



“NETWORK OF DANUBE WATERWAY ADMINISTRATIONS”
South-East European Transnational Cooperation Programme

NATIONAL STRATEGY PLAN FOR OPTIMISATION OF WATERWAY MAINTENANCE IN BULGARIA

**EXECUTIVE AGENCY FOR EXPLORATION AND MAINTENANCE
OF THE DANUBE RIVER**

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1 LIST OF ABBREVIATIONS

ABBR.	Abbreviation
AGN	European Agreement on Main Inland Waterways of International Importance
DC	Danube Commission
EAEMDR	Executive Agency for Exploration and Maintenance of the Danube River
EAMA	Executive Agency Maritime Administration
EC	European Commission
EIA	Environmental Impact Assessment
EU	European Union
GTMP	General Transport Master Plan
ISPA	Instrument for Structural Policies for Pre-Accession
IWT	Inland Waterway Transport
MTITC	Ministry of Transport, Information Technology and Communications
NAIADES	Navigation And Inland Waterway Action and Development in Europe
NEWADA	Network of Danube Waterway Administrations
NSP	National Strategy Plan
OPT	Operational Programme on Transport 2007-2013
SEE Programme	South East European Programme
WG	Working Group
WP	Work Package

2 SCOPE OF DOCUMENT

The current document is a planning document for waterway maintenance activities for the Bulgarian section of the Danube River. Since the Executive Agency for Exploration and Maintenance of the Danube River (EAEMDR) is the responsible organisation in Bulgaria for maintenance of the waterway infrastructure and for ensuring safety navigational conditions, the document should give an outlook for future actions in order to optimise all maintenance related activities of the Agency. It gives a short overview of the current status of the waterway, the legal background (national and international), the goals for future optimisation and the necessary activities for their achievement as well as information for its monitoring and evaluation.

3 BACKGROUND INFORMATION

3.1 NEWADA and WP4 info

The project NEWADA (Network of Danube Waterway Administrations) aims at increasing the efficiency of the Danube River as the European Transport Corridor VII by intensifying cooperation between waterway administrations to promote inland navigation as a cost-effective and environmentally friendly mode of transport. The project is financed under the South East European Transnational Cooperation Programme (SEE Programme) and the project team comprises 12 project partners from 8 Danube countries including: Austria, Slovakia, Hungary, Croatia, Serbia, Romania, Bulgaria and Ukraine. EAEMDR is the Bulgarian partner organization within NEWADA. The project consists of 6 Work Packages – two of them are connected with project management issues and communication and the other three (WP 3 – WP 6) are content oriented. WP 4, one of the activities within which is the elaboration of this NSP (Act. 4.3), is dealing mainly with waterway maintenance issues.

3.2 National IWW information

3.2.1 General overview of the national Danube stretch



The Bulgarian section of the Danube River is a part of the Lower Danube. It is from rkm 845,500 to rkm 375,000, enclosed between the right bank of the river and the demarcation line of the border between the Republic Bulgaria and Romania (according to the Convention for determination of the river border between Bulgaria and Romania, 1908). Starting from the outfall of the Timok River and reaching

