

Reporting on global SDG indicator 6.5.2

TEMPLATE of the second cycle for reporting

Content of the template

The template is divided into four parts:

- Section I - Calculation of SDG indicator 6.5.2
- Section II - Information on each transboundary basin or group of basins
- Section III - General information on transboundary water management at the national level
- Section IV - Final questions

Country name: [Afghanistan]

I. Calculation of Sustainable Development Goal indicator 6.5.2

Methodology

1. Using the information gathered in section II, the information gathered in this section allows for the calculation of Sustainable Development Goal global indicator 6.5.2, which is defined as the proportion of transboundary basin area with an operational arrangement for water cooperation.
2. The step-by-step monitoring methodology for indicator 6.5.2, developed by UNECE and UNESCO in the framework of UN-Water, should be referred to for details on the necessary data, the definitions and the calculation.^a
3. The value of the indicator at the national level is derived by adding up the surface area in a country of those transboundary basins (river and lake basins and aquifers) that are covered by an operational arrangement and dividing the area obtained by the aggregate total area in a country of all transboundary basins (both river and lake basins, and aquifers).
4. 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.
5. 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.
6. For an arrangement to be considered “operational” all the following criteria need to be in place in practice:
 - (a) There is a joint body, joint mechanism or commission (e.g., a river basin organization) for transboundary cooperation (criterion 1);
 - (b) There are regular (at least once per year) formal communications between riparian countries in form of meetings (either at the political or technical level) (criterion 2);
 - (c) Joint objectives, a common strategy, a joint or coordinated management plan, or an action plan have been agreed upon by the riparian countries (criterion 3);
 - (d) There is a regular (at least once per year) exchange of data and information (criterion 4).

Calculation of indicator 6.5.2

7. 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:
 - (a) The country/ies with which the basin is shared;
 - (b) The surface area of the basin (the catchment of rivers or lakes and the aquifer in the case of groundwater) within the territory of your country (in square kilometres (km²));
 - (c) Whether a map and/or a geographical information system (GIS) shapefile of the basin has been provided;

^a Available from the UN-Water website: <https://www.sdg6monitoring.org/indicators/target-65/indicators652/> (updated version “2020”).

- (d) Whether there is an arrangement in force for the basin;
- (e) The verification of each of the four criteria to assess operationality;
- (f) The surface area of the basin within the territory of your country which is covered by a cooperation arrangement that is operational according to the above criteria.

8. In case an operational arrangement is in place only for a sub-basin or a 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.

Table 1

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

<i>Name of transboundary river or lake basin/sub-basin</i>	<i>It is a basin or a sub-basin?^b</i>	<i>Countries shared with</i>	<i>Surface area of the basin/ sub-basin (in km²) within the territory of the country</i>	<i>Map and/or GIS shapefile provided (yes/no)</i>	<i>Covered by an arrangement (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Surface area of the basin/ sub-basin (in km²) covered by an operational arrangement within the territory of the country</i>
Panj-Amu	Basin	Tajikistan, Uzbekistan, and Turkmenistan,	90,962	√	Partially	yes	yes	yes	yes	0
Harirud - Murghab	Basin	Iran, and Turkmenistan	77,604	√	no	no	no	no	no	0
Helmand	Basin	Iran	262,341	√	Entirely	yes	yes	yes	yes	262,341
Kabul	Sub Basin	Pakistan, India and China	76,908	√	no	no	no	no	no	0
(A) Total surface area of transboundary basins/sub-basins of rivers and lakes covered by operational arrangements within the territory of the country (in km²) (do not double count sub-basins)										262,341
(B) Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km²) (do not double count sub-basins)			507,815							

Total Afghanistan **645,803** (Based on watershed atlas of Afghanistan 2004)

^b List sub-basins after the basin they belong to.

Table 2

Transboundary aquifers (please add rows as needed) (no idea yet). No groundwater data available

<i>Name of the transboundary aquifer</i>	<i>Countries shared with</i>	<i>Surface area of the aquifer^c (in km²) within the territory of the country</i>	<i>Map and/ or GIS shapefile provided (yes/no)</i>	<i>Covered by an aquifer specific arrangement (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Covered within an arrangement not specific to the aquifer^d (entirely, partly, no) (Ref. to questions in sect. II)</i>	<i>Criterion 1 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 2 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 3 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Criterion 4 applied (yes/no) (Ref. to questions in sect. II)</i>	<i>Surface area of the aquifer (in km²) covered by an operational arrangement within the territory of the country</i>
No data available	No country	Area	Maps							
No data available	No country									
No data available	No country									
No data available	No country									
(C) Sub-total: surface area of transboundary aquifers covered by operational arrangements (in km²)										
(D) Total surface area of transboundary aquifers (in km²)										

^c 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.

