

TERRITORIALITY AND COHESION – THE RELEVANCE OF TRANSPORT ON THE DEVELOPMENT STRATEGIES OF DANUBE AND BLACK SEA MACRO-REGIONS**FRUNZĂ, Ramona^{*},
ALUPULUI, Ciprian****Abstract**

The objective of this paper is to analyze the macro-region as a new form of territorial cooperation at EU level under discussion on the future of cohesion policy. The study describes the main actions regarding the development strategies of Danube and Black Sea macro-regions, based on an empirical analysis about the importance of the territorial positioning and its effects on transport costs. The results of our research highlighted that a macro-region can become viable, effectively functioning, only through the involvement of the empowered authorities in an active and responsible manner.

JEL codes: R1 (General Regional Economics), R58 (Regional Development Planning and Policy), O18 (Regional, Urban, and Rural Analyses; Transportation).

Keywords: Danube and Black Sea macro-regions, territorial governance, cohesion, transport.

1. Conceptual determinations

Macro-region can be defined differently depending on economic and political context to which this notion applies. It is generally accepted that a macro-region is the region with common problems in a well-defined territory and forms the basis for economic and political cooperation (Breslin et. al, 2002). Grouping countries and regions in a macro-regional bloc is a commonly used strategy to increase economic and political power within an institutional framework in the context of globalization (ASEAN, NAFTA, and EU).

At EU level, macro-regional approach is based on a new operational strategy on regional cooperation, starting from the premise that the new scale of action will open the possibility for authorities to meet the current challenges in order to achieve better transport infrastructure, safer energy sources, a more balanced economic development and a greater cooperation with neighbouring countries. In this way macro-region is defined as an area including territory from a number of different countries or regions associated with one or more common features or challenges (EC, 2009).

A key element of the functionality of a macro-region is the ability to solve even the inequalities that arise between participating actors, because the formation of a macro-region may create disparities between Member States. The success of this process can be determined by integration of economic and non-economic organizations developed in regional projects, which will lead to economic and political legitimacy, and to a better

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integration (López and Ramos, 2009). The future of macro-regional strategies remains uncertain. It certainly does not appear that the European Commission wishes to use these strategies as a model to be reproduced across the European territory, since it makes a distinction between macro-regional areas (the specific challenges can only be addressed by national and regional authorities, in which the added value of Community intervention is high) and groups of regions that wish to cooperate on a common integrated strategy, which – although the existence of any specific challenge is less evident – may enable the area to enhance its global competitiveness¹.

Normally, Member States define their development areas and may use structural funds for the development of each region, according to the needs. The management of these funds will be made practical by and within a Member State. There have been identified, however, several macro-regions in the EU, comprising several regions virtually, from different countries but which have the same needs and development projects of common interest, whose development would be achieved if there would be a better coordination between existing tools and programs in every country and region by region. Therefore, the Lisbon Treaty contains stipulations on territorial cooperation, which are the legal basis for developing the strategies and projects at the macro-region level. Obviously, all these projects should contribute to economic development and social cohesion in that macro-region.

2. The importance of the development strategies of Danube and Black Sea macro-regions

The economic crisis, the climate changes, the energy or demographic deficit problem are current issues that Europe is facing and which cannot be solved by individual actions limited by administrative boundaries. This situation requires a policy based on cooperation that can diminish the negative impact of these obstacles by reducing the economic disparities from national and regional level (Arguelles et al., 2011). In this context, the EU is looking for new models of territorial cooperation that may lead to new opportunities for economic development. Redefining cohesion policy by including regional perspective as a third component, with the economic and social development, has led to assertion of the macro-region as a new model of inter-regional and transnational cooperation design. Thus macro-regions became an important element for the removal of economic disparities, and border effects (administrative, economic, and cultural) by drawing a framework for development outside of the national frontiers.

