**Preliminary Fair Business Program**

Venue: VNIIZhT Test Loop, Moscow, Scherbinka, Butovsky Tupik, 1

“Technology Transformation and New Ecological Thinking”
26–27 August 2021

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<th><strong>DAY I. THURSDAY, AUGUST 26</strong></th>
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<tr>
<td><strong>Hall 1</strong> Experience and Training Exhibition Centre (DOVC)</td>
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<td><strong>Hall 1 (DOVC)</strong></td>
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**10:15 - 12:00 Opening plenary session**
Railway Industry on the Verge of Change. Sustainable Development Technologies

With growing external challenges, including the environmental agenda, the company strategy and industry as a whole require reconsideration. This year, Russian Railways has set the priorities for scientific and technological development until 2050. The active implementation of innovative solutions will help increase efficiency, solve government infrastructure problems, expand the range of services provided and enter new markets. The main factor in the formation of the railway is technological progress. According to analysts, the mechanical engineering industry expects more changes in the next five years than the industry has experienced in the last 20 years. Within the framework of the year of science and technology in Russia, it will be necessary to re-evaluate the contribution of the largest domestic manufacturers of railway equipment, machinery and prepare for the future progress of the industry.

- What will determine the growth of the industry in the coming decades and how will its technological appearance change?
- What is the key role of scientific and technological development in the implementation of environmental strategy?
- Are climate goals a burden or do they create new opportunities for evolution?
- What is the strategy of machine builders from 2030 - 2050?
**Where do machine builders and carriers see the greatest potential and how will they consolidate their efforts?**

**Moderator:**
Natalia Popova, First Deputy CEO, "Innopraktika"

**Speakers:**
Oleg Belozerov, Chief Executive Officer–Chairman of the Executive Board, JSC “Russian Railways”
Kirill Lipa, CEO, Transmashholding
Alexander Misharin, Board Chairman, Sinara -Transport Machines
Michael Peter, CEO, Siemens Mobility (online)
Diego Diaz, President of SNCF International, International Director of SNCF GROUP (online)
Alexander Morozov, Deputy Minister of Industry and Trade of the Russian Federation

Expert:
Yuri Saakyan, Managing Director, Institute for Natural Monopolies Research

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<tr>
<th>Hall 1 (DOVC)</th>
<th>12:10–12:35 Agreement Signing Ceremony</th>
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<td>access for all participants of the Fair</td>
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| Hall 1 (DOVC) | 12:40–13:00 Award Ceremony for the Winners of Competitions |
| access for all participants of the Fair |
| Ceremony awarding the "Innovator of JSC Russian Railways" and the winners of the JSC "Russian Railways" competition for the best quality of rolling stock and complex technical systems |
| Awards: Vladimir Andreev, Acting Deputy General Director - Chief Engineer, JSC “Russian Railways” |

| Hall 1 (DOVC) | 15:00–16:20 Panel discussion |
| 15:00–16:20 Panel discussion |
| New Trends in International Transport Corridors: Ecology and Digitalization |
**Moderator:**
Vladimir Kosoy, President, Infrastructure Economics Centre

**Speakers:**
Sergey Pavlov, First Deputy Managing Director, JSC “Russian Railways”
François Davenne, Director General, UIC (online)
Miroslav Antonovich, Chairman, OSJD Committee (online)
Francesco Dionori, Head of the Transport Networks and Logistics Section, UNECE Sustainable Transport Department (online)
Dmitry Murev CEO, RZD logistics
German Maslov, Vice President for Linear and Logistics Division, FESCO Transport Group
Johannes Emmelheinz, Head of Customer Service, Siemens Mobility GmbH
Anton Zubikhin, Deputy General Director, Sinara-Transport
Nikolay Rezrov, General Director, Digital Logistics
Batyr Kotyrev, Chief Engineer, "NC" Kazakhstan Temir Zholy

