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### Administrative and economic dimensions of regionalization: case of Leningrad Province and North-Western Federal District of Russia

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## Economic Aspects of Regionalization in North-West Federal District of Russia: case of transport.

Transport is a key element of infrastructure, as well as electric mains, roads and pipelines, air and water routs. All these form the regional transport system, which is a part and parcel of the national transport system. Existence of the transport network is one of the in the main preconditions for a national economy to be one and indivisible.

In Russia the role of transport is exclusively important. Great distances, remoteness of peripheral regions from the centre increase the significance of transport system. After disintegration of the USSR a large number of seaports located on the Baltic and the Black Seas became the property of Baltic States, Ukraine and Georgia. That created a necessity for Russian Federation to reinforce its own seaports and develop its sea transport system to neutralise the negative impact of Soviet Union's disintegration.

In the Northwest part of Russia during the whole period of Russian history there has been created an advanced and complex transport system including all components: railways, sea and internal water (river and lake) transport, automobile roads, airports and pipelines. Here, within the regional borders, the first transport links of the national importance were created: the first Russian railway (Saint Petersburg - Tsarskoe Selo), the first channel system (Vyshnij Volochek water system). The first Russian steam locomotive was built here, at Alexandrovski Iron-Works). Steam locomotives built in Saint-Petersburg in the beginning of the XXth century were considered as the best in the world.

Now in the Northwest of Russia huge transport companies are operating: Octjabrskaja, Northern and Kaliningrad Railways, shipping companies BMP<sup>1</sup>, North-West, Belomoro-Onezhskoje and other, air transport company Pulkovo, etc.

During the last decade cargo turnover contracted substantially (See Table 1).

<sup>&</sup>lt;sup>1</sup> BMP – Baltijskoje Morskoje Parokhodstvo (*Russian*) – Baltic Sea Shipping Company

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(minon tons)							
Modes of Transport		Years					
	1990	1995	1996	1997	1998	1999	2000
Railways	298,0	142,5	143,7	142,3	133,7	145,6	143,0
Automobile	1595,3	691,8	609,1	473,4	393,0	318,4	358,5
Internal Marine	96,7	18,9	12,3	12,8	11,0	13,0	15,3
Marine	26,5	26,3	25,7	31,5	29,3	47,6	53,5
Air	0,3	0,1	0,1	0,0	0,02		
Total in North-West	2016,8	879,6	790,9	660,0	567,02	524,6	570,3
Federal District							

#### Cargo Turnover Dynamics in North-West Federal District (million tons)

Source: The Basic Directions of social and economic development strategies of North-West Federal District for the period until 2015 / Saint-Petersburg, 2002 / P. 206.

Regarding the modes of transport a picture is as following: railway transport cargo turnover since 1990 till 2000 decreased two-fold; automobile cargo turnover contraction was 4 times; internal marine: six times; air: 15 times. And only marine transport cargo volumes doubled during the period under review. The total decrease (average for all types of transport) is more than three-fold.

Reforms influenced the transport sector of the regional economy substantially. For example, former state air transport company Aeroflot has been divided into 500 smaller companies. Many transport organizations were privatized, became joint-stock companies. However, some of them have kept the status of state unitary enterprises, for example, Pulkovo company, which owns airport facilities in Saint-Petersburg.

Cargo turnover and passenger transportation dynamics shows that in a number of regions of North-West Russia after 1998 some slight increase (See Table 2) was observed. So, in Karelia, for example, railway cargo transportation contracted since 1990 until 1998 from 25.5 to 11.8 million tones, but in 2000 grew up to 13,4 million tones. In Komi Republic corresponding figures are the following: 55.7; 23.0 and 24.9 million tones, in Arkhangelsk Province: 22.8; 6.8 and 9.4 million tones; in Saint Petersburg – 14.3; 4.0 and 7.4 million tones.

#### Table 2

Regions of Russian	1990	1995	1996	1998	1999	2000
Federation						
Republic Karelia	22.5	11.8	11.3	11.8	13.4	13.4
Komi Republic	55.7	29.1	28.9	23.0	23.1	24.9
Arkhangelsk Province	22.8	8.3	6.8	6.8	8.5	9.4
Vologda Province	30.7	13.5	13.0	13.3	15.5	16.5
Kaliningrad Province	9.1	8.2	8.2	7.1	7.2	
Leningrad Province	76.6	34.7	34.0	33.2	38.8	39.5
Murmansk Province	47.2	23.7	22.3	23.0	24.9	24.7
Novgorod Province	10.0	5.1	4.7	4.3	4.7	4.9
Pskov Province	3.6	3.0	3.9	3.7	4.4	1.7
Saint-Petersburg	14.3	4.6	4.4	4.0	5.4	6.4

#### Cargo Departure by Railway Transport within the Borders of North-West Russia (million tones)

Source: Social and Economic Indicators of Republics and Provinces of Northern and North-West Economic Districts, Kaliningrad and Kirov Provinces in 1990-2000 / 2001 / P. 121.

