







Cooperation-Network for logistics and nautical education focusing on Inland Waterway Transport in the Danube corridor supported by innovative solutions

Supporting EU and National Policies

Draft National Action Plan for Education and Training Issues in the Field of Inland Waterway Transport BULGARIA

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1. List of abbreviations

| NAP(s) | National Action Plan(s) |
|----------|---|
| EAMA | Executive Agency Maritime Administration |
| BPIC | Bulgarian ports infrastructure company |
| EAEMD | Executive Agency for exploration and maintenance of the Danube river |
| MSC | Merchant Shipping Code |
| NELI | Cooperation-Network for logistics and nautical education focusing on Inland Waterway Transport in the Danube corridor supported by innovative solutions |
| LMSIWPRB | Law on the maritime spaces, inland waterways and ports of the Republic of Bulgaria |
| EU | European Union |
| IWT | Inland Waterway Transport |
| ITC | Information Training Centre |
| NAIADES | Navigation and Inland Waterway Action and Development in Europe |
| RIS | River Information Services |
| BulRIS | Bulgarian River Information Services |
| SWOT | Analysis along Strengths, Weaknesses, Opportunities and Threats |
| MTITC | Ministry of Transport, Information Technology and Communications |
| OPT | Operative Programme Transport |

2. Analysis of relevant policies

The European transport policy gives the priority to the development of the maritime and inland waterway transport within the Community, as two key components of intermodality as a tool to overcome the growing load of road and rail transport infrastructure and reduce air pollution. So far, these two types of transport are not used enough. Their development should be supported through the development of better transport and more efficient port services, proposed both in sea ports and inland ports. The strategy for development of transport system of the Republic of Bulgaria until 2020 was developed by the Ministry of Transport, Information Technology and Communications. After public consultations, it was accepted at a meeting of the Council of Ministers. Concerning IWT the strategy is based on the European Action Plan NAIADES and it will be the basis for future support of the program for development of inland navigation.







The main documents which regulate the shipping in the Republic of Bulgaria are the following:

- The Merchant Shipping Code, regulating social relations that arise in connection with the shipping industry and its control.
- The Law on Maritime Spaces, Inland Waterways and Ports of the Republic of Bulgaria, which governs their legal system and controls its compliance.

2.1 Operational Program Transport (SOP-T 2007 – 2013)

The SOP-T is one of the seven operational programs of the Republic of Bulgaria. One of its priorities is Priority 4 - Improving the conditions for maritime and inland waterways. The purpose of OPT is the development of railway, road and water infrastructure, and promoting the development of combined transport in line with EU transport policy.

The Danube River and the improvement of the conditions for navigation on it, is considered one of the main advantages of the Danube towns, as is Ruse. Therefore, the Regional Development Strategy Ruse 2005 - 2015 also identifies similar activities as in the regional development strategies of some other Danube cities. Crucial for achieving the objectives of this priority is to improve coordination and cooperation between administrations responsible for waterway and harmonize their actions. This document is consistent with the Lisbon Strategy, whose strategic objective is to achieve a more dynamic and competitive economy, further development and improvement of transport infrastructure, market liberalization of transport services and greater application of information and telecommunications technologies.

2.2 National Program for the Development of public transport ports 2006 – 2015

This program is being developed in line with article 103, paragraph 2 of the Law on the Maritime Spaces, Inland Waterways and Ports of the Republic of Bulgaria (LMSIWPRB). The aim of the program is to increase efficiency and quality of service to the economy of the Republic of Bulgaria through the modernization of ports and providing fast and reliable services, by increasing transit traffic through the country and increase the competitiveness of Bulgarian ports.

2.3 Strategy for development of transport infrastructure of Bulgaria *(concessions)*

The main objective of the document is to clarify the intentions of the Bulgarian Government in the medium term to attract private sector construction and operation of major projects of national importance in the field of transport infrastructure – airports, ports and railway stations. The document is entirely consistent with the existing legislation in the field of concessions, the Government Program of the European Development of Bulgaria 2009 - 2013, the Development Strategy of the transport system of the Republic of Bulgaria until 2020 and the National Program for the Development of ports for public transport 2010 – 2015.







2.4 Relevant executive Agencies

The Minister of Transport, Communications and Information Technology, assisted by the relevant staff, makes policy in the field of transport and coordinates the development and the implementation of strategy development and restructuring of transport. For the different modes of transport to the Ministry of Transport, Communications and Information Technology, there are established and operate the regulatory authorities – the executive agencies:

THE EXECUTIVE AGENCY MARITIME ADMINISTRATION (EAMA)

EAMA performs regulatory and supervisory functions of the state in the ports and supervises inland waterways; controls the RIS vessel traffic, monitors compliance with norms and the standards, adopted by the Republic of Bulgaria to prevent and reduce marine pollution; activities related to the organization of search and rescue, keeps records of ships, seafarers, port and port operators in the Republic of Bulgaria, monitors the implementation of provisions ensuring the security of ships flying the Bulgarian flag and port in the Republic of Bulgaria.