In Europe the focus stays on making efforts to overcome the regional gaps, and the natural and peripheral position. Achievement of territorial cohesion can determine a better maximization of the benefits of all regions for a more competitive European space, as in Europe 2020 Strategy is stipulated. Territorial cohesion requires closer cooperation between EU Member States and regions (e.g. cross-border, transnational and interregional) but also a strengthening of ties between regional and community policies (environment, transport policy, rural area). Territorial cohesion is thus a solution to the problems identified at regional level, whether the degree of development (the isolated one

¹ Some elements regarding the analysis on the development of macro-regional strategies, in Technical paper from the CPMR (Conference of Peripheral Maritime Regions of Europe), General Secretariat, 2009, <http://cpmr.org/>.

or those from the Eastern borders of the EU) or major urban centers facing disadvantaged peripheral areas (EC, 2008). The recent move of the gravity centre in the territorial level of the competitive development policy is justified by identifying several socio-economic and cultural characteristics in certain areas of housing which amplify or attenuate the cumulative benefits of economic activity (Cojanu et al., 2009, p.5). Achievement of territorial cohesion requires the establishment of a proper horizontal coordination between different sectorial policies at EU and national level, and vertical coordination between different institutions from European to local level. In this respect, the territorial governance principle should lead to greater involvement of actors at regional and local level.

A first model of economic cooperation on macro-regional level was implemented in the Baltic Sea region. The development strategy, based on the hypothesis that macro-region, as new EU action scale, may allow to the authorities to act more effectively to solve problems such as those related to economic development of disadvantaged areas, environmental protection and transport accessibility. Following the positive results of Baltic Sea Strategy, the EU wants to adopt a new strategy for the Danube space containing specific modes of action in the context of the increasing importance of the role of regions and cities in planning and implementation. The strategy highlights that the future macro-region is closely related to planning future development of transport infrastructure, of strategies for inter-and intra-regional economic cooperation (Smets, 2008; Busek and Gjoreska, 2010). For the future, EU Member States requested to the European Commission to develop a comprehensive strategy similar to the Baltic Sea for the Black Sea Basin. Strategies for the Baltic Sea and Danube Basin are an opportunity for testing the functioning of macro-regions. If these models are functional there can be further established, at the EU level, action plans for other European regions and, eventually, concrete actions can be defined in the cross-border cooperation field.

3. New macro-regions in European Union

3.1. First European macro-regional model - The Baltic Sea Strategy

The Baltic Sea Macro-region is important because it involves eight Member States around the Baltic Sea, the Russian Federation and Norway, the Regional and Local Authorities, the Inter-Governmental Bodies, NGOs and representatives from the private sector. It has a population of over 96 million, and accounts for over 20% of the European Union population. The Strategy of The Baltic Sea Region (EC, 2009) which includes 15 priorities and more than 80 planned actions, leaded, on European level, to a great interest in the macro-region concept, but at the same time the question was raised if this type of action is making the beginning of a new process of EU mega-regionalization (Assembly of European Regions, 2009). Strategy for the Baltic Sea has become important in the context of recognizing the deficiencies in the environment, economic development and infrastructure area, deficiencies which are linked and interdependent. This so-called macro-region strategy for the Baltic Sea was adopted by the Commission and European Council in 2009.

The purpose stated by the Baltic Sea strategy is build around four main pillars (environment; safety and security; prosperity; accessibility and attractiveness) which

intend to transform this area into a prosperous region. Such objectives does not involve the allocation of other funding sources, legislation or establishment of new institutions, but can lead to a better co-ordination of resources, coherent implementation of regulations and laws and minimal structures making use of those that exist. The Action Plan proposing to improve internal and external links in shipping, road and rail under the Baltic Sea region requires urgent comprehensive network of road infrastructure (corridors between Helsinki and Vienna / Slovenia). Within the strategy there are also concerns regarding the emphasis on science, technology, research and innovation. The project also faces challenges related to the potential added value, governance structure, and cohesion of EU and external effectiveness of the strategy.

3.2. The Danube River Strategy

At the European level, it is considered that the importance of the Danube Basin for the EU cannot be underestimated. The Danube needs a specific strategy comparable to the developing strategy for the Baltic Sea Region. Should be emphasized that between the two large projects (Baltic Sea and Danube River) can be identified a number of differences, the Baltic region being more advantageous because it is a more compact geographical standpoint, is composed of several Member States with a longer history of cooperation. However, the Danube region is considered an important development area for the future of Europe because of the joining force between ten countries, and the major axis for political, economic and cultural cooperation. To reach its full economic, social, environmental and cultural potential, the Danube area should be viewed as a single European transnational area of development (Committee of the Regions, 2009).