**Expert:**
Kirill Semion, Head of the Informatization Department, JSC “Russian Railways”

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<th>Hall 1 (DOVC)</th>
<th>16:40 – 18:00 Debate</th>
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<tr>
<td><strong>From Zero Demand to Zero Emissions. Gas and Hydrogen Traction:</strong> Alternative or Economic Principal Use</td>
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<tr>
<td>• Passenger and freight rolling stock: gas or hydrogen?</td>
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<td>• Multi-unit rolling stock in agglomerations</td>
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<td>• Infrastructure for refueling and replacement of fuel tanks. How to implement?</td>
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<td>• How to create a unified fuel delivery ecosystem?</td>
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<td>• How to ensure low fuel prices?</td>
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<td>• Safety issues: storage and transportation of &quot;green&quot; fuel. Promising solutions</td>
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<td>• Hybrid shunting locomotives: gas or hydrogen? Customers’ opinion</td>
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<td>• Economic issues: maintenance and repair systems for green traction locomotives</td>
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<td>• Modernization of locomotives on the network. Why choose gas?</td>
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<td>• Energy storage devices. How to stimulate production?</td>
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<td>• Issues of operation and industrial safety</td>
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</table>
• Support measures: subsidizing the production and transportation of hydrogen and natural gas

**Moderator:**
Sergey Malozemov, Author and Presenter of programs, NTV

**Speakers:**

"Hydrogen" Group
Vladimir Andreev, Acting Deputy General Director - Chief Engineer, JSC “Russian Railways”
Alexander Ermonsky, Deputy General Director for Technical Development, Transmashholding
Alexey Kashin, CEO, InEnergy Group
Anton Moskvin, Vice President for Marketing and Business Development, Rusatom Overseas

"Gas" Group
Leonid Kuznetsov, Deputy Director of the Center for Advanced Development, STM Engineering Center
Kirill Lyats, General Director, Kryomash - Balashikhinsky factory of cryogenic engineering
Yuri Babkov, First Deputy CEO and Chief Engineer, VNIKTI
Alexander Manyakhin, Executive Director, SRO Association Promzheldortrans

Experts:
Sergey Drobzhev, Technical Director, RM Rail
Denis Pak, Director of the Department of the Automotive Industry and Railway Engineering, Ministry of Industry and Trade of Russian Federation
Boris Lapidus, Professor, Honored Economist of the Russian Federation, Chairman of the Joint Scientific Council of Russian Railways
Yuri Saakyan, Managing Director, Institute for Natural Monopolies Research
Pavel Ivankin, President, Railway Transport Research Institute
Dmitry Kuznetsov, Director of the Rolling Stock Business Unit, Siemens Mobility

**Hall 2**
(Corporate University, Room 404)

**Hall 2**
(Corporate)

**15:00 – 16:20 Round table**
Twins Rule. Rail Digital Twin: from Concept to Application
University, Room 404)

- How digital twins can transform the railroad industry in online mode
- Mathematical modeling of supply chains on the railway
- Approach to a typical CAPEX optimization project
- Ecosystem for managing objects and processes of the infrastructure complex of Russian Railways
- Digital twins as a basis for building a service-resource model in a telecom operator
- Transfer information to the data center or process it on-site? Requirements for the organization of infrastructure for the functioning of the digital twin

**Moderator:**
Alexander Miskaryan, General Director, "RZD-Technology"

**Speakers:**
Yevgeny Charkin, Deputy managing director, JSC “Russian Railways”
Denis Simakin, CEO, Modern Radio Technologies
Alexey Shmelev, CEO, INSPARK
Dmitry Krasilov, Head of Supply Chain Design, KORUS Consulting Group of Companies
Dmitry Greskov, CEO, Transset
Denis Zuev, General Director, SINTEZ-AT
Konstantin Boltrukевич, Head of the System Integration Department, TransTeleCom Company
Jean-Michel Evanghelou, Deputy Director, Railway Systems Department, UIC (online)

Hall 2 (Corporate University, Room 404)

16.40 – 18.00 Panel discussion

**Trust as a Driver of Development. Thirst for Digital Technology**

- Trusted environment of the locomotive complex
- Digital depot. Reliability tools and improving its use
- Transition to predictive repair. What will change in service maintenance?
- Unmanned control of hump locomotives
- Digital onboard platforms. How the control systems of the future are built
  Digital technologies in action on a locomotive electronic passport

*preliminary program
**planned for the invitation*
• Automation of shunting movements: from remote to fully unmanned control mode
• Approach to creating digital AI platforms for managing lifecycle contracts

**Moderator:**
Evgenii Bogdanov, partner, Kearny

**Speakers:**
Oleg Valinsky, Deputy Managing Director–Head of the Traction Directorate, JSC “Russian Railways”
Victor Lesh, General Director, Sinara-Transport Machines
Kirill Semion, Head of the Informatization Department, JSC “Russian Railways”
Pavel Popov, Deputy General Manager, NIIAS
Yuri Popov, Director, Design Bureau of Central Television, JSC “Russian Railways”
Andrey Romanchikov, Managing Director for Development of Intelligent Control Systems, Transmashholding
Ivan Bukin, Technical Director, Siemens Mobility

