Ukrainian and Russian waterways and the development of European transport corridors

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Abstract

Four of the nine international transport corridors pass through the territory of Ukraine: №3, №5, №7, and №9. In recent years Ukraine conducted an active policy supporting the European initiatives on the international transport corridors and offered variants of corridors to the European community. In the field of a water transport it is planned to carry out the construction of new and reconstruction of existing infrastructure (regarding corridors № 9; TRACECA; Baltic - Black Sea) in the main Ukrainian ports.

The paper considers the situation in the Ukrainian waterways as a part of the international transport corridors. It presents an analysis of the existing situation and some planning measures. In order to optimize and rationally development the inland waterways and seaports of the Black Sea – Azov Sea region it is necessary to speed up the working out and official approval of the regional transport ways network. Regarding Ukrainian seaports this task is carried out within the framework of program TRACECA, and also by Steering Committee of Black Sea PETRA and working group on transport of the Organization of the Black Sea Economic Cooperation.

To connect the new members countries of EU two approaches are considered: (1) the use of the Danube River due to restoration of navigation in its Ukrainian part, providing an exit to the Black Sea; (2) the creation of new inland water-transport links providing a more rational and uniform distribution of freight traffics from the Central and Northern Europe (using the third largest river in Europe - Dnepr River running into the Black Sea).

It is important to assess also a condition of development of transport flows in the neighboring states (states of European transport corridors), in particular in the Russian Federation (Big Ring Project and others). There are good prospects of Ukrainian waterways involvement in the system of international transport corridors. Some improvements of the existing structures are needed together with an optimized use of Ukrainian transport potential. There is a large reserve of capacity which represent a base for an optimistic prediction of the future Ukrainian waterways development as part of European transport axis.

Keywords: European transport corridors; Inland waterways; Ukraine.

1. Introduction

The international importance of the Ukrainian waterways can easily be grasped thinking about such rivers as the Danube (with the ports of Reni, Izmail and Ust-
Dunaisk in the vicinity of its mouth) and the Dnepr (connecting the central part of the country including Kiev with the Black Sea). Other rivers have local importance and cannot affect on the international cargo turnover.

Four of nine international transport corridors pass through the territory of Ukraine: №3, №5, №7, and №9. In recent years Ukraine conducted an active policy supporting the European initiatives on the international transport corridors and offered variants of corridors to the European community.

However, in spite of the fact that some two years ago Ukraine won the first place in Europe on factor of transit, the degree of current use of Ukrainian transport infrastructure is still low. So the creation of transport axis and their existence in the international transport system is recognized as a priority nation-wide direction of development of Transport-Road-Complex (TRC) of Ukraine.

2. Ukrainian waterways in the international aspect

2.1 TRACECA

In May, 1993 in Brussels an international conference put forward the idea of creating an international transport corridor, TRACECA, connecting the Western Europe via the Black sea, the Caucasus and the Caspian Sea to Central Asia,. Is has been estimated that TRACECA should provide a flow of 100 thousand containers a year. TRACECA is the most prominent international transport corridor whose development is recognized by the EU as the major transport task of the region. The corridor Europe - Caucasus - Asia can (and should) become a link with other international transport corridors. In Ukraine (ports of Odessa and Ilyichevsk) TRACECA incorporates to a corridor №9, in Romania (port of Constantza) it is connected with corridors №4 and 7, and in Bulgaria (ports of Burgas and Varna) TRACECA joins a corridor № 8 (Figure 1).

2.2 Waterway the Danube – the Black Sea

The following waterway sections can be considered on the Ukrainian Danube (Figure 2):
- Maritime Danube [port of Reni (km 172) – the Black Sea];
- port of Reni – port of Izmail;
- Chilia Branch;
- Danube – the Black Sea Canal (Bystroe).

There are no locks or bridges in the Ukrainian part of the Danube.

The important problem of the creation of a new artificial waterway the Danube – the Black Sea was discussed in Ukraine during a number of years (earlier used channel Prorva became unsuitable for navigation). Several variants of the decision of this important and actual problem were offered. One of the most arguable points was the layout of the canal’s track in view of the conflict of interests to biosphere natural reserve in the Ukrainian delta of the Danube. Nevertheless economic realities of our time and modern understanding of ecological aspects of the situation suggested acceptance of the final decision. Its practical implementation started in mid May, 2004.
The first stage of the channel BYSTROE provides 3,5 km length, 85 m width and more than 8 m depth.

Figure 1: The TRACECA corridor.

Figure 2: The Ukrainian Danube.
It is possible to consider the restoration of navigation on the Ukrainian part of Danube delta as the transport event of the year 2004. The so called, deep-water ship course «Danube — Black Sea» began operation in August 2004. In spite of the fact that only the first turn of the construction now comes to an end, more than 300 vessels have already passed a restored ship course. An interesting detail is that 40 % of the vessels went to the Romanian ports. It, perhaps, testifies that the Ukrainian route is attractive not only for domestic shipping companies. For comparison one can mention that through the Sulina channel during the same period was used by about 200 vessels which means turning to the Ukrainian ship course over 35 % transit cargo traffic of the Lower Danube. The prospects are of almost 1 million tonnes of transit cargoes per year, including transportation to the Upper Danube and the Azov Sea - Black Sea region.

The year of 2005 made clear some negative aspects related to the operation of the channel BYSTROE. Firstly, unexpected high level of sedimentation of channel’s bottom occurred; it was caused by extremely heavy rains in Reni-city vicinity. Secondly, lack of funds does not permit full-scale development of the next stages of the channel construction as well as quick restoration of the initial water depth of the first stage of channel creation.

2.3 The Dnepr River and other inland waterways

Another approach foresees the creation of new inland water-transport links providing a more rational and uniform distribution of freight traffics from the Central and Northern Europe. The main task of this approach is to use the Dnepr River (Figure 2).

Dnepr, the third longest river of Europe, has great potential in the sphere of inland transportations. A unique advantage of Ukraine is represented by the fact that Dnepr, according to the international system of classification of waterways, is unique in Europe as a deep-water transport highway of category "E" which considerably raises its competitive rating. Crossing northern border of Ukraine and Belarus, Dnepr runs to the South in the direction to the Black Sea.

The transport fleet, passing the Dnepr, can reach the ports of the Danube as well as of the Black and Mediterranean seas. Through the Sea of Azov, the Don River and the Volga-Don channel vessels can reach ports on the Volga River as well as on Caspian and Baltic seas. Since 1992 the Dnepr is open for call to foreign ships.

In the USSR water transport arteries of Ukraine were maintained in a sufficient measure. At the end of the 80s — the beginning of 90s about 50 million tonnes of industrial cargoes were transported by river. After the disintegration of the Union, the next 10 years the transport volumes were reduced tens times. Nowadays, the main river carrier in Ukraine is the company UKRRECHFLOT. In 2004 the company’s volume on internal and local lines was 2,4 million tonnes.

Nowadays between Dnepropetrovsk and Kiev the waterway is almost unused for navigation due to unreasonable decisions on taxation for passing the locks and for building railway bridges, and also due to payment for using the river water.

