

## ROMANIA – A FUTURE REGIONAL ENERGY HUB

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**Abstract:** The paper highlights Romania's geostrategic potential and advantages as transit state of the future "Nabucco" transport route of natural gas from the Caspian Basin and Central Asia to the Central and East-European countries still heavily dependent on Russian hydrocarbon supply. Apart from the geostrategic advantages conferred by its geographical position, Romania is the only state in Central and South-Eastern Europe that can meet its own oil-and-gas demand and besides can also export this resource. The country also has the biggest Black Sea harbour which is ever more important economically and geostrategically after becoming port of the new Euro-Asian hydrocarbon transport axes.

**Key-words:** energy hub, gas war, Nabucco, Constanța, Romania.

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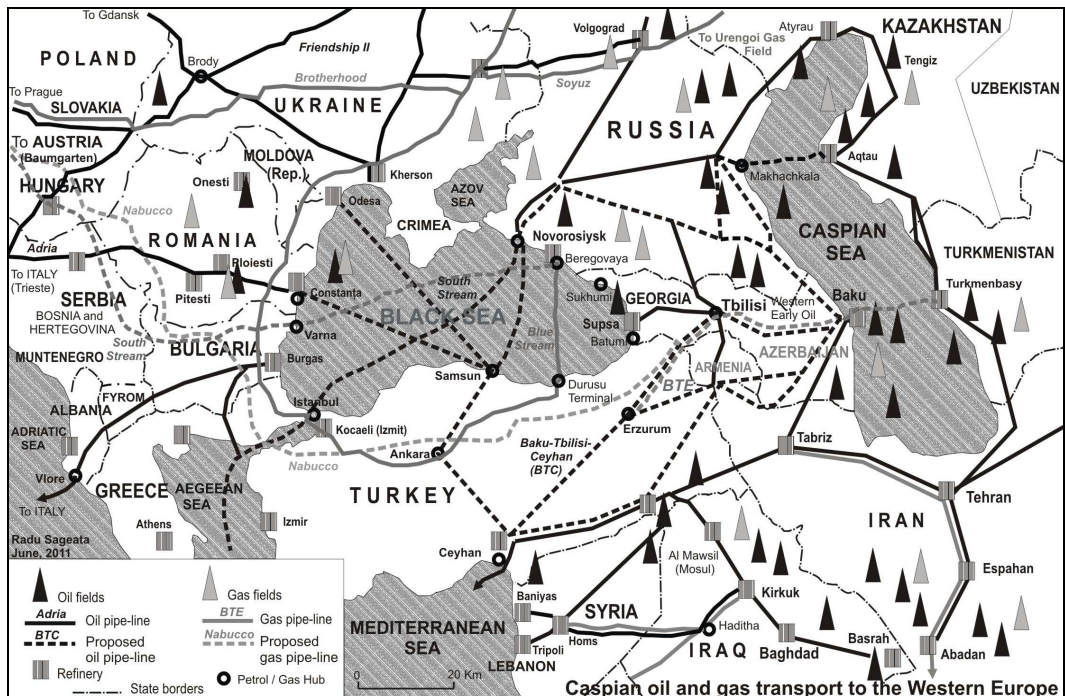
### BACKGROUND

The importance of the Transcontinental strategic line that links the EU to the oil-and-gas reserves of Central Asia which, after the dissolution of the COMECON economic co-operation system opened up to the West-European market, has been described by various syntagms. The stake is high (of the order of several million of barrels/day translating into billions of euros/year) and the fulfillment of this project would push the Caspian Basin into the position of world leader, surpassing the Middle East in the production and export of oil and gas. This geostrategic game has entailed very many state players hugely interested to benefit their economies. It is not only the producers and the direct users who are involved, but also the "intermediaries" – states like Romania (who wish to act as transit hydrocarbon route), as well as others like Russia, US, Turkey or even China, who do not contemplate being eliminated from the game.