Cooperation in the Danube region already has a long tradition. One of the first European institutions, Danube Commission, was founded in 1856, aiming to ensure free navigation on the Danube. Currently there are over 1,000 projects and programs of bilateral or multilateral cooperation in the Danube region and the existence of an integrated strategy in the Delta region can meet all these programs and projects of cooperation and can, by coagulating all national efforts, to ensure implementation of strategic projects for Danube region's development. The four main policy priorities and policy development likely to be at the core of the Danube strategy: economic development, transport, tourism and environment protection (ecosystems). These priorities materialize in major cross-border or transnational projects such as Datourway².

Shortly, the Danube Strategy was initiated by Austria and Romania in 2008 in order to promote cooperation between states parties of the basin through joint infrastructure projects and hence economic exchanges. These will lead to: the improvement of the transport and the access areas of Danube macro-region; the extension of economic and cultural cooperation within the macro-region; common policies on intermodal transport in order to comply with environmental standards and the establishment and functioning of a common energy market in the Danube macro-region.

² Datourway project stretches from 2009 - 2012 and gathers 16 partners from seven countries (Bulgaria, Croatia, Italy, Romania, Serbia, Slovakia and Hungary). Datourway project focuses on supporting projects aimed at poor rural areas and aims to improve quality of life in the Danube settlements, environment, exploitation of tourism potential and infrastructure development. For details please consult www.datourway.eu.

In the Europe 2000+ report, drawn up by the European Commission, the Danube space has been identified as one of the ten transnational regions that could form new elements propitious to development cooperation. From this perspective, the Danube space presents a major interest because it links the economic centre of the EU and Black Sea. Regarding the location, the Danube Basin can be divided into two areas: the core and peripheral zone. The core consists of those states with a significant area covered by the river and for which the Danube is an economic, political or cultural key criteria. At present, the countries mainly concerned will be those covered by the Danube cooperation process: Germany (Baden-Württemberg and Bavaria), Austria, Slovakia, the Czech Republic, Hungary, Slovenia, Croatia, Serbia, Bosnia and Herzegovina, Montenegro, Romania, Bulgaria, the Republic of Moldova and Ukraine (the regions along the Danube). Eight are Member States of the EU and six are not.

3.3. Looking for a macro-region in Black Sea area

With the accession of Bulgaria and Romania to the EU in 2007, the Black Sea became “European” as much as the Mediterranean or the Baltic Sea, for this area being more than necessary concerted policies in transport and sustainable development fields. Black Sea represents a distinct geographical area, rich in natural resources and occupies a strategic position at the crossroads of Europe with Central Asia and the Middle East, an expanding market with high growth potential, and it is an excellent base for energy and transport flows. European Commission launched a cooperation initiative for the Black Sea called Black Sea Synergy (EC, 2007) in the nine countries in the region³. Initiative by the Commission argues that with the accession of Bulgaria and Romania, the Black Sea became part of EU. This regional cooperation strategy is part of overall EU policy in the region, which includes pre-accession negotiations with Turkey, the EU Neighbourhood and Strategic Partnership with Russia. One of the most important objectives of the strategy is the EU’s energy security and supply new transport of Caspian gas and oil through the Black Sea projects, in particular by creating a new energy corridor INOGATE (Interstate Oil and Gas To Europe pipelines). Another important program, The TRANsport Corridor Europe Caucasus Central Asia (TRACECA) provides technical assistance covering road, rail, aviation and maritime transport connections from Central Asia to Europe. It was originally a Community program but since 1999 it is regulated by a multilateral agreement with intergovernmental structures.

However, until now there is no official position of the European institutions regarding the possibility of initiating a macro-regional strategy for the Black Sea similar to Baltic Sea Strategy model. We believe that such an approach would be necessary in the light of Danube macro-region’s favourable evolution, because the two regions are closely related to both economic and environmental viewpoint. The main factor which can stop a future strategy in this area consists of small number of EU countries which have not yet been able to impose important projects. The issue will become topical in terms of Turkey’s accession to the European Union.