**Expert:**
Petr Skobelev, President, General Designer, Genesis Knowledge Group of Companies (online)
### DAY II. FRIDAY, AUGUST 27

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<th>Hall 1 (DOVC)</th>
<th>10:00–11:20 Round table</th>
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<tr>
<td><strong>Hall 1 Experience and Training Exhibition Centre (DOVC)</strong></td>
<td><strong>Zero Waste. Environmental Ambition as a Source of Modernization</strong></td>
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<td>• Approach to the formation of environmental strategies of railway companies in Russia and foreign countries</td>
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<td>• Building a system for financing environmental projects in Russia</td>
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<td>• Keeping every bolt. Energy efficient recycling of rolling stock and reuse of parts</td>
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<td>• Concept of green transport by rail: opportunities and potential consumers</td>
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<td>• Separate and recycle: waste disposal, elimination of accumulated damage</td>
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<td>• Noise and vibration of trains: reduction of acoustic pollution in urban space</td>
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**Moderator:** *Sergey Kapkov*, head of the educational and scientific laboratory "Center for Research on the Economy of Culture, Urban Development and Creative Industries", Moscow State University

**Speakers:**
- *Vladimir Andreev*, Acting Deputy General Director - Chief Engineer, JSC “Russian Railways”
- *Dmitry Aksakov*, Executive Director of the Business Block, VEB.RF
- *Artur Nurmukhamedov*, Founder, NAKHODKA
- *Denis Karasev*, General Director of the Center for Advanced Technologies, Transmashholding
- *Alexander Schierhuber*, CEO, Breitspur Planungsgesellschaft
- *Alexander Nikitin*, Deputy General Director, SKF
- *Alexander Grigoriev*, Deputy General Director, Institute of Natural Monopolies Problems

**Experts:**
- *Andrey Ptichnikov*, Deputy Head of the Center for Responsible Use of Resources, Institute of Geography of the Russian Academy of Sciences
- *Nikolay Kanev*, Lead Acoustic Engineer, Chief Engineer, Acoustic Group
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<th>Hall 1 (DOVC)</th>
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<tr>
<td><strong>Unmanned Trains: Reality or Dream?</strong></td>
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<tr>
<td>• Current level of technology readiness</td>
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<td>• Safety of unmanned technology use</td>
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<td>• Standard regulation of unmanned technology use</td>
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<td>• How will dispatchers manage unmanned trains?</td>
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<td>• Are new trains needed or can existing ones be modified?</td>
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<td>• The feasibility of using artificial intelligence technologies for unmanned trains</td>
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<td>• Unmanned trains and capacity. Is there a correlation?</td>
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<td><strong>Moderator:</strong></td>
<td>Pavel Popov, Deputy General Director, NIIAS</td>
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<td><strong>Speakers:</strong></td>
<td>Carlsson Scholl, Vice President Urban Transport Division, Siemens Mobility (online)</td>
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<td>Yury Smagin, Director of Railway Infrastructure Division, Siemens Mobility</td>
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<td>Andrey Romanchikov, Managing Director for the Development of Intelligent Control Systems, Transmashholding</td>
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<td>Luc Laroche, Project Manager, Unmanned Trains, SNCF (online)</td>
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<td>Jack Schneider, Head of International Standardization of Onboard Control Systems and Driving Systems, SBB AG</td>
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<td>Baseliyos Jacob, Senior Manager ETCS and ATO, DB Cargo</td>
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<td><strong>Expert:</strong></td>
<td>Kirill Kolesnikov, First Deputy General Director, Center for Innovative Development STM</td>
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<th>Hall 1 (DOVC)</th>
<th>14:00 – 15:20 Panel discussion</th>
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<td><strong>Comfortable, Eco-Friendly, Safe. Railway Transport in Agglomerations</strong></td>
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<td>• The role of rail transport in the unification of cities in the agglomeration</td>
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<td>• Transport hubs as catalysts: integrated development of adjacent territories and businesses</td>
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<td>• Main rail lines: high speed lines, city electric trains</td>
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<td>• Synchronization and multimodality: seamless transport systems</td>
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<td>• ITS: digital solutions for passenger transportation</td>
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</table>
• Suburban railway rolling stock: comfort and safety for passengers
• Impact of train stations on society and economy
• "Tram-train" for Russian agglomerations: prerequisites, opportunities, advantages and challenges