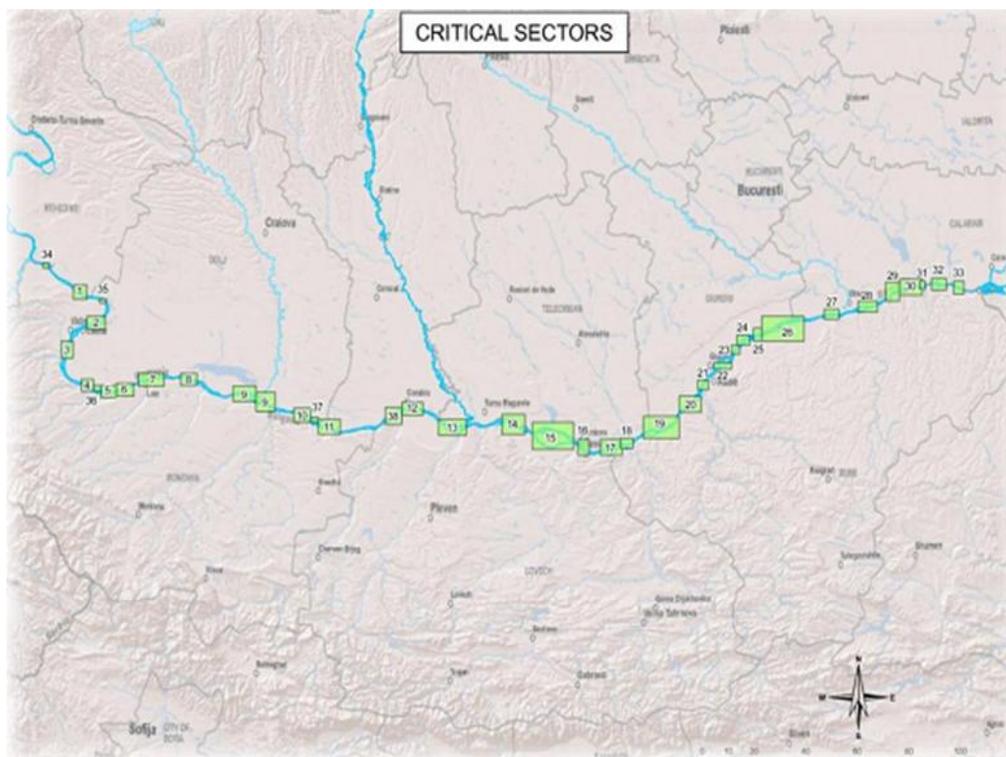
the city of Silistra downstream the Danube it has a total length of 471 km. The whole Bulgarian section is a free flowing and has no dams. The river in this section is typical lowland river, it becomes shallower and broader and has a big seasonal difference of water levels – more than 9 m. The width of the riverbed varies from 600 m to 720 m and is subject to constant changes. The influence of the local meteorological conditions, the existing soil types through which river passes, the riverbed configuration, the increase and decrease of the water and hard flow, the different river flow velocity influenced by the water formations, the hydrotechnical facilities and other natural forces and human factors define the active hydromorphological processes of the river in this section. As a result of their activity the riverbed constantly changes its geometrical and hydrological parameters (situation of the midstream, direction and velocity of the flow, structure of the flow, terrain shapes in the riverbed, etc.). During low and average water periods the water quantities in the upper Bulgarian – Romanian section are directly dependant on the mode of operation of the hydrotechnical complex Iron Gates and are characterized with large daily fluctuation. In some cases the differences between the water levels registered at 8 a.m. and the midnight water levels are more than 1 m.

3.2.2 Current status of waterway infrastructure

During the summer – autumn periods the river discharges in the Bulgarian section of the Danube decrease considerably, resulting in worsening the navigational conditions and on the main branch of the Danube the minimum depth criteria are not met. The reasons for this unfavorable navigational situation are mainly related to morphological and hydrological phenomena.



About 15 critical for the navigation sectors appear during the low water periods. The most critical of them are in the regions of Belene, Vardim, Batin, Kosui and the village of Popina, where the riverbed is very wide and during the low water periods the water flow meanders, as a result of which a huge amount of sedimentation appears. Most of the bottlenecks in the Bulgarian section appear in the region of islands and group of islands where the width of the riverbed suddenly increases and there is a substantial amount of floating and bottom silts. On the following figure is shown the location of the 38 critical sectors in the common Bulgarian – Romanian section of the Danube River that were identified within the project „Technical Assistance for Improvement of Navigation Conditions on the Romanian – Bulgarian common sector of the Danube and accompanying studies” (ISPA measure 2005/RO/16/P/PA/002).



3.3 Legal framework

The wider framework for navigation and environment issues in the Danube River Basin includes international conventions between countries as well as relevant EU and national laws, policies and action plans. There are several national and international

transport and environment-related legal requirements, as well as bilateral agreements that must be observed. The implementation and integration of all relevant policies is crucial for an appropriate development of IWT. This is the only way in which conditions for IWT and the environment can be improved and protected.

