicators of the transport and operational state of the road and the road network as a whole;

development of programs and schemes for the development of highway networks in the Russian Federation and regions;

development of various scientific and technical programs for the development of the road sector;

improvement of the road management system, including scientific support for the development of the legal and regulatory framework for the road sector, methods for competitive selection of contractors according to the criteria of the most cost-effective proposal, aimed at improving the quality of road works and ensuring the effectiveness of public-private partnership mechanisms and the regulatory framework for the widespread introduction of a system of long-term contracts aimed at achieving the normative indicators of the transport and operational condition of roads;

development of technical regulation in the road sector, aimed at improving the basic technical and environmental requirements that ensure high consumer properties of roads, the reliability and durability of road structures, the operability of the road network and the safety of road users, as well as stimulating the introduction of energy and resource-saving technologies in the implementation of road works;

experimental design work involving the development of new equipment for diagnosing the transport and operational condition of roads, devices for laboratory and field quality control of construction, repair and maintenance of roads and bridges in order to increase the reliability of information and the quality of these works, at the same time creating a system organizational and economic measures to stimulate the development and mass production of new road machinery, equipment for the production of high-quality road building materials by enterprises in the engineering industries.

To conduct experimental research and test new developments, it is necessary to create experimental test sites in different regions of the country and various climatic zones that would be available for testing by various research organizations.

The main directions for the development of scientific support in road transport are:

development of transport balances at the national and regional levels, their coordination with federal programs for the development and modernization of road infrastructure and infrastructure of other modes of transport;

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

determination of rational areas for the use of road transport and directions (mechanisms) of its interaction with other modes of transport in order to minimize transport costs and ensure the sustainable development of the transport system;

study of the effectiveness of legal, economic and administrative mechanisms for regulating the market of motor transport services;

marketing researches of the market and monitoring of its condition, forecasting of tendencies of development of the market of motor transportation services;

development of proposals to improve the availability and quality of motor transport services for consumers and increase the mobility of the population;

creation of modern transport and logistics technologies based on the achievement of complexity and high quality standards of transport services.

The main directions for the development of scientific support in air transport are:

scientific and methodological support and monitoring of the implementation of the Transport Strategy in terms of the development of air transport within the framework of the subprogram "Civil Aviation" of the federal target program "Development of the transport system of Russia (2020 - 2025)", other federal and industry target programs, general schemes and strategic development plans air transport until 2025, 2030 and 2035;

scientific and methodological support, analysis of problematic issues and forecasting the implementation of the goals of the Transport Strategy in terms of the development of air transport, based on monitoring the state of the market and studying the relationship between the development of its segments, subsystems, information and resource support for air transport;

scientific and applied research on the content and forms of an innovative model for ensuring the competitiveness of air transport, including in terms of the material and technical base, technology of the air transportation process, information technology and management;

marketing research of the air transportation market, monitoring its state and forecasting development trends, providing for an increase in the availability and quality of air transport services and population mobility, including within the region;

scientific support of issues of state regulation of the development of air transport, ensuring the competitiveness of services, expanding their accessibility to the population and the necessary supplies of a fleet of modern aircraft;

scientific and methodological developments in the field of air transport pricing in order to reduce the growth rate of the cost of services and tariffs for air transportation, as well as increase the availability of air transportation;

development of a regulatory framework that regulates the activities and protection of the interests of Russian air carriers on the international market, including in the context of the Russian Federation's entry into the World Trade Organization;

scientific research of the market of socially significant air transportation, as well as the development of proposals for improving the mechanism of their state support within the constituent entities of the Russian Federation;

scientific research in the field of integrated safety and ecology of civil aviation in order to form a long-term policy of the Russian Federation, harmonized with the requirements of the International Civil Aviation Organization and the European Union;

study of the situation and specification of forecasts for the development of the air transportation market and the aircraft fleet of the Russian Federation for 20 years;

scientific and methodological support for the development and maintenance of the operation of a unified state information and analytical system for civil aviation;

scientific substantiation of criteria, standards and procedures that contribute to the development of justified competition, the growth of business activity, labor productivity and the introduction of innovations by the subjects of the air transport market.

The main directions for the development of scientific support in maritime transport are:

analysis of the current state and forecast of changes in the cargo base of maritime transport in the medium and long term;

analysis of the world freight market and international maritime shipping;

development of sectoral targeted programs, general schemes and strategic plans for the development of seaports;

determination of the boundaries of territories and water areas of seaports in order to prepare relevant documents for submission to the Government of the Russian Federation;

determination of the structure of the marine transport fleet and its composition for the future;

determination of the need for ships of the supporting fleet for various purposes;

development of proposals for strengthening the interaction of maritime transport with adjacent modes of transport and cargo owners within the framework of intersectoral transport coordination, developing the principles of logistics in managing cargo flows and ensuring transportation along international transport corridors passing through the territory of Russia;

development of proposals for the development of progressive transport and technological systems (container, package, ro-ro, ferry, lighter, etc.);

development of a set of technical, economic, legal and other measures related to the development of transportation along the Northern Sea Route;

## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>PIHIQ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

development of a set of measures to increase the competitiveness of domestic maritime transport, especially taking into account Russia's entry into the World Trade Organization;

development of proposals on measures of state support for maritime transport;

development of proposals for increasing the number of ships registered under the Russian flag, reserving the cargo base for domestic maritime transport and building ships mainly at Russian shipyards;

preparation of proposals in the field of pricing in maritime transport, in particular, the development of a system of tariffs and port dues;

development of proposals and preparation of documentation for the creation and effective functioning of special port economic zones;

development of measures to improve the level of safety of maritime transport activities and environmental protection;

development of a regulatory framework that regulates the activities of maritime transport and ensures the protection of its interests in the field of international maritime navigation;

improving the forms and methods of training specialists in maritime higher and secondary educational institutions;

development of automated control systems for technological and information processes;

development of proposals for improving statistical reporting in maritime transport;

monitoring the functioning of maritime transport, the implementation of the adopted management decisions and the effectiveness of the measures taken.

The main directions for the development of scientific support in inland water transport are:

development and scientific and analytical support for the implementation of federal targeted programs for the development of the industry;

forecasting the socio-economic development of river transport in general and in individual regions;

scientific and technical support for the development of the transport and support fleet;

prospective development of river ports, shipbuilding and ship repair enterprises and other facilities;

development of intersectoral and transport coordination, logistics systems and intermodal transportation;

research in the field of legal and regulatory support for river transport;

research in the field of safe operation of the river fleet, environmental protection, as well as safety measures for the operation of the river fleet and its enterprises;

development of means of communication and information technologies in transport.

The main directions for the development of scientific support in industrial transport are:

development of a normal range of diesel locomotives, electric locomotives and traction units of dump trucks for industrial railway and road transport;

development of the type of loading and unloading machines and complexes for bulk, packaged cargo and containers;

reduction in the transport intensity of products, in particular, products of the metallurgical industry;

development of alternative modes of transport that allow efficient use of land, reduce the burden on the environment, increase the productivity and efficiency of production units;

optimization of the repair base of industrial transport.

The implementation of the directions of scientific support for the development of the transport system of Russia until 2035 will require an adequate development of the system of scientific and design organizations in the industry, their material base and staffing.

One of the priorities in the development of scientific support is the reconstruction of the system of scientific organizations (or their specialized divisions), whose activities are focused on the development of problems for the future development of the country's transport complex, the collection, examination, certification and implementation of the best innovative solutions in the field of development of the transport system.

The development of an effective state system of long-term planning requires the creation of a system of innovation-scientific and implementation centers for each type of transport and in the road sector in existing sectoral institutions. In addition, a general transport innovative experimental and innovative center with regional branches should be developed, which ensures the complexity of the development of transport as a single system, technological, economic, legal and organizational interconnection of adjacent modes of transport.

The tasks of developing the transport system of Russia until 2035 can be solved only if the industry is provided with a sufficient number of highly qualified specialists. In order to achieve the strategic goals of the development of the transport system of Russia until 2035, it is necessary to ensure the training of specialists and labor resources for the transport complex in the following areas:

development of the provision of labor resources in the field of design and implementation of projects for the development of transport systems;

development of labor resources in the field of operation of transport infrastructure and vehicles created in the process of implementing the strategy;

development of the provision of labor resources in the field of providing transport and logistics services and other transport services;

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHII (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

development of labor resources in the field of transport complex management;

development of technical, technological and other types of knowledge of labor resources to a level that ensures the implementation of the objectives of the Transport Strategy.

State regulation in the field of staffing of modes of transport is aimed at training, attracting and retaining qualified personnel and includes:

improvement of the system of training, retraining and advanced training of personnel in educational institutions of the transport complex;

improving the training program in accordance with changing market requirements and improving the quality of training;

improvement of programs for training and advanced training of personnel, as well as the widespread use of specialized simulators for training specialists of various types of transport;

improvement of the system of state control over the quality of personnel training for various modes of transport;

development of normative legal acts regulating the labor and financial relations of a trained specialist with a future employer who paid for his training, and state executive authorities in the field of transport if the training is paid for from the federal budget;

creation of a system of mentorship, succession and accumulation of unique experience in the field of transport;

formation in organizations of managerial personnel motivated to achieve corporate strategic goals;

assistance in strengthening and developing social partnership.

The main activities in the field of human resource development are:

providing transport at all levels with professionally trained workers of mass professions, specialists and managers focused on long-term employment relationships and the development of a professional career in railway transport;

training of specialist managers of a wide profile and development of a high level of competence among personnel of all types of transport to work in a unified transport system, active interaction between modes of transport, logistics complexes and unified technological chains and high quality standards;

promoting the creation of corporate personnel management systems focused on motivated and efficient work of employees, improving its quality, labor productivity and active participation in technical modernization and innovative development of transport;

creation of effective models of educational institutions that introduce science and production into the education process;

improvement of the material and technical base of educational institutions, including the acquisition

of training air, sea and river vessels, simulators, construction and reconstruction of buildings and structures.

To carry out these activities, you must:

switch to long-term planning for the training of specialists, including in new areas of training (specialties) in the field of logistics, transport services, inter-transport interaction and other areas;

ensure the development and implementation of mechanisms for long-term cooperation between the Ministry of Transport of the Russian Federation, the Federal Service for Supervision in the Sphere of Transport, federal agencies, transport companies and educational institutions in the field of training and advanced training of personnel, in particular, to expand the scope of the state order, targeted contracts in the format of state-private partnerships, including using new financial and credit schemes, and science, in particular, to ensure technical and technological modernization, the subsequent innovative development of transport through fundamental, exploratory and applied research, primarily on the basis of university complexes, by strengthening their social, material and technical and scientific and laboratory base, creation of research and production, innovation and implementation centers, technology parks, transfer of the latest models of equipment, technology and software to them;

stimulate the concentration of intellectual and material resources in large university complexes of federal and regional significance, which have a wide network of territorial branches, allowing them to provide a full educational cycle, starting with the training of skilled workers and workers with secondary vocational education, and all types of lifelong learning;

to ensure the training of specialists in mobilization training for each mode of transport;

expand the practice of providing jobs for students of educational institutions for industrial and undergraduate practice and consolidate its legal foundations for greater adaptation of graduates to real working conditions and production requirements;

to develop a system of scientific internships and postgraduate training of employees, practical internships for scientific employees of educational institutions, as well as to stimulate the reproduction of scientific and pedagogical personnel and the improvement of their qualifications;

to strengthen ties between employers and educational institutions (corporate programs and other forms of coordination of interests and requirements for the selection of students, monitoring by the customer of educational services of the educational process, the quality of training, the final control of knowledge while expanding the system of guaranteed employment of successful graduates in their specialty and a predetermined position, as well as adaptation of bachelor graduates to the requirements of employers

## Impact Factor:

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**PIHLI (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

in the course of additional professional education in transport universities, combining education in higher and secondary specialized educational institutions with practical work in working positions);

to develop a system of vocational training for workers of mass professions, technicians, craftsmen and other specialists on the basis of maintaining and strengthening the system of primary and secondary vocational education as part of university complexes;

expand cooperation with educational institutions of the Ministry of Education and Science of the Russian Federation and foreign educational institutions in the preparation of specialists in the field of transport;

introduce integrating educational technologies (unified information networks for advanced training in the field of issues related to state regulation) with the participation of the largest companies and educational institutions and taking into account their financial interests (issues of integrated transport, environmental and industrial safety);

to pursue an effective coordinated youth policy aimed at stimulating the employment of graduates of educational institutions in their specialty and establishing long-term stable labor relations with them, as well as motivating the acquisition of high-quality knowledge and practical skills that will shorten the period of adaptation of young specialists to working conditions;

pursue a coordinated long-term policy aimed at increasing the prestige of transport professions;

identify and develop appropriate mechanisms for monitoring, analysis and decision-making, control tools and targets to make the activities of human resource management in transport more systematic and more efficient (in terms of cost).