North-West Federal District (NWFD) owns 14.5-16.5% of total railway cargo turnover in Russia. The basic commodities - coal, ore, steel, wood (including saw-timber), building materials, oil products, mineral fertilizers. Octjabrskaja Railway System (especially its directions Saint Petersburg - Moscow, Saint Petersburg - Murmansk, and also from Saint-Petersburg to Helsinki and Tallinn) is of great strategic value both for NWFD, and for Russia in general. Octjabrskaja Railway System (ORS) is the oldest in Russia (since 1855 until 1923 it was called Nikolaevskaja Railway System). In the framework of NWFD total length of railways is about 13 thousand kilometers. Here there are a lot of problems: aging of locomotive and wagon parks, outdated railway facilities, etc. In Russia only 2 locomotive building factories are really functioning: one in Kolomna (diesel engine locomotives) and one in Novocherkassk (electric engine locomotives). As to wagon-building factories, there are several producers: Abakan, Nijni Tagil, Tver, and Saint-Petersburg wagonbuilding plants. The latter is located on the territory of NWFD.

Transport complex of North-West Russia is a component of the transit system providing a transport corridor from Asian and Pacific regions to Europe and vice versa. However, the cargo market operators assume that the share of Russian transit corridor in the total cargo turnover in the "East-West" direction is about  $4\%^2$ .

Other component is the international transport corridor "North - South". Here the potential of the transport complex of NWFD can and should be involved.

<sup>&</sup>lt;sup>2</sup> Ekonomika i Vremja / 2002 No 5 / P.6

ORS develops co-operation both with Russian sea terminals, and with seaports of Finland and Baltic States.

Russian Ministry of Railways declares priority development of railway lines which end at Russian seaports. For example, a railways division from Vejmarna to Ust-Luga is stipulated for electrification. Since 2010 about 30 pairs of trains a day will pass through this division, transferring about 30 million tones of cargo a year. While today the capacity of this division is 30 times less.

«Wood Express Trains» go to Finland using the new railway line Ledmozero - Kochkoma which reduces now the distance nearly by 500 kilometers. The same route is convenient and fast for transporting iron ore concentrate from Kostamuksa, as well as other export-import cargoes. Regular transportation of bulk-oil cargoes from station Kirishi to Estonia by the closed route in tanks are organized.

Traditional cargo traffics to seaports in Baltic States and Finland are, however, still more profitable for Russian transport companies. Start of exploitation of new terminals in the Russian seaports changed the priorities, but the process is just at its beginning.

The special place in the transport complex of NWFD belongs to an industrial railway transportation (Table 3). Let us take Russian total figures for comparison: Ministry of Railways owes 23 thousand locomotives, including 13 thousand locomotives of industrial transport. Length of federal railways is 87.1 thousand kilometers, length of industrial railways is 61.5 thousand kilometers.

Table 3

<b>Regions of Russian Federation</b>	Length of railways (km)	Amount of enterprises
Saint-Petersburg		259 <sup>3</sup>
Arkhangelsk Province	1616.2	368
Vologda Province	1376.0	234
Leningrad Province	1058.0	247
Murmansk Province	982.7	99
Komi Republic	722.8	250
Novgorod Province	420.0	194
Republic Karelia	356.6	106
Pskov Province	242	80
Kaliningrad Province	221	93

#### **NWFD Industrial Transport Indicators**

Source: Ekonomika i Vremja / 2002 No 6 / P.6

According to Goskomstat<sup>4</sup> of Russia figures, 90% of cargo traffic passing through the network of federal railways belongs to industrial

<sup>&</sup>lt;sup>3</sup> Not taking into account enterprises of Promzheldortrans holding (58 access railroads) and Ministry of Railways (146 similar ways).

<sup>&</sup>lt;sup>4</sup> Goskomstat (Russian abbr.): National Statistics Committee

railway transportation. That puts an accent on renovation of wagons in NWFD; but the situation is quite problematic: in Novgorod Province, for example, deterioration of diesel locomotives is equal to 75 %, of carriages equal to 45 %; in Leningrad Province the corresponding figures are 70 % and 42%.