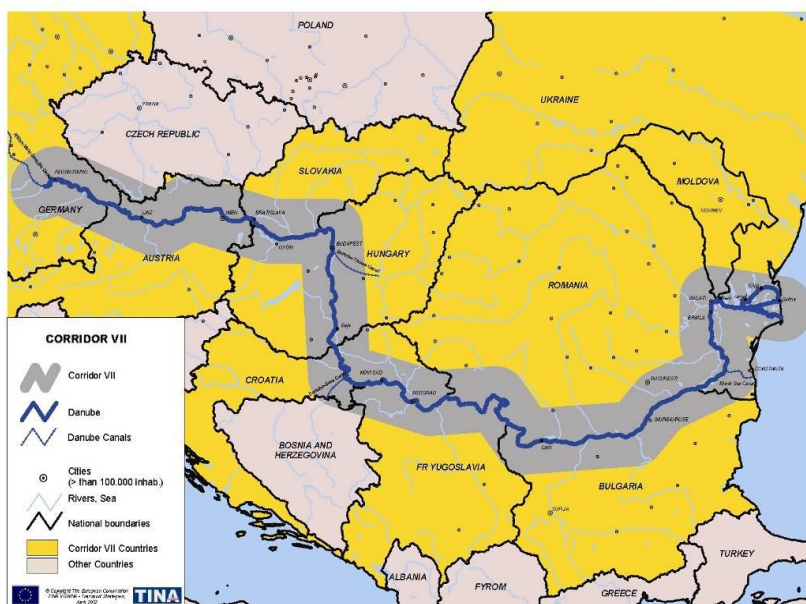
³ Romania, Bulgaria, Greece, Russia, Turkey, Ukraine, Georgia, Armenia, Azerbaijan and Republic of Moldova.

4. The Danube – European Transport Corridor (from Black Sea to the North Sea)

One central concern of the European Danube Strategy has to be the future oriented development of the European river, rail and highway transport networks. Greater safety traffic and improved transport connections make the region more easily accessible and consequently more attractive for inhabitants, tourism and business. Any future oriented transport development policy will need to ensure that the various transport carriers are interlinked (intermodality). The different carriers also need to be optimized with regard to the purpose they are meant to fulfill, instead of preference being given to just one carrier (co-modality). This will make it necessary to facilitate the transfer of traffic to the railways and waterways by developing innovative concepts and means of transport, by eliminating the blockings on the Danube in an environmentally sound way and by developing the terminal and port structure. This will also make it possible to relocate enterprises directly on the Danube waterway (European Danube Strategy Bavarian Positions, 2009).

The Danube River is the second largest river in Europe⁴ and its basin has about 1 million square kilometers area. In 2009, the population of the transnational Danube region was of 19.6 one million inhabitants. Being navigable on 87.1% (2,488 km) of its course, the main qualifications of the Danube, in relation to the General Scheme - Transport and Technical Infrastructure, has: the main inland waterway of International Importance E-80, the Pan-European Transport Corridor VII and the TEN-T Priority Axes No 18 (Rhine / Meuse-Main-Danube inland waterway axis) (Popescu, 2008, p. 7-14).

Figure 1. The Pan-European Transport Corridor VII



Source: www.corridor7.org

⁴ Flows across 10 countries and its own basin is the world's most international river basin as it includes territories of 19 countries.

The 2004 and 2007 enlargements have transformed the Danube into a genuine space of European Union, becoming a “Trans-European corridor” and represent a priority axis for inland waterway traffic across the Union. For example, the “Rhine-Danube” corridor may provide a direct link between the North Sea and the Black Sea. Thus, shipping and multi-modality is made possible from the Black Sea to the North Sea, from Constanța to Rotterdam - an impressive 3.000 kilometers, of which the Danube stretch is 2.400 kilometers. It is estimated that 5 billion tone-kilometers of freight could be transferred from roads to waterways by increasing the Black Sea-North Sea axis capacity by 30%. This will also contribute to the reduction in gas emissions. For transport in the region would be necessary to eliminate blockings from the Rhine / Meuse-Main-Danube axis, taking into account that internal navigation fell, mainly because of the serious economic recession. One other important aspect would be to develop TEN Trans-European Network to increase connectivity with the Black Sea via road and rail routes (corridors of goods transportation and fast - track railway). Modernization of ports, unification of navigation systems from the Danube, eliminating the blockings from the Rhine / Meuse-Main-Danube axis to improve navigation conditions, providing intermodality in the region and the increased connectivity with the Black Sea through road and rail ways - rail freight corridors and high speed trains - are just some of the development priorities of the region’s transport. All infrastructure projects in transport and energy must be accompanied by strategic assessments and environmental impact, including impact assessments of the entire ecosystem of the river, requiring a comprehensive plan for conservation and restoration of natural populations of sturgeons in the Danube. Regarding the reduction of water pollution, it is necessary the installation of hydrological and water quality control stations.

