

PROJECTION FOR ROMANIA DANUBE STRATEGY

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Abstract

The paper highlights a few management consequences of the projection for Romania Danube Strategy, focusing on shipwreck salvage. The authors are directly involved in elaborating the Strategy and designing the salvaging operations.

KEYWORDS: *Danube Strategy, shipwreck refloating, critical areas, floating islands, navigation channel, efficiency.*

JEL CLASSIFICATION R58

1. INTRODUCTION

For the Danube countries, Danube Strategy (SUERD) represents one of the European mechanisms design to establish a cooperation between these countries for social and economic development. This cooperation model was inspired and adapted from the EU 2009 Strategy for the Baltic Sea.

The political initiative of the Strategy belongs to Romania and Austria, in 2008, and took shape in June 24th 2011. The participants to the Danube Strategy are 9 EU countries (Romania, Germany – as federal state and 3 lands -, Austria, Bulgaria, Czech Republic, Slovakia, Slovenia, Croatia, Hungary) and 5 non-EU countries: Republic of Moldova, Bosnia-Herzegovina, Serbia, Montenegro and Ukraine. The communication platform is www.danube-region.eu, and represents the main information portal for the Strategy.

The main objectives of the Strategy are: environment protection, consolidation and interlinkage of Danube regions and increasing the welfare of the region. Specific action domains, structured into 11 priority areas, each coordinated by 2 member states, were set for each objective (Langer, P., 2011):

A. Region interlinkage

B. Improving mobility and multimodality (Combined transport)

- a. interior waterways (Austria and Romania)
- b. road, railway and aerial connections (Slovenia and Serbia)
- Encouraging durable energies; (Hungary and Czech Republic)
- Promoting culture and tourism, direct contacts between people; (Romania and Bulgaria)

B. Environment protection

- Rehabilitation and maintaining water quality; (Hungary and Slovakia)
- Managing environment risks; (Hungary and Romania)
- Preservation of biodiversity, landscapes and water and soil quality (Bavaria and Croatia)

C. Increasing regional welfare

- Development of the knowledge-based society, through research, education and information technology; (Serbia and Slovakia)

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- Supporting companies' competitiveness, also by developing clusters; (Croatia and Baden Württemberg)
- Investments in people and capacities; (Austria and Republic of Moldova)

D. Consolidation of the region

- Improving institutional capacity and cooperation; (Austria and Slovenia)
- Cooperation in order to promote security and to solve issues concerning organized crime and severe transgressions; (Bavaria and Bulgaria).

2. OBJECTIVES FOR THE IMPLEMENTATION OF THE STRATEGY IN ROMANIA

- Improving quality of life, through an increase of competitiveness and amenity of Danube towns and villages;
 - Creating economic advantages through business partnerships and cross-cooperation between public and private sectors;
 - Attracting investments in strategic areas, such as transport infrastructure, environment and energy (Andreica, M.E. 2011);
 - Fluidification of river navigation, allowing traffic from Danube to the sea on the interior waterways during drought
 - Elimination of the military shipwrecks and of the risks associated with live ammunition.
 - Elimination of pollution risks, due to residues from shipwrecks tanks;
 - Pier stabilization and rigging up the channel on horizontal and vertical axes
 - Protection of the plants and wildlife and maintaining waters clean on all the Danube
- The effects sought are:
- Development and rehabilitation of the fluvial infrastructure of the Lower Danube; creation of an adequate setup in order to relaunch commerce and navigation on the Danube, though an integrated approach of water management, flood control, energy production and environment aspects.
 - Identifying acceptable technical, ecologic, legal and economic alternatives, in order to increase the touristic appeal of the cross-border region by developing pleasure boating on Danube
 - Increasing freight and transportation by 20% in the next years;
 - Connecting Constanta and Rotterdam, thus creating the shortest European waterway
 - Enabling social and economic development for the Danube towns and for the neighbouring areas, as these create jobs.
 - Reduction of Danube transportation costs and flood risks, as well as of the damage produced by floods.
 - Ensuring a durable improvement of Danube as international waterway, by meeting the standards (navigation terms) recommended by the Danube Commission, and allowing for the passing of the ships throughout the year.
 - Elimination of all the critical points and of the risk area connected with the German shipwrecks carrying live ammunition.
 - Ensuring adequate water levels for the protection of the Danube pier against erosion and avoiding morphological changes to the riverbed.

In order to achieve such a project, the following steps are necessary: drafting the technical documentation (pre-feasibility study, feasibility study, impact studies on the environment, hydrologic study that substantiate the necessity and opportunity of the

investment, based on the technical and economic data and proposes the intervention works for the safety of the interior waterways), financing the works with European funds and private contribution, implementation of the project (Popescu, M.E. 2015) .

