





# Risk map of the Russian Railways Group

External	
Category	Risk
<p><b>Macroeconomic</b></p> 	<ul style="list-style-type: none"> <li>• reduction in the volume of freight provided for transportation;</li> <li>• risk of unplanned fluctuations in transportation volumes exceeding the carrying capacity of certain railway sections;</li> <li>• deterioration in the structure of industrial and agricultural production;</li> <li>• growth in prices for goods and services consumed by the Russian Railways Group as a result of inflation;</li> <li>• decrease in the Company's income from passenger transportation due to a decline in the public's ability to pay;</li> <li>• decline in investment and business activity.</li> </ul>
<p><b>Market</b></p> 	<ul style="list-style-type: none"> <li>• decrease in the Russian Railways Group's share of highly profitable segments of the transportation market;</li> <li>• growth in intra-industry and cross-industry competition;</li> <li>• advanced development of alternative types of transportation, including through the accelerated introduction of innovations;</li> <li>• establishment and full-scale operation of international corridors to bypass Russia;</li> <li>• risk of the quality and range of services not complying with new customer requirements;</li> <li>• lack of production capacity among product suppliers for the Russian Railways Group.</li> </ul>
<p><b>Financial</b></p> 	<ul style="list-style-type: none"> <li>• credit risks;</li> <li>• currency risks;</li> <li>• interest risks;</li> <li>• price risks as regards raw commodity and energy assets;</li> <li>• risk of liquidity loss;</li> <li>• downgrading of Russian Railways positions by international ratings agencies;</li> <li>• financial implications from property and liability risks.</li> </ul>
<p><b>Human resource risks</b></p> 	<ul style="list-style-type: none"> <li>• increased imbalances in the structure of the workforce represented on the market;</li> <li>• deterioration in the positions of Russian Railways on the labour market;</li> <li>• deterioration in the quality of the workforce;</li> <li>• reduction in the working population in remote regions due to the urbanisation of society;</li> <li>• risk of the diminished attractiveness of professions in the railway transportation industry.</li> </ul>

## External

### Category

### Risk

#### Regulatory risks



- continued strict government tariff regulation;
- stricter environmental requirements;
- stricter legislation (transportation, tax, etc.);
- failure to fulfil the action plan to give the constituent entities of the Russian Federation greater responsibility to compensate for falling income by suburban passenger companies.

#### Political



- impact of international sanctions against the country's economy and activities of Russian Railways;
- deterioration in intergovernmental relations;
- local military operations.

#### Manmade, natural and climatic



- accidents at facilities that support the work of the Russian Railways Group;
- manmade accidents on related types of transportation (primarily in seaport waters and on major highways);
- fires or natural disasters in areas where the Russian Railways Group operates.

#### Scientific, technical and technological



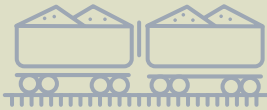
- use of new energy resources and energy-saving modes on alternative types of transportation;
- improving the carrying capacity of vehicles and vessels.

## Internal

### Category

### Risk

#### Production and technological



- lag in infrastructure development compared with the increase in freight and passenger transportation;
- disruptions in the organisation of freight delivery logistics schemes;
- disruptions to the plan for making up trains and the train traffic schedule;
- violations of traffic safety;
- diminished efficiency from the use of rolling stock;
- discrepancies in existing technological processes for organising transportation with the quality requirements for transportation products.

#### Technical and resource

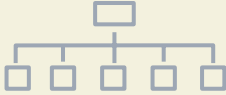

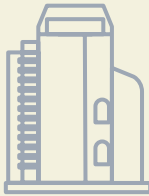


- continued high level of fixed asset deterioration;
- breach of the deadlines and conditions for supplies of material resources;
- risk of using substandard and incomplete information about consumers of the Russian Railways Group's services.

#### Investment



- incorrect substantiation and erroneous selection of new investment targets;
- diminished return on investment and failure to ensure planned profitability from invested funds;
- lack of clear guarantees for transportation volume from freight owners when implementing infrastructure investment projects;
- risk of the failure to meet the parameters of the projects implemented (exceeding the budget, failure to meet deadlines or failure to achieve the project objective).

Internal	
Category	Risk
<p><b>Risks of structural reforms</b></p> 	<ul style="list-style-type: none"> <li>• threat of a disruption to the technological processes of the Russian Railways Group and significant financial losses as a result;</li> <li>• threat of the loss of financial sustainability and the risk of bankruptcy of S&amp;A;</li> <li>• decrease in the profitability of the Russian Railways Group due to the uncompensated spin-off of highly profitable S&amp;A;</li> <li>• decline in asset value and capitalisation of the Russian Railways Group in the event of the ineffective work of S&amp;A.</li> </ul>
<p><b>HR</b></p> 	<ul style="list-style-type: none"> <li>• lack of compliance of the professional level of personnel with the requirements of the Russian Railways Group;</li> <li>• risk of a further increase in the number of employees approaching retirement age;</li> <li>• outflow of highly skilled personnel due to insufficient motivation and the decreased competitiveness of salaries for employees of the Russian Railways Group compared with other industries;</li> <li>• violations of labour safety through the fault of personnel;</li> <li>• risk of ineffective recruiting, placement and management of personnel;</li> <li>• violations of labour discipline;</li> <li>• deterioration in the corporate culture of employees.</li> </ul>
<p><b>Management</b></p> 	<ul style="list-style-type: none"> <li>• reduced manageability of Russian Railways Group structures;</li> <li>• adoption of unsubstantiated management decisions;</li> <li>• failure to execute decisions by the required deadlines;</li> <li>• failure to achieve target economic and production performance results of the Russian Railways Group.</li> </ul>