TRANSPORTATION AND LOGISTICS

In the transportation and logistics segment, Russian Railways is shifting the focus from basic freight transportation services to comprehensive door-to-door solutions and creation of global logistics chains. The Company is applying advanced logistics technologies, implementing an automated customer relationship management system and a uniform freight transportation service catalogue, and expanding its geography, while also continuing to develop and introduce new services for shippers.

2018 HIGHLIGHTS:

AVERAGE HAUL OF

AVERAGE LOADED FREIGHT CAR DELIVERY SPEED OF

km/day

+0,9%

LOADED FREIGHT TURNOVER OF

bn tkm





Transportation and logistics

This business line of Russian Railways focuses on transportation and infrastructure services, including operation of rolling stock, creation of logistics chains with varying degrees of complexity (i.e. those involving several transport modes), contract logistics, warehousing, and transit freight shipments via international routes.

Key growth areas under the Long-Term Development Programme

The Programme's key initiatives in the realm of transportation and logistics services focus on:

- building long-term relations with customers, including by linking guaranteed freight volumes to infrastructure, organisational and technical initiatives designed to fully meet the customers' transportation needs;
- improving customer feedback and ensuring high client loyalty, including by putting in place an automated customer relationship management system in the freight transportation segment in Russian Railways and across its subsidiaries and affiliates;
- creating an automated tool to maintain a uniform freight transportation service catalogue giving customers access to the entire range of freight transportation

- services, offerings and specifications;
- > strengthening logistics capabilities to satisfy the customer demand for comprehensive services, including use of global transportation chains and outsourcing logistics for industrial facilities:
- enhancing accuracy of freight shipment schedules by improving the system of shipments with fixed departure and arrival times and reducing delivery time;
- fine-tuning transportation products and services to meet the shippers' needs and developing new products and services;
- developing freight transportation quality standards based on availability, timeliness and reliability of transportation services, cargo safety, choice of logistics, terminal and warehousing services, and delivery speed;

- developing the RZD Express service for small and medium-sized cargo batches;
- introducing RoLa services;
- conducting a dedicated analysis and, if economically feasible, initiating gradual abolition of tariff regulation in certain sufficiently competitive transportation market segments (including container (RoLa) shipping, transportation of light petroleum products, fish, fish products, etc.);
- enhancing coordination within the Group in order to improve the performance of transportation and logistics subsidiaries and business units:
- launching electronic workflow as a tool to facilitate communication between all participants of the transportation process (including the federal executive authorities and international multimodal freight transportation players).

Key achievements in 2018

- Loaded freight turnover reached an alltime high of 2,596.9 bn tkm (up 4.2% vs 2017).
- Handling volumes increased by 2.2% y-o-y to 1,289.6 mt (an average of 3,533.2 kt per day).
- The strongest growth was recorded in the volumes of hard coal (up 4.6%), iron and manganese ore (up 5.7%), ferrous metals (up 7%) and grain (up 22.6%).
- The average haul increased by 35 km (up 1.9%) to 1,835 km¹.
- 32,870 trains were dispatched as part of the fixed schedule freight transportation service delivering 72.59 mt of cargo (up 21.9% y-o-y).

- In 2018, the number of registered users at the Freight Transportation electronic trading platform (FT ETP) increased 1.9 times to 3,522.
- The first phase of the project was completed to establish the Kaliningrad transportation and logistics centre and its satellite facility at Chernyakhovsk station for transshiping transit containers between the 1,520 mm and 1,435 mm gauge flatcars.
- The Company expanded the geography of its transportation and logistics operations, having launched grain shipments from Russia to Turkey via the Baku-Tbilisi-Kars international route.
- The Company developed and rolled out new container-based transit services along the China-Europe-China axis using the port of Kaliningrad and along the South Korea-Finland-South Korea axis via the Vostochny port.
- As part of developing the International North-South Transport Corridor (INSTC), pilot container-based shipments were made from India to Russia and Belarus.
- > Two pilot RoLa shipments were organised on the Kaliningrad–Moscow–Kaliningrad route through the territory of Lithuania and Belarus. Another pilot shipment was made from Moscow to Novosibirsk in association with Federal Freight Company and Magnit.