Traffic safety is not satisfactory because of transport facilities deterioration. In 2001, for instance, 78 person have suffered in accidents that occurred in the region, not taking into consideration losses of transport companies and cargo destruction.

Let's emphasise once again the main point. Despite double reduction of cargo turnover of railway transporters within 1990 and 2000 (from 298 to 143 million tones), rates of transport facilities deterioration are exceptionally high. The regional railroad transport facilities need renovation, intensive investing and developing.

At the same time, not only reconstruction and modernization of NWFD railways are on the agenda; development of regional economy requires new railroads.

One of the most promising regional transport project is construction of a new railway Arkhangelsk - Syktyvkar - Kudymkar – Perm, known as "Belkomur". That will create a direct corridor of freight traffics from Urals to Arkhangelsk, Karelia and ports of Finland. Existence of such a railroad will decrease transport costs by 30-50%. Development of bauxite extraction in Timan - Pechora region also requires constructing a new railway from Chinjavoryk to Timan; that process has already been started.

Another large project is aimed at developing railway communication between Urals through Komi Republic with Barents Sea coast. Today this new project is at a stage of preliminary consultations and arrangements, surveys and collecting the corresponding technical documentation; draft project name is Barentskomur.

Ministry of Railways is today reforming national and regional transport complexes. Methods and speed of restructuring arise today serious concerns among the participants of logistic processes. Whether it is necessary to force reforming on transport? Comparable reforms took 4-5 years in Great Britain and Germany, and longer restructuring period helps obtaining better results. Regions of NWFD are worried about the integrity of their transport systems, as well as about stability of the interregional relations, revitalized during the last years with considerable difficulties.

The railway complex transports not only cargo, but also passengers. Since 1990 until 2000 railway passenger transportation contracted on ORS from 429 to 158.4 million person, on Northern Railways: from 25.8 to 18.8 million person; on Kaliningrad Railways: from 28.3 to 8.7 million person. As it follows from the given data, two railway systems, namely ORS and Kaliningrad Railways, had almost triple reduction of passenger transportation. Northern Railways are an exception in this case, and that outlines some internal differences in NWFD passenger traffic. The main reason for such a reduction is that tariffs grow faster than consumer incomes. Suburban passenger traffic contracted as well during the reform period. That is a result of a gap between consumer incomes that form the demand side, and high transport tariffs on the supply side.

The Baltic, Barents, White and Kara Seas make the natural borders of NWFD. A significant part of the Northern Sea Way from Murmansk to Vladivostok in the Far East passes here. In NWFD large seaports are located: Saint-Petersburg, Arkhangelsk, Murmansk, Kaliningrad. Therefore the role of sea transport is huge. The total cargo turnover by sea transport decreased since 1990 till 1996 (from 26.5 to 25.7 million tones). It is three times less than volumes of railway transportation and seven times less than automobile transport cargo turnover. However it is necessary to bear in mind, that sea transport plays a very important role for the countries of the Baltic region. Cargo turnover dynamics of the basic region's seaports (Table 4) proves this assertion.

Table 4

Seaports	2000	2001	Change 2001 to 2000, %
Saint-Petersburg	17.48	19.37	+10.0
Murmansk	8.36	9.86	+8.7
Vysotsk	2.95	3.19	+8.1
Kaliningrad	2.24	2.7	+20.4
Arkhangelsk	0.96	0.87	-9.4
Vyborg	0.94	0.91	-2.8
Narjan-Mar	0.16	0.15	-5.7
Kandalaksa	0.6	0.8	+26.3

#### Cargo Turnover Dynamics of Basic NWFD Seaports in 2000 - 2001 (million tones)

Source: Terminal / 2002 / No 1 / P 3.

After disintegration of the USSR Russian Federation has lost a possibility to exploit 91% of the Baltic Sea coast that belonged to Soviet Union before. Only 138 kilometers coastline in Kaliningrad Province and 480 kilometers coastline in Leningrad Province give Russia an access to the Baltic Sea. After 1991 Russia turned to be a minor transport operator in the Baltic region. All that has predetermined a target of reconstructing old and building new ports in the Baltic.

