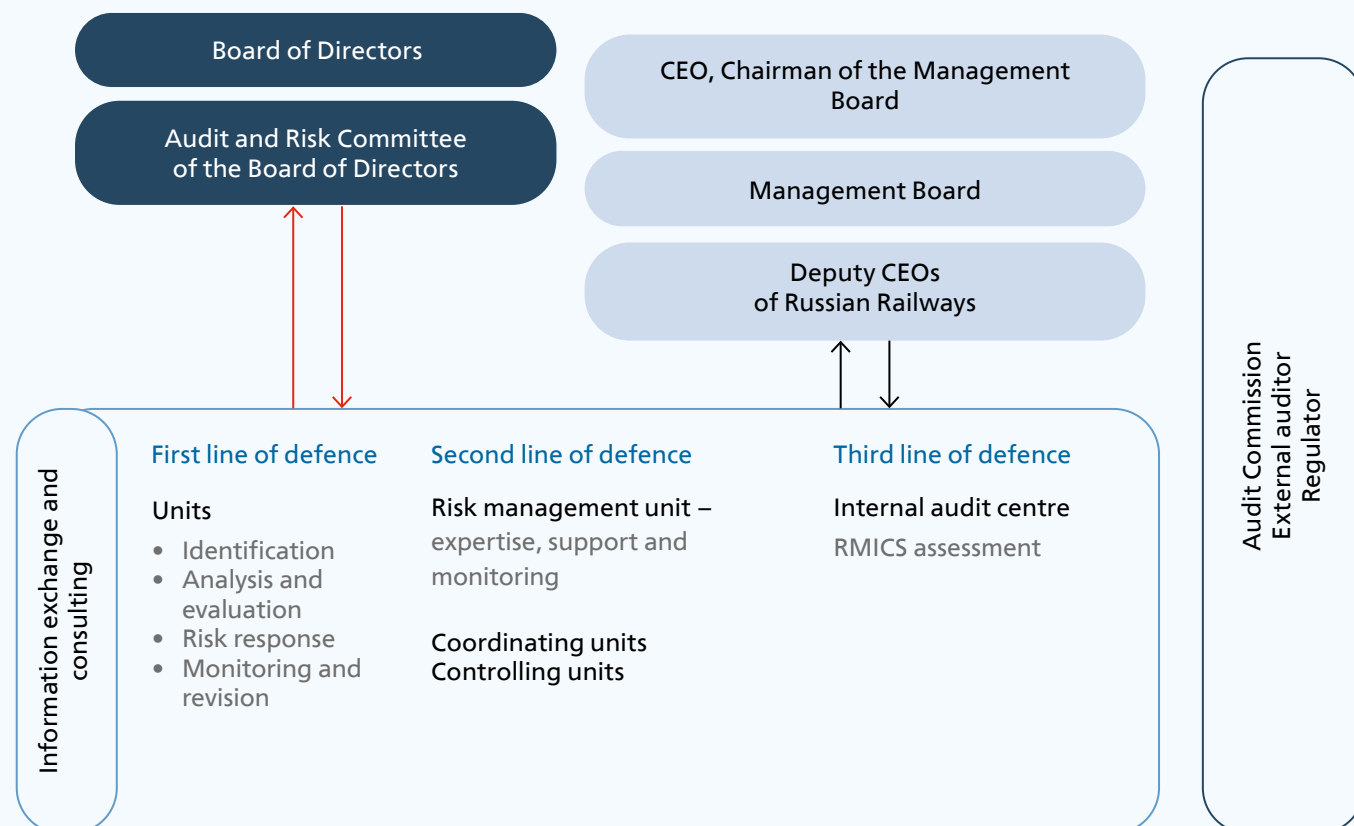


### Stages of the risk management process



### Risk management and internal control: organisational structure



### RMICS assessment

To enhance the effectiveness of RMICS and to develop and prioritise improvement measures, an annual internal assessment (self-assessment and internal audit) is conducted. External assessment is subject to resolution by the Board of Directors.

The results of internal assessment are annually discussed by the Board of Directors following a preliminary review by the Board’s Audit and Risk Committee.

In 2023, the internal assessment of the risk management and internal control system was carried out by Zheldoraudit in accordance with the Internal Audit Manual on Assessment of the Risk Management and Internal Control System. The internal audit team assessed RMICS for compliance

with established requirements and the effectiveness of risk management with respect to Russian Railways’ individual business processes.

The internal assessment resulted in the internal audit report on RMICS current status, compliance with the main RMICS requirements, and the opinion on efficient development of Russian Railways’ RMICS.

In addition, the Audit Commission of Russian Railways inspects and analyses the functioning of the internal control system and the financial and operational risk management system. The commission keeps the shareholder, the Board of Directors, and the Chief Executive

Officer of Russian Railways updated on proposals aimed at enhancing the internal control system.

In line with the Three Lines of Defence model, external oversight (including regular audits of certain projects) contributes to continuous improvement of RMICS.



For more details on risk management and RMICS improvements in the reporting year, see the Risk Management section of [Russian Railways’ 2023 Annual Report](#).

### Sustainability risks

As a leader of the global railway transportation market and one of Russia’s backbone local players, Russian Railways helps achieve important social and economic goals and ensure transport accessibility of cities and regions. Being a major taxpayer, we place special emphasis on the professional development and safety of our employees.

We take into account all stakeholder interests, analyse risks, and take stronger effort towards sustainability. This helps us identify growth points and take advantage of new opportunities while striking a balance between such opportunities and related risks.

#### Information on sustainability risk management is available in the respective sections of the report:

- [Social risks \(Personnel Development section\)](#)
- [Health and safety risks \(Health and Safety section\)](#)
- [Corruption risks \(Anti-Corruption section\)](#)
- [Procurement risks \(Procurement Management section\)](#)
- [Climate change risks \(Climate Action section\)](#)
- [Information security risks \(Innovation-driven Development and Digital Transformation section\)](#)

# Anti-corruption

**GRI** GRI 205-3, 3-3

Russian Railways values its business reputation and sets high business ethics compliance standards for all employees of the Company, directors, personnel of Russian Railways' controlled entities and business partners.

In 2023, we updated the Code of Business Ethics<sup>1</sup>, a key document setting out, among other things, anti-corruption requirements and rules of professional conduct that are mandatory for the Board of Directors and every employee of the Company and reflect the core conduct standards underpinned by Russian Railways' mission, values and principles.

Russian Railways' anti-corruption policy<sup>2</sup> is a set of interrelated principles and procedures designed to prevent and combat corruption and minimise corruption risks. It also enables the Company to achieve its sustainability goals.

Russian Railways' anti-corruption policy outlines the following priorities:

- to ensure that the Company's employees, directors and stakeholders have a uniform understanding of the zero tolerance approach to corruption in all its forms and manifestations;

- to communicate the importance of publicly declaring zero tolerance for corruption and bribery in business;
- maintain compliance with the Russian anti-corruption laws.

Russian Railways' anti-corruption policy is underpinned by the following principles:

- the Company declares zero tolerance for corruption and is committed to compliance with Russian laws, international treaties signed by Russia and generally accepted standards;
- the Company takes a systematic approach to assessing corruption risks as a way to form an adequate response to corruption;
- the Company regularly monitors the effectiveness of its anti-corruption practices;
- the Company exercises due diligence in all its activities and managerial decision-making;
- the Company's employees receive regular training in anti-corruption.

