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# BLACK SEA TRAFFIC AND EUROPEAN INTEGRATION

ABSTRACT

The Black Sea is a major component of the Mediterranean Sea. It is a bridge between two continents and a factor of cohesion among ancient neighbouring spaces of civilisation. Some of its geographical peculiarities make of it a half-closed sea between Europe and Asia. Its link with the Mediterranean is secured by the Bosphorus and the Dardanelles Straits and thence with the planetary ocean. So, the Black Sea ports represent actual gateways to the world for its riverain countries. These ports boomed or waned in terms of the riverain regions' history. After 1990, and moreover after the Soviet Union fell apart and new sovereign states came into being, the Pontic space has been undergoing major geopolitical changes. Traffic suffered radical changes, being governed by fresh criteria and directions. There is growing competition among the city-ports and, under the 1992 Black Sea Economic Co-operation Treaty, new regional development opportunities have been cropping up for the individual states. Viewed at global scale, the Black Sea might play, if integrated into an adequate programme, an essential role of cohesion and stability in a complex European zone with a history full of turmoil.

#### KEY WORDS

Black Sea maritime traffic, European integration, intercontinental traffic bridge

## 1. THE BLACK SEA – AN INTERCONTI-NENTAL BRIDGE

The presence of the Black Sea in the history of civilisation goes back nearly three thousand years. The basin has been disputed by the big powers ever since, with regional conflicts having sometimes lasted for long periods of time.

An assessment of the current geoeconomic situation of this Sea, to say nothing of its future prospects, calls for at least a brief outline of the natural geographical background which pertains to the major hydrographical system of the Mediterranean Sea. At the same time, the geopolitical background of the Pontic space makes the Black Sea a link between two continents, an element of geopolitical cohesion, enabling or banning the formation of a coherent, if not

unitary, territorial whole for the populations living on its shores.

### 1.1. The Black Sea. Geographical identity

The Black Sea lies in the south-eastern extremity of the European Continent and covers 431,838 sq. It looks like an extension of the Mediterranean Sea deep into the Eurasian Continent. Like its other marine components, Pontus Euxinus is one of the Mediterranean's inner seas.

Its shoreline, 4,075 km long, is shared by the Ukraine (36.6%), Turkey (33.2%), Russia (9.4%), Georgia (8.1%), Bulgaria (6.7%) and Romania (6.0%). They bring a significant water surplus, at the same time constituting a route of fluvial transport to the Pontic Basin limitrophe regions. The Black Sea is an outlet for the rivers flowing from the west and the north, of which more important is the Danube (2,850 km, flow rate 203 cu km), the Dniepr (2,285 km, 25 cu km), the Dniestre (1,360 km, 9.6 cu km) and the Bug (792 km). Since ancient times navigation on some of these rivers (particularly on the Danube, the Dniepr and the Don) have been facilitating trade relations between the Black Sea Basin and the central or northern parts of Europe. In the past two decades of this century, transport conditions on the Danube-Rhine waterway have been considerable improved, and the traffic capacity has increased due to the construction of two canals on the Danube (Danube-Black Sea, 1984 and Danube-Maine-Rhine, 1992). In this way, the Danube-Rhine axis has become a major component of the fluvio-maritime transport system centred on the Black Sea Basin. This sea is connected to the planetary ocean through two SW located straits (the Bosphorus and the Dardanelles) divided by the small Marmara Sea. The two straits also represent a traffic route.

The Bosphorus /30 km long and 0.750 - 3.7 km wide) is a passageway to the Marmara Sea (1,147 sq. km). It is bordered by a high, steep shoreline with several gulfs of which the Golden Horn is best known. The strait is 33 m deep, but navigation is safe only at a depth of 27 metres. This means that only oil tankers up

to 250,000 tdw may cross the Bosphorus. Its natural setting, therefore, imposes limitations to Black Sea access, namely no more than 40 vessels/24 hrs., compared to 140 through the Gibraltar, and 500 through the English Channel.

The Dardanelles (120 km long and 1.3-18.5 km wide) provides passage to the Aegean Sea.

Depths in the straits vary between 53 m and 106 metres. The configuration of the shore proved favourable to the development of two ports: Helibolu (Galipolis) on the European coast, and Ceanakale on the Asian shores.

In the north-west, the link between the Black Sea and the Azov Sea (38,000 sq. km) is made by the rather shallow Kerch Straits (9-14.5 m deep). The main rivers running into the Azov Sea (actually a Black Sea gulf) are the Don (1,970 km) and the Kuban (907 km). The surface current carrying fresh water to the Black Sea, enables active water refreshment between the two basins. The Kerch Straits separate the Ukraine (the Crimean Autonomous Republic) from Russia (Krasnodar Region), facilitating communications inside Russia through the Volga-Don Canal (commissioned in 1951). As it is, the Kerch Straits are an obstacle to the continuity of the land road between Crimea and North Caucasus.

