PROTOCOL
ON PREVENTION OF THE WATER POLLUTION CAUSED BY NAVIGATION
TO THE FRAMEWORK AGREEMENT ON THE SAVA RIVER BASIN

Bosnia and Herzegovina, the Republic of Croatia, the Republic of Serbia and the Republic of Slovenia (hereinafter: Parties),

Pursuant to the provisions referred to in Article 30, Paragraph 1 of the Framework Agreement on the Sava River Basin, done at Kranjska Gora, on December 3rd 2002 (hereinafter: FASRB),

Considering that the Recommendations on technical requirements applicable to inland navigation vessels agreed at the European level, European Code for Inland Waterways (CEVNI), and the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) represent a set of guiding regulations with important role in controlling water pollution by inland navigation vessels,

Believing that, even if the water pollution caused by inland water transport is of minor significance, the further improvement of its environmental performance would contribute to achieving the environmental and nature-protection objectives in using inland waterways,

Have agreed as follows:

PART I
GENERAL PROVISIONS

Article 1
DEFINITIONS

1. The terms defined in Article 1 of the FASRB shall have the same meaning for the purpose of this Protocol except as otherwise specified.

2. For the purpose of this Protocol:
   a) “FASRB” means the Framework Agreement on the Sava River Basin, done at Kranjska Gora, Slovenia, on 3rd December 2002, including amendments stipulated within the Agreement on Amendments to the Framework Agreement on the Sava River Basin and Protocol on Navigation Regime to the Framework Agreement on the Sava River Basin, done at Ljubljana on 2nd April 2004;
   b) “Sava Commission” means the International Sava River Basin Commission established by Article 15 of the FASRB;
   c) “vessel” means any inland waterway craft intend for navigation, including small craft and ferry-boats, as well as floating equipment;
   d) “floating establishment” means any floating installation that is permanently moored, anchored or laid on the river bed, e.g. landing-places, accommodation-establishment, restaurants, repair-shops, warehouses, pontoon bridges, floating hangars, watermills;
e) “waste occurring on board” means substances or articles, of which the person in charge disposes or of which he intends or is required to dispose including waste resulting from the operation of the vessel and cargo-related waste;

f) “waste resulting from the operation of the vessel” means waste and waste water generated on board as a result of the operation and maintenance of the vessel; it includes oily and greasy waste and other waste occurring during the operation of the vessel;

g) “oily and greasy waste” means waste oil, bilge water and other oily and greasy waste such as waste grease, used filters, used rags, containers and packaging for such waste;

h) “waste oil” means used oil or other non-reusable oil from engines, gears and hydraulic equipment;

i) “bilge water” means oily water from the engine-room bilges, peak, cofferdams or side compartments;

j) “waste grease” means used grease collected from run-off from greasers, bearings and greasing facilities and other non-reusable grease;

k) “household waste water” means waste water from galleys, messes, bathrooms, toilets and laundries and other human waste water;

l) “household refuse” means on-board organic and inorganic household waste and food remains, which do not, however, contain components of the other types of waste;

m) “sludge” means residues occurring on board the vessel during the operation of an on-board waste water treatment plant;

n) “slops” mean mixtures of cargo residues with swilling-out water, rust or mud, whether or not suitable for pumping;

o) “other special waste” means waste occurring during the operation of the vessel other than oily and greasy waste and other than the waste defined from (k) to (n) above;

p) “cargo-related waste” means waste and waste water occurring on board the vessel and derived from the cargo, including cargo residues exempt cargo remnants;

q) “cargo remnants” mean liquid cargo remaining in the cargo tanks or in the pipes after unloading when a stripping system in accordance with the European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) has not been used, and dry cargo remaining in the holds after unloading before manual or mechanical sweepers or suction facilities are used;

r) “cargo residues” mean liquid cargo which cannot be discharged from tanks or pipes using the stripping system and dry cargo which cannot be removed from the hold by the use of manual or mechanical sweepers or suction facilities;

s) “swept hold” means hold from which the cargo has been removed using means of cleaning such as manual or mechanical sweepers, but without the use of suction or washing apparatus and containing only cargo residues;

t) “stripped tank” means tank from which cargo remnants have been removed using a stripping system in accordance with ADN and containing only cargo residues;

u) “vacuum-cleaned hold” means a hold from which cargo remnants have been removed using a suction technique and containing considerably fewer cargo residues than a swept hold;

v) “swilled-out hold or tank” means a hold or tank which following swilling-out is suitable for any category of cargo;

w) “discharge of remnants” means removal of cargo remnants from the holds and from the tanks and pipes using suitable means (e.g. manual or motorized sweepers, suction
facility, stripping system) enabling the standard of “swept” or “vacuumed” clean for the hold or “stripped” clean for the cargo tank to be achieved along with the removal of handling residues, packaging and means of stowage;
x) “swilling-out” means removal of cargo residues from swept or vacuumed holds using steam or water;
y) “swilling-out water” means water from the swilling-out of swept or vacuumed holds or stripped tanks; it also includes ballast water or rainwater from these holds or tanks;
z) “reception facility” means a vessel or a facility on land certified by the competent authorities for the collection of waste occurring on board;
   aa) “oil” means petroleum in any form, including crude oil, fuel oil, sludge, oil refuse and refined products;
   bb) “hazardous substances” mean substances with adverse extraordinary impacts on the water, water regime and water eco-system and which are toxic, carcinogenic, mutagenic, teratogenic, bio-accumulative or possess other hazardous characteristics, especially when they are persistent;
   cc) “navigation-related accident” means accidents involving exceptional occurrence as collision, running aground, disaster or other external force, which has the result of mechanical damage of a vessel and thereafter discharge, pouring out or dumping of hazardous substances into the waterway.

Article 2
SCOPE OF APPLICATION

1. This Protocol shall be applied on the Sava River from the rkm 0 to the town of Brežice, Slovenia, on the Kolubara River from the rkm 0 to the rkm 5, on the River Drina from the rkm 0 to the rkm 15, on the Bosna River from the rkm 0 to the rkm 5, on the Vrbas River from the rkm 0 to the rkm 3, on the Una River from the rkm 0 to the rkm 15, on the Kupa River from the rkm 0 to the rkm 5, as well as to their port areas, shelters and loading and unloading stations.

2. The newly built vessels and vessels, which shall be starting the process of reconstruction and modernisation after entering into force of this Protocol, shall be equipped with capacities and means for storage of waste in order to collect and deliver it to the reception facilities.

3. All other vessels shall be properly equipped with capacities and means for storage of waste in order to collect and deliver it to the reception facilities, during the period of eight years after entering into force of this Protocol.

PART II
PREVENTION, CONTROL AND REDUCTION OF POLLUTION FROM VESSELS

Article 3
BASIC OBLIGATION

1. The Parties shall take all necessary measures to effectively prevent, control and reduce pollution from vessels in navigation and shall execute necessary measures for adequate
pollution response, using the polluter pays principle whenever possible.

2. The Parties shall establish a sufficiently dense network of reception facilities on the waterway specified in Article 2 paragraph 1 of this Protocol, and accordingly coordinate all relating activities.

Article 4
PREVENTION OF POLLUTION

1. The discharge, pouring out or dumping from vessels and floating establishments, into the waterway as specified in Article 2, paragraph 1 of this Protocol, of articles or substances, including oil that may cause water pollution or create obstacles or hazards for navigation shall be prohibited.

2. The boatmaster, crew members or other persons on board shall exercise every care required by the circumstances in order to avoid pollution of the waterway and to restrict the amount of waste occurring on board to the minimum, as well as to avoid, as far as possible, any mixing of the various categories of waste.

3. In the event of discharge, pouring out, or dumping referred to in paragraph 1 of this Article or a threat of discharge, pouring out, or dumping, the boatmaster shall notify the nearest competent authority without delay, indicating the position, quantity and substances of the discharge as precisely as possible. Any vessel that has caused pollution or has detected an incident of pollution of the water of the Sava River Basin, shall immediately by all means notify the competent response authorities and the vessels that are in the vicinity of the spill area.

4. The boatmaster of a vessel shall report on any observed water pollution to the competent authorities.

5. Waste occurring on board shall be collected and delivered, in accordance with the national legislation, to the reception facilities in ports or other points designated for reception of waste occurring on board.

6. The boatmaster shall keep and regularly update the Used Oil Log, and shall present it to the competent authorities upon request.

7. The discharge into the water of oily and greasy waste shall be prohibited. Bilge water shall be delivered to the reception facilities. It shall be possible to seal the closing valve on the pipeline for direct discharge of the bilge water in the closed position.

8. Discharge into the waterway of water from a separation plant for the bilge water on the vessels, whose operation is certified by the competent authorities, shall be exempt from the prohibition specified in paragraph 7 of this Article if the maximum content of oil residues after separation is consistently and without prior dilution in accordance with national requirements, but in any case less then 5 mg/l.

9. It shall be forbidden to dispose or discharge parts of cargo or cargo-related waste from vessels into the waterway.

10. The prohibition specified in paragraph 9 shall not apply to swilling-out water with cargo residues from substances, which are explicitly allowed to be discharged into the waterway in accordance with national regulations.

11. All household refuse generated on a vessel shall be collected and, when possible, after sorting to paper, glass, other recyclable materials and other refuse, delivered to the reception facilities.

12. It shall be prohibited to burn household refuse, sludge, slops and special waste on board.
13. Discharge of household waste water shall be forbidden for:
   a) cabin passenger vessels with more than 50 berths, effective from 3 years after entering into force of this Protocol. The boatmaster shall keep and regularly update the Sanitary Water Log and shall present it to the competent authorities upon request.
   b) passenger vessels, certified (permitted) for carrying more than 50 passengers, effective from 8 years after entering into force of this Protocol.
14. The prohibition specified in paragraph 13 of this Article shall not apply to passenger vessels, which have certified waste water treatment plants with limit values and control values complied with values given in Annex to this Protocol.
15. The boatmaster of a vessel transporting hazardous substances shall notify the competent authorities of the Party involved. The Party in question may organize an escort for the vessel on the territory under its jurisdiction.

Article 5

TECHNICAL REQUIREMENTS FOR THE EQUIPMENT OF PORT FACILITIES AND OTHER RECEPTION STATIONS

1. The Parties shall take all necessary steps to equip the ports open for international traffic with required reception facilities within five years as of entry into force of this Protocol and, thereof, inform the Sava Commission of the location of the reception facilities on their respective territories.
2. Reception facilities shall be equipped with flanges on the pipeline for the reception of the bilge and household waste water in accordance with European Standard EN 1305 and EN 1306 and with containers for the reception of waste oil, waste grease and household refuse.
3. A list of reception facilities shall be drafted and regularly updated by the Sava Commission.

Article 6

SPILL RESPONSE

1. All necessary measures for spill removal shall be used to contain the spill and remove the spilled substances from the water.
2. For successful control of spills, the competent authorities of each Party shall develop and implement a set of best available techniques and other measures, in order to identify the structure of special and contracted technical facilities, required for the response to spills, as well as the structure of the spill response organization and, thereof, inform the Sava Commission.

Article 7

IMPLEMENTATION OF PROVISIONS ON PREVENTION, CONTROL AND REDUCTION OF WATER POLLUTION FROM SHIPPING

1. The Parties shall designate competent authorities and assign them appropriate powers and responsibilities with regard to fulfilment of the requirements for the prevention of water pollution from shipping.
2. The competent authorities shall control the observation of the provisions of this Protocol on the waterway set out in Article 2 of this Protocol under their jurisdiction.
3. The competent authorities shall in particular:
a) ensure the availability of best available techniques for pollution prevention and best available technologies for control of water pollution resulting from shipping,
b) establish, rationally locate and maintain the reception facilities network,
c) establish special port services for management of the reception facilities, for management of the reception of waste from vessels, with the obligation of containing and displacement of waste occurring on board,
d) ensure immediate notification of pollution, especially transboundary, by means of effective communication networks, and take effective emergency response measures, and
e) inform other Parties on vessels and boatmasters with severe violations of regulations or with frequent violations.

Article 8
MONITORING OF WATER QUALITY AND ENFORCEMENT

1. Regular monitoring of water quality shall be performed by national monitoring authorities. The Sava Commission shall establish and maintain an information system on water quality as part of the Sava River Information System.
2. Regular monitoring of port areas shall be performed by the competent authorities.
3. Surveillance monitoring and incident monitoring shall be performed by national surveillance authorities.
4. The competent authorities of the Parties shall, within the areas under their jurisdiction, take all necessary measures of inspection, to ensure that all prescriptions and requirements for the prevention of pollution from vessels are complied with.
5. The competent authorities shall in particular:
   a) inspect vessels or floating establishments in order to determine causes and situations of a discharge or loss of cargo, waste or waste water that is harmful to human health or river ecosystem,
   b) administer measures for elimination of violation of established rules for handling of cargo, waste or waste water that is harmful to human health or river ecosystem,
   c) initiate proceedings for prosecution of violations of the applicable rules and standards, in compliance with the laws of the territory on which the violation occurred, and
   d) immediately forbid further navigation or allow limited navigation in order to minimize adverse effects on environment for vessels presenting danger to the environment in compliance with this Protocol and national regulation.

Article 9
TRANSBOUNDARY COOPERATION TO PREVENT AND CONTROL POLLUTION FROM VESSELS

1. The Parties shall cooperate in the reduction of water pollution from shipping in cases of mutual interest.
2. The Parties, by means of the Sava Commission, shall develop a program of joint action to prevent water pollution from shipping, and establish a mutual information system.
3. When a competent authority becomes aware of a threat of transboundary pollution of the water in the Sava River Basin, it shall immediately notify all competent authorities of the
Parties downstream of the location, quantity and substances of pollution, using all means of communication including the shipping radio network for early warning of the pollution in progress.

4. In case of navigation-related accidents with the result of discharge, pouring out or dumping of substances from vessels or floating establishments with transboundary impact or with the possibility of transboundary impact, a joint body shall on site establish causes and circumstances of the navigation-related accident, impact on the environment and possible polluting effects on parts of the waterway. The joint body shall consist of one member of the Party on whose territory the navigation-related accident occurred, and member or members of the Party or Parties whose territories are affected by the impact.

PART III
INSTITUTIONAL ARRANGEMENTS

Article 10
DESIGNATED AUTHORITIES AND FOCAL POINTS

1. Each Party shall designate the competent authority/authorities which shall be responsible for implementation of this Protocol and nominate its Focal Point for official communication in implementation of this Protocol on its behalf.

2. Each Party shall, no later than the date of the entry into force of this Protocol, notify the Sava Commission of the competent authority/authorities and name and address of its Focal Point. Each Party shall forthwith notify the Sava Commission of any changes in competent authority/authorities and name and address of its Focal Point.

3. The Sava Commission shall forthwith inform the Parties of the notifications received under paragraph 2 of this Article.

Article 11
MEETING OF THE PARTIES

Meeting of the Parties as stipulated under Article 14 of the FASRB shall also serve as the Meeting of the Parties to this Protocol.

Article 12
INTERNATIONAL SAVA RIVER BASIN COMMISSION

The Sava Commission shall exercise its functions defined in the FASRB, mutatis mutandis, also for the implementation of this Protocol.

Article 13
SECRETARIAT

The Secretariat defined in Article 18 of the FASRB shall exercise its functions defined by the FASRB, mutatis mutandis, also for the implementation of this Protocol.
Article 14
MONITORING IMPLEMENTATION OF THE PROTOCOL

The Methodology of Permanent Monitoring of implementation of the FASRB as stipulated under Article 21 of the FASRB shall also apply to the monitoring of the implementation of this Protocol.

Article 15
GUIDELINES FOR IMPLEMENTATION

The Parties shall cooperate in developing guidelines for the implementation of this Protocol. Such guidelines shall be adopted by the Meeting of the Parties.

PART IV
FINAL PROVISIONS

Article 16
DISPUTE SETTLEMENT

Any dispute arising between two or more Parties regarding the interpretation or implementation of this Protocol shall be settled in accordance with the procedure set by the FASRB.

Article 17
RELATIONSHIP OF THE PROTOCOL WITH THE FASRB

Except as otherwise provided for in this Protocol, the provisions of the FASRB relating to its Protocols shall apply to this Protocol.

Article 18
OTHER AGREEMENTS

1. Nothing in this Protocol shall affect the rights and obligations of a Party arising from any agreement being in force on the date on which this Protocol enters into force.

2. For the implementation of this Protocol the Parties may enter into bilateral or multilateral agreements or arrangements, which shall not contradict to this Protocol.

Article 19
RESERVATIONS

No reservation may be made to this Protocol.

Article 20
DURATION AND ENTRY INTO FORCE

1. This Protocol shall be concluded for an indefinite period of time.
2. This Protocol shall be subject to ratification, acceptance or approval.

3. Instruments of ratification, acceptance or approval shall be deposited as soon as possible with the Depositary. The Depositary shall notify the Parties of the date of the deposit of each instrument of ratification, acceptance or approval.

4. This Protocol shall enter into force on the thirtieth day after the date of deposit of the fourth instrument of ratification, acceptance or approval. The Depositary shall notify the Parties of the date of entry into force of this Protocol.

**Article 21**

AMENDMENTS, WITHDRAWAL AND TERMINATION

1. The provisions of the FASRB related to amendments and withdrawal shall apply to this Protocol.

2. This Protocol may be terminated by mutual agreement of all Parties.

3. The Protocol shall terminate in case of the termination of the FASRB.

**Article 22**

INTERNATIONAL BORDERS

Establishing and marking of interstate borders among the Parties shall not be affected by any provision of this Protocol or its implementation.

**Article 23**

DEPOSITARY

1. The Government of the Republic of Slovenia shall be the Depositary of this Protocol.

2. The Depositary shall, upon entry into force of this Protocol, ensure its registration in accordance with Article 102 of the Charter of the United Nations.

Done at __________, on ________________ in four originals in English language, one to be retained by each Party.

FOR BOSNIA AND HERZEGOVINA

FOR THE REPUBLIC OF CROATIA

FOR THE REPUBLIC OF SERBIA

FOR THE REPUBLIC OF SLOVENIA
ANNEX

Limit and control values
for Waste Water Treatment Plants onboard of Passenger Vessels

The Waste Water Treatment Plants onboard of Passenger Vessels shall minimally comply with the following requirements:

1. During the Type Approval in accordance with the EN 12566-3:2006, the following limit values shall be met:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>OXYGEN CONCENTRATION</th>
<th>SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemical Oxygen Demand (BOD₅) in accordance with ISO N5815-1 from 2003</td>
<td>20 mg/l</td>
<td>24-h-Average Sample</td>
</tr>
<tr>
<td></td>
<td>25 mg/l</td>
<td>Qualified Sample</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD) in accordance with ISO N6060 from 1986</td>
<td>100 mg/l</td>
<td>24-h-Average Sample</td>
</tr>
<tr>
<td></td>
<td>125 mg/l</td>
<td>Qualified Sample</td>
</tr>
</tbody>
</table>

2. During operation, the following control values shall be met:

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>OXYGEN CONCENTRATION</th>
<th>SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemical Oxygen Demand (BOD₅) in accordance with ISO N5815-1 from 2003</td>
<td>25 mg/l</td>
<td>Qualified Sample</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD) in accordance with ISO N6060 from 1986</td>
<td>125 mg/l</td>
<td>Qualified Sample</td>
</tr>
<tr>
<td></td>
<td>150 mg/l</td>
<td>Random Sample</td>
</tr>
</tbody>
</table>

It is necessary to observe values in the Qualified Sample procedure.

3. The Qualified Sample is one mix from not less than five Random Samples with the same
volume, performed in the timeframe of one hour and with the time interval of not less than two minutes.

4. Competent Authorities can use equivalent procedures.

5. Mechanical and chemical processes with use of the means for halogenisation and chlorination are not allowed.

6. It is necessary to take adequate measures for storage and orderly disposal of the sludge from onboard waste water treatment plants.