**The principle of zero tolerance for corruption set out in Russian Railways' anti-corruption policy prohibits Russian Railways' directors, employees and counterparties, acting directly or through third parties, from engaging, or inducing anyone to engage in corruption, whatever the business practices are in any particular country.**

Preventive measures are based on the following two components:

- implementing anti-corruption standards that establish responsibilities, limitations and bans integrated into employment contracts;
- ensuring compliance by employees and management at all levels.

As part of the efforts to enhance the anti-corruption function, in 2023 we approved:

- Anti-Corruption Guidelines of Russian Railways<sup>1</sup>;
- Anti-Corruption Rules for Russian Railways Employees (responsible conduct standards)<sup>2</sup>.

In accordance with the law, the Company's employees may be subject to disciplinary, administrative and criminal liability for committing corruption offences. Furthermore, the Company itself may be subject to administrative liability.

The incidents when the Company was subject to administrative liability were caused by non-compliance with applicable restrictions in employment of former government and municipal officials. Entities hiring former officials are required to report signing respective employment (civil law) contract to the official's last known employer. Notification to that effect must be sent within ten days after respective contract is signed.

To prevent violations in this area, Russian Railways implements a number of measures. Letters with clarifications are sent to heads of units. The Company distributes visual aids describing an algorithm of what must be done when hiring former government and municipal officials. A respective notification form was added to the Human Resource UCAS<sup>3</sup>, with the system also displaying a pop-up window to remind the user to send the notification to the new hire's previous employer.

The measures taken led to a fourfold decrease in the number of cases where the Company was held liable for administrative offences (from eight in 2022 to two in 2023).

### Confirmed incidents of contracts with business partners terminated or not renewed due to corruption violations

0	2023
0	2022
0	2021

### Incidents when the Company was subject to administrative liability for violating Russian anti-corruption laws

2	2023
8	2022
12	2021



<sup>1</sup> Approved by a resolution of Russian Railways' Board of Directors (Minutes No. 13 dated 23 June 2023).

<sup>2</sup> Russian Railways' Order No. 472r dated 24 February 2015.

<sup>1</sup> Approved by Russian Railways' Order No. 254/r dated 7 February 2023.

<sup>2</sup> Russian Railways' Order No. 2110/r dated 18 August 2023.

<sup>3</sup> Human Resource Uniform Corporate Automated System.

## Governance structure

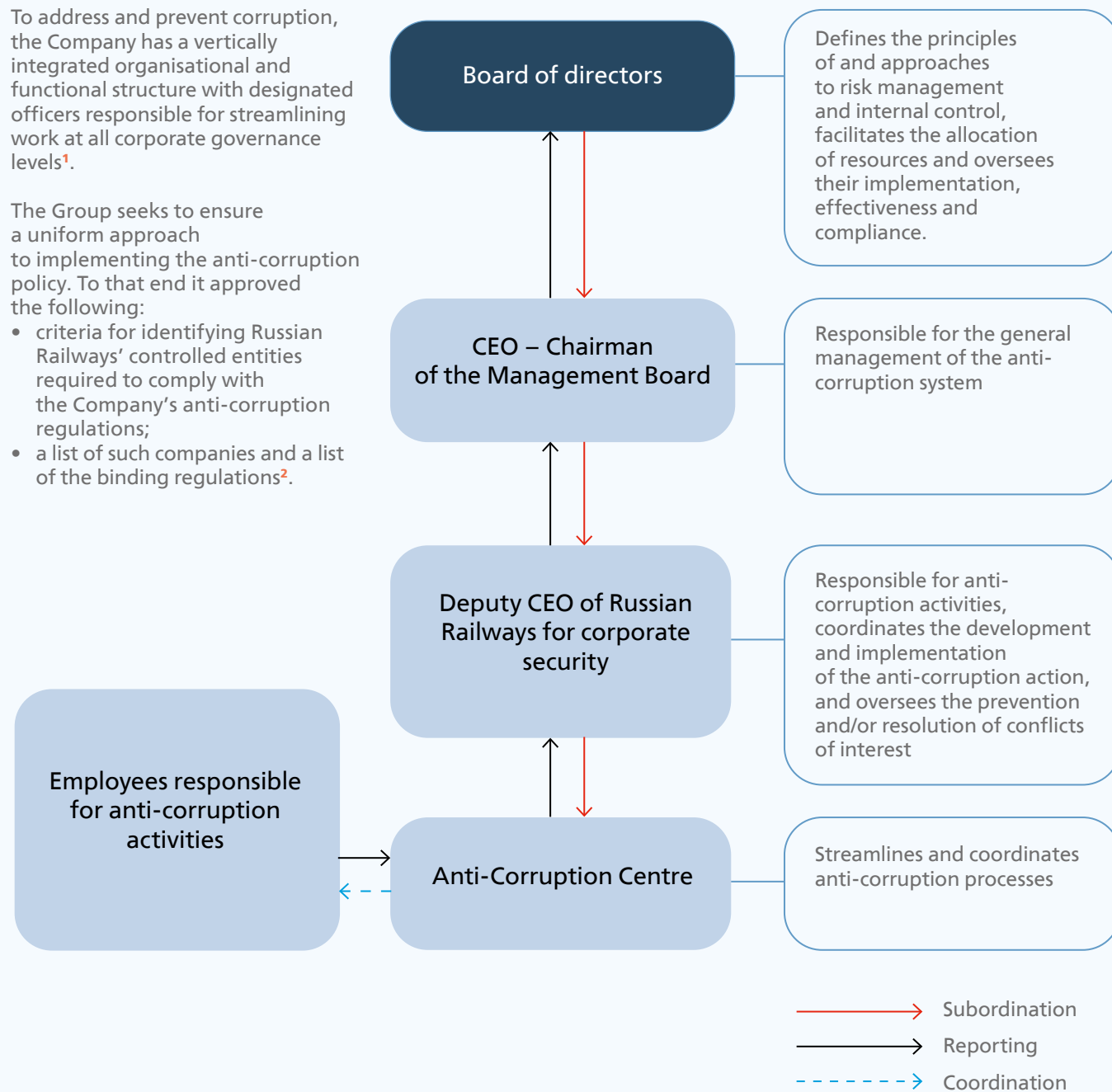
**GRI 3-3**

To address and prevent corruption, the Company has a vertically integrated organisational and functional structure with designated officers responsible for streamlining work at all corporate governance levels<sup>1</sup>.

The Group seeks to ensure a uniform approach to implementing the anti-corruption policy. To that end it approved the following:

- criteria for identifying Russian Railways' controlled entities required to comply with the Company's anti-corruption regulations;
- a list of such companies and a list of the binding regulations<sup>2</sup>.

### Governance structure



<sup>1</sup> Russian Railways' Order No. 2051/r dated 16 September 2019.

<sup>2</sup> Russian Railways' Order No. 2063/r dated 22 September 2021.

## Russian Railways' Anti-Corruption Action Plan

Russian Railways' Anti-Corruption Action Plan approved for the relevant period in accordance with the National Anti-Corruption Plan<sup>1</sup> and the respective Instructions of the Russian Government provides a legal and organisational framework for the Company's anti-corruption action.



