The Sulina and Danube-Black Sea canals - Geopolitical vectors with role in Accessing the pan-European Danube transport corridor

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Abstract: Important links and segments of European corridor Number 7 Danube, the two canals (Sulina Canal and Danube-Black Sea Canal) fulfill the role of gates in Eastern Europe in Western European shipping traffic, West and South in Asia. The commissioning of the Danube-Black Sea canal in 1984, a century later after the official opening of the Sulina Canal, completed the Trans-Rhine-Danube Navigation system, has led to the total freight traffic growth on the Danube and at the transformation of port Constanţa from one the main important Romania's traffic center in one of the most important European naval center having economic relations with countries outside Europe. Financial and taxation policies applied by Romania have shaped the evolution of the transport development through these two gateways to Europe but have limited role these two canals to one purely commercial, rather than geopolitical one.

Keywords: Romanian gates, navigation canals, the pan-European Danube transport corridor, navigation system Danube-Main-Rhine, tariff policy.

1 Introduction

Since its commissioning in 1984, the Danube-Black Sea Canal widens scope Romanian transport geography, which register a shift of freight flows and travelers both nationally and internationally. Advantages of shipping traffic internally and externally terms on the Sulina Canal have not disappeared with the construction of Danube Black-Sea Canal. These two Romanian canals were never antithesis, have not competed or even in the smuggling of goods, where the Danube-Black Sea canal had a position more "delicate" than its counterpart Danube. Although the year 1988 marks a reversal situations, becoming a leader in terms of traffic Danube-Black Sea after 1992 until early 2009 there is a revival of all traffic on both canals,
supported by the Danube-Black Sea Canal which will know explosive growth especially in 2005.

2. Sulina Canal and the Danube-Black Sea Canal - geopolitical vectors in West European shipping traffic, West and South Asian

The fact is that both canals, the Sulina Canal and Danube-Black Sea Canal (Cernavodă - Constanța), became first after the completion of work and commissioning in 1992 of Main-Danube Canal (between Bamberg and Kelheim, also called the Canal Europe), conducted parts of the artery Rhine-Main-Danube, then the eastern part of pan-European corridor Transport 7 - the Danube (Fig.1), or the end of it thought in the flowing part of the river; using the Rhine-Main-Danube Canal between Galați and Rotterdam the distance was reduced from 6,500 km route 3,600 km at sea.

Although at first sight this transformation seems to have only economic valences, the real implications of the completion of this river crossing Europe routes from northwest to southeast are extremely complex, influencing if not directly, certainly indirectly, whether economic, social and political also but not in the last case, strategic European continent.

Although considered ineffective at first, the Danube - Black Sea Canal has captured the Europeans interest after the opening to traffic of Main-Danube Canal (from within Germany) sustained interest and Romania's accession to the EU. There are two extra-economic valences of the canal, valences that have been taken into account in the design and construction by the communist regime from Romania at that time: first is the strategic and military role of the canal, thought to be an obstacle against penetrations coming from Dobrudja to Romanian Plain, in case of a military attack (planned by former Soviet Union); and second element is related to the proximity to the nuclear power plant at Cernavodă.
In this last direction must not be forgotten the fact that the Danube provides energy and water needs and in the same time provide strategic transport and materials necessary for proper functioning of the plant, some of them enjoying a special status, that must obey special rules, rigorously checked of the authorized bodies in the field (Table 1). The importance of the Danube-Black Sea Canal is constantly emphasized by the Navigable Canals Administration Constanța (A.C.N.).

Table 1. Navigation sectors of the Danube
(Source: EUDET, cited: Baltălungă A. A., 2008)