The main uses of the Dnepr basin are for the transportation of rubble and sand from river borrow pits in such cities as Kiev, Kherson, Zaporozhye, Dnepropetrovsk and also for the transportation to seaports of rolled metal and scrap metal. Transportation by inland waterways is most effective and justified for such types of cargoes as construction materials (rubble and sand), fertilizers, ore, cars.
There are indeed many river ports and quays along the banks of the Dnepr and Yuzhny Bug River. Ukraine's ten major river ports, namely those of Chernigov, Kiev, Cherkassy, Dneprodzerzhinsk, Dnepropetrovsk, Zaporozhie, Nikopol, Novaya Kakhovka, Kherson and Nikolayev, used to handle up to 100 million tonness of cargo annually in former Soviet Union times.

Dnepr is the only river in Ukraine provided with navigation locks. There are six locks along the Dnepr:

- the Kiev lock, put into operation in 1964, is situated 972.4 km from the Dnepr Mouth; the lock has one chamber;
- the Kanev lock, put into operation in 1972, is situated 810 km from the Dnepr mouth; the lock has one chamber;
- the Kremenchug lock, put into operation in 1959, is situated 563 km from the Dnepr mouth; the lock has one chamber;
- the Dneprodzerzhinsk lock, put into operation in 1963, is situated 441 km from the Dnepr mouth; the lock has one chamber;
- the Zaporozhie lock. Zaporozhie hydro construction area has a three chamber lock and a one chamber lock. The three-chambers lock was originally put into operation in May 1933. It has been undergoing reconstruction since 1992. The one chamber lock was put into operation in December 1980; it is situated on the left bank of the river, 110-170 m southeast from the three-chambers lock;
- the Kakhovka lock, put into operation in 1959, is situated 563 km from the Dnepr mouth; the lock has one chamber.

2.4 Development of inland transport system

Following the collapse of the USSR and the ensuing economic crisis, the flight of river tonnage going off to seek work on the Danube led to an abrupt fall in cargo handling at these river ports.

As early as in 1992, Ukrainian river ports began to be operated in joint-stock ownership. And in 2002, already four of them, Zaporozhie, Dnepropetrovsk, Kherson and Nikolayev river ports were integrated into JS Ukrichflot, which now owns a substantial share of these ports' stock.

For providing of optimum use and rational development of inland waterways and also seaports of the Black Sea – Azov Sea region it is necessary to speed up works and obtain the official approval of the regional transport ways network. Regarding seaports this task is carried out within the framework of program TRACECA, and also by the working group on transport of the Organization of the Black Sea Economic Cooperation.

The annual increase in transport services in Ukraine is 4-5 %, the volumes of transportations of cargoes till 2005 have increased by 27 %, passengers by -2,7 %, and in the long term (till 2020) the forecast for increase of cargoes turnover is 1,5-2 times, and for passengers – 1,3-1,5 times.

It is planned to carry out a construction of a new and reconstruction of existing infrastructure (regarding corridors № 9; TRACECA; Baltic - Black sea) in such ports as Ilyichevsk, Odessa, Yuzhny, Mariupol.
3. New possibilities in water transport and international corridors development

3.1 From Europe to Asia by sea

The situation of formation and development of the basic Black Sea communications may be characterized as follows. On the one hand, the rough reorganization of basic cargo traffic and appropriate transport communications (occurred in 90s) was replaced by the stabilization of trade communications, trade turnover and, as a consequence, certain stabilization of transport ways and transportation directions. On the other hand, real practice of realization of transportations and accumulation of their results for the period have enabled to specify the decisions, accepted at the international level, on the creation of transport corridors and definition of perspective transport ways. The second meeting of the Expert group on development of the Euro-Asian transport ways was devoted to these questions, which have been held in Odessa on the beginning of November 2004.

It has been decided, that the further development of connections of transport axes of the European network with a transport infrastructure of the Black Sea region should include the new concept of sea intermodal lines, making transport flows more effective for the account of intermodal and other technical and organizational measures. At the meeting of BSEC Working Group on transport and the meeting of the Ministers of transport of the BSEC countries, which have been held in January 2005 in Thessaloniki, the previously considered map of the routes was complemented by a lot of the offers which have been brought in by the representatives of two international regional transport Associations BASRA and BINSA.

The main intermodal Black Sea lines are based on ports: Ilyichevsk, Odessa, Izmail, Nikolaev, Kherson, Mariupol, Berdyansk and Kerch (Ukraine), Constantza (Romania), Varna and Bourgas (Bulgaria), Novorossiysk, Tuapse and Kavkaz (Russian Federation), Poti and Batumi (Georgia), Istanbul, Derince, Zonguldak and Samsun (Turkey).

One of the largest Ukrainian ports of the region by general cargoes handling is the port of Illyichevsk, where two major international transport corridors of the Eastern Europe approach each other: Corridor №9 and TRACECA. In 2004 the total cargo turnover of the port was 14,8M tonnes, including 197,000 TEU of containers and 1,5Mt of ferry cargoes.

In connection with the rather dynamical increasing of the flow of containers through the port (from 30 up to 50 % annually), the Government of Ukraine has approved the Program of the port development till 2010. This Program provides the increasing of capacity for containers handling up to 1,5M TEU per year. In the port it is conducted the construction of new terminals not only for general, but also for bulk and liquid cargoes. It should enable to increase capacity of the port (now it is 23,5M tonnes per year) more than 2 times in the next 10 years.

The Odessa port now is the third in cargo traffic among the ports of the Black Sea region and handled 30.5 M tonnes in 2004.

The Pan European transport corridor #9 approaches the port of Odessa, as well as the port of Illyichevsk. In the port of Odessa especially the volumes of container handling has rapidly increased (2004 – 203.500 TEU). The rates of growth of container cargo traffic are from 20 up to 30 % per year. The port has one of the best passenger terminals in Black Sea region, and will serve as one of the main bases for development of sea transportations and tourism in future.
Together with the port Yuzhniy, located near Odessa, which specializes basically on bulk and liquid cargoes, the three ports of the Large Odessa' (Odessa, Ilyichevsk, Yuzhniy) in total have achieved a cargo traffic of more than 60M tonnes per year and provide a turnover more than a half of cargo traffic of the ports of Ukraine.

One of the main port bases on the Black Sea area of the Danube (Pan European transport corridor № 7) is the port of Izmail, located on crossing of the corridor № 7 and Balkan branches of the transport corridor № 9.

The Ukrainian port of Mariupol, located on the coast of the Azov Sea, is the sea gate of the most powerful industrial raw-supplying region in Ukraine - Donbass. So in 2004 from total port cargo traffic 4,33M tonnes have made transit cargoes. Now Mariupol is the basic port of transit sulphur handling in bulk from Kazakhstan.

The significant amounts of cargo handling from the sea to overland type of transport the Russian ports of the Black Sea coast carry out and, first of all, two large of them: Novorossisk and Tuapse. The total cargo traffic of these two ports was 89.8 M tonnes in 2004.