At present, the town of Kerch is the terminal of a railway that crosses northern Crimea. There is a ferry-boat line crossing the straits to the Caucasus both for passengers and automobiles. Prospectively, as traffic is expected to grow, an underwater tunnel needs to be built to ensure fast links between the Ukraine and Russia (across the straits), or direct connections between the Ukraine and Georgia and farther of towards the Caspian Sea and the Persian Gulf regions. This tunnel could become part of a future fast European transport route in the Black Sea area (Wolf Tietze, 1998, pp. 15, 27).

What is the Black Sea offer to its riverain countries?

Limited natural resources. In terms of the Mediterranean, the Black Sea fauna is rather poor, dominated by simple forms (molluscs, crustaceans). There are few fish species of economic value (anchovy, mackerel, pelamid, herring and sturgeon). The fishing of sturgeons in excess for their caviar has led to the alarming disappearance of this species. Plants are mainly the algai, the red and the brown ones (in huge quantities at depths of 25-50 m) utilised in the dye and farmacenticals industries. In the NW of the Black Sea a platform was built for the exploitation of oil and gas reserves, which has been in operation for the past few decades. The output is valorised by Romania and the Ukraine. There are also exploitations of titanium sands on the Taman Peninsula, near the Kerch Straits, and along the Caucasian coast.

Ecological issues. As the Black Sea is a semi-closed basin, divided from the Mediterranean by the narrow Bosphorus Straits, the process of water exchange between them is not very smooth. Hence, the precarious ecological situation of the Pontic space. Besides, the straits themselves are affected by the massive increase of biogenic and organic substances, chemical pollution (phenols, detergents) and oil leaks, etc.

The main rivers flowing into the Black Sea (the Danube, Dniestr, Dniepr, Don and Kuban) have their sources, entirely or partially, on the territory of 15 states whose total surface-area is five times larger than the Black Sea's. These rivers carry huge quantities of pollutants degrading the marine ecosystems and causing eutrophiocation of the whole area. Massive pollution of the straits comes from the big city of Istanbul lying on either bank: refuse dumped right into the sea, waste waters failing to be purified. Another potential source of pollution are the vessels criss-crossing the Bosphorus.

Transport route. There is no doubt that the Black Sea holds a privileged geographical position. It connects Central and Eastern Europe to the Near and the Middle East and farther on to Central Asia. Hence, the importance of this sea as a transit route, particularly for the riverain countries. It is both a starting and finishing traffic point worldwide (across the Suez Canal and the Gibraltar Straits) and, at the same time, a link between the EU and the countries of the Near and the Middle East or the Central Asian region.

The role of the Black Sea for continental or intercontinental traffic has always depended on political developments. So, its history shows it either open to the world or simply a lake enclosed within the frontiers of an Empire (whichever it was). And, as Europe has always been craving for greatness, the Pontic space has been included or excluded from its sphere of interests. The Ancient world included it, Mediaeval Europe marginalised it, leaving it a 'Turkish lake' role; Modern Europe strived to appropriate it, while the European Union is rediscovering it. Recently, the Pontic space, organised into a Black Sea Economic Co-operation scheme (CEMN), or into systems involving individual states, has been targeted as a region of major interest and included into EU-sponsored regional development programmes.

Thus, at the Paneuropean transport conferences (Crete, 1994 and Helsinki, 1997), the Black Sea Basin was singled out as European zone of economic interest. In view of it, priority European and global transport corridors were laid out to link Central Europe, across the Black Sea Basin, to the Near and the Middle East, or to the Transcaucasian and Central Asian regions. For example, Corridor IV (variant C), finishing in Constanta harbour, could be extended, by several direct maritime lines, to the ports located on the

eastern and southern side of the Black Sea. Constanta is also the terminal (or the beginning) of fluviatile transport Corridor VII, corresponding to the Danube-Rhine waterway and to the canals connecting the two rivers. It ensures direct traffic between the North and the Black Seas (Geocolleg, 11, p. 96). So, development of traffic on the Danube represents an extension of the Pontic traffic and an important premis for enlarged collaboration between the Black Sea states and the North Sea ones.

