

No.0403/ 9416



The Secretariat of the Prime Minister
Government House, Phitsanulok Rd,
Dusit, Bangkok 10300

๑ October B.E. 2566 (2023)

Dear Ms. Olga Algayerova and Ms. Audrey Azoulay,

Subject: Thailand's National Report on SDG Indicator 6.5.2

Kindly refer to your letter dated 15 March 2023, requesting to submit the national report for the third reporting exercise on SDG indicator 6.5.2 on transboundary water cooperation. I would like to express our sincere gratitude to UNECE and UNESCO for your invaluable support of Sustainable Development Goal 6.5.2.

Thailand recognises the significance of sharing the report for Indicator 6.5.2, which focuses on transboundary water cooperation. This perspective emphasises Thailand's commitment to the global agenda for sustainable development and underlines the interdependence between water resources management and the achievement of broader sustainable development goals. As the regulatory agency responsible for water resources management in all its dimensions, the Office of the National Water Resources (ONWR) of the Prime Minister's Office has collected data using a participatory approach and consulted with all relevant agencies and stakeholders. Thailand remains committed to achieving this objective and ensuring the sustainable management of water resources.

In this regard, I'm pleased to submit herewith our national report for SDG indicator 6.5.2. I am confident that this report reflects our ongoing dedication to the principles of the United Nations' Sustainable Development Agenda.

Yours sincerely,

A handwritten signature in blue ink, reading "Somsak Thepsuthin".

(Mr. Somsak Thepsuthin)
Deputy Prime Minister

Enclosure: as stated
Mr. Olga Algayerova
Executive Secretary
UNECE

Mr. Audrey Azoulay
Director-General
UNESCO



2023

Office of the National Water Resources



SDG 6.5.2 REPORT

**Proportion of transboundary basin area
with an operational arrangement
for water cooperation**

Reporting on global SDG indicator 6.5.2
TEMPLATE of the third reporting exercise

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: [fill in] [Thailand](#)

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;
 - (d) Whether there is an arrangement in force for the basin;
 - (e) The verification of each of the four criteria to assess operationality;

^a Available from the UN-Water website: www.unwater.org/our-work/integrated-monitoring-initiative-sdg-6/indicator-652-proportion-transboundary-basin-area (updated version “2020”).

(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) (see section 2 question 1)</i>	<i>Criterion 1 applied (yes/no) (See sect. II question 3)</i>	<i>Criterion 2 applied (yes/no) (See sect. II question 3(i))</i>	<i>Criterion 3 applied (yes/no) (See sect. II question 4)</i>	<i>Criterion 4 applied (yes/no) (See sect. II questions 6 (a) and (b))</i>	<i>Surface area of the basin/ sub-basin (in km²) covered by an operational arrangement within the territory of the country</i>
The Mekong River Basin	Basin	Cambodia, Lao PDR, Viet Nam	184,000	Yes	Entirely	Yes	Yes	Yes	Yes	184,000
The Golok River Basin	Basin	Malaysia	1,090	Yes	Partly	Yes	Yes	Yes	Yes	6
The Salween River Basin	Basin	China Myanmar	19,105.59	Yes	No	No	No	No	No	No
(A) Total surface area of transboundary basins/sub-basins of rivers and lakes covered by operational arrangements within the territory of the country (in km ²) (do not double count sub-basins)										184,006
(B) Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km ²) (do not double count sub-basins)			204,195.59							

Source: <http://www.tnmc-is.org/>
<http://oopm.rid.go.th/consultantjob/golok/Area.html>
<https://ebook.onwr.go.th>

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

Table 2

Transboundary aquifers (please add rows as needed)

<i>Name of the transboundary aquifer</i>	<i>Type of aquifer^c</i>	<i>Countries shared with</i>	<i>Surface area of the aquifer^d (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) (See sect. II question 1)</i>	<i>Covered within an arrangement not specific to the aquifer^e (entirely, partly, no) (See sect. II question 2(b))</i>	<i>Criterion 1 applied (yes/no) (See sect. II question 3)</i>	<i>Criterion 2 applied (yes/no) (See sect. II question 3(i))</i>	<i>Criterion 3 applied (yes/no) (See sect. II question 4)</i>	<i>Criterion 4 applied (yes/no) (See sect. II questions 6 (a) and (b))</i>	<i>Surface area of the aquifer (in km²) covered by an operational arrangement within the territory of the country</i>
Mekong (a and d)		Lao PDR, Viet Nam	71,437.78	Yes	No	No	No	No	No	No	No
Golok (a and d)		Malaysia	685.99	Yes	No	No	No	No	No	No	No
Salween (a and d)		Myanmar	18,909.4	Yes	No	No	No	No	No	No	No
(C) Sub-total: surface area of transboundary aquifers covered by operational arrangements (in km ²)											0
(D) Total surface area of transboundary aquifers (in km ²)			91,033.17								

