

# WASTE MANAGEMENT FOR INLAND NAVIGATION ON THE DANUBE



## **Status Report on National Frameworks in Slova- kia**

Work Package WP 3: **Elaborating ship waste management concepts**

Activity 3.1 : **Definition a common framework concept**

Output No: 3.4

**Work Package Leader/ Organisation: Ernő Pál/KTI**

Activity Leader/ Organisation: Ernő Pál/KTI

Author/Organisation: Júlia Šumná/WRI

Author/Organisation: Katarína Kozáková, Dagmar Drahovská, Wanda  
Kutášová - WRI

Preparation of Document: 2010-03-26

**Version: 02**

## TABLE OF CONTENT

<b>0</b>	<b>Introduction .....</b>	<b>4</b>
<b>1</b>	<b>General Information .....</b>	<b>5</b>
1.1	Geography .....	5
1.2	Basic shipping Data .....	6
1.3	Responsible Authorities .....	10
1.3.1	Waste management Right .....	10
1.3.2	Water Right .....	11
1.3.3	Navigation Right .....	11
1.3.4	Environmental Right .....	12
<b>2</b>	<b>National Legal Frameworks .....</b>	<b>13</b>
2.1.1	Waste Management .....	13
2.1.2	Water Management .....	17
2.1.3	Inland Navigation .....	17
2.1.4	Environment .....	18
2.2	Regulations for Inland vessels .....	19
2.2.1	Regulations for inland vessels according to Water Right .....	19
2.2.2	Regulations for inland vessels according to Navigation Right .....	19
2.2.3	Regulations for inland vessels according to Waste Management Right .....	20
2.2.4	Regulations for inland vessels according to Environmental Right .....	20
2.3	Regulations for Ports .....	20
2.3.1	Regulations for ports according to Water Right .....	20
2.3.2	Regulations for ports according to Navigation Right .....	21
2.3.3	Regulations for ports according to Waste Management Right .....	21
2.3.4	Regulations for ports according to Environmental Right .....	21
2.4	Regulations for Handling Stages .....	21
2.4.1	Regulations for handling stages according to Water Right .....	21
2.4.2	Regulations for handling stages according to Navigation Right .....	21
2.4.3	Regulations for handling stages according to Waste Management Right .....	21
2.4.4	Regulations for handling stages according to Environmental Right .....	21
2.5	Regulations for Locks .....	21
2.5.1	Regulations for locks according to Water Right .....	21
2.5.2	Regulations for locks according to Navigation Right .....	22
2.5.3	Regulations for locks according to Waste Management Right .....	22

2.5.4	Regulations for locks according to Environmental Right.....	22
2.6	Regulations for Mobile Services and other assets .....	<b>22</b>
2.6.1	Regulations for mobile services and other assets according to Water Right.....	22
2.6.2	Regulations for mobile services and other assets according to Navigation Right .....	22
2.6.3	Regulations for mobile services and other assets according to Waste Management Right .....	22
2.6.4	Regulations for mobile services and other assets according to Environmental Right.....	22
<b>3</b>	<b>Analysis of current state.....</b>	<b>22</b>
<b>4</b>	<b>Stakeholders .....</b>	<b>25</b>
<b>5</b>	<b>Conclusions .....</b>	<b>26</b>
<b>6</b>	<b>Literature .....</b>	<b>27</b>
6.1	Official Sources.....	27
<b>7</b>	<b>Annex 1.....</b>	<b>29</b>

## 0 INTRODUCTION

Preparation of the draft on waste management for inland vessels requires a multidisciplinary knowledge base about the conditions in which this process takes place and by which it is determined. The success of the proper implementation depends not only on reliable know-how of the water management from the viewpoint of quality and quantity.

Know-how of inland navigation in national and also international context, know-how of agreements and conventions that shape the conditions for its implementation in terms of technical specifications and also the legal background are equally important.

Furthermore, it is important

- to find the right system solutions in organisation of the water transport from institutional point of view,
- to know the scope of state administration bodies and state professional supervision in the section of inland navigation, the rights and obligations of legal entities and natural persons involved in inland navigation,
- but also keep track of number and the condition and state of vessels, their classification and capacities.
- Moreover, to carefully understand and respect the legal regulations for waste management and the type and quantity of waste generated in connection with the water transport, options and real state when dealing with them.

Considering the multidisciplinary nature of this task, in order to design optimal ship waste management the work activities were in the first phase aimed at

- Analysis of the legal framework for inland waterway transport and environment issued in the Danube River Basin, which is comprised of international conventions between countries as well as relevant EU law, policies and action plans in these areas
- Operational Analysis of state administration bodies and state expert supervision over the water management, waste management and inland waterway transport,
- Analysis of institutional and objective organisation of inland water transport in the conditions of transformation into private sector as well as
- Description of Water way with appropriate infrastructure and real state of vessels in the SR.

## 1 GENERAL INFORMATION

Slovakia is a landlocked country in the Central Europe with a population of over five million and an area of about 49,000 square kilometres.

The Slovak economy is considered as an advanced economy. Slovakia transformed from a centrally planned economy to a market-driven economy.

Slovakia has recently been characterized by sustained high economic growth. In 2006, Slovakia achieved the highest growth of GDP (8.49%) among the members of OECD. The annual GDP growth in 2007 was 10.42% and 6.4% in 2008. After several years of exceptionally high growth, GDP with rising unemployment, wage growth is expected to contract this year and slow considerably. (-5.0 expected for 2009)

Slovakia's GDP comes mainly from the tertiary (services) sector; the country's industry also plays an important role within its economy. The main industry sectors are car manufacturing and electrical engineering.

Bratislava's geographical position in Central Europe has made Bratislava a crossroad for international trade traffic. Various ancient trade routes, such as the Amber Road and the Danube waterway have crossed the territory of current Bratislava.

The Bratislava Port is one of two international river ports in Slovakia. The port connects Bratislava to international shipping, especially the interconnection from the North Sea to the Black Sea via the Rhine-Main-Danube Canal. Additionally, tourist lines operate from Bratislava's passenger port, including routes to Devín, Vienna and elsewhere.

The Slovak landscape is noted primarily for its mountainous nature, with the Carpathian Mountains extending across most of the northern part of the country. The high peaks of the Tatra mountains are amongst these mountain ranges.

### 1.1 GEOGRAPHY

The Danube River has always played a crucial role in the SR. The second largest river in Europe (with the length of 2 857 km) flows from Austria into the territory of Slovakia at the mouth of the Morava river at the Devin Castle and leaves at the mouth of the Ipeľ river near the village Chľaba. The Slovak section of the Danube belongs to the upper part of the middle flow. The Danube in our territory forms the border with Austria in the length of 7.5 kilometres, in the section of 22.5 kilometres it flows through the Slovak territory and then in the length of 142 km it creates border with Hungary. The Danube is also a recipient of all Slovak rivers except the Poprad and Dunajec rivers and their tributaries from the SR which flow into the Baltic Sea.