In 2001 stevedore companies of a so-called Saint Petersburg Big Sea Port transported 36.9 million tones of export and import cargo, that means a 15% surplus to the corresponding figure in 2000. It is a significant achievement, taking into account that in the beginning of 90-ies transport capacity of the Port was at a level of 15 million tones a year, and in the middle of the same decade the Port's annual cargo turnover reduced to 8 million tones.

Sea transport includes port terminals and vessels. The second component has also undergone considerable cataclysms during the reform period. For example, after break up of the Soviet Union the Baltic Tanker Fleet became the property of Latvia. Baltic Shipping Company (BSC), one of two shipping companies that became Russian property, has lost more than three quarters of its vessels during the 90-ies. That corresponds with the general tendency observed at a national level (See Table 5).

Table 5

Years	Total Amount of Vessels (units)	Amount of Vessels in Large Shipping Companies	The tonnage (thousand tones)
1995	5509	547	7590
1996	5205	464	6350
1997	4915	362	4843
1998	4547	293	3862
1999	3985	247	3277
2000	3908	233	3132

#### **Russian Merchant Navy Indicators**

Source: Ekonomika i Vremja / 2002 / No 5 / P.6

Today new ports in the Baltic, one in Primorsk and one in Ust-Luga, enable Russia to transport its main export commodities through seaports on Russian territory (Ust-Luga seaport is still under construction to-date). In Primorsk the process has just started, and the projected transportation capacity is about 45 million tones of crude oil annually. Due to construction of this port Russia exporters can save 1.5 billion US dollars annually. Nowadays the main exporters stopped using Latvian seaport Ventspils and shifted to NWFD ports; that resulted in a negative impact on Latvian economy.

The Ust-Luga seaport is often considered to be a substitute for Saint-Petersburg; that idea has a 150 year history. Today the first coal terminal is already put into operation. The main problem is to deepen the sea channel connecting the Ust-Luga Haven with the Gulf of Finland's deeper zones. Depth of this channel should be not less than 9.5 meters. Smaller depths make it impossible for vessels with 10 thousand tones displacement to enter the Ust-Luga Haven. Exploitation of such big vessels only makes coal exports to Europe profitable. Next step will be constructing a container terminal in Ust-Luga; then may come terminals for chemicals (for example, mineral fertilizers), wood, etc. The planned cargo turnover in Ust-Luga seaport is about 37 million tones.

A seaport in Vysotsk (near Vyborg) was founded in 18<sup>th</sup> century. Historically the port was specializing on coal and ore exports. Not long ago regional and federal authorities decided to create an export terminal for mineral fertilizers. Specialized company Baltkhimexport had carried out a cycle of preparatory surveys and spade-work; however the owners of the company gave up the plans and escaped out of this project. In 2002 100% of Baltkhimexport's stock were acquired by petroleum company LUKoil which is planning to build its own oil exporting complex in Vysotsk. The complex will export nearly 10 million tones of oil products annually. Company LUKoil plans to invest 150 million US dollars in this project.

In the Batarejnaja Bay (southern coast of the Gulf of Finland) creation of shipment terminal for the fuel oil was planned. However, the potential investor which was oil processing company Kinef introduced deep oil refining at its own production facilities. The fuel oil exporting terminal was not needed any more. In the future it is planned to build a terminal for exporting light oil products in the Bay.

The largest petroleum companies of Russia invest in construction of their own terminals and even big seaports in Leningrad Province. Geographical positions of the Province and also advanced infrastructure each year attract companies that invest their financial resources in regional transport complex.

River transport is an important component of NWFD transport complex. Volga – Baltic system connects rivers of the region (the Neva, the Svir, the Norhtern Dvina, the Pechora) with those of Central Russia. River transport was always used to maintain transport connection with remote territories of the region (especially in its Northern part).

Along this waterway "river-sea" type vessels are successfully transporting cargo; these vessels are exploited all the year round. While the rivers and the lakes of the region are frozen, the vessels are re-directed towards sea lines. The use of such type of vessels in NWFD is its regional peculiarity; nowhere else in Russia they are so widespread. Perhaps, further development of regional economy and foreign trade may give new impact to using that type of transport; this specific transport can reveal its competitive advantages if the demand on its services will grow sufficiently.