3.2 Container cargo turnover and JSC UDSC activity

Over two dozens of the largest container operators are working on the Black Sea. One can find among the carriers such companies as Maersk Sealand, CMA CGM, MSC ZIM, Cosco, Hapag-Lloyd, P&O Nedlloyd and others.

The Romanian port of Constantza is the leader in container traffic (206,400 TEU in 2004). The container cargo turnover of the port of Odessa amounted to 185,900 TEU and the port of Ilyichevsk transhipped 196,600 TEU in 2004. The program of increasing of the container traffic via Ukrainian sea ports for 2004-2007 provides for the growth of container handling as much as by 770,000 TEU including the growth by 350,000 TEU in the port of Odessa, by 250,000 TEU in Ilyichevsk, by 110,000 TEU in Mariupol, by 50,000 TEU in Izmail, and by 10,000 TEU in Nikolaev.

JSC UDSC (Joint Stock Company Ukrainian Danube Shipping Company) is the operator of Ukrainian-Turkish container line Roksolana with regular ship calls at the ports of Ilyichevsk, Istanbul and Izmail (optionally - at the ports of Odessa and Mariupol).

The port of Izmail is located in the mouth of the river Danube where the International Transport Corridor No. 7 is passing. Potential possibilities of the direction increased after the reconstruction of the Ukrainian shipping passage the Danube - the Black Sea in August 2004. The main ports on the Danube handling containers are the following: in Germany - Deggendorf; in Austria -Vienna, Lintz; in Slovakia - Bratislava; in Serbia - Belgrade; in Hungary - Budapest; in Bulgaria - Rouse; in Romania - Giurgiu, and in Ukraine - Izmail.

UDSC spares no efforts to increase transportation between Ukrainian ports and the ports of the Danube countries including the way out to the Canal Rhine - Main - Danube. There have already been some orders for mineral raw materials, domestic electric devices in containers to be transferred from the ports of industrial zone Izmir (Turkey) to the ports of the upper Danube. The shipping company is considering the possibility to establish a container line Izmail - ports of middle and upper Danube.
3.3 Prospects of free economic zones

One can see interesting prospects in rationally combining free economic zones (FEZ) and the international transport corridors. According to expert assessment, combination of FEZ and international transport corridors in the considered region may produce a significant effect and create a transport artery of intercontinental value. Both the Baltic Sea-Black Sea corridor and the international transport corridor Europe-Asia will attract to Ukraine a powerful transit flows, including links between Southern Asia and Europe, Africa and Europe, the Middle East and Europe, Central Asia and Europe. Two FEZ are already created: one in Odessa Port and other – in Reni.

3.4 GUAM opportunities

An organization as GUAM (Georgia, Ukraine, Azerbaijan and Moldova) has a large potential in the development of the international transport corridors and waterways. In September 2000 during the Millennium Summit in New York leaders of GUAM countries have signed Memorandum and have proclaimed «a new phase of development of association». One of the basic items of the memorandum recognizes as an unconditional general priority the effective functioning of a transport corridor Europe – Caucuses - Asia and the necessity of developing its infrastructure, providing its reliability and safety. It was confirmed on the Yalta Summit (June, 6-7, 2001, Ukraine) and was reflected in Yalta GUAM Charter where the basic purposes, principles, directions of cooperation as well as organizational structure of GUAM were determined.

3.5 Potential of BSEC

During the recent meeting of the Ministers of Transport of BSEC (Black Sea Economical Cooperation) member countries passed the Declaration on linking the transport systems of the Black Sea region and European Union. As it was proposed by the Ukrainian representative in the Black Sea International Shipowners Association, the item concerning development of sea transport on the routes linking Asia and Europe via the Black Sea was put into it. One of the important direction of such development is operation of ferry crossings in the Black Sea, between Ukraine and Georgia as well as between Ukraine and Turkey. In December 2004 dredging works were started in Scadovsk Sea Commercial Port aiming to open the second passenger-and-freight ferry line Scadovsk — Zonguldak (Turkey). Statement of the second ferry will give additional increase in a stream of import - export and transit cargoes in Turkey direction approximately on 250-280 thousand tonnes.

3.6 Cooperation with EBRD

The European Bank of Reconstruction and Development declares its readiness through programs of bank to carry out attraction on the Ukrainian market up to 1 billion euro of investments per year. Such statement was made by the president of the
European Bank of Reconstruction and Development Bank Mr. Jean Limier during January meeting in Davos with the president of Ukraine Victor Yuschenko. At a meeting with journalists in Kiev the director of the European Bank of Reconstruction and Development in Ukraine Mr. Kamen Zakhariev has informed that in 2005 the Bank is going to direct to Ukraine credit resources at least for the sum 400 million USD whereas in 2004 the volume of investments of Bank has been at the level of 350 million. According to Mr. Zakhariev, the European Bank of Reconstruction and Development is going to make active crediting projects in sphere of road construction, construction of ports and the airports, as well as, in railway transportation, and also in development of an infrastructure of cities. According to the bank, the portfolio of the Bank in Ukraine in 2004 has increased for 267 million euro (seven new large projects are authorized). In total from the beginning of activity of the Bank in Ukraine 64 projects for the sum of 1.6 billion euro are realized. As to Mr. Zakhariev opinion, despite of the certain negative influence rendered on economy of Ukraine by political events of the end of 2004, its growth in the current year will make about 6.5%.

3.7 Sea ports rating of 2004

The rating of the 20 biggest sea ports and terminals of the Black and Azov Seas of 2004 has considerably changed if compared with that of 2003. The Russian oil port of the Caspian Piping Consortium (CPC) has achieved the largest growth in handling. It has increased oil discharging by 50.5%, having 22.2M tonnes handled in total. The port of CPC has changed its position from the sixth to the fourth place and outstripped the port of Tuapse (Russia) and the port of Yuzhniy (Ukraine).

In great probability CPC can be predicted to take the third place pressing out the port of Odessa (Ukraine) in 2005. As it was stated by Mr. MacDonald, Director General of CPC, they are planning to increase the amount of transshipped oil up to 32M tonnes in 2005. Ukrainian ports of Odessa and Theodosia lost large cargo flows of transit oil in 2004. One can hardly see any possibility of their returning yet. The port of Theodosia moved from 9 to 18 position in the rating of top twenty owing to those losses. JS Novorossiysk Sea Trade Port is the first. Its cargo turnover totaled 69.5M tonnes. Volumes of cargo turnover have not changed in the port since last year. The second place was taken by the port of Constantza, as in 2003. But that port increased its cargo turnover as much as by 7.2M tonnes. The growth of box handling by 87.1% (from 206,449 TEU up to 384,282 TEU) was the most considerable. That growth, if measured in tonnes, amounted to 106.4%. That means the port additionally handled almost 2M tonnes of cargoes in containers. The Port Kaukaz achieved considerable cargo turnover due to the large volumes of oil of UKOS company transferred through the Kerch Straight in 2003 (over 5M tonnes) are reckoned in statistics of the port Kaukaz.