The main activities in the field of social policy in transport are:

strengthening the economic position of transport enterprises, increasing their competitiveness and economic efficiency as a necessary condition for increasing the potential for increasing wages and filling the social package provided to the personnel of transport enterprises;

ensuring the social guarantees fixed in the labor legislation, expanding and improving corporate social packages on the basis of temporary tripartite agreements (bilateral - for federal state unitary enterprises, federal state institutions and state-owned enterprises), reflecting the current balance of interests of employers, industry workers and the state;

observance of the differentiation of remuneration depending on its complexity (qualification of the employee);

promotion of social responsibility of business, as well as the use of social partnership agreements in the interests of developing human resources.

The sectoral social standard should play a significant role in raising the prestige and the level of

wages in transport, including the minimum wage. The main components of social standards can be considered:

working conditions and remuneration (the amount of remuneration, employment conditions and working hours);

social package (pension provision, paid leave, medical care, length of rest, the possibility of improving health (going in for sports, organizing recreation) and solving the housing issue and education);

protection of the employee within the framework of labor relations (labor conditions and labor protection, conditions for the release of employees and insurance).

The main direct mechanisms for the implementation of the Transport Strategy are federal and regional targeted programs. The composition and structure of these programs should meet the main targets, goals, objectives and mechanisms for the implementation of the Transport Strategy.

At the first stage of the Transport Strategy (until 2025), the federal target program "Development of the transport system of Russia (2020-2025)" should be implemented, which includes 5 subprograms formed according to the sectoral principle ("Railway transport", "Roads", "Maritime transport", "Inland water transport" and "Civil aviation"), and the functional subprogram "Development of export of transport services".

At the second stage (2025 - 2035), the main mechanism for implementing the Transport Strategy will be federal targeted programs for the development of the transport system for 5-year periods.

At the same time, it is advisable to combine the subprograms included in them in 3 areas (two functional and one sectoral):

subprograms aimed at achieving general economic, general social and general transport main strategic targets of the Transport Strategy;

subprograms aimed at putting into operation the main mechanisms for the implementation of the Transport Strategy;

subprograms aimed at achieving the strategic targets of the Transport Strategy by types of transport activities - in road, rail, inland waterway, sea and air transport.

Within the framework of these subprograms:

a single transport space of the country is being formed, and complex projects are being implemented for the development of transport hubs and traffic control centers that ensure the operation of transport corridors;

a new type of transport infrastructure is being created - integrated transport, storage and commodity transport complexes, which form an integrated system of interaction, including cargo owners, as well as integration of all segments of the transport process and logistics is ensured and a single transport system of

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

the country is being formed, on the basis of which integration into the global transport space and realization of Russia's transit potential;

the development of technical and technological parameters of international transport corridors to a level competitive with world analogues is ensured, planning of their development and coordination within the framework of international cooperation is ensured, conditions are created for expanding the access of Russian transport service providers across all modes of transport to foreign markets, and measures are being taken to strengthen the role Russia in the formation of international transport policy;

ensures the development and implementation of minimum social transport standards to ensure the possibility of movement of all segments of the population on various modes of transport throughout the country, as well as the development and implementation of quality standards for passenger service in all modes of transport;

due to the systemic set of measures, the achievement of a level of safety in all modes of transport that meets international and national requirements is ensured, and a single set of measures is being implemented to stimulate the reduction of the level of technogenic impact of all modes of transport on the environment and human health and the achievement of international environmental standards for all modes of transport ;

unified integrated models, technologies, standards, legal framework and methods of state regulation, which are common for various types of transport, are being developed and put into effect.

On the basis of these comprehensive activities and projects, common models and integration technologies, standards and legislative regulations, as well as general methods of regulation that have a general social, general economic and general transport orientation, within the framework of programs aimed at achieving the strategic guidelines of the Transport Strategy, subprograms by modes of transport, taking into account the specifics of the development of each mode of transport, as well as the needs of the economy and society in relation to these specific modes of transport.

Thus, from 2020 to 2035, federal targeted programs consisting of these subprograms and developed to implement the Transport Strategy should be formed in the following areas:

formation of a single transport space in Russia based on the balanced development of an efficient transport infrastructure;

ensuring the availability, volume and competitiveness of transport services according to quality criteria for cargo owners at the level of the needs of the innovative development of the country's economy;

ensuring the availability and quality of transport services for the population in accordance with social standards;

integration into the global transport space and realization of the country's transit potential;

improving the security of the transport system;  
reducing the harmful impact of transport on the environment;

improvement of the legal framework and methods of state regulation of the development of the transport system, ensuring the achievement of the goals and indicators of the Transport Strategy;

training and development of personnel potential of the transport complex;

creation of an effective system for managing the implementation of the Transport Strategy;

advancing development of the scientific, technical and technological base of the transport complex;

highways and road transport;

railway transport;

inland water transport;

sea transport;

civil Aviation;

air navigation.

The implementation of the Transport Strategy is associated with risks that may hinder the achievement of planned results. Such risks include macroeconomic, geopolitical, operational, social, man-made and environmental risks.

Macroeconomic risks are associated with the possibility of a slowdown in economic growth and the level of investment activity, a crisis in the banking system and the emergence of a budget deficit.

The sources of such risks are:

lack of financial resources due to outstripping price growth in sectors of the economy,

supplying products for railway transport;

decrease in freight traffic due to insufficient development of transport infrastructure;

a decrease in the volume of freight traffic due to a change in their structure and an increase in the share of high-tech cargo;

decrease in the volume of transit freight traffic due to the development of alternative

foreign routes bypassing the territory of the Russian Federation;

lack of capacity and low technical level of development of domestic engineering;

unbalanced development of the infrastructure of related modes of transport (lack of port facilities, storage terminals, etc.);

non-compliance of the allocated investments in the construction and technical base of transport with the requirements of the Transport Strategy for the level of infrastructure development and the quality of transport services.

An unfavorable scenario for the development of the Russian economy will lead to the actual



## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

conservation of the technical backwardness of the transport infrastructure for a fairly long period of time. In practice, this means a disruption in the implementation of the Transport Strategy and the stagnation of the transport industry.

Geopolitical risks are relevant for all modes of transport. In the field of navigation, they lead to the restriction of navigation and the curbing of the further development of Russian port facilities. The instability of the international situation may have a negative impact on the implementation of projects to create a network of air transportation hubs.

The successful integration of the Russian Federation into the international transport system largely depends on a stable political situation in neighboring regions. The deterioration of the international situation may lead to a decrease in the attractiveness and competitiveness of the Russian transport system.

Operational risks are associated with shortcomings in the systems and procedures for managing, supporting and monitoring the implementation of the Transport Strategy, including shortcomings in their legal and regulatory support.

Operational risks include risks associated with negligent or incompetent actions of personnel, as a result of which material damage may be caused, transactional risks, operational control risks, risks of support systems, technological risks, insurance risks and others.

The unfavorable factors that increase these risks include the absence of a number of fundamental regulatory legal and strategic documents necessary for the implementation of the Transport Strategy, such as a promising layout of the distribution of productive forces, the main provisions of the demographic and migration policy of the Russian Federation, the foreign trade development strategy of the Russian Federation and other documents, as well as the lack of a transport balance as the main tool for identifying imbalances in the process of forecasting and establishing a balance between the demand for transport services and their supply, and many other factors.

The occurrence of social risks is determined by: deterioration of the demographic situation and a decrease in demand for passenger and freight transportation;

shortage of qualified labor force, outflow of highly qualified personnel to other sectors of the economy due to lower wages in transport;

shortage of labor resources for the implementation of infrastructure transport projects in remote regions, primarily in the regions of Siberia and the Far East.

Technogenic and environmental risks are caused by a high degree of physical deterioration of technical equipment, the human factor, natural phenomena, as well as vandalism and terrorist acts. Elimination of

their consequences requires serious additional investments and will lead to the diversion of funds from other objects of the transport system.

These main risks include:

failures in the organization of traffic due to accidents at industrial facilities related to ensuring the operation of transport;

failures in the organization of the movement of vehicles due to man-made accidents in adjacent modes of transport, in the waters of seaports, on main highways and in close proximity to railways;

temporary suspension of transport due to fires and natural disasters;

decrease in the environmental safety of transport due to the occurrence of man-made accidents at transport facilities.

Among the side effects of such incidents, one can expect a decrease in investment attractiveness and a decrease in the rating of confidence in the transport industry on the part of credit organizations and international financial institutions.

The direct consequences of these risks are the incomplete achievement of the objectives of the Transport Strategy. The mechanisms and implementation plans proposed in the Transport Strategy are formed in such a way as to minimize the possible negative consequences of these risks during its implementation. The implementation of the Transport Strategy will take place in two stages:

the first stage (until 2025) - the completion of the modernization of the transport system using targeted investment methods and the elimination of "bottlenecks" and the transition to its systemic integrated development in all key areas;

the second stage (2025 - 2035) - intensive innovative development of the transport system in all directions to ensure an innovative socially oriented development path for Russia.

The first stage of the implementation of the Transport Strategy is based on the results of the implementation of the federal target program "Modernization of the transport system of Russia (2002 - 2010)" and is focused on solving the tasks set within the framework of the federal target program "Development of the transport system of Russia (2010 - 2015)" and others existing programs, and includes the development of a modern and efficient transport infrastructure that provides the necessary throughput in the main directions of transportation, the renewal of vehicle fleets, the composition of the sea, river and air fleet, and the improvement of technological processes. These tasks are aimed at accelerating the movement of goods and reducing transport costs in the economy, increasing the availability of transport complex services for the population,

At this stage, the main attention in the development of transport infrastructure will be given to the formation of a single road network, year-round accessible to the population and business entities, the

## Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	PIHIQ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

elimination of existing gaps and "bottlenecks" of the transport network, including in the Asian part of Russia, as well as the development of large transport hubs in the main directions of transportation, transport approaches to checkpoints across the state border of the Russian Federation and transport hubs. On this basis, infrastructure conditions will be created for the development of potential points of economic growth, including the integrated development of new territories and the development of mineral deposits, primarily in Siberia and the Far East.

The main directions of development in the sectoral context at the first stage are characterized by:

in the field of railway transport - the modernization of rolling stock, permanent devices and structures, an increase in the throughput of railway network sections, the formation of railway network directions with the circulation of trains of increased weight and axle load, the construction of railway lines in areas of new development and for the organization of high-speed and high-speed passenger traffic, development of the railway network in the directions of international transport corridors, construction of bypasses of large railway junctions, provision for all carriers of non-discriminatory access to infrastructure services, equal conditions for competition and uniform requirements for ensuring security;

in the field of road economy - increasing the accessibility of the road network for the population, the beginning of the formation of a network of highways and high-speed roads in the directions of international transport corridors, the construction and reconstruction of roads in the regions of Siberia and the Far East, ensuring the development of natural resources and the connection of settlements with the backbone transport network, as well as the construction of bypasses of the largest cities;

in the field of air transport - the development of international hub airports (hubs), a network of domestic hub airports and regional airport networks that provide connectivity to the core airport network, a radical renewal of the aircraft fleet, the development of the Russian air navigation system and the creation of enlarged air traffic control centers;

in the field of maritime transport - increasing the throughput capacity of Russian seaports and the carrying capacity of the domestic transport fleet, updating the marine fleet, ensuring the growth of cargo and passenger traffic on socially significant routes;

in the field of inland water transport - the elimination of sections that limit the throughput of the Unified deep-water system of the European part of the Russian Federation, the development of port infrastructure on inland waterways of international importance, an increase in the length of inland waterways with guaranteed dimensions of ship passages and illuminated conditions, the reconstruction of hydraulic structures, the

reconstruction of passenger stations and improving the quality of passenger service, as well as the construction of a cargo and passenger fleet.