THE EXECUTIVE AGENCY FOR EXPLORATION AND MAINTENANCE OF THE DANUBE RIVER (EAEMD)

EAEMD organize, manages and controls the exploration and the maintenance of the conditions for navigation on inland waterways of the Republic of Bulgaria in line with the domestic and international law; provides navigation traffic to keep the shipping route along the Danube and in the sovereignty of port and winter camps.

BULGARIAN PORTS INFRASTRUCTURE COMPANY (BPIC)

BPIC manages the infrastructure of public transport ports of national importance. The main activities of BPIC are related to the construction, reconstruction, rehabilitation, maintenance and property management and work organization in public transport port of national importance and providing access to them, maintaining the existing and building new approaches channels, sovereignty of port, sea and river facilities, breakwaters, and other protective gear.

2.5 Conclusions of the policy analysis

On the basis of multi-factor analysis of the transport sector in the Republic of Bulgaria, the guidelines for development of transport policy of the European Union and the emerging trends, the Strategy defines the main priorities and measures that need to be implemented by 2020.

The Strategic policy objectives in the transport sector are:

- Achieving economic efficiency;
- Development of sustainable transport;
- Improvement of regional and social development and commitment.

The Republic of Bulgaria should make efforts to harmonize its legislation with the legislation of the Member States, taking into account the specific features. Only in this way the process of adjustment will be successful. Reducing the number of people in shipping is a serious problem that may limit the prosperity of the inland waterways







sector. The consequences of this problem will be evident not only in shipping companies, but also in ports, port facilities shipyards agencies for water transport, etc. The existing hydrological and climatic conditions along the only inland waterway in the country - the Danube call for measures to improve navigation conditions and ensuring a minimum depth of 2.5 m in all or bigger period of the year required for vessels up to 3000 tons. So the river ports in Bulgaria of national importance have sufficient capacity for handling general, bulk and liquid cargoes, container and RO-RO units. Currently about 60% of infrastructure capacity at existing waste transfer technique is used. The weaknesses of the ports are:

- Poor state of port facilities (piers) and reloading equipment, which does not meet current trends in the structure of cargo turnover;
- Lack of appropriate equipment for processing and storage of grain;
- Poor state of relations with road and rail infrastructure in the country;
- Lack of modern logistics and information systems at ports;
- Lack of efficient equipment for pollution control.

3. SWOT analysis of Bulgarian education and training situation in the field of inland waterway transport

The main objective is following: Providing qualified personnel in the field of inland waterway transport and logistics.

| Strengths | Weaknesses |
|--|---|
| Favourable geographical position of the country; The public ports have good | Lack of long-term national strategy for education and qualification in the field of IWT; |
| connections with the national road and railway infrastructure; | 2. The system for education is not adapted to the requirements of the |
| Links with the European channel river shipping system by the Danube River; | market and to the requirements for acquiring the necessary competence of the seafarers in the field of IWT; |
| High degree of harmonization with the European legislation; | Lack of enough resources for funding of E + T in the field of IWT; |
| Projects for development and modernization are in progress of implementation; | 4. Lack of specialized training vessels for training; 5. Lack of interest of the shipowners to |
| 6. A system for education and training is set up and in operation. | invest in the education of their personnel; |
| | Outlining the trend for reducing the ship's crews; |
| | The navigation on the inland waterways is weakly spread in the public. |
| Opportunities | Threats |







| 1. | Establishment of Modern | 1. | Qualified personnel in the field of |
|----|---------------------------------|----|-------------------------------------|
| | Training Centre to provide high | | IWT aging; |
| | quality training and to promote | 2. | Reduction of the number of the |
| | the profession; | | candidates for acquiring in IWT; |
| 2. | Development of intermodal | 3. | Lack of interest in the profession; |
| | terminals and freight villages; | 4. | Decrease of quality of education. |
| 3. | Optimize the navigation | | |
| | conditions and more intensive | | |
| | use of the Danube River. | | |
| | | | |

Strengths

1. Favorable geographical position of the country

The Danube River is the only waterway in the Bulgaria of Bulgaria. The Bulgarian section of the Danube River is downstream of the river and has a length of 471 km. The transport functions of the Danube River are crucial for the development of the adjacent river areas. The Danube River was included in the general scheme of European Inland Waterways (Trans-European Transport Corridor VII) at the meetings of European transport ministers held on the island Crete in 1994 and in Helsinki in 1997.