4. Ukraine/Russia interaction in inland water transportation and corridors’ development

For the Ukraine it is important to assess also the conditions for development of transport flows in the neighbouring states (states of European transport corridors), in
particular in the Russian Federation. It is forecast that the volume of foreign trade of
Russia till 2010 in comparison with 1998 will increase by 70-75 %, and export-import
transport by 30-35 %. According to experts, a cargo turnover of container cargoes on a
direction the Western Europe - East Asia will make 250 billion dollars (10-15 % of
them will pass by the Russian transport communications). In 2001-2010 Russia plans to
spend 600 billion roubles for the development of corridors’ infrastructure. Thus the
main freight traffics inside Russia will go on axes West - East and North - South.

4.1 The concept of integration of transport systems

In September 2004 the concept of integration of transport systems of Ukraine and the
Russian Federation has been signed. Substantive provisions of this document are based
on a joint interests of Russia and Ukraine in the sphere of formation of Common
Economic Space (CES), assistance to social and economic progress, satisfactions of
needs of economy of two countries in the transportation of passengers and cargoes by
all types of transport and increases the level of integration of transport networks of the
Russian Federation and Ukraine in world transport system. In order to provide
implementation of the mentioned Concept in Ukraine there has been already created a
special working group which solves problems of interaction of the parties within the
framework of the Concept functions.

In the frame of Conception of integration of transport systems of Ukraine and Russian
Federation recently some new actions will be developed. These actions concern
passenger shipment between Caspian, Azov, Black seas and Danube via inland
waterways of Russia and Ukraine. Besides new tourist projects and joint programs of
cruise lines will be developed. There will be also a joint Russian/Ukrainian project in
the Port of Yuzhniy relating to the construction of coil terminal of 10 mln ton capacity.

4.2 Transport corridor North — South

During the second Euro-Asian Conference on Transport on September, 12, 2000 in
Sankt-Petersburg the Intergovernmental Agreement on international transport corridor
"North - South", between the Republic of India, Islamic Republic of Iran and the
Russian Federation has been signed. Kazakhstan, Belarus, Azerbaijan, Armenia,
Bulgaria and Bahrain have declared intention to join the Agreement. Among possible
candidates on participation are considered to be also Turkmenistan, Saudi Arabia,
Kuwait, United Arab Emirates, Indonesia, Malaysia, Sri Lanka and some other
countries, including European: Finland and Lithuania.

The corridor "North - South" may include some different routes in involved regions:
1. a Trans-Caspian Sea option;
2. a waterway the Caspian Sea - Volga River - Baltic Sea including route to the
   Volga-Don channel and further to the Black Sea ports;
3. a railway and automobile transportation.

Transport between participants of the Agreement by the corridor are presently carried
out only according to the first option. The joint-stock company "Astrakhan Shipping
Company" was established in Russia to work on this corridor.
It may be foreseen that development of the second option regarding the Black Sea direction and well known deficit of Russian ports throughput capacity will lead to Ukrainian sea ports and waterways involvement in the transit transportation process. Existing reserves of Ukrainian sea ports throughput capacity (about 30 % for the present state) and their universal possibilities of cargo handling allow to consider the Ukraine as prospective potential partner for "North - South" corridor participants.

On the European direction which provides transport-economic relations North - South, the Russian experts underline the importance of these directions:

- Finland border – Sankt-Petersburg - Moscow - Kiev - ports of Ukraine on Black Sea;
- Sankt-Petersburg - Pskov - Nevel - Vitebsk - Kiev - ports of Ukraine on Black Sea.

Both routes are parts of the European international transport corridor № 9. Recently there were two events considered as important for realization of International Transport Corridor (ITC) North — South project. The first one: the Russian transport workers have put into service the railway 700-m long bridge over the Buzan River. The second one — in the Croatian town of Pula. Construction of four sea rail ferries intended to serve transit transportation on the Caspian Sea was launched at the Ulianik shipyard. The contract price of each ferry boat amounts to 20M USD.

Taking into account the construction of the 49-km branch line to the port of Olya, Russia can be considered to have completed the formation of its section of that ITC. In the nearest future the completion of technological chain can influence seriously the amount of cargo traffic, transit cargo mainly. For example, container transportation through the ITC enable to reduce time of cargo transfer from the Northern Europe to India and Iran from 37 down to 13—15 days.

The total value of the current cargo traffic in Europe — Asia range amounts to 140Bn USD annually. Iran declares his intention to earn additionally from 5 to 10Bn USD from transit of cargo. Moscow has well-grounded intention to get the same revenue in future. A consortium of states carrying out that project includes currently 10 countries: Russia, Iran, Iraq, Oman, Kazakhstan, Belarus, Tajikistan, Azerbaijan, Armenia and Syria. Other countries including UAE are interested in it.

In 2003 almost 5M tonnes of container cargoes costing over 5Bn USD were transferred through the ITC North-South. In 2004 cargo transportation increased by 15—20 %. In 2—3 years cargo traffic through the ITC is expected to reach annual 15M tonnes. Potential volumes of transit container cargo are far over 20M tonnes. To achieve that goal, a container terminal of 1M TEU annual capacity is under construction in the port of Olya.

4.3 Transit cargo transportation

The transport policy of Russia has a significant importance for Ukraine. It is enough to mention that 70 % of import freight traffics come to Ukraine from Russia, 65 % of the transit cargoes transported through the territory of Ukraine are Russian goods. Such cargoes as coal, oil and mineral oil, iron and manganese ore, ferrous metals, chemical and mineral fertilizers, grain prevail in the structure of transit. All these goods are Russian exports to Europe through both on-land transport and using seaports of Ukraine to all continents of the world.
Ukraine is unhappy of the fact that the share of Russia in transit cargoes transportation through the Ukrainian seaports is constantly reduced: from 85% in the middle of 90s up to about 60% nowadays. It is connected with a purposeful policy of Russia on reorientation of export-import freight traffics to own ports.

The second major factor of the transport policy of Russia is the development of his own transit potential as a transport bridge between Europe and Asia.

In December, 2001 the Government of the Russian Federation accepted the Federal Program «Modernization of Transport System of Russia» in which the qualitative updating of all types of transport and a number of inter-branch programs are determined. The prospective total amount of financing (in the prices of 2001) for the period of 2002-2010 was determined as 4646.3 billion roubles (approximately 150 billion dollars). One of components of the Federal Program is the program «International Transport Corridors» determining a transit policy of Russia in the beginning of XXI century.

Russia estimates the losses stipulated by transfer of cargoes to ports of the adjacent countries in 1 billion dollars per year. According to Russia’s, now (because of lack or absence of own reloading capacities) more than 25% of the Russian foreign trade turnover of goods goes through ports of Ukraine, Baltic and Finland.

In the last years the Russian oil companies have essentially reduced the transit of oil in a direction of Odessa, having left this route to the Kazakh companies. A further reduction of transit of the Russian oil through seaports of Ukraine is predicted.