5. Data and research methodology

To analyze the importance of the territorial positioning in the Danube Basin and which are its effects on transport costs per GDP unit in these area countries, we consider as dependent variable GDP achieved per 1000 t fuel consumed for transportation. Independent variable is coverage in Danube River Basin - DRB (km²). The statistical data in Annex 1 were collected from sources as Eurostat, International Commission for the Protection of the Danube River and DG Regio. The analysis was realized for the year 2009. The results have been strengthened by the analysis carried out using SPSS program. Thus, we have obtained:

Table 1: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.611	.597	.421	15444.767

The independent variable is Coverage (km²).

Source: own calculations based on Eurostat and DG Regio data

The value of R from Table 1 shows if there is a correlation between the independent and dependent variable taken into account. The coefficient determined by R² has values between 0 and 1. If R² is equal to 1, then the regression model perfectly explains the

relationship between variables. In our case it was obtained a value $R^2 = 0.597$, which means that 59,70% of variation variable GDP per 1000 t fuel consumed for transportation is explained by the variable coverage in DRB (km²). Considering the diversity of countries analyzed, we consider the correlation relevant. To see which the relation between the two variables is, we used the correlation analysis (table 2). Values of Pearson index (0.511), Kendall (0.575) and Spearman (0.589) express the same relatively strong connection between variables (if the value is 1, between the considered variables is a perfect connection).

Table 2: The index of correlations

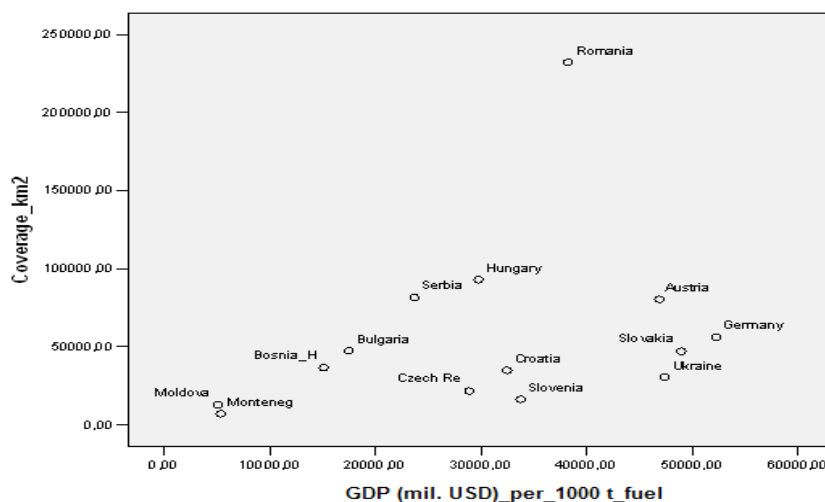
	Coverage_ km ²	GDP_per_1000t_fuel in mill. USD
Pearson coef.	1.000	.511
Kendall's tau_b coef.	1.000	.575
Spearman's rho coef.	1.000	.589
	Sig. (2-tailed)	.002
N	14	14

Source: own calculations based on Eurostat and DG Regio data, 2010

To highlight the discrepancies that exist between the variables considered, we used principal components analysis (figure 1).

Analyzing the differences on the countries between considered variables, we note that Romania distances from other countries because it has the largest area in the Danube basin (232.193 km²) (See Annex 2).

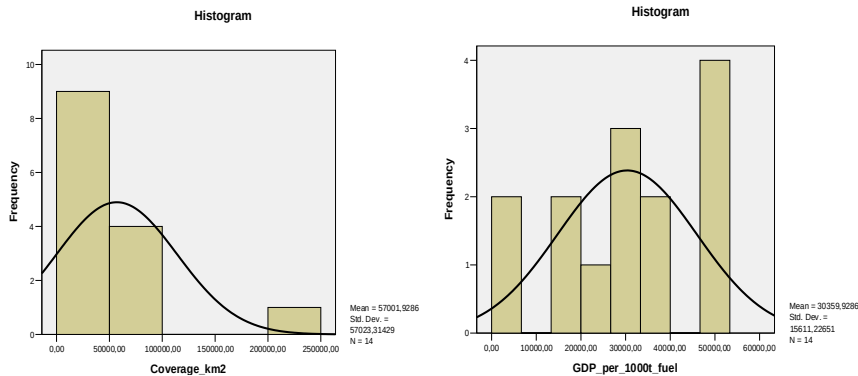
To more *GDP per 1000 t fuel consumed for transportation (million of USD)* is higher, the distance from the point of origin is more pronounced (Germany, Austria etc.). Instead, the countries that have low values on this indicator, we find that are concentrated to the point of origin (Montenegro, Republic of Moldova etc.).