^d In the text of the agreement or arrangement or in the practice.

Indicator value for the country

Surface waters:

Percentage of surface area of transboundary basins of rivers and lakes covered by an operational arrangement:

$$A/B \times 100 = 69.52\%$$

Aquifers:

Percentage of surface area of transboundary aquifers covered by an operational arrangement:

$$C/D \times 100 = \text{no data of groundwater}$$

(as per our knowledge there is no any transboundary aquifer)

Sustainable Development Goal indicator 6.5.2:

Percentage of surface area of transboundary basins covered by an operational arrangement:

$$((A + C)/(B + D)) \times 100 = \text{no data of groundwater}$$

Spatial information

If a map (or maps) of the transboundary surface water catchments and transboundary aquifers (i.e., “transboundary basins”) is available, please consider attaching them. Ideally, shapefiles of the basin and aquifer delineations that can be viewed in GIS should be sent. – shapefiles should be taken from WRD

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:

So far there is no any information groundwater shared resources available. If is expected to study and explore amount of groundwater resources within 5year plan

Does your country have transboundary agreements or arrangements for the protection and/or management of transboundary waters (i.e., rivers, lakes or groundwater), whether bilateral or multilateral?

Yes /No

If yes, list the bilateral and multilateral agreements or arrangements (listing for each of the countries concerned): [*Helmand river basin bilateral treaty with Iran*]

II- 1 Questions for each transboundary basin, sub-basin, part of a basin, or group of basins (river, lake or aquifer)

Please complete this second section for each transboundary basin (river or lake basin, or aquifer), sub-basin, part of a basin or a group of basins covered by the same agreement or arrangement where conditions are similar.¹ In some instances, you may provide information on both a basin and one or more of its sub-basins or parts thereof, for example, where you have agreements² or arrangements on both the basin and its sub-basin. You may coordinate your responses with other States with which your country shares transboundary waters, or even prepare a joint report. General information on transboundary water management at the national level should be provided in section III and not repeated here.

Please reproduce this whole section with its questions for each transboundary basin, sub-basin, part of a basin or group of basins for which you will provide a reply.

Name of the transboundary basin, sub-basin, part of a basin or group of basins:
[*Helmand river basin*]

List of the riparian States: [*Iran*]

In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:

Unconfined aquifer connected to a river or lake

Unconfined aquifer with no or limited relation with surface water

Confined aquifer connected to surface water

Confined aquifer with no or limited relation with surface water

Other

Please describe: [fill in]

Unknown

Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins: [40,6%]

1. Is there one or more transboundary (bilateral or multilateral) agreement(s) or arrangement(s) on this basin, sub-basin, part of a basin or group of basins?

One or more agreements or arrangements exist and are in force

¹ In principle, section II 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.

² In 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.

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(s) or arrangement(s) [Helmand river treaty]

Agreement or arrangement is under development

No agreement or arrangement

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 or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism 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, sub-basin, part of a basin or group of basins.

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

Yes /No

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

Yes /No

Additional explanations? [fill in]

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

Yes /No

Additional explanations? [fill in]

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

(b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

Yes /No

If yes, please list the aquifers covered by the agreement or arrangement: [fill in]

(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
 - Fisheries
 - Tourism
 - Nature protection
 - Other (*please list*): [fill in]

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

Procedural and institutional issues

- Dispute and conflict prevention and resolution
- Institutional cooperation (joint bodies)
- Consultation on planned measures
- Mutual assistance

Topics of cooperation

- Joint vision and management objectives
- Joint significant water management issues
- Navigation
- Human health
- 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
- Joint monitoring
- Maintenance of joint pollution inventories
- Elaboration of joint water quality objectives
- Common early warning and alarm procedures
- 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*): [development of shared infrastructures]

(e) What are the main difficulties and challenges that your country faces with the agreement or arrangement and its implementation, if any?