### ROMANIA IN THE "NABUCCO" PROJECT

At present, oil-and-gas flows from the south of the Caspian Basin through three pipe-lines that start from the same point, namely Baku: one in the north, inaugurated in 1997 (5 million crude t/year) which reaches the Russian port of Novorossiisk (1,330 km), and another two through Turkey: one for oil (Baku-Tbilisi-Ceyhan) (1,768 km), operational since 2006, flowing some 1 million barrels/day and the other for gas (Baku-Tbilisi-Erzurum) (692 km), annual

transport capacity around 8 billion m<sup>3</sup>, predicted to reach 20 billion m<sup>3</sup> after being connected to the Transcaspian gas corridor scheduled to include, beside Azerbaijan, also other hydrocarbon-rich states, such as Turkmenistan and Kazakhstan. This gas pipe is to feed the European Project “Nabucco” planned to cross Romania and reduce EU dependence on Russian exports (Figure 1). The project would benefit Romania in many ways, first and foremost by increasing its revenues from the transit of hydrocarbons, and create new jobs that would revigorate some economic problem-areas (the faltering mining sector of the Jiu Valley and of Oltenia Coal Basin, or the Oltenia Plain agriculture) by employing the redundant workforce.



**Figure 1.** Caspian oil and gas transport to Western Europe

The “gas wars” of 2006 and early 2009 brought to the fore the strong dependence of the Central and East-European states on Russian energy resources. Designed and put in place during the COMECON era, the oil-and-gas transport and distribution system from this part of Europe still bears the mark of the policy-makers of the 1950-1960 decade who devised the then economic relations. The Nabucco line, financed by the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD), will run along 3,893 km between *Erzurum* (Turkey) and *Baumgarten an de March* (Austria). In these two points it is to be linked to the existing corridors and thus have it connected with extraction and consumption areas; 66.3% of its total length (2,581 km) is to cross Turkey, a EU candidate state, the other 33.7% will transit Bulgaria (412 km), Romania (469 km) and Hungary (384 km), the end point being Austria (47 km). After being commissioned in 2017, the Nabucco pipe-line is scheduled to carry annually 31 billion m<sup>3</sup> of gas, thus reducing considerably Europe’s energy dependence on Russia. The main question is

whether the necessary quantities of gas can be provided since current political negotiations speak only of some one-third of the pipe-line transport capacity. Apart from the Caspian Basin, alternative supply sources are Irak, Egypt and Lybia, possibly Iran, despite the Lybian conflict, or the political instability in Egypt and Syria and the foreseeable difficult political negotiations in the event of talks with Teheran.

In view of the importance attached to the Nabucco Project, Russia came up with a rival plan, the South Stream, of similar capacity, which is to skirt Romania, run south of the Danube and reach Hungary and Austria through Bulgaria and Serbia, two Pan-Slav and Pan-Orthodox countries, historically allied to Russia.

Here are Romania's main geostrategic assets with regard to the transport of Caspian hydrocarbons to Central and Western Europe:

- It is the largest country in the region, has political stability and lies at the crossing of the east-west and north-south economic and commercial corridors;