The motor transport in NWFD is the leader in total volume of cargo transferred. In 2000 that volume was equal to 358,5 million tones. It exceeds twice the corresponding volumes for railway transport, for example. It should be mentioned, that the volume of automobile cargo transportation is a little bit underestimated, as the official statistics does not take into account the transportations, which are carried out by personal cars (which belong to private persons, not to any organization; their activities are not reflected in any official statistics). The share of this hidden sector is, we suppose, rather big, especially in the sphere of trade. Total length of general roads network in NWFD is 108.5 thousand kilometers, and the density of transport communications (kilometer of road per thousand square kilometers of territory) nine times exceeds the density of a railway network and eight times that of internal waterways (See Table 6). Nenetsky Autonomous District, where the density of waterways is twice higher than that of automobile roads, makes an exception. But it is a special case, taking into account the natural conditions of Nenetsky Autonomous District.

Several so-called "federal" roads pass through the territory of

NWFD. Among them could be mentioned: road "Russia" (Moscow – Saint-Petersburg), "Kola" (Saint-Petersburg - Murmansk), "Scandinavia" (Saint-Petersburg – Finnish border), "Narva" (Saint Petersburg – Estonian border), "Vyatka" (Cheboksary - Syktyvkar); "Holmogory" (Moscow -Arkhangelsk), "Baltia" (Moscow – Latvian border), etc. Some federal roads of NWFD, according to the Declaration of the Second All-European Conference on Transport (1994), are included into 9-th Pan-European Transport Corridor Helsinki – Saint-Petersburg - Moscow - Kiev -Kishinev with branches to Kiev - Minsk - Vilnius - Kaliningrad and to Pskov - Vitebsk - Kiev.

Russian experts in regional economy (Institute of Territorial Development and Transport Infrastructure) forecast in the long-term intensifying of road traffic in such directions as "Russia" (18-20 thousand automobiles per day), Saint-Petersburg - Pskov (10-15 thousand automobiles per day), "Scandinavia" (12-14 thousand automobiles per day).

Table 6

Regions of Russian Federation	Density of Railway Network	Density of Automobile Network	Density of Internal Waterways
Arkhangelsk Province	3.0	25.4	5.2
Including: Nenetsky Autonomous District	-	1.0	2.2
Vologda Province	5.3	135.3	10.8
Kaliningrad Province	42.4	447.7	21.3
Leningrad Province	28.6	176.4	22.6
Murmansk Province	6.2	30.3	-
Novgorod Province	20.8	179.3	11.0
Pskov Province	19.8	219.2	9.1
Republic Karelia	12.1	77.7	21.1
Komi Republic	4.1	30.1	6.8
Total for NWFD	7.5	64.7	8.7

#### Density of transport communications in NWFD (kilometers per thousand square kilometers of territory)

Source: Dorogi Severo-Zapada: Perspektivy razvitija / Saint-Petersburg / 2001 / P. 17

Since 1999 the demand for automobile transportations started to grow. In NWFD Saint Petersburg gave the main surplus; here the annual automobile cargo turnover in 2000 was nearly 170 million tones. In 2000 in Karelia the same figure grew by 9,1 % and in Vologda Province increased by 3 %.

There is an opinion that private automobile roads will contribute

much to modernization of the transport complex of the region. World practice gives us examples of effective use of this form of transport system management. However, in NWFD business community is not participating in such investment projects yet. Today state is the only investor in main roads building. But idea of private roads, private pipelines, etc. gains more and more popularity and support.

Table 7

	In NWFD (thousand items)								
Regions of Russian Federation	8		Including the Municipal						
			Routes						
Leningrad Province		40.0	4.0						
Arkhangelsk Province	2.0	33.0							
Vologda Province	6.4	18.0							
Pskov Province		15.7	1.6						
Komi Republic	4.5	15.6							
Republic Karelia	4.5	14.6							
Kaliningrad Province	3.1	11.0	6.4						
Murmansk Province	2.9	8.0							
Novgorod Province	3.8		1.5						

#### Amount of Officially Registered Auto Carriers and Lorries In NWFD (thousand items)

Source: Ekonomika i Vremja / 2002 / No 11 / P.11

During the last decade volume of international automobile transportation has considerably increased. According to calculations of International Automobile Transportation Association, the growth during this decade was 12 times! In 2000 the Russian automobile carriers have transported about 7 million tones of foreign trade cargo. That has brought nearly 1 billion US dollars to the state budget. By 2010, according to the estimates of experts from Ministry of Transport of Russian Federation, budget revenues from cargo transit will exceed 15 million US dollars. NWFD share in expected revenues will be the biggest among federal districts.

Cargo transportation dynamics in NWFD regions shows that growth in the sector was not synchronic. In Karelia, for example, after the recession of 1990-1997 came significant increase since 1999, in Komi Republic the same growth started in 2000, in Arkhangelsk Province in 1999, in Saint-Petersburg in 1999 (See Table 8).