Source: http://app.dgr.go.th/newpasutara/xml/map_well.html (map scale of 1:100,000)

^c Please choose from the following list: a) unconfined aquifer connected to a river or lake; b) unconfined aquifer with no or limited relation with surface water; c) confined aquifer connected to surface water; d) confined aquifer with no or limited relation with surface water; e) other; or, f) unknown.

^d 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.

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

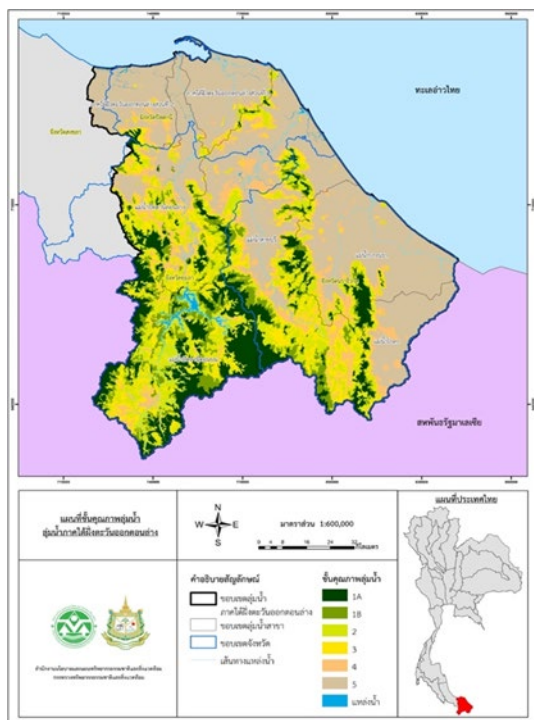


Figure 2: Golok River.

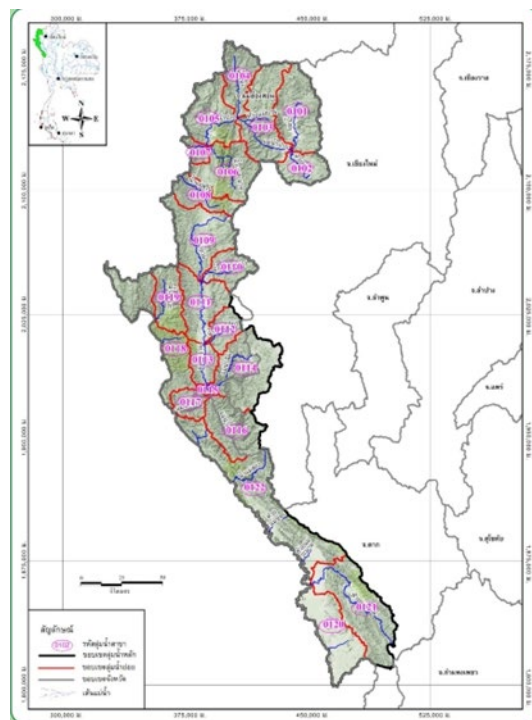


Figure 3: Salween River.

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:

Salween River Basin shared between China, Myanmar and Thailand. Percentage of Thailand's territory within the basin is 5%. It is under study process and update information on transboundary agreement(s) or arrangement(s) on the basin.

(Source of percentage of country's territory within the basin: FAO. 2011. AQUASTAT Transboundary River Basins – Salween River Basin. Food and Agriculture Organization of the United Nations (FAO). Rome, Italy)

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): [fill in]

The Mekong River Basin

1. **1995 Agreement on the cooperation for the sustainable development of the Mekong River Basin** is the agreement signed between Kingdom of Cambodia, Lao People's Democratic Republic, Kingdom of Thailand, and the Socialist Republic of Viet Nam on April 5, 1995.
2. **Mekong - Lancang Cooperation** - MLC is the collaboration between the Mekong River Commission together with the People's Republic of China and the Union of Myanmar officially established in November 2015.

-
3. **Coordination of Commercial Navigation on the Lancang-Mekong River** - CCN is the agreement signed between the Lao People's Democratic Republic, Kingdom of Thailand, Union of Myanmar and People's Republic of China on April 20, 2000.