- It is part of three major Pan-European transport corridors: corridor 4 (Berlin-Prague-Bratislava-Győr-Budapest-Arad-Bucharest-Giurgiu-Sofia-Istanbul); corridor 7 (the Danube-Main-Rhine transcontinental navigable route which links the Black Sea with the North Sea); corridor 9 (Helsinki-Sankt Petersburg-Pskov-Vitebsk-Ljubasivka-Chişinău-Bucharest-Plovdiv). The Danube-Black Sea Canal (64.4 km) was commissioned in 1984 and four years later the Danube-Main-Rhine Canal (171 km) was opened to navigation linking the Black Sea Basin to the North Atlantic ports. Thus, the opening of a second navigable thoroughfare shortened the Near East (Port Said) to Rotterdam route from 11 days (through the Mediterranean and the Gibraltar, 3,375 miles, by skirting the Black Sea) to only 3 days and 8 hours (on the Dardanelles-Bosphorus-Danube-Main-Rhine route) (Ghenovici, 1993). Similarly, connecting the Danube-Black Sea Canal to Europe's inland network of canals reduced the distance between Rotterdam and Constanța from 6,000 km on the old maritime line to 3,000 km, again from 11 days to 3 days and 8 hours. In this way, the importance of the Danube (2,588 km) has considerably increased. Moreover, 34 of its 120 tributaries are accessible to Europe's river traffic. The geostrategic importance of the two canals as transport routes was confirmed at the Pan-European Transport Conference, Helsinki 1997, when the Danube-Black Sea Canal was put on the Transeuropean transport list and Corridor 7 (North Sea - Black Sea) was extended to Constanța. Behind that decision lay ecological considerations (the fragility of the Danube Delta natural ecosystem), the risks posed to navigation security by the Sulina Canal (the grounding of a vessel imposing sailing restrictions), geopolitical reasons (connected with Ukraine's intention to continue with the building of the Bystroe Canal in the North of the Danube Delta) and more recently the measures taken to contain the spread of bird flue (leading to traffic restrictions).

- The pipe-line is supposed to cross lowland regions, especially plain areas, which offer greater technical advantages than the variants naming Burgas as point of departure, to say nothing of the routes across Turkey, in which case the pipe-line is to be built at up to 2,000 m altitude;

- Romania's offer is not simply to transit crude-oil from the Caspian Sea, but also to process it, because it has a fairly well-developed pipe-line system both for the transport of crude oil (around 4,500 km) and of oil products (2,500

km). The system can easily be connected to the Central and West-European transport route with minimum investments.

- The Romanian port of Constanța is the largest and most active one at the Black Sea, having all the special terminals operational both for crude-oil (24 million t/year) and oil products (12 million t/year), as well as the respective reservoirs (1.7 billion m<sup>3</sup>). Ongoing works will turn this harbour into the second largest port in Europe (after Rotterdam). The port of Constanța is scheduled to have a liquid gas terminal (12 billion m<sup>3</sup>/year) as stipulated in the April 2010 Memorandum signed by Romania with Azerbaijan and Georgia, on the development of the Azerbaijan-Georgia-Romania Interconnection (AGRI) for the transport of liquid gas through Constanța port; the initial transport capacity is to be of 3 billion m<sup>3</sup>, prospectively increasing up to 12 billion m<sup>3</sup> in 2016;

- The construction of the Nabucco gas-pipe could bring orders for the local iron-and-steel industry (Galați, Târgoviște, Călărași and Reșița), given that Romania is still competitive in this sector, moreover, the transport of iron-and-steel semi-fabs from long distances is not cost-effective;

- Transport facilities: *railway* (the route of the future gas pipe will run almost parallel to the Bucharest-Timișoara train line); *waterway* (through the Danube Black Sea and Poarta Albă – Năvodari canals);

- The presence of major urban agglomerations close to the pipe-line route (Timișoara, Arad, Craiova, Caransebeș, Lugoj, etc.) means easy access to air traffic as well;

- The future bridge over the Danube between Calafat and Vidin;

Several other opportunities ensuing from the regional and international geopolitical framework:

- Partnership opportunities facilitated by the cross-border co-operation Euro-regions: Danube-Criș-Mureș-Tisa (DKMT), Middle Danube-Iron Gate, Danube 21, Giurgiu-Ruse and The Lower Danube; funds are obtainable from the EU regional development programme;

- The Pan-European vocation of Turkey, Azerbaijan and Georgia;

- The pipe-line crosses or runs close to some states deeply energy-dependent on Russia: Bulgaria – 100%, Slovakia – 98.3%, Greece – 72.3%, Hungary – 66.5%, Turkey – 66% and Austria – 62.9%;

- The Black Sea Economic Co-operation (BSEC) initiative, an institution of regional co-operation, brings together the Black Sea riparian states;

- The geostrategic goal of the former Central-Asian Soviet states (e.g. Turkestan) is to get rid of the Russian geopolitical influence through a rapprochement to the West and to Turkey (by virtue of geocultural affinities).