2. The public ports have good connections with the national road and railway infrastructure

The density of the existing port infrastructure is high. There is still a free port capacity. Convenient links are built between ports and national road and rail network. Most of the Bulgarian ports are in poor technical condition because they were built early last century and the lack of sufficient investment to maintain and develop the port infrastructure in previous years is in place.

3. Links with the European channel river shipping system by the Danube River

The Rivers Rhine, Main and Danube are connecting Western and Eastern Europe via the Rhine-Main-Danube corridor, thus giving excellent practical opportunities for direct navigation links between the Black Sea and the North Sea and convenient access to many European countries and their industrial centers.

The increased interest in this important European waterway was confirmed in the report of the High Level Group on Trans-European transport network by June 27, 2003 and Decision (EC) 1692/96 as amended by Decision (EC) 884/2004 by identification of the Danube River as a priority axis No18.

4. Projects for development and modernization are in progress of implementation

The Strategic Sector Operational Program Transport is in line with the strategies and the policies for the development of Trans-European Transport Network (Decision (EC) 1692/96 amended by the Council Decision (EC) 884/2004), the policy of sustainable development is in line with the Gutenberg Strategy and the White Transport Paper (2001).

5. A system for education and training is set up and in operation







There are 10 institutions for education and training in the field of inland waterway transport (IWT) in Republic of Bulgaria:

- Professional nautical High School (High River Shipping School of Ruse)
- 4 universities (N.Y.Vaptsarov Naval Academy, Technical University of Varna, University of Ruse, University of Economics)
- 5 training centers /vocational schools (ST "Mincho Minchev", "Scipper Consult" LTD., "Blazhev" LTD., SNC "Danube Club" LTD and ST "Radian-M")

Weaknesses

1. Lack of long-term national strategy for education and qualification in the field of IWT For the time being, there is not an actual long-term strategy for education and qualification in the field of IWT which satisfies the requirements of the business in the field of IWT.

2. The system for education is not adapted to the requirements of the market and to the requirements for acquiring the necessary competence of the seafarers in the field of IWT

The education system in the Republic of Bulgaria was not changed in relation to the requirements of modern and qualified education on the field of IWT. The education form is the traditional one – mainly "classroom" e.g. there is lack of updated tools for education like e-learning.

3. Lack of enough resources for funding of Education and Training centres in the field of IWT

The economic crisis imposes restraints of the national budget. This is very important for the sector of education in the field of IWT. Therefore, there is a need for maximum assimilation of instruments of the different programs and projects within EU.

4. Lack of specialized training ships

The training of students is not performed on specialized training ships. The lack of such vessels leads to weak practical and professional schooling of the future seafarers in the field of IWT.

5. Lack of interest of the ship owners to invest in the education of their personnel

The ship owners do not invest enough resources for education and qualification of their personnel. This leads to inefficient use of the human resources in the process of work on board of the river fleet.

6. Outlining the trend for reducing the ship's crews

The high competition and the contraction of the market leads to a reduced number of the ship's crew by the shipowners. This is supposed to be premise to abuses with the working hours which is the main factor for wrecks and accidents.

7. The navigation on the inland waterways is weakly spread in the public

The lack of a modern training centre, equipped with all necessary for proposing high quality education, in which by up-to-date multimedia means the information for the







professions in the field of IWT is provided, and thus the promotion of these professions is made, are the quay factors for the choice of the profession in the field of IWT made by the young people in Ruse, which is the biggest Bulgarian city along the Danube River.

Opportunities

1. Establishment of Modern Training Centre to provide high quality training and to promote the profession

For the building of a positive image of the profession, there are essential purposeful educational and promotional activities to be performed, that to be oriented not only to the people of the branch, but also for the public. The joint efforts of the public and the politicians will leads to the establishment of strong political support for the profession.

2. Development of multimodal terminals and freight villages

A freight village is a defined area within all the activities related to the transport, logistics and distribution of cargo, both for national and international transit are carried out by different operators. These operators could be owners as well as tenders of the buildings and facilities (storehouses, ship unloading centres, storage areas, offices, parking places, etc.) built there. In order to promote the multimodal freight transport, the freight village should be provided with access to different transport modes (road, rail, maritime, inland waterway transport and air transport).