# 2. MAJOR CITY-PORTS AT THE BLACK SEA

At present, the Black Sea numbers, at least, 40 city-ports of various sizes and importance (Fig. 1), unevenly distributed along its shores: 15 in the Ukraine, 9 in Turkey, 6 in Russia, 4 in Georgia and Bulgaria each and 3 in Romania. Some cities are centuries-old; ports are often of a millenary age, with a sinuous evolution over the time; others had developed one or two centuries ago, and a few more are of recent standing, dating to the post-war period. The evolution of the Pontic ports shows several generations of temporal continuity. The first generation are the ancient ports, founded by the Greeks six-seven centuries B.C., and conquered first by the Romans, then by the Byzan-

tines, and used in the maritime traffic of agricultural products to the big Mediterranean metropoles. In the Middle Ages, Pontic traffic fell into the hands of the Genoese and of the Venitians. But the longest and most important domination of all was that of Byzance (Byzantium), the future city of Constantinople and later on Istanbul, the city-port at the entrance of the Bosphorus into the Black Sea. It was first the capital of Estern Christianity, then the capital a mighty (or dying) Muslem empire. Today even, with its multi-million population, it is by far the largest city of the Black Sea and one of its main ports.

With the exception of Turkey and Russia, which have outlets also on other seas, the Black Sea riverain countries have no possibility of joining the planetary ocean traffic otherwise than through the Black Sea harbours. The Bosphorus traffic in 1992 was of 140 million tons (very little less than the Panama Canal record of 157 million tons), 40% of it belonging to the CIS (i.e. Russia, Ukraine and Georgia), 15% to Romania, 13% to Greece and 32% to Turkey and to other states. This value increases if the exchange volume among the Black Sea ports themselves (cabotage) is added.

Only four out of the Black Sea ports are more important (Constanta, Odessa, Istanbul and Novorossiysk) in point of capacity and annual freight traffic volume. They also function as major towns and indus-

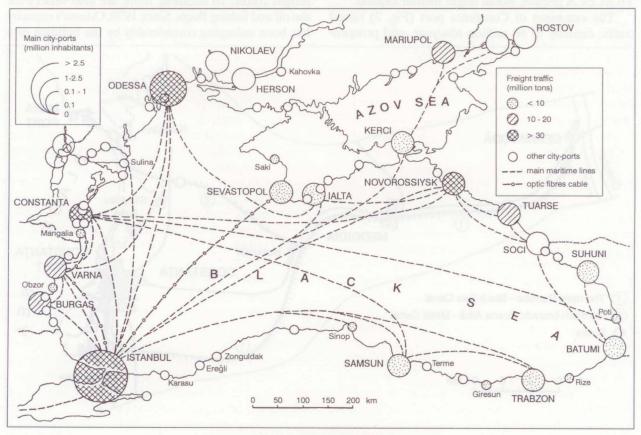


Figure 1 - Black sea ports

trial centres. Insofar as port capacity is concerned, Constanta (Romania) stays at the head of the table. Its evolution goes hand in hand with the history of the Black Sea. A colony set up by Milesian Greeks in the 6<sup>th</sup> cent BC, it was promoted to a free – port status in 260 BC, and beginning with the first century AD, flourished also under the Romans. In the 18<sup>th</sup> century, the Genoese, then the Venitians would control all trade through Constanta harbour. As from the 15th century, Dobrogea became a part of the Ottoman Empire, and Constanta, renamed Küstendjie, declined. It is only in the 19th century that it was recovering, due to the construction of the Constanta-Cernavodă railway line (1857-1860) and the modernisation of Constanta harbour (1895-1896). The improvements made in the post-war period and, moreover, in the year 1964, led to its southward extension, trebled its surface-area, increased wharf length, and depth down to 13.5-14.5 m, thus enabling the access of 150,00 tdw vessels. In 1976, a new harbour, Constanta South-Agigea, started being built; by 1980, the port capacity was 10 times that of 1960. Enlargement was correlated with the commissioning of the Danube-Black Sea Canal.

The same evolution experienced *Midia harbour* (Midia Cape), used exclusively for the supply of the Midia Cape oil refinery. There is a ramification that links this port to the Danube-Black Sea Canal. In the coming years, provided Romania is included into the TRACECA project, Midia might further expand.

The extension of Constanta port (Fig. 2) raised traffic capacity to 60 million tdw/year, and prospec-

tively up to 120 million tdw, which puts it first on the Black Sea port list. Tankers of 150,000 tdw can be built in its docks, while the free – trade zone will provide for the whole rang of afferent operations.

The position of this port on the western coast, almost in the midst of the western front-side, has numerous advantages over the other Black Sea ports, not in the least because it may well become a maritime gateway to the EU countries. It has the necessary port infrastructure and good links to fluvial transport inside the Continent (the Danube-Black Sea Canal), to the railway net, to the international airport and to a direct motorway running to the west of Romania. In 1991, this country boasted a large commercial fleet (4 mill. t traffic capacity and 6 mill. tdw), third in rank after the Russian and the Ukraine fleets. After 1991, because of deficient management, capacity dropped sharply.