On the other hand, there are also weaknesses and constraints imposed by possible accidental hydrocarbon pollution with negative consequences for the environment as the pipe-line is to run in the proximity of protected natural areas (the Valea Cernei – Domogled Natural Park) which shelter many rare and endemic species; construction and exploitation works undertaken in the mountain region (Timiș-Cerna and Mureș corridors) are very costly, transport efficiency being affected by competitive projects (*Blue Stream* and *South Stream*); there are also political constraints imposed by certain conflictual situations existing in the proximity of the transit area (Kurdistan, South Osetia, Abkhazia and Kosovo), or of supply basins (Azerbaijan, Iran, Irak, Lybia, Syria, etc.).

In these conditions, new questions arise with regard to Romania's preparedness for the Third Millennium Project, and its prospective supporters in

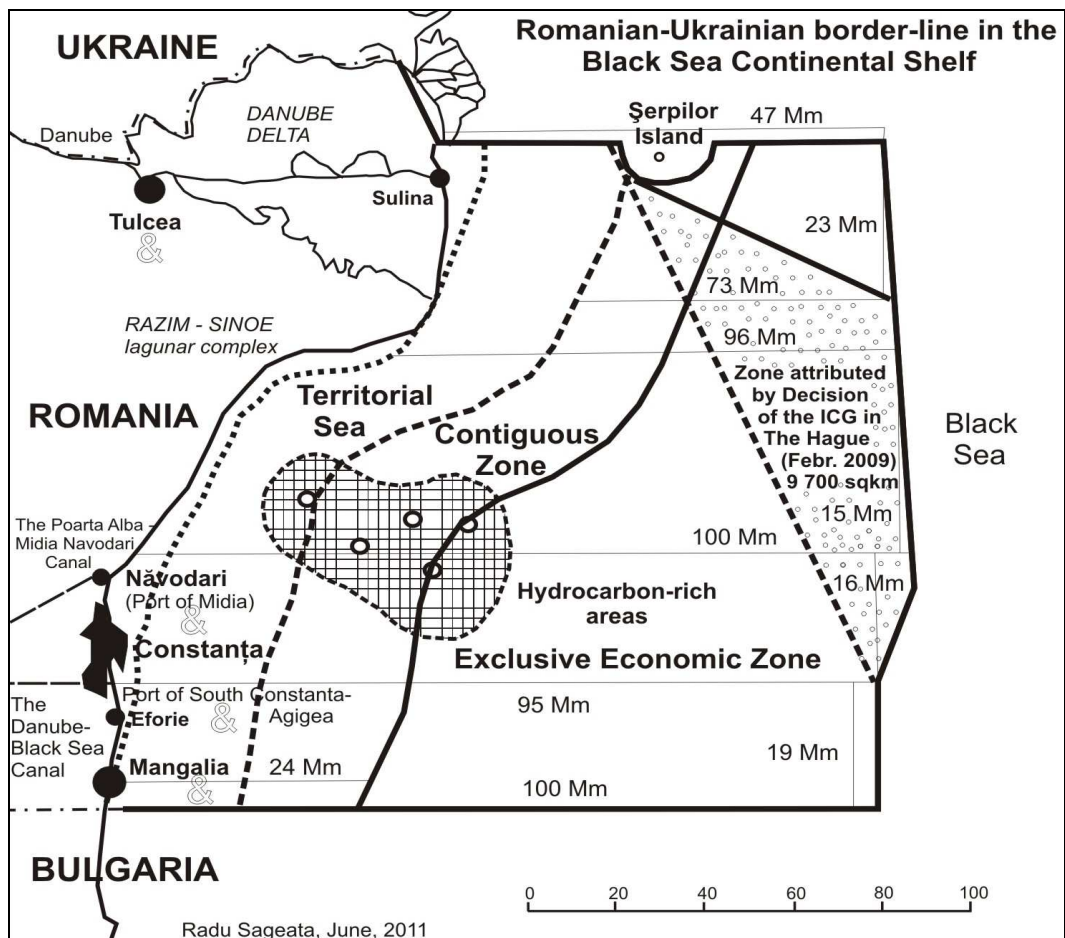
the bid. Russia supports the transport variants across Bulgaria, Serbia and Greece, largely because it has good traditional relations with these countries; on the other hand, the United States favours the transport corridors through Turkey, a NATO member-state and its main ally in the region (Neguț et al., 2004).