The second stage of the implementation of the Transport Strategy includes:

creation of a market for competitive transport services to meet the needs of intensive innovative development of the economy and improve the quality of life of the population, increase the competitiveness, productivity and profitability of transport systems;

access to the world level of technological and technical development of transport;

creation of reserves necessary to ensure the accelerated development of the transport system and increase its competitiveness, efficiency and quality of transport services, create infrastructural conditions for the development of new "points" of economic growth in the country;

expansion of the core transport network;  
implementation of the country's transit potential, including joint projects within the EurAsEC and with other states;

diversification of directions for export deliveries of Russian hydrocarbons;

increasing the role of transport and logistics infrastructure in the organization of goods distribution, as well as the transformation of logistics transport centers into control elements of the goods movement system.

At this stage, a transition to the systemic development of the country's transport system will be ensured on the basis of the formation of a single transport space in Russia, which includes:

creation of a unified balanced system of transport communications of the country on the basis of a differentiated development of communication routes for all types of transport;

increase in capacity and achieve the best world indicators in terms of speed parameters of the transport infrastructure, as well as an increase in the share of high-speed communications;

creation of an interconnected integrated system of commodity transport technological infrastructure for all types of transport and cargo owners, an integrated system of logistics parks, as well as a unified information environment for the technological interaction of various types of transport and participants in the transport process to form a modern commodity distribution network that provides the volume and quality of transport services in the country;

development of innovative technologies for construction, reconstruction and maintenance of infrastructure.

At this stage, the transport system should reach a level that ensures the absence of infrastructural restrictions on the country's future socio-economic development.

## Impact Factor:

<b>ISRA (India)</b>	<b>= 6.317</b>	<b>SIS (USA)</b>	<b>= 0.912</b>	<b>ICV (Poland)</b>	<b>= 6.630</b>
<b>ISI (Dubai, UAE)</b>	<b>= 1.582</b>	<b>ПИИИ (Russia)</b>	<b>= 3.939</b>	<b>PIF (India)</b>	<b>= 1.940</b>
<b>GIF (Australia)</b>	<b>= 0.564</b>	<b>ESJI (KZ)</b>	<b>= 8.771</b>	<b>IBI (India)</b>	<b>= 4.260</b>
<b>JIF</b>	<b>= 1.500</b>	<b>SJIF (Morocco)</b>	<b>= 7.184</b>	<b>OAJI (USA)</b>	<b>= 0.350</b>

The balanced development of the country's transport system will increase the competitiveness of domestic goods and services in world markets, bring population mobility indicators closer to the level of developed countries, which will be one of the most important factors in improving the quality of human capital in the country, as well as reduce differentiation in the availability of transport services for different regions and social groups of society.

It is envisaged to provide the population with high-quality transport services in accordance with minimum social transport standards. It is intended to gradually increase the level of these standards on a progressive scale.

The development of all types of transport will continue. Particular attention will be paid to the integrated development of large transport hubs and the creation of a transport and logistics infrastructure.

The main directions of development at the second stage are characterized by:

in the field of railway transport - the development of the main main lines, the construction of bypasses of large junctions, the formation of a deep bypass of the Moscow junction, the construction of second and third bridge crossings over the river. Volga, r. Ob, r. Amur and others, as well as a significant expansion of the range of high-speed traffic;

in the field of air transport - the expansion of the airfield network as a result of the development, mainly, of regional air transport infrastructure, the development of airport infrastructure, including those that are not part of the core network, maintaining the airports of the core network in serviceability and ensuring the balanced development of the entire air transport infrastructure;

in the field of road economy - the development of new directions of highways that are part of federal routes, not only providing interregional communications, but also allowing the integration of a disparate road network of individual regions into a single transport system of Russia, roads connecting the administrative centers of the constituent entities of the Russian Federation by the shortest distance, regional highways that are part of international transport corridors and provide access to automobile checkpoints, highways that provide motor transport links of subjects located in the north-east of the country with the road network of Russia, highways that provide access from the federal road Russian network to seaports, and highways, ensuring the unloading of large transport hubs, as well as the modernization of existing and construction of new roads in the zone of the North and areas of new development, the comprehensive modernization and development of the road network in the largest transport hubs of Russia, the construction and reconstruction of roads that form a system of toll highways and express roads;

in the field of development of public passenger transport - the development of a dedicated infrastructure for public passenger transport, urban off-street transport systems, as well as the development of intermodal passenger transportation systems, the modernization and growth of rolling stock fleets;

in the field of maritime transport - an increase in the throughput of seaports and an increase in the efficiency of their work in coordination with the creation of a logistics system that includes both port terminals for various purposes and terminals in large transport hubs of the country, including "dry ports", as well as an increase in the deadweight of maritime transport a fleet registered under the Russian flag;

in the field of inland water transport - the development of the infrastructure of inland waterways and river ports to ensure transportation along international transport corridors, including the development of a water transport connection between the Azov-Black Sea and Caspian basins, as well as the development of the tourism business.

A necessary condition for the implementation of the Transport Strategy at all stages is the improvement of the investment climate and the development of market relations in transport based on the formation and development of investment management mechanisms, including on the terms of public-private partnership.

Assessment of the necessary resource support for development transport system The implementation of the Transport Strategy is ensured by a stable and reliable financing system that takes into account the specifics of transport as an infrastructure industry.

Capital investments in 2010 - 2015 are taken into account in the implementation of the federal target programs approved by the Government of the Russian Federation "Development of the transport system of Russia (2010 - 2015)", "Economic and social development of the Far East and Transbaikalia for the period up to 2013", "Modernization of the Unified System organization of the air traffic of the Russian Federation (2009 - 2015)", "Improvement of the federal system of reconnaissance and airspace control of the Russian Federation (2007 - 2010)", "Global navigation system", programs for the construction of Olympic facilities and the development of Sochi as a mountain climatic resort and other programs.

State capital investments at the expense of the federal budget are planned to be allocated primarily for the implementation of the following activities:

construction and reconstruction of motor roads of federal importance, provision of subsidies for the construction and reconstruction of public roads of regional and intermunicipal significance;

reconstruction and construction of federal civil aviation infrastructure facilities;

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

reconstruction and construction of federal facilities in sea and river ports, construction of sea and river vessels of the supporting fleet;

reconstruction of inland waterways and hydraulic structures on them.

The funds of the regional budgets are planned to be directed primarily to the development of regional roads, the suburban passenger complex of railway transport, the construction of new railway lines of great social and economic importance for the regions, as well as the development of air transport infrastructure facilities.

Extrabudgetary funds are planned to be used primarily to finance commercial projects for the development of the infrastructure of transport hubs, the formation of transport systems in the territorial production clusters created in the regions, as well as the organization of transport and logistics centers in the largest transport hubs, the creation of toll and express highways and highways.

In order to develop the domestic production of materials, machinery and equipment for the transport system of the Russian Federation, it is advisable to

provide measures for state support of their manufacturers, stimulating the transition to an innovative development model and attracting private investment both in the transport industry and in industry segments engaged in the manufacture of modern materials, machines and equipment. transport system equipment. Such measures can be customs and tariff regulation aimed at reducing import duties on equipment, as well as subsidizing the interest rate on loans for enterprises engaged in the production of modern equipment and its purchase for use in the transport complex.

The cost of scientific support for the implementation of the Transport Strategy will amount to 1.26 trillion rubles in 2025-2035. rubles in the prices of the corresponding years.

The specific composition and scope of work of scientific support for the implementation of the Transport Strategy is envisaged to be determined in detail when developing federal targeted programs that ensure the implementation of the Transport Strategy for the relevant periods.

## References:

1. Jaspers, K. (1991). *The meaning and purpose of history*. Per. with him, (p.527). Moscow: Politizdat.
2. Hegel, G. (1975). *Encyclopedia of Philosophical Sciences*. Per. with him. T.1. Science of logic. (p.452). Moscow: "Thought".
3. Engels, F. (n.d.). *Preface to three editions of "Anti-Dühring"*. Per with him. K. Marx and F. Engels. Soch., Ed. Tue., V.20. (pp.5-15). Moscow: Gospolitizdat.
4. Engels, F. (n.d.). *Dialectics of nature*. Per with him. K. Marx and F. Engels. Soch., Ed. Tue., T 20, (pp.339-626). Moscow: Gospolitizdat.
5. (2009). *Britannica. Desktop illustrated encyclopedia*. Per. from English. M. AST. Astrel. T. II, 2325 p.
6. (2004). *Encyclopedia of technology in 3 volumes*. Transl. from Spanish. T 1. Energy. Transport. Construction. (p.160). Moscow: Mir kn..
7. (n.d.). *Big illustrated encyclopedia in 32 volumes*, volume 27, 503 p.
8. (n.d.). *Modern explanatory dictionary of the Russian language*.
9. Dal, V. I. (1982). *Explanatory dictionary of the living Great Russian language*: T. 1 - 4.- Moscow: Rus. lang., 1981 - 1982. T 4, 1982, 683.
10. Brockhaus, F.A., & Efron, I.A. (2006). *Illustrated Encyclopedic Dictionary in 24 volumes*. Vol. 20. (p.256). Moscow: Eksmo.
11. Galbraith, J. (1969). *New industrial society*. Per. from English. (p.480). Moscow: "Progress".
12. Engels, F. (1961). *Preparatory work for "Anti-Dühring"*. Per. with him. K. Marx and F. Engels. Soch., Ed. Tue. T 20, M. Gospolitizdat, M., pp.629 - 654.
13. Mishin, Yu.D., & Postnikov, P.M. (n.d.). *History and methodology of transport science*. Uch. settlement M. 20 p.
14. Popper, K. (1983). *Logic and growth of scientific knowledge*. Per from English. (p.606). Moscow: "Progress".
15. Vereskun, V.D., Mishin, Yu.D., & Postnikov, P.M. (2018). Transport in the context of post-non-classical science. *Scientific Thought of the Caucasus*, No. 1, pp. 87-93.

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIHLI (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

SOI: [1.1/TAS](https://doi.org/10.1/TAS) DOI: [10.15863/TAS](https://doi.org/10.15863/TAS)  
International Scientific Journal  
**Theoretical & Applied Science**  
p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)  
Year: 2023 Issue: 02 Volume: 118  
Published: 10.02.2023 <http://T-Science.org>

Issue

Article



**Aleksandra Barinova**  
Chonnam National University  
Republic of Korea  
Doctoral Degree Student, General Graduate School,  
College of Social Sciences,  
Dept. of Global Diaspora (International Studies)

**Vera Barinova**  
Chonnam National University  
Republic of Korea  
Doctoral Degree Student, General Graduate School,  
College of Social Sciences,  
Dept. of Global Diaspora (International Studies)


**Youngsool Kim**  
Chonnam National University  
Republic of Korea  
College of Social Sciences,  
Research Professor

## FAMILY IDENTITY NEGOTIATIONS IN INTER-ETHNIC MARRIAGES: RUSSIAN-UKRAINIAN FAMILY CASE

**Abstract:** Russians and Ukrainians have common cultural and historical roots this is Kievan Rus, the Old Russian language and the Orthodox faith. Both Ukraine and Russia are suffering as a result of the ongoing conflict between the two countries. Since both nations belong to a unified ethnic group, that is, they are fraternal people, the recent dispute between them came as a huge shock. The idea for this study first focused on the distinctions between these two nations and how they perceive each other. Additionally, how the dispute's origins affect family identity as well as how family identity affects conflict. This study explored intergenerational family identity negotiations in inter-ethnic marriages between Russians and Ukrainians to achieve this goal. Through this analysis, the identity positions of the two ethnic groups were examined, and an attempt was made to comprehend their disparities. A thorough analysis of three generations was completed during the investigation. Specifically, the parents and children of mixed Russian and Ukrainian households, as well as the Russian paternal grandparents and Ukrainian maternal grandparents. The two questions below were the focus of this investigation. First, given a historical and social context, what significance does interethnic marriage have? Second, how do families in interethnic unions negotiate their relational, cultural, and family identities, and what role does their family identity play?

**Key words:** Inter-ethnic marriages, family, generations, family identity negotiations, Russians, Ukrainians  
**Language:** English

**Citation:** Barinova, A., Barinova, V., & Kim, Y. (2023). Family identity negotiations in inter-ethnic marriages: Russian-Ukrainian family case. *ISJ Theoretical & Applied Science*, 02 (118), 180-188.

**Soi:** <http://s-o-i.org/1.1/TAS-02-118-17> **Doi:**  <https://dx.doi.org/10.15863/TAS.2023.02.118.17>  
**Scopus ASCC:** 3300.