Second in rank stands *Odessa*, the biggest Ukrainian port and one of its major cities (1,150,000 inhabit.). Founded in the years 1792-1793 at the mouths of the Dniestr River, the city would rapidly develop around the stronghold, and by mid-19<sup>th</sup> century it was the third city of the Russian Empire next to Sankt-Petersburg and Moscow. After a railway had been built as far as the south of the Ukraine, it became the main port for the export of cereals.

At present, most of its area is reserved for general freight traffic. In addition, there are also wharf's for the oil and fishing fleets. Since 1970, Odessa's capacity has been enlarging considerably by the building of a

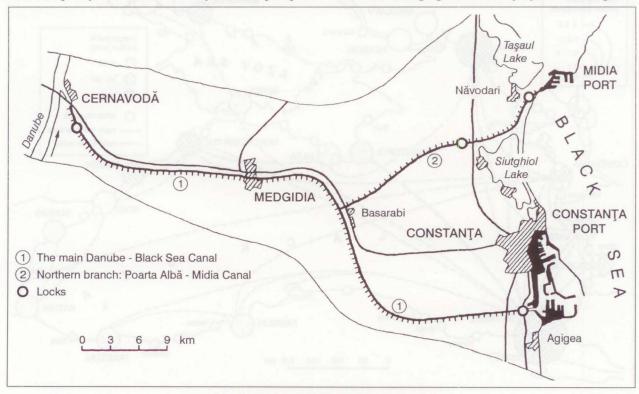


Figure 2 - The Danube - Black Sea Canal

new harbour, *Ilicevsk*, 30 km south of the old one. It specialised in the traffic of coal, ores and cereals. The reason behind the construction of the new harbour was trade with Bulgaria, a regular maritime line (440 km) between Odessa and Varna being opened. Nowadays, traffic is estimated at 30 million tons, half of it consisting of oil products. A big petrochemical complex and an oil refinery (30 mill t/year) are in operation at Ilicevsk.

Novorossiysk (Russia) is the third major port at the Black Sea (240,000 inhabit.) situated in the homonymous gulf, on the east Black Sea coast. It was established in 1838 as a military base. Subsequently, the town grew into a centre for the cement production and the manufacturing of train carriages. At present, it is Russia's main oil port (45 mill.t/year). With the ongoing competition for the Caspian Sea oil, its importance has increased considerably. The Novorossiysk terminal is scheduled to be extended on sea to Burgas (Bulgaria) and thence, a pipe line will reach Alexandroupolis (Grece), as well as other ports (Constanta, Odessa) on the west or NW Black Sea side.

Istanbul (Turkey). Although the largest city in this area and one of the biggest in the world, it lists but fourth among its Black Sea counterparts. The city has a long and very special history, its socio-cultural importance having spread far beyond the Pontic region. It was founded by Emperor Constantine the Great in AD 326, first under the name of Byzance (Byzantium) which afterwards stood for the whole Empire (The Eastern Roman Empire). Named Constantinople in honour of the great emperor, it became Europe's first mediaeval city with a multi-million population. In 1453, it was conquered by the Turks and turned into the capital of the Ottoman Empire, a position it held until 1923, when Ankara assumed that role. The present population of this city-port numbers nearly 5 million inhabitants, but the whole urban agglomeration, extending on both sides of the Bosphorus, exceeds 9 million people. Istanbul is Turkey's main commercial centre, with 50% of the country's traffic passing through it. The city is a major rail, road, air and maritime transport knot, a link between Europe and the Near and the Middle East.

A second category of Black Sea city-ports, with an annual record below 15 million tons, is more numerous. It numbers eleven ports better differentiated in regard of geohistorical favourability and future development prospects: 5 in the Ukraine (Kerch, Mariupol, Nikolaev, Herson and Sevastople), one in Russia (Taganrog), 3 in Turkey (Sinope, Samson, and Trabzon), and 2 in Bulgaria (Varna and Burgas). Apart from these, the above countries (and Georgia) have also several other smaller city – ports, or simply tourist resorts. Their importance depends on the region's new geo-economic conditions.

Besides Odessa, Nikolaev and Herson, most of Ukraine's harbours are situated in the Crimean Peninsula, or at the Azov Sea, a more advantageous location in the competition with the other Black Sea ports.

*Mariupol* (540,000 inhabit.), serves mainly the Donbass coal basin and has a traffic record of 12 mill.t/year.