The longest and largest left-bank branch of the Danube which branches off from the main stream below Bratislava is the Little Danube. It flows in the channel to the village Most near Bratislava, where it continues in the original riverbed 30 to 50 meters wide, with many meanders and typical

floodplain forests in their surroundings. Over 150 km long flow bypassing Žitný island (island formed by the Danube and the Small Danube) is the largest river island in Europe., Zitny island lies in the territory of the Slovak part of the Danube in the length of 84 km, wide from 15 to 30 km and it covers an area of over 1 600 km<sup>2</sup> from Bratislava to Komárno. Its territory is flat in nature with low altitude. The other major tributaries of the Danube are Váh which joins at Komárno, Hron joins at Štúrovo and Ipeľ in the easternmost part of the territory. All tributaries of the Danube flow more or less in the north-south direction, while they monitor fault lines.

The greatest natural sights of the Danube region include Burda Mountains, the national nature reserve - Kováčovské hills – south, where the richest occurrence of rare species of thermo-philic plants in Slovakia can be found. The unique natural values of the Danube region has been a reason for a declaration of several small-sized protected areas of different categories and the protected area of the Danube flooded woodlands. The most valuable section is 80 km long between Bratislava and Zlatná in terms of nature conservation. There are forestry, aquatic, wetland, meadow and sandy communities found here in a relatively small area. The protected area consists of five individual parts. The first two parts are spread at Bratislava on both sides of the Danube, and include dry and aquatic ecosystems. The third (forestry) system is part of the left side branches of the Danube between the villages Dobrohošť and Sap. A similar character has a section between the villages and Sap Čičov. They are characterised by deep blind branches of the Danube at Čičov and Klúčovec. The last part is the forestal country of Veľkolélsky Island at Zlatná.

The protected area of the Danube flooded woodlands is included in the list of wetlands of international importance.

## 1.2 BASIC SHIPPING DATA

The Danube waterway with an international navigation regime and three public ports Bratislava, Komárno and Štúrovo is the basis of water transport infrastructure in Slovakia within the Concept of Water Transport Development of the Slovak Republic. The Danube forms a part of a major European transport corridors marked with Corridor No. VII - the Danube, in the AGN Agreement, marked E 80. According to this agreement it is a waterway of the category VIc in the mouth of the Ipeľ River – Klížska Nemá and the category VIb in the stretch Klížska Nemá - the mouth of the Morava River. The section of Gabčíkovo Water Work meets the parameters of the category VII.

For the Slovak Republic in particular, the access to waterway channel Rhine-Mohan-Danube, which connects the North Sea with Black Sea and completion of the Váh waterway, mainly due to interconnection of developed economic regions of the Slovak Republic to the Danube waterway and prospectively in northern direction to the corridor No. VI, in part of the waterway transport to the Odra River and the Baltic Sea, is of great importance.

Public ports with the statute of international public ports in the Slovak Republic play a crucial role in the water transport infrastructure.

The area of the Bratislava port includes two docks and both banks of the Danube River in the stretch from river km 1 871.350 up to 1 862.000. This part includes manipulation, service, repair and docking positions of vessels as well as conditions, a way of their anchoring, tying and permissibility of docking at the port regarding purpose specification of vessel.

Komárno public port area includes left bank of the Danube River up to the left border of shipway in the stretch from river km 1 770.000 to 1 762.000, both banks of the Váh River up to the railway bridge, eastern and western river bank with a specified area.

Štúrovo public port is located on the left bank of the Danube River up to the left border of shipway in the stretch from river km 1 718,800 to 1 718,300 with a specified area.

In view of optimizing the operation of state property in conditions of commercial environment, Verejné prístavy joint-stock company was established in 2008 in accordance with the conceptual policy of the Slovak Republic in this field. The company was founded by the Slovak Republic and it is managed by the Ministry of Transport, Posts and Telecommunications of the SR. The scope of the company activities is as follows:

- development of construction plans and construction of public ports;
- provide operation, registration, maintenance and repair of public port structures and facilities;
- creation of conditions for development of combined transport
- collection of public port fees and charges

Public water transport in the Slovak Republic can be performed only with a licence which is given by the Ministry of Transport, Posts and Telecommunications of the Slovak Republic. Currently this licence is owned by approximately 40 transporters. The overview on the state of ships in inland waterway transport, tonnage of ships in inland waterway transport, number of transported persons, amount and sort of transported goods during recent years can be found in the following tables.

Tab.1: The state of ships in inland waterway transport

<b>cargo vessels - total</b>	267	245	235	234
☒ tug boats	47	45	42	43
☒ motor cargo ship	28	29	26	26
☒ cargo and push boat	144	135	132	132
☒ tankers and push boats	42	30	29	28
☒ ro - ro boats	6	6	6	5
<b>passanger ships</b>	17	16	14	14
☒ ponton				44
<b>VESSELS TOTAL</b>	284	261	249	248

Tab.2: Tonnage of ships in inland waterway transport

indicator	2005	2006	2007
<b>cargo vessels</b>			
☒ tug boats (kW)	47 229	44 409	42 678
☒ motor cargo ship (tons)	24 132	23 140	17 791
☒ motor cargo ship (kW)	14 916	14 648	11 823
☒ cargo and push boat (tons)	216 432	205 683	205 349
☒ tankers and push boats (tons)	58 478	37 784	36 938
☒ ro - ro boats	6 299	6 299	6 299
<b>passanger ships (persons)</b>	1 583	1 463	1 421
passanger ships (kW)	12 061	7 812	7 051

The tables 1, 2 to contain the statistical data for all providers of the inland waterway transport registered in the Slovak Republic regardless of their main activity.

Tab.3: Selected indicators for all providers of the inland waterway transport on territory of SR

indicator	2005*	2006*	2007
<b>transport of goods (tous.tons)</b>	2 350	2 252	8 013
<b>performances in ton km (mill.)</b>	88	106	1004
* without transit for foreing operators inland waterway transport			

The table 3 contains the statistical data for all providers of the inland waterway transport regardless of their registration country of ship on the territory of the Slovak Republic.

Tab.4: Selected indicators of goods transport

indicator	2005	2006	2007	2008
<b>transport of goods - total (thous.tons)</b>	1 526	1 713	1 806	1 767
<b>performances in ton km (mill.)</b>	680	936	843	979
of which enterprises with transport as prevailing activity				
<b>transport of goods - total (thous.tons)</b>	1 431	1 260	1 307	1470
<b>performances in ton km (mill.)</b>	674	632	722	914
<b>avarege worked distance (km)</b>	471	501,6	552,4	
of which transport enterprises with the number of employees 20 and more				
<b>transport of goods - total (thous.tons)</b>	1 408	1 244	1 276	1355
<b>performances in ton km (mill.)</b>	655	623	684	795
<b>avarege worked distance (km)</b>	465,2	500,8	536,1	587

The table 4 contains the statistical data for all providers of the inland waterway transport registered in the Slovak Republic regardless of their main activity.