We reach mutually beneficial solutions to tackle the most complicated issues through an ongoing dialogue with our clients. We build effective relationships with our partners and offer them flexible tariff policies. Last but not least, we remain committed to further coordinating and developing our transportation and logistics services»

Alexey Shilo
Deputy CEO, Head of the Centre
for Corporate Transport Services

Freight transportation using Russian Railways' infrastructure

Sustainable development

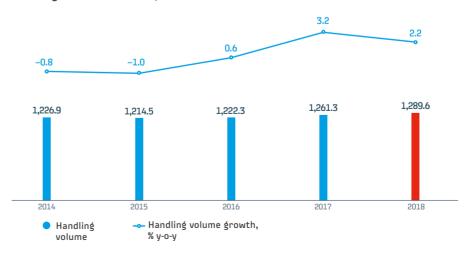
Highlights of freight transportation using Russian Railways' infrastructure

ltem	Measurement unit	2014	2015	2016	2017	2018	
						Value	Change vs 2017, %
Handling volumes, total	mt	1,226.9	1,214.5	1,222.3	1,261.3	1,289.6	2.2
Daily averaģe	kt	3,361.5	3,327.3	3,339.5	3,455.7	3,533.2	2.2
Total freight turnover	bn tkm	2,954.5	2,954.9	2,997.8	3,176.7	3,304.8	4.0
Including:							
loaded turnover	bn tkm	2,298.6	2,304.8	2,342.6	2,491.9	2,596.9	4.2
empty turnover	bn tkm	655.9	650.1	655.2	684.8	708.0	3.4
Share of shipments delivered within required (contractual) period	%	87.1	92.9	96.1	96.7	97.1	0.4 pp
Average freight and empty car delivery speed	km/day	299	341	361	362	370	2.2
Average loaded freight car delivery speed	km/day	372	381	380	386	390	0.9

Handling

Russian Railways'performance reflects general situation in the Russian industry and economy. According to the Russian Federal State Statistics Service, the Industrial Production Index came in at 102.9% in 2018. Handling volumes across Russia's railways went up accordingly, adding 2.2% and amounting to 1,289.6 mt (an average of 3,533.2 kt per day). This was primarily due to increases in shipments of hard coal, iron and manganese ore, ferrous metals and grain.

Handling volumes evolution, mt



Handling by transportation type

ltem			Chanée		
	mt	Share, %	mt	2018 Share, %	in volume, %
Handling	1,261.3	100.0	1,289.6	100.0	2.2
Domestic	791.5	62.8	797.6	61.8	0.8
Export	460.0	36.5	482.3	37.4	4.8
Including:					
via ports	291.2	23.1	306.3	23.8	5.2
via border crossinģs	168.8	13.4	176.0	13.6	4.3
Import and transit	9.8	0.8	9.8	0.8	-0.3

In 2018, growth was recorded across the board. Domestic and export handling volumes increased by 0.8% (to 797.6 mt) and 4.8% (to 482.3 mt), respectively. As a result of strong growth in export shipments, the share of domestic services in handling volumes decreased from 62.8% to 61.8%, while the share of exports moved up from 36.5% to 37.4%.

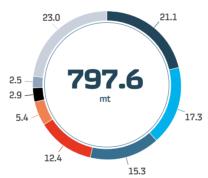
Shipments of hard coal, bulk oil, construction materials and ores made up the largest part of handling volumes, with their aggregate share amounting to 66.1% (down 0.3 pp y-o-y).

In 2018, handling volumes also showed growth across tariff classes. In contrast to 2017 when the cheapest Class I freights demonstrated the strongest growth, 2018 saw the most expensive Class III cargoes as the obvious outperformer. Class I, Class II and Class III freight shipments increased by 1.6%, 2.9% and 4.2%, respectively.

