

1.3.2. Cargo turnover at Russian seaports

The volume of export, import, transit and cabotage of Cargo handling at Russian seaports grew by 4% to 816.7 million tonnes in 2018, including:

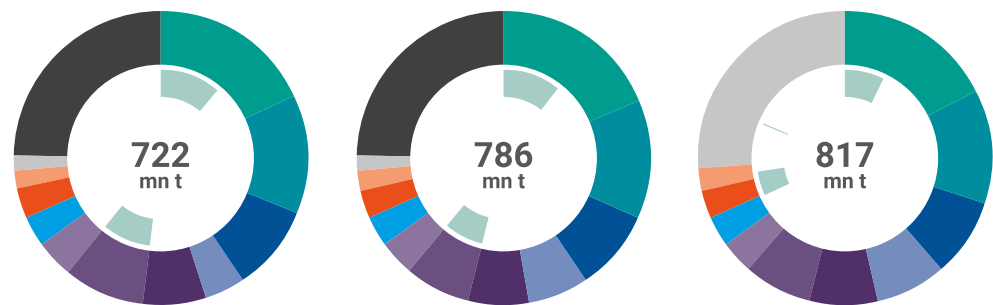
- > liquid cargo by 4% to 429.1 mn t;
- > dry cargo by 4% to 387.6 mn t.

Liquid cargo turnover grew virtually across the board, including:

- > crude oil by 1% to 255.3 mn t;
- > oil products by 2% to 145.1 mn t;
- > LNG by 60% to 23.2 mn t.

The strongest growth in dry cargo handling was 17%, by 7.9 mn t for grain and 11%, by 5.3 mn t for containers.

CARGO TURNOVER AT RUSSIAN SEAPORTS, MN T



	2016	2017	2018
Novorossiysk	131.4	147.5	154.9
Including NCSP Group	81.7	84.9	85.3
Ust-Luga	93.4	103.3	98.7
Vostochny	68.5	69.3	69.2
Murmansk	33.4	51.4	60.7
St. Petersburg	48.6	53.6	59.3
Primorsk	64.5	57.6	53.5
Including NCSP Group	64.5	57.6	53.5
Vanino	30.2	29.2	29.5
Tuapse	25.2	26.6	25.6
Nakhodka	23.3	24.3	24.3
Vladivostok	14.3	17.0	21.2
Kaliningrad	11.7	13.8	14.1
Including NCSP Group	0.7	1.0	1.3
Other	177.6	192.7	205.7

CARGO TURNOVER BY TYPE OF CARGO, MN T

Cargo	2016	2017	2018
Crude oil	228.0	252.3	255.3
Oil products	140.8	141.6	145.1
Coal	136.3	154.6	161.4
Ferrous metals	28.2	28.3	30.6
Fertilizer	16.2	17.7	17.8
Iron ore	8.7	7.6	6.9
Grain	35.6	47.9	55.8
Nonferrous metals	3.5	3.7	3.5
Containers	42.7	48.3	53.6
Other	82.1	84.4	86.6
Total	722.0	786.4	816.7

CARGO TURNOVER BY DESTINATION



Transshipments at Russian seaports grew in all directions in 2018 – export, import, transit and cabotage. There was only a decline in dry cargo handling by cabotage shipments.

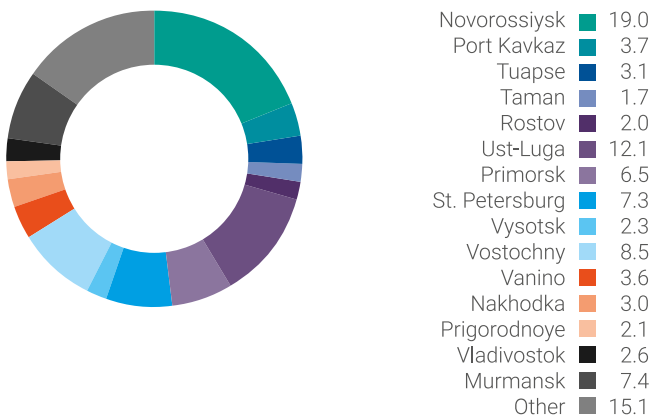
Transshipment of containers increased by 10% year-on-year to 5.075 million TEU, with the amount of loaded containers growing by 10% to 3.883 million TEU, including refrigerated containers up by 7% to 481,800 TEU. Handling of empty containers increased by 8% to 1.192 million TEU. Transshipment of PJSC NCSP equaled to 620,2 TEU.

Transshipment of containers made up 41.4% of export cargo, 41.9% of import cargo, 14.7% of cabotage and only 1.9% of transit cargo.

Russia's key ports by volume of container handling in 2018 were St. Petersburg with a market share of 42% and cargo turnover of 2.131 million TEU; Vladivostok with, respectively, 19% and 944,000 TEU; Novorossiysk with 15% and 755,000 TEU; Vostochny with 8% and 419,200 TEU; and Kaliningrad with 5% and 276,000 TEU, including LLC «BSK» - 198,900 TEU.

Most cargo at Russian seaports is handled in the Baltic, Azov-Black Sea and Far East basins.

MARKET SHARE OF LARGEST RUSSIAN SEAPORTS BY CARGO TURNOVER



TRANSSHIPMENT OF CARGO AT RUSSIAN SEAPORTS BY BASIN



Azov-Black Sea basin

Cargo turnover at seaports in the Azov-Black Sea basin grew by 1% to 272.3 million tonnes in 2018, as dry cargo handling increased by 0.5% to 119.2 million tonnes and liquid cargo rose by 1% to 153.1 million tonnes.