- Aligning implementation of agreement or arrangement with national laws, policies and programmes
- Aligning implementation of agreement or arrangement with regional laws, policies and programmes
- Lack of financial resources
- Insufficient human capacity
- Insufficient technical capacity
- Tense diplomatic relations

Non-participation of certain riparian countries in the agreement

- No significant difficulties
- Other (*please describe*): [fill in]

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success? [Promotion of bilateral relations, trust building]

(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*): [please attach the treaty (**Helmand**)

https://www.internationalwaterlaw.org/documents/regionaldocs/1973_Helmand_River_Water_Treaty-Afghanistan-Iran.pdf

3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes /No

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

Where there is a joint body or mechanism

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

- Plenipotentiaries
- Bilateral commission
- Basin or similar commission
- Expert group meeting or meeting of national focal points
- Other (*please describe*): [fill in]

(b) Does the joint body or mechanism cover the entire transboundary basin, sub-basin, part of a basin or group of basins?

Yes /No

(c) Which States (including your own) are members of the joint body or mechanism? (*Please list*): [**Iran**]

(d) Are there any riparian States that are not members of the joint body or mechanism? (*please list*): [no-it is shared with **Iran** only.]

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

No cooperation

They have observer status

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

(f) Does the joint body or mechanism 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): [separate]

A subsidiary body or bodies

Please list (e.g., working groups on specific topics): [fill in]

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

(g) What are the tasks and activities of this joint body or mechanism?³

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

Surveillance and early warning of water related disease

Water allocation and/or flow regulation

Policy development

Control of implementation

Exchange of experience between riparian States

³ 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.

-
- 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 (under plan)
 - 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]

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

- Governance issues
Please describe, if any: [fill in]
- Unexpected planning delays
Please describe, if any: [fill in]
- Lack of resources
Please describe, if true: [fill in]
- 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*): [lack of shared infrastructures (under development)]

(i) Does the joint body or mechanism, or its subsidiary bodies meet regularly?
Yes /No

If yes, how frequently does it meet?

More than once per year

Once per year

Less than once per year

(j) What are the main achievements with regards to the joint body or mechanism?
[Promoting bilateral relations, trust building & furthering cooperation]

(k) Did the joint body or mechanism ever invite a non-riparian coastal State to cooperate?

Yes /No

If yes, please give details. If no, why not, e.g. are the relevant coastal States also riparian States and therefore already members of the joint body or mechanism?

4. Have joint objectives, a common strategy, a joint or coordinated management plan or action plan been agreed for the basin, sub-basin, part of a basin or group of basins?

Yes /No

If yes, please provide further details: [action plan for building shared water gauging stations]

5. How is the transboundary basin,–sub-basin, part of a basins or group of basins protected, including the protection of ecosystems, in the context of sustainable and rational water use?

Regulation of urbanization, deforestation, and sand and gravel extraction.

Environmental flow norms, including consideration of levels and seasonality

Water quality protection, e.g. nitrates, pesticides, faecal coliforms, heavy metals

Water-related species and habitats protection

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

6. (a) Does your country regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?

Yes /No

(b) If yes, how often:

More than once per year

Once per year

Less than once per year

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): [information and data can be shared during meeting]

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

Environmental conditions

Research activities and application of best available techniques

- Emission monitoring data
- Planned measures taken to prevent, control or reduce transboundary impacts
- Point source pollution sources
- Diffuse pollution sources
- Existing hydromorphological alterations (dams, etc.)
- Flows or water levels (including groundwater levels)
- Water abstractions
- Climatological information
- Future planned measures with transboundary impacts, such as infrastructure development
- Other subjects (*please list*): [fill in]
- Other comments, e.g. spatial coverage of data and information exchange: [fill in]

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

Yes /No

(f) Is the database publicly available?

Yes /No

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

(g) What are the main difficulties and challenges to data exchange, if applicable?

- Frequency of exchanges
- Timing of exchanges
- Comparability of data and information
- Limited spatial coverage
- Inadequate resources (technical and/or financial)

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

Additional comments: [fill in]

(h) What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (*please describe*): [trust building]

7. Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins?