Hard coal (up 4.6%), iron and manganese ore (up 5.7%) and timber (up 5.6%) were the main drivers of Class I growth, while handling of construction cargoes continued to decrease for the second year in a row (down 6.8% in 2018 after a drop of 5.7% in 2017).

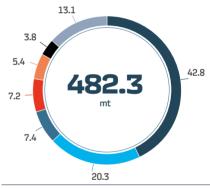
In Class II, the strongest performers included grain (up 22.6%), containerised

Domestic handling by cargo type in 2018, %



- Hard coal
- Oil and petroleum products
- Construction cargoes
- Iron and manganese ore
 Ferrous metals
- Chemical and mineral fertilisers
- Timber
- Other

Export handling by cargo type in 2018, %



- Hard coal
- Oil and petroleum products
- Iron and manganese ore
 - Ferrous metals
- Chemical and mineral fertilisers
- Timber
- Other

cargoes (up 12.1%) and fertilisers (up 3.7). The y-o-y surge in grain handling volumes (22.6% growth in 2018 vs 16.4% in 2017) reflects the increasingly active role of grain suppliers, especially on the export markets.

Ferrous metals led the pack in Class III (up 7%). With handling volumes in this category adding 4.3 pp (vs 2.8% growth rate

in 2017), ferrous metals seem to be gaining significant market traction.

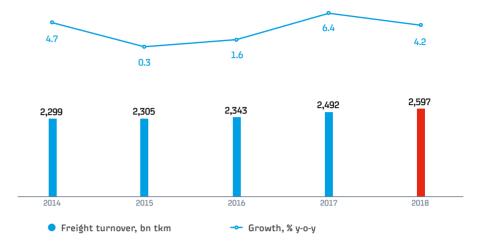
In 2018, low-margin cargoes dominated the freight shipment structure with a share of 59.9% compared to 60.2% in 2017. The shares of mid- and high-margin cargoes increased only slightly to 29.5% (vs 29.3% in 2017) and 10.6% (vs 10.4% in 2017), respectively.

Freight turnover

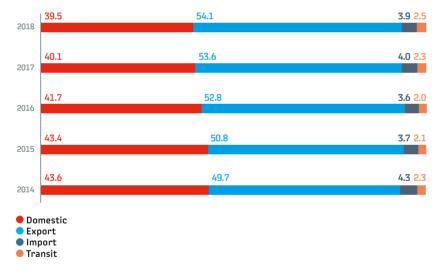
In 2018, loaded railway freight turnover grew by 4.2% y-o-y to 2,596.9 bn tkm, hitting an all-time high.

Total freight turnover (including the empty run of third-party cars) within Russian Railways' infrastructure increased by 4 % y-o-y to 3,304.8 bn tkm. Growing transportation volumes (primarily, coal shipments) were the main driver behind the rise in freight turnover. The 1.9% increase in the average haul also contributed to the positive result. Empty freight turnover added 3.4 % in 2018 to reach 708 bn tkm.

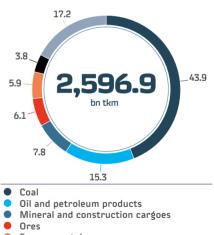
Loaded freight turnover evolution



Loaded freight turnover breakdown, %



Loaded freight turnover breakdown, %



Ferrous metals

Chemical and mineral fertilisers

Other

2018 saw loaded freight turnover rise across transportation types, with domestic, export, import and transit lines registering increases of 2,6% (to 1,025.8 bn tkm), 5.3% (to 1,405.2 bn tkm), 2.1% (to 101.4 bn tkm) and 10.5% (to 64.5 bn tkm), respectively.

The dramatic growth in exports further reduced the share of domestic shipments in overall loaded freight turnover. Over the past five years, it went down by 4.1 pp, while the share of export shipments rose by 4.4 pp.