### Key focus areas of Russian Railways' Anti-Corruption Action Plan for 2021–2024<sup>2</sup>:

- corruption risk management;
- prevention and resolution of conflicts of interest;
- reporting any inducement to corruption to the employer;
- reporting receipt of gifts by an employee;
- anti-corruption compliance in real estate management;
- engagement with law enforcement agencies;
- analysis of anti-corruption measures in procurement;
- expert review of draft contracts to identify and eliminate corruption risks;
- assessment of RMICS from an anti-corruption perspective;
- Anti-Corruption Hotline;
- anti-corruption awareness raising;
- staff training and development;
- improvement of digital technologies in anti-corruption activities;
- social surveys on anti-corruption.

In 2023, Russian Railways fully implemented the anti-corruption action plan for the reporting period, focusing on managing corruption risks and conflicts of interest and making its educational, awareness raising and other anti-corruption initiatives more efficient.

<sup>1</sup> Approved by the Russian President's Decree No. 478 dated 16 August 2021.

<sup>2</sup> Russian Railways' Order No. 2106/r dated 28 September 2021.

## Corruption risk management

Russian Railways' corruption risk management is an integral part of the Company's risk management and internal control system. We streamline and harmonise risk management approaches in line with the Guidelines for Corruption Risk Management<sup>1</sup>, Risk Management and Internal Control Policy<sup>2</sup> and other documents.

Across the Company's business units, employees responsible for anti-corruption practices at all governance levels perform regular and consistent assessment of corruption risks, exercise multi-tier control and take corrective actions.

In 2023, the units performed an annual assessment of corruption risks, with the registers for the year compiled after such assessment, response plans implemented and the Russian Railways' consolidated register of corruption risks updated.

We also perform an annual internal audit to check the RMICS performance in preventing and combatting corruption.

The Code of Ethics for Internal Auditors<sup>3</sup> establishes:

- main ethical norms and rules, including the objectivity principle and the 'no conflict of interest' principle;
- unified mandatory rules of conduct for internal auditors.

The Board of Directors' Audit and Risk Committee is regularly informed on monitoring outcomes for RMICS as regards anti-corruption performance and the effectiveness of relevant measures.

We conduct due diligence on companies intending to enter into contracts with Russian Railways, including bidders competing in a tender or auction for a contract to supply goods, work or services for Russian Railways' needs.

To sign a contract with Russian Railways, counterparties must submit, among other documents, a beneficial owner certification form as provided for in the contract. All draft contracts require approval of the Security Department that can be granted after the successful completion of a security audit.

Contracts with counterparties also include anti-corruption clauses stipulating the following:

- guaranteed compliance with the relevant regulations;
- termination of the contract if the counterparty is found to engage in corruption.

Compliance monitoring and control are key elements of anti-corruption practices. Russian Railways' business units and subsidiaries conducted over 170 audits of its regional and structural units (1.5 times more compared to 2022), with follow-up corrective measures developed and put into action.



<sup>1</sup> Approved by Russian Railways' Order No. 192/r dated 1 February 2021.

<sup>2</sup> Approved by the Company's Board of Directors (Minutes No. 17 dated 27 May 2019) and enforced by Russian Railways' Order No. 1223/r dated 18 June 2019.

<sup>3</sup> Russian Railways' Order No. 3034/r dated 25 December 2019.

## Conflict of interest prevention and management

### GRI 2-15

Prevention and resolution of conflicts of interest remain Russian Railways' overarching priority in combatting corruption.

The Corporate Governance Code<sup>1</sup> features a dedicated anti-corruption section, which includes provisions on preventing and resolving conflicts of interest, among other things. They are mandatory for all governance bodies.

To eliminate causes and conditions conducive to corruption, the Company approved the Regulation on Prevention and Resolution of Conflicts of Interest<sup>2</sup>. This document serves the following purposes:

- setting out the timeline for reviewing conflict of interest reports;

- explaining the meaning of a potential and actual conflict of interest;
- listing those whose personal interest may lead to a conflict of interest;
- describing the response procedure for employees in charge of reviewing such reports at business units and Russian Railways management;
- stipulating criteria for determining a disciplinary action.

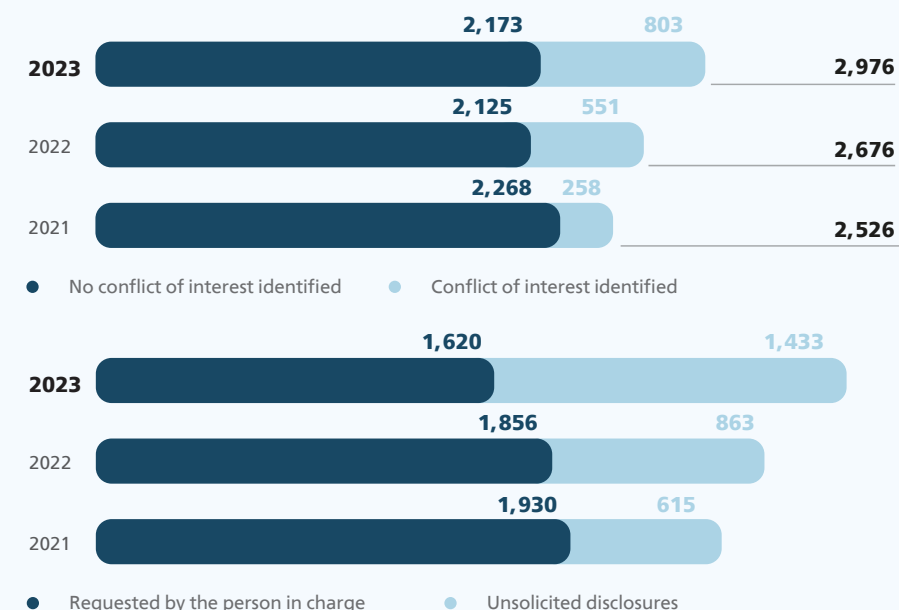
All the Company's employees must do their best to prevent and resolve conflicts of interest.

In 2023, the number of conflict of interest disclosures at all corporate governance levels increased by 11% y-o-y to 2,976.

A total of 803 conflicts of interest were identified compared to 551 in 2022. The Company applied disciplinary actions for failure to comply with anti-corruption rules to 35 employees (24 employees were admonished, and 11 employees were reprimanded).

**Regional conflict of interest commissions set up by the 16 railways of the Company held 16 meetings on 32 employees, with conflict of interest identified in 22 cases.**

### Total conflict of interest disclosures reviewed



<sup>1</sup> Approved by a resolution of Russian Railways' Board of Directors, Minutes No. 1 dated 14 September 2022.

<sup>2</sup> Russian Railways' Order No. 1929/r dated 26 July 2022.

Employees subjected to disciplinary action

**35** people in 2023

**52** people in 2022

**34** people in 2021

## Anti-Corruption Hotline

**GRI 205-3**

The Company has a whistleblowing hotline in place to report corruption in the Russian Railways Group, including anonymously. The contact channels are available in the Anti-Corruption section of Russian Railways' website.

The Anti-Corruption Hotline is open 24/7 and has a voicemail service. The Anti-Corruption Centre, Russian Railways' structural unit, receives and processes the incoming reports. At the end of each quarter, information on investigation results and actions taken is submitted to Russian Railways' Deputy CEO for corporate security.