Tab.5: Selected indicators of passenger transport

indicator	2005	2006	2007	2008
<b>transport of passengers in thous.</b>	133,9	111	121,9	121,5
<b>performances in mill.passenger-km</b>	4,2	2,6	4,3	3,3
of which enterprises with transport as prevailing activity				
<b>transport of passengers in thous.</b>	111,1	78,4	95,2	94
<b>performances in mill.passenger-km</b>	3,9	2,4	2,8	3,1
<b>avarege worked distance (km)</b>	35,1	30,6	29,4	
of which transport enterprises with the number of employees 20 and more				
<b>transport of passengers in thous.</b>	<b>99,8</b>	<b>78,1</b>	<b>95,1</b>	94
☒ national transport	60,3	60,9	70	63,2
☒ international transport	39,5	17,2	25,1	30,8
<b>performances in mill.passenger-km</b>	3,8	2,4	2,7	3,1
<b>avarege worked distance (km)</b>	38,1	30,7	28,4	33
<b>num.of lines in regular and irregular transport of passengers</b>	18	17	16	16

Transport in third countries is an international transport performed by ships registered in Slovak Republic between two places (port of loading and port of unloading are in two different countries).

The chapter transportation of goods and persons by navigable waterways within the territory of the Slovak Republic is included in water transport. Data on recreational transportation of passengers by the lakes or dams are excluded.

Tab.6: Transport of goods in inland waterway public transport by individual types for enterprises with the number of employees 20 and more the state of ships in inland waterway transport

indicator	2005			2006			2007		
	total	import	export	total	import	export	total	import	export
<b>inland waterway transport of goods in total</b>	1 068 182	22 410	1 045 518	962 560	18 133	944 427	1 027 324	27 237	1 000 087
☒ cereals	58 439	3 730	54 455	37 649	2 127	35 522	31 000	3 260	27 380
☒ textiles, tex.articles, man-made fibres, other raw materials of plant and animal origin	5 655	0	5 655	0	0	0	0	0	0
☒sugar, beverages, stimulants and spices, other foodstuffs, animal food and food waste	10 639	1 000	9 639	0	0	0	0	0	0
☒ oil seeds and oleaginous fruit and fat	15 500	0	15 500	0	0	0	0	0	0
☒ coal, lignite, coke	9 231	0	9 231	34 041	0	34 041	5 736	0	5 736

☒ fuel derivatives,gaseous hydrocarbons liquid and compressed, non-fuel derivatives	55 272	0	55 272	97 885	0	97 885	96 768	0	96 768
☒ iron ore, iron and steel waste and blast furnace dust	615 626	0	615 626	511 947	0	511 947	558 969	5 266	553 703
☒ non-ferous ores and waste	1 232	1 232	0	0	0	0	1 569	0	1 569
☒ pig iron, crude steel, ferro-alloys, rolledsteel, bars, sections, tracks, steel sheet, tubes, pipes, non-ferrous metals	59 435	1 037	58 398	58 095	7 403	50 692	162 690	3 151	159 539
☒ cement,lime and other manuf. build. Materials	0	0	0	0	0	0	14 829	14 829	0
☒ sand, gravel, clay and slag, slat, sulphur, iron pyrites,plasters, other stone earths and minerals	23 868	15 291	8 577	22 713	8 603	14 110	0	0	0
☒ natural and chemical fertilisers	206 290	0	206 290	197 342	0	197 342	150 832	0	150 832
☒ paper pulp and waste paper	0	0	0	0	0	0	0	0	0
☒ machinery, transport equipment, tractors, agricult. And other machinery, engines	3 091	0	3 091	1 928	0	1 928	120	0	120
☒ other manufactured articles	3 904	120	3 784	960	0	960	4 811	371	4 440
<b>transit and international cross-trade</b>	339 910	x	X	281 394	x	x	248 712	x	x

### 1.3 RESPONSIBLE AUTHORITIES

In the following chapter give an overview of national authorities and institutions responsible o the execution of Water, Navigation, Waste Management an Environmental Right.

#### 1.3.1 Waste management Right

**The Ministry of Environment of the SR** as a central state administration body in waste management shall

- Control and check the execution of state administration in waste management
- Prepare, issue, update and publish the Plan waste management of the Slovak Republic
- Raise objections, issue permits and stipulate conditions in waste import, export and transit
- Cooperate with central state administration authorities and other legal entities in providing for the uniform application of generally binding legal regulations in waste management

- Be a body of state supervision in waste management
- Ensure provision of information in the field of waste management to international institutions where the Slovak Republic is a member or where the obligation results from international agreements by which the Slovak Republic is bound.

The Ministry of Environment of the SR  
Námestie Ľ. Štúra 1  
812 35 BRATISLAVA  
Waste Management Section  
Marcela Pokusová  
Director

### 1.3.2 Water Right

**The Ministry of Environment of the SR** is the central body of the state water administration and water management:

- manages the state water administration and the execution performance.
- supervises the leading state water protection, elaborates framework and development programmes in the water management and centrally manages activities in the administration and operation of water courses and water constructions in the state property, which serve for water courses.
- fulfils assignments arising from the membership of the European Union in the water planning,
- ensures coordination of these tasks with relevant central bodies of the state administration and reports on performance of tasks arising from the legal acts of the European Community.

Ministry of Environment of the SR  
Nám. Ľ. Štúra 1  
812 35 Bratislava  
Water Section  
Department of Water Policy  
Ľudmila Strelková  
Department of River Basin Management and Flood Protection  
Milan Timár

### 1.3.3 Navigation Right

**The Ministry of Transport, Posts and Telecommunications of the Slovak Republic** as the central body of the state administration of the Slovak Republic for inland shipping and ports mainly

- defines framework programme of the development in the inland shipping, ports and water ways and in co-operation with the Ministry of the Environment of the Slovak Republic provides implementation in compliance with the state transport policy aims

- represents the Slovak Republic in international organisations working in inland shipping
- provides international cooperation in the hazardous goods transport

The Ministry of Transport, Posts and Telecommunications of the SR  
Námestie slobody č. 6  
P.O.BOX 100  
810 05 Bratislava  
Slovak Republic  
Peter ČÁKY  
State advisor – Inland navigation,  
Deputy Representative of the SR in Danube Commission

**The State Navigation Administration** is another governmental body for inland navigation and ports, which also performs the state professional supervision by:

- Managing and maintaining waterways and ports,
- Operating of vessels on the waterways and ports,
- Qualified capabilities of the crew and vessel and lock operators,
- Vessels capacity with the exception of mining equipment,
- Compliance with safety regulations for inland navigation.