In terms of cargo types, in 2018, coal's share grew the most - up 0.8 pp, while the share of oil and petroleum products dropped by 0.4 pp and that of mineral and construction cargoes by 0.6 pp.

IN 2018, LOADED FREIGHT TURNOVER REACHED A 15-YEAR HIGH OF

Transportation and logistics services

In the transportation and logistics segment, Russian Railways is shifting the focus from basic freight transportation services to comprehensive door-to-door solutions and creation of global logistics chains. The Company is busy introducing advanced 3PL/4PL logistics technologies.

In 2018, Russian Railways updated its unified register of freight transportation services. The Company continues migrating to the uniform service catalogue as part of an effort to put in place an automated customer relationship management system.

The strongest growth in 2018 was demonstrated by container-based transit services, which rose 33% y-o-y to 553,000 TEU.

In 2018, Russian Railways continued to diversify container delivery routes on the East–West axis. For instance, the Company launched a new container-based transit service from Finland to South Korea through the Vostochny port. As part of developing the International North–South Transport Corridor (INSTC), pilot container-based shipments were made from India to Russia and Belarus.

The Company continued working on the Mail project, which provides for international container-based parcel transportation and door-to-door delivery services. These services operate under specifically designed logistics schemes on the Harbin–Moscow, Suzhou–Moscow and Chongqing–Europe routes.

Customers were also offered new types of services. One of them is rolling highway, or RoLa, a form of combined transport with trailers, semi-trailers, swap bodies or even entire road trains placed on specialised flatcars for transportation. Rolling highways decrease road traffic density and help reduce damage caused by heavy trucks to the environment and motor roads.

In 1H 2018, two pilot RoLa shipments were organised on the Kaliningrad–Moscow–Kaliningrad route through the territory of Lithuania and Belarus. Another pilot shipment was made from Moscow to Novosibirsk in association with Federal Freight Company and Magnit. Based on the lessons learnt, a plan was drafted to put in place regular RoLa services in 2019.

Performance highlights of major transportation and logistics subsidiaries

GEFCO

GEFCO (a France-based subsidiary of Russian Railways Group) is a global provider of 3PL/4PL logistics solutions and services. With 350 operational sites all over the world and a footprint spanning over 150 countries, the company is Europe's Top 10 logistics operator. Russian Railways holds a 75% stake in GEFCO.

In 2018, GEFCO celebrated the 15th anniversary of its Russian operations. Over this period, the company:

- had grown to become a leading automobile logistics player in Russia;
- obtained a customs broker licence;
- expanded the range of its services from transporting cars and components to establishing end-to-end supply chains for the leading Russian manufacturers;

 diversified its customer base by acquiring customers in many key industries.

In partnership with Russian Railways, GEFCO launched a number of projects in Russia to improve efficiency of the Group's supply chains and use its assets in joint activities. One of the key projects is multimodal transportation of oversized coal mining machinery and equipment from Europe to Russia. Another major project is transportation of copper and iron ore concentrates from Russia to China. In 2018 alone, a total of 6,419 gondola cars were loaded with 358.3 kt of iron ore concentrate and 77.039 kt of copper concentrate.

The company's revenue in 2018 grew 4.6% y-o-y to EUR 4.647 bn. Net profit for the same period totalled EUR 96.7 m, up 24% y-o-y.



Learn more about the company at: https://www.gefco.net/en/



UTLC ERA

In April 2018, United Transport and Logistics Company (UTLC) was reorganised into UTLC Eurasian Rail Alliance (UTLC ERA). The company continued working on the development of container-based transit services in Russia, Kazakhstan and Belarus. UTLC ERA is a joint venture of Russian Railways, Belarusian Railway and Kazakhstan Temir Zholy, with each founder having an equal share of 33.33%.