In 2023, we received 378 reports, down 5% against the previous year, 212 of which (56%) were on suspected offences. Investigations proved 25 reports (12%) to be true.

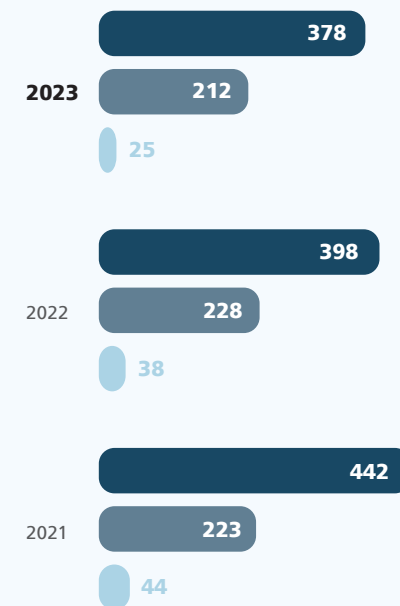
The findings of investigations into the received reports are considered in the management of corruption risks and are escalated to the heads of business units to perform relevant preventive initiatives.

Following the investigation of complaints received through the Anti-Corruption Hotline, the Company took disciplinary action (reprimands) against six employees and dismissed five employees, with materials on seven reports forwarded to law enforcement agencies.

In accordance with Russian Railways' Code of Business Ethics and the Company's anti-corruption policy, we ensure confidentiality and protect whistleblowers from negative consequences arising from their reports of potential corruption in the Company.

**212**  
corruption violations reported in 2023

### Number of complaints



- Total complaints received
- Reported corruption violations
- Confirmed violations



[Anti-Corruption Hotline](#)

## Zero tolerance for corruption

**GRI 205-2**

### Staff training

Russian Railways' centralised system of mandatory anti-corruption training is one of the key instruments for fostering responsible conduct culture. Pursuant to Russian Railways' regulations anti-corruption training has become mandatory for all of the Company's employees since 2019, as they have to complete relevant courses within one month of their employment date. Refresher training is required every three years.

In 2023, over 106,000 employees (up 32% compared to 2022) completed relevant training on Russian Railways' distance learning platform, including more than 94,000 people who took the general course and more than 11,000 people who took a special course geared towards executives and employees whose responsibilities included anti-corruption activities.

Furthermore, 429 employees responsible for overseeing anti-corruption efforts received advanced training at the Institute of Legal

Studies at MIIT (Russian University of Transport) in line with the 2023 centralised plan for the training and development of Russian Railways managers and office employees.

All new hires are required to read and sign Russian Railways' Code of Business Ethics, anti-corruption policy and other internal anti-corruption regulations when accepting employment and to get acquainted with any amendments thereto by reading and signing them in a hardcopy, digital<sup>1</sup> or electronic format.

## Anti-corruption promotion programme

**GRI 205-2**

As a result of running the Comprehensive Anti-Corruption Promotion Programme in 2021–2023<sup>2</sup>, the Company developed a platform for raising employee awareness about anti-corruption issues. We paid special attention to educating employees, promoting ethical values, supporting young activist movements and cooperating with controlled entities on combating and preventing corruption.

To raise employee awareness the Company distributed anti-corruption infographics. Our corporate media featured news, interviews and other materials on anti-corruption compliance, and RZD TV broadcast themed videos and satirical articles.

The Group's quarterly almanac Anticorr, a dedicated blog on the Employee Service Portal,

and associated Anticorr channels on Telegram and Rutube have all focused on anti-corruption efforts.



<sup>1</sup> Via the single automated document management system.  
<sup>2</sup> Approved on 24 December 2020 (Minutes No. 1955).

### Reports can be submitted in the following way:

- via the virtual reception desk on the Company's official website (Corruption to be chosen as the topic)
- via e-mail [anticorruption@center.rzd.ru](mailto:anticorruption@center.rzd.ru);
- by mail at: 2/1 Novaya Basmannaya St., Bld. 1, Moscow 107174, Anti-Corruption Centre, Russian Railways' structural unit
- by phone 8 (800) 775-65-66

> **1,000**  
anti-corruption materials  
and 42 relevant videos  
released in the corporate  
media

**200** articles  
posted on social  
media

**4** issues  
of the Anticorr digital  
almanac distributed to the  
Company's business units

We are witnessing the expansion of membership in Anticorr, a voluntary union of the Russian Railways Group employees fostering a culture of zero tolerance to corruption among the Group's teams. The community regularly discusses draft anti-corruption promotion materials and tests some of them on site. On top of that, intellectual anti-corruption volunteering is gaining traction among young employees.

More than 200 authors, including the Company's employees and representatives of educational organisations affiliated with Russian Railways, took part in the Railway Worker's Honour anti-corruption social advertising contest.

In 2023, the Company conducted a survey to explore how Russian Railways' employees perceive its anti-corruption activities. The survey revealed that the majority of respondents (83%) knew how

to deal with attempts at engaging them in corrupt activities. This indicator remained flat compared to 2022.

To make its anti-corruption activities open and transparent, the Company publishes all anti-corruption regulations, rules, guidelines, and information in the Anti-corruption section of its website. The Company's employees can also access these materials from their personal accounts on the Employee Service Portal.



[Anti-corruption at Russian Railways website](#)

**Anti-Corruption Rating of Russian Business**



Seeking independent due diligence, the Company took part in the Anti-Corruption Rating of Russian Business awarded by the Russian Union of Industrialists and Entrepreneurs based on compliance with the ISO 37001:2016 international anti-corruption standard (Anti-bribery management systems – Requirements with guidance for use) and the provisions of the Russian Anti-Corruption Charter for Business.

In 2023, Russian Railways and three of its controlled entities earned the highest (AAA+) classification in this rating as a company upholding the strongest anti-corruption standards. The Company also received a special award for the Leadership in Promoting Anti-Corruption Principles in Russian Business.

# Responsible tax policy

**GRI 207-1**

**As a systemically important company, a large employer and a major taxpayer, Russian Railways is a key contributor to Russia's social and economic progress. We are aware of our responsibility towards the government and society, and are committed to fulfilling our tax liabilities in good faith.**

Russian Railways pays all applicable taxes, insurance contributions, levies and charges required by the Russian laws, including VAT, corporate income, property, land, and transportation taxes, insurance fees, MET and others.

The Company adopted the Declaration on Tax Strategy Objectives and Principles (tax strategy)<sup>1</sup>, which is in line with the Russian Railways Group's values, mission, strategic priorities, and growth targets.

**Higher tax transparency.**

The Company takes measures to enhance tax transparency, including through tax monitoring to ensure accurate calculation and timely payment of taxes, levies and insurance fees.

**Tax risk management.**

The Company uses a comprehensive system to identify and manage tax risks.

**Consistency of tax accounting methodology.**

Russian Railways develops and sticks to uniform approaches to taxation to ensure the consistency of tax accounting and fair presentation of taxes in its reporting. The Company mitigates tax risks among other things by requesting clarifications from relevant government agencies and reasoned opinions of tax authorities as part of tax monitoring.

**In its tax strategy, the Company relies on the following principles:**

**Taxpayer's good faith.**

The Company complies with all tax laws and pays all applicable taxes and levies on time and in full, as well as files tax returns and other documents in a timely manner.

