



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

**STATUS QUO REPORT ON WATERWAY ADMINISTRATION**

Document ID:		
Activity:	Act. 6.1	
Author / Project Partner:	Date:	Version:
Tomislav Štrus	April 30, 2009	1.0

## **1 OVERALL OBJECTIVE OF THE REPORT AND RELATION TO OTHER NEWADA TASKS**

Activity 6.1 deals with organizational and strategic issues of the waterway administrations. As a starting point the “Board of Directors” shall elaborate a status quo report of their waterway administrations (Task 6.1.2.). This report shall include general information on the organizational and legal structures, the existing tasks and objectives as well as the available resources of each waterway administration. Based on this information a SWOT analysis (Strengths-Weaknesses-Opportunities-Threats) shall be elaborated for each waterway administration, which shall be presented and discussed during a Board of Directors meeting.

The results of the status quo report are the basis for the discussions between the participating directors on common future objectives of waterway administrations on the river Danube (Task 6.1.3.). Based on these findings a set of recommendations shall be elaborated for every waterway administration, which aims at optimizing the framework conditions of the respective waterway administration (Task 6.1.4.).

## 2 ELEMENTS OF THE STATUS QUO REPORT:

### 2.1. Legal background of your waterway administration

By the end of 1990, inland waterways in Croatia were a part of the inland waterway network in the former Socialist Federal Republic of Yugoslavia. There was no maintenance or marking done whatsoever on the inland waterways at the period between 1990 and 1995, whereas from years 1995 to 1997 the only maintenance that was implemented, on a rather limited scale, was on the Drava River waterway.

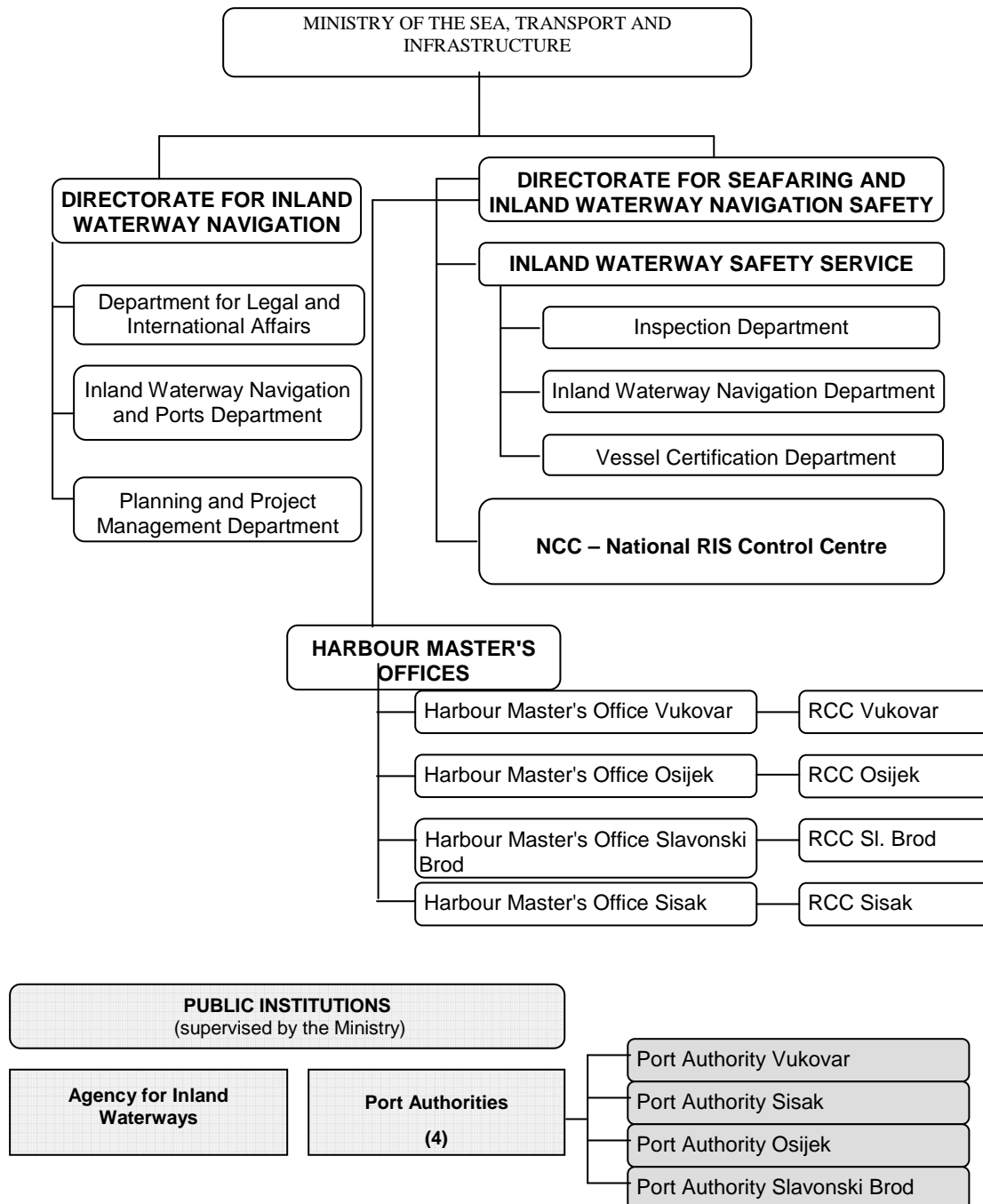
After the Act on Inland Waterway Navigation and Ports has been passed, basis for financial resources have been created and implementation of technical maintenance measures could begin. Organized restructuring of the waterway marking system was started in 1998. It lasted for 4 years, during which period, safety level was constantly increased. Within the first step, preconditions for daytime navigation were provided whereas in the second, night-time navigation marking system was also repaired.