**Moderator:**
Alexey Romanenko, Partner, Alvarez & Marsal

**Speakers:**
Ilya Zamornikov, Deputy Head of the Development Centre, Central and St. Petersburg Transport Hubs, Russian Railways
Alexander Loshmanov, Deputy CEO for Passenger Transport Development, Transmashholding
Evgeny Timofeev, Deputy General Director, Trade House STM
Dmitriy Bolotskiy, Deputy General Director, Group of companies 1520
Fabrice Morenon, General Director Hubs&Connexions, SNCF (online)
Philippe Citroën, General Director, UNIFE (online)

**Experts:**
Ruslan Lisnevsky, Deputy Head of the Center - Head of the Suburban Transportation Development and Passenger Service Department Center for Corporate Governance of the Suburban Complex, JSC “Russian Railways”
Vladimir Waldin, Director for Public Transport Solutions, SIMETRA

**Hall 1 (DOVC)**

15:50 – 17:10 Round table
Greenways. Tramway Renaissance in Metropolitan Areas

Today, all over the world, the high-speed tram is experiencing a rebirth. In recent years, light rail lines have opened in over 100 cities around the world. This type of transport has proven itself well in Cologne, Frankfurt, Stuttgart, Porto, as well as in the USA - Boston, Philadelphia, San Francisco. According to statistics, a tram carries 10 times more passengers per hour per lane than a bus or a trolleybus. Today in Russia in more than two dozen cities, it is planned to build high-speed tramlines. Why did the country decide on this type of transport?

• Trams are a must and a city landmark
• High-speed rail transport as a multiplicative solution to economic problems in the agglomeration
• Russia on its own. Domestic tram: comfort, speed, reliability
- Intelligent model of the transport network
- Modernization of infrastructure: at whose expense and who benefits?
- Financing models: public-private concessions
- Mode of transport behavior: from denial to demand
- Development of tram traffic: obstacles and how to overcome them
- Results of a comparative study on the economic efficiency of various modes of transport

**Moderator:**
Vladimir Kosoy, President, Center for Infrastructure Economics

**Speakers:**
Dmitry Brusyanin, Deputy Minister of Transport and Roads of the Sverdlovsk Region
Alexey Nechaev, Minister of Roads and Transport of the Chelyabinsk Region
Boris Myagkov, Deputy General Director for Civilian Products, Concern Uralvagonzavod
Felix Vinokur, President, "PC Transport Systems"
Nikolay Pronin, Deputy General Director, Sinara-Transport Machines
Viktor Shekshuyev, Director of the Department for the Production of Civilian Products, UKVZ

Experts:
Kirill Yankov, Head, Passenger Union
Alexander Morozov, Vice President, International Association of Urban Electric Transportation Enterprises

**Hall 2**
(Corporate University, Room 404)

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<tr>
<td>10:00–11:20</td>
<td>Panel discussion Technology Issues. Track Superstructure Construction: Faster, Safer, Cheaper</td>
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<td>- Universal track complex: construction of railway tracks</td>
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<td>- Innovative development of the infrastructure complex</td>
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<td>- The effectiveness of methods to reduce the life cycle cost of the track superstructure</td>
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<td>- Technologies of continuous welded railways</td>
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*preliminary program
**TBD
• Complex polygon technology for diagnostics of infrastructure in the train  
• Service on wheels: traveling machines  
• Robots under repair: infrastructure monitoring and maintenance  
• Innovative rail and ballastless track  
• Safety at railway crossings  
• Unmanned monitoring  
• Increased output due to new track repair technologies  
• Coordinate and time support of infrastructure facilities life cycle: from design to operation  
• BIM technologies in the design of objects

Moderator:
Alexey Kharnas, Editor in Chief, “GUDOK” Newspaper

Speakers:
Alexander Boretsky, Director, Infrastructure Design Bureau - Branch of JSC “Russian Railways”
Mikhail Lunkov, First Deputy Head of the Central Directorate for Track Repair, JSC “Russian Railways”
Dmitry Raenok, First Deputy General Director for Production, PTK Group
Andrey Ushakov, General Director, ApateK
Arman Bubikanov, Deputy CEO, “PROMMASH.KZ” (Ekibastuz railway cluster Railways Systems KZ)
Vyacheslav Chervyakov, Chairman of the Board of Directors, MGK INTECHROS
Vitaly Votolevsky, Deputy General Director, Sinara-Transport Machines
Anthony-Victor Menl, Sales and Marketing Director - Altametris, SNCF Réseau subsidiary (online)