**Tax disclosure.**

We disclose tax information in accordance with the laws of our countries of operation and international treaties.



<sup>1</sup> Approved by Russian Railways' Order No. 1309/r dated 15 June 2021

### Tax burden planning.

The Company has a tax planning system in place to have tax authorities informed of planned tax accruals and to ensure the complete and timely payment of taxes and levies. The Company collaborates with the Russian government agencies to determine a fair tax burden on the rail transportation industry.

### Due diligence and mitigating risks of unjustified tax benefits.

Russian Railways exerts every effort to stay within the limits as regards the right to determine tax base and calculate taxes when entering into transactions with its counterparties. The Company's internal controls and procedures serve to mitigate tax risks.

### Tax function automation and digitalisation.

Russian Railways seeks to improve its tax management processes by means of continuous automation and digitalisation.

### Taxes and insurance fees paid in 2023

The total amount of taxes and insurance fees accrued in accounting statements for 2023 stood at RUB 391.4 bn, including:

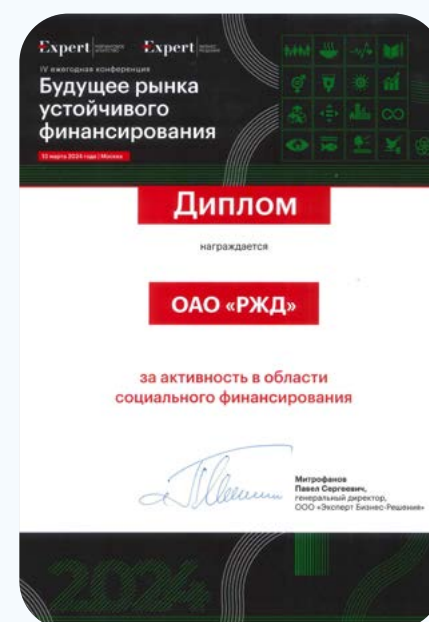
- RUB 1.2 bn owed to the federal budget;
- RUB 179.4 bn owed to the regional and local budgets;
- RUB 210.8 bn owed to extra-budgetary funds.

In 2023, a total of RUB 465.7 bn was allocated towards the payment of current taxes and insurance fees (including offsets and refunds), including:

- RUB 38.5 bn to the federal budget;
- RUB 194.1 bn to the regional and municipal budgets;
- RUB 233.1 bn to the Pension and Social Insurance Fund.



For more details on Russian Railways' tax strategy, see the Company's website



## Sustainable financing

GRI 3-3

In December 2023, the Company approved and published an updated version of its Social Financing Framework in the Russian language, which received an independent opinion from the Expert RA rating agency confirming its compliance with the sustainability principles. During the Future of the Sustainable Finance Market conference sponsored by Expert RA, Russian Railways was awarded a diploma as the first Russian company to provide a notable example of verifying the Social Financing Framework.

According to the Framework, proceeds from social financing instruments will be used to finance social projects in the following areas:

- developing railway infrastructure and ensuring transport accessibility;
- ensuring affordable healthcare;
- ensuring affordable education;
- other social projects.

### Social financing concept

# Procurement management

## Management approach

In procuring goods, works and services, Russian Railways adheres to the principles of equality, fairness, non-discrimination and the absence of unreasonable restrictions on competition among bidders. On top of that, the Company pursues an open approach to promote publicity and transparency in these processes and foster fair competition.

Russian Railways' procurement activities are governed by:

- Federal Law No. 223-FZ On Procurement of Goods, Work and Services by Certain Types of Legal Entities dated 18 July 2011;
- other procurement laws and regulations;
- Regulation on the Procurement of Goods, Work and Services for the Needs of Russian Railways<sup>1</sup>.

Russian Railways complies with anti-corruption and tax clauses, and no conflict of interest requirements. Suppliers may be included in the register of bad faith suppliers only on the grounds and in the manner set forth by applicable Russian laws.

## Procurement risks

The Company's key procurement risks include:

- procurement of materials and resources at inadequate prices;
- procurement of materials and resources in volumes insufficient for Russian Railways' units;
- failure to procure from small and medium-sized businesses as required;
- violation of laws when arranging and holding procurement procedures;
- violation of laws when making procurement disclosures;
- improper preparation of documents for competitive procurement.

To manage these risks, the Company:

- analyses market prices and monitors initial (maximum) prices;
- considers/plans procurement taking into account the requirements for purchases exclusively from small and medium-sized businesses;
- monitors if its units fulfil the requirements for procurement from small and medium-sized businesses;
- monitors legislative changes and amends its procurement regulations;
- monitors changes in the functions of information systems;

- standardises documents to arrange and hold procurement procedures;
- trains its employees;
- makes sure that planning, procurement and contracting are timely;
- automates processes and improves the functions of information systems;
- provides timely responses to queries on procurement.

<sup>1</sup> Approved by resolution of Russian Railways' Board of Directors dated 28 June 2018, Minutes No. 26.

## Procurement in 2023

### GRI GRI 3-3

In 2023, we introduced certain amendments to our regulations aiming to enhance, streamline and improve the transparency of our procurement activities, as well as to increase the number of players representing various economic sectors.

The Regulation on the Procurement of Goods, Work and Services for the Needs of Russian Railways was amended as follows:

- regulations concerning conflicts of interest in procurement have been adjusted: a list of individuals who cannot be members of a procurement commission and the procedure for preventing and settling conflicts of interest were established<sup>1</sup>;
- the right to conclude a single-source contract for a state defence order is granted if the Government of the Russian Federation decides to introduce special economic measures as per Article 26.1, clause 1 of Federal Law No. 61-FZ On Defence dated 31 May 1996, ensuring counter-terrorist and other operations outside Russia<sup>2</sup>;
- a ban on participation in procurement by persons recognised as foreign agents in accordance with applicable laws was introduced<sup>3</sup>;

- cases where the procurement law does not apply when making purchases from persons recognised as interdependent with the customer according to provisions in the Tax Code of Russia were clarified<sup>4</sup>;
- to ensure proper implementation of investment projects, including the investment project Upgrade of Rail Infrastructure of the Baikal–Amur and Trans-Siberian Main Lines Designed to Enhance the Throughput and Carrying Capacity of the Railways (second stage), it is now possible to set out in procurement documentation and/or contracts conditions that establish the customer’s right to unilaterally change or terminate a contract due to adjustments in relevant investment projects, including changes in or absence of financing limits<sup>5</sup>.

To secure a uniform procurement approach in view of antitrust practices and to expand the scope of potential bidders, amendments were made to procurement documents.



For more details on Russian Railways’ procurement activities, see the [Procurement and Bidding section on the Company’s website](#)



<sup>1</sup> In line with Federal Law No. 160-FZ On Amendments to Article 3 of the Federal Law “On Procurement of Goods, Work and Services by Certain Types of Legal Entities” and the Federal Law “On the Contract System in the Procurement of Goods, Works and Services for State and Municipal Needs” dated 11 June 2022.

<sup>2</sup> In line with Federal Law No. 272-FZ On Amendments to Certain Legislative Acts of the Russian Federation dated 14 July 2022.