### Introduction

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИЦ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

Mixed marriages in the USSR<sup>1</sup> were supported both in theory and in practice, since mixed marriages contributed to the final merging of nations into a single Soviet. Inter-ethnic marriages were seen as a tool of modernization, especially in backward regions. According to Soviet theorists, mixed couples moved away from the traditional way of life. They accepted a modern, typically Soviet way of life, creating an example to follow in their republics (Hirsch, 2005).

Russian was considered as the language of interethnic communication in the USSR. Therefore, the existence of a common language contributed to the conclusion of interethnic marriages, and in such families the primary language of communication was Russian. Even today, the approach to interethnic marriage in Russia remains unchanged, as in USSR times, when they valued friendship between people and considered multinationalism as a national force, emphasizing the integration of ethnic relations. (Adrienne, 2022).

In Russia, according to statistics for 2019, there lived about 3 million people with a Ukrainian surname, Ukrainian roots, or even Ukrainian identity (Биятов, 2019). On the other hand, in 2021, 3.7 million Russians lived in Ukraine (Водяний, 2022). This could have a significant impact on the process of identity formation not only in Ukraine, but also in Russia. And although there are similarities in the people and cultures of the two countries, there are also differences. Therefore, a more thorough study of the ways of their communication is required in intercultural and interethnic relations between Russians and Ukrainians. This is related to fact, that cultural background impacts contact, and the communication process is a way of expressing culture (Saunders, 1999).

Russians and Ukrainians belong to East Slavic nations and both have similar ethnic and cultural roots. Also, as one unified ethnic group, as fraternal people, and as heirs of Kievan Rus, they consider like a family. In Soviet times, Russians and Ukrainians were perceived as brothers, and the collapse of the Soviet Union led to the formation of independent states of Russia and Ukraine with their national interests, foreign and domestic policies. The political divorce of Ukraine from Russia was one of the most painful perceptions in the Russian public consciousness. Meanwhile, the wall that has emerged in recent years between the historical and spiritual space, created by Russians and Ukrainians, is perceived as tremendous common misfortune and tragedy (Путин, 2021).

The sudden conflict between Ukraine and Russia drew the attention of researchers to the identity of the two countries. In addition, a discussion has begun

about whether Russians and Ukrainians are one and what it means (Miller, 2022). Meanwhile, much more time has been devoted to studying the impact of identity on the conflict's genesis than looking at the influence of competition on identity (Alexeev, 2015). However, researchers in their scientific works did not pay much attention to the issues of interethnic relations and the coordination of cultural identities. What is so controversial about Ukrainian issues is about Ukrainian identity, because it has to do with Russia.

In ethnic conflicts, the most important things are constant interactions, dialogue and discussion of the nature of the relationship between 2 sides of the competition. Cultural identity impacts communication because it is expressed cultural identity in different forms of communication and can be the same or different from the interlocutor (Collier, 2005). The great interest is how identities are negotiated, created, maintained, transformed and strengthened through interaction with family members. This study, titled "Family Identity Negotiations", will explain the cultural differences between the two ethnic groups and providing a deeper understanding of multicultural families' complex nature and characteristics.

This study focuses on understanding of the differences between Russians and Ukrainians by examining the role played by family identity between two ethnicities through intergenerational family identity negotiation in interethnic marriages. The two questions below were the focus of this investigation. First, given a historical and social context, what significance does interethnic marriage have? Second, how do families in interethnic unions negotiate their relational, cultural, and family identities, and what role does their family identity play?

## II. Identity negotiation concept and analysis framework

In identity negotiations, the term identity is defined as a multifaceted individual personality, depending on the structure of society and personal relationship to cultural, ethnic, religious, social class, gender, sexual orientation, professional development, family role and kinship ties in the community. The term "negotiation" also refers to exchanging verbal and non-verbal messages between two or more communicators, depending on different sociocultural groups, to maintain, threaten or reinforce each other's unique individual identities.

Identities differ depending on the cultural context. In identity negotiations, a particular identity influences everyday interactions with another person. Thus, studying the process of identity coordination between ethnic families, it seems necessary to check

<sup>1</sup> The Union of Soviet Socialist Republics, the Soviet Union was a state in Eurasia that existed from 1922 to 1991. It was a federal union of 15 national republics: Russian Soviet Federative Socialist Republic (RSFSR), Ukrainian SSR, Byelorussian SSR, Uzbek SSR,

Kazakh SSR, Georgian SSR, Azerbaijan SSR, Lithuanian SSR, Moldavian SSR, Latvian SSR, Kirghiz SSR, Tajik SSR, Armenian SSR, Turkmen SSR, Estonian SSR).

## Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИЦ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

not only the problem of individual identity, but also the problem of intergenerational family identity. Significantly it can help to understand better the role of identity negotiations in intercultural communication.

This study considers the negotiation of cultural identity from four perspectives. First, it is a prominent role of cultural identity. The expressiveness of cultural identity indicates the strength of belonging to a particular cultural group (Ting-Toomey, 2005). The second dimension is the difference between ascribed and recognized cultural identity. Cultural identity often results in strained or conflicting relationships between group members, where the individual's assigned and assumed identity do not match (Collier, 2009). The third dimension is the dialectical approach to cultural identity. The dialectical approach implies that multiple identities are reconciled through contradictions and identity of self-definition (Martin, Nakayama 1999). This is important and relevant for explaining the complexities of interethnic family identity. The fourth dimension is the intersection of multicultural identities. The role of cultural identity also depends on contextual constraints such as social and historical context (Collier, 2009). In other words, it is necessary to consider the meaning of marriage between two peoples in the historical and social context of the times of the USSR.

In particular, the identity of family relationships is considered in terms of such concepts as family decisions, shared values, eating and drinking habits, gender roles, attitudes towards time, religion, and stress. Decision-making by couples is not mutual and rational and may differ under the influence of various emotions, such as fear, disappointment, fatigue, loneliness, happiness, etc. (Adams, 2004; Martin & Nakayama, 2007; Romano, 1997).

In parenting, the process can be described as each spouse's cultural and kinship identity and the negotiation of child restraints. Parenting is an essential topic for inter-ethnic couples, as different parents may have different cultural backgrounds and expectations towards their children. When raising children, paying attention to the dialectical negotiations between parents is necessary (Ho, 1990).

### III. History and social context of interethnic marriage

#### 1. Resettlement migration of Ukrainians to Russia and interethnic marriages.

In USSR times, people of different nations could freely move to a new residence. Resettlement was a form of migration. Planned resettlement was carried

out as a voluntary relocation of peasants for permanent residence from agrarian-overpopulated land to poor regions of the USSR to special resettlement land funds allocated by the state with the permission of local land authorities (Постановление Совета Министров СССР). Maternal grandfather met a young 16-year-old maternal grandmother in 1948, the marriage was not registered officially but was concluded in the village according to Ukrainian tradition. They had six children, the first and second daughters were born in the Ukrainian SSR and were recorded under the father's surname, and the rest of the children were recorded under mother surname, so the family retained two surnames. It is confirmed that the birth certificate was written in two languages, Ukrainian and Russian (Главбух)<sup>2</sup>, (Управление ЗАГС).<sup>3</sup>

Then, in 1953, the maternal grandfather with his grandmother, two children, mother and brother, emigrated by train from the Ukrainian SSR to the RSFSR, namely to the Chkalovskoye village in the Primorsky region. In the service book of the maternal grandmother, there is an entry about the termination of her labor activity in the Ukrainian SSR in connection with the planned resettlement in the RSFSR. Upon arrival, the maternal grandmother worked at the state farm, and the maternal grandfather became a laborer in the fields. They had very little money, lived in poverty, and to feed their families, they had to farm and grow vegetables. They had 50 acres of land; the whole family was engaged in animal husbandry, breeding cattle, pigs, chickens and geese. In the Chkalovskoye village, the maternal grandparents had four more children (two sons and two daughters).

In Soviet times, such a migration policy was one of the primary forms of labor supply and land settlement. It was planned to boost the Soviet economy and agriculture in Siberia and the Far East Region. When determining the places for the recruitment of resettlement families, the main criteria was the reserve of labor resources available there. During the resettlement, the similarity of the natural and climatic conditions of the exit areas and the areas of settlement, organizational and economic motives (preservation of traditional agricultural skills, the use of new settlers in their regular jobs), and the compactness of the settlement of representatives of one nationality were considered. Reception plans considered the prospects for further development of the economy, and the possibility of providing new settlers with houses, livestock, household plots, and

<sup>2</sup> From December 9, 1934, in accordance with the Decree on the procedure for registering acts of civil status, birth registration became mandatory, and children born in an unregistered marriage of parents must be registered on an equal basis with children born in a registered marriage. And by agreement of the parents, the children are assigned the surname of the father or mother.

<sup>3</sup> According to the Decree of the People's Commissariat of RSFSR No. 15 adopted in 1946 on streamlining the registration of acts of civil status, all certificates of acts of civil status were written in two languages, 1<sup>st</sup> in Russian and in the corresponding language of the autonomous republic.

## Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	ПИИЦ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

food. (Большая Российская энциклопедия, 2015).

**2. Historical and social context of interethnic marriage.** An interethnic marriage is between spouses belonging to different ethnic, religious or sociocultural groups. Marriage between ethnic groups becomes more difficult as the distance between ethnic groups increases. People are more likely to have interethnic marriages if they live in a different ethnic group for a long period of time (Соболевская, 2015).

In 2010, among inter-ethnic marriages in Moscow, 35.4% were Russian-Ukrainian marriages, 9.6% were Russian-Moldovan, 8.5% were Russian-Armenian, the following marriages are marriages with Belarusians, Uzbeks, Azerbaijanis, Georgians and Tajiks (Муниципальный совет, 2020). Thus, Ukrainian was the most preferred nationality in the formation of married couples in Russia.

In the Soviet Union, during the first decades of Soviet management, the concept of race was virtually absent from Soviet discourse. The state distributed citizens according to "nations" or "nationalities", and not according to racial characteristics. Moreover, these categories were perceived mainly in cultural and historical terms, and not in biological or genetic terms. Each citizen of the USSR had only one citizenship, but a different nationality was recorded in the passport. When receiving a passport at the age of 16, a person of mixed origin had to choose the nationality of the father or mother. So many people have separated from one person in choosing one of two parents.

In the Brezhnev time, scientific publications tried to demonstrate the growth in the number of interethnic marriages throughout the Soviet Union, since this was supposed to confirm the hypothesis of the inevitable "merging" of Soviet people. Within the framework of Soviet national policy, language was considered one of the most critical components of national identity. Each national republic in the USSR had its own "national language", the study of which was officially encouraged through the creation of schools teaching in the native language, the publication of textbooks and newspapers, and the creation of national elites. Russian was the language of international communication throughout the country, and in every national school without exception, it was taught as a second language. However, in the republics, people strove to master the

Russian language perfectly, as this made it possible to receive higher education; and career building. Thus, the existence of a common language of communication contributed to the conclusion of interethnic marriages (Adrienne, 2022).

## IV. Intergenerational Family Identity Negotiation in Interethnic Marriages

**1. Research methods and subjects.** The research method applied in this study was Qualitative approach and for data collection were used literature review analysis and the interviews performed by in-depth session of families. The interviews focused on three generations, namely paternal and maternal grandparents, parents, and grandchildren. Paternal grandparents are Russians, the maternal grandparents are Ukrainians, the father is Russian, the mother is Ukrainian, and grandchildren are mixed Russian and Ukrainian origins.

Since all members of the first generation has passed away, the study of paternal and maternal grandparents was reconstructed from the memories of family members of the second and third generations. In particular, parents and grandchildren actively participated in the interview to recall the first-generation identity negotiations. And also described the process of raising their children, forming a family identity and reconciling different identities. The reason the first generation was included was because it had a significant influence on the second generation and subsequently on the third generation as well.

The interviews were conducted between September 5 - October 10, 2022 with, second-generation parents and third-generation grandchildren residing in Primorsky Region, Russian Federation. The grandchildren interviewed the second-generation family members several times during the research period, and the responses were recorded, organized and framed in a standard way. The average time of an interview did not exceed 1 hour. The interviews were done with pre-prepared questions. The language used during the interview was Russian, so the participants were able to freely express their thoughts, feelings and emotions. To ensure confidentiality, the names and other information of the interviewees were omitted and replaced by the names of the degrees of relationship of kinship ties.