Yes /No

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

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Border surface waters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Surface waters on the main watercourse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters in part of the basin please describe [Dehraood station data]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transboundary aquifer(s) (connected or unconnected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(b) If joint monitoring is carried out, how is this done? * Please see the treaty and answer based on the related articles

National monitoring stations connected through a network or common stations

Please describe: [fill in]

Joint and agreed methodologies

Please describe: [fill in]

Joint sampling

Please describe: [fill in]

Common monitoring network

Please describe: [fill in]

Common agreed parameters

Please describe: [fill in]

(c) Please describe the main achievements regarding joint monitoring, if any: [fill in]

(d) Please describe any difficulties experienced with joint monitoring: [Joint stations to carry out joint monitoring of the water flow at the border, as enshrined in the treaty, have not been yet installed. Through such stations, water flow would have been jointly monitored]

8. Do the riparian States carry out joint assessment of the transboundary basin, sub-basin, part of a basin or group of basins?

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, and assessment methodology applied: [fill in]

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

Yes /No

If yes, what standards have been applied, e.g. international or regional standards (please specify which), or have national standards of the riparian States been applied? [fill in]

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

Notification and communication

Coordinated or joint early warning or 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: [not specified in the treaty]

11. What are the measures implemented to prevent or limit the transboundary impact of extreme weather events and climate change?

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]

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?

Yes /No

If yes, please provide a brief summary: []

13. Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins?

Yes /No

If yes, how? (please tick all applicable)

Stakeholders have observer status in a joint body or mechanism

Stakeholders have an advisory role in the joint body

Stakeholders have a decision-making role in the joint body

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

Intergovernmental organizations

Private sectors organizations or associations

-
- Water user groups or associations
 - Academic or research institutions
 - Other non-governmental organizations
 - General public
 - Other (please specify): [fill in]
 - Availability of information to the public
 - Consultation on planned measures or river basin management plans⁴
 - Public involvement
 - Other (*please specify*): [fill in]

⁴ Or, where applicable, aquifer management plans.

Does your country have transboundary agreements or arrangements for the protection and/or management of transboundary waters (i.e., rivers, lakes or groundwater), whether bilateral or multilateral?

Yes /No

If yes, list the bilateral and multilateral agreements or arrangements (listing for each of the countries concerned): [Panj-Amu river sub basin bilateral arrangement with Tajikistan (signed bilateral protocols and MoU on data and information sharing of transboundary water, installation of hydrological stations including early warning systems)

II.2 Questions for each transboundary basin, sub-basin, part of a basin, or group of basins (river, lake or aquifer)

Please complete this second section for each transboundary basin (river or lake basin, or aquifer), sub-basin, part of a basin or a group of basins covered by the same agreement or arrangement where conditions are similar.⁵ In some instances, you may provide information on both a basin and one or more of its sub-basins or parts thereof, for example, where you have agreements⁶ or arrangements on both the basin and its sub-basin. You may coordinate your responses with other States with which your country shares transboundary waters, or even prepare a joint report. General information on transboundary water management at the national level should be provided in section III and not repeated here.

Please reproduce this whole section with its questions for each transboundary basin, sub-basin, part of a basin or group of basins for which you will provide a reply.

Name of the transboundary basin,-sub-basin, part of a basin or group of basins: [Panj river sub- basin]

List of the riparian States: [Tajikistan, Turkmenistan and Uzbekistan]

In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:

Unconfined aquifer connected to a river or lake

Unconfined aquifer with no or limited relation with surface water

Confined aquifer connected to surface water

Confined aquifer with no or limited relation with surface water

Other

Please describe: [fill in]

Unknown

Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins: [14%]

⁵ In principle, section II 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.

⁶ In 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, sub-basin, part of a basin or group of basins?

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(s) or arrangement(s) [Signed Protocols and MoU with Tajikistan only at the moment – with Uzbekistan and Turkmenistan discussions are underway on joint data collection]

Agreement or arrangement is under development

No agreement or arrangement

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: [Signed Protocols and MoU with Tajikistan only on data and information sharing which are effective. There are good communications with Turkmenistan and Uzbekistan on establishment of hydrological stations and data collection]

If there is no agreement or arrangement and no joint body or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism 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, sub-basin, part of a basin or group of basins.

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

Yes /No

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

Yes /No

Additional explanations? [fill in]

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

Yes /No

Additional explanations? [It only cover sub basins bordering with Tajikistan such as Upper Panj, Kokcha and Kunduz]

Which States (including your own) are bound by the agreement or arrangement? *(Please list):* [Afghanistan and Tajikistan]

- (b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

Yes /No

If yes, please list the aquifers covered by the agreement or arrangement: [fill in]

- (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

Fisheries

Tourism

Nature protection

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

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

Procedural and institutional issues

Dispute and conflict prevention and resolution

Institutional cooperation (joint bodies)

Consultation on planned measures

Mutual assistance

Topics of cooperation

Joint vision and management objectives

Joint significant water management issues

Navigation

Human health

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

Joint monitoring

Maintenance of joint pollution inventories

Elaboration of joint water quality objectives

-
- Common early warning and alarm procedures
 - Exchange of experience between riparian States
 - Exchange of information on planned measures (partially)

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*): [development of shared infrastructures]

(e) What are the main difficulties and challenges that your country faces with the agreement or arrangement and its implementation, if any?