In 2001 Ministry of Railways of the Russian Federation has cancelled export railroad rates/taxes for the basic Russian cargoes sent to own ports thus reducing the competitiveness of the Ukrainian ports.

4.4 The Big Ring project

The Big Ring Project represents the development of a concrete projects of the Ukrainian - Russian cooperation in sphere of internal waterways. The project was developed by the international company “Interlighter”. It suggested that the 7th Danube transport corridor should be extended to Astrakhan on the Volga River in Russia. The Ukrainian Danube Shipping Company (UDSC) hold negotiations on the organization of the traffic by that route with the Russian enterprises North-West Shipping Company and Donrechflot. UDSC has specific proposals concerning carriage of various machinery from Hungary, Austria, Germany to the Caspian Sea by waterways including rivers of Russia. But the prices for passage through the Volga-Don Canal repel solvent customers.

4.5 New railway/ferry connection

In November 2004 the railway/ferry connection «Crimea - Caucasus» was opened. According to forecasts, it will be able to reduce the transport distance between Ukraine and Russia to 270 km. Besides the ferry will allow reduce cost and terms of delivery of cargoes. A planned turnover of goods using the ferry is established at the level of 3.4 million tonnes per year.
5. The Baltic Sea – The Black Sea by waterways

By present time some interesting initiatives directed on connection of the European countries, not having own way to the Black Sea (Poland, Baltic, Belarus), to the Dnepr have been offered (Figure 3).

Let us now concentrate on some of the most, in our opinion, promising and effective projects.

5.1 Daugava – Dnepr Project

An interesting and prospective idea was recently proposed. It concerned the creation of a new inland transport corridor Latvia-Belarus-Ukraine by waterway Daugava – Dnepr. According to designers, the length of this waterway will be 2330 km. Its operation will provide essential increase of cargo turnover on the direction “Baltic Sea – Black Sea”. There are different expert evaluations of possible turnover: the low estimate
is 10 million tons per year, more optimistic assessments forecast several times more by 2010.

One can expect some technical problems when constructing a new waterway. First of all the construction of the channel (80 km length) between the Belarus cities of Orsha and Vitebsk. Another important task is the improvement of the Daugava River: to make it navigable it is necessary to construct in Latvia at least 3 water engineering systems (including dams, locks, etc.). According to preliminary assessment, it is necessary to invest about EUR 5 billion to provide all necessary construction works; the total cost of the project reaches about EUR 6 billion. As it was indicated in the press, Icelandic investment bank Kaupthing was ready to invest required means in this project. According to experts evaluation it may be possible to fulfill the project during 6 years.

5.2 Prospects on Belarus direction

In connection with above-stated we would like briefly to overview situation with Belarus, which recently made active efforts for the development of inland waterways and cargo transportation by water (particularly, by sea). Since 2000 part of the Belarus export by waterways is carried out via Ukraine. One of the main directions is the transportation of potash fertilizers by inland waterways to Nikolayev Merchant Sea Port where they are overloaded on the sea-going vessels.

Nowadays Belarus has a quite good cargo base. Experts estimate that freight flows from this country with use of sea transport exceed 15 million tonnes a year. Part of them are directed to the Baltic Sea, part to the Black Sea, and today between ports of the countries surrounding Belarus there is a serious competition for serving the Belarus export, namely among Kaliningrad (Russia), Ventspils (Lithuania), Klaipeda (Latvia), Nikolayev (Ukraine).

Though Belarus is not a sea state, its government has accepted the program of development of sea transport. According to this program 10 «river - sea» type vessels are to be built. The vessel "Nadezhda" ("The Hope") has already been constructed at the shipyard in Gomel-city. This vessel transports potash fertilizers to Nikolaev. Belarus authorities plan to use their fleet for work on Danube routes.

In Belarus there is an extensive system of inland waterways: about 2000 km in length and 10 river ports in operation. The big role is played by the Dnepro-Bugsky channel which exists more than 200 years. During former Soviet times there passed up to 30 vessels a day. Now the waterway which may participate in connecting the East and the West is almost abandoned. Nevertheless, if some ideas related to the linkage the Black Sea – the Baltic Sea will be realized, we can expect a rise of interest to this waterway too. First of all consider the route the Black Sea – Dnepr — Dnepro-Bugsky channel — Vistula — Oder — the Baltic sea which is in discussion since end of 90’s of the last century. This waterway is the shortest route from the Black Sea up to the Baltic Sea but its arrangement needs serious investments to construct or renew several locks in Brest (Belarus) and on the river Bug (Poland). Meanwhile in Belarus some the reconstruction of locks on the Dnepro-Bugsky channel according to European standard has already started.

Transportation of cargoes from Belarus via Pripyat, Dnepr and Southern Bug initially was carried out by some Ukrainian shipping companies. Besides, there is an opportunity
to renew river transportation of the Belarus wood, peat, and with return loading — the Ukrainian rolled steel.

In Ukraine there are all conditions to increase cargo volumes through Dnepr ports. For this purpose there is no need to build new expensive construction. Constructed during the Soviet time about 80 quay walls in all river industrial cities, six locks and more than thousand kilometers of equipped waterway have a sufficient reserve of throughput. Charges on the maintenance of inland waterways look more than attractive in comparison with expenses for the construction of new and the maintenance of existing railways and highways as well as bridges, tunnels, crossings, stations, etc.

6. Prospects of Ukrainian water transport and sea ports development

6.1 Water transport and inland transportation

From the Soviet Union time Ukraine has inherited a powerful infrastructure of water transport. But ten years later there was a problem of steady ageing of the fleet. The average age of the steam-ships maintained by the Ukrainian shipping companies is approximately 24 years, and write-off of obsolete vessels exceeds ten times the construction of new ones.

Shipping companies try to improve the situation. In particular, the UKRRECHFLOT company has received from the European Bank of Reconstruction and Development three credits for construction of new fleet. In cooperation with Eurobank seven dry-cargo universal ships are already constructed, the design of four more steam-ships of a carrying capacity of 6300 tonnes each is realized. According to the building contract ten such vessels will be constructed. Presently the national carrier owns 200 vessels of a various class and purposes.

The large industrial enterprises — steel plants, chemical factories, coal holdings for which work via Dnepr ports is more than justified from a territorial point of view – have river connections with the ports of the Black Sea. Besides, the further development of feeding container lines on a transport route Ilyichevsk — Odessa — Dnepr ports, in particular, Dnepropetrovsk and Kiev, is forthcoming.

During the next five years, up to 2010, experts predict an increase in transport volumes by river transport more than 100 % in comparison with parameters of 2004. Thus the annual gain of a segment will reach 20-25%.

6.2 Ukrainian sea ports - Program of development

All the 19 sea commercial ports of Ukraine are state-owned (to the contrary with Russia where most of the ports were privatized). Basic principles of Ukrainian ports operation are stipulated by the Program of Development of Sea Merchant Ports of Ukraine till 2010 and in the Concept of Development of Transport-Road Complex of Ukraine till 2020.