<sup>3</sup> In line with Federal Law No. 498-FZ On Amendments to Certain Legislative Acts of the Russian Federation dated 5 December 2022.

<sup>4</sup> In line with Federal Law No. 159-FZ On Amendments to Article 1 of the Federal Law “On Procurement of Goods, Work and Services by Certain Types of Legal Entities” dated 11 June 2022.

<sup>5</sup> In line with Minutes No. 4 of the meeting of Russian Railways’ Board of Directors dated 24 November 2022.

## 2023 performance

In 2023, a total of **14,440** procurements were conducted, with an average number of bidders of 3.2 (3.4 among SMEs)

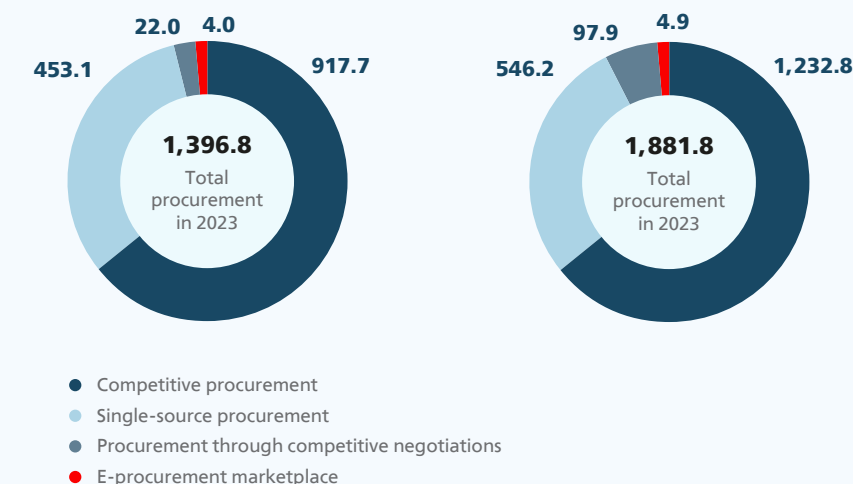
Competitive procurement continued to account for the largest share in the total procurement volume.

In the reporting year, Russian Railways procured goods, works, and services for RUB 1,881.8 bn, including:

- RUB 1,232.8 bn, or 65.5% – competitive procurement;
- RUB 546.2 bn, or 29.0% – single-source procurement;
- RUB 102.8 bn, or 5.5% – non-competitive procurement.

Single-source procurement is special-purpose procurement for the railway industry (contracts for the supply, servicing and maintenance, upgrade and repairs of the rolling stock worth RUB 326.1 bn).

### Procurement in 2023, RUB bn



### Procurement savings totalled

**RUB 7.5 bn** or 2.4% of the sum of initial (maximum) bidding prices

According to the procurement breakdown, goods have the largest share in total procurement (45.7%), with materials and supplies, rolling stock, and equipment representing sizeable 24.4%, 10.1% and 8.7%, respectively.

Work accounts for 38.2%, of which the largest share is attributable to construction and installation (18.8%), upgrades, repairs, and maintenance of the rolling stock (12.6%).

Services make up 16.1% in total procurement, including transportation, security, financial services, water supply and disposal, heating, gas and heat supply, medical services, lease services, and cleaning and laundry services (12.1%).



## Import substitution

### GRI 204-1

The Russian Railways Group continues to consistently enhance technological independence to ensure the stability and technological security of transportation business processes in line with its Comprehensive Import Substitution Programme through 2025<sup>1</sup>.

We developed and introduced a risk-based approach for timely risk forecasting and subsequent management decision-making and preventive measures to eliminate and/or minimise the impact of using products reliant on imports in the production processes of the Russian Railways Group in the light of new sanctions restrictions.

To stimulate the adoption of domestic innovations, the Company focuses on leveraging state support to fund research and development at manufacturing facilities. In its turn, the Russian Railways Group acts as an anchor customer, securing a guaranteed

#### Priority import substitution areas:



order volume for Russian-made railway products and bolstering machinery manufacturers via existing long-term contracts.

**97.9%**

of total goods, works, and services procured (provided) by Russian companies in 2023

#### Construction

In the construction domain, domestic products, works, and services accounted for 99.6% of Russian Railways' total procurement volume in 2023.

Under the Comprehensive Plan for Upgrading and Expanding Core Infrastructure<sup>2</sup>, the proportion of domestic procurement as part of the federal projects in 2023 was as follows:

- enhancement of the throughput and carrying capacities to achieve an increase in transit container

- reducing dependency on imported complex technical systems such as railway automatics and telematics equipment;
- reducing railway industry dependency on imported transportation machinery;
- preferred use of domestic software;
- equipping railway infrastructure with import-independent hardware and software;
- scheduled replacement of foreign products with domestic ones.

traffic, including the Trans-Siberian in Seven Days project – 99.5% (target: 94%);

- development and renovation of the rail infrastructure serving ports of the Azov and Black Seas – 99.9% (target: 92%);
- development and renovation of the rail infrastructure serving ports of the North-Western basin – 99.9% (target: 93%).

Architectural planning, construction design, engineering surveys, as well as construction and installation works are exclusively sourced from Russian entities.

#### Rolling stock

In 2023, the following series of national rolling stock, featuring a domestic component share in excess of 90%, entered the production phase:

- locomotives: 2(3) TE28, 2(3) E58;
- electric trains: EP2DM, EP3D (incl. No. 087), ES104 Finist, EGE2Tv Ivolga 4.0 (ver. 09-16);
- locomotive traction passenger cars: 61-4472 (ver. 08), 61-4473 (ver. 08), 61-4465 (ver. 08, 09).

The development and production launch processes for these vehicles have been finalised, and compliance certificates have been issued in line with the Technical Regulations of the Customs Union.

Sanctions and exit of numerous international brands (previously engaged in repairing special rolling stock) from the Russian market

force the country to substitute foreign powertrains with domestic alternatives:

- in 2023, imported diesel engines – Caterpillar C6.6 (for KGT road-rail loaders), Cummins N14 (for Duomatic 09-32 tamping machines), and Deutz (for Dynamic machines) – were replaced with Russian-made engines;
- a three-year programme was initiated, with plans for 2024 to replace Cummins N14 engines in 19 Duomatic (74 units) and Unimat (63 units) tamping machines with YAMZ-65802 engines, and to equip 91 loaders with Russian engines;

- jointly with the School of Space and Information Technology at the Siberian Federal University, we delivered a project to re-engineer technical gas control board EI-T5311.00 for Duomatic 09-32 and Unimat 08-275-3s tamping machines. This initiative seeks to enhance the board's technical specifications by employing more contemporary circuit designs in the output stage.

For more details on import substitution in IT, see the Innovations and Efficiency Improvement section on [p. 167](#).



<sup>1</sup> Russian Railways' Order No. 3125/r dated 31 December 2019.

<sup>2</sup> Approved by Order No. 2101-r of the Russian Government dated 30 September 2018.

## Procurement from small and medium-sized enterprises

**For the fifth consecutive year, Russian Railways secured a Top 20 position among major customers dedicated to supporting small and medium-sized enterprises (SMEs).**

The Company's robust procurement strategy and comprehensive measures have enabled it to maintain its leading spot in the Top 20 of the customer loyalty rating for SMEs for five years running, earning recognition for the highest volume of SME procurement in 2023.