Figure 1: The relationship between coverage (Km²) and GDP per 1000 t fuel

Source: own representation based on Eurostat and DG Regio data, 2010

Analyzing the differences on the countries between considered variables, we note that Romania distances from other countries because it has the largest area in the Danube Basin (232.193 km²).With concern to the histograms (figure 2) we observe that most countries fall in terms of indicator coverage in DRB in limit of 50.000 km², the only country that exceeds threshold 200.000 km² being Romania. Concerning GDP per 1000 t fuel consumed for transportation variable, the highest concentration is in the interval 20.000-40.000 million of USD.

Figure 2: The histograms



Source: own representation based on Eurostat and DG Regio data, 2010

An interesting aspect that emerged from our analysis refers to the clusters that are formed: first cluster consists of Bulgaria, Slovakia, Bosnia-Herzegovina, Croatia, Ukraine, Republic of Moldova, Slovenia, Montenegro, Czech Republic; the second cluster meet Austria, Serbia and Hungary; the third cluster consists of Germany and the fourth, Romania (table 3).

Table 3: Cluster Membership

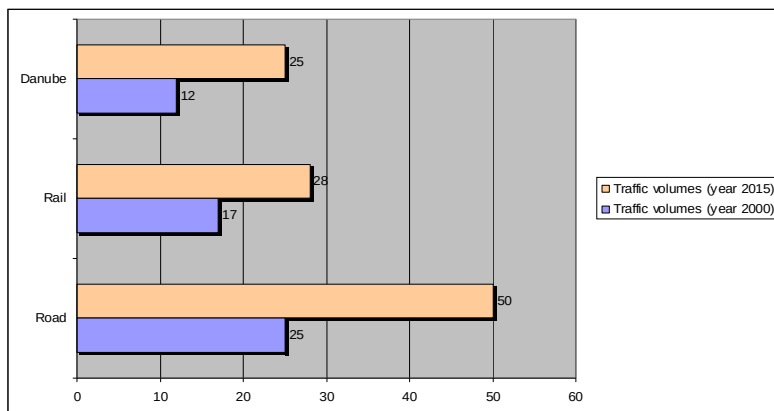
Case	4 Clusters	3 Clusters	2 Clusters
1:Austria	1	1	1
2:Bosnia_Hertzegovina	2	1	1
3:Bulgaria	2	1	1
4:Croatia	2	1	1
5:Czech Republic	2	1	1
6:Germany	3	2	1
7:Hungary	1	1	1
8:Montenegro	2	1	1
9: Republic of Moldova	2	1	1
10:Romania	4	3	2
11:Serbia	1	1	1
12:Slovakia	2	1	1
13:Slovenia	2	1	1
14:Ukraine	2	1	1

Source: own calculations based on Eurostat and DG Regio data, 2010

Also, the proximity matrix (distances between variables) shows that the maximum distance/discrepancy regarding the analyzed variables is between Romania and Montenegro (50689497800.000 points) (See Annex 2).

Considering these results, we may conclude that the openness of the mentioned countries is relevant for the fuel consumption per GDP unit. That is a reason why we consider that transportation on Danube should receive more attention in the coming years.

Figure 3: Traffic forecast for the Danube corridor (2015): Impacts of measures to support Danube navigation (in million tons).



Source: ÖIR, ALSO DANUBE Forecast, 2010

For the future, it is estimated, as in figure 3, that the Danube has enough free capacities to increase the volume of transport from 12 million tons in 2000 to about 25 million tons by the year 2015, which is another argument for our consideration.