The Golok River Basin

1. **The agreement on the Golok River Mouth improvement project** is the agreement signed between the Government of the Kingdom of Thailand and the Federation of Malaysia on March 8, 1997.

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

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:
[fill in]

The Mekong River Basin

List of country shared with: [fill in]

China, Myanmar, Cambodia, Lao PDR, Thailand, Viet Nam

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

23 %

(Source: FAO. 2011. FAO AQUASTAT Reports. Transboundary River Basins - Mekong River Basin. Food and Agriculture Organization of the United Nations (FAO). Rome, Italy.)

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 ☐

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.

Please insert the name of the agreement(s) or arrangement(s) [fill in]

- 1995 Agreement on the cooperation for the sustainable development of the Mekong River Basin
- Mekong - Lancang Cooperation - MLC
- Coordination of Commercial Navigation on the Lancang - Mekong River - CCN

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.

1995 Agreement on the cooperation for the sustainable development of the Mekong River Basin

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]

The Mekong River originates from Qinghai Province, China, and the northern mountains of Tibet. It passes through countries in Southeast Asia, including Myanmar, when it passes through Lao PDR, Thailand, Cambodia and flows out into the South China Sea in Viet Nam. A total distance of about is 4,880 km. The Mekong River Basin is separated to 2 parts, the Upper Mekong Basin (UMB) consisting of China and Myanmar, and the Lower Mekong Basin (LMB) consisting of 4 countries such as Cambodia, Lao PDR, Thailand and Viet Nam.

The Mekong River Basin Agreement of 1995 covers only the Lower Mekong Basin. There are member countries under the agreement consisting of Cambodia, Lao PDR, Thailand and Viet Nam.

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

Yes ☐/No ☒

Additional explanations? [fill in]

The Mekong River Basin Agreement of 1995 covers only the Lower Mekong Basin.

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

Cambodia, Lao PDR, Thailand, Viet Nam

(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	☒
Promotion of equality and inclusion, e.g. gender equality, inclusion of indigenous people, youth or other minority groups	☒

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 (<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?

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? [fill in]

- Cooperation, Consultation and Negotiation for sustainable of water resources in the Mekong River Basin

- Exchange data and information

(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*): [fill in]

<http://www.mrcmekong.org/assets/Publications/MRC-1995-Agreement-n-procedures.pdf>

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

Yes ☒ No ☐

If yes, please provide its official name: [fill in]

Mekong River Commission

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*): [fill in]

Cambodia, Lao PDR, Thailand, and Viet Nam

(d) Are there any riparian States that are not members of the joint body or mechanism? (please list): [fill in]

China and Myanmar

(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]

China and Myanmar are Dialogue Partners of MRC

(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): [fill in]

The permanent secretariat is Mekong River Commission Secretariat (MRCS).

Also, each member country has own secretariat. For Thailand, Office of the National Water Resources (ONWR) acts as Thai National Mekong Committee Secretariat (TNMCS).

A subsidiary body or bodies ☒

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

There have been several subsidiary bodies of MRC on specific topics such as Expert Group on Strategy and Partnership (EGSP), Expert Group on Basin Planning (EGBP), Expert Group on Data, Modelling and Forecasting (EGDMF) and Expert Group on Environmental Management (EGEM).

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

If sex-disaggregated data is collected on the membership and/or staff of the joint body or mechanism, please provide additional information here, e.g. the type of data collected, the percentage split of men and women within the joint body or mechanism, requirements related to gender-balance within the regulations of the joint body or mechanism, and/or links to relevant documents: [fill in]

MRCs have collected participants data who participated in MRC activities, sex-disaggregated data is also collected.

(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	☒
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	☒

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.

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	☒
Gender-related aspects of water management	☒
Any other tasks <i>(please list):</i> [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	☐
<i>Please describe, if any:</i> [fill in]	
Unexpected planning delays	☒
<i>Please describe, if any:</i> [fill in]	
The implementation by the MRC must be in accordance with the consensus of the four member states. Therefore, when any activity/plan/project does not receive such consensus, there is a delay that is not compliant with the operational plan. Covid-19 situation also causes unexpected planning delays.	
Lack of resources	☐
<i>Please describe, if true:</i> [fill in]	
Lack of mechanism for implementing measures	☐
<i>Please describe, if true:</i> [fill in]	
Lack of effective measures	☐
<i>Please describe, if true:</i> [fill in]	
Unexpected extreme events	☒
<i>Please describe, if any:</i> [fill in]	
El Nino and La Nina	
Lack of information and reliable forecasts	☒
<i>Please describe, if any:</i> [fill in]	
Climate Change, lack of data sharing/database which linkage whole basin	
Others <i>(please list and describe, as appropriate):</i> [fill in]	