Activities of technical maintenance of inland waterways, financed by the national budget, started in year 2000. In the beginning, the budget was restricted within the budget of the National Water Directorate, but since 2002, our financing is provided within the budget of the Ministry in charge of inland navigation.

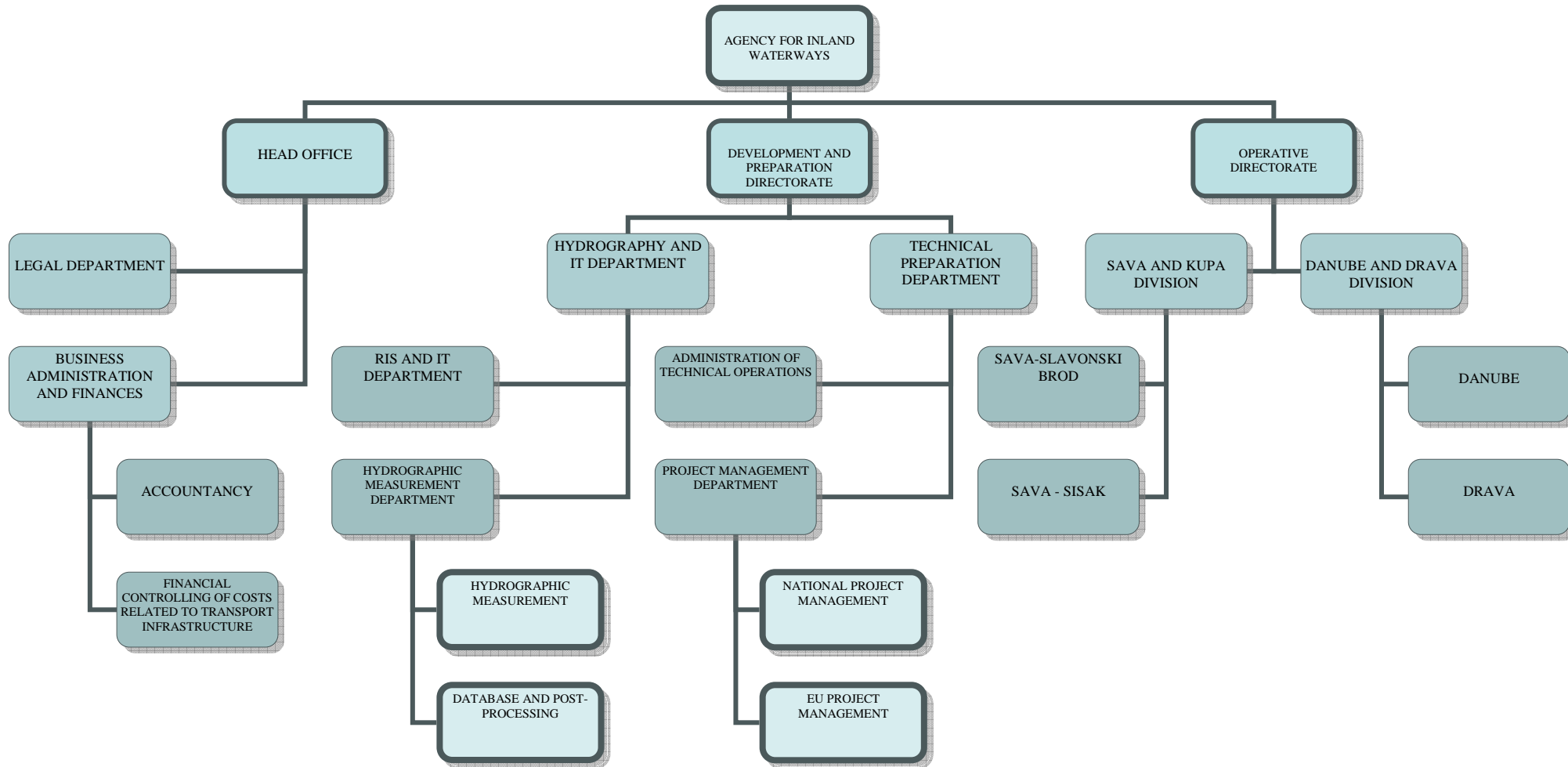
After year 2001, general modernization and increase of the maintenance standard was defined as the primary goal, whereas after year 2004, development of River Information Services started. Agency for Inland Waterways, with the head office in Zagreb, was formed in 2003 by the Amendments of the Act on inland waterway navigation (OG 151/03). The Government of the Republic of Croatia was the sole founder. As of year 2006, the Agency for Inland Waterways became an operative body by setting up an office in Vukovar. The head office was also transferred to Vukovar in 2007.