The State Navigation Administration  
Prístavná 10  
821 09 Bratislava 2  
River Information Services Unit  
Štefan Chalupka  
Head of Unit

#### 1.3.4 Environmental Right

**The Ministry of Environment of the Slovak Republic** is a central governmental body for the development and environmental protection, including

- nature and landscape protection,
- water management, flood protection, protection of water quality and quantity, and their rational exploitation and fisheries with exception of aquaculture and of marine and fishery
- air protection, ozone layer and climate system of the Earth,
- environmental aspects of territorial planning, waste management; assessment of environmental impact,
- providing a unified information system on environment and broad-based monitoring,
- geological research and exploration;
- protection and regulation of trade in endangered species of wild fauna and flora;
- genetically modified organisms.

## 2 NATIONAL LEGAL FRAMEWORKS

The following text is a legal base for the field of waste and water management, which is related to the creation and with oily and greasy ship borne waste management.

### 2.1.1 Waste Management

Waste caused by inland navigation can be divided into two types: ship borne waste and waste caused by cargo, which includes mainly washing water and slops.

The first type comprises mostly oily and greasy ship borne waste, which arises from direct connection with technical ship operation and other ship borne waste, which arises from the human beings and their activities, e.g.: domestic sewage, domestic refuse, sewage sludge, other hazardous waste such as paint, varnish, solvents and the like.

Oily and greasy ship borne waste, including used oil, bilge water, other oily and greasy waste such as used grease, used filters, used rags, bundles and packaging of such waste is a subject of the research of the WANDA project.

The basic legal regulation (transposition from the European law) for the area of the waste management is **the Act No. 223/2001 on wastes as amended**. According to the Article 19 of this Act the waste holder is obliged:

- Categorise wastes according to the Waste Catalogue
- Accumulate wastes sorted by waste types and secure the same from deterioration, theft or other undesirable release
- Separately accumulate hazardous wastes by their types, indicate the same in a specified way and handle the same in compliance with the Act and special regulations
- Recover wastes in its own operation; offer the waste not utilised in that way for recovery to another person
- Provide for waste disposal if providing for its recovery is impossible or inefficient
- Hand over waste only to a person entitled to handle waste by the Act if not providing oneself for its recovery or disposal
- Keep and retain records of the waste types and quantities handled, and of their recovery and disposal
- Report stipulated data from the records to the respective state administration body in waste management

A classification of individual wastes from oily and greasy ship borne waste according to **the Waste Catalogue** (Decree of the Ministry of Environment of the Slovak Republic No. 284/2001, Decision 2000/532 establishing a list of wastes and a list of hazardous waste) is the following:

13 04 01\* Bilge oils from inland navigation

15 02 02\* Absorbents, filter materials, wiping cloths, protective clothing contaminated by dangerous substances

15 02 03 Absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02

15 01 10\* Packaging containing residues of or contaminated by dangerous substances

16 10 01\* aqueous liquid wastes containing dangerous substances (bilge water)

**For definition of terms, Waste Collection** shall mean waste accumulation, sorting or mixing for the purpose of its shipment, **while Waste Accumulation** shall mean temporary storage of waste proceeding for its further handling and **Waste Sorting** shall mean separation of waste by types or separation of waste components that may be classified as separate waste type after separation.

According to the Article 7 of the Act on Wastes an approval of state administration bodies in waste management is required to

- Operate an installation for waste disposal,
- Operate an installation for waste recovery
- Operate an installation for waste collection in case it is not part of recovery or disposal equipment
- Accumulate Waste by the waste holder without any previous sorting, where – with a view to the following way of its recovery or disposal – sorting or separated accumulation is not possible or efficient
- Recover or dispose waste by mobile installations

According to § 21, operators of mobile installations are obliged, no later than three days in advance notify in writing the District Environmental Office, in which territorial district they will the waste will be recovered or disposed, the place where they will be engaged in the activity; type, category and estimated quantity of waste to be recovered or disposed and estimated time of activity.

For recovery or disposal of waste oils, waste oils (waste oils shall be considered all mineral or industrial lubricant oils that have become unusable for the purpose for which they were initially intended, in particular used lubricant oils of combustion engines, transmission oils, mineral lubrication oils, turbine oils and hydraulic oils) requires an authorization by the Ministry granted to an entrepreneur to conduct activities - (Authorization granted by the Ministry shall mean granting consent to an entrepreneur)

The following provisions of the Act on Wastes are in force (Article 42) for the process of waste oils handling:

- Recovery of waste oils shall mean a process allowing the formation of basic oils from waste oils, in particular by the removal of contaminants, oxidation products and admixtures contained in those oils. Basic oils may not contain hazardous waste.
- It is prohibited to
  - Discharge waste oils into surface water, ground water and sewage
  - Deposit or discharge waste oils and any discharge of residues from waste oil processing into the soil.

- Where technical, economic and organisation conditions allow, the waste oil holder shall be obliged to preferentially provide for their recovery by regeneration; where that is impossible, the holder shall be obliged to provide for their energy recovery in compliance with special regulations. Where their recovery is not possible either, the waste oil holder shall be obliged to provide for their disposal.
- Anyone providing for the collection, reclamation or another way of recovery or disposal of waste oils, shall be obliged to
  - Keep and retain record of waste oils and of their recovered quantities from the waste collected in the Slovak Republic
  - Report stipulated data from the records to the Recycling Fund and the competent district authority on a quarterly basis.
- Waste oils may be collected, shipped, recovered and disposed of only separately from other waste types.
- The holder of waste oils shall be obliged to hand them in for reclamation and for another method of recovery or for disposal only to an authorisation holder
- Cross-border transport of waste from another Member State to the Slovak Republic, cross-border transport of waste from the Slovak Republic to another Member State, import of waste from a state other than Member State to the Slovak Republic, export of waste from the Slovak Republic to a state other than Member State and transit of waste (hereinafter “cross-border movement of waste”) are determined by specific regulations (Regulation No 1013/2006 of the European Parliament and of the Council on shipments of waste, Commission Regulation (EC) No 1418/2007 concerning the export for recovery of certain waste listed in Annex III or IIIA to Regulation (EC) No 1013/2006 of the European Parliament and of the Council to certain countries to which the OECD Decision on the control of transboundary movements of wastes does not apply (Official Journal of the European Union L 316, 4.12.2007).
- Cross-border transport of waste from another Member State to the Slovak Republic and import of waste from another State than Member State to the Slovak Republic for the purpose of disposal are forbidden unless otherwise stated in the international treaty binding for the Slovak Republic.
- Hazardous waste which was generated in the Slovak Republic will be preferentially recovered in the Slovak Republic in line with the programme of the Slovak Republic (§ 4 section 1). If recovery of such waste is not possible in the Slovak Republic, it will be preferentially recovered in one of the Member States.