- Aligning implementation of agreement or arrangement with national laws, policies and programmes
- Aligning implementation of agreement or arrangement with regional laws, policies and programmes
- Lack of financial resources
- Insufficient human capacity
- Insufficient technical capacity
- Tense diplomatic relations
- Non-participation of certain riparian countries in the agreement
- No significant difficulties
- Other (*please describe*): [fill in]

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success? [trust building for furthering bilateral cooperation]

(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*): [The MoU is only available in Dari and Tajiki languages]

3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes /No

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

Where there is a joint body or mechanism

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

- Plenipotentiaries

Bilateral commission

Basin or similar commission

Expert group meeting or meeting of national focal points

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

(b) Does the joint body or mechanism cover the entire transboundary basin, sub-basin, part of a basin or group of basins?

Yes /No

(c) Which States (including your own) are members of the joint body or mechanism? (*Please list*): [**Afghanistan and Tajikistan**]

(d) Are there any riparian States that are not members of the joint body or mechanism? (*please list*): [**yes, Uzbekistan and Turkmenistan**]

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

No cooperation

They have observer status

Other (*please describe*): [**discussion is in progress with Turkmenistan and Uzbekistan**]

(f) Does the joint body or mechanism 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): []

A subsidiary body or bodies

Please list (e.g., working groups on specific topics): [fill in]

Other features (*please list*): [**Join Technical Team**]

(g) What are the tasks and activities of this joint body or mechanism?⁷

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

⁷ 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.

-
- Surveillance and early warning of water related disease
 - 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]

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

- Governance issues
Please describe, if any: [fill in]
- Unexpected planning delays
Please describe, if any: [fill in]
- Lack of resources
Please describe, if true: [fill in]
- 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): []

- (i) Does the joint body or mechanism, or its subsidiary bodies meet regularly?

Yes /No

If yes, how frequently does it meet?

More than once per year

Once per year

Less than once per year

- (j) What are the main achievements with regards to the joint body or mechanism?
[trust building & furthering bilateral cooperation]

- (k) Did the joint body or mechanism ever invite a non-riparian coastal State to cooperate?

Yes /No

If yes, please give details. If no, why not, e.g. are the relevant coastal States also riparian States and therefore already members of the joint body or mechanism? [see protocols]

4. Have joint objectives, a common strategy, a joint or coordinated management plan or action plan been agreed for the basin, sub-basin, part of a basin or group of basins?

Yes /No

If yes, please provide further details: [action plan for creation of data and information sharing stations]

5. How is the transboundary basin,–sub-basin, part of a basins or group of basins protected, including the protection of ecosystems, in the context of sustainable and rational water use?

Regulation of urbanization, deforestation, and sand and gravel extraction.

Environmental flow norms, including consideration of levels and seasonality

Water quality protection, e.g. nitrates, pesticides, faecal coliforms, heavy metals

Water-related species and habitats protection

Other measures (please describe): [fill in]

6. (a) Does your country regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?

Yes /No

- (b) If yes, how often:

More than once per year

Once per year

Less than once per year

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): [through email exchange]

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

- | | |
|--|-------------------------------------|
| Environmental conditions | <input checked="" type="checkbox"/> |
| Research activities and application of best available techniques | <input type="checkbox"/> |
| Emission monitoring data | <input type="checkbox"/> |
| Planned measures taken to prevent, control or reduce transboundary impacts | <input type="checkbox"/> |
| Point source pollution sources | <input type="checkbox"/> |
| Diffuse pollution sources | <input type="checkbox"/> |
| Existing hydromorphological alterations (dams, etc.) | <input checked="" type="checkbox"/> |
| Flows or water levels (including groundwater levels) | <input checked="" type="checkbox"/> |
| Water abstractions | <input type="checkbox"/> |
| Climatological information | <input checked="" type="checkbox"/> |
| Future planned measures with transboundary impacts, such as infrastructure development | <input type="checkbox"/> |

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

Other comments, e.g. spatial coverage of data and information exchange: [fill in]

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

Yes /No

(f) Is the database publicly available?