The statistics above emphasize that freight transport volumes on the Danube are low not only in comparison with those along the Rhine, but also with other western European waterways such as the Neckar and Mosel. This can mainly be explained by the disparity of the economic conditions in the catchment areas, the insufficient waterway depths in some sections, and the limited integration of Danube navigation in intermodal transport chains. That is why, we consider that a further challenge is the integration of Danube navigation into intermodal transport chains. By improving the framework conditions for Danube navigation and achieving the potential shift of freight traffic to the Danube, it would be feasible to optimize the investments required for the road and rail infrastructure. The reduction in truck traffic on motorways would also improve transportation safety. Developing Danube navigation requires the close cooperation of public bodies and private sector. Protective measures for sensitive areas must also be taken into account.

6. Conclusions

Although the project is on exploratory and negotiation stage between regional, national and European policy makers, the Danube macro-region has a visible economic and social potential for development of riverside regions.

Danube as “the enlargement River” (6 of the 8 riparian countries became Member States after 2004), may determine a clear policy of the EU in this regard to provide development opportunities to encourage economic exchanges in the border areas (East and South). Starting such a project at the macro-regional level, relatively new in the history of European regional cooperation, can encounter a number of problems. They appear on the background of the difficulties of defining and delimiting the action area, the actors involved, for the administration of such areas or of arising benefits. More, the future funding schemes under the cohesion policy would be difficult to implement because it has established an optimal level of enforcement and administration.

Large sizes of the area, together with the social and political heterogeneity are unlikely to determine in the near future, a creation of an administrative macro-regional body, but only one in an advisory role. Under those conditions it will be difficult to implement all the projects and the economic development strategies. Another factor that may affect the functionality of the project is the inclusion in the Strategy of non-EU Member States (Ukraine, Serbia, Republic of Moldova, Albania etc.) with irregular fiscal and economic policies that can become an important element in the EU enlargement (Croatia, FYR Macedonia). Even if the European Union is in favour of the neighbourhood policy that includes economic agreements with neighbouring countries, politically, Ukraine and particularly Serbia are difficult to be included in a medium or short term strategy because of the domestic political context of these countries.

All this may lead that Danube macro-regional strategy to remain at the design stage; the only possible way will be the existence of a formal framework for cooperation in favour of individual economic relations at neighbouring countries (cross-border cooperation). In this way, the only element that does have a future is the development of transport infrastructure project on the Danube in order to facilitate the movement from North to South-Eastern of Europe (Baltic Sea - Black Sea).

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Annex 1

Country	GDP (million of USD)	Coverage in DRB (km²)	Transport fuel consumption in 1000 t	Col.5 = Col. 2/Col. 4	Percenta ge of DRB (%)	Percenta ge of DRB in country (%)	Populati on in DRB (Mio.)
Austria	374.400	80.423	7994	46.835	10.0	96.1	7.7
Bosnia- Herzegovina	16.960	36.636	1122	15.115	4.6	74.9	2.9
Bulgaria	44.780	47.413	2560	17.492	5.9	43.0	3.5
Croatia	61.720	34.965	1902	32.450	4.4	62.5	3.1
Czech Republic	189.700	21.688	6569	28.878	2.9	27.5	2.8
Germany	3.235.0 00	56.184	61958	52.212	7.0	16.8	9.4
Hungary	124.200	93.030	4175	29.748	11.6	100.0	10.1
Montenegro	4.444	7.075	830	5.354	1.6	35.6	1.1
Rep. of Moldova	5.328	12.834	1049	5.079	0.9		
Romania	160.700	232.193	4204	38.225	29.0	97.4	21.7
Serbia	42.390	81.560	1790	23.681	10.2		
Slovakia	88.300	47.084	1805	48.919	5.9	96.0	5.2
Slovenia	49.550	16.422	1469	33.730	2.0	81.0	1.7
Ukraine	115.700	30.520	2445	47.321	3.8	5.4	2.7

Source: Eurostat; International Commission for the Protection of the Danube River; DG Regio.

Note: Col.5 = GDP achieved with 1000 t fuel consumed for transportation (million of USD)