Import, export and transit of waste provide Regulation 1013/2006 of the European Parliament and of the Council on shipments of waste. As an EU Member State, we are obliged to have this regulation adopted. This Regulation is focused on the need to restrict and control the movement of waste. It establishes procedures and control regimes for the shipment of waste, depending on the origin, destination and route of the shipment, the type of waste shipped and the type of treatment to be applied to the waste at its destination.

This Regulation shall apply to shipments of waste between Member States, within the Community or with transit through third countries; imported into the Community from third countries;

exported from the Community to third countries; in transit through the Community, on the way from and to third countries.

Under the Article 2 of this regulation the waste generated on board vehicles, trains, aeroplanes and ships shall be excluded from the scope of this Regulation, until such waste is offloaded in order to be recovered or disposed. This clearly indicates that ship waste can be delivered for the purpose of evaluation or disposal in the ports of another state only in the regime determined by this regulation.

It determines the conditions when the ship waste is subject to the procedure of prior written notification or general information requirements (Article 18) or certain simplified procedures (bilateral agreements Article 30).

On one hand the regulation provides a space for the implementation of necessary steps which should be taken to ensure that, in accordance with Directive 2006/12/EC and other Community legislation on waste, waste shipped within the Community and waste imported into the Community is managed, throughout the period of shipment and including recovery or disposal in the country of destination, without endangering human health and without using processes or methods which could harm the environment.

On the other hand it considerably makes more difficult the disposal of waste generated in relation to inland water transport. Therefore it would be suitable to work out a separate regime for this waste (as it is allowed by Waste Framework Directive) which enables flexible disposal during the whole navigation route (also in the territory of another state) and at the same time it provides the respective protection for the environment and human health.

### Overview of relevant legislations

Legislation	Legal base	Area of application
Act 223/2001 Coll. on waste	Directive 2006/12/EC on waste	Waste management
Act 529/2002 Coll. on packaging	Directive 94/62/EC on waste	Packaging and Packaging Waste
Decree of the Ministry of Environment of the Slovak Republic No. 283/2001 Coll. on Implementing Certain Provisions of the Act on Wastes	Directive 2006/12/EC on waste	Waste management
Decree of the Ministry of Environment of the Slovak Republic No. 284/2001 that sets the waste catalogue	Decision 2000/532 establishing a list of wastes and a list of hazardous waste	Waste management Waste classification

### 2.1.2 Water Management

The Slovak “**Water Act**” in Article 19 regulates the conditions of navigation:

- Water use for navigation may not hazard the quality or health safety of waters, human safety and safety of constructions, recreational purposes nor disturb the natural environment. **Discharge to waters of waste waters other than domestic waste waters** and dumping into waters all kinds of waste originating in vessels and remains of carried cargos, except of material dredged from these waters, **is prohibited**.
- Operator of a vessel may discharge domestic waste waters only if the vessel has necessary equipment enabling purification of domestic waste waters and its due operation is ensured. Such purification equipment must attain at least 90% effectivity in parameters of five-days biochemical oxygen demand and total suspended solids.
- If operation of a vessel results in production of domestic waste water or other type of waste water that cannot be discharged into waters, the vessel operator shall equip the vessel with device retaining them and preventing their release. The obligation to equip the vessel with device ensuring retention and preventing their release shall also apply with regard to dangerous substances. The vessel operator must keep records on volumes and disposal of these waters and on dangerous substances.

### Overview of relevant legislations

Legislation	Legal base	Area of application
Act 364/2004 Coll. on waters	Directive 2000/60/EC	Surface and ground water and waste water, inland waterway transport
Government Regulation No. 296/2005 Coll., establishing Qualitative Targets for Surface Waters and Limit Values of Pollution Indicators of Wastewater and Special Waters.	Directive 2000/60/EC	Surface and ground water and waste water
Government Regulation No. 617/2004 Coll., setting up sensitive areas and vulnerable zones	Directive 91/271/EC Directive 91/676/EC	Surface and ground water and waste water,

### 2.1.3 Inland Navigation

The book on waste and other dangerous material delivery must be kept on the vessels with its own propulsion system, floating machines and floating devices with inbuilt reservoirs for waste water with the exception of small vessels according to the Article 28, paragraph 2 of the Act 338/2000 on Inland Navigation.

Safety rules on the operation of inland waterway vessels in the Slovak Republic issued by the Decree of the Ministry of Transport, Posts and Telecommunications no 1740 following the Article No. 22, paragraph 7 of this Act determine specific duties of water protection and waste handling:

- Avoid and limit the generation of liquid and solid wastes on the deck of the vessel
- Discharge only treated waste water. Discharge other waste water and any other waste into waterway is forbidden. These must be delivered on the places designed for this purpose depending on the conditions and usage of vessel. Confirmation on waste delivery is written into check book by the collection officer.
- Provide separated waste collection on the vessel according to the content as well as collection of draining water in engine rooms

### Overview of relevant legislations

Legislation	Legal base	Area of application
Act 338/2000 Coll. on inland navigation	Directive 96/35/EC, 96/50/EC, 96/75/EC, 2005/33/EC, 2000/18/EC, 2005/44/EC, 2006/103/EC 2006/87 EC	Inland waterway transport
Regulation of the Government of the Slovak Republic No. 193/2009 Coll., on Technical and Operational Requirements for Inland Waterway Vessels	Directive 2006/87 EC	technical requirements for inland waterway vessels
Decree of the Ministry of Transport, Posts and Telecommunications No. 22/2000 Coll., determining details on the classification of inland waterways		classification of waterways

#### 2.1.4 Environment

Legislation	Area of application
Act 17/1992 Coll. on environment	Environment
Act No. 543/2002 Coll. on Nature and Landscape Protection	Protection on Nature and Landscape
Act No. 525/2003 Coll. of the Legal Codes on State Administration of the Environment	Environment

## 2.2 REGULATIONS FOR INLAND VESSELS

### 2.2.1 Regulations for inland vessels according to Water Right

The Slovak **“Water Act”** in Article 19 regulates the conditions of navigation:

- Waters may be used for navigation and extracted in necessary volumes for vessel operation without a permit or approval from a state water administration authority.
- Navigation of diesel-motor vessels is prohibited on surface waters located within protective zones of water-supply resources, on water reservoirs designated for intensive fish farming and on exposed groundwaters. The provisions shall not apply to vessels used officially by the manager of major water courses, armed forces, police force, armed security service, fire brigades, state navigation authority;
- Water use for navigation may not hazard the quality or health safety of waters, human safety and safety of constructions, recreational purposes nor disturb the natural environment. Discharge to waters of waste waters other than domestic waste waters and dumping into waters all kinds of waste originating in vessels and remains of carried cargos, except of material dredged from these waters, is prohibited.
- Operator of a vessel may discharge domestic waste waters only if the vessel has necessary equipment enabling purification of domestic waste waters and its due operation is ensured. Such purification equipment must attain at least 90% effectivity in parameters of five-days biochemical oxygen demand and total suspended solids.
- If operation of a vessel results in production of domestic waste water or other type of waste water that cannot be discharged into waters, the vessel operator shall equip the vessel with device retaining them and preventing their release. The obligation to equip the vessel with device ensuring retention and preventing their release shall also apply with regard to dangerous substances. The vessel operator must keep records on volumes and disposal of these waters and on dangerous substances.
- To supply vessels with fuel or substances necessary for their operation out of ports is prohibited if fuel volume in each separate case exceeds 50 litres, except when supply is done using vessel traffic service.
- If protection of health and human safety, protection of water and aquatic ecosystems quality, protection of hydraulic constructions and facilities requires so, the state water administration authority may modify, limit, or prohibit water use for navigation.

### 2.2.2 Regulations for inland vessels according to Navigation Right

The book on waste and other dangerous material delivery must be kept on the vessels with its own propulsion system, floating machines and floating devices with inbuilt reservoirs for waste water

with the exception of small vessels according to the Article 28, paragraph 2 of the Act 338/2000 on Inland Navigation.

Safety rules on the operation of inland waterway vessels in the Slovak Republic issued by the Decree of the Ministry of Transport, Posts and Telecommunications 1740 following the Article No. 22, paragraph 7 of this Act determine specific duties of water protection and waste handling:

- Avoid and limit the generation of liquid and solid wastes on the deck of the vessel
- Discharge only treated waste water. Discharge other waste water and any other waste into waterway is forbidden. These must be delivered on the places designed for this purpose depending on the conditions and usage of vessel. Confirmation on waste delivery is written into check book by the collection officer.
- Provide separated waste collection on the vessel according to the content as well as collection of draining water in engine rooms

### 2.2.3 Regulations for inland vessels according to Waste Management Right

According to the Article 18, paragraph 3 of the Act 223/2001 on Waste it is forbidden:

- Dispose waste
- Releasing into a water body except seas/oceans (D6)
- Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.) (D4)
- Releasing into seas/oceans including sea-bed insertion (D7)
- Burn polychlorinated biphenyls or used polychlorinated biphenyls on the vessels
- Discharge waste oils into surface water, ground water and sewage (Article 42)
- Deposit or discharge waste oils and any discharge of residues from waste oil processing into the soil.

### 2.2.4 Regulations for inland vessels according to Environmental Right

There are no significant regulations in the Slovak national law.

## 2.3 REGULATIONS FOR PORTS

### 2.3.1 Regulations for ports according to Water Right

There are no significant regulations for ports in the Slovak national law for water management.

### **2.3.2 Regulations for ports according to Navigation Right**

There are no significant regulations for ports in the Slovak national law for navigation.

### **2.3.3 Regulations for ports according to Waste Management Right**

There are no significant regulations for ports in the Slovak national law for waste management.

### **2.3.4 Regulations for ports according to Environmental Right**

There are no significant regulations for ports in the Slovak national law for environmental.

## **2.4 REGULATIONS FOR HANDLING STAGES**

### **2.4.1 Regulations for handling stages according to Water Right**

There are no significant regulations for handling stages in the Slovak national law for water management.

### **2.4.2 Regulations for handling stages according to Navigation Right**

There are no significant regulations for handling stages in the Slovak national law.

### **2.4.3 Regulations for handling stages according to Waste Management Right**

There are no significant regulations for handling stages in the Slovak national law for waste management.

### **2.4.4 Regulations for handling stages according to Environmental Right**

There are no significant regulations for handling stages in the Slovak national law.

## **2.5 REGULATIONS FOR LOCKS**

### **2.5.1 Regulations for locks according to Water Right**

There are no significant regulations for locks in the Slovak national law for water management.

### **2.5.2 Regulations for locks according to Navigation Right**

There are no significant regulations for locks in the Slovak national law.

### **2.5.3 Regulations for locks according to Waste Management Right**

There are no significant regulations for locks in the Slovak national law for waste management.

### **2.5.4 Regulations for locks according to Environmental Right**

There are no significant regulations for locks in the Slovak national law.

## **2.6 REGULATIONS FOR MOBILE SERVICES AND OTHER ASSETS**

### **2.6.1 Regulations for mobile services and other assets according to Water Right**

There are no significant regulations for mobile services and other assets in the Slovak national law for water management.

### **2.6.2 Regulations for mobile services and other assets according to Navigation Right**

There are no significant regulations for mobile services and other assets in the Slovak national law.

### **2.6.3 Regulations for mobile services and other assets according to Waste Management Right**

There are no significant regulations for mobile services and other assets in the Slovak national law for waste management.

### **2.6.4 Regulations for mobile services and other assets according to Environmental Right**

There are no significant regulations for mobile services and other assets in the Slovak national law.

## **3 ANALYSIS OF CURRENT STATE**

Public water transport in the Slovak Republic can be performed only with a licence which is given by the Ministry of Transport, Posts and Telecommunications of the Slovak Republic. Currently this licence is owned by approximately 40 transporters.

The Slovak Shipping and Ports, Joint Stock company is the majority water transport carrier and operator on the Danube in the Slovak Republic. This company carries out the inland transport. It provides by its own vessels only cargo services. Its portfolio is more than two hundred vessels of various types and provides ¾ of the total Slovak IWT.

In addition to this, it manages and performs operations in two major cargo ports on the Slovak territory - The Bratislava and Komárno port.

Since 2000, it operates a utility station - pontoon P-65, as a facility providing services to vessels in the area and removal of waste arising in connection with the operation of vessels.

The utility station pontoon P-65 is a special steel vessel without self-propelled vessels used for refuelling fuel, oil and water, and transfer of waste generated in connection with the operation of vessels. These services are provided by the Slovak Shipping and Ports, Joint Stock company **exclusively to its own vessels.**

Another major water carrier in Slovakia is the Slovak Water Management Enterprise, state company, branch office Bratislava DUNAJ, a centre of water transport, which ensures administration of water courses.

The following vessels are in operation:

- 7 pushers on the performance of 3 171 KW
- 1 motor tanker on the performance of 175 kW and 208 t loading capacity
- 2 passenger ships on the performance of 408 KW, with a maximum of 200 passengers
- 11 push boats with a total carrying capacity of the loading space 6 746.7 tons

They transport freight carried by a majority of stone riprap for bank protection, baffle structures and groynes as well as gravel transport when dredging the navigable stretches. Passenger transport is provided in cooperation with tour operators.