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>DANUBE (km)</th>
<th>Length (km)</th>
<th>Number of dykes</th>
<th>Other aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelheim – Straubing</td>
<td>2414</td>
<td>90</td>
<td>4</td>
<td>canalised</td>
</tr>
<tr>
<td>Straubing – Vilshofen</td>
<td>2294</td>
<td>75</td>
<td>-</td>
<td>Suitable for small scale ships</td>
</tr>
<tr>
<td>Vilshofen – Melk</td>
<td>2249</td>
<td>211</td>
<td>8</td>
<td>canalised</td>
</tr>
<tr>
<td>Melk – Dürnstein</td>
<td>2038</td>
<td>30</td>
<td>-</td>
<td>Suitable for small scale ships</td>
</tr>
<tr>
<td>Dürnstein – Viena</td>
<td>2008</td>
<td>87</td>
<td>3</td>
<td>canalised</td>
</tr>
<tr>
<td>Viena – Ciumești</td>
<td>1921</td>
<td>68</td>
<td>-</td>
<td>Suitable for small scale ships</td>
</tr>
<tr>
<td>Ciumești – Pâlcovăcioț</td>
<td>1853</td>
<td>42</td>
<td>1</td>
<td>canalised</td>
</tr>
<tr>
<td>Pâlcovăcioț – București</td>
<td>1811</td>
<td>165</td>
<td>-</td>
<td>Suitable for small scale ships</td>
</tr>
<tr>
<td>București – Slănic</td>
<td>1646</td>
<td>413</td>
<td>-</td>
<td>Free navigation</td>
</tr>
<tr>
<td>Slănic – Portile de Fier II</td>
<td>1215</td>
<td>352</td>
<td>2</td>
<td>canalised</td>
</tr>
<tr>
<td>Portile de Fier II – Brațul Borcea</td>
<td>863</td>
<td>517</td>
<td>-</td>
<td>Free navigation</td>
</tr>
<tr>
<td>Brațul Borcea – Giurgiului</td>
<td>346</td>
<td>106</td>
<td>-</td>
<td>Free navigation</td>
</tr>
<tr>
<td>Giurgiului – Brăila</td>
<td>240</td>
<td>70</td>
<td>-</td>
<td>Free navigation</td>
</tr>
<tr>
<td>Brăila – Sulina</td>
<td>170</td>
<td>170</td>
<td>-</td>
<td>Seaside sector</td>
</tr>
<tr>
<td>Brațul Borcea – Cernăuți</td>
<td>346</td>
<td>97</td>
<td>-</td>
<td>Suitable for small scale ships</td>
</tr>
<tr>
<td>Cernăuți – Giurgiului</td>
<td>299</td>
<td>59</td>
<td>-</td>
<td>Free navigation</td>
</tr>
<tr>
<td>Giurgiului – Constanța</td>
<td>64</td>
<td>64</td>
<td>2</td>
<td>Canal suitable for navigation</td>
</tr>
<tr>
<td>Brațul Chilia – Marea Neagră</td>
<td>116</td>
<td>116</td>
<td>-</td>
<td>Free navigation</td>
</tr>
</tbody>
</table>

Fig. 2 - Traffic of goods on the Danube-Black Sea Canal in the period 1990-2009
(Data source: http://www.acn.ro/index.php?id=5)

The year 2005 was the best year for transit of passenger ships on waterways, with 125 transits of passenger ships, compared to only 80 in 2003. If the total traffic in 2006 was over 29 million tones capacity, of which 4 million tones as internal capacity less than in 2005, external traffic increased with 1 million tones capacity, reaching a 25% share of total traffic in 2006 (Fig. 3).

3. Pricing policy - coordinated in weakening or strengthening of the role of gates in the new context economic, geopolitical and geostrategic

Tariff policy practiced for these two canals that depend from the Romanian space is connected with the increased or decreased water traffic (so that one gets beat by other), and with the changing in the structure of the most routes of transport etc.

The status of Constanța port as a transit port requires the removal of some tariffs quite high on the Danube - Black Sea Canal and a low percentage (about 50%) of traffic capacity. The reason for this need is made public through media by the Administration of Navigable Canals: "Everything that is a shorter access route face another route [comparison the Sulina Canal] is beneficial. Who wants to hurry and save time because time is money, will choose the canal. If the Constanța port will be able to become a transit port then the canal traffic must become cheaper"\(^2\).

The official data published in the company report indicates that in 2005, compared with 2004 Danube-Black Sea Canal was more attractive, even for tourism companies through the tariff policy.

For example, 120 passenger ships had transiting the canal locks from the early 2005 until September 15 that year doubled, practically, the number of cruise vessels in 2004 that were destined for the port of Constanța.