This ranking, developed collaboratively by the Agency for Strategic Initiatives and SME Corporation, considers various criteria: total annual procurement from SMEs, diversity of items purchased and contracts signed, engagement in SME supplier development programmes, and other factors.

Despite its achievements, Russian Railways remains committed to spearheading state policies for SME development, enhancing procurement efficiency, and intensifying efforts to boost SME procurement performance.

To foster supplier development and facilitate SME expansion, Russian Railways became the first major purchaser to introduce long-term offset contracts with an investment element featuring stiff competition (seven to 18 bids per auction).

Following the selection process, offset contracts were made with SMEs for labour-saving devices for a total of RUB 99.5 m (VAT included), bottled

water, totalling RUB 145.5 m (VAT included), lumber and timber, totalling RUB 401.1 m (VAT included).

Drawing from this experience, the Company adopted a universal 2030 SME development programme<sup>1</sup>. This initiative empowers all Russian Railways units to select and engage with SMEs for goods, works, or services through offset contracts with an investment element.

On the official Russian Railways website, in the Procurement and Bidding section (Regulations and Information for SMEs subsections), detailed guidelines are available. These feature insights into common errors made by bidders and guidance on how to avoid them, provide document templates, and offer

presentations titled Becoming a Russian Railways Supplier and SME Participation in Russian Railways Procurement, etc.

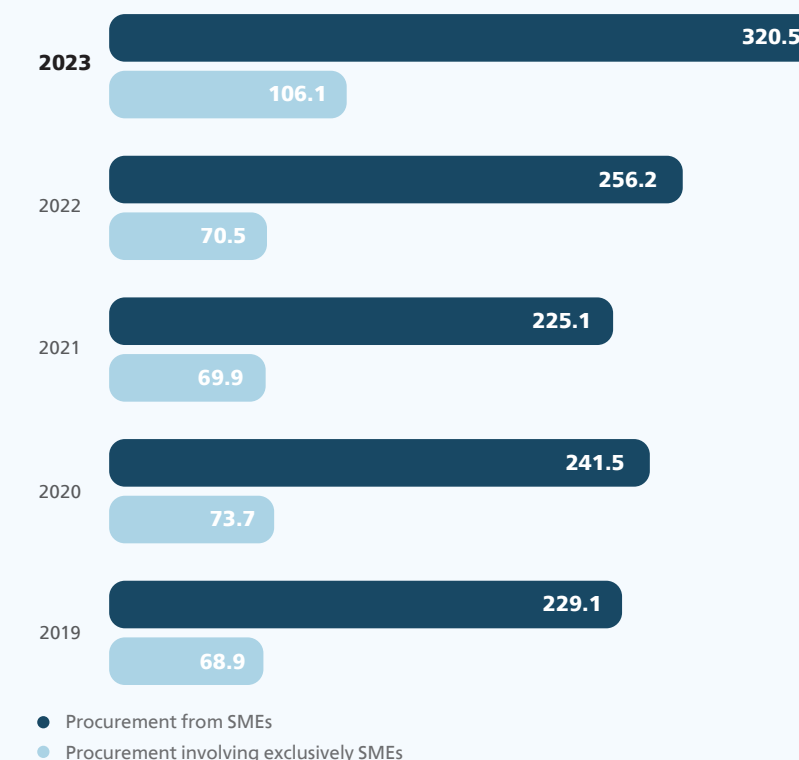
In 2023, procurement involving SMEs only made up 23.4% against the statutory threshold of 20.0% per year, while the total share of procurement from SMEs stood at 70.7% against the annual statutory requirement of 25.0%.

**70.7%**  
total share of procurement from SMEs

**In its commitment to SME support and development, Russian Railways, in collaboration with SME Corporation, conducted 36 training workshops attended by 2,455 SMEs in 2023.**

Russian Railways keeps pursuing its partnership programme with SMEs, targeting the identification and compilation of a roster of partners specialising in high-tech manufacturing, sales, and engaged in R&D and technological endeavours. In 2023, 176 SMEs confirmed their eligibility for the partnership programme<sup>1</sup>.

### Procurement from small and medium-sized businesses, RUB bn



<sup>1</sup> Russian Railways' Order No. 2221/r dated 30 August 2023.

<sup>1</sup> Approved by Russian Railways' Order No. 276/r dated 5 February 2014.

## Sustainable development and supplier engagement

### Occupational health and safety

The Company relies on the Regulation on OHS Relations of Russian Railways with Contractors to ensure safe work of contractors on its sites.

It stipulates OHS requirements for contractors in service contracts, putting relevant branches where contractors perform work in charge of overseeing compliance. In case of violations, the contractor is penalised as provided for in the contract.

Contracts for work on Russian Railways sites and premises include the following:

- OHS provisions regulating responsibilities of the customer and contractors, including contractor liability for breaching safety rules;
- provisions on contractor staff compliance with Russian Railways' OHS requirements;
- provisions on the timely notice to the Company of all accidents, injuries, health impairment and illnesses of employees, and other work-related emergencies.

### Supplier hotline

**GRI** GRI 2-26

To ensure that legal entities and individuals exercise their right to access information about Russian Railways' procurement of goods, works, services and can participate in relevant procurement activities, the Company operates a hotline to address any enquiries related to procurement.

This hotline offers guidance on the organisation and execution of competitive procurement processes.

### Supplier environmental responsibility

The Company adopted an in-house methodology to assess supplier environmental responsibility.

To monitor contractor compliance with environmental requirements, we use the Methodology for the Recognition and Assessment of Environmental Requirements for Products, Raw Materials and Supplies Purchased by Russian Railways' Business Units. This methodology regulates compliance with additional requirements and helps:

- reduce the environmental footprint;
- improve working conditions;
- increase the Company's economic performance through better energy and resource efficiency.

Enquiries can be submitted 24/7, with each being addressed within one business day. Questions and answers are made available on the Company's official website.



[Supplier hotline](#)



# Innovation-driven development and digital transformation

The Russian Railways Group's R&D activities and innovation-driven development follow the priorities set forth in its Research and Development Strategy until 2025 and further until 2030 (the "White Book")<sup>1</sup>, in line with the country's strategic development goals and global R&D trends.

## Innovations

The Group's Comprehensive Innovative Development Programme until 2025 (the "CIDP")<sup>2</sup> lays the groundwork for fulfilling its strategic priorities. It outlines 11 groups of key projects, proposes organisational improvements to innovation management, and establishes partnership mechanisms based open innovation.

In 2023, the Russian Railways Innovation Leader competition was launched to encourage innovation within the Company. Three branches, whose employees were declared winners, received funding of RUB 3 m each as part of the Russian Railways Innovation Support Programme to bring their winning project to life in 2024.