The main objectives of the Program are:

- to create a reliable material base of seaports of the highest world standards;
to strengthen the interaction of sea merchant ports with other adjacent types of transport and cargo owners in the frame of logistical systems and the international transport axis which pass the territory of Ukraine;

to increase the level of navigating and ecological safety in sea merchant ports;

to increase the efficiency of state regulation of activity and development of sea merchant ports which will provide the realization of interests of the state without restricting the economic independence of the enterprises.

The basic directions of the Program contain a complex of technical-technological, economic and organizational – legal measures encompassing:

- the creation and modernization of terminal complexes, the implementation of progressive transport-technological systems and their correspondence to the world standards;

- the creation of conditions which assist increase in volumes of the international transit transportations through Ukrainian ports;

- the creation and development of legal base of transport and transport-technological providing of ports activity in interaction with other types of transport, harmonization of the current legislation regarding the international shipping laws;

- the reform of management methods and forms of economic activities of ports aiming their correspondence to requirements of development of the transport services market and world practice of ports management by way of structural transformations and dividing of administrative and business functions;

- the regulation of ports activity on state and regional (municipal) levels in view of their importance in the general system of economy of Ukraine, the international and local transport networks;

- the creation of data bases in order to increase the competitiveness of the Ukrainian ports as well as providing the conditions of information and technological interaction and coordination of work of different types of transport.

The basic program task is entering to operation in 2002-2010. The major productive parameter is an increase of cargo turnover in the Ukrainian seaports by 30 % (from 89 million tons in 2001 up to 115 million tons in 2010).

Sea commercial ports at the present stage are the basic part of sea transport of Ukraine. The further development of ports is supported by the “Program of stabilization and development of sea and river transport of Ukraine till 2005”. Dynamics of freight flows resulted in tab.1.

In 2004 cargo turnover amounted to 111.4 M tonnes, increasing by 0.7 % relative to 2003. And though export has grown by 15 %, transit went down by 12.8%, primarily due to reduced oil and grain transit from Russia. In 2004 the sea ports of Ukraine handled 410,500 TEU (28 % over the 2003 result).

The basic owner of transit cargoes is the Russian Federation (80 % of total amount of a transit freight flows through the Ukrainian seaports). Reloading complexes specialized to work with specific cargoes in ports. In some seaports new specialized complexes for nontraditional cargoes were recently constructed. Thus, sea commercial ports of Ministry of Transport of Ukraine have nowadays a reserve of a throughput capacity about 35 %, but it concerns mostly reloading complexes of universal purpose with crane kind of mechanization of reloading works.
Table 1: Dynamics of freight flows which pass through seaports of Ministry of Transport of Ukraine during 1998 - 2004.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cargoes in total, mln tonnes</td>
<td>69.4</td>
<td>80.85</td>
<td>84.1</td>
<td>89.04</td>
<td>106.287</td>
<td>110.64</td>
<td>111.44</td>
</tr>
<tr>
<td>Liquid cargoes</td>
<td>17.51</td>
<td>25.82</td>
<td>25.62</td>
<td>27.61</td>
<td>31.055</td>
<td>36.59</td>
<td>28.14</td>
</tr>
<tr>
<td>Bulk and Dry-Bulk cargoes cargoes</td>
<td>25.24</td>
<td>27.80</td>
<td>29.50</td>
<td>29.50</td>
<td>45.10</td>
<td>43.92</td>
<td>49.47</td>
</tr>
<tr>
<td>Boxes/Packages</td>
<td>23.07</td>
<td>27.23</td>
<td>28.97</td>
<td>27.91</td>
<td>30.12</td>
<td>30.13</td>
<td>33.82</td>
</tr>
<tr>
<td>Among them:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td>35.1</td>
<td>41.0</td>
<td>40.0</td>
<td>45.27</td>
<td>55.31</td>
<td>50.19</td>
<td>57.69</td>
</tr>
<tr>
<td>Import</td>
<td>2.1</td>
<td>2.4</td>
<td>3.0</td>
<td>3.53</td>
<td>34.78</td>
<td>7.13</td>
<td>7.02</td>
</tr>
<tr>
<td>Transit</td>
<td>30.4</td>
<td>34.1</td>
<td>36.5</td>
<td>36.03</td>
<td>42.97</td>
<td>48.97</td>
<td>42.72</td>
</tr>
<tr>
<td>Short sea transportation</td>
<td>1.8</td>
<td>3.2</td>
<td>4.5</td>
<td>4.21</td>
<td>4.99</td>
<td>4.35</td>
<td>4.06</td>
</tr>
</tbody>
</table>

Occurrence in sphere of the foreign trade and transit transportations of nontraditional kinds of cargoes, participation of Ukraine in network of international transport corridors has caused need of development of corresponding capacities of reloading complexes and infrastructures of sea merchant ports, including port railways and stations.

Dynamics of volumes of cargoes handling in sea merchant ports of Ukraine are presented in tab. 2.

Table 2: Cargo handling in sea merchant ports of Ukraine for the period 2002 - 2004, thousand tonnes.

<table>
<thead>
<tr>
<th>Ports</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odessa</td>
<td>28545</td>
<td>33496</td>
<td>30549</td>
</tr>
<tr>
<td>Ilyichevsk</td>
<td>13830</td>
<td>13654</td>
<td>14883</td>
</tr>
<tr>
<td>Yuzhny</td>
<td>13550</td>
<td>16126</td>
<td>18868</td>
</tr>
<tr>
<td>Belgorod-Dnestrovsky</td>
<td>840</td>
<td>827</td>
<td>1084</td>
</tr>
<tr>
<td></td>
<td>3730</td>
<td>4222</td>
<td>5003</td>
</tr>
<tr>
<td>Nikolaev</td>
<td>970</td>
<td>532</td>
<td>841</td>
</tr>
<tr>
<td>Oktyabrsk</td>
<td>2400</td>
<td>2511</td>
<td>2702</td>
</tr>
<tr>
<td>Kherson</td>
<td>250</td>
<td>323</td>
<td>375</td>
</tr>
<tr>
<td>Sevastopol</td>
<td>3380</td>
<td>11114</td>
<td>5335</td>
</tr>
<tr>
<td>Feodosiya</td>
<td>885</td>
<td>2268</td>
<td>2636</td>
</tr>
<tr>
<td>Kerch</td>
<td>8000</td>
<td>13465</td>
<td>14771</td>
</tr>
<tr>
<td>Mariupol</td>
<td>2450</td>
<td>2452</td>
<td>2403</td>
</tr>
<tr>
<td>Berdyansk</td>
<td>4675</td>
<td>5631</td>
<td>6645</td>
</tr>
<tr>
<td>Izmail</td>
<td>3160</td>
<td>2019</td>
<td>2242</td>
</tr>
<tr>
<td>Reni</td>
<td>1800</td>
<td>622</td>
<td>1027</td>
</tr>
<tr>
<td>Ust-Dunaisk</td>
<td>160</td>
<td>217.3</td>
<td>271</td>
</tr>
<tr>
<td>Yalta</td>
<td>500</td>
<td>1082</td>
<td>1277</td>
</tr>
<tr>
<td>Evpatoria</td>
<td>300</td>
<td>169.28</td>
<td>162</td>
</tr>
<tr>
<td>Skadovsk</td>
<td>28545</td>
<td>33496</td>
<td>30549</td>
</tr>
<tr>
<td>Totally</td>
<td>13830</td>
<td>13654</td>
<td>14883</td>
</tr>
<tr>
<td>Ilyichevsk</td>
<td>87625</td>
<td>110661</td>
<td>111436</td>
</tr>
</tbody>
</table>
An important task of the Program is to harmonize the legislation with the international agreements and the corresponding legislation of EU. First of all the completion of changes and amendments to the Code of Merchant Navigation is foreseen. Development and approval of a package of branch legislative acts (rules, regulations, instructions), which comment some items of the specified law, will be worked out simultaneously.