Romania’s hopes to be a successful bidder are pinned primarily on its geostrategic and economic assets, because the big companies likely to participate in this project are interested in maximising profits with minimum risks.

**THE HYDROCARBON RESOURCES ON THE ROMANIAN BLACK SEA CONTINENTAL SHELF**

Another asset is the contry’s hydrocarbon resources on the Black Sea Continental Shelf, it holding 79.3% (9,700 km<sup>2</sup>) of the total Shelf area disputed with Ukraine, an area attributed to Romania by Decision of the International Court of Justice in The Hague on February 3, 2009.

Estimated reserves are put at same 12 million tons of oil and 70 billion m<sup>3</sup> of gas (Figure 2). This could make Romania the first Central and East-European state capable to meet domestic consumption needs from own resources and act not only as transit country, but also as a hydrocarbon-exporting state.



**Figure 2.** The Romanian-Ukrainian border-line in the Black Sea Continental Shelf area

### THE PORT OF CONSTANȚA IN THE REGIONAL CONTEXT

As the main consumer of hydrocarbons, Europe has lately become interested in integrating oil transport routes into its short-and-medium-term development programmes and besides, to include the whole of the Black Sea region into medium-and-long-term programmes. Viewed within a global integrating perspective, the Black Sea might play a major role in the future cohesion and stability of a rather complex geopolitical area.

Ever since the seventh decade, Romania has endeavoured to enlarge the geopolitical area of its external trade exchanges, developing *Constanța* harbour as the main gateway of international maritime traffic. At the same time, also a port at the Danube - Black Sea Canal, *Constanța* can become a transit destination between remoter and economically complementary geographical regions.

The complex post-war works, especially those of 1964, extended the port area to the south, which eventually became three times larger than before, as did the length of its wharfs. In the years 1970-1980 extensions continued north and south along the coast with the building of two more harbours: *Midia-Năvodari* specialised in shipping crude-oil and oil products, and *Constanța Sud - Agigea*, the terminus of the Danube - Black Sea Canal. The former harbour, built exclusively for the homonymous refinery, is also a river port being connected (through the 26.6 km-long *Poarta Albă - Midia Năvodari Canal*) to the Danube - Black Sea Canal). It is also a point of convergence of the submarine oil pipe coming from the oil drillers on the Black Sea Continental Shelf.

These extension and modernisation works increased *Constanța* harbour's traffic capacity from 60 to 85 million tons / year, establishing it as the biggest Black Sea port and the fourth in Europe after Rotterdam, Antwerp and Marseille. Port installations and equipments cover 3,926 hectares, out of which 1,313 ha on land and 2,613 ha on water. The harbour is sheltered by two sea walls, situated north and south, which confer safety and optimal conditions for the development of port activities. At present, the north and the south sea walls are 8,344 m and 5,560 m long, respectively. *Constanța Port* has 156 berths, of which 140 are operational. The total length of the wharfs is 29.83 km, depths between 7 m and 19 m allow for oil tanks of 165,000 tdw and cargo ships of up to 220,000 tdw to anchor here.