- improvement of the passenger train service on the Moscow Central Diameters contributing to the development of the Central Transport Hub;
- introduction of a single ticket service for direct and multimodal transportation and integration of Russian Railways' information systems with state-run ticket sales systems;
- implementation of intelligent and automated customer service systems for freight transportation, including Autoagent, Electronic Claim Settlement, RZD Market, and CD Freight Forwarder;
- introduction of virtual coupling – a wireless inter carriage link technology, single-person freight train driving technology, remote locomotive driving, high-performance specialised rolling stock for infrastructure repair and maintenance, innovative loading and unloading equipment, innovative freight terminal technologies, new container train departure routes from Russian Railways' freight terminals, and acoustic monitoring points;

### Key innovation-driven development projects in 2023

The following innovation projects were implemented as part of the CIDP in 2023:

- deployment of innovative rolling stock for passenger transport (state-of-the-art coupled two-car sets);
- development of the EMKA2 catenary and battery-powered electric shunter as well as alternative fuel locomotives;

**RUB 291.5** bn

total investment in innovation projects in 2023, including R&D under the CIDP

**16** unique projects launched in 2023 with funding as part of the Innovation Support Programme

<sup>1</sup> Approved by Russian Railways' Order No. 769/r dated 17 April 2018.

<sup>2</sup> Approved by the Board of Directors of Russian Railways on 26 February 2020.

- research and development of prototype next-generation derailment control devices;
- introduction of innovative solutions to reduce environmental impact and save fuel and energy resources, including digital energy-saving heating systems, ceramic heating panels, guaranteed engine start systems, and compact dual-mode LED lights.

**R&D breakthroughs in 2023**

- Efforts continued to develop and test computer vision systems to enable the deployment of highly automated UA4 electric trains on the Moscow Central Circle.
- As part of Russian Railways' R&D plan, calculations and simulations were completed for a modified

2TE116U mainline diesel locomotive converted to natural gas and diesel traction, with an operational model and design documentation developed.

- The development of a new generation of eight-axle freight cars, consisting of two rigidly coupled body sections, was launched.
- Efforts were made to increase the speed of multimodal transit and domestic freight transportation by organising freight transportation at speeds up to 140 km/h.
- Railway track design and maintenance technologies were being developed to achieve a gross throughput of 2.5 billion tonnes.



**Protection of intellectual property**

Protecting intellectual property and managing intellectual property rights is a key focus for Russian Railways. The Company's extensive intellectual property portfolio makes it a leader among state-owned enterprises.

**4,465** inventions, useful models, trademarks, and software suites comprise Russian Railways' patent portfolio

**368** new intellectual property items added to the portfolio in 2023, with 10 receiving international legal protection



For more details on the Company's innovations see [Russian Railways' 2023 Annual Report, Innovation-driven Development and Digital Transformation](#) section.

**Digital Transformation**

Russian Railways is actively embracing digital transformation, which leads to more efficient use of employee time, reduced material costs, and faster, higher-quality management decisions.

**55%** of inquiries handled by AI (chatbots) and software robots in 2023 **13% increase from 2022**

**Digitalising process flows**

- Artificial intelligence (AI), distributed ledger, Internet of Things, and digital twin technologies enhance data accuracy and reliability, enabling high-quality predictive analytics, repairs based on actual condition, and a trusted

environment for customer and partner interactions. The focus on developing big data processing technologies and quantum communications further strengthens data security during transmission.

- Effective data management, transmission, and protection are essential for driving the growth of the country's data economy. Russian Railways developed and implemented a Corporate Data Management System (CDMS) that goes beyond simple data collection. It supports statistical, accounting, and managerial reporting, while also enabling advanced and predictive analytics, ultimately leading to more effective management decisions.
- New technologies are making work safer and less routine. VR/AR training reduces workplace injury risks in hazardous areas, while software robots and AI technologies streamline tasks.



**Software import substitution**

The Company's 2023 target for transitioning to the preferred use of domestic software has been achieved:

- as at the year end, 173 automated systems owned by Russian Railways were registered in the Unified Register of Russian Software and Databases;
- the share of expenditures on purchasing Russian software and related services reached 81.76% of total software procurement costs, exceeding the target of 78.0%;
- 741 employees of Russian Railways' Main Computing Centre were trained on the use of import-substituted software.

Domestic software transition progress as at 1 January 2024:

- over 144,000 users of electronic document management systems (23,900 users transitioned in 2023);
- 133,700 users of ERP systems (of them, 54,600 users were transitioned in 2023);
- over 31,000 users of business analytics and master data management systems (of them, over 8,700 users were transitioned in 2023);
- over 29,200 users of EAM systems and over 6,700 units of track maintenance equipment (of them, 8,100 users and 1,800 units of track maintenance equipment were transitioned in 2023 respectively).

**Key software import substitution projects:**



- transitioning automated passenger service systems to import-independent platforms, including the Express 3 automated control system, the passenger portal for direct sales of rail and air tickets, and the passenger service performance database;
- implementing Russian Railways' Corporate Data Warehouse on a domestic platform, which involves developing a standard functionality for a Unified Corporate Data Analysis and Visualisation System as a tool for analysing the Company's data and ensuring a unified development environment for analytical information systems using a centralised architecture;
- developing a primary dispatching tool, built on an import-independent platform, to effectively manage traffic and track the actual execution of the train schedule, with the Central Directorate for Traffic Management's Transportation Management Centre information and control system already implemented;
- re-engineering the automated freight car database and locomotive depot-level systems;
- developing an automated system for monitoring the performance of Russian Railways' operational branches and structural units based on a new generation of key performance indicators.



For more details on the Company's digital transformation projects see [Russian Railways' 2023 Annual Report, Innovation-driven Development and Digital Transformation section](#)

**Quantum communications**

In 2023, new segments were added to the quantum network, bringing its total length to 3,295 km.

A total of 25 research and development projects are underway, focused on creating domestic equipment and components, as well as developing advanced technologies.

Continuous efforts are being made to develop the ecosystem, which includes refining regulatory frameworks, standardisation, building human capital, and promoting awareness. The ecosystem registry currently includes over 140 organisations.

In 2023, the Framework for Regulating the Quantum Communications Industry

in Russia until 2030 was approved. Additionally, six preliminary national standards, standardisation guidelines, and amendments to the quantum communications-related codes in the All-Russia Classifier of Economic Activities (OKVED) and All-Russia Classifier of Products by Types of Economic Activities (OKPD) were approved by the Russian Federal Agency for Technical Regulation and Metrology.

**Information security risks**

Managing information security risks is an essential priority. Breach of data confidentiality, integrity, availability, reliability, etc., may, among other things, lead to:

- disruptions of corporate systems thereby impacting operations and critical IT infrastructure facilities;
- disclosure of information constituting a trade secret or other types of secret;
- damages to the integrity of financial documents;
- unauthorised access to the personal data of employees and customers;
- direct and indirect financial losses.

The main risk factors related to the security of Russian Railways' information infrastructure include tampering by third parties to gain unauthorised access to the information of the Company and its counterparties, including purposeful hacker and virus attacks, as well as internal threats of employee misconduct and analysis and SIEM tools failure.

The key information security measures implemented by Russian Railways include:

- classification and categorisation of Russian Railways' systems, information security threat modelling, development of information protection requirements;
- sound arrangement of the information infrastructure components with due account for information security;
- design and implementation of centralised protection tools and private information protection subsystems in the Company's information infrastructure, certification of Russian Railways' systems for compliance with information security requirements;

- arrangements to analyse and control the security of IT infrastructure;
- organisation of employee training in information protection;
- ensuring the security of Russian Railways' information systems in use, monitoring information security incidents and responding to them;
- conducting internal investigations into information security and confidentiality incidents related to the use of computers;
- enhancement of the Company's information security policies and guidelines.