In 2007, new legislation was passed, the Act on Navigation and Ports of Inland Waterways, which regulates legal obligations and jurisdiction of the Agency for Inland Waterways. The Agency is a public body under the direct supervision of the Ministry of Sea, Transport and Infrastructure.

Administrative capacity of public sector in the area of inland waterway transport



## 2.2. Organizational structure and main tasks of your waterway administration



## Main tasks of the Agency

- preparation of the med-term development plans,
- construction, technical development and modernization of the inland waterways,
- preparation and implementation of technical maintenance plans,
- repairing river training structures damaged by natural disaster or any other exceptional event,
- Inland waterways marking,
- development and improvement of the RIS
- monitoring and controlling the condition of the inland waterways

Development and preparation directorate includes:

- technical preparation department,
- hydrography and IT department.

Technical preparation department is in charge of preparing mid-term plans of inland waterway development as well as technical plans for waterway maintenance. As Agency for Inland Waterways does not have at their disposal the necessary equipment and staff for conducting construction work of river training objects, technical improvements of the waterway and traffic management modernization, those are conducted by subcontractors which are contracted on the basis of public procurement. The department of Administration of technical operations provides tender dossiers and conducts public procurement. Hydrography and IT department is in charge of development and modernization of RIS, as well as hydrographical measurements of inland waterways.

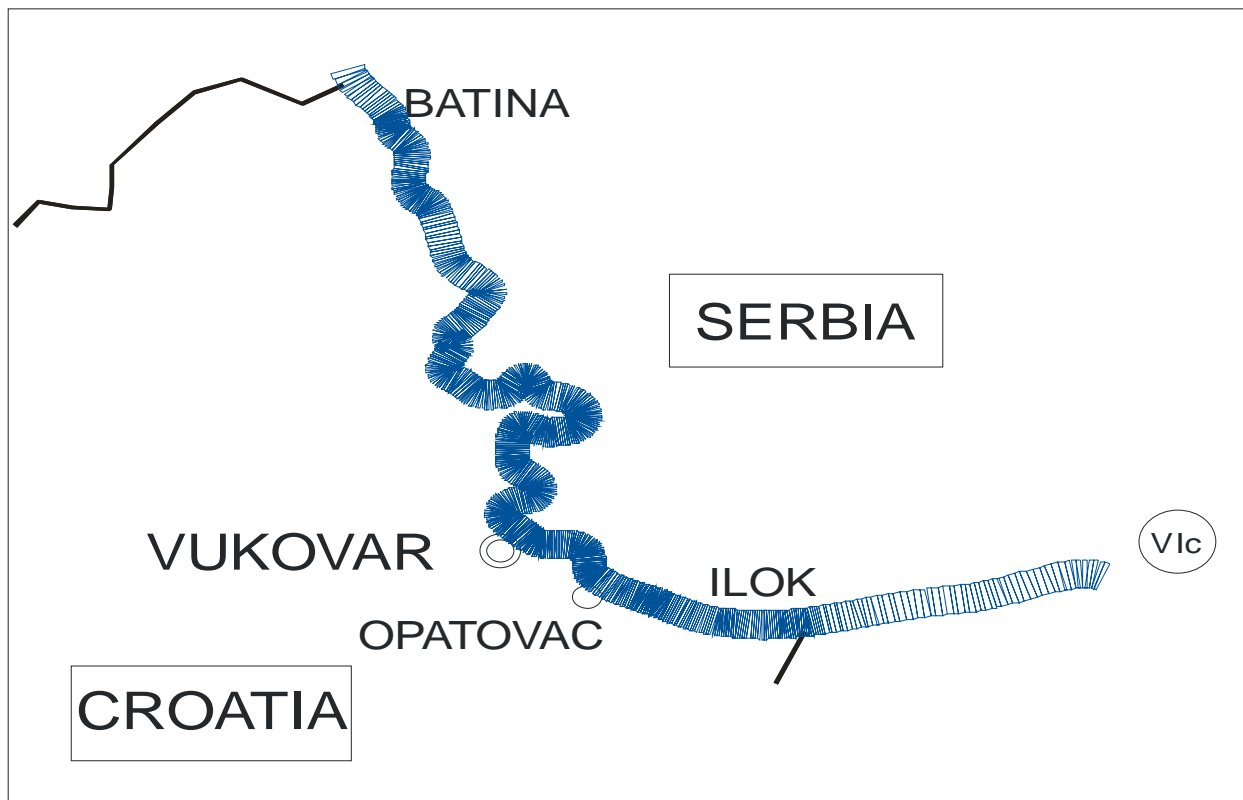
The Operative directorate is in charge of monitoring and control of waterway conditions as well as marking of the waterway. Due to the geographic position of inland waterways in Croatia, this directorate is divided into two divisions: one for the Sava River waterway and the other for the Danube and Drava waterways.