(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?
[fill in]

The main achievements are joint consultations, guidelines, various reports such as Basin Development Strategy, MRC Strategic Plan, Mekong Atlas, Handbook on Mainstreaming Gender into the MRC's Core Functions and Activities and other tools for Lower Mekong River management.

(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?
[fill in]

MRC has invited Dialogue Partners as China and Myanmar and invited Development Partners, for example, Asian Development Bank (ADB), Association of Southeast Asian Nations (ASEAN), International Union for the Conservation of Nature (IUCN), United Nations Development Programme (UNDP), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), World Wildlife Fund (WWF), and World Bank (WB) for participation and cooperation in various areas for the Mekong River sustainable development.

If no, please explain.

Mekong - Lancang Cooperation: MLC

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]

Mekong - Lancang Cooperation (MLC) covers six countries, including the Upper and Lower Mekong Basin, comprising China, Myanmar, Cambodia, Lao PDR, Thailand, and Viet Nam.

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): [fill in]

China, Myanmar, Cambodia, Lao PDR, Thailand, and Viet Nam

(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	☒
Promotion of equality and inclusion, e.g. gender equality, inclusion of indigenous people, youth or other minority groups	☒

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 (<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?

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? [fill in]

- Cooperation, Consultation and Negotiation for sustainable Mekong River Basin

- Exchange data and information

- Joint study and research

- Funding support for capacity 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*): [fill in]

- <http://www.lmcchina.org/eng/>

- <http://www.lmcwater.org.cn/>

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

Yes ☒ No ☐

If yes, please provide its official name: [fill in]

Joint Working Group on Lancang - Mekong Water Resources Cooperation (JWG)

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)*: [fill in]

China, Myanmar, Cambodia, Lao PDR, Thailand, and Viet Nam

(d) Are there any riparian States that are not members of the joint body or mechanism? *(please list)*: [fill in]

No, there are not.

(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): [fill in]

Each member country has Joint Working Group on Lancang Mekong Water Resources Cooperation (JGW), and Lancang - Mekong Water Resources Cooperation Center acts as the secretariat of cooperation.

A subsidiary body or bodies ☒

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

The Implementation Team for Lancang - Mekong Water Resources Cooperation Information Sharing Platform Development (ITPD)

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

If sex-disaggregated data is collected on the membership and/or staff of the joint body or mechanism, please provide additional information here, e.g. the type of data collected, the percentage split of men and women within the joint body or mechanism, requirements related to gender-balance within the regulations of the joint body or mechanism, and/or links to relevant documents: [fill in]

(g) What are the tasks and activities of this joint body or mechanism?⁴

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	☒
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,	

⁴ 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	☒
Gender-related aspects of water management	☒
Any other tasks <i>(please list)</i> : [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	☐
<i>Please describe, if any</i> : [fill in]	
Unexpected planning delays	☒
<i>Please describe, if any</i> : [fill in]	
Lack of resources	☐
<i>Please describe, if true</i> : [fill in]	
Lack of mechanism for implementing measures	☐
<i>Please describe, if true</i> : [fill in]	
Lack of effective measures	☒
<i>Please describe, if true</i> : [fill in]	
Ongoing process to develop measures	
Unexpected extreme events	☒
<i>Please describe, if any</i> : [fill in]	
Impacts from Climate Change	
Lack of information and reliable forecasts	☒
<i>Please describe, if any</i> : [fill in]	
Ongoing process to develop data sharing platform	
Others <i>(please list and describe, as appropriate)</i> : [fill in]	

(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?
[fill in]

- Funding for the development of environmental and social resources for member countries such as irrigation and agriculture technology and promoting environmental awareness among young people or other aspects as requested by member countries.
- Joint Study on the Changing Pattern of Hydrological Conditions of the Lower Mekong River Basin.

(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? [fill in]

The cooperation is bilateral between Upper and Lower Mekong River countries.

Coordination of Commercial Navigation on the Lancang - Mekong River: CCN

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]

The cooperation covers area in the Mekong Basin comprising China and Myanmar in the Upper Mekong Basin, Lao PDR and Thailand in the Lower Mekong Basin.