The reforming of state regulation will be based on the following principles:

1. fixed capital of ports (berths, moles and breakwaters, shore protection structures, territories, water areas, approaching ways, reloading complexes, etc.) is state property and is not the subject to privatization;

2. functions of port authorities are divided on:
   a. management of a state property and development of a fixed capital;
   b. providing of safety navigation on water areas of ports and supervision of safety of navigation according to laws, rules and the international agreements of Ukraine in the field of merchant shipping;
   c. commercial economic activities concerning service of vessels, cargoes and passengers;

3. de-monopolization of industrial activity in ports is provided: a competitive environment is created due to functioning on their territories and water areas of commercial structures which compete for service of vessels, cargoes and passengers (stevedore, forwarding, agency and other organizations).

The basic idea of the Program relates to stimulation of capital investments in construction of the specialized reloading complexes, development of railway and truck transportation communications due to own and involved financial resources and duly entering in operation according to predicted term of coming freight flow.

Regarding Governmental decisions concerned participation of seaports in system of the international transport corridors, it is necessary to define in corresponding normative documents items on the organization of the interaction of domestic seaports with administration of the international transport corridors according to the international standards.

During last years investment activity on sea transport was carried out by realization of investment projects of modernization and construction of reloading complexes in seaports. More than 70 % of all investments were carried out thanks to the ports’ own means.

The need for the further construction of port complexes stipulated by the Concept of Development of Ports of Ukraine till 2020 is confirmed. The total need of investments till 2010 on development of port complexes of Ukraine is estimated in volume of 2,3 billion hryvna (about EUR 360 mln). Additional investments are necessary for updating of port fleet by tug-boats and other auxiliary vessels as well as by passenger vessels.

Providing safety of navigation and prevention of environment pollution in sea merchant ports are the primary strategic directions of work of seaports of Ukraine and are directed to realization of a state policy in the field of protection the population, territories, an environment, economy against negative influence of ports activities.

Further opportunities of development of social sphere in sea merchant ports will be determined by two factors: state legislation in the field of social policy and economic efficiency of activity of each port.
Table 3: Volumes of necessary investments into development of Ukrainian ports (Ministry of Transport and Communication), mln EUR.

<table>
<thead>
<tr>
<th>Subjects of investments</th>
<th>Volumes of investments</th>
<th>Sources of funding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In total for 2002-2010</td>
<td>Own means, investments</td>
</tr>
<tr>
<td></td>
<td>Up 10 2005</td>
<td>2006-2010</td>
</tr>
<tr>
<td>Construction and</td>
<td>370</td>
<td>213</td>
</tr>
<tr>
<td>reconstruction of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>terminals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing of vessels</td>
<td>116</td>
<td>47</td>
</tr>
<tr>
<td>In total for all ports</td>
<td>487</td>
<td>260</td>
</tr>
</tbody>
</table>

7. Russian ports in 2004

7.1 Some basic figures

In 2004 the cargo turnover of the sea ports of Russia and neighbouring countries increased by 63.8M tonnes and amounted to 420Mt (+18 %). The share of Russian ports in total volume of transportation of Russian cargo increased by 5 % and amounted to 30 %. The traffic of Russian foreign trade cargo via foreign ports decreased correspondingly and amounted to 84.4M tonnes — 57.3M tonnes out of them handled in the ports of the Baltic countries and 27.1M tonnes — in the ports of Ukraine. In 2004 the cargo turnover of the ports of RF increased by 23.4 % and amounted to 356M tonnes, dry cargo totaling 157.3M tonnes out of them.

In 2004 Russian sea ports transshipped 17 M tonnes of cargo in containers of about 1.4 MTEU. Container transportation increased as much as over 60 %, In St. Petersburg growth of container handling amounted to 34 %, in Novorossiysk to 23 % and in Vostochnyi to 30 %. In the structure of cargo turnover of Russian ports export share amounted to 85 %, import share to 6 %, transit share to 3 %, and coastal transportation to 6 %. Cargo turnover of the ports of Southern basin increased by 14.6 % and exceeded 142 M tonnes.

7.2 Some recent tendencies and developments

Three basic documents contain the transport strategy of Russian Federation up to 2020, the strategy of development up to 2010 and the federal special program aimed to modernize transport system.

Recently transport as a whole has complied with the growing demand to transfer cargo and passengers across the country. However, there is still the imbalance between the level of development of transport system and the demand dictated by social-economic development of the country. That discrepancy can cause a slowing down the economic growth in the nearest future.
For example, 13 out of 16 biggest Russian ports does not have a direct way out to the network of federal motor roads. Currently the approaching rail tracks are the barrier to increased cargo flow towards Russian ports. There is some doubt as to plans to direct up to 40M tonnes of export coal via Russian ports. The railway fails to handle that volume of cargo. The situation with such export cargo as oil, grain, mineral fertilizers is not less complicated. Cargo in containers can be also referred to those groups of cargo because their transportation will doubtless outstrip its growth. Currently export of containers in RF amounts to less than 10 % out of total cargo transportation, import amounts to less than one third.

There is one more imbalance. In Russia 27 % of motor roads are nowadays overloaded. During last 8 years the amount of cars has been growing as much as 3 times faster than motor roads capacity has been increasing. There is a low level of transport service availability. 28,000 of Russian towns inhabited by almost 12M people do not have all round access to main land communications. There is also some dependence on foreign carriers. Thus, current capacity of port infrastructure makes it possible to handle only 75 % of Russian foreign cargo. 65 % of tonnage controlled by Russian ship owners is registered in foreign ship lists. One of the most urgent problems to be solved by the Ministry is the improvement of safety, mostly of road traffic. Last year 35,000 people were killed during road accidents in Russia, much in excess of other countries.

The strategy of development of transport of Russian Federation up to 2010 contains the ways to solve that and other problems. It provides for establishing the through motor traffic between western and eastern parts of the country. By 2010 they will have built and reconstructed almost 4,000 km of federal roads. The network of high speed motorways meeting the world standards will begin its operation for the first time. Over 2,700 km of main railways will be built for rail transport. The length of electrified ways will increase as much as up to 3,300km. The standard speed will increase by 5km/h on average. The length of inland water ways with guaranteed depths will increase by 160 km. Handling of containerized cargo in ports will increase up to 67M TEU per year. The rate of cargo delivery will increase as much as by 6-8 % and in main international transport corridors by 15-20%.