3.3.1 International legal framework



In January 2006, the multi-annual European Action Programme for Inland Waterway Transport **NAIADES**

(Navigation And Inland Waterway Action and Development in Europe) which aims at promoting inland waterway transport in Europe was launched. The programme includes recommendations for action to be taken between 2006 and 2013 by the European Community, its Member States and other parties concerned. The Action Programme focuses on five strategic and equally important areas, namely on the creation of favourable conditions for services and new markets, on the modernization of the fleet, in particular its environmental performance, on jobs and skills, and on the promotion of inland waterway transport as a successful business partner. Part V of the Action Programme relates to the waterway infrastructure. The Communication underlines that the development of waterway infrastructure should happen in a co-ordinated and integrated way, by fostering the mutual understanding of multi-purpose use of waterways and to reconcile environmental protection and sustainable mobility.



The EU Strategy for the Danube Region was adopted by the European Commission on the 8th of December 2010. The Strategy provides a sustainable framework for policy integration and coherent development of the Danube Region. It sets out priority actions to make it an EU region

for the 21st century. The strategy concerns mainly 14 countries of which 8 are Member States (Germany, Austria, Hungary, Czech Republic, Slovak Republic, Slovenia, Bulgaria

and Romania) and 6 are non-EU countries (Croatia, Serbia, Bosnia and Herzegovina, Montenegro, Ukraine and Moldova). Organizations representing civil society and private companies are also involved in the implementation of actions and projects, and achievement of precise targets.

The strategy is based on a new working method based on a “macro-regional” approach, following in the footsteps of the EU Strategy for the Baltic Sea Region. The novelty of the method is the way it brings countries together to cooperate on setting goals, aligning funding, and working together to achieve their objectives, with the Commission playing a leading role in coordination. The strategy focuses on four main pillars: connecting the Danube Region, protecting the environment in the Danube Region, building prosperity in the Danube Region, and strengthening the Danube Region. An Action Plan set priorities, identifies projects and proposes some deadlines. The countries and regions which will coordinate each priority area of work are already announced.

European Agreement on Main Inland Waterways of International Importance (AGN) lays down guidelines for the navigability characteristics of inland waterways carrying international traffic. This agreement (adopted in 1996 in Geneva) aims to determine unified technical and operational parameters for the construction, modernization, reconstruction and operation of waterways designed for international river transport. The AGN establishes an internationally agreed European network of inland waterways and ports as well as uniform infrastructure and operational parameters. By acceding to the AGN, governments commit themselves to the development and construction of their inland waterways and ports of international importance in accordance with the uniform conditions agreed upon and within their investment programmes. The Agreement underlines the importance of IWT which, in comparison with other modes of inland transport, presents economic and environmental advantages and may, therefore, contribute to reducing congestion, traffic accidents and negative environmental impacts in the pan-European transport system. According to the Technical and Operational

Characteristics of Inland Waterways of International Importance the Bulgarian section of the Danube River meets the requirements of class VII river.



The **Danube Commission** is an international intergovernmental organization set up by the Convention on the navigation regime on the Danube, signed in Belgrade on 18 August 1948. The primary tasks of the Danube Commission are the provision and development of navigation on the Danube for commercial vessels in accordance with interests and sovereign rights of its member states. According to the Convention, the 11 Member States (Austria, Bulgaria, Croatia, Germany, Hungary, Moldova, Romania, Russia, Serbia, Slovakia and Ukraine) undertake to maintain their sections of the Danube in a navigable condition for river-going and, where appropriate, for sea-going vessels, and to carry out the works necessary for the maintenance and improvement of navigation conditions and not to obstruct or hinder navigation on the navigable channels of the Danube. It consults with and makes recommendations to Member States regarding the execution of these works. With respect to the waterway infrastructure, the Danube Commission has defined minimum parameters for the different Danube stretches which have recommendation character.

3.3.2 Bilateral Agreements

Bilateral Agreement between the Governments of the Republic of Bulgaria and the Romanian Republic for maintenance and improvement of the fairway in the common Bulgarian-Romanian section of the Danube River, 1955 – the Agreement regulates the areas of responsibility of the two countries concerning the maintenance and improvement of the navigational conditions in the relevant sectors, including the works for ensuring the fairway parameters, recommended by the DC and marking the fairway with floating and costal signalization, as well as removing the obstacles along the fairway and flood protection works. According to this act the two countries are also obliged to provide the conditions in the winter camps necessary for their safety

utilization, and should undertake the relevant hydrotechnical measures and river engineering works for provision of safety navigational conditions along the Danube. According to this agreement the Bulgarian side is responsible for the maintenance and improvement of the navigational way in the section between rkm 374.5 and rkm 610. The section between rkm 610 and rkm 845.5 is maintained by the Romanian side. Based on this Agreement, the two countries established a Joint Bulgarian-Romanian Commission for Maintenance and Improvement of the Fairway, the main purpose of which is the coordination of all activities related to the hydrographical and hydrological observations and maintenance of the navigational way in the common BG-RO section of the Danube River.