Wastes arising from shipping (used oils and bilge water) are given to organisations that are authorized for this activity.

The Donau Trade Petrol company has its own transport ships (motor tankers, tugs, pusher craft, barges, pontoons) carries out freight shipping, fuel transporting on the Danube river provides boats for fuel transportation, transshipment of goods, distribution to all logistics routes (transshipment capacity 60 000 ton per month) piping system (transshipment capacity 40 000 ton per month).

Wastes arising from shipping (used oils and bilge water) are given to organizations that are authorized for this activity.

The same way of proceeding as defined by the Act on Wastes is carried out by other carriers, the holders of licensees for water transport, carrying shipping transport only as a supplement to the core business.

In order to assess the amount of waste produced from the inland waterway transport in the presented classification according to type of waste and describe the way of disposal, we also analyzed data from the Regional Information System on Wastes (RISO). Considering the majority of

license holders water transport is not the main activity and because of inaccurate classification of waste oils and bilge water, we were unable to clearly sort out the share of waste oil per waterways. On basis of the processing from the RISO and based on data obtained directly from the major carriers, the annual production of waste oil from ships in the last two years is around 45 t and bilge water in the range of 800-900 m<sup>3</sup>.

As an example of possible solution to waste management from ships we present a system of collection and disposal of waste carried out by the Slovak Shipping and Ports, Joint Stock Company, which is in compliance with the legislation of the Slovak Republic.

It operates a utility station, pontoon P-65 a facility providing services to vessels for waste disposal arising in connection with the operation of vessels. This is mainly drainage water from the vessel's engine room, bilge water, sewage, used oil and various hazardous waste (oily rags, oil filters, absorbents, etc.)..

Utility Station is located on the left bank of the main course of the Danube River in Bratislava at 1865.7 kilometre.

The vessels are operated mostly on weekdays from 7.00 a.m. to 3.30 p.m. Operation of utility station is provided by two employees of the Slovak Shipping and Ports Jsc. Contact to service is possible via e-mail, telephone or via radio transmitter.

In terms of the Slovak Shipping and Ports, Jsc. an order for services takes place on the pontoon through notification from the vessel to the nautical department (or radio station), which in turn informs the operating station mostly electronically or by phone about the vessel, scheduled date and furnishing time of the vessel, ordered services and quantities of disposed waste.

Various types of waste are transferred to individual tanks or transmitted to responsible person and then stored in containers, designated for this purpose, labelled according to specific rules. Records in the registration book are made on the type and quantity of waste received and from them the data is transferred to the registration sheets on waste.

Individual kinds of waste are treated as follows:

- bilge water, **drainage waters (16 10 02\*** Aqueous liquid wastes) – are collected in separated tank from which they are pumped to storage tank belonging to the organization authorized to waste treatment (Limpia) after reaching the tank capacity
- **used up oils (13 04 01\*** Bilge oils from inland navigation) –are collected in separated tank from which they are pumped to storage tank belonging to the organization authorized to waste treatment (Ecorec Slovensko, Detox) after reaching the tank capacity
- **sewage waters** – collected in separated tank from which they are consequently pumped into built-in waste water treatment plant at service station for processing. Treated water is discharged directly into the Danube River. Waste water sampling is done according to specific regulations. Sewage sludge is delivered to Vrakuňa WWTP;

- **oily rags, oil filters, absorbents and so on. (15 02 02\***  
Absorbents, filter materials, wiping cloths, protective clothing contaminated by dangerous substances)– collected in separated clad container with trapping tank placed on PMO which is after being full transported for disposal by the organization authorized to waste treatment (EBA);
- **oily containers, paint bins, metal and plastic transfer packaging (15 01 10 \*** Packaging containing residues of or contaminated by dangerous substances) – collected in separated clad container with trapping tank, in designated area, which is after being full transported for disposal by the organization authorized to waste treatment (EBA);
- **lead and nickel – cadmium batteries (16 06 01\* Lead batteries, 16 06 02\* Ni-Cd batteries) –** collected in designated area. After being full they are transferred for material assessment by the organization authorized to waste treatment (MACH Trade).

As it was already mentioned, this service is provided by the Slovak Shipping and Ports, Jsc. only for their own vessels. If necessary there is a real possibility to complete the system also by abstraction and further treatment of this waste also for the vessels of other companies from Slovakia.

It would not be possible to extend this service for the vessels from other countries without having amended the valid legislation of the Slovak Republic and the European Union.

## 4 STAKEHOLDERS

This group included all those involved in the issue of inland waterways, waste, water protection and the environment. The inland waterway between stakeholders certainly are, particularly, the holders of licenses for water transport - about 50 companies, but also the Transport Research Institute in Žilina and the Public Ports, Joint-stock company.

We have established the contact with representatives of the companies mentioned already above and other smaller companies for which water transport only supplements the core business. And we asked in writing for provision of information and identification of contact persons to cooperate on the Wanda Project.

Currently, a sufficient number of companies work in the territory of Slovakia, which are authorized by the Ministry of Environment to carry out waste recovery or ship borne waste or waste oils disposal.

In Annex 1, there is a list of organisations, which are involved in the project WANDA.

## 5 CONCLUSIONS

In order to design optimal ship waste management the work activities were in the first phase aimed at:

- Analysis of the legal framework for inland waterway transport and environment issued in the Danube River Basin, which is comprised of international conventions between countries as well as relevant EU law, policies and action plans in these areas
- Operational Analysis of state administration bodies and state expert supervision over the water management, waste management and inland waterway transport,
- Analysis of institutional and objective organisation of inland water transport in the conditions of transformation into private sector as well as
- Description of Water way with appropriate infrastructure and real state of vessels in the SR.

On the basis of acquired know-how the legislation in water management, waste management and inland waterway transport, does not provide a specific model of ship waste management, but creates sufficient space for elaborating ship waste management concepts based on consistent compliance with the waste management hierarchy.

## 6 LITERATURE

### 6.1 OFFICIAL SOURCES

Statistical Office of the Slovak Republic: Yearbook of Transport, Post and Telecommunications 2007

Statistical Office of the Slovak Republic: Yearbook of Transport, Post and Telecommunications 2008

Statistical Office of the Slovak Republic documents, 2009

Documentation of the Slovak water enterprise

Documentation of the State Navigation Administration

Documentation of Shipping and Ports, joint-stock company

Documentation of Verejné prístavy joint-stock company

Act No. 364/2004 Coll. on waters as amended

Act No. 338/2000 Coll. on inland navigation as amended

Regulation of the Government of the Slovak Republic No. 193/2009 Coll., on Technical and Operational Requirements for Inland Waterway Vessels

Act No. 223/2001 Coll. on waste as amended

Decree of the Ministry of Environment of the Slovak Republic No. 283/2001 Coll. on Implementing Certain Provisions of the Act on Wastes

Decree of the Ministry of Environment of the Slovak Republic No. 284/2001 that sets the waste catalogue

Regulation 1013/2006 of the European Parliament and of the Council on shipments of waste.



## 7 ANNEX 1

No	Full Name	Company	Title	Role	Street	City	ZIP Code	Country
1	Peter Krasnec PhD.	A.S.A. SLOVENSKO spol. s r.o.	RNDr., PhD.	Sales Director	P.O.BOX 8,	Bratislava 24	820 04	SLOVAKIA
2	V. Chovanec	Arguss, s.r.o			Záhradnícka 27	Bratislava	814 29	SLOVAKIA
3	Milan Deščík	Dekonta, s.r.o	RNDr.		Štyndlová 11/A	Bratislava	812 49	SLOVAKIA
4	Jana Palíková	DETOX			Košická cesta 2923	Rimavská Sobota	979 01	SLOVAKIA
5	Ján Dinga	DETOX, s.r.o	Ing.	Director	Zvolenská cesta 139	Banská Bystrica	974 05	SLOVAKIA
6	Kurucz ml.	Dunaj Petrol Trade a.s.	Ing.		Záhradnícka 16	Komárno	945 01	SLOVAKIA
7	Milan Hanúsek	Dunajhantrans s.r.o	Ing.	konateľ - Managing Director	Láb 251	Láb	900 67	SLOVAKIA
9	Monika Fickuliaková	EBA, s.r.o	Ing.	Director	Senecká 10	Bernolákovo	900 27	SLOVAKIA
10	Juraj Číž	Ecorec Slovakia, s.ro.			Glejovka 15	Pezinok	902 03	SLOVAKIA
11	Jaroslav Plich	Eko - Salmo, s.r.o	Ing.	Managing Director	Závodná 8,	Bratislava	821 06	SLOVAKIA
12	Augustín Záhradník	Eko - Salmo, s.r.o, Waste Department	Ing.	Director	Kaukazská 2,	Bratislava	851 04	SLOVAKIA
14	Michal Špirka	Konzeko, s.r.o	Ing.	Regional Manager	Radlinského 9	Bratislava	811 07	SLOVAKIA
15	Josef Jedlička	Limpia, s.r.o.	Ing.	konateľ - Managing Director	Považanova 2	Bratislava	841 02	SLOVAKIA
16	Jozef Házel	Limpia, s.r.o.	Ing.	Director	Bosáková 4	Bratislava	851 04	SLOVAKIA
17	Ľudmila Strelková	Ministry of Environment of the SR, Department of Water Policy			Nám. Ľ.Štúra 1	Bratislava	812 35	SLOVAKIA
18	Ján Dobiaš	Ministry of Environment of the SR, Department of River Basin Management and Food Protection	Ing.	vedúci Oddelenia manažmentu povodí	Nám. Ľ.Štúra 1	Bratislava	812 35	SLOVAKIA
19	Milan Timár	Ministry of Environment of the SR, Department of River Basin Management and Food Protection	Ing.		Nám. Ľ.Štúra 1	Bratislava	812 35	SLOVAKIA
20	Marcela Pokusová	Ministry of Environment of the SR, Waste Management Section	RNDr.	Director	Nám. Ľ.Štúra 1	Bratislava	812 35	SLOVAKIA

21	Marta Gojdičová	Ministry of Environment of the SR, Waste Management Department	Ing.		Nám. Ľ.Štúra 1	Bratislava	812 35	SLOVAKIA
22	Ján Opial	Ministry of Environment of the SR, Waste Management Department	Mgr.	vedúci oddelenia štátnej správy odpadového hosp.	Nám. Ľ.Štúra 1	Bratislava	812 35	SLOVAKIA
23	Vaniček Matej	The Ministry of Transport, Posts and Telecommunications of the SR	Ing.	Head of Waterborn Transport - Inland Waterway Transport Department	Námestie slobody č. 6	Bratislava	810 05	SLOVAKIA
24	Peter Čáky	The Ministry of Transport, Posts and Telecommunications of the SR	Ing.	State advisor of Inland navigation,	Námestie slobody č. 6	Bratislava	810 05	SLOVAKIA
25	Juraj Pavelek	Navi Sped, s.r.o		Managing Director	Prístavná 776/10	Bratislava	821 09	SLOVAKIA
26	Hanus	Port Service Bratislava, s.r.o			Prístavná 776/10	Bratislava	821 09	SLOVAKIA
27	Pavol Sira	Slovenská plavba a prístavy a.s.	DI	Director of Inland Navigation	Pribinova 24	Bratislava	815 24	SLOVAKIA
28	Jaroslav Riečan	Slovenský plavba a prístavy, a.s.	Ing.	Vedúci oddelenia nákupu	Horárska 12	Bratislava	815 24	SLOVAKIA
29	Marián Pastucha	SLOVENSKÝ VODOHOSPODÁR- SKY PODNIK, š.p., OZ Bratislava	Ing.	Director	Včie Hrdlo 82	Bratislava	824 19	SLOVAKIA
30	Juraj Boroš	Tatramarine, s.r.o	Ing.	Director	Radlinského 6	Bratislava	811 07	SLOVAKIA
31	Štefan Chalupka	The State Navigation Administration, River Information Services Unit	Ing.	Head of Unit	Prístavná 10	Bratislava	821 09	SLOVAKIA
32	Vladimír Varadin	Verejné prístavy, a. s	Ing.	CEO and Vice Chair- man	Prístavná 10	Bratislava	821 09	SLOVAKIA
33	Július Tóth	Waste Recycling, a.s.	Ing.		Továrenská 49	Zlaté Moravce	953 01	SLOVAKIA
34	V. Petko	WIL - TRANS s.ro., International Transport	Ing.		Vlastenecké nám. 1185/8	Bratislava	851 01	SLOVAKIA

35	Peter Žitňanský	Transport research institute Research and development section Branch of Inland Water Transport research, Bratislava	Ing.		Prístavná 10	Bratislava	821 09	SLOVAKIA
36	Zuzana Kriššáková	Krajský úrad životného prostredia v Bratislave, Odbor kvality životného prostredia	RNDr.	vedúca odboru kvality životného prostredia	Karloveská 2	Bratislava	842 19	SLOVAKIA
37	Robert Wendl	Krajský úrad životného prostredia v Bratislave, Odbor štátnej vodnej správy	Ing.	vedúci odboru štátnej vodnej správy	Karloveská 2	Bratislava	842 19	SLOVAKIA
38	Štefan Havlík	Slovenská plavebná spoločnosť, a.s., odbor PBVC a P	Ing.	vedúci odboru PBVC a P	Lazaretská 12	Bratislava	811 08	SLOVAKIA