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): [fill in]

China, Myanmar, Lao PDR, and Thailand

(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 <i>(please list)</i> : [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	☒
Promotion of equality and inclusion, e.g. gender equality, inclusion of indigenous people, youth or other minority groups	☒

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 <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?

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 <i>(please describe)</i> : [fill in]	

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

[There is stability and safety in navigation.](#)

(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*): [fill in]

<http://treaty.mfa.gov.cn/tykfiles/20180718/1531875998858.pdf>

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

Yes ☒/No ☐

If yes, please provide its official name: [fill in]

[Joint Committee on Coordination of Commercial Navigation on the Lancang-Mekong River among China, Lao PDR, Myanmar and Thailand \(JCCCN\)](#)

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*): [fill in]

[China, Myanmar, Lao PDR, and Thailand](#)

(d) Are there any riparian States that are not members of the joint body or mechanism? (*please list*): [fill in]

[Cambodia and Viet Nam](#)

(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): [fill in]

A subsidiary body or bodies ☒

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

[Joint Committee on Coordination of Commercial Navigation on the Lancang-Mekong River among China, Lao PDR, Myanmar and Thailand \(JCCCN\)](#)

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

If sex-disaggregated data is collected on the membership and/or staff of the joint body or mechanism, please provide additional information here, e.g. the type of data collected, the percentage split of men and women within the joint body or mechanism, requirements related to gender-balance within the regulations of the joint body or mechanism, and/or links to relevant documents: [fill in]

(g) What are the tasks and activities of this joint body or mechanism?⁵

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 ☒

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

Settling of differences and conflicts ☒

⁵ 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.

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	☒
Gender-related aspects of water management	☒
Any other tasks <i>(please list)</i> : [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	☐
<i>Please describe, if any:</i> [fill in]	
Unexpected planning delays	☐
<i>Please describe, if any:</i> [fill in]	
Lack of resources	☐
<i>Please describe, if true:</i> [fill in]	
Lack of mechanism for implementing measures	☐
<i>Please describe, if true:</i> [fill in]	
Lack of effective measures	☐
<i>Please describe, if true:</i> [fill in]	
Unexpected extreme events	☐
<i>Please describe, if any:</i> [fill in]	
Lack of information and reliable forecasts	☐
<i>Please describe, if any:</i> [fill in]	
Others <i>(please list and describe, as appropriate)</i> : [fill in]	

(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?
[fill in]

Regulation and Guideline such as the Project of Language Communication on Navigation Safety of the Lancang-Mekong River, and Lancang-Mekong Merchant Ship Survey Technical Regulation.

(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?
[fill in]

Navigation route under the cooperation is not cover to the Mekong River in Cambodia and Viet Nam.

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: [fill in]

- The 1995 Mekong Agreement has Basin Development Strategy (BDS) 2021-2030, MRC Strategic Plan (MRC-SP) 2021-2025 and Multiyear Work Plan.

- Mekong-Lancang Cooperation has Mekong-Lancang 5 years implementation plan in 2018-2022 and 2023-2027.

- The Development Plan for International Navigation on the Lancang-Mekong River (2015-2025).

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): [fill in]

1995 Agreement on the cooperation for the sustainable development of the Mekong River Basin:

- Procedures for Data and Information Exchange and Sharing (PDIES) which provide a framework for the Mekong countries to share regional data for better water resources management.

- MRC website (<https://www.mrcmekong.org/>)

- MRC website for Data portal (<https://portal.mrcmekong.org/home>)

- Thai National Mekong Committee - Information System (www.tnmc-is.org)

- Email and Meetings

Mekong - Lancang Cooperation - MLC:

- Mekong-Lancang Cooperation website (<http://www.lmcchina.org/eng/>)

- Email and Meeting

Coordination of Commercial Navigation on the Lancang-Mekong River - CCN:

- Email and Meetings

- (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]
- Sex-disaggregated data or other gender-related information ☒
- 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]
www.mrcmekong.org, <https://portal.mrcmekong.org/home>, and www.tnmc-is.org
- (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*): [fill in]
- Water management such as flood and drought forecasting, early warning and notification
 - Fisheries
 - Navigation

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	☒	☒	☒
Surface waters in the entire basin	☐	☐	☐
Surface waters on the main watercourse	☐	☐	☐
Surface waters in part of the basin please describe [fill in]	☐	☐	☐
Transboundary aquifer(s) (connected or unconnected)	☐	☐	☐
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	☐	☐	☐

- (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]

Core River Monitoring Network in the Lower Mekong River Basin (CRMN) monitors environmental parameters in 5 disciplines as hydrology, sediment, water quality, ecosystem health, and fisheries.