Experts:
Andrey Pavlovsky, Deputy General Director, NIIAS
Yuri Chervyakov, Technical Director, Tikhoretsk Machine-Building Plant named after V.V. Vorovsky
Vyacheslav Nevezhin, Deputy Minister, Ministry of Transport and Roads of the Novosibirsk Region
Sergey Melikhov, Deputy Head of the Track and Structures Directorate, Russian Railways
Pavel Sidelev, Chief Engineer of the Automation and Telematics Directorate, JSC “Russian Railways”
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<td><strong>Import Substitution as a Trend. Localization and Transfer of Future Technologies</strong></td>
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<td>- Issues of modernization: challenges of the time</td>
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<td>- Future locomotive. How does the customer see it?</td>
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<td>- What are the risks of having imported components?</td>
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<td>- How to motivate manufacturers to produce components for locomotives?</td>
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<td>- Diesel engines and generators: the advantages of the new series</td>
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<td>- Component manufacturing: plans and goals</td>
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<td>- Incentives and preferences. What additional support do rolling stock manufacturers need?</td>
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<td>- Freight car building amid falling demand: new types and innovative rolling stock</td>
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**Moderator:**
Pavel Ivankin, President, Railway Transport Research Institute

**Speakers:**
- Oleg Valinsky, Deputy Managing Director–Head of the Traction Directorate, JSC “Russian Railways”
- Vitaly Brekson, First Deputy General Director, Ural Locomotives
- Valentin Gapanovich, President, Non-Profit Partnership “Association of Railway Equipment Manufacturers”
- Bernard Kaufmann, coordinator, IRQB (online)
- Denis Kravchenko, Deputy Chairman of the State Duma Committee on Economic Policy, Industry, Innovative Development and Entrepreneurship
- Taras Spivak, General Director, KSC Group of Companies

**Expert:**
- Vladimir Savchuk, Deputy General Director, Institute for Natural Monopoly Problems
**Hall 2**
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<tr>
<td>14:00–15:20</td>
<td><strong>Round table</strong>&lt;br&gt;Century of Strategy. Priorities for Innovative Development</td>
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- Assessment of prospects for technological and socio-economic development in Russia and the world and their possible impact on the development of the transport industry until 2050
- Formation of strategic priorities for the scientific and technological development of Russian Railways (benchmarking, foresight)
- Core technologies to ensure leading positions for Russian Railways
- Tools for implementing scientific and technological development priorities
- Involvement of leading innovative and scientific organizations and universities in addressing the challenges ahead
- Synchronization of scientific and technological development priorities of Russian Railways and capabilities of partners–manufacturers of railway equipment
- Feedback: challenges faced by the largest consumers of Russian Railways’ services

**Moderator:**
Vitaly Saraev, Head of Consulting, “Innopraktika”

**Speakers:**
Sergey Kobzev, First Deputy General Director, JSC “Russian Railways”*
Vladimir Knyaginin, Vice Governor of St. Petersburg (online)
Rustam Tikhonov, Director of the Department for Strategic Development and Innovation, Ministry of Economic Development of Russia (online)
Anton Zubikhin, Deputy General Director, Sinara-Transport Machines
Dmitry Bakanov, Director of Digital Transformation Department, Ministry of Transport of Russia*
Kirill Lipa, General Director, Transmashholding
Alexander Liberov, President, Siemens in Russia
Andrey Klepach, Chief Economist, VEB.RF (online)
Mikhail Nenyukov, Senior Managing Director, RUSNANO Management Company

**Experts:**
Pavel Krasovsky, Deputy Director of the Center for Strategic Innovations,
Rostelecom (online)
Boris Lapidus, Professor, Honored Economist of the Russian Federation, Chairman of the Joint Scientific Council of Russian Railways (online)
Pavel Morozov, Managing Director, Skolkovo - Venture Investments
Dmitry Sanatov, partner, CSR North-West Foundation
Evgeny Goman, Chief Engineer, ELTEZA
Sergey Drobzhev, Technical Director, RM Rail
Anatoly Aleksandrov, Rector of the Bauman Moscow State Technical University*
Alexander Klimov, Rector, RUT MIIT
Dmitry Verbov, Head of the Center for Innovative Development - a branch of JSC “Russian Railways”
Andrey Tulupov, Deputy Head of the Center for Innovative Development - a branch of JSC “Russian Railways”