Agreement between the Governments of the Republic of Bulgaria and the Romanian Republic for maintenance and equipment of the road and railway bridge over the Danube Ruse-Giurgiu, 1954 – The Agreement regulates the responsibilities of the two countries concerning the studies related to the hydromorphological and the hydrological conditions of the river in the area of the Ruse - Giurgiu Bridge and ensuring of unimpeded passage of ships.

Framework agreement for cooperation between EAEMDR and Via Donau, 2006 - The aim of the Agreement is to enhance and further develop cooperation between the two institutions based on their responsibilities for similar topics in their respective countries especially for waterway administration and maintenance for inland navigation purposes. The cooperation under this Agreement include: regular exchange of information on infrastructure and policy measures related to Danube navigation; joint research and development for the development of the Danube waterway; exchange of experts in areas of mutual interest and education and training for joint projects and initiatives; mutual technical assistance and implementation of cooperative projects and execution of joint promotion activities.

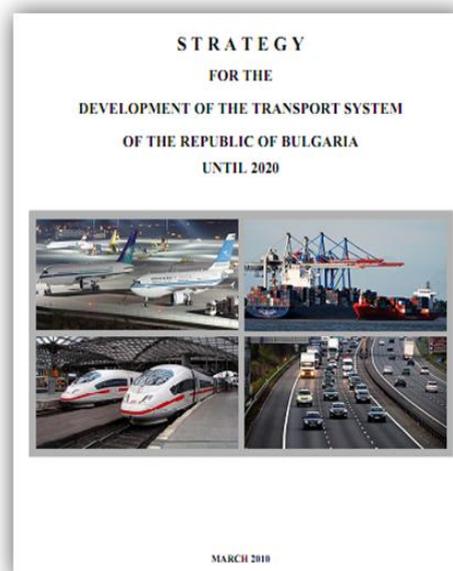
3.3.3 National legal framework

Strategy for the development of the transport system of the Republic of Bulgaria until 2020 – The Strategy outlines the most important aspects for the development of the transport system until 2020. The format of the Strategy complies with the format of strategic documents adopted by the European Union. It is also in line with all national strategic documents. The vision for the development of the transport sector is that by 2020 Bulgaria should have a modern, safe and reliable transport system in order to satisfy the demand for high-quality transport services and to provide better opportunities for its citizens and business.

Some of the priorities, set in the Strategy are: efficient maintenance, modernization and development of the transport infrastructure; reduction of the transport sector negative impact on the environment and human health, safety and

security of the transport system and provision of high-quality and accessible transport in all regions of the country. The waterway maintenance activities and the measures for improvement of the navigational conditions are closely related to the aim of these priorities and will contribute to their achievement.

Operational Programme on Transport 2007-2013 - The Programme (OPT) is one of the seven operational programmes of the Republic of Bulgaria, which are financed by the Structural and the Cohesion Funds of the EU. The OPT is the operational programme with the largest budget in Bulgaria - 2 003 481 163.68 EUR. The goal of OPT is development of railway, road and waterway infrastructure, as well as stimulation of development of combined transport in accordance with the transport policy of the European Union and the established requirements for development of the Trans-