3. STEPS FOR THE IMPELEMENTTION OF THE DANUBE STRATEEGY CONCERNING SALVAGING SHIPWRECKS

The main steps assigned at the implementation of the Danube Strategy concerning slavaging shipwrecks are:

1. Forming the consortium of entities who participate at the project. As a consequence of the fact that Danube is a natural border for several states, the project concerning salvaging shipwrecks must involve all the Danube countries (Serbia, Bulgaria, Republic of Moldova and Ukraine). Therefore, the consortium will comprise institutions (economic organizations) from each of these countries.
2. Documentation using the Civil and Military Archives (registrars from the Harbour Office, data from the Danube Book, MAN Archives) in order to identify shipwrecks, their load at sinking, respective technical data and geographical coordinates for the sinking place.
3. Setting up a model for fluid dynamics in order to simulate the effects of salvaging shipwrecks on the piers, concerning pier security and waterways, on different areas of the Danube. This model will allow for the identification of solutions to get beyond critical areas by simulating salvaging shipwrecks.
4. Developing a study in the legal aspects concerning the ownership of the salvaged shipwrecks and other restrictions concerning actions on the piers, involving the Danube countries.
5. Drafting impact studies of the salvaging work on the environment, in various critical areas of the Danube.
6. Identifying the position of the shipwrecks using sonar-equipped vessels in order to mark the position on digital maps and to establish the course of action for the salvage operations.
7. Drafting pre-feasibility studies and obtaining a preliminary approval from the institutions involved in the project (Parvu, D., Andreica,M.- 2003)
8. Developing the financing plan for the project
9. Elaboration of the feasibility studies
10. Accessing European funds and accomplishment of the project
11. Cost-benefit analysis for salvaging works in order to evaluate their efficiency.

The financing sources for the project are:

- UE Cohesion Funds UE -85% Priority axis PA10;
- Private contribution (Public-private partnership) -15%

There is a possibility that the funds assigned to this project in Romania may not account for the entire financing required, even if the project has a duration of 3-4 years. In this case, the project must be confined to certain sections of the Danube (e.g. the shore with Bulgaria) and alternative financing provided by the Danube Strategy through other priority axes or even cross-border funds needs to be sought.

The issue of project segmentation according to various financing sources encompasses the creation of consortiums with public institutions eligible for the operations envisaged. The main difficulty consists of the fact that very few priority axes view the salvaging operations as

eligible. The most delicate matters concern financing salvaging works for shipwrecks on the Serbian, Moldovan and Ukrainian territory. Also, a strategic issue arises: cleaning the Chitila branch of the Danube we neglect Sulina branch, which is solely Romanian, thus being bound to include Sulina waterway in the project also.

12. Reclaiming scrap iron from shipwrecks

There are several strategies for reclaiming scrap iron, such as:

- Creating a metallic platform by connecting several barges so that the shipwrecks would be dismembered on the water surface, thus reducing theft risks
- Collecting the iron in dedicated areas on the Danube pier, created especially for dismemberment;
- Collecting the iron in harbours, in designated places.

The choice depends on the strategy to exploit the scrap iron collected. Should the scrap iron be sold directly from the barge platform or if the metal is transported to the port selected by the customer, then the first option is chosen, otherwise, if there aren't purchasing contracts for the entire quantity, the other 2 alternatives will be chosen.

The salvaging and pier consolidation works can also be financed as private projects of national interest, thus relieving the public institutions of the burden to provide co-financing. The work for the rehabilitation of the waterway can only be financed if the beneficiary is a public institution, namely AFDJ Galati.

4. CONCLUSIONS

The drafting of the project concerning salvaging shipwrecks requires significant financial, human and technical resources and will continue for several years, while financing is completely uncertain. Usually, public institutions cannot afford such an initiative. The only way is to engage a private company into the project, which would take on the risks and draft a *private project of national interest*. This drawback can be found in every sector of our economy. In order to receive the approval for the pre-feasibility study from the Ministry of Transportation, a guarantee letter for 15% of the total amount of the project must be presented, in order to prove co-financing. For a 500 million euro project, the private company must guarantee 75 million euro. In most cases, it is impossible to achieve this, therefore the respective company must associate themselves with other institutions, which have the necessary financial capacity.

The rehabilitation of the waterway requires salvaging shipwrecks from both piers of the Danube, as the course has sections where it goes only on one side of the river, then crossing from a bank to the other.

Therefore, a consortium with institutions from countries frontager to the Danube on Sulina- Bazias sector needs to be created, and all the documentations must be matched, as well as financing sources need to be found, because Serbia, Ukraine and Republic of Moldova are not members of the EU. Corresponding to the sectors of these countries, other financing sources than PA 10 axis need to be found.

Salvaging shipwrecks will be carried out gradually on different sectors or simultaneously on several sectors. The duration of the project will be reduced significantly depending on the financing (Andreica, M. 2011). Usually, it is easier to move on the water machines from an intervention site to another than transporting them to the shore and then to a new site, but there is a technical issue that some cranes cannot cross under the Giurgiu Ruse

bridge and it is necessary to disassemble the cranes or to rent them from machine parks at the new Danube exploitation sites.

In conclusion, for the Romanian economy it is mandatory to rehabilitate the waterway in order to boost commerce and tourism in the south part of the country (Popescu, M.E., Lazar, I., 2015).

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