Joint and agreed methodologies



Please describe: [fill in]

There was agreed about the duration of data collection including methods and equipment.

Joint sampling



Please describe: [fill in]

Joint monitoring of discharge and sediment in the Mekong River between Lao PDR and Thailand.

Common monitoring network



Please describe: [fill in]

MRCS expert group has monitor water utilization in the Lower Mekong River Basin using satellite, set up hydrological model, and prepare Mekong Atlas in the Lower Mekong Basin.

Common agreed parameters



Please describe: [fill in]

Agreed parameters among member countries such as discharge, river cross-section, bathymetry, Suspended Sediment Concentration (SSC), water quality (physical, chemical, and biological), diversity of fish species, and fish larvae under Core River Monitoring Network (CRMN)

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

State of Basin Report is prepared every 5 years for monitoring and guiding on the sustainable Mekong Basin management.

- (d) Please describe any difficulties experienced with joint monitoring: [fill in]

To set agreed time for both countries for joint monitoring of river cross - section.

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]

MRC State of Basin Report is prepared every 5 years. The Mekong River situation and water resources are presented. The latest State of Basin Report was in 2018, at present the 2023 version is under preparation.

Source: https://www.mrcmekong.org/assets/Publications/SOBR-v8_Final-for-web.pdf

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]

Member countries agreed on the standard which refer to acceptable international standard and national standards. The target values are adopted by MRC Technical Body for Water Quality based on the national standards that are acceptable for all member countries.

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?: [fill in]

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 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: [fill in]

MRC has Procedure for Water Quality and Technical guideline for member countries response to emergency. Technical guideline chapter 4 is Guidelines for Water Quality Emergency Response and Management.

(Source: <https://www.mrcmekong.org/assets/Publications/TGWQ.pdf>, and <https://www.mrcmekong.org/assets/Publications/policies/Procedures-for-Water-Quality-council-approved260111.pdf>)

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]

	<i>Observer status</i>	<i>Advisory role</i>	<i>Decision-making role</i>
Intergovernmental organizations	☐	☒	☒
Private sector organisations or associations	☐	☒	☐
Water user groups or associations	☒	☒	☐
Environmental non-governmental organisations or groups	☐	☒	☐
Women organisations or groups	☐	☐	☐
Indigenous peoples' organisations or groups	☐	☐	☐
Youth organisations or groups	☒	☐	☐
Academic or research institutions	☒	☒	☐
Other non-governmental organisations	☒	☐	☐
General public	☒	☐	☐
Other please describe: [fill in]	☐	☐	☐

Other (*please specify* in case there are other of participation): [fill in]

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.

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

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.⁶ 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 agreements⁷ 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: [fill in]
Golok River Basin

List of country shared with: [fill in]
Thailand and Malaysia

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

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) [fill in]

An agreement on the Golok River Mouth improvement project

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.

⁶ 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 percent.

⁷ 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.

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? คำอธิบายเพิ่มเติม? [fill in] โปรดระบุ

Golok River Mouth Improvement Project has the objective as follows:

1. To maintain a clear borderline between Thailand and Malaysia especially the Golok River mouth.
2. To facilitate navigation through the Golok river mouth.
3. To mitigate flooding in the lower part of the Golok river basin.
4. To promote aqua culture in the Tak Bai river.
5. To improve the living conditions of the people in the Golok river basin.

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): [fill in]

Thailand and Malaysia

- (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 (<i>please list</i>): [fill in]	

Flood mitigation

(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	☐
Promotion of equality and inclusion, e.g. gender equality, inclusion of indigenous people, youth or other minority groups.	☒

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 <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?

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 <i>(please describe)</i> : [fill in]	

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

The cooperation has project plan including monitoring and evaluation.

(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*):
[fill in]

Source: <http://h2o.water.gov.my/golok/main.html>

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

Yes ☒/No ☐

If yes, please provide its official name: [fill in]

1. Thailand - Malaysia Joint Steering Committee (JSC), meeting every 2 years.

2. Thailand - Malaysia Joint Technical Working Group (JTWG), meeting 1 time/year.

3. Thailand - Malaysia Joint Evaluation Team (JET), meeting 2 times/year.

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*): [fill in]

Thailand and Malaysia

(d) Are there any riparian States that are not members of the joint body or mechanism? (*please list*): [fill in]

No, there are not.