**Table 1. Basic information of interviewees**

Relation	Ethnicity	Country of birth	Year of birth	Age of marriage	Marital period	Education	Occupation	
Paternal grandfather 1	A	Russian	RSFSR (Saratov)	1926	25	45	Elementary school	Driver
Paternal grandmother 2		Russian	RSFSR (Penza)	1929	23	45	College	Head nurse
Maternal	B	Ukrainian	Ukrainian SSR	1923	25	28	Elementary	Laborer in the



## Impact Factor:

ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
ISI (Dubai, UAE) = 1.582	PIHIQ (Russia) = 3.939	PIF (India) = 1.940
GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

grandfather1			(Chernigov)				school	fields
Maternal grandmother2		Ukrainian	Ukrainian SSR (Chernigov)	1932	16	28	Elementary school	Laborer in the fields
Father 1	C	Russian	RSFSR (Primorsky Region)	1952	30	40	College	Welder
Mother 2		Ukrainian	RSFSR (Primorsky Region)	1955	27	40	Secondary school	Junior nurse
Granddaughter1	D	mixed Russian and Ukrainian origins	Russian Federation (Primorsky Region)	1983	Unmarried	Single	University	Unemployed
Granddaughter2		mixed Russian and Ukrainian origins	Russian Federation (Primorsky Region)	1984	Unmarried	Single	University	Office worker

**1.1 First-generation.** The paternal grandfather (A1) is Russian and was born in 1926 in a family of workers in the city of Saratov, RSFSR. He graduated from elementary school and later went to serve in the army in the Far East in 1943. After serving in the army, he decided to live constantly in the Primorsky Region. In 1950, he met his future wife through matchmaking, got married, and in 1952 they had a son. The paternal grandmother (A2) is also a Russian, she was born in 1929 in the Penza region, RSFSR. When she was 7 years old, her parents with her younger brother voluntarily moved to the Russian Far East. The maternal grandfather (B1) was Ukrainian and was born in 1923 in Chernigov, Ukrainian SSR. The maternal grandmother (B2) was also Ukrainian and was born in 1932 in the same place as well. In 1953 they moved to the Far East under a planned agricultural resettlement program.

**1.2 Second-generation.** The father (C1) was born in 1952 in Primorsky Region in the Russian family. The mother (C2) was born in 1955 in Primorsky Region in the Ukrainian family. Both of them got married in 1982.

**1.3 Third-Generation.** The grandchildren (D) were born in Primorsky Region, Russia. Both of them are Russian by nationality, (D1) is unemployed, whereas the other (D2) is an office worker, and both of them are single.

**2. Cultural identity's negotiations.** According to the interview participants' observations, and points of view, several factors were identified to confirm the content of the study about the discussion of cultural and relational identity. In particular, religion and baptism were considered in the negotiations of cultural identity.

**2.1 Religion** has a decisive influence on the formation of a person's worldview, determines the deep meaning of behavior, and forms motivation. The religious behavior of family members deferred depending on individual values systems, and certain

conflicts can be explained by the differences in beliefs and attitudes.

Namely, the A family had a neutral attitude towards religion and did not follow religious traditions, such as attending church or celebrating religious holidays. Therefore, they just buy Easter bread on Easter. The B family adhered most strictly to traditional Orthodox beliefs and followed Ukrainian traditions. In particular, B2 kept a strict fast before Christmas, prayed regularly and she visited a church in the major holidays. Thus, she prepared a wide variety of dishes to celebrate Christmas and Easter. However, her children had the freedom to choose whether or not to follow a religion and attended church but did not follow a strict fast.

C1 is a non-religious person and has a neutral attitude toward religion, accordingly, he assumed religious holidays as ordinary holidays similar to A2. Therefore, C1 did not set a festive table, neither than invite friends or relatives to his home for Christmas or Easter. C2 is the opposite, a strong Orthodox believer who always follows religion and Ukrainian traditions as B2. In particular, to meet Easter or Christmas, it was necessary to prepare holiday dishes in advance, and this process took extra time. This was the reason for conflicts in the C family because every day dishes were not always fully prepared.

D1 and D2 attend church regularly on Christmas and Easter, but do not follow the Great Lent. They believe that it is impossible to live without faith and they want to follow the culture and traditions transmitted to them from C2.

**2.2 Baptism** is an equally important and solemn event and rite in the life of the Orthodox, therefore, the traditions and customs of baptism are the same for both Ukrainians and Russians. People believed that if baptism was celebrated at a joyous, well-laid table, the baptized child's life would pass in joy and prosperity.

A2 objected to the grandchildren's baptism, but C2 was trying to find a way to baptize Ds. Thus, she

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIIHQ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

secretly baptized them in her village's small Orthodox church. D1 and D2 received Orthodox names to avoid difficulties in life. C1 has always lived as an atheist, but one day, at the workplace, when he was cutting metal, a piece of metal flew into his head. Fortunately, he had goggles on his face that saved him from a skull fracture and death. After this near-fatal accident, C1 decided to accept Christianity at the age of 60 and was baptized.

**3. Family relationships identity's negotiations.** In this part, factors such as family decision-making, gender roles, relationships between grandparents and grandchildren, parenting, and family name changes have been reviewed.

**3.1 Family decision-making** can be one-sided, i.e. a male-dictated decision as well as decisions resulting from the spouse's rational dialogue. Also, in the decision-making process, different emotions or tensions can be present or conflicts may arise. In this family, decisions were predominantly made by males, but this had nothing to do with ethnicity or discrimination.

A1 was the head of the family, made all the decisions, and conveyed them to C1, thus having a strong influence on his family. For the B family, decisions were made through gatherings and discussions, sometimes it was in very emotionally charged environments, with disputes and disagreements arising. C1 was the head of the family but consulted with A1, and then made the decision. C2 was from a village and did not receive a higher education, so it was believed that she lacked judgment, so her opinion was not taken at all. Both D1 and D2 are of the opinion that a person should be independent and take responsibility for own life without the advice of A's and C's families. All decisions must be made by the spouses together.

**3.2 Gender roles.** It is important to note that cultural identity negotiations can be gender-specific. Within gender roles, it can be observed how these negotiations impact the husband and wife's relationship. In the case of this family, the identity of generations can be analyzed by examining the relationship and of gender equality and gender roles. In regards to the first-generation's double-income couple, there can be seen the influence of the social and historical setting of the Soviet era. In addition, gender roles are inherited like family identities. In the context of two ethnic cultures, things like gender ideology can affect a couple's relationship.

The A family was a working couple, so the gender roles of the couple were the same. A1 worked and cooked food, A2 worked and rarely cooked at home, and could do only cleaning. B1 earned money and was the authority in the family. B2 took care of the house and raised the children. The elder children took care of the younger ones. C1 only worked and did not know how to do housework, C2 basically did all the housework. A2 also criticized C2 for not being

able to cook well because she was not well educated. In Ds opinion, the wife has to do housework plus educate and take care of the children. The husband just has to earn money, take care of the family and ensure its safety.

**3.3 Relationships between grandparents and grandchildren.** A2 did not love C2 because she was irritated by C2's Ukrainian food, her lifestyle and the way of raising D1 and D2, and the imposition of church traditions. C2 did not belong to a Russian family and A2 would often comment that Ds were also non-Russian "breeds" and wanted them to study more than visit church. Due to this behavior, from an early age Ds felt like some strangers in the family, particularly with A2 and disliked her. However, as A2 had tremendous impact on C1, he spent more time at A2's home than with his own family, so they rarely traveled together and took very few pictures. From childhood, A2 made Ds to sweep the floor or wash the dishes, do a lot of housework, especially D1 did the dirtiest work. Ds often came to visit A2 with C1, but she would exclaim that Ds' visit was a complete surprise, she was rude and liked to repeat that she did not expect Ds. There was no food on the table, A2 always gave stale bread, sometimes with mold and old cookies.

**3.4 Parenting** can be an important topic when discussing identity in normal family relationships. In raising children, multiple identities are revealed, distinguished, and crossed through cultural differences, personal identities, and ongoing negotiation. However, in this family, parents rarely participated in the upbringing of children. This is due to the fact that in the socialist system of the Soviet Union, the state provided the basis for the safety and socialization of children. Thus, the parenting of children does not intersect with religious, cultural, and personal complexities. There is no dialectical tension between traditional cultural education or the interactive way, between tradition and modernity.

The A family believed that education is very important, so more the books is better. They did not like to play with their grandchildren and considered having many children a very expensive decision. The B family had many children, so they worked hard to earn money and feed the whole family. Education was considered important but optional. Children should be hardworking, honest, respectful to others and live fairly. For parenting children, they first used dialogue, that's why the children respected their parents, but if they were found guilty, then they were beaten with a belt. B family's children were forced to do manual labor by growing vegetables and animals. C1's belief is that education is important and children should not play. C2 allowed the children to play, and emphasized that friendship and social connections are more important than education, the main thing is to meet a good person and start a family. Parents rarely participated in raising Ds. Therefore, it was very

## Impact Factor:

ISRA (India)	= 6.317	SIS (USA)	= 0.912	ICV (Poland)	= 6.630
ISI (Dubai, UAE)	= 1.582	PIHII (Russia)	= 3.939	PIF (India)	= 1.940
GIF (Australia)	= 0.564	ESJI (KZ)	= 8.771	IBI (India)	= 4.260
JIF	= 1.500	SJIF (Morocco)	= 7.184	OAJI (USA)	= 0.350

difficult for Ds to study in elementary school, because they did not receive any preschool preparation and their parents did not help with their studies. Instead, Ds stayed at school until late in the evening to get more knowledge. Due to the lack of knowledge at school, they faced discrimination from teachers. They had very few friends, they felt lonely, isolated, and misunderstood, and they led a secluded life. In the future, Ds prefers the traditional way of raising children.

**3.5 Change of surname.** Differences in cultural identity, as a rule, appears more frequently in interethnic marriages. Personal life, relationships, and communication with people largely depend on the difference in cultural attitudes, value systems, positions, and behavior in society. Therefore, interethnic marriages are more likely to face problems and difficulties in the course of everyday exchanges. Culture, which influences the development and formation of personality, is the tendency of each person to look at the world from their own point of view, based on personal experience, and upbringing which is unique to a particular ethnic group.

The change in D's surname can also be called an individual trend. At the age of 14, Ds were legally recognized as Russians, but since they lived all their life adhering to Ukrainian traditions, they actually led a Ukrainian way of life. And due to the bad attitude of A1, Ds had a desire to give up their father's surname. In Russia, historically, changing a surname was not so easy, it required the re-issuance of all available documents, so this was considered possible only due to marriage. But in 2010, D2 paid the tax and changed the surname taken from Ukrainian relatives from the maternal side.

A2 found out about this change in the act of the changes in 2012, perceived it as a betrayal and abandonment of the family and a break in relations, and criticized the choice of a Ukrainian relative's surname. C1 also took the news very negatively, but over time, the situation in family relations returned to normal, but he remembered this as a negative event in his life. A2 didn't love Ds, including C2, and claimed that C2 was a bad wife and did not raise her children well and she influenced D's decision to change surname, but this is not true. After changing their surname, Ds rarely visited A2's grandmother's home and only started talking again in 2014.

Documents, such as the birth certificate, remain connected by origin, but based on D2's words before the change of name, she was under pressure in her heart, but now she feels free and thinks the era of pressure and humiliation has ended. According to D1's words, she felt her life will not remain as before. Ds convince that C1 and A2 will not be able to manage their lives anymore.

## V. Conclusion

This study examined identity negotiations in

interethnic marriages between Russians and Ukrainians. The results of the intergenerational family identity negotiations of interethnic marriages are as follows.

**1. A prominent role of cultural identity.** From one point of view, the grandchildren consider themselves Russians because they were born and live in Russia. On the other hand, they follow the way of life and traditions of both cultures, resulting in their bicultural identity. The grandchildren do not and have never had negative feelings about Russia as a country. They said that since Russia is a multinational country, they never really thought about who they are and what ethnic group they belong to. But they had negative feelings towards their paternal grandparents and father, who are Russians. On the other hand, they have a positive and respectful attitude towards the cultural identity of their maternal grandparents and mother. Thus, it can be said that personal relationships, and not ethnicity, hurt the stability and reliability of dual-ethnic unions. The grandchildren insist that one should not confuse the political situation and the ethnic issue in relations between people, because these are entirely different concepts.

**2. The difference between ascribed and recognized cultural identity.** Regardless of whether grandchildren recognize their identity, the idea of themselves and relationships in some way impact everyday behavior. When identities do not match, tension or contradiction arises, demonstrating the vital role of identity negotiation in the context of intercultural communication skills.