3. Optimisation of the navigation conditions and more intensive use of the Danube River

The navigation channel of the Danube River does not conform to the internationally accepted standards, established by the Danube Commission. There are many bottlenecks identified in the period 1994-2008 within the Bulgarian section of the Danube River. The optimisation of the navigation conditions will contribute for the transfer of significant part of the freight traffic towards the waterways, which is in line with the established EU transport policy (White Paper for transport) and the NAIADES Programme.

Threats

1. Aging tendency among the qualified personnel in the field of inland waterway transport is observed

The lack of a promotion centre for encouraging the professions in the field of inland waterway transport and a modern training centre, providing high quality education to young people, poses a risk of alarming increase of the average age of the qualified personal, engaged in the inland waterway transport.

2. Reduction of candidates for acquisition of competence in the field of IWT

The insufficient investments in the field of IWT are a prerequisite for the decreasing number of candidates for acquisition of competence, giving them the right to work on river ships. Over the past few years a tendency of permanently decreased interest in new candidates to work in the field of IWT is observed.

3. Deterioration of the quality of education







The current state of the quality of education in the field of IWT does not correspond to the modern training methods used in the maritime education, for example. The lack of simulators for the river leads to incapability of providing sufficient training and upgrading qualifications of the personnel, engaged in the field of inland waterway navigation.

4. Measures of the Bulgarian National Action Plans

4.1 Measures addressing nautical personnel

| I. Establishment of a modern education centre, providing high quality training and establishment of a centre for promotion of the profession in the field of IWT in Ruse | | |
|--|---|--|
| Status quo | The absence of such centre for education and training in the field of IWT leads to the lack of interest in young people in the specific occupations carried out on board. The City of Ruse, being the biggest Bulgarian city with developed infrastructure along the Danube river, is the most appropriate place for the building of such centre. | |
| Proposed | For improving the quality of education of the personnel in the field of | |
| Measure | IWT, establishment of a modern education centre, responding to the needs of the business is needed. | |
| Expected impact | This measure will increase the quality of the provided education and | |
| | the opportunities for upgrading of the qualifications. The target | |
| | group includes both young people seeking their realization in the IWT | |
| | as well as the already engaged personnel willing to upgrade their qualifications. | |
| Responsibility | R: The responsibility lies with the Executive Agency "Maritime | |
| and stakeholders | Administration" on behalf of the Ministry of Transport, Information | |
| | Technology and Communications. | |
| | S: Bulgarian River Shipping J.S.Co.; shipowners; Rousse Shipyard J.S.C.; | |
| | Professional High School for river shipbuilding and river navigation | |
| Priority | high | |
| Financing | Consortium between the Ministry of Transport, Information | |
| | Technology and Communications and the business. The funding of | |
| | this measure could be provided under the Seventh Framework | |
| | Programme (FP7) of the European Commission. | |

| II. Introducing a mandatory legal requirement for passing a course and practice on a simulator for receiving education and practical capacities in the field of navigation on inland waterway transport | | |
|---|---|--|
| Status quo | The current examination programs for acquiring capacity "Captain – Inland Navigation" do not require demonstration of skills, related to river navigation in real situation. | |
| Proposed Measure | Legislative initiative is needed from Executive Agency "Maritime Administration" on behalf of the Ministry of Transport, Information Technology and Communications for the introduction of such | |







| | requirement in the examination procedures for acquiring the capacity of captain. | | |
|------------------|---|--|--|
| Expected impact | Such examination together with the use of a simulator will provide actual and impartial assessment of the skills and the assimilation of the material in the field of inland navigation. Thus the possibility of corruption practices will also be avoided during the examination. | | |
| Responsibility | R: This measure will be implemented by the Executive Agency | | |
| and stakeholders | "Maritime Administration" together with the Bulgarian Ports | | |
| | Infrastructure Company | | |
| | for the needs of which RIS operators will be trained. | | |
| | S: ship owners; logistics operators | | |
| Priority | high | | |
| Financing | The Ministry of Transport, Information Technology and | | |
| | Communications | | |

| III. Enabling the provision of scholarships for students during their practice on IWT. | | | |
|--|--|--|--|
| Status quo | Students in Professional High School for River Shipbuilding and River Navigation and Naval Academy – Varna, dealing with IWT do not receive scholarships during their education. | | |
| Proposed | Creation of links between the educational institutions and the | | |
| Measure | shipping companies, to enable students to obtain better practical | | |
| | training. | | |
| Expected impact | Students should be able to relate the theoretical knowledge with practical work and thus an easy transition from training to real work will be achieved. | | |
| Responsibility | R: The Ministry Transport, Information Technology and | | |
| and stakeholders | Communications, shipping companies | | |
| | S: high schools, maritime and IWT companies, port authorities. | | |
| Priority | medium | | |
| Financing | The Ministry of Transport, Information Technology and | | |
| | Communications, maritime and IWT companies, port authorities | | |