In Russian ports the amount of cargo handling will almost double and become total 540M tonnes if compared to the results of 2003. And Russian ports will transfer up to 90 % of foreign cargo. The amount of transit transportations will increase up to 75M tonnes. Russia is planning to have approximately 5 % out of total world transit, moving from Asia to Europe and back, transported via its territory. By 2010 the tonnage, controlled by Russian ship owners, will have to increase up to 17M tonnes and over 50 % of tonnage will be registered in national lists. The level of availability of transport infrastructure will increase by a quarter. The amount of road accidents caused by bad road conditions is planned to reduce by 15 %.

The strategy also provides for realization of the projects of national importance including the construction of high speed motorway Moscow-St. Petersburg and other toll roads. The port complex in Ust-Luga, motor road Chita-Khabarovsk, ring road around St. Petersburg will be completed. The program to develop ferry transportations on the Baltic, Caspian and Black Sea areas will be realized. Modernization of inland water ways will make it possible to level the depths of almost all waterways in European part of Russia.

One of the main conditions to carry out that and other plans is the improvement of the legal-normative field. Particularly, it is supposed to work out and adopt federal laws on
toll roads, on second international sea registry of ships, on sea ports, on transport safety, and so on. The strategy also provides for further perfection of machinery to finance projects. One of the most important directions is the development and establishment of a system of public-private partnership (PPP).

The world average level of expenses on development and maintenance of transport system amounts to not less than 4-5 % of gross domestic product. That figure is taken into account annually while making the federal program of modernization of Russian transport system. That means the minimum of 700Bn roubles are to be invested annually. The amount is twice more than it was planned before.

The use of PPP machinery is considered as one of the preferable directions of transport policy. In 2004 a special meeting of the government was held to discuss possibilities of PPP. It was mentioned that among such main types of PPP as contract agreement to carry out works for government needs, rent of state property, establishment of companies with private and governmental capital the most flexible one is concession. In case the related law is passed, it will provide possibility to develop that process in Russia.

7.3 Southern Russian ports

NOVOROSSIYSK

The JS Novorossiysk Sea Trade Port is the largest enterprise among those of Novorossiysk dealing with cargo handling. Its handling turnover in 2004 was a bit above 70M tonnes, crude and oil products embracing 55M tonnes. The state keeps 20% of the shares. Yet, there are basic holders namely the financial corporation NIKoil and Russian General Bank, controlling more than 60% of shares together with involved shareholders.

The second in Novorossiysk by handling numbers stands the port of Caspian Pipeline Consortium (CPC) in Yuzhnaya Ozereevka. The system is planned to be expanded up to 67Mt yearly. The shareholders of the CPC are quite a lot. Firstly, there are governments: Russia — 24 %, Kazakhstan — 19%, the Sultanate of Oman — 7%. And the private holders of the consortium.

The third place in terms of cargo handling is kept by the ship-repair yard acting as a port. The JS Novorossiyskiy SR2 has processed 2.2M tonnes of cargoes in 2004. The company's major shareholders are Russian General Bank (45.9% share), and the JS Novoship.

The fourth goes the JS Novoroslesexport— 1.6M tonnes, known as Lesnoy Port (Wood Port). Here they handle lumber, round timber, fiberboard, plywood, paper, metals, containers.

The fifth place is kept by JS NUTEP, handling mostly containers. They plan to expand the terminal capacity up to 300,000 TEU.

In January 2005 the company Stoks + Ltd. established by the National Container Company and Deb Group purchased 14.93 % of shares and became the holder of 65 % stock of NUTEP in total.

National Container Company (NCC) was established in 2002 by the companies Severstaltrans and First Quantum on parity terms. For its existence NCC have accumulated in its hands the First Container Terminal in St Petersburg (531,231 TEU
handled in 2004), Vladivostok Container Terminal (102,169 in 2004), NUTEP terminal in Novorossiysk, and Caspian Container Terminal (the port Olya, Astrakhan Region). Besides, NCC has the Baltic Container Terminal under construction in the new port Ust-Luga on the Baltic Sea.

TUAPSE

The second by significance Russian port juncture on the Black Sea is situated westward of Novorossiysk in the Tuapse Bay. There are moors of the sea trade port, ship repair yard and ship machinery plant, and a former fishery port in its territory.

In 2004 cargo turnover of the JS Tuapse Sea Trade Port amounted to 20.2M tonnes, including 14.4M tonnes of crude and petrol products. The latter comes to the port by pipelines from reservoirs. For some recent years the port has changed several owners. First, JS Severstaltrans bought 65% of the stock, then the whole lot. Now most of the shares are owned by Novolipetskiy Steel Plant (NLMK), the third steel mill company in Russia, they purchased 69.4% of the stock from Severstaltrans. the reasons why the latter sold out its controlling stock are down-to-earth. There just was a too good price offered to reject it. While 3 years ago 65% stock was acquired for 40—45M USD (different sources put different figures), then half a year ago 69.4% stock was sold out for 100M USD. Now NLMK can export up to 3M USD of metals through Tuapse.

TAGANROG

Taganrog town is situated on the northern shoreline of the Azov Sea in Taganrog Bay. Quays of the sea trade port, ship repair yard and JS Priazovyye are situated there too. In 2004 JS Taganrog Sea Trade Port handled 1.9Mt. In 2002 Severstaltrans sold 38.9% stock to the local company Karavay Plus which is a major grain trader in the region. The bargain amounted to 8M USD.

ZHELEZNIY ROG

There is a big port under construction on the cape Zhelezniy Rog. The building is invested in by 6 companies. In particular, JS Tolyattiazot intends to transship up to 6M tonnes of ammonia via the new port, SA Tarnaneftegaz — up to 9.5M tonnes of petroleum products, the Dutch firm Vopak Panagia — from 4 to 8M tonnes of crude, the LLCTam-antranzit — 10M tonnes of petroleum products. By 2015 the port Zhelezniy Rog may come the second in Russia after Novorossiysk.

8. Conclusion

There exist strong opportunities of attraction significant international transport flows (especially by waterways) to Ukraine. It was assessed that the volume of transit transportation through territory of the country may increase by 25-30% in the near future, and in the long term – in several times. An important role will be played by the creation of common transport system in the country including the TRACECA corridor,
the Euro-Asian transport corridor (Black Sea – Caspian Sea) involving Russian inland waterways (Volga River, Volga-Don channel), Danube corridor (№7), and a corridor Baltic Sea - Black Sea.

Ukrainian water transport is already involved in the functioning of existing transport corridors and it provides necessary services and support. There is also a large reserve of capacity (regarding both sea ports and inland waterways) which represent a base for optimistic prediction of future Ukrainian waterways development as part of the international transport axis.

Acknowledgements

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