The identities attributed to grandchildren are Russian and Ukrainian. However, the identities attributed to paternal and maternal grandparents and parents in everyday life were separated. Therefore, the identities of the grandchildren were not integrated into one whole, but, on the contrary, were reduced to one identity, that is, the grandchildren had to choose their cultural identity. It can be said that tensions and contradictions manifest in the form of the dominance of Russian cultural relations over Ukrainian culture in formatting family identity. Ultimately, the grandchildren had to leave this situation and choose a new cultural identity.

**3. The dialectical approach to cultural identity.** The cultural identity of grandchildren shows a dialectical tension between individual and cultural identity. They disagree that their parents want them to have a unique identity and how they define their own identity. Grandchildren focus on individual and family behavior and change their attitudes and beliefs based on cultural stereotypes and family relationships. This happens because grandchildren find their identity marginalized and questioned from one side or the other. They try to find their own identity by separating themselves from the group they belong to. The grandchildren were undergoing a self-transformation, and the change of surname can be seen as an

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

agreement on a relational identity. This is not a change of cultural identity, but a change of identity by a dialectical approach in a difficult situation. Changing last name by grandchildren, the paternal grandmother took as a betrayal and abandonment of the family, so the grandchildren rarely visited their grandmother's house. Still later they resumed communication with each other. This can be seen as the negotiation of relational identities through interactions.

#### 4. The intersection of multicultural identities

It can be said that in gender roles cultural identity manifests itself as the intersection of multicultural identities. Regarding gender roles, grandparents showed that trends in gender equality were sustainable. Their gender roles show behavior relevant to gender equality in the socialist system of the Soviet Union. On the other hand, the parents guide

the social context of the post-Soviet period. Therefore, it can be said that intergenerational family identity in gender roles is based on historical and social context or relationships rather than age and gender.

Looking at this family, we can see that the reliability and stability of marriage are influenced by the couple's relationship and preparation for family life, and not by the ethnicity of the spouses. Intergenerational communication, lifestyle, parenting and family roles of two ethnically different partners may differ, often leading to conflicting requirements. The most significant thing in this matter is specific personal characteristics, and the feeling of belonging to a particular country is a secondary factor. Therefore, in order to form the desired family identity, first it's necessary to understand and respect each other's identity.

## References:

1. Adams, J. (2004). This is not where I belong! The emotional, ongoing, and collective aspects of couples' decision making about where to live. *Journal of Comparative Family Studies*, 35:459-484.
2. Adrienne, E. (2022). *Intermarriage and the Friendship of Peoples: Ethnic Mixing in Soviet Central Asia*. Cornell University Press.
3. Alexeev, M. (October 15, 2015). *Vojna i social'no-politicheskie identichnosti v Ukraine. Ponars Eurasia*. Retrieved September 17, 2022 from <https://www.ponarseurasia.org/8192/>
4. Collier, M. J. (2005). *Theorizing cultural identifications: Critical updates and continuing evolution in W. B. Gudykunst (Ed.), Theorizing about intercultural communication, Thousand Oaks, CA: Sage*.
5. Collier, M. J. (2009). Negotiating intercommunity and community group identity positions: Summary discourses from two Northern Ireland intercommunity groups. *Negotiation and Conflict Management Research* 2: 285-306.
6. Hirsch, F. (2005). *Empire of Nations: Ethnographic Knowledge and the Making of the Soviet Union* (Culture and Society after Socialism).
7. Ho, M. K., (1990). *Intermarried couples in therapy*, Springfield, IL: Charles Thomas.
8. Martin, J. N., & Nakayama, T. K. (1999). Thinking dialectically about culture and communication. *Communication Theory*, 9: 1-25.
9. Romano, D. (1997). *Intercultural marriage: Promises and pitfalls* (2nd ed). Yarmouth, ME: Intercultural.
10. Saunders, H.H. (1999). *A public peace process*. New York: Palgrave.
11. Ting-Toomey, S. (2015). *Identity negotiation theory*. In J. Bennett (Ed.), *Sage Encyclopedia of Intercultural Competence* Volume 1, CA: Sage.
12. Ting-Toomey, S., (2005). *Identity negotiation theory: Crossing cultural boundaries*. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication*, Thousand Oaks, CA: Sage.
13. Bijatov, E. (December 19, 2019). *Putin skazal, skol'ko ukraincev prozhivaet v Rossii*. Ukraina.ru. Retrieved September 22, 2022 from <https://ukraina.ru/20191219/1026101639.html>
14. Vodjanij, A. (May 9, 2022). *V Ukraine ostalos' tol'ko 5% jetnicheskikh russkikh. 80% nazvali rodnym ukrainskij jazyk*. liga.Novini. Retrieved September 22, 2022 from <https://news.liga.net/society/news/v-ukraine-ostallos-tolko-5-etnicheskikh-russkikh-80-nazvali-rodnym-ukrainskiy-yazyk>
15. (2022). *Glavbuh - Zhurnal dlja buhgalterov* №1. Instrukcija NKVD SSSR ot 09.12.1934 № b/n Retrieved September 18, 2022 from [https://www.glavbuh.ru/npd/edoc/97\\_472570](https://www.glavbuh.ru/npd/edoc/97_472570)
16. Miller, A. I. (2022). Nacional'naja identichnost' na Ukraine: istorija i politika. *Rossija v global'noj politike*, 20(4): 46-65.
17. Osipov, Jy. (2015) *Bol'shaja Rossijskaja jenciklopedija*. V 35 tomah. Tom 28. Pustyrnik — Rumcherod.
18. (1974). *Postanovlenie Soveta Ministrov SSSR ot 28.08.1974 № 677*.

**Impact Factor:**

**ISRA (India) = 6.317**  
**ISI (Dubai, UAE) = 1.582**  
**GIF (Australia) = 0.564**  
**JIF = 1.500**

**SIS (USA) = 0.912**  
**ПИИИ (Russia) = 3.939**  
**ESJI (KZ) = 8.771**  
**SJIF (Morocco) = 7.184**

**ICV (Poland) = 6.630**  
**PIF (India) = 1.940**  
**IBI (India) = 4.260**  
**OAJI (USA) = 0.350**

---

19. Putin, V. (July 12, 2021). *Ob istoricheskom edinstve russkih i ukraincev*. *Administracija Prezidenta Rossii*. Retrieved September 16, 2022 from <http://kremlinuru/events/president/news/66181>
20. Sobolevskaja, O. V., (June 5, 2015). *Smeshannye braki izmerjaut distanciu mezhdju jetnosami*. IQHSRU Retrieved September 19, 2022 from <https://iq.hse.ru/news/177665069.html>
21. (2022). *Administracija Prezidenta Rossii*. Retrieved September 16, 2022 from <http://kremlin.ru>
22. (2022). *Municipal`nyj sovet i Mestnaja administracija okrug 21, 2020. Mezhnacional`nye braki i specifika assimiljacii v Rossii*. Retrieved September 19, 2022 from <http://okrug21.ru/>
23. (2022). *Upravlenie ZAGS Tumenskoj oblasti, 2017 Istorija formy blankov svidetel`stv o gosudarstvennoj registracii aktov grazhdanskogo sostojanija*. Retrieved September 18, 2022 from <https://zags.admtymen.ru/OIGV/zags/actions/100/more.htm?id=11457836@cmsArticle>

## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
ПИИИ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

### International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2023 Issue: 02 Volume: 118

Published: 28.02.2023 <http://T-Science.org>

Issue

Article



**Annaguly Rejepovich Deryaev**

Scientific Research Institute of Natural Gas of the State Concern „Turkmengas”  
Candidate of Technical Sciences, Senior Researcher,  
Ashgabat, Turkmenistan  
[annagulyderyayew@gmail.com](mailto:annagulyderyayew@gmail.com)

## A BRIEF SCIENTIFIC AND PRACTICAL OVERVIEW OF THE DRILLING OF A DIRECTIONAL WELL ON THE WESTERN CHELEKEN FIELD

**Abstract:** The article discusses the experience of drilling in Turkmenistan of a directional production and evaluation well in order to restore oil production from an inactive field in the coastal zones of the coastal waters of the Caspian Sea.

This work can be used and useful for the development of fields in difficult-to-develop shallow waters and to reduce costs during their drilling, as well as to increase the volume of oil produced in order to develop the field in an accelerated manner, without increasing the oil recovery coefficient.

**Key words:** azimuth, conservation, displacement, vertical, along the hole, intensity, combined schedule, drilling mode, downhole, wellhead.

**Language:** English

**Citation:** Deryaev, A. R. (2023). A brief scientific and practical overview of the drilling of a directional well on the western cheleken field. *ISJ Theoretical & Applied Science*, 02 (118), 189-192.

**Soi:** <http://s-o-i.org/1.1/TAS-02-118-18> **Doi:**  <https://dx.doi.org/10.15863/TAS.2023.02.118.18>

**Scopus ASCC:** 2209.

### Introduction

In accordance with the Program for the Development of the oil and gas industry of Turkmenistan, for the period up to 2052, all employees of the oil and gas industry have specific tasks for the successful implementation of large-scale projects of the country's oil and gas sector.

The wise economic policy of the President of Turkmenistan, Serdar Berdimuhamedov, is based on the principles of channeling the vast natural resources and economic power of the country to ensure a happy life for the Turkmen people.

On behalf of the Leader of the Nation, Chairman of the Halk Maslahaty of Turkmenistan Gurbanguly Berdimuhamedov, the development of shallow waters of the coastal part of the Caspian Sea began in 2008.

In order to increase oil and natural gas production, in accordance with the purpose of ensuring a reliable resource base, it is planned to increase efficiency through the introduction of new technologies and methods during the necessary volume of exploration,

exploration and deep operational evaluation drilling operations. The experience gained during the construction of a directional exploration well in southwestern Turkmenistan made it possible to conclude that drilling operations can be carried out on the fields located in the shallow waters of the Gulf of the Caspian Sea with the help of directional wells with a deviation of the bottom a long distance from the vertical.

In 1991, the Caspian Sea flooded the Western Cheleken field with a tide. For the purpose of ecology and non-pollution of the marine water area, all existing wells were in conservation. To resume the development of the field, it was necessary to drill new operational and evaluation directional wells and drilling of these wells began in 2022.

The purpose and objective of these works was to resume the development of the field and with a reduction in capital investments for drilling, as well as strictly observe the ecology of marine pollution [1, 2].

Directional production and evaluation well No. 707 on the West Cheleken square was laid with a

## Impact Factor:

ISRA (India) = 6.317  
 ISI (Dubai, UAE) = 1.582  
 GIF (Australia) = 0.564  
 JIF = 1.500

SIS (USA) = 0.912  
 PIHII (Russia) = 3.939  
 ESJI (KZ) = 8.771  
 SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
 PIF (India) = 1.940  
 IBI (India) = 4.260  
 OAJI (USA) = 0.350

design vertical depth of 2620 meters (along the hole of 2764.37 meters) in order to assess the reserve of hydrocarbon raw materials and increase oil production, with the use of advanced technology from foreign companies. In order to implement this project, the geological data of previously drilled wells were analyzed. Drilling of the well was designed to be carried out from the land with a vertical shaft to a depth of 1650 m. From a depth of 1650 meters, drill with an obliquely directed trajectory with an azimuthal angle within 250-260 degrees to the water part of the Caspian Sea. The maximum intensity of the change in the zenith angle according to the design profile is 1.8 degrees by 30 meters. According to the calculation of reaching the design depth, the maximum zenith angle was 39 degrees. With these calculations, the displacement from the vertical to the roof of the productive reservoir according to the design profile was 450.85 m and the total length of the directional section was 1114.37 m. Drilling was carried out on a ZJ70DS type drilling rig manufactured by the People's Republic of China.

The project for the construction of exploration well No. 707 with a depth of 2620 m (vertical) 2764.37 m (along the hole) at the field in question was developed on the basis of a combined pressure graph in drilled wells and calculations of the hole trajectory. That is, the guide shaft with a diameter of Ø708 mm was lowered to a depth of 7 m (vertically) and secured with rubble concrete. An elongated direction with a diameter of 508 mm was lowered to a depth of 50 m, to overlap weakly cemented sandstones. The conductor Ø=339.7 mm was lowered to a depth of 800, to overlap unstable layers of the horizons of Absheron, akchagil and unstable water layers, as well as possible gas layers of the upper part of the horizon of the red-colored thickness. The technical column Ø=244.5 mm was lowered to a depth of 2100 m vertically and along the

hole of 2119 m, for overlapping in water and possibly gas layers of the middle, lower horizons of the red-colored thickness, as well as for the purpose of controlling anti-discharge equipment in case of possible gas and oil occurrences. The operational column Ø = 139.7 mm, descended to a depth of 2620 m vertically and along the hole 2764 m.