(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): [fill in]

A subsidiary body or bodies ☒

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

1. Thailand - Malaysia Joint Steering Committee (JSC)

2. Thailand - Malaysia Joint Technical Working Group (JTWG)

3. Thailand - Malaysia Joint Evaluation Team (JET)

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

If sex-disaggregated data is collected on the membership and/or staff of the joint body or mechanism, please provide additional information here, e.g. the type of data collected, the percentage split of men and women within the joint body or mechanism, requirements related to gender-balance within the regulations of the joint body or mechanism, and/or links to relevant documents: [fill in]

(g) What are the tasks and activities of this joint body or mechanism?⁸

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 ☒

Exchange of information on existing and planned

⁸ 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.

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	☐
Gender-related aspects of water management	☐
Any other tasks <i>(please list)</i> : [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	☐
<i>Please describe, if any</i> : [fill in]	
Unexpected planning delays	☐
<i>Please describe, if any</i> : [fill in]	
Lack of resources	☐
<i>Please describe, if true</i> : [fill in]	
Lack of mechanism for implementing measures	☐
<i>Please describe, if true</i> : [fill in]	
Lack of effective measures	☐
<i>Please describe, if true</i> : [fill in]	
Unexpected extreme events	☒
<i>Please describe, if any</i> : [fill in]	
El Nino and La Nina	

Lack of information and reliable forecasts ☐

Please describe, if any: [fill in]

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

(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?
[fill in]

- Monitoring and evaluation of the Golok River mount survey.

- Meetings to follow up and evaluate joint plans/projects implementation
between countries.

(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?* [fill in]

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: [fill in]

Thailand and Malaysia have joint project to improve mouth of the Golok River
following objectives of the cooperation.

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): [fill in]

Information is exchanged through joint working group meetings.

- (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 ☒

Sex-disaggregated data or other gender-related information ☐

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*): [fill in]

Data exchange leads to effective planning and water management.

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	☒	☒	☒
Surface waters in the entire basin	☐	☐	☐
Surface waters on the main watercourse	☐	☐	☐
Surface waters in part of the basin please describe [fill in]	☐	☐	☐
Transboundary aquifer(s) (connected or unconnected)	☐	☐	☐
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	☐	☐	☐

(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]

Riverbed survey at mouth of the Kolok River.

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]

Monitor and consultation are used for joint work plan adjustments following project objectives.

- (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?: [fill in]

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 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: [fill in]

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]

	Observer status	Advisory role	Decision-making role
Intergovernmental organizations	☐	☐	☒
Private sector organisations or associations	☐	☐	☐
Water user groups or associations	☐	☐	☐
Environmental non-governmental organisations or groups	☐	☒	☐
Women organisations or groups	☐	☐	☐
Indigenous peoples' organisations or groups	☐	☐	☐
Youth organisations or groups	☐	☐	☐

	<i>Observer status</i>	<i>Advisory role</i>	<i>Decision-making role</i>
Academic or research institutions	☐	☒	☐
Other non-governmental organisations	☒	☐	☐
General public	☒	☐	☐
Other please describe: [fill in]	☐	☐	☐
Other (<i>please specify</i> in case there are other of participation): [fill in]			

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 [fill in]

Thailand has policies, laws, regulations, and national plans to support the implementation of integrated water resource management at the national level which are related to measures for protect, control, and mitigate transboundary impacts. The 20 - Year Water Resources Management Master Plan (2018 - 2037) was prepared according to Strategy 5 Eco-Friendly Development and Growth of the 20-Year National Strategy (2018 - 2037) and the 12th and 13th National Economic and Social Development Plan. The Water Resources Master Plan has six strategies dividing into (1) water for domestic consumption, (2) stable water supply for production, (3) disaster prevention, (4) water quality management (5) conservation and restoration of forest water sources and soil erosion prevention, and (6) water resources administration and management. The Strategy 6 "water resources administration and management" enhances the international cooperation on water resource management.

In addition, the Pollution Control Department as the main agency to prepare policy and action plan on water quality improvement has action plan comprises two transboundary areas such as (1) Kok and Kong River Basin water quality improvement action plan and (2) Salween River Basin water quality improvement action plan. The objectives of these plans are management of water quality and wastewater which focus on participation between network agencies and public participation. The goal is water pollution reduction affecting water quality and ecological system. The 3rd measure of action plan is specified on monitoring of water quality by automatic water monitoring stations. The action plans have sub-plans related to sustainability growth focusing on pollution management affecting environment and chemical used in agricultural sector based on international standard.

