
Situation and Development Conditions of Astrakhan Water Transport Junction

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Rapid upsurge of world economy in the twentieth century, integration processes, and many political reasons promoted an intense progress of transport and powerful increase of freight flow. At the same time, transport entirely revealed itself as an important factor of both economy and geopolitics. Globalization of world economy and practically free capital mobility in the form of direct investment in capital assets gave birth to considerable changes in international differentiation of labor and useful increase of shipping operations.

It is also important that integration and rapid development in the area of information technology had a great effect on transportation logistics development [3, page 30]. Recently the functioning of transport "corridors" has reached a precise accuracy.

Practical advantages force carriers either to change the direction of freight traffic activity or to develop business taking into consideration markets location. Such processes are taking place in many countries including Russia and CIS states. Gradual shortening of load distances has already begun and as predicted will continue in 2000-2015 [3, page 3 1].

Due to its advantageous geographical position at estuary of Volga River, Astrakhan city has long ago turned into "Russia's gate" on Caspian Sea. There are no shortages of vessels "river-sea" type which are able to transport cargo between foreign ports on Caspian Sea and Russian ports on inland waterways (including Moscow). But existing transportation pattern is composed of sea shipping between Caspian ports and Astrakhan, and motor trucking or transit by rail freightage between Astrakhan and inland destination station on Russia's territory. In the city and its suburbs there are several competing ports which render stevedoring, freight, storing and primary handling services.

According to "Astrakhan port sea administration (MAP)" there are 45 companies and enterprises currently operating in Astrakhan water transport junction. Twelve of them render port services.

Today all vessels calling at Astrakhan ports including foreign ships (Iranian) are built according to Russian inland navigation vessels specification: maximum beam - 16,5 m, maximum length - 145m mid drought corresponding to the controlling depth. Astrakhan water transport junction enterprises have considerable resources for integrated servicing of merchant fleet.

Market of cargo transportation services has entered a growth stage. In transport corridor "North-South" passing through Astrakhan water transport junction the most promising freight flows are the following:

1. Cargo transportation between Russia and Iran.
2. Transit traffic between Russia and states of South-East Asia and Indian Ocean including United Arab Emirates, Saudi Arabia, India, Pakistan, Bangladesh and Vietnam.

Transit traffic between Western European countries and states of Indian Ocean area might also be considered as a flow within the bounds of "North South" transport corridor but only in theory, as cargo transportation markets of these countries have been already divided among international shipping companies. That is why container traffic is considered to be one of the most promising ways of cargo transportation.

The volume of freight traffic in Astrakhan port (containers and general cargo) is given below in the tables 1 and 2. The figures clearly show a strong tendency towards the increase of freight traffic activity of both container (export of the first six months in 2001 amounted to 60% from the whole volume of freight traffic in 2000 and semi-annual imports exceeded the whole volume that of last year

Table 1

No	Name of enterprise	Export (total)		Imports (total)	
		2000	6 months of 2001	2000	6 months of 2001
1	GUP Commercial seaport Olya (carrier, stevedore)	-	241	-	749
2	JSC "Lakor" (carrier)	54	80	272	334
3	JSC "Volga-Vaster" (Forwarder. Carrier)	740	265	1280	682
4	JSC "Shtil" (carrier)	-	82	-	46
5	JSC "DAF" (carrier)	106	17	64	16
	Total:	900	685	1616	1827

Source: MAP information

Table 2

No	Name of enterprise	First 6 month of 2001					2000 half year
		Total	Including				
			Export	Imports	Cabotage	Loading	
1	GUP Commercial seaport Olya	98,7	70	22,1	5,9	-	94,4
2	GUP Astrakhan fishing sea port	150,03	150,73	0,3	-	-	124,4
3	JSC "Armada"	146,63	146,63	-	-	-	52,8
4	JSC "Astrakhan port"	387,46	374,35	13,11	-	-	332,4
5	JSC "Yug- Terminal"	11,82	11,68	0,14	-	-	15,7
6	JSC "Volgomost", subsidiary "Bridge construction subdivision No83"	161,14	161,14	-	-	-	176,6
7	JSC "Terminal- Container"	19,3	19,3	-	-	-	49,3
8	JSC "Alfa- Port"	52,94	49,66	3,28	-	-	38,1
9	JSC "Streletskoye- Terminal"	39,63	37,8	2,55	-	-	44,1
10	JSC "Beluga- Terminal"	69,25	68,81	0,44	-	-	82,8
	Total:	1137,9	1090,08	41,92	5,9	-	1012,6

by 13%) and general cargo. The volume of general cargo handling increased in the first six month of 2001 by 12.37% compared to the some period of the last (2000) year.