Drilling up to 800 m was carried out vertically on an oil-emulsion lignosulfonate drilling mud with a density in the range of 1.40-1.47 g/cm<sup>3</sup> and fastening with a casing string of 339.7 mm was carried out. The parameters of the drilling mud were adhered to within the following limits: conditional viscosity 40-60 in 30 seconds, conditional water yield 10-12, clay crust thickness 2-3 mm, static shear voltage in 1-10 minutes 30-60, alkalinity pH 9-9.5, total mineralization 13-15.

Drilling mud preparation was carried out with seawater. In order to maintain the design parameters of the drilling mud, 20 kg of soda ash was added to the drilling mud for drilling 1 m of cement stone when drilling the cement cup of the conductor. According to the norm, in order to retain the lubricating properties of the drilling mud, oil was added per 1m of 40 kg penetration [3, 4, 5].

Before the conductor was lowered into the well, the drilling mud was treated with concentrated chemical reagents, and the borehole was worked out with rigid layouts of the bottom of the drill strings in order to unhindered descent and attachment of the conductor to successfully achieve the design depth of the drilled well [6, 7].

Drilling for a technical column with a diameter of 244.5 mm vertically from a depth of 800 m to a depth of 1650 m on a Versadril type hydrocarbon-based drilling mud with a density in the range of 1.47-1.68 g/cm<sup>3</sup> and fastening with a 339.7 mm casing string. The parameters of the drilling mud are given in Table 1.

**Table 1. Parameters of the drilling mud of well No. 707 on the Western Cheleken field**

Drilling mud parameters	800 m replacement	800 m – 2100 m (vertical) 800 m – 2119 m (by hole)	2100 m – 2620 m (vertical) 2119 m – 2764 m (by hole)
Diameter of the borehole, mm	D <sub>c</sub> =339,7 mm	D <sub>b</sub> =311,0 mm	D <sub>n</sub> =215,9 mm
Density, g/cm <sup>3</sup>	1,40 – 1,47	1,47 – 1,61 – 1,68	1,74 – 1,81
Conditional viscosity, sec	40 – 60	40 – 60	45 – 80
Statistical shear voltage			
Q <sub>10</sub> at 10 sec.	8 – 20	8 – 20	10 – 30
Q <sub>10</sub> at 10 min	9 – 25	9 – 25	10 – 35
Plastic viscosity, η, sPz	20 – 35	20 – 35	30 – 45
Dynamic shear attraction, τ <sub>0</sub> , dPa:	15 – 25	15 – 25	20 – 35
Angle of rotation on the device "OFITE", deg:			
φ <sup>0</sup> = 3 rpm	6 – 10	6 – 10	7 – 20
φ <sup>0</sup> = 6 rpm.	8 – 12	8 – 12	8 – 25
φ <sup>0</sup> = 300 rpm.	35 – 60	35 – 60	50 – 80
φ <sup>0</sup> = 600 rpm.	55 – 95	55 – 95	80 – 125
Water output in 30 minutes, in the device "Fann", B, cm <sup>3</sup> .	5 – 2	5 – 2	5 – 2
Clay crust, K, mm.	< 0,5	< 0,5	< 0,5
Hydrogen index, pH	9 – 10	9 – 10	9 – 10

<b>Impact Factor:</b>	<b>ISRA (India) = 6.317</b>	<b>SIS (USA) = 0.912</b>	<b>ICV (Poland) = 6.630</b>
	<b>ISI (Dubai, UAE) = 1.582</b>	<b>ПИИИ (Russia) = 3.939</b>	<b>PIF (India) = 1.940</b>
	<b>GIF (Australia) = 0.564</b>	<b>ESJI (KZ) = 8.771</b>	<b>IBI (India) = 4.260</b>
	<b>JIF = 1.500</b>	<b>SJIF (Morocco) = 7.184</b>	<b>OAJI (USA) = 0.350</b>

Total solid phase, (%)	13	14	33
Total carbon phase, (%)	70	70	54
Total water phase, (%)	17	16	13
Hydrocarbon/water ratio	80/20	80/20	80/20
Electrical stability (Volts)	400 – 1500	400 – 1500	500 – 1500
Calcium content (% , weight)	5 – 8	5 – 8	5 – 8
Chloride content (% , weight)	3 – 6	3 – 6	3 – 6

Further deepening of the well from a depth of 1650 m to a depth of 2100 m vertically 2119 m along the hole was performed obliquely with a set of zenith angle of 27 degrees and azimuth of 250 degrees, while the displacement of the hole from the vertical was 103.69 m.

The deepening of the well under the production column with a diameter of 139.7 mm from a depth of 2100 m vertically 2119 m along the hole to a depth of 2620 m vertically 2764 m along the hole was performed obliquely with a finite set of zenith angle of 39 degrees and azimuth of 260 degrees. At the same time, the displacement of the hole from the vertical was 491.2 m. Drilling of the interval was carried out with a hydrocarbon-based drilling fluid of the Versadril type with a density in the range of 1.67 - 1.81 g/cm<sup>3</sup>. The parameters of the drilling mud are given in Table 1.

The Versadril system is one of the best systems for drilling clays, where the stability of the hole is the main criterion. In addition, this system operates at high temperatures up to 180-190 °C and has more improved rheological properties. The “Versadril” system has a very low water output [ 8].

In all intervals drilling was carried out with the rotary method in the following modes:

- in the interval from 0 m to 50 m under the elongated direction: axial load 4 – 6 t.ef., rotor rotation 30 – 40 rpm, drilling mud consumption 58 l/sec;
- in the interval from 50 m – up to 800 m under the conductor: axial load 10 – 16 t.ef., rotor rotation 60 – 100 rpm, drilling mud consumption 42 l/sec;
- in the interval from 800 m to 1650 m, the vertical part of the technical column: axial load 10 – 14 t.ef., rotor rotation 60 – 100 rpm, drilling mud consumption 41 l/sec;
- in the interval from 1650 m – up to 2119 m in the section of the zenith angle set for the technical column: axial load 5 – 10 t.ef., rotor rotation 120 – 130 rpm, drilling mud consumption 41 l/sec;
- in the interval from 2119 m – up to 2764 m for the production column: axial load 5 – 10 t.ef., rotor rotation 120 – 130 rpm, drilling mud consumption 28 l/sec;

Profile data of the borehole No. 707 on the Western Cheleken area are shown in Table 2.

**Table 2.**

Title	Depth (m)	Zenith angle (degree)	Azimuth (degree)	Vertical depth (m)	Offset (m)
Wellhead	0,00	0,0	0,0	0,0	0,0
Ø339,7 mm	800	0,0	250,0	800	0,0
Angle set interval	1650	0,0	250,0	1650	0,0
Interval stabilization	2100	27,0	250,0	2083,53	103,69
244.5 mm	2118,49	27,0	250,0	2100,0	112,05
Angle set interval	2150,0	27,0	250,0	2128,08	126,30
Interval stabilization	2388,64	39,0	260,0	2328,0	255,63
Entrance to the roof of the formation	2700,04	39,0	260,0	2570,0	450,86
Final depth	2764,37	39,0	260,0	2620,0	491,19

The actual drilling of the well with amendments was brought up to 2764.37 m (along the hole).

In the process of drilling this well, geological and technological studies (GTI) were regularly carried out. They control drilling parameters, assess the overall situation, select reservoirs in cross-section and determine their saturation state, as well as prevent accidents [9, 10].

The station consists of three main modules:

- technological (real-time drilling monitoring);
- gas logging module (recording the total volume of gas content and analysis of the composition of gas impurities);

- geological module (operational analysis of core, sludge, drilling fluids and reservoir fluids) [11].

When drilling a well, the maximum displacement of the bottom was 491.19 m with a magnetic azimuth of 260°, the maximum zenith angle at a depth of 2764.37 m was equal to 39.0°. As a result of the development of the third facility, an inflow was received with a maximum total flow rate of 30 tons /day.

Directional production and evaluation well No. 707 on the Western Cheleken area has successfully fulfilled its goal, confirming the oil and gas potential of this section of the field without additional costs for



## Impact Factor:

ISRA (India) = 6.317  
ISI (Dubai, UAE) = 1.582  
GIF (Australia) = 0.564  
JIF = 1.500

SIS (USA) = 0.912  
PIIHQ (Russia) = 3.939  
ESJI (KZ) = 8.771  
SJIF (Morocco) = 7.184

ICV (Poland) = 6.630  
PIF (India) = 1.940  
IBI (India) = 4.260  
OAJI (USA) = 0.350

materials and time for the construction of an offshore platform [12]. A directional exploration well was drilled with a significant offset from the bottom, creating an opportunity for further acceleration of work on the field site in the Caspian Sea and hard-to-reach places.

### Conclusion

1. By drilling an obliquely directed well, the goal has been achieved and the resumption of development of the mothballed field has begun.

2. This drilling method has cost-effectively reduced the cost of installing an expensive offshore platform.

3. Safe well management prevents the danger of pollution of the marine area.

4. This method is acceptable to apply in hard-to-reach areas that exist on the earth's surface with old infrastructure, as well as in marine areas.

### References:

1. Deryaev, A.R. (2022). *Tekhnologiya bureniya naklonno-napravlennoj skvazhiny s razdel'noj ekspluatsiej odnovenno neskol'kih gorizontov na mestorozhdenii Severnyj Goturdepe*. Materialy 83-j Mezhdunarodnoj nauchno-prakticheskoy konferencii "Aktual'nye voprosy nauki". (pp.30-35). Moscow: OOO Izdatel'stvo Sputnik +.
2. Deryaev, A.R. (2022). *Opredelenie nabora plastov dlya odnovenno, razdel'nogo i sovmestnogo ispol'zovaniya naklonnoj skvazhiny na mnogoplastovom mestorozhdenii Severnyj Goturdepe*. Materialy 83-j Mezhdunarodnoj nauchno-prakticheskoy konferencii "Aktual'nye voprosy nauki". (pp.26-29). Moscow: OOO Izdatel'stvo Sputnik +.
3. Deryaev, A.R. (2022). *Burenie naklonno-napravlennyh skvazhin s burovym rastvorom na uglevodorodnoj osnove «Versadril»*. Sbornik statej po itogam Mezhdunarodnoj nauchno-prakticheskoy konferencii "Razvitie nauki i tekhniki: mekhanizm vybora i realizacii prioritetov". (pp.95-100). Sterlitamak: Nauchnoe izdanie: "Agentstvo mezhdunarodnyh issledovaniy".
4. Deryaev, A.R. (2022). *Rekomendacii po bor'be s pogloshcheniem pri burenii naklonno-napravlennyh skvazhin*. Sbornik statej Mezhdunarodnoj nauchno-prakticheskoy konferencii "Instrumenty i mekhanizmy sovremennogo innovacionnogo razvitiya". (pp.62-65). Ufa: Izdatel'stvo OOO "Omega sajsn".
5. Deryaev, A.R. (2022). *Burenie naklonno-napravlennyh skvazhin s burovym rastvorom na uglevodorodnoj osnove*. Sbornik statej po itogam Mezhdunarodnoj nauchno-prakticheskoy konferencii "Razvitie nauki i tekhniki: mekhanizm vybora i realizacii prioritetov". (pp.95-100). Sterlitamak: Nauchnoe izdanie: "Agentstvo mezhdunarodnyh issledovaniy".
6. Deryaev, A.R. (2022). *Komponovka niza buril'noj kolonny dlya bureniya napravlennoj skvazhiny pri odnovenno-razdel'noj ekspluatsii*. Sbornik statej VII Mezhdunarodnoj nauchno-prakticheskoy konferencii "Aktual'nye voprosy, dostizheniya i innovacii". (pp.61-67). Penza: Nauchnoe izdanie: MCNS «Nauka i prosveshchenie».
7. Deryaev, A.R. (2012). *Burenie naklonno-napravlennyh skvazhin na mestorozhdeniyah Zapadnogo Turkmenistana*. Nebitgazylmytaslama institutyň makalalar ýgyndysynyň 2-nji (29) goýberilişi, (pp.267-276). A: Türkmen döwlet neşirýat gullugy.
8. Deryaev, A.R. (2022). *Kreplenie naklonno-napravlennyh skvazhin dlya osvoeniya sposobom odnovenno razdel'noj ekspluatsii. «Innovacii v nauke, obshchestve, obrazovanii» monografiya*. (pp.53-77). Penza: Nauchnoe izdanie: MCNS «Nauka i prosveshchenie».
9. Deryaev, A.R. (2022). Basic requirements and features of well drilling technology for dual completion of several horizons. *European Journal of Technical and Natural Sciences*, №5 - Vienna: Publishing: "Premier publishing", pp.21-23.
10. Deryaev, A.R. (2022). Development of a hydrocarbon buffer fluid system and field testing. *International Journal of Current Research* vol.14, issue 08 - India - Delhi: Publishing: "International Journal of Current Research", pp.22109-22112.
11. Deryaev, A.R. (2022). Determination of physical properties of oil and gas for field development by dual completion. *Danish Scientific journal*, №64 -Copenhagen V Denmark: Publishing: "Danish Scientific journal", pp.48-50.
12. Deryaev, A.R. (2022). Determination of the properties of reservoir fluids and gases for the development of multi-layer deposits by dual completion. *German International Journal of Modern Science*, №42 -Satteldorf. (pp.28-31). Germany: Publishing: "Artmedia 24".