| IV. Establishment of e-LEARNING tools for education in the field of IWT. | | |
|--|---|--|
| Status quo | Currently there are no e-LEARNING tools provided for the purposes of education in the field of IWT. | |
| Proposed Measure | The development of e-learning tools will provide updated materials in one place to the students and will provide a database of learning materials in the field of IWT. | |
| Expected impact | The e-learning platform in the field of IWT will be a modern tool for learning, which will gather all the learning materials and provide an easier and better access to education in the field. | |







| Responsibility | R: The Ministry of Education, Youth and Science | |
|------------------|--|--|
| and stakeholders | S: Professional High School for River Shipbuilding and River | |
| | Navigation and Naval Academy – Varna, EAMA | |
| Priority | medium | |
| Financing | The Ministry of Education , Youth and Science, EU projects | |

4.2 Measures addressing IWT logistics personnel

| I. Participate in the design of teaching materials | | |
|--|---|--|
| Status quo | The topic inland waterway transport is underrepresented when it comes to teaching materials for training and education; the current materials used contain out of date information (e.g. old fashioned IWT image). This is the case in general in the education as well as in the education and training in the field of transport logistics. | |
| Proposed | Existing learning materials (books, scientific works) has to be updated | |
| Measure | and improved. Multimedia teaching materials dealing with IWT has to be created (films, games, e-learning). The form and level of information has to be orientated towards the target groups. A strong cooperation between teachers and schoolbook authors will contribute to the impact of this measure. | |
| Expected impact | Up-to-date and well prepared materials facilitate the teachers to teach IWT related content. A modern picture of IWT will be provided to the next generation and the inland navigation will gain awareness. | |
| Coordination and stakeholders | C: EAMA S: schoolbook editors, teachers, Ministry of Education Youth and Science | |
| Priority | medium | |
| Financing | The Ministry of Education, Youth and Science | |

5. Identification of national or regional funding possibilities for Education and Training Measures in Bulgaria

There are no national programs funding education and training initiatives. The funding is provided by the national budget.

6. Conclusions

The issues of the education and training in the field of IWT and the decreasing number of qualified personnel cause great influence on the overall development of the sector. Some of the pointed problems could not be solved on national level:

- Aging tendency, observed among the qualified personnel;
- Lack of training ships and practices;
- Lack of harmonized and coordinated certification of the education and training centres in Europe.







Having in mind the above mentioned problems, it could be concluded that the transnational cooperation and the gathering of resources will be of great favour to:

- The creation of modern learning tools (e-learning)
- The exchange of equipment (simulators, training ships)
- The exchange of know-how and guest lecturers.

The establishment of a modern education centre, facilitated with all the needed equipment for the provision of high-quality education as well as the establishment of a centre for promotion of the profession in the field of IWT based in Ruse, will be a big step forward to the positive tendency of the development of the professions related to the IWT.

The realization of such project within the Action Plan on the implementation of the Integrated Programme NAIADES as well as within the European strategy for the Danube region will contribute to the development and promotion of the IWT.

7. Validation of Austrian National Action Plan

The Bulgarian dNAP has been validated by following institutions. Please find their reaction and inputs:

• The Ministry of Transport, Information Technology and Communications

"After reviewing the draft Plan for education in the inland waterway transport, the experts of National Transport Policy Directorate within the Ministry of Transport, Information Technology and Communications have the following recommendations:

- The prepared analysis should take into account the EU Strategy for the Danube Region and be consistent with the Strategy for the Development of the Transport System of the Republic of Bulgaria till 2020
- The prepared list of actions should be expanded by including deadlines for the implementation
- It is extremely important to consult and clarify the funding of the actions in the Plan."

• The Ministry of Education, Youth and Science

"The experts of Ministry **endorse the NAP**. We propose the measures "Establishment of e-learning tools for education in the field of IWT" and "Participation in the design of teaching materials" to be financed only from EU funds and private companies"

• District Administration – Ruse

LETTER OF SUPPORT

The District Administration – Ruse approves the National Action Plan for Education and Training Issues in the Field of Inland Waterway Transport in Bulgaria, prepared in connection with the obligations of Bulgarian Maritime Administration, Executive Agency as a partner in a project "Cooperation-Network for logistics and nautical education focusing on Inland waterway Transport in the Danube corridor supported by innovative solutions" (NELI).

Our opinion is that the town of Ruse is the most suitable place to create a Centre for education and training and for encourage practising the professions connected with inland waterway transport as a part of the National Action Plan in the National strategy of developing the transport system of Republic of Bulgaria till 2020.