Kerch (180,000 inhabit.) lies in the homonymous peninsula close to an iron ore sediment that is shipped to Mariupol. It is disadvantaged by the shallow waters of the Azov Sea which freeze in winter.

Sevastople (375,000 inhabit.) was founded by the Russians in the year 1783, when they reached as far as the Black Sea coast. The port, set up on the ruins of Chersones, the old Greek colony (4<sup>th</sup> cent. B.C.), was used by the Russian Black Sea fleet as military base. Its present judicial situation is rather confused: it continues to shelter the Russian fleet, more precisely, what has been left of it after partition (1994) among Russia, Ukraine and Georgia.

Nikolaev (520,000 inhabit), a fluvio-maritime port at the mouth of the River Ingul, and a naval base since 1789. Its aluminium plant lives on the bauxite imports from Guinea, a raw material that holds a major share in its traffic.

Herson (355,000 inhabit.), a fluvio-maritime port at the mouth of the Dniepr initially a military base (set up in 1778), it became a major 19<sup>th</sup>-century, port for the export of cereals, lemons, and other agricultural products. Subsequently it developed a number of industries (machine-building for the alimentary sector and for agriculture) and ship-building. Its oil refinery has a capacity of 6 mill.t/year. Port traffic capacity up to 5 mill.t./year.

One of the outstanding spas and health resorts on the Crimean coast is Yalta (100,000 inhabit.). Its port is used for passenger traffic. But for Novorossiysk, Russia has no longer many other major harbours at the Black Sea. However, the situation could change if new ports are developed to compensate for those lost to the Ukraine or to Georgia.

Taganrog (292,000 inhabit.) is situated in the Taganrog Gulf, Azov Sea. It was set up by Peter the Great in 1698, as military port. Later on, a cereal export point and a strong industrial centre in the Soviet era, primarily for the manufacturing of military equipment, but also for the construction of agricultural machines, heavy equipment, etc. Port traffic capacity up to 5 mill.t/year.

Until 1994, the three Georgian ports at the Black Sea did not play a particularly important transit role, their activity being limited to cabotage in the interest of the Soviet Union.

Batumi (140,000 inhabit.), the capital of the Autonomous Republic of Adjaria, lies at the end of the Transcaucasian railway which starts from Baku and

passes through Tbilisi-Soupsa (Georgia). The city was taken by the Russians in 1878. In the early 20<sup>th</sup> century, an oil pipe line linked it to Baku, but the obsolescence of its parts depress flow rates. The oil refinery has an annual capacity of only 4 mill. tons. Port traffic capacity reaches 6 mill t/year, inclusive of the import of bauxite for the aluminium plant at Gandja (Azerbaijan).

Poti (60,000 inhabit.) lies at the mouth of the River Roni, on the ruins of an old Greek colony. The Annual traffic (4 million tons) consists mainly in the export of manganese. Recently, it has become an important military base, its docks sheltering the vessels left to Georgia after the fall of the Soviet Union. Its role is expected to increase considerably in the competition with the other Black Sea ports.

Suhumi (120,000 inhabit.), the capital of the Autonoums Republic of Abhazia, continues, like Batumi, the millenary activity of an ancient Greek colony at Pontus Euxinus, and of the later Genoese. In the 16<sup>th</sup> century it fell to the Turks and in 1810 it was conquered by the Russian. Suhumi is a major centre for the food and leather industries, it hosts scientific institutions, and functions as a spa-and-health resort.

The three more important Turkish ports on the southern coast of the Black Sea might stand a good development chance due to multilateral relations between the CEMN member-states, and prospectively, to the European integration of the Black Sea Region.

Trabzon, or Trapezunt (301,400 inhabit.) has a history as old as that of the majority Black Sea ports. It was founded by the Greeks in 750 BC, subsequently becoming an important port of the Roman Empire's Eastern provinces, sharing, after the Ottoman conquest, the fate of the other Pontic harbours at the Black Sea that remained simply a Turkish lake. Today, there are food an tabacco manufactures, the city itself being a railway terminal (to Iran through Erzerum).

Samsun (150,000 inhabit.) was set up by the Greeks (6<sup>th</sup> cent. B.C.) in the homonymous gulf. Its evolution is very similar to that of the other Black Sea Turkish ports. It is a centre for tabacco manufacturing (the famous Samsun tabacco), food and mineral fertilisers industries, an outstanding heavy freight port, wherefrom goods are redistributed inside the country.

Sinope (30,000 inhabit.) lies in the Sinope Gulf on the ruins of an old Greek city. It is the main commercial centre of an agricultural region wherefrom tabbaco, fruit and timber are shipped worldwide.