*Constanța* dockyard has the capacity to build and repair ships of up to 200,000 tdw, and the free zone can discharge the whole range of specific activities. For all that, traffic is far below capacity, basically not even half its potential values being reached. The structure of goods is dominated by cereals (about ¼ of the total), crude-oil and oil products, iron ores and derived products, general commodities, non-ferrous ores, fossil fuels and chemical products.

The fundamental political mutations experienced by the Black Sea riparian countries after 1990 have led to radical changes in the volume and structure of maritime traffic in the area; with the exception of the Turkish ports, all the others and more especially those located on the western coast of the basin, were in some cases faced suddenly with massive of the traffic volume decreases. From 62 million tons passing through *Constanța* in 1988-1989, values dropped to 42.4, 28.4 and 26.8 million tons in 1990, 1991 and 1992, respectively, a slight increase being noted in 1995 (30 mill. tons/year). The financial-economic crisis affected also the traffic of goods in *Constanța* harbour, the 2009 volume being by 30% lower than the year before. Beside difficulties in volume and structure due to economic restructuring processes in the riverine countries, radical changes

also occurred in what concerns the geographical area and the direction of transported goods. So, traffic through the ex-Soviet harbours decreased in favour of the southern and eastern Black Sea ports.

The level at which the Black Sea port capacities are used at present is distinctively different. Some harbours (e.g. Constanța and Odessa) have excess capacities, others are in deficit (Caucasian ports).

In these conditions Constanța can become a competitive actor at the Black Sea: it has a complex transport system – sea, river, rail and air. Ship entry to the Danube-Black Sea Canal being placed in the south of the harbour, enables direct reshipping from sea vessels to barges; it has a vast hinterland which includes both the Black Sea and the Danube basins; it has the biggest and modernmost operation capacities in the region, receiving all types of vessels transiting the Suez Canal; it converges river and sea transport, and has important strategic facilities (shipyard and free-zone regime).

Works to upgrade port equipments, diversify services and integrate regional, European and global transport systems more efficiently are underway or scheduled to begin. As a result, Constanța will strengthen its position of Europe's eastern maritime gateway and principal Black Sea harbour.

## **CONCLUSIONS**

For all the efforts made by the Romanian side after 1989, the Black Sea has not regained its status of regional geopolitical power, although the dissolution of Soviet Russia kindled the hope of new prospects for international relations to develop in this strategic zone. Despite various international organisations being established nearly throughout the last two decades, Russian intervention, Ukrainian and Turkish interests and the lack of interest on the part of international alliances brought positive evolutions to a halt. As the oil crisis got momentum, a crisis actually triggered by Islamic revolutions, the Black Sea was found to have an exceptional geostrategic potential, so far not fully exploited. A shift in the economic-military policy of Western states opened up new vistas for a fresh approach to the Black Sea, an area lying at the crossroads of some vital axes (Pontic-Baltic, Pontic-Caspian, Caspian-Arab, Mediterranean-Arab and Balkan-Caspian) for international alliances, part and parcel of the geopolitical system of intra-continental European seas.

So, Romania's geographical position links it essentially to the Black Sea, which thus becomes the main gateway to Europe (through the ports of Constanța, Constanța Sud – Agigea and the Danube – Black Sea Canal, unfortunately still not exploited at its full strategic capacity) and the main Caspian-Pontic interface with the West. Situated in the central zone of the geopolitical system of intra-continental seas, Romania can become the "Eastern key" to NATO and EU relationships with Russia, Asia and the Arab states.

In this period of searches determined by the globalisation process, Romania possesses the necessary infrastructure to take over, store and transport energy resources, it being a real partner in the alliances it belongs to. A founder, together with Bulgaria, Georgia, Russia, Turkey and Ukraine, of the Black Sea Economic Community (BSEC), Romania has been actively involved in strengthening trade relations, public and telecommunication works and environmental protection (especially of the Danube Delta, tensioning its relations with Ukraine), stimulating cultural exchanges and granting political support to the Republic of Moldova, Ukraine, Georgia, Azerbaijan and Turkey on the world's stage.



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