		IIIIIIOII	tones)			
Regions of Russian	1990	1994	1995	1998	1999	2000
Federation			•			
Republic Karelia	178.4	73.3	76.1	74.9	89.8	98.6
Komi Republic	151.8	88.5	77.5	48.5	45.9	51.8
Arkhangelsk Province	125.2	48.8	54.8	27.2	29.6	31.5
Vologda Province	130.3	77.1	65.3	41.1	50.3	55.3
Kaliningrad Province	32.1	30.6	13.2	7.9	5.4	6.5
Leningrad Province	145.7	64.0	59.3	32.9	42.6	41.4
Murmansk Province		57.6	18.5	13.2	13.1	12.3
Novgorod Province	86.8	29.0	29.1	20.0	23.8	24.0
Pskov Province	74.3	30.9	16.1	7.9	8.7	12.7
Saint-Petersburg	201.1	42.9	42.2	15.7	18.9	29.7

## Cargo Transportations by Automobile Transport in NWFD (million tones)

Source: Social and Economic Indicators of Republics and Provinces of Northern and Northwestern regions, Kaliningrad and Kirov Provinces in 1999-2000 / 2001 / P. 122.

Amount of passengers carried by air transport in NWFD in 90-ies reduced sharply: from 23.3 to 1.7 million person. Such a deep fall it the most impressive among other types of transport. In different regions of NWFD the picture varies (See Table 9).

While analyzing this data it is necessary to mention that some regions of NWFD such as Komi Republic, Arkhangelsk and Murmansk Provinces are remote territories, where air transport is the only means of transportation for many settlements. That is the main reason why these territories had rather high level of air transport development in 1990.

Table 9

Regions of Russian Federation	1990	1994	1995	1998	1999	2000
Republic Karelia	190	26	20	6	13	14
Komi Republic	2644	696	589	223	170	158
Arkhangelsk Province	2171	463	352	164	169	209
Vologda Province	471	107	68	11	10	12
Kaliningrad Province	176	190	172	104	132	104
Leningrad Province	1046	388	311	172	163	122
Murmansk Province	74	8	7	1.5	4.4	2.9
Novgorod Province	120	18	11	0.03	0.02	0.02
Pskov Province	6826	1570	1740	1373	1486	1624
Saint-Petersburg						

#### Transportation of passengers by air transport In NWFD (thousand person)

Source: Social and Economic Indicators of Republics and Provinces of

Northern and Northwestern regions, Kaliningrad and Kirov Provinces in 1999-2000 / 2001 / P. 121.

Today cost of transporting 1 tone of cargo by aircraft is 25 thousand rubles; that reduces sphere of use of this transport. In general air transport is too expensive for regional economy. Therefore the volumes of cargo transported by air are insignificant (See Table 10).

Table 10

In IN W FD (thousand tones)							
<b>Regions of Russian Federation</b>	1990	1995	1996	1997	1998		
Komi Republic	180	10	10	3	2		
Arkhangelsk Province	100	55	40	2.3	3.0		
Nenetsky Autonomous District	-	-	-	0.4	0.2		
Vologda Province	1.1	0.6	0.1	0.2	14.0		
Murmansk Province	13.6	2.3	0.6	0.7	0.7		
Saint-Petersburg and Leningrad	7.3	8.2	8.2	14.1	5.6		
Province							
Novgorod Province	1.0	-	-	-	-		
Pskov Province	4.1	1.9	-	-	-		
Kaliningrad Province	-	1.6	1.6	1.9	1.7		
Total in NWFD	307.1	79.6	60.5	22.5	24.5		

#### Volume of Cargo Transported by Air in NWFD (thousand tones)

Source: Social and Economic Development of NWFD: General Strategic Directions for the Period until 2015 / Saint-Petersburg / 2002 / P. 221-222.

Passenger and cargo traffic tariffs grow faster than personal incomes and companies' revenues. That is the main reason for such a falling. Taking into account world aviation standards, Russian aircraftly can hardly compete with foreign analogues. Therefore updating the aircraft park is a problem number one today. Reconstruction and modernization of the airports, developing and updating airline traffic organizing systems are quite necessary.

Thus, the transport complex of NWFD is advanced and mobile industrial system having a number of big problems. Being a part of unified national transport system it has its regional peculiarities. The way to effectively manage and reform transport complex of NWFD is to analyze these peculiarities and to find the appropriate – often exclusive – means to solve its problems.