For climate change issue, Office of Natural Resources and Environmental Policy and Planning (ONEP) as the main agency to prepare National Climate Change Policy and Plan and national focal point under United Nations Framework Convention on Climate Change (UNFCCC) formulated Climate Change Master Plan 2015 - 2050. The objectives of master plan are to be framework and guideline for properly integrated climate change adaptation into plans and strategies of different sectors and geographic areas as well as to lay foundation and develop approaches to build immunity and readiness to adapt to the impact of climate change for all sectors.

- (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: [fill in]

The implementation is following Enhancement and Conservation of National Environmental Quality Act, B.E. 2535 (1992) and The Water Resources Act, B.E. 2561 (2018).

(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 ☐

If yes, for which sectors?

Industry	☐
Mining	☐
Energy	☐
Municipal	☒
Livestock raising	☐
Aquaculture	☒

Other (please list): [fill in]

- Registration of Aquaculture Farmers
- Aquaculture in public water sources

Please briefly describe the licensing or permitting system: [fill in]

Laws and regulations are industrial relevant acts and announces such as Industrial Estate Authority of Thailand Act, B.E. 2522 (1979), Factory Act, B.E. 2535 (1992), Factory Act (the 2nd edition), B.E. 2562 (2019) including relevant ministerial regulations and ministry announcements. Royal Ordinance of Fisheries, B.E. 2558 (2015) is indicated as follows:

- Section 76 of Royal Ordinance of Fisheries, B.E. 2558 (2015) presented that for the purposes of supervising the quality of aquaculture and to prevent environmental consequences or hazards to consumers or others' enterprises, a Ministerial Regulation may be issued to determine the kinds of aquatic animals or aquatic animals' features or types, forms or sizes or the objectives of aquaculture enterprises to be classified as those under aquaculture control.

- Section 77 of Royal Ordinance of Fisheries, B.E. 2558 (2015), no person shall undertake an aquaculture enterprise under control outside the areas prescribed by the Provincial Fisheries Committee as aquaculture zones.

- Section 78 of Royal Ordinance of Fisheries, B.E. 2558 (2015) presented that the Director-General shall have the power to determine that an aquaculturist undertaking an aquaculture enterprise under control in aquaculture zones pursuant to section 77 shall comply with the following requirements: (1) an aquaculture entrepreneur shall have to give notify the aquaculture undertaking to the competent official as per the procedure prescribed. (2) determining the origins of aquatic animals prohibited for use in aquaculture. (3) determining the types, features, and quality of aquatic animals' feed prohibited in aquaculture. (4) determining kinds and quantities of any drug, chemical or hazardous matter prohibited in aquaculture. (5) determining criteria and operational methods in the management of effluent water or solid waste from aquaculture farms. (6) determining rules and procedures for preventing leaks of water used in aquaculture from aquaculture grounds. (7) determining any further matter necessary for the prevention of impacts to the environment, or danger to consumers or to others' enterprises.

Does the system provide for setting emission limits based on best available technology?

Yes ☐/No ☐

If yes, for which sectors? (please list): [fill in]

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]

(d) Are the authorized discharges monitored and controlled?

Yes ☒/No ☐

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]

(e) What are the main measures which your country takes to reduce diffuse sources of water pollution on transboundary waters from diffuse sources (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 ☐

Permitting system ☒

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): [fill in]

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]

- (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 ☒Stakeholder consultations are held, including with
civil society representatives ☒Other means (*please list*) ☐

- (g) Does your country apply the ecosystems approach?

Yes ☒ No ☐*If yes, please describe how:* [fill in]

- Enhancement and Conservation of National Environmental Quality Act, B.E. 2535 (1992), Factory Act, B.E. 2535 (1992), Industrial Estate Authority of Thailand Act, B.E. 2522 (1979) for wastewater control and natural water sources conservation.

- Forestry cooperation with countries in the transboundary river basin as the Mekong River Basin, the Salween River Basin, and Golok River Basin through ASOF, ASEAN, AFoCO, MLC, APFNet and TICA.
- A project to study and demonstrate forest fire characteristics, impacts and management under the Lancang Mekong Project for forest landscape restoration effected by climate change and ecosystem restoration.

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

Yes ