

Template for reporting under the Water Convention and for global SDG indicator 6.5.2

Country name:

[Bosnia and Herzegovina (BiH)]

By its Constitution, Bosnia and Herzegovina (BiH) is organised as a decentralised country. It consists of two Entities: Federation of Bosnia and Herzegovina (FBiH) covers 51% of BiH territory, Republic of Srpska (RS) covers 49% of BiH territory, and special administrative unit Brcko District of Bosnia and Herzegovina (BD BiH). FBiH is divided into 10 cantons and cantons are divided into 79 municipalities, while RS is divided into 64 municipalities.

Both entities FBiH and RS as well as BD BiH has full power and jurisdiction on Water Management. Thus, comprehensive legal and institutional framework was developed at the level of both entities and BD BiH. In the field of water management, State level institutions are responsible for the coordination of activities among different levels of authorities within the country and for the international cooperation. Implementation of international obligations is responsibility of the State level institutions with full involvement of respective institutions of FBiH and RS entities and BD BiH.]

This template or reporting form is in the form of a questionnaire to be filled out. Questions can be either “closed”, Yes /No , with appropriate boxes to tick; “open”, requiring further information to be supplied, indicated by the words in square brackets [fill in]; or a combination of both. Depending on the country situation, it will not always be necessary to fill in extra information where space is provided for this.

The questions are divided into four parts: national (section I); by transboundary basin, river, lake or aquifer (section II); list of transboundary waters and information for calculation of the SDG indicator 6.5.2, Proportion of transboundary basin area with an operational arrangement for water cooperation (section III), and final questions (section IV). Please answer open questions very briefly, and in less than 200 words, using bullet points as appropriate. Section II will need to be completed for each of the transboundary basins, rivers, lakes or aquifers (please just copy the template for these questions and fill out again for each additional transboundary basin, river, lake or aquifer).

The template encourages those reporting to refer to the reporting under other multilateral environmental agreements to which their country is a Party.

I. Transboundary water management at the national level

In this first section, you are requested to provide general information on transboundary water management at the national level. Information on specific transboundary basins, rivers, lakes or aquifers and agreements should be presented in section II and not repeated here.

1. (a) Does your country’s national legislation refer to measures to prevent, control and reduce any transboundary impact (art. 2 of the Convention)?

Yes /No

If yes, list the main national legislation:

- [1. State level Law on Ministries and Other Administrative Bodies of BiH^a,
2. Law on Waters of FBiH^b,
3. Law on Waters of RS^c and

^a Official Gazette (OG) BiH 42/03, 26/04, 42/04, 45/06, 88/07, 35/09 i 59/09, 103/09

^b OG FBiH 70/06

4. Law on Waters of BD BiH^d.

In addition to main above mentioned laws set of bylaws is adopted to enable more efficient implementation of laws.]

(b) Do your country's national policies, action plans and strategies refer to measures to prevent, control and reduce any transboundary impact?

Yes /No

If yes, list the main national policies, action plans and strategies:

- [1. Action Plan for Flood Protection and River Basin Management in BiH 2014-2017,
2. Climate Change Adaptation and Low Carbon Development Strategy of BiH,
3. Environmental Approximation Strategy to EU *acquis communautaire* of BiH^e,
4. Water Management Strategy of FBiH 2010-2022,
5. Program of Approximation of environmental protection legal framework to EU *acquis communautaire* in FBiH,
6. Integral Water Management Strategy of RS 2015-2024,
7. Program of Approximation of environmental protection legal framework to EU *acquis communautaire* in RS,
8. Environmental Approximation Strategy for BD BiH]

(c) Does your country's legislation provide for the following principles?

Precautionary principle Yes /No

Polluter pays principle Yes /No

Sustainable development Yes /No

(d) Does your country have a national licensing or permitting system for wastewater discharges and other point source pollution (art. 3, para. 1 (b)) (*e.g., in industry, mining, energy, municipal, wastewater management or other sectors*)?

Yes /No

If yes, for which sectors? (please list):

[Water Permits are issued for all activities including discharges of sanitary and industrial wastewaters into surface waters and groundwater. Water Permit defines conditions and monitoring of these discharges.]

If not, please explain why not (giving the most important reasons) or provide information if there are plans to introduce a licensing or permitting system: [fill in]

If your country has a licensing system, does the system provide for setting emission limits based on best available technology?

Yes /No

(e) Are the authorized discharges monitored and controlled (art. 3, para. 1 (b))?

Yes /No

^c OG RS 50/06, 92/09, 121/12

^d OG RS 10/98, New Law on Waters of BD BiH is under adoption

^e Under adoption

If yes, how? (Please tick the ones applicable):

- Monitoring of discharges
- Monitoring of physical and chemical impacts on water
- Monitoring of ecological impacts on water
- Conditions on permits
- Inspectorate

Other means (please list): [fill in]

If your country does not have a discharge monitoring system, please explain why not or provide information if there are plans to introduce a discharge monitoring system: [fill in]

(f) What are the main measures which your country takes to reduce diffuse sources of water pollution on transboundary waters (art. 3, para. 1) (e.g., from agriculture, transport, forestry or aquaculture)? The measures listed below relate to agriculture, but other sectors may be more significant. Please be sure to include these under "others":

Legislative measures

- Norm for uses of fertilizers
- Norms for uses of manure
- Bans on or norms for use of pesticides
- Others (please list): [fill in]

Economic and financial measures

- Monetary incentives
- Environmental taxes (such as fertilizer taxes)
- Others (please list):

[Norms for uses of phosphorus in detergents in RS]

Agricultural extension services

Technical measures

Source control measures

- Crop rotation
- Tillage control
- Winter cover crops
- Others (please list): [fill in]

Other measures

- Buffer/filter strips
- Wetland reconstruction
- Sedimentation traps
- Chemical measures
- Others (please list): [fill in]

Other types of measures

If yes, please list: [fill in]

(g) What are the main measures which your country takes to enhance water efficiency (art. 3)?

Please tick as appropriate (not all might be relevant)

- | | |
|---|-------------------------------------|
| A regulatory system regarding water abstraction | <input checked="" type="checkbox"/> |
| Monitoring and control of abstractions | <input checked="" type="checkbox"/> |
| Water rights are clearly defined | <input type="checkbox"/> |
| Water allocation priorities are listed | <input type="checkbox"/> |
| Water-saving technologies | <input type="checkbox"/> |
| Advanced irrigation techniques | <input type="checkbox"/> |
| Demand management activities | <input type="checkbox"/> |
| Other means (please list) | <input type="checkbox"/> |

(h) Does your country apply the ecosystems approach (art. 3, para. 1 (i), and art. 2, para. 1 (d))?

Yes /No

If yes, please describe how:

[Following requirements of Water Laws, River Basin Management Plans (RBMP) has to be developed and adopted in BiH. RBMPs were developed in line with EU Water Framework Directive. During preparation of the RBMPs status of water bodies has to be determined based on respective ecological and environmental parameters.]

(i) Does your country take specific measures to prevent the pollution of groundwaters (art. 3, para. 1 (k))?

Yes /No

If yes, please list the most important measures:

[The most important measures are:

1. Direct discharges of wastewaters into groundwater is forbidden by the Water Laws and relevant bylaws;
2. Sanitary Protection Zones, protection measures, method of determining, maintenance and marking for water springs used for public water supply are determined.]

2. Does your country require transboundary environmental impact assessment (EIA)?

Yes /No

Does your country have procedures for transboundary EIA?

Yes /No

If yes, please make reference to the legislative basis (please insert the name and section of the relevant laws). (Please note: If your country is a Party to the Convention on Environmental Impact Assessment in a Transboundary Context, you may refer to your country's report under that Convention.):

[EIA related issues are determined by legislation at the level of both Entities, FBiH and RS, as well at the level of BD BiH. Law on environmental protection of FBiH^f, Law on Environmental protection of RS^g, and Law on environmental protection of BD BiH^h defines

^f OG 33/03, 38/09

^g OG of RS 71/12, 79/15.

obligations, methodology, responsible institutions etc. for EIA. In addition to mentioned laws set of secondary legal documents were adopted to further elaborate relevant issues and procedures for EIA.

BiH is party to the Convention on Environmental Impact Assessment in a Transboundary Context.]

3. Does your country have transboundary agreements or arrangements for the protection and/or management of transboundary waters (i.e., surface waters or aquifers), whether bilateral, multilateral and/or at the basin level?

Yes /No

If yes, list the bilateral, multilateral and basin agreements (listing for each of the countries concerned):

[Multilateral:

1. Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention)ⁱ,
2. Convention on Cooperation for the Protection and Sustainable use of the Danube River (Danube River Protection Convention)^j (Contracting Parties to the Convention are Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Moldova, Montenegro, Romania, Slovakia, Slovenia, Serbia, Ukraine and the European Union)
3. Framework Agreement on the Sava River Basin (FASRB)^k (Contracting parties to the agreement are Bosnia and Herzegovina, Croatia, Serbia and Slovenia). In addition to FASRB following Protocols have been signed in order to further elaborate and determine cooperation between countries in the Sava River Basin^l:
 - a. Protocol on Prevention of Water Pollution caused by Navigation to FASRB
 - b. Protocol on Flood Protection to FASRB
 - c. Protocol on Sediment Management to FASRB
 - d. Policy on the Exchange of Hydrological and Meteorological Data and Information in the Sava River Basin

Bilateral:

1. Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations,
2. Agreement between the Council of Ministers of BiH and the Government of Croatia on joint financing, maintenance and operation of the regional waste water system Komarna-Neum-Mljet channel,
3. Agreement between the Council of Ministers of BiH and the Government of Croatia on rights and obligations for usage of public water supply systems crossing across state's borders.

Bilateral agreements on cooperation in the field of water management with two other neighbouring countries Montenegro and Serbia are planned to be agreed and signed by the end of 2017 and 2018 respectively.]

^h OG of BD BiH 24/04, 1/05, 19/07 i 9/09

ⁱ <http://www.unece.org>

^j www.icpdr.org

^k <http://www.savacommission.org>

^l Additional Protocol on emergency Situations is under negotiations

II. Questions for each transboundary basin, river, lake or aquifer

Please complete this second section for each transboundary basin, river, lake or aquifer, or for group of basins covered by the same agreement or arrangement and where conditions are similar. It might also be convenient to group basins or sub-basins for which your country's share is very small.^m In some instances, you may provide information on both a basin and one or more of its sub-basins, for example, where you have agreementsⁿ on both the basin and its sub-basin. You may coordinate your responses with other States with which your country shares the basin or aquifer or even prepare a joint report for shared basins. General information on transboundary water management at the national level should be provided in section I and not repeated here.

Please reproduce the whole section II with its questions for each transboundary basin, river, lake or aquifer, or group of basins for which you will provide a reply.

Name of the transboundary basin, river, lake or aquifer, or group thereof, list of the riparian States, and country's share of the basin:

[Sava River Basin

Sava River Basin is transboundary river basin and it is the largest sub-basin of the Danube River Basin, thus answers on the following questions were given taking into consideration activities at the level of Sava River Basin primarily and at the level of Danube River Basin.

Sava River Basin is shared by the following countries with respective shares of the Basin belonging to each riparian State:

Bosnia and Herzegovina (39,25%),

Croatia (25,97%),

Serbia (15,50%)

Slovenia (12,01%)

Montenegro (7,09%),

Albania (0,18%)]

^mIn principle, section 2 should be submitted for every transboundary basin, river, lake or aquifer, in the country, but States may decide to group basins in which their share is small or leave out basins in which their share is very minor, e.g., below 1 per cent.

ⁿIn section II, "agreement" covers all kinds of treaties, conventions and agreements ensuring cooperation in the field of transboundary waters. Section II can also be completed for other types of arrangements, such as memorandums of understanding.

1. Is there one or more transboundary (bilateral or multilateral) agreement(s) or arrangement(s) on this basin (art. 9)?

One or more agreements or arrangements exist and are in force

Agreement or arrangement developed but not in force

Agreement or arrangement developed, but not in force for all riparians

Please insert the name of the agreement or agreements or arrangements:

[1. Framework Agreement on the Sava River Basin (FASRB) and additional protocols and policy document to this agreement as follows:

1.1. Protocol on Prevention of Water Pollution caused by Navigation to FASRB

1.2. Protocol on Flood Protection to FASRB

1.3. Protocol on Sediment Management to FASRB

1.4. Policy on the Exchange of Hydrological and Meteorological Data and Information in the Sava River Basin

1.5. Memorandum of Understanding between International Sava River Basin Commission and Montenegro

2. Convention on Cooperation for the Protection and Sustainable use of the Danube River (Danube River Protection Convention)

3. Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations.]

Agreement or arrangement is under development

No agreement

If there is no agreement or arrangement or it is not in force, please explain briefly why not and provide information on any plans to address the situation: [fill in]

If there is no agreement or arrangement and no joint body for the transboundary basin, river, lake or aquifer then jump to question 4; if there is no agreement, but a joint body then go to question 3.

Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, river, lake or aquifer or group of basins or sub-basins

2. (a) Does this agreement or arrangement specify the basin area subject to cooperation?

Yes /No

If yes, does it cover the entire basin, or group of basins, and all riparian States?

Yes /No

If not, what does it cover?:

[FASRB with its Protocols covers parts of the Sava River Basin in BiH, Croatia, Serbia and Slovenia which is 92,73% of the whole basin area. Montenegro (7,09% of the Sava River Basin) and Albania (0,18% of the Sava River Basin) are not covered by the FASRB. However, Montenegro have signed Memorandum of Understanding with International Sava River Basin Commission established by the FASRB.

Since Sava River Basin is the largest sub-basin of the Danube River Basin it is important to stress again that Montenegro is party to the Danube River Protection Convention.]

Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

Yes /No

Which States (including your own) are bound by the agreement or arrangement?
(Please list):

[BiH, Croatia, Serbia and Slovenia^o are bound by the FASRB, while Austria, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Moldova, Montenegro, Romania, Slovakia, Slovenia, Serbia, Ukraine and the European Union are bound by Danube River Protection Convention.

BiH and Cratia are bound by bilateral Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations.]

(b) Are aquifers (or groundwater bodies) covered by the agreement/arrangement?

Yes /No

(c) What is the sectoral scope of the agreement or arrangement?

All water uses

A single water use or sector

Several water uses or sectors

If one or several water uses or sectors, please list (check as appropriate):

Water uses or sectors

Industry

Agriculture

Transport (e.g., navigation)

Households

Energy: hydropower and other energy types

Tourism

Nature protection

Other (*please list*): [fill in]

(d) What topics or subjects of cooperation are included in the agreement or arrangement (art. 9)?

Procedural and institutional issues

Dispute and conflict prevention and resolution

Institutional cooperation (joint bodies)

Consultation on planned measures

Mutual assistance (art. 15)

Topics of cooperation

Joint vision and management objectives

^o Montenegro have signed Memorandum of Understanding with International Sava River Basin Commission

Joint significant water management issues	<input checked="" type="checkbox"/>
Navigation	<input checked="" type="checkbox"/>
Environmental protection (ecosystem)	<input checked="" type="checkbox"/>
Water quality	<input checked="" type="checkbox"/>
Water quantity or allocation	<input type="checkbox"/>
Cooperation in addressing floods	<input checked="" type="checkbox"/>
Cooperation in addressing droughts	<input checked="" type="checkbox"/>
Climate change adaptation	<input checked="" type="checkbox"/>
Monitoring and exchange	
Joint assessments	<input checked="" type="checkbox"/>
Data collection and exchange (art. 13)	<input checked="" type="checkbox"/>
Joint monitoring (art. 11)	<input type="checkbox"/>
Maintenance of joint pollution inventories	<input type="checkbox"/>
Elaboration of joint water quality objectives	<input checked="" type="checkbox"/>
Common early warning and alarm procedures (art. 14)	<input checked="" type="checkbox"/>
Exchange of experience between riparian States	<input checked="" type="checkbox"/>
Exchange of information on planned measures	<input checked="" type="checkbox"/>
Joint planning and management	
Development of joint regulations on specific topics	<input checked="" type="checkbox"/>
Development of international or joint river, lake or aquifer basin management or action plans	<input checked="" type="checkbox"/>
Management of shared infrastructure	<input checked="" type="checkbox"/>
Development of shared infrastructure	<input checked="" type="checkbox"/>
Other (<i>please list</i>): [fill in]	

(e) What are the main difficulties and challenges that your country faces with the agreement or arrangement and its implementation, if any (*please describe, if applicable*):

[Main difficulties and challenges for the implementation of the FASRB in BiH are mainly related to:

1. lack of the capacities (human, technical and knowledge) of the respective institutions and
2. lack of financial resources for implementation of the jointly agreed and adopted programs of measures and infrastructure investments]

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success?:

[Main achievements under the FASRB are: International Sava River Basin Commission^P was established and it is operational since 2004; Sava River Basin Management Plan was adopted; in addition to FASRB several Protocols have agreed; SavaGIS and Sava HIS platforms for data exchange are developed and

^P Sava Commission

operational; Flood Risk Management Plan is under development; Joint flood forecasting and warning system is under development.

Main achievements under the Danube River Protection Convention are: International Commission for the Protection of Danube River is operational for more than 15 years, Danube River Basin management Plan was adopted, Flood Risk Management Plan was adopted, Trans National Monitoring Network is operational, Joint Danube Survey being conducted every 3 years, etc.

Main achievements under bilateral agreement between BiH and Croatia are: bilateral Commission for Water Management Cooperation is operational since 2006, Commission discuss bilateral issues between two countries, based on the initiative of Commission BiH and Croatia concluded Agreement on rights and obligations for usage of public water supply systems crossing across state's borders; Countries throughout bilateral Commission approve operational costs, investment costs and tariffs of the water supply and sanitation systems jointly constructed and operated by both countries and systems that are crossing across state's borders, throughout bilateral Commission countries discuss projects of transboundary relevance, number of capacity building, scientific and investments projects in the water sector has been successfully implemented.]

(g) Please attach a copy of the agreement or arrangement or provide the web address of the document (*please attach document or insert web address, if applicable*):

[1. Framework Agreement on the Sava River Basin is available at the following link:

http://www.savacommission.org/dms/docs/dokumenti/documents_publications/basic_documents/fasrb.pdf

2. Danube River Protection Commission is available at the following link:

<https://www.icpdr.org/main/sites/default/files/DRPC%20English%20ver.pdf>

3. Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations is attached to this Report as Annex I.]

3. Is your country a member of an operational joint body or joint bodies for this agreement/arrangement (art. 9)?

Yes /No

If no, why not? (please explain): [fill in]

Where there is a joint body (or bodies)

(a) If there is a joint body, which kind of joint body (*please tick one*)?

Plenipotentiaries

Bilateral commission

Basin or similar commission

Other (*please describe*): [fill in]

(b) Does the joint body cover the entire transboundary basin or sub-basin, river, lake or aquifer, or group of basins, and all riparian States?

Yes /No

(c) Which States (including your own) are member of the joint body? (*Please list*):

[BiH, Croatia, Slovenia and Serbia are Parties to the FASRB. Following requirements of FASRB International Sava River Basin Commission (ISRBC) was established. Representatives of four before mentioned countries are members of the ISRBC.

Montenegro is not Party to FASRB and thus it is not full member of ISRBC.]

(d) Does the joint body have any of the following features (*please tick the ones applicable*)?

A secretariat

If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):

[Following article 18 of the FASRB, ISRBC had established joint Secretariat. Seat of the Secretariat is in Zagreb (Croatia). Secretariat staff is employed from all four countries^q. Operation of ISRBC is financed from the annual contribution of the countries.]

A subsidiary body or bodies

Please list (e.g., working groups on specific topics):

[In order to further strengthen its work and to increase implementation of the FASRB, ISRBC had established following expert and ad-hoc groups: Permanent Expert Group for Navigation, Permanent Expert Group for River Basin Management, Permanent Expert Group for Accident Prevention and Control, Permanent Expert Group for Flood Prevention, Ad-hoc Legal Expert Group, Ad-hoc Expert Group for Hydrological and Meteorological Issues, Ad-hoc Expert Group for Hydrological Issues related to Navigation, Ad-hoc GIS Expert Group, Ad-hoc RIS Expert Group, Ad-hoc Financial Expert Group^r.

In order to further strengthen its work and to increase implementation of the Danube River Protection Convention, ICPDR had established following expert and ad-hoc groups: Expert group for River Basin Management, Expert group for Flood Protection, Expert group for Pressures and Measures, Expert group for Accident Prevention and Control, Expert group for Monitoring and Assessment, Expert group for Information Management and Geographic Information Systems, Expert group for Public Participation and ad-hoc Expert Group for legal and administrative questions.

Bilateral Commission for Water Management Cooperation between BiH and Croatia had established two sub-commissions: Sub-commission for Black sea watershed area, and Sub-commission for Adriatic sea watershed area.]

Other features (*please list*): [fill in]

(e) What are the tasks and activities of this joint body (art. 9, para. 2)?^s

Identification of pollution sources

Data collection and exchange

Joint monitoring

Maintenance of joint pollution inventories

^q <http://www.savacommission.org/organ/2>

^r <http://www.savacommission.org/organ/3>

^s This may include tasks according to the agreement or tasks added by the joint body, or its subsidiaries. Both tasks which joint bodies coordinate and tasks which they implement should be included.

- Setting emission limits
- Elaboration of joint water quality objectives
- Management and prevention of flood or drought risks
- Preparedness for extreme events, e.g., common early warning and alarm procedures
- Water allocation and/or flow regulation
- Policy development
- Control of implementation
- Exchange of experience between riparian States
- Exchange of information on existing and planned uses of water and related installations
- Settling of differences and conflicts
- Consultations on planned measures
- Exchange of information on best available technology
- Participation in transboundary EIA
- Development of river, lake or aquifer basin management or action plans
- Management of shared infrastructure
- Addressing hydromorphological alterations
- Climate change adaptation
- Joint communication strategy
- Basin-wide or joint public participation and consultation of, for example, basin management plans
- Joint resources to support transboundary cooperation
- Capacity-building
- Any other tasks (*please list*): [fill in]

(f) What are the main difficulties and challenges that your country faces with the operation of the joint body, if any?

Governance issues

Please describe, if any: [fill in]

Unexpected planning delays

Please describe, if any:

[Although clear timeline for preparation and implementation of the actions is initially determined certain delays occurs. Main reasons for this are related to: different status of the riparian countries (Slovenia and Croatia are EU member states while BiH and Serbia are non-EU member states, more than 50 institutions from all 4 countries are involved in implementation of FASRB, a lot of coordination activities in countries need to take place.]

Lack of resources

Please describe, if true:

[Lack of capacities (financial, human, technical and knowledge) of the respective institutions and lack of financial resources for implementation of the jointly agreed and adopted programs of measures and infrastructure investments]

Lack of mechanism for implementing measures

Please describe, if true: [fill in]

Lack of effective measures

Please describe, if true: [fill in]

Unexpected extreme events

Please describe, if any: [fill in]

Lack of information and reliable forecasts

Please describe, if any: [fill in]

Others (please list and describe, as appropriate): [fill in]

(g) If not all riparian States are members of the joint body how does the body cooperate with them?

No cooperation

They have observer status

Other (please describe):

[As it was mentioned earlier Montenegro is not Party to the FASRB, and it is not full member of the ISRBC. Recognising mutual interest to establish firm cooperation ISRBC and Montenegro signed Memorandum of Understanding on cooperation. Following this, respective institutions from Montenegro are involved in the implementation of the projects of the ISRBC. As result of this, part of the territory of Montenegro belonging to the Sava River Basin is covered by the Sava River Basin Management Plan, respective institutions from Montenegro are involved in real time hydrological and meteorological data exchange, institutions from Montenegro are involved in other activities related to establishment of Joint flood forecasting and early warning system and Flood Risk Management Plan development.

Albania has negligible part of the Sava River Basin (0,18%) thus particular cooperation was not developed with this country so far.]

(h) Does the joint body or its subsidiary bodies meet regularly?

Yes /No

If yes, how frequently does it meet?

[ISRBC meets regularly, three or four times annually, while subsidiary bodies meets at least two times annually.

ICPDR meets two times annually, while subsidiary bodies meets at least two times annually.

Bilateral Commission for Water Management Cooperation meets regularly, one time annually, while subsidiary bodies meets at least one time annually.]

(i) What are the main achievements with regards to the joint body?:

[Please see respond on question 2.f.]

(j) Are representatives of international organizations invited to the meetings of the joint body (or bodies) as observers?

Yes /No

(k) Did the joint body ever invite a coastal State to cooperate (art. 9, paras. 3 and 4)?

Yes /No

If yes, please give details. If no, why not?:

[Question is not relevant for the Sava River Basin. The Sava River is tributary of the Danube River. Regular cooperation with costal countries and joint bodies such as Black Sea Commission have been established throughout the activities of the ICPDR.]

4. Is there a joint or coordinated management plan (such as an action plan or a common strategy) or have joint objectives been set specifically on the transboundary waters subject to cooperation (art. 9, para. 2 (f)) ?

Yes /No

If yes, please provide further details:

[According to article 12 of FASRB, Sava River Basin Management Plan^t was adopted by the Parties in December 2014. Plan is developed in line with EU Water Framework Directive and other relevant EU legislation.

According to article 8 of the Protocol on Flood Protection to FASRB countries are obliged to develop and to adopt Joint Flood Risk Management Plan for the Sava River Basin. Financial resources for the Flood Risk Management Plan are provided and development of the Plan formally started in April 2017.

Under the activities of the ICPDR Danube River Basin Management Plan (2016-2021) and Danube Flood Risk Management Plan (2016-2021) were adopted in December 2015, and confirmed by the Ministerial Declaration in February 2016.]

5. How is the transboundary basin, river, lake or aquifer protected, including the protection of ecosystems, in the context of sustainable and rational water use (art. 2, para. 2 (b), and art. 3, para. 1 (i)) ?

Afforestation

Restoration of ecosystems

Environmental flow norms

Groundwater measures (e.g., protection zones)

Other measures (*please list*): [fill in]

6. (a) Does your country exchange information and data with other riparian States in the basin (art. 13)?

Yes /No

- (b) If yes, on what subjects are information and data exchanged?

Environmental conditions (art. 13, para. (1) (a))

Research activities and application of best available techniques (arts. 5, 12 and 13, para. 1 (b))

Emission monitoring data (art. 13, para. 1 (c))

Planned measures taken to prevent, control or reduce transboundary impacts (art. 13, para. 1 (d))

Point source pollution sources

Diffuse pollution sources

Existing hydromorphological alterations (dams, etc.)

Discharges

Water abstractions

^t <http://www.savacommission.org/srbmp/>

Future planned measures with transboundary impacts, such as infrastructure development

Other subjects (*please list*): [fill in]

(c) Is there a shared database or information platform?

Yes /No

(d) Is the database publicly available?

Yes /No

If yes, please provide the web address:

[<http://www.savagis.org/map;jsessionid=6796B3615F6A96764A885DB46C68E206>
<https://www.icpdr.org/main/>]

(e) What are the main difficulties and challenges to data exchange, if applicable? (*please describe*):

[Due to previously mentioned lack of capacities, data are not always available. However, joint strategic and planning documents identify clear priorities related to improvement of monitoring, knowledge and data availability. In order to support such priorities number of projects has identified, and some of them are under implementation. Further resources and support is needed.]

(f) What are the main benefits of data exchange on the transboundary waters subject to cooperation? (*please describe*):

[Data exchange is primarily focused to support realisation of an integrated and sustainable a water management issues at regional and basin-wide scale. Data exchange improves knowledge sharing, reduce duplication of efforts, direct interested community toward the best available data and improve the overall quality of geospatial information at river basin level.]

7. Do the riparian States carry out joint monitoring in the transboundary basin, river, lake or aquifer (art. 11, para. 1)?

Yes /No

[Within the ICPDR there is a Transnational Monitoring Network (TNMN) and the following information on joint monitoring in transboundary Sava River Basin refers to it.]

(a) If yes, what does the joint monitoring cover?

	Covered?	Hydrological	Ecological	Chemical
Border surface waters	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Connected aquifers (or groundwaters)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unconnected aquifers (or groundwaters)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) If joint monitoring is carried out, how is this done?

National monitoring stations connected through a network or common stations

Joint and agreed methodologies

Joint sampling

Common monitoring network

Common agreed parameters

(c) Please describe the main achievements regarding joint monitoring, if any:

[Surveillance Monitoring within the ICPDR TNMN aims at long-term monitoring of specific pressures of basin-wide importance. Selected quality elements are monitored annually. Such denser monitoring programme is needed to identify the specific pressures in the Danube River Basin District in order to allow a sound and reliable long-term trend assessment of specific quality elements and to achieve a sound estimation of pollutant loads being transferred across states of Contracting Parties and into the Black Sea.

Surveillance Monitoring is based on the set-up of the original TNMN and is fitted to respond to pressures of basin-wide importance. The monitoring network is based on the national monitoring networks and the operating conditions are harmonized between the national and basin-wide levels to minimise the efforts and maximise the benefits.]

(d) Please describe any difficulties experienced with joint monitoring:

[Lack of the financial, technical and human resources]

8. Do the riparian States carry out joint assessment of the transboundary basin, river, lake or aquifer (art. 11)?

Yes /No

If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment:

[As the first step in the development of the Sava River Basin Management Plan, the Sava River Basin Analysis has been undertaken. This effort finally resulted in the Sava River Basin Analysis Report. The Report is a comprehensive document. In addition to the characterization and assessment of water resources in the Sava River Basin, provided in accordance with Article 5 of the EU Water Framework Directive (WFD), the water quantity and integration issues are addressed, as well, through an additional consideration of the important issues, such as flood management and navigation development in the Basin.

The Sava River Basin Analysis Report was accepted by the ISRBC in September 2009, "as a good basis for further activities on the development of the Sava RBM Plan". The Report has been published and also made available in the electronic form, on the official web site of the ISRBC^u.]

9. Have the riparian States agreed to use joint water quality standards?

Yes /No

If yes, is the basis an international or regional standard (please specify which) or has it been adapted from the national standards of the riparian States?: [fill in]

10. What are the measures implemented to prevent or limit the transboundary impact of accidental pollution (art. 14)?

Notification and communication

Coordinated or joint alarm system for accidental water pollution

Other (please list):

[Prevention of accidental pollution is one of the important issues in the sava River Basin. In order to improve status parties to FASRB have agreed to develop additional Protocol on emergency situations. Protocol is currently under negotiations. Protocol on emergency situations relets to:

^uhttp://www.savacommission.org/dms/docs/dokumenti/documents_publications/publications/other_publications/sava_river_basin_analysis_report_high_res.pdf

- Prevention, preparedness and reaction on industrial accidents and accidents related to navigation that may have transboundary impacts, and on other events that are result of uncontrolled situations involving dangerous substances that are causing or may cause transboundary impact;
- Cooperation between parties in terms of mutual assistance, exchange of information, exchange of technology and research and development related to prevention, preparedness and reactions on emergency situations.]

No measures

If not, why not? What difficulties does your country face in putting in place such measures?: [fill in]

11. What are the measures implemented to prevent or limit the transboundary impact of extreme weather events (art. 14)?

Notification and communication

Coordinated or joint alarm system for floods

Coordinated or joint alarm system for droughts

Joint climate change adaptation strategy

Joint disaster risk reduction strategy

Other (*please list*): [fill in]

No measures

If not, why not? What difficulties does your country face in putting in place such measures?: [fill in]

12. Are procedures in place for mutual assistance in case of a critical situation (art. 15)?

Yes /No

If yes, please provide a brief summary:

[As it was described earlier Parties to FASRB adopted Protocol on Flood Protection. Protocol is in force since 27 November 2015. Article 11 of the Protocol on Flood Protection defines issues related to flood defence emergency situations and mutual assistance. Procedures and mechanisms for mutual assistance shall be further elaborated within Flood Risk Management Plan.

For industrial accidents and accidents related to navigation that may have transboundary impacts please see respond on question no.10.]

13. Are the public or relevant stakeholders involved in transboundary water management in the basin, river, lake or aquifer? (art. 16)?

Yes /No

If yes, how? (please tick all applicable) (Please note: If your country is a Party to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), you may refer to your country's report under that Convention.):

Stakeholders have observer status in a joint body

If yes, please specify the stakeholders for each joint body: [fill in]

Availability of information to the public

- Consultation on planned measures or river basin management plans^v
- Public involvement
- Other (*please specify*): [fill in]

Please remember to complete section II for each of the transboundary basins, rivers, lakes or aquifers. Please also remember to attach copies of agreements, if any.

^v Or, where applicable, aquifer management plans.

Name of the transboundary basin, river, lake or aquifer, or group thereof, list of the riparian States, and country's share of the basin:

[Adriatic Sea Watershed Area including Trebisnjica River Basin District shared by BiH, Croatia and Montenegro]

1. Is there one or more transboundary (bilateral or multilateral) agreement(s) or arrangement(s) on this basin (art. 9)?

One or more agreements or arrangements exist and are in force

Agreement or arrangement developed but not in force

Agreement or arrangement developed, but not in force for all riparians

Please insert the name of the agreement or agreements or arrangements:

[Bilateral Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations

Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona convention)]

Agreement or arrangement is under development

No agreement

If there is no agreement or arrangement or it is not in force, please explain briefly why not and provide information on any plans to address the situation:

[Particular multilateral Agreement between riparian countries (BiH, Croatia and Montenegro) that covers cooperation on Adriatic Sea Watershed Area including the Trebisnjica River Basin District does not exist.

Bilateral Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations is in force since 2006. Implementation and cooperation under this agreement is on-going.

Bilateral agreement that covers the Trebsnjica River Basin District shared between BiH and Montenegro is not in place yet. Following requirements of the Water Convention and mutually recognised needs to improve cooperation on water management, initiative to conclude bilateral agreement between BiH and Montenegro on water management cooperation was launched. It is expected to sign this agreement by the end of 2017 or mid of 2018.]

If there is no agreement or arrangement and no joint body for the transboundary basin, river, lake or aquifer then jump to question 4; if there is no agreement, but a joint body then go to question 3.

Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, river, lake or aquifer or group of basins or sub-basins

2. (a) Does this agreement or arrangement specify the basin area subject to cooperation?

Yes /No

If yes, does it cover the entire basin, or group of basins, and all riparian States?

Yes /No

If not, what does it cover?:

[Bilateral Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations covers both Sava River Basin as well as whole Adriatic Sea Watershed Area including Trebisnjica River Basin District in BiH and Croatia. Part of the Trebisnjica River Basin District in Montenegro is not covered by this agreement.]

Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

Yes /No

Which States (including your own) are bound by the agreement or arrangement?
(Please list):

[BiH and Croatia]

(b) Are aquifers (or groundwater bodies) covered by the agreement/arrangement?

Yes /No

(c) What is the sectoral scope of the agreement or arrangement?

All water uses

A single water use or sector

Several water uses or sectors

If one or several water uses or sectors, please list (check as appropriate):

Water uses or sectors

Industry

Agriculture

Transport (e.g., navigation)

Households

Energy: hydropower and other energy types

Tourism

Nature protection

Other (please list): [fill in]

(d) What topics or subjects of cooperation are included in the agreement or arrangement (art. 9)?

Procedural and institutional issues

Dispute and conflict prevention and resolution

Institutional cooperation (joint bodies)

Consultation on planned measures

Mutual assistance (art. 15)

Topics of cooperation

Joint vision and management objectives

Joint significant water management issues

Navigation

Environmental protection (ecosystem)

Water quality

- Water quantity or allocation
- Cooperation in addressing floods
- Cooperation in addressing droughts
- Climate change adaptation

Monitoring and exchange

- Joint assessments
- Data collection and exchange (art. 13)
- Joint monitoring (art. 11)
- Maintenance of joint pollution inventories
- Elaboration of joint water quality objectives
- Common early warning and alarm procedures (art. 14)
- Exchange of experience between riparian States
- Exchange of information on planned measures

Joint planning and management

- Development of joint regulations on specific topics
- Development of international or joint river, lake or aquifer basin management or action plans
- Management of shared infrastructure
- Development of shared infrastructure

Other (*please list*): [fill in]

(e) What are the main difficulties and challenges that your country faces with the agreement or arrangement and its implementation, if any (*please describe, if applicable*):

[Main difficulties and challenges for the implementation of the Bilateral Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations are:

1. lack of the capacities (financial, human, technical and knowledge) of the respective institutions and
2. lack of financial resources for the implementation of measures, strengthening of capacities and infrastructure investments.]

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success?:

[Joint Commission for Water Management Cooperation was established and it is fully operational. Cooperation between institutions in both countries is significantly improved, sub-commissions for the Black Sea Watershed Area and Adriatic Sea Watershed Area were established, joint projects have been created and implemented, cooperation on the harmonisation of the legal framework in both countries is taking place, such as harmonisation of the sanitary protection zones, cooperation on the infrastructure developments of transboundary relevance is taking place, additional agreements have been developed and in forced^w, operation and maintenance of joint infrastructure is regularly monitored, etc.]

^w Please check the answer on question no.3. page 4.

(g) Please attach a copy of the agreement or arrangement or provide the web address of the document (*please attach document or insert web address, if applicable*):

[Bilateral Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations is attached to this questionnaire as Annex I.

Barcelona convention is available on the following link:
http://wedocs.unep.org/bitstream/handle/20.500.11822/7096/Consolidated_BC95_Eng.pdf?sequence=1&isAllowed=y

3. Is your country a member of an operational joint body or joint bodies for this agreement/arrangement (art. 9)?

Yes /No

If no, why not? (please explain): [fill in]

Where there is a joint body (or bodies)

(a) If there is a joint body, which kind of joint body (*please tick one*)?

Plenipotentiaries

Bilateral commission

Basin or similar commission

Other (*please describe*): [fill in]

(b) Does the joint body cover the entire transboundary basin or sub-basin, river, lake or aquifer, or group of basins, and all riparian States?

Yes /No

(c) Which States (including your own) are member of the joint body? (*Please list*):

[Following Article 5 of the Bilateral Agreement between Government of Bosnia and Herzegovina and Government of Republic of Croatia on regulation of water management relations “Joint Commission on Water Management Cooperation of Bosnia and Herzegovina and Republic of Croatia” was established and it is operational.

BiH and Croatia are members of the Joint body.

In line with Article 4 of the Barcelona Convention the Mediterranean Commission on Sustainable Development (MCSD) was established as an advisory body to the Contracting Parties, to assist them in their efforts to integrate environmental issues in their socioeconomic programmes and, to promote sustainable development policies in the Mediterranean region. The MCSD is unique in its composition which includes, on an equal footing, government representatives, local authorities, socioeconomic actors, IGOs, and NGOs.]

(d) Does the joint body have any of the following features (*please tick the ones applicable*)?

A secretariat

If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):

[According to Article 5. of the bilateral agreement, Joint Commission on Water Management Cooperation of Bosnia and Herzegovina and Republic of Croatia does not have Permanent Secretariat. Institutions in both countries are responsible to ensure administrative assistance to Commission and deal with all other relevant issues.]

A subsidiary body or bodies

Please list (e.g., working groups on specific topics):

[Joint Commission on Water Management Cooperation of Bosnia and Herzegovina and Republic of Croatia has mandate to establish permanent and ad-hoc expert groups. Following this two subsidiary bodies were established: 1) Sub-commission for the Black Sea Watershed Area (Sava River Basin) and 2) Sub-Commission for Adriatic Sea Watershed Area.]

Other features (*please list*): [fill in]

(e) What are the tasks and activities of this joint body (art. 9, para. 2)?^x

Identification of pollution sources

Data collection and exchange

Joint monitoring

Maintenance of joint pollution inventories

Setting emission limits

Elaboration of joint water quality objectives

Management and prevention of flood or drought risks

Preparedness for extreme events, e.g., common early warning and alarm procedures

Water allocation and/or flow regulation

Policy development

Control of implementation

Exchange of experience between riparian States

Exchange of information on existing and planned uses of water and related installations

Settling of differences and conflicts

Consultations on planned measures

Exchange of information on best available technology

Participation in transboundary EIA

Development of river, lake or aquifer basin management or action plans

Management of shared infrastructure

Addressing hydromorphological alterations

Climate change adaptation

Joint communication strategy

Basin-wide or joint public participation and consultation of,

^x This may include tasks according to the agreement or tasks added by the joint body, or its subsidiaries. Both tasks which joint bodies coordinate and tasks which they implement should be included.

- for example, basin management plans
- Joint resources to support transboundary cooperation
- Capacity-building
- Any other tasks (*please list*): [fill in]

(f) What are the main difficulties and challenges that your country faces with the operation of the joint body, if any?

- Governance issues
- Please describe, if any:*

[Having in mind specific constitutional organisation of BiH, and distribution of the competencies between different levels of authorities in BiH (State and Entities) representatives of all respective institutions has to be involved in the cooperation activities. Thus, it is demanding task to provide adequate representation as well as to establish efficient decision-making process.]

- Unexpected planning delays
- Please describe, if any:* [fill in]

- Lack of resources
- Please describe, if true:*

[Due to lack of human resources within the institutions in BiH implementation of the international obligations are additional burden for the institutions. In addition to this, lack of financial resources creates challenging environment for the implementation of international obligations, agreed measures, new infrastructure development.]

- Lack of mechanism for implementing measures
- Please describe, if true:*

[Having in mind that jurisdiction for water management in BiH is shared between different levels of authorities existing mechanisms has to be improved in order to provide more efficient and timely implementation of agreed measures and actions. One of the priority issues recognised by strategic and planning documents in BiH is to improve coordination and decision making process in the country.]

- Lack of effective measures
- Please describe, if true:* [fill in]

- Unexpected extreme events
- Please describe, if any:* [fill in]

- Lack of information and reliable forecasts
- Please describe, if any:* [fill in]

Others (*please list and describe, as appropriate*): [fill in]

(g) If not all riparian States are members of the joint body how does the body cooperate with them?

- No cooperation
- They have observer status
- Other (*please describe*): [fill in]

(h) Does the joint body or its subsidiary bodies meet regularly?

Yes /No

If yes, how frequently does it meet?

[Joint Commission on Water Management Cooperation of Bosnia and Herzegovina and Republic of Croatia has regular annual meetings. If it is needed Joint Commission can meet more frequently.]

Both subsidiary bodies have regular annual meetings. If it is needed subsidiary bodies can meet more frequently.]

(i) What are the main achievements with regards to the joint body?:

[Cooperation between institutions in both countries are improved, joint projects have been created and implemented, cooperation on the harmonisation of the legal framework in both countries is taking place, cooperation on the infrastructure developments of transboundary relevance is taking place, additional agreements on water supply and sanitation have been developed and in forced^y.]

(j) Are representatives of international organizations invited to the meetings of the joint body (or bodies) as observers?

Yes /No

(k) Did the joint body ever invite a coastal State to cooperate (art. 9, paras. 3 and 4)?

Yes /No

If yes, please give details. If no, why not?:

[Both countries BiH and Croatia are coastal countries.]

4. Is there a joint or coordinated management plan (such as an action plan or a common strategy) or have joint objectives been set specifically on the transboundary waters subject to cooperation (art. 9, para. 2 (f)) ?

Yes /No

If yes, please provide further details:

[During the development of the river basin management plans respective authorities in both countries jointly, throughout the same project developed draft of the RMBs in Bosnia and Herzegovina and Croatia. Joint objectives and Significant Water Management Issues are jointly agreed.]

One of the jointly developed documents is “Framework for Neretva and Trebisnjica River Basin Management in BiH and Croatia”.

Joint Commission on Water Management Cooperation of Bosnia and Herzegovina and Republic of Croatia endorsed results of the joint activities.]

5. How is the transboundary basin, river, lake or aquifer protected, including the protection of ecosystems, in the context of sustainable and rational water use (art. 2, para. 2 (b), and art. 3, para. 1 (i)) ?

Afforestation

Restoration of ecosystems

Environmental flow norms

Groundwater measures (e.g., protection zones)

Other measures (*please list*): [fill in]

6. (a) Does your country exchange information and data with other riparian States in the basin (art. 13)?

Yes /No

^y Please see respond on question no. 3, page 4.

- (b) If yes, on what subjects are information and data exchanged?
- Environmental conditions (art. 13, para. (1) (a))
 - Research activities and application of best available techniques (arts. 5, 12 and 13, para. 1 (b))
 - Emission monitoring data (art. 13, para. 1 (c))
 - Planned measures taken to prevent, control or reduce transboundary impacts (art. 13, para. 1 (d))
 - Point source pollution sources
 - Diffuse pollution sources
 - Existing hydromorphological alterations (dams, etc.)
 - Discharges
 - Water abstractions
 - Future planned measures with transboundary impacts, such as infrastructure development
 - Other subjects (*please list*): [fill in]

(c) Is there a shared database or information platform?

Yes /No

(d) Is the database publicly available?

Yes /No

If yes, please provide the web address: [fill in]

(e) What are the main difficulties and challenges to data exchange, if applicable? (*please describe*):

[All data relevant for the trans-boundary Adriatic Sea Watershed Area including Trebisnjica River Basin District meetings of the Bilateral Commission and subsidiary bodies data being prepared and shared between the countries. Key problem is actually lack of data due to shortages in monitoring network, outdated scientific knowledge and relevant studies and analysis.]

(f) What are the main benefits of data exchange on the transboundary waters subject to cooperation? (*please describe*):

[Following obligations of the bilateral Agreement and Rulebook on operation, Bilateral Commission is responsible to analyse issues related to joint flood protection, water protection and sea protection from pollution, water usage and other water management issues. In order to perform its duties and responsibilities Bilateral Commission need to exchange relevant and available data and other information.]

7. Do the riparian States carry out joint monitoring in the transboundary basin, river, lake or aquifer (art. 11, para. 1)?

Yes /No

(a) If yes, what does the joint monitoring cover?

	Covered?	Hydrological	Ecological	Chemical
Border surface waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Connected aquifers (or groundwaters)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unconnected aquifers (or groundwaters)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- (b) If joint monitoring is carried out, how is this done?
- National monitoring stations connected through a network or common stations
- Joint and agreed methodologies
- Joint sampling
- Common monitoring network
- Common agreed parameters
- (c) Please describe the main achievements regarding joint monitoring, if any: [fill in]
- (d) Please describe any difficulties experienced with joint monitoring: [fill in]

8. Do the riparian States carry out joint assessment of the transboundary basin, river, lake or aquifer (art. 11)?

Yes /No

If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment:

[BiH and Croatia implemented GEF financed Project Neretva and Trebišnjica in period of time 2008-2014. One of the components of the Project was related to river basin management planning. Following legal requirements in both countries as well as requirements of EU Water Framework Directive joint assessment (Characterisation Reports) of the transboundary basin was finalized. Based on the joint assessment coordinated River Basin Management Plans were developed. Following legal requirements Strategic Environmental Assessments for river basin management plans was developed, and plans in BiH are currently under adoption.

In the period of time 2010-2014 four countries (Croatia, BiH, Montenegro and Albania) jointly implemented project "Protection and Sustainable Use of the Dinaric Karst Transboundary Aquifer System – DIKTAS". Aim of the project was to improve the management of karst groundwaters contained in the Dinaric Karst and shared by four countries. Throughout this project Transboundary Diagnostic Analysis was developed. Based on TDA, Strategic Action Program was developed and accepted by the countries.]

9. Have the riparian States agreed to use joint water quality standards?

Yes /No

If yes, is the basis an international or regional standard (please specify which) or has it been adapted from the national standards of the riparian States?: [fill in]

10. What are the measures implemented to prevent or limit the transboundary impact of accidental pollution (art. 14)?

Notification and communication

Coordinated or joint alarm system for accidental water pollution

Other (please list): [fill in]

No measures

If not, why not? What difficulties does your country face in putting in place such measures?: [fill in]

11. What are the measures implemented to prevent or limit the transboundary impact of extreme weather events (art. 14)?

Notification and communication

Coordinated or joint alarm system for floods

Coordinated or joint alarm system for droughts

- Joint climate change adaptation strategy
- Joint disaster risk reduction strategy
- Other (*please list*): [fill in]
- No measures
- If not, why not? What difficulties does your country face in putting in place such measures?:* [fill in]

12. Are procedures in place for mutual assistance in case of a critical situation (art. 15)?

Yes /No

If yes, please provide a brief summary: [fill in]

13. Are the public or relevant stakeholders involved in transboundary water management in the basin, river, lake or aquifer? (art. 16)?

Yes /No

If yes, how? (please tick all applicable) (Please note: If your country is a Party to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), you may refer to your country's report under that Convention.):

Stakeholders have observer status in a joint body

If yes, please specify the stakeholders for each joint body: [fill in]

Availability of information to the public

Consultation on planned measures or river basin management plans^z

Public involvement

Other (*please specify*): [fill in]

^z Or, where applicable, aquifer management plans.

III. Calculation of SDG indicator 6.5.2

Methodology

Using the information gathered in section II, the information gathered in this section allows for the calculation of the Sustainable Development Goal global indicator 6.5.2, which is defined as *the proportion of transboundary basins' area with an operational arrangement for water cooperation*.

The Step-by-step monitoring methodology for SDG indicator 6.5.2^{aa}, developed by UNECE and UNESCO in the framework of UN Water, can be referred to for details on the necessary data, the definitions and the calculation.

The value of the indicator at the national level is derived by **adding up the surface area in a country of those transboundary surface water catchments and transboundary aquifers (i.e. 'transboundary' basins') that are covered by an operational arrangement and dividing the obtained area by the aggregate total area in a country of all transboundary basins (both catchments and aquifers)**.

Transboundary basins are basins of transboundary waters, that is, of any surface waters (notably rivers, lakes) or groundwaters which mark, cross or are located on boundaries between by two or more States. For the purpose of the calculation of this indicator, for a transboundary river or lake, the basin area is determined by the extent of its catchment. For groundwater, the area to be considered is the extent of the aquifer.

An "**arrangement for water cooperation**" is a bilateral or multilateral treaty, convention, agreement or other formal arrangement among riparian countries that provides a framework for cooperation on transboundary water management.

For an arrangement to be considered "**operational**" all the following criteria needs to be fulfilled:

- There is a joint body, joint mechanism or commission (e.g. a river basin organization) for transboundary cooperation,
- There are regular (at least once per year) formal communications between riparian countries in form of meetings (either at the political or technical level),
- There is a joint or coordinated water management plan(s), or joint objectives have been set, and
- There is a regular (at least once per year) exchange of data and information.

Calculation of indicator 6.5.2

Please list in the tables below the transboundary basins (rivers and lakes and aquifers) in your country's territory and provide the following information for each of them:

- the country/ies with which the basin is shared;

^{aa} Available at <http://www.unwater.org/publications/publications-detail/en/c/428764/>.

- the surface area of these basins (the catchment of rivers or lakes and the aquifer in the case of groundwater) within the territory of your country (in km²); and
- the surface area of these basins within the territory of your country which is covered by a cooperation arrangement that is operational according to the above criteria (please consider the replies to the questions in section II, in particular questions 1, 2, 3, 4 and 6).

In case an operational arrangement is in place only for a sub-basin or portion of a basin, please list this sub-basin just after the transboundary basin it is part of. In case there is an operational arrangement for the whole basin, do not list sub-basins in the table below.

Transboundary basin (river or lake) [please add rows as needed]

Name of transboundary basin / sub-basin	Countries shared with	Surface area of the basin / sub-basin (in km ²) within the territory of the country	Surface area of the basin / sub-basin (in km ²) covered by an operational arrangement within the territory of the country
Sava River Basin	Slovenia, Croatia, Serbia and Montenegro	38,349.10 ^{bb}	38,349.10
Adriatic Sea Watershed Area including Trebisnjica River Basin District	Croatia and Montenegro	12.935,0 ^{cc}	10.955
Total surface area of transboundary basins / sub-basins of rivers and lakes covered by operational arrangements within the territory of the country (in km²) [A] (do not double count sub-basins)			49.304,1
Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km²) [B] (do not double count sub-basins)		51.284,1	

^{bb} Sava River Basin Management Plan

^{cc} 8877 km² FBiH, 4.058 km² RS

Transboundary aquifers [please add rows as needed]

Name of the transboundary aquifer	Countries shared with	Surface area (in km ²) ^{dd} within the territory of the country	Covered by an operational arrangement (yes/no)
Gornji sliv Korane – Cazin	Croatia	124,7	Yes
Gornji sliv Une	Croatia	1.171,9	Yes
Romanija – Devetak	Serbia	1337,3	No
Posavina	Croatia	1601,4	Yes
Lijeve polje	Croatia	595,7	Yes
Semberija	Serbia	465,1	No
Tara-Čehotina	Montenegro	245,2	No
Dubicko polje	Croatia	147,1	Yes
Gornja Drina	Montenegro	463,9	No
Posušje – Imotski	Croatia	297,61 od 384,2	Yes
Tihaljina	Croatia	252,57	Yes
Prud	Croatia	121,27	Yes
Neretva lijeva obala	Croatia	104,06	Yes
Aluvij Capljina	Croatia	40,98	Yes
Zavrelje	Croatia	49,14	Yes
Duboka Ljuta	Croatia	82,70	Yes
Ombla	Croatia	577,63	Yes
Zaton	Croatia	29,35	Yes
Doli – Slano	Croatia	152,96	Yes
Bistrina	Croatia	24,87	Yes
Butina	Croatia	4,75	Yes

^{dd} For a transboundary aquifer, the extent is derived from the aquifer system delineation which is commonly done relying on information of the subsurface (notably the extent of geological formations). As a general rule, the delineation of aquifer systems is based on the delineation of the extent of the hydraulically connected water-bearing geological formations. Aquifer systems are three-dimensional objects and the aquifer area taken into account is the projection on the land surface of the system. Ideally, when different aquifer systems not hydraulically connected are vertically superposed, the different relevant projected areas are to be considered separately, unless the different aquifer systems are managed conjunctively.

Vrgoracka banja	Croatia	27,48	Yes
Lijeve obale rijeke Cetine	Croatia	1071,68	Yes
Gronji tok rijeke Krke	Croatia	335,47	Yes
Konavoska ljuta	Croatia	87	Yes
Sub-total: surface area of transboundary aquifers covered by operational arrangements (in km²) [C]		6.900,32	
Total surface area of transboundary aquifers (in km²) [D]		9.411,82	

Indicator value for the country

$$((A + C)/(B + D)) \times 100\% =$$

$$= ((49.304,1 + 6.900,32)/(51.284,1 + 9.411,82)) \times 100\% =$$

$$= 92,59 \%$$

Additional information

If the respondent has comments that clarify assumptions or interpretations made for the calculation, or the level of certainty of the spatial information, please write them here:

All data used for calculation of Indicator were taken from Draft River Basin Management Plans. River Basin Management Plans are under adoption procedure.

Spatial information

If a map (or maps) of the transboundary surface water catchments and transboundary aquifers (i.e. 'transboundary basins') is available, please attach them. Ideally, shapefiles of the basin and aquifer delineations that can be viewed in Geographical Information Systems should be sent.

Following maps are attached to this report:

1. Danube River Basin District Overview,
2. Sava River Basin Overview,
3. Sava River Basin in BiH,
4. Transboundary Aquifers in the Sava River Basin,
5. Adriatic Sea Watershed Area including Trebisnjica River Basin District,
6. Transboundary Aquifers in the Adriatic Sea Watershed Area including Trebisnjica River Basin District.

IV. Final questions

1. What are the main challenges your country faces in implementing the Convention and cooperating on transboundary waters? *(Please describe)*:

[Efficient implementation of the Convention could be achieved only if:

- There is adequate understanding among different stakeholders in all riparian countries on the importance of transboundary cooperation, benefits that can be achieved throughout such cooperation or problems that might arise if cooperation does not exist,
- all relevant authorities in the country are adequately involved in activities,
- all institutions take their part of responsibility,
- adequate resources are provided to support cooperation and implementation of the measures (actions).

Institutions in BiH are facing with chronic lack of financial, technical and human capacities which actually slowing down activities, or in some cases preventing implementation of the measures.

At the bilateral or multilateral level some other opened issues between riparian countries that are not directly linked to water management (State borders, in general political cooperation between riparian countries, etc.) may support or discourage joint cooperation and implementation of the activities. Such opened issue between riparian countries are the key reason why bilateral agreements on cooperation between BiH and Serbia and BiH and Montenegro are still not in place.]

2. What have been the main achievements in implementing the Convention and cooperating on transboundary waters? What were the keys to achieving that success? *(Please describe concrete examples)*:

[BiH and other riparian countries are parties to the Water Convention. Cooperation established under the Convention helped riparian countries to start working together and network between institutions have been established. There is mutual understanding that Water Convention should be key document and all other mutual agreements, Memorandum of Understandings and other arrangements are based on the Convention. In this light Danube River Protection Convention and Framework Agreement on the Sava River Basin were concluded. These two formats of cooperation have proved that despite different interests, different political status of the countries, different level of economic development of the riparian countries cooperation still can be operational and successful.

Riparian countries need to invest significant amount of resources (financial, technical and human) in order to achieve desired level of effectiveness of transboundary cooperation. However, these efforts might be recognised and supported by different IFIs and there are number of examples of this. For countries with economies in transition such external support is extremely important to develop institutional capacities, legal, strategic and planning documents, and to undertake necessary infrastructure investments.]

3. Name and contact details of the person(s) who filled out the questionnaire *(please insert)*:

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Date: [15 May 2017]

Signature: [Bosko Kenjic]



4. Please include any additional information on the process of preparing the report (e.g., whether there was an exchange or consultation within the joint body or with riparian countries), in particular which institutions have been consulted (*please describe*):

[Respective institutions from BiH have participated in preparation of the report as follows:

- Ministry of Foreign Trade and Economic Relations of BiH,
- Federal Ministry for Agriculture, Water Management and Forestry,
- Ministry of Agriculture, Forestry and Water Management of RS,
- Government of BD of BiH,
- Sava River Watershed Agency,
- Adriatic Sea Watershed Agency,
- Public Institution “Vode Srpske”.]

5. If you have any other comments please add them here (*insert comments*): [fill in]

Thank you very much for taking the time to complete this report.