ANNEX 2. Proximity Matrix. This is a dissimilarity matrix

Case	Squared Euclidean Distance													
	1:Austria	2:Bosnia_H	3:Bulgaria	4:Croatia	5:Czech Re	6:Germany	7:Hungary	8:Monteneg	9:Moldova	10:Romania	11:Serbia	12:Slovakia	13:Slovenia	14:Ukraine
1:Austria														
2:Bosnia_	19645257,000													
3:Bulgaria	11191884,000	11821157,000												
4:Croatia	21035422,000	3400641,000	15538566,000											
5:Czech Re	34518308,000	25311251,000	67784770,000	19805961,000										
6:Germany	34996424,000	40831432,000	36050528,000	40569690,000	33767107,000									
7:Hungary	17352121,000	31896040,000	20835189,000	33767107,000	54000,000	77900128,000								
8:Monteneg	54312520,000	87393798,000	16301471,000	77900128,000	16301471,000	44000,000	49050877,000							
9:Moldova	46165059,000	56654053,000	11979903,000	49050877,000	49050877,000	62000,000	38904183,000	188000,000						
10:Romania	23048497,000	38252038,000	34146351,000	38904183,000	34146351,000	136000,000	188000,000	21711065,000	69000,000					
11:Serbia	39782385,000	20186120,000	11666105,000	21711065,000	11666105,000	09000,000	69000,000	14687957,000	14687957,000	0,000				
12:Slovakia	11497926,000	10962719,000	678266,000	14687957,000	11497926,000	0,000	0,000	34403033,000	34403033,000	96163236,000	8000,000			
13:Slovenia	41387036,000	40872620,000	96163236,000	34403033,000	40872620,000	2000,000	20052874,000	28538667,000	28538667,000	28538667,000	20052874,000	20052874,000		
14:Ukraine	25211008,000	39155785,000	39155785,000	20052874,000	25211008,000	4000,000	20052874,000	28538667,000	28538667,000	28538667,000	20052874,000	20052874,000	20052874,000	

14:Ukrain	13:Sloveni	12:Slovaki	11:Serbia	10:Roman	9:Moldova	8:Montene	7:Hungary	6:German	5:Czech
25211008	41387036	11497926	39782385,	23048497	46165059	54312520	17352121	34996424	34518308
10,000	26,000	42,000	000	000,000	46,000	00,000	0,000	17,000	50,000
39155785,	40872620	10962719	20186120	38252038	56654053	87393798	31896040	40831432	25311251
000	5,000	3,000	00,000	973,000	3,000	5,000	45,000	00,000	3,000
28538667	96163236	678266,00	11666105	34146351	11979903	16301471	20835189	36050528	67784770
4,000	2,000	0	09,000	136,000	62,000	44,000	14,000	45,000	6,000
20052874,	34403033	14687957	21711065	38904183	49050877	77900128	33767107	40569690	19805961
000	8,000	0,000	69,000	188,000	0,000	4,000	54,000	97,000	8,000
95011600,	53740756,	66765251	36074952	44317948	10886371	24647589	50954122	42579153	,000
000	000	2,000	25,000	250,000	6,000	0,000	00,000	37,000	,000
42004380	52399357	37011934	42641296	34314692	55891287	61483262	46965028	,000	42579153
65,000	65,000	09,000	00,000	597,000	81,000	65,000	05,000	37,000	37,000
39104930	58761081	21166518	13724912	19366341	64411702	73994510	,000	46965028	50954122
00,000	00,000	16,000	5,000	410,000	92,000	50,000	73994510	05,000	00,000
55227625	87774730,	16016707	55489368	50689497	33214042,	,000	50,000	61483262	24647589
0,000	000	06,000	25,000	800,000	000	,000	50,000	65,000	0,000
31474341	13050144,	11736340	47238121	48128324	,000	33214042,	64411702	55891287	10886371
2,000	000	36,000	57,000	906,000	,000	000	92,000	81,000	6,000
40675093	46564604	34271097	22696128	,000	48128324	50689497	19366341	34314692	44317948
010,000	666,000	082,000	085,000	,000	906,000	800,000	410,000	597,000	250,000
26055106	42430620	11885948	,000	22696128	47238121	55489368	13724912	42641296	36074952
25,000	85,000	01,000	11885948	085,000	57,000	25,000	5,000	00,000	25,000
27477569	94027114	,000	01,000	34271097	11736340	16016707	21166518	37011934	66765251
6,000	0,000	,000	01,000	082,000	36,000	06,000	16,000	09,000	2,000
19970618	,000	94027114	42430620	46564604	13050144,	87774730,	58761081	52399357	53740756,
0,000	,000	0,000	85,000	666,000	000	000	00,000	65,000	000
,000	19970618	27477569	26055106	40675093	31474341	55227625	39104930	42004380	95011600,
	0,000	6,000	25,000	010,000	2,000	0,000	00,000	65,000	000