The two main Bulgarian Black Sea ports (Varna and Burgas) had developed in the post-war period due to extend relations with the former Soviet Union. There are also several smaller ports, among which Sozopol discharges dominantly a tourist function.

Varna (310,000 inhabit.) dates from the Antiquity. It is situated in a shallow water gulf, and its modern

development required a lot of management works (eg. the digging of a navigable canal to link the new Varna – West harbour with the Devina chemical works and with the Varna – Ilicevsk (Odessa) ferry-boat line terminal used for much of the commercial exchanges between Bulgaria and the USSR over 1978-1990. It is an important industrial centre (textiles and foodstuffs, shipbuilding and electromechanical items) and a tourist destination (Albena, Slachev, Briag and Balchik sea resorts).

Burgas (1994,000 inhabit.), formerly a fishing port, it developed its commercial function in the 20<sup>th</sup> century, serving southern Bulgaria (Varna remaining for the northern hinterland). Port activities have been growing as the town turned industrial: in 1963 they built a petrochemical combine works and on oil refinery (15 mill.t) served by a special port created in the southern part of the gulf. Its oil transport function will be extended as part of the Caucasian oil is scheduled to be shipped from Burgas to Alexandroupolis (Greece).

## 3. MARITIME LINES AND MAJOR FREIGHT TRAFFIC DIRECTIONS. NEW BLACK SEA GEOPOLICY

It the post-war period, Black Sea traffic was dominated by the interests of the Soviet Union, which possessed nearly 50% of the Pontic coast. Turkey, a NATO member since 1952, holding one-third of it, targeted its traffic to its Aegean and Mediterranean ports.

The Soviet Union used to participate in world trade largely through the Black Sea harbours, through Odessa in the main. It also had strong trading ties, with Bulgaria in particular; a sizeable cabotage traffic with the Black Sea ports of its own republics was also going on. The extension and equipment of its Pontic ports, as well as their modernisation focused preferentially on Odessa or the military naval bases. The ports located on the eastern, Caucasian, side (largely of local importance at the time) would grow into tourist towns and economic centres of some administrative political units of the Caucasus region.

The Black Sea traffic served basically the export and import of its riverain countries. The structure of transported goods was an accurate reflection of each country's import and export structure. Transit traffic from the Black Sea basin's limitrophe regions (Middle East, Central Asia) to Central and Western Europe held a small share in the activities of the respective ports.

Ever since the seventh decade, Romania has been trying to widen the geographical area of its external trade relations. The port of Constanta has become a

major maritime gateway for international traffic. By the end of the 1990s, port facilities allowed for a traffic of over 80 mill.t/year. At the same time a port at the Danube-Black Sea Canal, Constanta represented a transit point for remoter geographical regions, with richer complementary resources.

After 1990, the Black Sea countries have been experiencing radical changes which affected also the volume and structure of the Pontic traffic.

But for the Turkish ports, all the others have registered massive decreases in trading volumes, particularly those located on the west side of the sea, traffic volumes dropping sharply and suddenly within a span of several years. While the 1988-1989 Constanta harbour traffic turnover was 62 million tons, the steep decline in 1990 reduced it by half, a situation that continued for another three years.

After a first episode of decline caused by the confusion of transition, the port traffic of the former 'socialist' states recorded a timid comeback. The eastern and north-western ports appear to have fresh opportunities of development. For countries like Georgia and the Ukraine, which turned independent after 1991 when the Soviet Union fell apart, and even for Russia, these harbours have remained the principal, if not the only gateway to the word. They are striving hard to regain as much as possible of the role played in the Black Sea traffic during Soviet times.

After 1990, apart from a decrease in traffic volume and structure due to the economic difficulties of riverain countries in transition to the market economy, both the geographical area and the direction of shipments suffered radical changes. While cabotage traffic among the former Soviet ports decreased, the trade record of the eastern and southern ports registered increases. Profiting by the situation, Turkey's interest in the Black Sea ports was rekindled by a greater transit offer from the Middle East and the Persian Gulf area that combines land traffic up to Turkey's Pontic ports, with maritime transport on the Black Sea up to the European ports on the western and north--western side and farther on to Central and Western Europe. Bilateral agreements provide for a ferry-boat maritime line between Constanta and Samsun, but actual implementation depends on the two countries' goods offer. Besides, lots of taxes might diminish attractivity or make the projects uninteresting economically.

In a similar situation is the Constanta (Romania)-Poti line, which presents real advantages in connecting the Caucasian areas to the European Pontic zones.