Namely:

The growth of dry cargo transshipments was driven primarily by increases in the following types of cargo, namely:

- > the growth by 15% to 52.3 million tonnes for grain;
- > the growth by 13% to 17.1 million tonnes for ferrous metals;
- > the minor growth by 4% to 2.6 million tonnes for mineral fertilizer and 6% to 8.6 million tonnes for container cargo.

The turnover of the following types of cargo has declined, namely the growth by 7% to 2.8 million tonnes for ore, 2% to 11.5 million tonnes for coal.

Transshipments of cargo on ferries have plummeted by 40% to 8.1 million tonnes.

The decrease in nonferrous metals transshipments was at a rate of 2% and the turnover totaled 1,2 million tonnes. Forest products turnover dropped by 27% and equaled to 0.4 million tonnes.

The growth in liquid cargo handling was driven by the increase in crude oil turnover by 3.3% to 89.1 million tonnes.

Chemical cargo turnover skyrocketed by 32.8% to 1.3 million tonnes.

LNG turnover grew by 20.8% to 1.0 million tonnes.

Handling of oil products declined 1.9% to 59.2 million tonnes and handling of liquid food cargo fell by 9.3% to 2.5 million tonnes.

Exports accounted for 63.7% of cargo handling in the region, transit made up 21.0%, cabotage cargo amounted to 12.4% and imports equaled to 2.9%.

Baltic basin

Cargo turnover at seaports in the Baltic basin declined by 0.5% to 246.3 million tonnes in 2018, as dry cargo turnover rose by 5% to 109.8 million tonnes while liquid cargo turnover decreased by 4% to 136.5 million tonnes.

Dry cargo turnover increased as transshipments grew by

- > 12.2% to 27.8 million tonnes of cargo in containers;
- > 2.7% to 7.2 million tonnes of ferrous metals;
- > 21.2% to 2.1 million tonnes of scrap metal;
- > 37.2% to 1.7 million tonnes of grain and 47.5% to 1.6 million tonnes of packaged unitized cargo.

Turnover declined by 3% to 11.4 million tonnes of mineral fertilizer; 10% to 1.3 million tonnes of nonferrous metals; and 19% to 1.4 million tonnes of refrigerated cargo. Coal handling remained flat at 39.4 million tonnes.

Handling of liquid cargo declined primarily because crude oil volume fell by 13.6% to 66.9 million tonnes. Handling of oil products increased by 6.8% to 66.4 million tonnes and handling of LNG grew by 12.5% to 2.4 million tonnes.

Exports accounted for 88.7% of cargo handling in the region, imports made up 8.5%, and cabotage and transit cargo accounted for only 1.8% and 1.0%, respectively.

Caspian basin

Cargo turnover at seaports in the Caspian basin grew by 22.3% to 4.8 million tonnes in 2018, as liquid cargo surged 90% to 2.1 million tonnes, while dry cargo decreased by 5.8% to 2.7 million tonnes.

Handling of liquid cargo grew on the back of transit shipments of crude oil from Kazakhstan, which doubled to 2.0 million tonnes.

Dry cargo handling decreased as ferrous metals fell by 70% to 0.2 million tonnes; forest products dropped 5% to 0.4 million tonnes; and handling of packaged unitized cargo slumped 6.1% to 0.2 million tonnes. However, handling of grain rose by 31.1% to 1.6 million tonnes.

The share of transit in the Caspian basin is the highest compared to other basins, at 41.5%, while exports make up 48.1% of cargo turnover, and imports and cabotage account for 4.3% and 6.1%, respectively.

Far East basin

Cargo turnover at seaports in Russia's Far East rose by 4.5% to 200.6 million tonnes in 2018. Dry cargo handling increased by 6.8% to 125.5 million tonnes, while transshipments of liquid cargo rose by 1% to 75.0 million tonnes.

Dry cargo handling grew as transshipments increased by 5.7% to 91.1 million tonnes of coal; 12.4% to 15.0 million tonnes of container cargo; 3.6% to 3.3 million tonnes of forest products; 13.2% to 6.0 million tonnes of ferrous metals; and 15.9% to 1.4 million tonnes of ore. Transshipment of cargo on ferries decreased by 2.7% to 1.9 million tonnes.

Handling of liquid cargo grew as volume increased by 3.7% to 15.1 million tonnes of oil products and 0.6% to 48.5 million tonnes of crude oil. Handling of liquefied natural gas (LNG) fell by 1.0% to 11.4 million tonnes.

Exports accounted for 86.2% of cargo handling in the Far East basin, imports made up 3.6%, and cabotage and transit cargo accounted for 9.7% and 0.5%, respectively.

Arctic basin

Cargo turnover at seaports in the Arctic basin grew by 26% to 92.7 million tonnes in 2018, as dry cargo handling increased by 4% to 30.4 million tonnes and liquid cargo handling surged 41% to 62.3 million tonnes.

Dry cargo handling growth was driven by increases of 12% to 19.3 million tonnes of coal; 7% to 3.6 million tonnes of mineral fertilizer; 12% to 2.2 million tonnes of container cargo; and 18% to 0.6 million tonnes of forest products. Handling of ore fell by 30% to 1.9 million tonnes.

Liquid cargo turnover grew as crude oil handling increased by 24% to 48.8 million tonnes and shipments of LNG through the Sabetta port continued to grow. Handling of oil products fell by 3% to 4.4 million tonnes.

Exports accounted for 60.0% of cargo handling in the Arctic, imports made up 0.5%, and cabotage accounted for 39.5%.