2018 performance highlights:

- > transit services along the China-Europe-China axis through Kazakhstan, Russia and Belarus amounted to 280,500 TEU (up 60% y-o-y), with UTLC ERA accounting for 239,100 TEU of this amount;
- > 3,342 container trains were dispatched. UTLC ERA accounted for 76% of all container-based transit services on the 1,520 mm gauge network along the China-Europe-China axis (including freight shipments to Belarus);
- the number of regular routes operated by UTLC ERA reached 57;
- transit services connect over 20 terminals in the European Union.

Revenue of UTLC ERA for eight months of 2018 reached RUB 19.745 bn. Its net profit for 2018 amounted to RUB 2.824 bn.



Learn more about the company at: https://utlc.com/en/

Federal Freight Company

Federal Freight Company (FFC) is a network-wide operator of freight rolling stock. The company is a subsidiary of Russian Railways and one of the largest freight railway operators in Russia. FFC runs 12 branches and transport service agencies and has representative offices in Moscow and Kazakhstan. In 2018, INFOLine Rail Russia TOP ranked FFC first among Russian railway operators for its operational and financial performance.

The company continued to be a leader of the freight rolling stock market in terms of:

- > the share in freight turnover (13.1%);
- the average annual size of fleet under management (138,500 units);

the share in the Russian railcar fleet (12.2%).

The company's sales revenue in 2018 grew 7% y-o-y to RUB 23.7 bn. For the first time in the last five years, net profit hit the RUB 21 bn threshold increasing 1.3 times compared to 2017.

Multimodal transportation and logistics centres

By now, the first phase of the project has been completed to establish the Kaliningrad transportation and logistics centre and its satellite facility at Chernyakhovsk station. This is where transit containers going on the Chongqing—Duisburg—Chongqing route are transshipped between the 1,520 mm and 1,435 mm gauge flatcars. The Kaliningrad transportation and logistics centre has therefore opened a new transportation corridor between the EU and China through Russia's Kaliningrad Region.

Terminal, warehousing and freight forwarding services

In 2018, Russian Railways loaded 412,500 railcars (up 7% y-o-y), including 277,400 railcars loaded with commercial cargo (up 6% y-o-y), as part of providing terminal and warehousing services.

The station of Tayshet was upgraded in 2018 to increase the volumes of cargo handled. The transshipment facility at Grodekovo, a satellite of the upcoming Primorsky dry port (Ussuriysk), was also upgraded to develop multimodal services in the Primorye-1 transport corridor (Harbin (China) – Grodekovo transshipment facility – Vladivostok ports – Asia Pacific ports).

Additional opportunities are also offered to customers delivering fish products from Russia's Far East to West Siberia and the European part of Russia. One of the key tasks is therefore to establish freight terminals for reefer trains. In 2018, the Company upgraded a container yard at the station Artyom-Primorsky 1. Over 2,000 reefer containers with fish were shipped to Moscow, St Petersburg, Novosibirsk, Yekaterinburg and Krasnoyarsk.

Improving the quality of transportation services

FT ETP progress in 2018

2018 saw the expansion of FT ETP services. It integrates transportation, rolling stock supply, terminal, warehousing and logistics services of Russian Railways and its subsidiaries. The platform enables non-discriminatory access for shippers to handling facilities and transportation services, including transit shipments, and provides end-to-end logistics services such as multimodal transportation, warehousing services and cloud services.

FT ETP 2018 performance highlights:

- > 3,522 registered users (up 1.9 times y-o-y);
- 18 rolliné stock operators added¹ (up 2 times y-o-y);
- > 25,476 orders registered;
- > 137,631 railcars dispatched;
- > RUB 12,150 m of orders paid.

Improving the quality of transportation services

Russian Railways' key priority in the freight

Grain Express enables grain-loaded trains to proceed to their final destination with no yard operations in transit. 817 kt of grain were transported in 2018 (up 1.5 times y-o-y).

The fixed schedule freight transportation service ensures timely and seamless delivery and helps major companies optimise transportation expenses by reducing rolling stock and container turnover time. 32,870 trains were dispatched using this service and delivered