<b>Impact Factor:</b>	<b>ISRA (India) = 6.317</b>	<b>SIS (USA) = 0.912</b>	<b>ICV (Poland) = 6.630</b>
	<b>ISI (Dubai, UAE) = 1.582</b>	<b>ПИИИ (Russia) = 3.939</b>	<b>PIF (India) = 1.940</b>
	<b>GIF (Australia) = 0.564</b>	<b>ESJI (KZ) = 8.771</b>	<b>IBI (India) = 4.260</b>
	<b>JIF = 1.500</b>	<b>SJIF (Morocco) = 7.184</b>	<b>OAJI (USA) = 0.350</b>

---

## Contents

		p.
14.	<b>Rasulov, S. S.</b> Conceptual foundations for the development of innovative processes in the agro-industrial complex.	101-107
15.	<b>Zemsky, G. A., Golubeva, O. A., Blagorodov, A. A., Prokhorov, V. T., &amp; Volkova, G. Yu.</b> On the impact of transport on the effective socio-economic development of Russian regions. Message 2.	108-146
16.	<b>Pushkareva, V. V., Golubeva, O. A., Blagorodov, A. A., Prokhorov, V. T., &amp; Volkova, G. Yu.</b> On the impact of transport on the effective socio-economic development of Russian regions. Message 3.	147-179
17.	<b>Barinova, A., Barinova, V., &amp; Kim, Y.</b> Family identity negotiations in inter-ethnic marriages: Russian-Ukrainian family case.	180-188
18.	<b>Deryaev, A. R.</b> A brief scientific and practical overview of the drilling of a directional well on the western cheleken field.	189-192

<b>Impact Factor:</b>	<b>ISRA (India) = 6.317</b>	<b>SIS (USA) = 0.912</b>	<b>ICV (Poland) = 6.630</b>
	<b>ISI (Dubai, UAE) = 1.582</b>	<b>ПИИИ (Russia) = 3.939</b>	<b>PIF (India) = 1.940</b>
	<b>GIF (Australia) = 0.564</b>	<b>ESJI (KZ) = 8.771</b>	<b>IBI (India) = 4.260</b>
	<b>JIF = 1.500</b>	<b>SJIF (Morocco) = 7.184</b>	<b>OAJI (USA) = 0.350</b>

---

<b>Impact Factor:</b>	ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 1.582	РИИЦ (Russia) = 3.939	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350



**Scientific publication**

«ISJ Theoretical & Applied Science, USA» - Международный научный журнал зарегистрированный во Франции, и выходящий в электронном и печатном формате. **Препринт** журнала публикуется на сайте по мере поступления статей.

Все поданные авторами статьи в течении 1-го дня размещаются на сайте <http://T-Science.org>.

Печатный экземпляр рассылается авторам в течение 3 дней после 30 числа каждого месяца.

**Импакт фактор журнала**

<b>Impact Factor</b>	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
JIF		1.500								
ISRA (India)		1.344				3.117	4.971		6.317	
ISI (Dubai, UAE)	0.307	0.829							1.582	
GIF (Australia)	0.356	0.453	0.564							
SIS (USA)	0.438	0.912								
РИИЦ (Russia)		0.179	0.224	0.207	0.156	0.126		3.939	0.671	
ESJI (KZ)		1.042	1.950	3.860	4.102	6.015	8.716	8.997	9.035	8.771
SJIF (Morocco)		2.031				5.667			7.184	
ICV (Poland)		6.630								
PIF (India)		1.619	1.940							
IBI (India)			4.260							
OAJI (USA)						0.350				

<b>Impact Factor:</b>	<b>ISRA (India) = 6.317</b>	<b>SIS (USA) = 0.912</b>	<b>ICV (Poland) = 6.630</b>
	<b>ISI (Dubai, UAE) = 1.582</b>	<b>РИИЦ (Russia) = 3.939</b>	<b>PIF (India) = 1.940</b>
	<b>GIF (Australia) = 0.564</b>	<b>ESJI (KZ) = 8.771</b>	<b>IBI (India) = 4.260</b>
	<b>JIF = 1.500</b>	<b>SJIF (Morocco) = 7.184</b>	<b>OAJI (USA) = 0.350</b>

### Deadlines

	Steps of publication	Deadlines	
		min	max
1	Article delivered	-	
2	Plagiarism check	1 hour	2 hour
3	Review	1 day	30 days
4	Payment complete	-	
5	Publication of the article	1 day	5 days
	publication of the journal	30th of each month	
6	doi registration	before publication	
7	Publication of the journal	1 day	2 days
8	Shipping journals to authors	3 days	7 days
9	Database registration	5 days	6 months

### INDEXING METADATA OF ARTICLES IN SCIENTOMETRIC BASES:



**International Scientific Indexing ISI (Dubai, UAE)**  
<http://isindexing.com/isi/journaldetails.php?id=327>



**Cl.An. // THOMSON REUTERS, EndNote (USA)**  
<https://www.myendnoteweb.com/EndNoteWeb.html>



**Research Bible (Japan)**  
<http://journalseeker.researchbib.com/?action=viewJournalDetails&issn=23084944&uid=rd1775>



**Scientific Object Identifier (SOI)**  
<http://s-o-i.org/>



**РИИЦ (Russia)**  
<http://elibrary.ru/contents.asp?issueid=1246197>



**Google Scholar (USA)**  
[http://scholar.google.ru/scholar?q=Theoretical+science.org&btnG=&hl=ru&as\\_sdt=0%2C5](http://scholar.google.ru/scholar?q=Theoretical+science.org&btnG=&hl=ru&as_sdt=0%2C5)



**Turk Egitim Indeksi (Turkey)**  
<http://www.turkegitimindeksi.com/Journals.aspx?ID=149>



**Directory of abstract indexing for Journals**  
<http://www.daij.org/journal-detail.php?jid=94>



**DOI (USA)** <http://www.doi.org>



**CrossRef (USA)** <http://doi.crossref.org>

<b>Impact Factor:</b>	ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 1.582	PIIHQ (Russia) = 3.939	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350



Open Academic Journals Index (Russia)  
<http://oaji.net/journal-detail.html?number=679>



Japan Link Center (Japan)  
<https://japanlinkcenter.org>



Kudos Innovations, Ltd. (USA)  
<https://www.growkudos.com>



AcademicKeys (Connecticut, USA)  
[http://sciences.academickeys.com/jour\\_main.php](http://sciences.academickeys.com/jour_main.php)



Cl.An. // THOMSON REUTERS, ResearcherID (USA)  
<http://www.researcherid.com/rid/N-7988-2013>



RedLink (Canada)  
<https://www.redlink.com/>



TDNet  
 Library & Information Center Solutions (USA)  
<http://www.tdnet.io/>



RefME (USA & UK)  
<https://www.refme.com>



Collective IP (USA)  
<https://www.collectiveip.com/>



PFTS Europe/Rebus:list (United Kingdom)  
<http://www.rebuslist.com>



Korean Federation of Science and Technology Societies (Korea)  
<http://www.kofst.or.kr>



Sherpa Romeo (United Kingdom)  
<http://www.sherpa.ac.uk/romeo/search.php?source=journal&sourceid=28772>



Cl.An. // THOMSON REUTERS, ORCID (USA)  
<http://orcid.org/0000-0002-7689-4157>



Yewno (USA & UK)  
<http://yewno.com/>



Stratified Medical Ltd. (London, United Kingdom)  
<http://www.stratifiedmedical.com/>

**THE SCIENTIFIC JOURNAL IS INDEXED IN SCIENTOMETRIC BASES:**



Advanced Science Index (Germany)  
<http://journal-index.org/>



SCIENTIFIC INDEXING SERVICE (USA)  
<http://sindex.org/JournalList.aspx?ID=202>

<b>Impact Factor:</b>	ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 1.582	ПИИИ (Russia) = 3.939	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 8.771	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350



**Global Impact Factor (Australia)**  
<http://globalimpactfactor.com/?type=issn&s=2308-4944&submit=Submit>



**CiteFactor (USA) Directory Indexing of International Research Journals**  
<http://www.citefactor.org/journal/index/11362/theoretical-applied-science>



**JIFactor**  
[http://www.jifactor.org/journal\\_view.php?journal\\_id=2073](http://www.jifactor.org/journal_view.php?journal_id=2073)



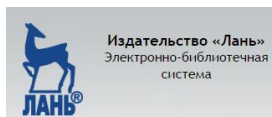
**Eurasian Scientific Journal Index (Kazakhstan)**  
<http://esjindex.org/search.php?id=1>



**SJIF Impact Factor (Morocco)**  
<http://sjifactor.inno-space.net/passport.php?id=18062>



**InfoBase Index (India)**  
<http://infobaseindex.com>



**Электронно-библиотечная система «Издательства «Лань» (Russia)**  
<http://e.lanbook.com/journal/>



**International Society for Research Activity (India)**  
<http://www.israjif.org/single.php?did=2308-4944>



**International Institute of Organized Research (India)**  
<http://www.i2or.com/indexed-journals.html>



**Journal Index**  
<http://journalindex.net/?qi=Theoretical+%26+Applied+Science>



**Open Access Journals**  
<http://www.oajournals.info/>



**Indian citation index (India)**  
<http://www.indiancitationindex.com/>



**Index Copernicus International (Warsaw, Poland)**  
<http://journals.indexcopernicus.com/masterlist.php?q=2308-4944>

<b>Impact Factor:</b>	<b>ISRA (India) = 6.317</b>	<b>SIS (USA) = 0.912</b>	<b>ICV (Poland) = 6.630</b>
	<b>ISI (Dubai, UAE) = 1.582</b>	<b>ПИИИ (Russia) = 3.939</b>	<b>PIF (India) = 1.940</b>
	<b>GIF (Australia) = 0.564</b>	<b>ESJI (KZ) = 8.771</b>	<b>IBI (India) = 4.260</b>
	<b>JIF = 1.500</b>	<b>SJIF (Morocco) = 7.184</b>	<b>OAJI (USA) = 0.350</b>

---

---



<b>Impact Factor:</b>	<b>ISRA (India) = 6.317</b>	<b>SIS (USA) = 0.912</b>	<b>ICV (Poland) = 6.630</b>
	<b>ISI (Dubai, UAE) = 1.582</b>	<b>ПИИИ (Russia) = 3.939</b>	<b>PIF (India) = 1.940</b>
	<b>GIF (Australia) = 0.564</b>	<b>ESJI (KZ) = 8.771</b>	<b>IBI (India) = 4.260</b>
	<b>JIF = 1.500</b>	<b>SJIF (Morocco) = 7.184</b>	<b>OAJI (USA) = 0.350</b>

---

---

Signed in print: 28.02.2023. Size 60x84  $\frac{1}{8}$

«Theoretical & Applied Science» (USA, Sweden, KZ)  
Scientific publication, p.sh. 35.875. Edition of 90 copies.  
<http://T-Science.org> E-mail: [T-Science@mail.ru](mailto:T-Science@mail.ru)

---

Printed «Theoretical & Applied Science»