Port capacity is another factor discriminating the Pontic ports. While Constanta and Odessa have it in excess, the Caucasian ports lack much of it, so they cannot increase port traffic volume or diversify its structure.

The new geopolitical situation seems to benefit the port of Novorossiysk, which is expected to become Russia's main Black Sea harbour and, in this way, compensate for losing other major ports to the Ukraine.

### 4. THE CASPIAN OIL TRANSIT

The present Pontic traffic should be judged also in the light of the recent interest shown by the EU countries for the Caspian Sea and Central Asia oil (Fig 3). Under the TRACECA programme, the Black Sea stands the chance of becoming part of the oil traffic route to the West-European markets. This implies either increasing tanker capacity, or the construction of underwater pipe lines, or both ways, concomitantly or successively. This is the case of Novorossiysk and of the Georgian ports of Poti and Batumi as future relay-ports in the oil transport from the Caspian Sea to the European Union. Increased tanker traffic has objective limitations, namely, the Straits are not sufficiently deep and wide and oil transport poses ecological risks. Therefore, no larger than 250,000 tdw carriers are accepted. Moreover, heavy traffic of all kinds of vessels also puts annual numerical transport restric-

Because of the great many accidents in the Straits with inherent ecological risk, tanker traffic through the Bosphorus ought to be seriously monitored.

The building of pipe lines under the Black Sea has both economic and ecological advantages. They are to be linked with pipe lines on land from remoter oil regions to supply consumers in Europe. If the new high-capacity pipe lines from Baku and Tenghiz to the Black Sea are commissioned in 1998-1999, then the capacity of oil tankers could be increased, too. Ultimately, an optimum solution is certain to be found and implemented.

Transiting the Caspian Sea oil might boost port activities and, in many cases, the oil processing industry as well, especially on the western coast, where big refineries are in place.

It is particularly the case of Constant port, which is both a gateway towards Europe and a terminal of two European transport priority corridors (IV and VII) of which VII represents Constanta-Rotterdam fluviatile waterway; at the same time, Constanta is the centre of oil industry, having huge oil refinery capacities.

The greater interest shown by Europe's big consumer market for the oil reserves found east of the Black Sea could mean not only the prospective integration of oil traffic into short-and medium-term development programmes (see TRACECA), but also the global integration of the Black Sea into the EU's medi-

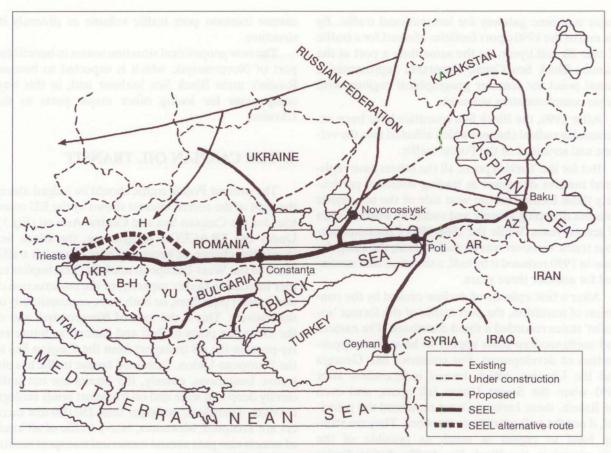


Figure 3 - Black Sea region. Oil transport routes

um- and long-term regional development programmes. In the course of centuries, Europe has been discovering the worth of the Black Sea. This time, one would expect that its interest be not momentous and limited to one aspect alone, but all-embracing, and materialised into an integrating programme. In the future, Pontus Euxinus could become a factor of cohesion and stability in a complex area plagued by turmoil.

# 5. COMPETITION AMONG THE BLACK SEA CITY-PORTS

Conversely, the complementary offer might trigger stronger co-operation. No longer under the umbrella of the 'socialist state', these ports, with the exception of Turkey, must make better use of their assets, and reduce disadvantages as much as possible. Setting up efficient port management is hampered largely by the difficulties inherent in the transition period, many of which are of an organisational or legislative nature.

There is tough competition when it comes to transiting liquid and solid goods to neighbouring regions or to zones adjoining the Pontic space proper, or among neighbouring ports, situated on the same coast. Inter-port complementarity is not merely a potential, but a *de facto* situation, sanctioned in bilateral or multilateral CEMN agreements at regional level. There are real opportunities for co-operation within the Black Sea basin, for each and everyone to have its share in the maritime transit traffic. In order to protect this traffic, each port could specialise in a certain type of transport for the SE – NE traffic coming from the Suez Canal.