Moreover, it appears that the policy regarding the level of customs duties is low on Sulina canal traffic, tariffs for low-capacity vessels are very large and therefore it is preferred the port of Constanța, this disadvantaging on the one hand the Sulina Canal traffic artery, and secondly moving the "bulk" shipping movements to the south, through Danube -

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\(^2\) http://www.acn.ro/index.php?id=5

**Fig. 4:** The navigation system North Sea – Rhine – Danube – Black Sea (Source: Baltălungă A. A. 2004)
Black Sea Canal. Perhaps because of this fact the policy on transit fare application navigable channels underwent radical changes in 2006.

Starting January 1st, 2006, traffic on Cernavodă-Constanța Canal is 50% cheaper, following the establishment of the Administration Navigable Canals (A.C.N.) Constanța. A package rescheduled.

In addition, carriers that use the Danube - Black Sea Canal to reach Constanța has more facilities. The prices are lower for those who go to first time on this channel. In addition, since they carry more, they will pay less. A clause was abolished coupling of ships passing through the two locks, the Cernavodă and Agigea, which reduced 20% of the charges.

Thus, if in early 2006, the canals charges were took by A.C.N. arbitrary, later the taxes were established by the capacity of the ship, tariff system introduced by groups of goods. In general, prices are lower than before now. The only group that can be said not following this rule is the increased rate of iron ore.

However, when Romania entered the European Union all the facilities that were granted convoys of barges had disappeared. Moreover, in 2007, when Romania became a member of EU, leadership of the Navigable Canals has set target on cargo shorts. It was proposed, for example, that each operator who will transit a quantity of 600,000 tons of grain can negotiate rates with the Administration of Navigable Canals. So, after rescheduling the transit charges the Danube-Black Sea Canal for greater tonnage, the channel transit is not taxed the same as it was in the past, making this route a more attractive choice, especially for heavy transport craft.

The disadvantage of choice Danube - Black Sea Canal is just the time spent on the Danube that at first right, an analysis of the Dutch "EcoRIS" showed that, in total, the expenses of maintenance of a vessel with a capacity of 6,000 tons amounts to 11.5 € per km map channel.

Although now, more than two decades after the opening of navigation on the Danube-Black Sea Canal, it only works half the capacity that was designed for and built, this channel has a strengthened role of shipping traffic doors inland from the Black Sea and vice versa. In this regard it should be noted that carriage of goods by water, in general, is five times cheaper than by rail or road. Not to mention the volume transported. For example, which can carry a convoy of six barges can go ashore with the help of 36 train sets. But as we can see due to pricing policy and beyond, the Danube-Black Sea Canal is the main entry-exit gate river of South Europe, supplemented by other, the Canal Sulina, obvious elements of advantage in favor of the Romanian geopolitical presence in this part of the continent.

4. CONCLUSIONS

So far, the two canals of the Romanian space - Sulina Canal and Danube-Black Sea Canal – are keeping the role of the gates from inland water traffic to Black Sea Canal and back, connecting the European inland waterway network with other systems extra-European waterway. If the target price policy on cargo shorts will not take into account that traffic on the Danube-Black Sea Canal is supported by the steel mill Galați (Mittal Steel) by the volume of iron ore and Navigable Canals Administration (A.C.N.) Constanța will not fix a good price, freight traffic will decrease, Mittal Steel will focus in the future, perhaps to another waterway excepting the two gates, one still using the Danube, but in Ukraine.

Viewed from this perspective, abolishing the charges -part of the policy of development and optimally utilization of the two channels (mainly the Danube - Black Sea Canal)- appears to be subject to financial and economic developments in Romania. In fact, due to the current crisis passing through our country, the problem of the two canals must be seen in the perspective and multiple viewpoints. We must not forget that the presence of American military bases from Dobrudja may have an influence on this region which includes the two canals. In other way, not only economic valence of the two channels but also their strategic role as part of the Romanian infrastructure component complicates any future decision on the optimization use and development of the two canals, especially the one located in the southern Dobrudja.

In the same time, movements in the area made by Ukraine in the last two or three years can pull an alarm signal on future developments in the area. This strategic advantage that Romania still has it must be maintained for future decades.

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