Yes /No

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

(g) What are the main difficulties and challenges to data exchange, if applicable?

- | | |
|---|-------------------------------------|
| Frequency of exchanges | <input checked="" type="checkbox"/> |
| Timing of exchanges | <input type="checkbox"/> |
| Comparability of data and information | <input type="checkbox"/> |
| Limited spatial coverage | <input type="checkbox"/> |
| Inadequate resources (technical and/or financial) | <input checked="" type="checkbox"/> |

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

Additional comments: [fill in]

(h) What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (*please describe*): [trust building for further cooperations]

7. Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins?

Yes /No

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

	<i>Hydrological</i>	<i>Ecological</i>	<i>Chemical</i>
Border surface waters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters in the entire basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters on the main watercourse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Surface waters in part of the basin please describe []	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transboundary aquifer(s) (connected or unconnected)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	<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

Please describe: [fill in]

Joint and agreed methodologies

Please describe: [fill in]

Joint sampling

Please describe: [fill in]

Common monitoring network

Please describe: [fill in]

Common agreed parameters

Please describe: [fill in]

(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, sub-basin, part of a basin or group of basins?

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, and assessment methodology applied: [fill in]

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

Yes /No

If yes, what standards have been applied, e.g. international or regional standards (please specify which), or have national standards of the riparian States been applied? [fill in]

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

Notification and communication

Coordinated or joint early warning or 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?: [lack of technical capacity]

11. What are the measures implemented to prevent or limit the transboundary impact of extreme weather events and climate change?

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 (under discussion)

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?

Yes /No

If yes, please provide a brief summary: []

13. Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins?

Yes /No

If yes, how? (please tick all applicable)

Stakeholders have observer status in a joint body or mechanism

Stakeholders have an advisory role in the joint body

Stakeholders have a decision-making role in the joint body

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

Intergovernmental organizations

Private sectors organizations or associations

-
- Water user groups or associations
- Academic or research institutions
- Other non-governmental organizations
- General public
- Other (please specify): [The World Bank]
- Availability of information to the public
- Consultation on planned measures or river basin management plans⁸
- Public involvement
- Other (*please specify*): [fill in]

⁸ Or, where applicable, aquifer management plans.

Please remember to complete section II for each of the transboundary basins, sub-basin, part of a basin or group of basins. Please also remember to attach copies of agreements or arrangements, if any.

III. Water management at the national level

In this section, you are requested to provide general information on water management at the national level as it relates to transboundary waters. Information on specific transboundary basins, sub-basins, part of basins and groups of basins, should be presented in section II and not repeated here.

1. (a) Does your country's national legislation, policies, action plans and strategies refer to measures to prevent, control and reduce any transboundary impact?

Yes /No

If yes, please briefly describe the main national laws, policies, action plans and strategies [Water Law, Draft of Transboundary Water Policy]

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

Precautionary principle Yes /No

Polluter pays principle Yes /No

Sustainable development Yes /No

User pays principle Yes /No

If yes, please briefly describe how these principles are implemented at the national level: [All above mentioned principles are important articles of approved laws and regulations. All five River Basin General Directorates and 36 River Sub Basins Directorates are responsible for implementation of those articles with the support of relevant ministries and agencies]

- (c) Does your country have a national licensing or permitting system for wastewater discharges and other point source pollution? (e.g., in industry, mining, energy, municipal, wastewater management or other sectors)?

Yes /No (not fully implemented)

If yes, for which sectors?

- | | |
|-------------------|-------------------------------------|
| Industry | <input checked="" type="checkbox"/> |
| Mining | <input checked="" type="checkbox"/> |
| Energy | <input type="checkbox"/> |
| Municipal | <input checked="" type="checkbox"/> |
| Livestock raising | <input type="checkbox"/> |
| Aquaculture | <input type="checkbox"/> |

Other (please list): [navigation, firefighting]

Please briefly describe the licensing or permitting system, indicating whether the system provides for setting emission limits based on best available technology?

If yes, for which sectors? (please list): [Transport, industry and other relevant sectors]

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] this part has to be discussed with

(d) Are the authorized discharges monitored and controlled?