At a global scale, the Pontic ports are competing with those of other seas. Major competitors are the Adriacit ports (Italian Trieste in the north, or others in its south). Competition might diversify the present traffic through Trieste, by adding other directions to the north or to the centre of Europe, associating it to fluvial transport on the Danube, in which case the Back Sea ports offer greater advantages. The competition of the Black Sea ports reflecting in their attractiveness for the flows of goods, investments and business, suffers changes in terms of conjectural factors, eg. political and regional development strategies. Let's take the case of Burgas in Bulgaria, competing with the other Bulgarian ports, with Varna in the first place as well as with Romanian ports, mainly Constanta. The successful development of Burgas after 1992 is largely connected with the decline of Varna which had flourished due to preferential relations with the former Soviet port of Odessa.

Taking a brief comparative look at the external and internal assets of Burgas and Constanta harbours (Bucur, 1996) reveals the following:

- location and links with the hinterland: Burgas lies closer to the Bosphorus, but Constanta has a direct strategic connection with the Danube-Rhine-Main Canal;
- port infrastructure: Constanta lists first;
- port facilities: Constanta's total capacity is of ca 85 mill t/year, not fully covered by the present traffic; the port will be enlarged with two more terminals (bitumen and LPG) operational at the end of 1998 and a containers terminal (investment negotiations phase).
- operational services: Burgas proves more attractive.

What is at stake in inter-port competition is the market. Some 1996 statistics put the traffic of solid and liquid bulk goods, general goods, oil, and container goods through the ports of Constanta and Burgas at a total of 42.2. mill. t and 18.8 mill. tons, respectively. Constanta ranks first with solid bulk goods, Burgas with fluid bulk goods. General goods: both ports stand on the same footing; oil traffic: 50% through Burgas and 21% through Constanta; containers: Constanta held a better position in 1996 compared to Burgas. In conclusion, in the competition between the two, Constanta is privileged both with regard to characteristics and market segments.

Constanta's upper hand in the Black Sea competition is due to:

- intermodal transport system: fluvial, road and rail, international airport. As the entrance to the Danube-Black Sea Canal lies in the southern part of the harbour, direct transhipment to barges is very much facilitated;
- vast hinterland, including the Black Sea Basin and the Danube River; being one of the Rhine-Maine--Danube Canal terminals it offers shorter direct access to Central Europe;
- all ships passing through the Suez Canal may dock here:
- best operative capacity in the region. Modern facilities for operating all types of goods; satisfactory sea depth at the wharf for all ships transiting the Suez Canal;
- Ro-Ro and ferry-boat connections, Ro-Ro and ferry-boat terminals are suitable for Black Sea cabotage and trade with the Middle East;
- strategic facilities; free-trade zone, ship-building and repair services.

The existing projects for further development, modernisation of port equipments, diversification of services and integration into Europe's logistic transport chains will give Constanta the chance of becoming the Eastern gateway of the Continent and the major Black Sea port.

# 6. ECONOMIC CO-OPERATION AT THE BLACK SEA (CEMN)

With the fall of communism the Black Sea opened to international trade, growing into a regional development zone. It is for the first time in its history that Pontus Euxinus has become a factor of unity, development and stability for a vast region stretching out at the contact of two continents. At Turkey's proposal, the birth certificate of the Black Sea Economic Co-operation zone was signed on June 25,1992 in Istanbul by eleven reverain and associate countries. The eleven founding members are Albania, Armenia, Azerbaijan, Bulgaria, Greece, the Republic of Moldova, Romania, Russia, Turkey and the Ukraine. Interested states may still join in. At present, Poland, Slovakia, Israel, Egypt and Tunisia act as observers.

The Black Sea zone covers 32 mill.sq.km, with a population of 340 million inhabitants, has important natural resources, and member-states have complimentary economies, at least partially. It is a space with good outlets to the Mediterranean, the Near and the Middle East, as well as to Asia.

This sub-regional co-operation grouping, based on economic ties among the riverian and non-riverain countries could be viewed as part of the new Continental architecture, playing a complementary role and paving the way for the Europe of tomorrow. At the same time, it ought to become a zone of political stability among regions that have a long-lasting history of conflicts.

The goal of the CEMN is to develop economic co-operation among zonal countries on multiple levels, but primarily in such areas as transports, telecommunications, public works, infrastructure, social protection, environmental protection, tourism, finances and banking, business contact etc. Some multilateral co-operation programmes are in various stages of implementation. After the dissolution of the Warsaw Pact and the CMEA Treaty this new form of co-operation, so far only economic, might develop into a free-trade zone, or why not, a 'common market' at the Black Sea. In the perspective of the TRACECA programme aimed at a greater opening of Transcaucasian and Central Asian states towards the EU, the CEMN acquires a new dimension.

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