Comparative data of container cargo handling in Astrakhan port

Nomenclature of cargo for the first six months of the 2001: The great part of the whole freight flow falls to metal (69.93%),

paper takes the second place (8.37%). The volume of saw-timber waterage amounted to 6.74% from the whole volume of freight traffic handled by ports. The share of different cargo was 3.18%. The most vital issue for a cargo owner is the time it takes to deliver the freight. It takes a minimum of 42 days to transport cargo from Bombay to Moscow through North Western Europe via Kotka and 45 days via Saint Petersburg. The transportation from Bombay to Moscow via Astrakhan will take only 30 days.

The second issue, which is very important for the cargo owners, is transportation total price. Total transportation price along the existing route for example, from India to an ultimate consignee adds up to \$3600 not including the cost of truck haulage or transit by rail freightage up to the point of destination in Russia. Presumptive rate quotation for transportation from India to an ultimate consignee in Moscow along the prospective "North-South" corridor passing through Astrakhan water transport junction is valued at \$3000 (not including the cost of land-based haulage). Thereby the new transport corridor offers the possible customers to save their time and money.

Along with obvious competitive advantages Astrakhan water transport junction has an important drawback - lack of capability to reload 40 feet containers as the maximum lifting capacity of wharf cranes do not exceed 27 tons. It is a very important disadvantage, since according to expert evaluation no less than 30% of potential market freight is transported in 40 feet containers whose weight exceeds 27 tons.

It should be noted here that Astrakhan water transport junction has not yet used all advantages due to technical and organization factors.

Today the bulk of freight flow between Russia and Asian states is transported via Baltic ports (mainly via Saint Petersburg); though hauling via Astrakhan will help to save time and money.

Taking into account the benefits of Astrakhan water transport junction and existing limitations, the biggest port in Astrakhan region JSC "Astrakhan port" yields itself to a proposal to build a container terminal on its materials handling site in "Solyanka" district. This initiative was supported on federal level. The design stipulates the construction of a quay wall and a terminal, local railway upgrading, purchasing of corresponding equipment. In addition to this project, the government support will be rendered to the development of transshipping system at Commercial sea port Olya.

Commercial sea port Olya whose building owner was Astrakhan port sea administration is considered to be one of the major links in the chain of international trade relations between Europe and Asia within the bounds of transport corridor of "North-South". The advantageous geographic position of the port creates the necessary prerequisites for a

year-round shipping operation of both freight in transit and export-import cargo, providing the access to river and sea routes, trunk railways and highways.

By now 2 quay walls with aggregate capacity of 540 thousand tons and total length of 330 meters have been put into operation in Olya port. The quaysides are equipped with necessary machinery (2 dockside cranes with lifting capacity of 20 tons each, small-scale mechanization facilities). The port has a status of a check-point across national frontier and has at its disposal covered and ground storage facilities and necessary transshipping machinery. Recently sea ferry route "Sea Trucker Line" Anzaly (Iran) - Turkmenbashi (Turkmenistan) - Olya (Russia) began to function. Now 4 Ro-Ro types' ferries are operating on the line.

Following the general global tendencies which in the lack of specialized transfer points in Astrakhan water - transport junction influenced on an identification of construction project priorities. The most prospective trend for this kind of port installations is handling of containerized freight.

In accordance with a master plan the further development of the port will take place on the basis of the first freight yard. It will be complemented with new transshipping complexes with overall handling capacity of 3 million tons (taking into account the processing of mineral construction materials on non-equipped bank - 4 million tons).

The construction general costs will amount to \$64.4 million. Out of this sum \$38.41 million will be invested in the building of main construction project (59.6%), \$25.99 million - in infrastructure. If the construction takes 4 years and the transshipping complexes are put into operation step-by-step, the pay-back period of the investment project will be 7 years. In long-term outlook the expected volume of cargo transshipment via Astrakhan water transport junction could reach 15 million tons per year.

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