Yes /No not yet – under plan

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

- | | |
|--|-------------------------------------|
| Monitoring of discharges | <input checked="" type="checkbox"/> |
| Monitoring of physical and chemical impacts on water | <input checked="" type="checkbox"/> |
| Monitoring of ecological impacts on water | <input type="checkbox"/> |
| Conditions on permits | <input checked="" type="checkbox"/> |
| Inspectorate | <input type="checkbox"/> |

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]

(e) What are the main measures which your country takes to reduce diffuse sources of water pollution on transboundary waters (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 | <input checked="" type="checkbox"/> |
| Norms for uses of manure | <input type="checkbox"/> |
| Permitting system | <input checked="" type="checkbox"/> |
| Bans on or norms for use of pesticides | <input type="checkbox"/> |
| Others (<i>please list</i>): [fill in] | |

Economic and financial measures

- | | |
|--|--------------------------|
| Monetary incentives | <input type="checkbox"/> |
| Environmental taxes (such as fertilizer taxes) | <input type="checkbox"/> |
| Others (<i>please list</i>): [fill in] | |

Agricultural extension services

Technical measures

Source control measures

- | | |
|--|--------------------------|
| Crop rotation | <input type="checkbox"/> |
| Tillage control | <input type="checkbox"/> |
| Winter cover crops | <input type="checkbox"/> |
| Others (<i>please list</i>): [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]

(f) What are the main measures which your country takes to enhance water resources allocation and use efficiency?

Please tick as appropriate (not all might be relevant)

- A regulatory system regarding water abstraction
- Monitoring and control of abstractions
- Water rights are defined
- Water allocation priorities are listed
- Water-saving technologies
- Advanced irrigation techniques
- Demand management activities
- Other means (*please list*)

(g) Does your country apply the ecosystems approach?

Yes /No

If yes, please describe how: [In the water affairs regulatory law, Afghanistan has adopted Integrated Water Resources Management IWRM where conservation of ecosystem and ecosystem approach is one of its main pillars]

(h) Does your country take specific measures to prevent the pollution of groundwaters?

Yes /No

If yes, please briefly describe the most important measures: [Afghanistan has adopted polluter pays principal including pollution of groundwater]

2. Do your national laws require transboundary environmental impact assessment (EIA)?

Yes /No

If yes, please briefly describe the legislative basis, and any related implementing procedures. [water affairs regulatory law. Based on the law, all owners of large water resources projects are responsible to conduct environmental impact assessment EIA with their own expenses as per required international standards]

If not, do other measures provide for transboundary EIA? [fill in]

IV. Final questions

1. What are the main challenges your country faces in cooperating on transboundary waters?

- Differences between national administrative and legal frameworks
- Lack of relevant data and information/ **Partially**
- Difficulties in data and information exchange
- Sectoral fragmentation at the national level
- Language barrier
- Resource constraints
- Environmental pressures, e.g. extreme events
- Sovereignty concerns

Please list other challenges and/or provide further details: [fill in]

2. What have been the main achievements in-cooperating on transboundary waters?

- Improved water management
- Enhanced regional integration, i.e. beyond water
- Adoption of cooperative arrangements
- Adoption of joint plans and programmes
- Long-lasting and sustained cooperation
- Financial support for joint activities
- Stronger political will for transboundary water cooperation
- Better knowledge and understanding
- Dispute avoidance
- Stakeholder engagement

Please list other achievements, keys to achieving success, and/or provide concrete examples: [fill in]

3. Please indicate which institutions were consulted during the completion of the questionnaire

- Joint body or mechanism
- Other riparian or aquifer countries
- National water management authority
- Environment agency/ authority
- Basin authority (national)
- Local or provincial government
- Geological survey (national)
- Non-water specific ministries, e.g. Ministries of Foreign Affairs, Finance, and National Energy Regulating Authority

- Civil society organizations
- Water user associations
- Private sector
- Other (please list): [fill in]

Please briefly describe the process by which the questionnaire was completed:
[fill in – Each section was filled by relevant departments' professional staff
and finally the questionnaire was reviewed and checked by senior high-level
officer]

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

5. Name and contact details of the person(s) who filled out the questionnaire (*please insert*):
[Khan Mohammad Takal, Director General, National Water Affairs' Regulation Authority
NWARA]

Date: [June 17, 2020]

Signature: []

Eng. Ahmad Wais Basiri
Deputy General Director of
National Water Affairs' Regulation Authority NWARA

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