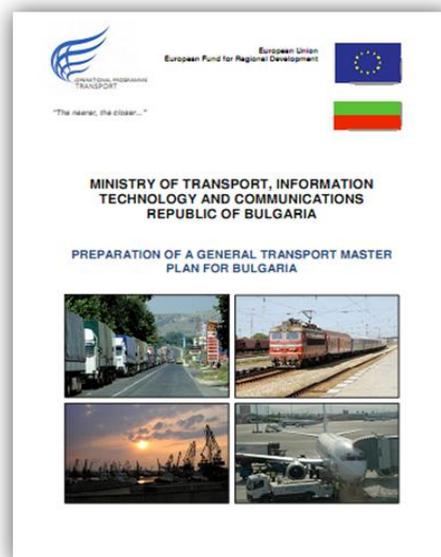


European transport network in order to achieve stability of the Bulgarian transport system. It is focused on several strategic priorities, which will contribute to the integration of the national transport network in the EU one. All projects for development of the maritime and inland waterway navigation of the OPT 2007-2013 are setup in Priority Axis IV of the Programme. EAEMDR is a beneficiary of two projects under this Priority Axis, namely: „Improvement of the navigation on the Bulgarian – Romanian section of the Danube River from rkm 530 to rkm 520 – Batin and from rkm 576 to rkm 560 – Belene” and „Improvement of the navigational systems and topohydrographic measurements on the Danube River”. The project „Establishment of River Information Services in the Bulgarian part of Danube River” (BulRIS) is also implemented under the same Priority Axis. Beneficiary of BulRIS is Bulgarian Ports Infrastructure Company.

General Transport Master Plan for Bulgaria - The Bulgarian General Transport Master Plan was commissioned by the Ministry of Transport of the Republic of Bulgaria in May 2008. The project was funded jointly by the Bulgarian Government and through Priority Axis V of OPT. The main objective of the General Transport Master Plan project is the establishment of a strategic and coherent base of technical data, transport models and multimodal technical studies for project identification for long and medium term investment programming in the transport sector in Bulgaria.

The improvement of the navigation on the Danube is one of the priorities in the GTMP and is related to the strategic activities for development of the transport corridors in Bulgaria.

Master plan dedicated to the inland waterways in Bulgaria does not exist so far.



Law for the sea waters, the internal waterways and the ports of the Republic of Bulgaria – This law provides the legal regime of the sea waters, the internal water ways and the ports of the Republic of Bulgaria. With regard to inland waterways some of the objectives of the law are facilitating the river connections, ensuring safety for the navigation, preservation of the river environment, improvement of quality of services offered to the users, as well as reduction of the expenses and encouragement of the river transportation, including at short distances and combined transport. This law also determines the status of EAEMDR, EAMA and Bulgarian Ports Infrastructure Company.

Law for the waters – This law provides the ownership and management of waters on the territory of the Republic of Bulgaria as a national indivisible natural resource. It is fully harmonized with the Water Framework Directive and its objective is integrated management of waters in community interest and protection of people’s health.

All maintenance activities and measures for improvement of the navigation on the Danube should be in compliance with the requirements of this law. According to this law EAEMDR performs quantitative monitoring of the Danube waters as well as the regulatory regime concerning the excavation of inert materials from the Danube.

Law for preservation of the environment – The objective of this law is protection of the environment and its components. The Ministry of Environment and Waters is the competent authority for the implementation of the state policy for preservation of the environment. The law regulates the procedures for implementation of Environmental Impact Assessment (EIA) which should be carried out for all projects for improvement of the navigation on Danube.

3.3.4 Relevant institutions and authorities

During the implementation of the waterway maintenance related measures different actors are involved:

Ministry of Transport, Information Technology and Communications (MTITC) – The ministry is the main developer of the transport policy of the country and its priorities

related to this field. Being a secondary administrator of budget credits under the jurisdiction of MTITC, EAEMDR is strongly dependant not only on the political will for development of the IWW but also on the available financial resources.

Basin Directorate Danube Region – It is a government authority within the Ministry of Environment and Water. It was established in compliance with the requirements of Water Framework Directive and the national legislation concerning water management. The main functions of the Basin Directorate are: the planning, controlling, informing and managing of state water sources, as well as preparation of Danube River Basin Management Plan and programmes of measures for its implementation.

Bulgarian Ports Infrastructure Company – The organization is a state company within MTITC which manages the infrastructure of the public transport ports of national importance. Among the basic activities of the company regarding these ports are construction, rehabilitation and reconstruction. The company is the beneficiary of the BulRIS project.

Executive Agency Maritime Administration – It is a legal entity on budget support to the MTITC. The Agency performs regulatory and control functions of the state in the field of ports, and supervises shipping along inland waterways. It also has control functions concerning the provision of RIS services.

3.3.5 Any other specific topics relevant for the country

During the last years several times the possibility for construction of hydroenergy complexes in the common BG-RO section of the Danube was discussed. It should be taken into consideration that if these projects are implemented this definitely will affect the approach when planning the water maintenance activities and the measures for improvement of the navigation. Nevertheless all construction works should be coordinated and should not have negative impact on the navigational conditions.

4 SUBJECT OF THE PLAN

The elaboration of the National Strategy Plan for Optimization of Waterway Maintenance is partly based on the Status Quo Report on waterway maintenance, Status quo reports on hydrological and hydrographical activities as well as on outcomes of enhanced cross-border cooperation within activity 3.2. With regard to this two bilateral meetings with AFDJ were held during which the existing problems and the common future objectives were discussed. A list of the short-term mid-term and long-term common goals was composed and agreed, the content of which is included in the present document and is its basic reference point.

The implementation of sufficient water maintenance activities is an important precondition for improving of the navigational conditions and ensuring safety navigation along the Danube. The lack of state financing during the last years as well as the insufficient resources, both technical and human, imposes the necessity of a new long-term approach for the implementation of these activities and more intensified cross-border cooperation. This is because national infrastructure investment policies have given priority to other modes of transport without maintaining the inland waterways and without eliminating existing bottlenecks on the network. This mode of transport needs to be made more reliable, efficient and accessible.

The subject of the current NSP are inland waterway maintenance activities, necessary for ensuring safety navigational conditions. Through this plan future actions should be identified which have to be undertaken in order to improve the current situation and the effectiveness of all maintenance related activities, to achieve new equipments and develop new services, based on the market and users needs. The goal is to optimize the final result of the activities, which is a navigation fairway according to the given international standards.

The activities included in the current NSP will be implemented in the period of 8 years from 2012 to 2020.

5 OBJECTIVES AND GOALS

5.1 Long term objective

The overall objective of the activities included in the NSP is to provide the recommended fairway parameters and safety navigational conditions along the whole Bulgarian section of the Danube through optimization of the waterway maintenance activities. This objective is a constant one and all the undertaken activities should be in compliance with it.

5.2 Mid and short term objectives

Depending on the character of the objectives and the time, necessary for their achievement, the approach for their including in three specific groups (waterway, administration and customers) and two timeframes (from 1 to 3 years - short-term and from 3 to 5 years - mid-term) was chosen, as follows:

5.2.1 Waterway

Short-Term objectives

- Modernization of the floating signalization;
- Harmonization of marking plans;
- Updating the kilometric signs;
- Harmonization of dredging plans;
- Optimization of fairway route and parameters;
- Monitoring of the floating signalization.

Mid-Term objectives

- Removal of the navigational constrains;
- Modernization of the equipment;
- Optimizing the vessels;
- Predictability of the fairway.

5.2.2 Administration

Short-Term objectives

- Increasing of knowledge and experience;
- Strengthening the cross-border cooperation.

Mid-Term objectives

- Improvement of methods and procedures/processes.

5.2.3 Customers

Short-Term objectives

- Orientation of the services to the customers

Mid-Term objectives

- Improving of the quality of the services
- Focus on the benefits of Inland navigation



6 ACTIVITIES

For achieving the abovementioned objectives the possible activities were identified and discussed. They are separated in three groups as follows:

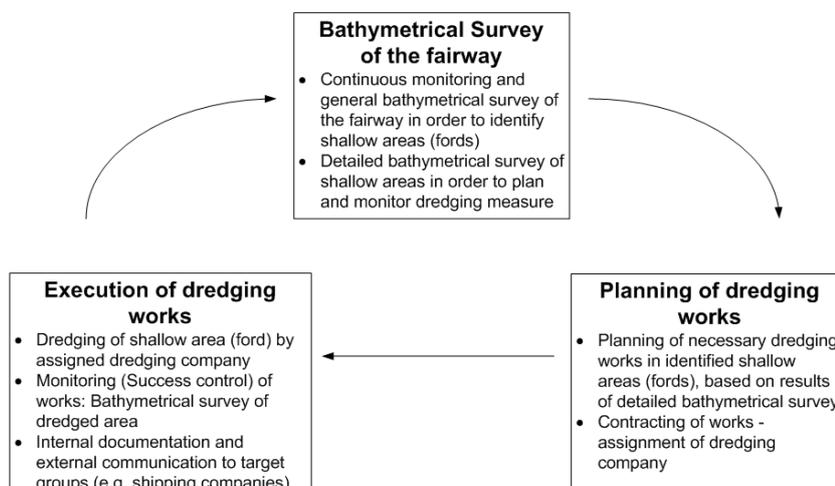
6.1 Activities related to the waterway

In the current moment the floating signals are controlled weekly and the changes, if necessary, are made every three days. These signals are not equipped with sensors and due to this fact it is not possible for the operative office of EAEMDR to control their location from distance in real time. It often happen signals to be displaced or lost because of passing vessels (convoys). In this case the respective section will stay without signals until the next specialized vessel for maintenance of the waterway passes by which is unfavorable for the safety of the navigation. In other cases the accumulators of the lighting signals are stolen and thus the meaning of the floating signals changes. In order to improve this situation a project for delivering new buoys which surround the fairway, coastal navigational signals, solar lighting of buoys and coastal signals, sensors for continuous control of the location of the floating signals will be implemented. In order to avoid accidents or loss of signs 24-hours monitoring should be performed. Thus a monitoring centre will be established in the navigational department. The project is included in the priority list of OPT and should be finalized till 2013. Meanwhile the marking plans of the two countries should be harmonized. For this purpose a new expert group within the Common BG-RO Commission of the Danube River should be established dealing with all the issues related to the signalization of the joint section. One of the tasks of this group could be the review of the current status of the kilometric signs and the preparation of a proposal for their updating.

At the current moment 38 critical for the navigation sectors exist. For all of them engineering measures were planned in the feasibility study, prepared within the project “Technical assistance for Improvement of the Navigational Conditions on the Romanian – Bulgarian common sector of the Danube and accompanying studies.” The measures

include construction of groins, chevrons, guiding walls, bottom sills and bank protection and will be implemented in phases till 2020. Capital dredging is planned as well. EAEMDR is beneficiary of a project for improvement of the navigational conditions in the regions of Belene and Batin, included in the priority list of OPT, and the basis for its implementation will be the outputs of the abovementioned study. Besides that, all the activities should be coordinated and implemented together with the Romanian side. Dredging works are one of the main activities for ensuring the minimum fairway parameters. At the current moment EAEMDR owns one dredger but it is very old (1981) and is not in a good operational conditions. When measures for improvement of the navigational conditions are implemented maintenance dredging is required. Thus new dredging equipment should be delivered. One of the possibilities for funding this activity could be OPT 2014-2020. The implementation of the dredging works is not an isolated activity but is closely related and based on the hydrographical and hydrological activities. Thus internal processes should be improved and harmonized. It is also necessary the dredging plans of the two countries to be harmonized, which could be discussed within the Common BG-RO Commission for the Danube River.

Fairway maintenance cycle



In order to achieve predictability of the fairway route and parameters implementation of full surveys in the critical for the navigation sectors both in low and high water levels is necessary. In this way the morphological changes could be monitored and forecasting model could be elaborated. Such surveys need to be implemented once a year.

Another activity which was proposed for achieving these objectives is the preparation of e-album of the critical for the navigation sections, accessible for all the relevant stakeholders. It will provide real time information to the skippers. The e-album should contain information for the fairway trajectory, its parameters, and the velocities of the water surface, i.e. where the minimum and where the maximum velocities of the flow are. This will help the skippers to optimize the vessels operations and to save time and fuel consumption. The e-album should be basically updated after every geodetical survey. Other changes will be permanently added.

6.2 Activities related to the administration

The successful implementation of waterway maintenance activities requires good level of knowledge and experience. Thus staff training should be regularly organized. This objective could also be achieved through voluntary training. Expert exchange meetings with other waterway administration are a very good approach as well because it will let the experts to learn from each other. This will also strengthen the cross-border cooperation which is an important precondition for the implementation of waterway maintenance activities and ensuring good navigational conditions in one common sector, as the BG-RO is.

Furthermore the organization should analyze the current internal and external procedures and try to improve the existing methods and processes. One of the approaches for this is the optimization of the available resources (both technical and human). Special training in project planning and implementation is required and language skills need to be improved.

6.3 Activities related to the customers

It is a fact that the inland navigation is still not among the preferred modes of transport. Thus is very important for the waterway administrations to try to put more focus on its benefits. In order to achieve this, all the existing and the potential users should be identified. A good tool for this could be a questionnaire based on which a list of the stakeholders to be composed. The same questionnaire can contain topics about the different services, provided by EAEMDR and the customers` satisfaction. Otherwise separate questionnaire concerning this should be circulated among the identified users. In this way the Agency will have information which services to what extent are of use for the customers and where the weak points are, respectively where improvements are necessary. After undertaking the relevant measures for increasing the quality of the services, promotion activities could also start. They can include workshops, preparation and dissemination of brochures, articles, etc.

7 IMPLEMENTATION TIMELINE

Taking into consideration the available resources, the complexity and the exigency of the measures the possible activities were scheduled for implementation until 2020. This could be seen in the following table:

Activities	2012	2013	2014	2015	2016	2017	2018	2019	2020
Waterway									
Delivery of new floating and costal navigational signs									
Establishment of 24-hours monitoring centre									
Harmonization of marking plans									
Establishment of new working group for signalization									
Review of the current status of the km signs									
Removal of bottlenecks in the common BG-RO section									
Delivery of new dredging equipment									
Harmonization of dredging plans									
Implementation of full surveys in the critical sectors									
Elaboration of forecasting model									
Preparation of e-album									
Updating of the e-album									
Administration									
Staff training									
Voluntary trainings									
Expert exchange									
Customers									
Identification of existing and potential users									
Customers' satisfaction research									
Promotional activities									

It should be taken into consideration that all of the activities, proposed in the present NSP depend on the available financial resources and the possibilities for accumulation of EU funding. Having in mind that the inland waterway transport is still not among the first priorities of the transport policy of the country, the Agency should try to put more focus on the importance of these activities and their contribution for the safety of the navigation.

8 MEASURES AND INDICATORS

In order to assess the implementation of the measures and the efficiency of the current NSP, for each activity the relevant indicator is provided in the following table:

No	Indicator	Number	Timeframe
1.	Number of floating and costal navigational signs delivered	200	2012-2013
2.	Monitoring centre	1	2012-2013
3.	Common marking plan	1	2012-2013
4.	Number of meetings per year of the signalisation WG	2	2012-2013
5.	Action plan for updating of the km signs	1	2012-2015
6.	Number of critical sectors removed	38	2012-2020
7.	Dredging equipment	1	2019-2020
8.	Number of meeting for harmonization of dredging plans per year	2	2012-2020
9.	Number of surveys of critical sectors per year	2	2012-2020
10.	Forecasting model	1	2015
11.	E-album of the critical sectors	1	2012
12.	Average number of employees in training	15	2012-2020
13.	Average number of trainees in voluntary trainings per year	54	2012-2020
14.	Average number of expert exchange meetings	15	2012-2020
15.	Number of surveys for users identification	3	2012-2020
16.	Questionnaire on customers satisfaction	3	2012-2020
17.	Number of promotional activities per year	3	2012-2020

This list of indicators will also be the basis for the implementation of monitoring and evaluation of the results.

8 MONITORING AND EVALUATION



For the successful implementation of the planned activities regular monitoring and evaluation processes are necessary. At national level this monitoring should be performed by the implementing body, i.e. EAEMDR and by MTITC as well. A monitoring could be also carried out by

BoD or SCOM set up within projects through which some activities will be implemented. At international level monitoring could be performed also by the Common BG-RO Commission for the Danube River.

In order to assess the implementation and the efficiency of the NSP, monitoring should be regularly performed and will include:

- Review and report on the achievement of the objectives of the strategy plan and the implementation of the planned activities;
- Analysis of the indicators for the implementation of measures, and attaining priorities;
- Follow-up assessment of the results of the implemented measures.

Taking into consideration the variety of all the factors, both internal and external, which determine the prioritisation of the activities, a need for re-prioritisation could appear. Thus the NSP should be reviewed and amended, if necessary every 2 years.

- End of document -