### 2.3. Available resources of your waterway administration

The original plan of AVP structural organization proposes 45 employees. Due to available resources, there are 25 people currently employed at the Agency: 2 at the head office, 6 at the development and preparation directorate and 17 at the Operative directorate (15 at the field vessels for maintenance, control and supervision of the waterways).

Technical aids at the disposal of the Agency for Inland Waterways include 4 vessels for marking, control and supervision and one vessel for hydrographical measurements, as well as the accompanying hydrographical equipment.

One vessel on the Danube waterway covers the entire stretch of the Danube waterway in Croatia, from ILOK (rkm 1295,5) to BATINA (rkm 1433).



The vessel is equipped with a Navisound 110 echo sounder, accuracy +/- 5 cm, INLAND ECDIS system, radar, GPS; whereas the pushraft is equipped with hydraulic crane for placement of buoys, with the load-bearing capacity of 2000 and 1300 kg, diesel aggregate, echo sounder and a workshop for minor repairs.

The vessels is stationed in Vukovar (rkm 1333) and once per week navigates along the entire sector and controls the markings on the waterway, does repairs on kilometre marks and buoys as well as depth measurements on the fairway.

Two vessels operate on the Sava River waterway covering the section from Oprisavci (rkm 343) to SISAK (rkm 594).





On the Drava River waterway, one vessel covers the section from the confluence with Danube (rkm 0) to rkm 125,6.



Apart from the four vessels, Agency for Inland Waterways also has smaller vessel carrying equipment for hydrographical measurements. An accompanying car trailer is provided alongside the vessel, in case it needs to be transported to another waterway.

Hydrographical equipment consists of the following:

- Multibeam echosounder ELAC 1185
- Differential GPS – MAGELLAN PROMARK 500
- Integrated gyro and sensor motion – TSS MAHRS
- Sound velocity profiler – Valeport miniSVP
- Power generator 2kw
- Software and hardware for navigation, acquisition and data processing – RESON PDS 2000, Elac Hydrostar.

Agency for Inland Waterways budget was set on annual basis until the year 2010, however, from 2010, it is allocated on a 3-year-basis. Budget cuts present a significant problem, as evident from the following table for the 2007-2012 period:

Year	Million EUR
2007	7,72
2008	8,41
2009	6,48
2010	4,69
2011	5,24
2012	6,62

## SWOT-Analysis

<p style="text-align: center;"><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• Executes annual maintenance plans regularly</li> <li>• Has recently set up a hydrographical department</li> </ul>	<p style="text-align: center;"><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• Understaffed</li> </ul>
<p style="text-align: center;"><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• Fully implemented RIS</li> </ul>	<p style="text-align: center;"><b>THREATS</b></p> <ul style="list-style-type: none"> <li>• Budget cuts</li> <li>• Lack of experience in hydrographical activities</li> </ul>

- End of document -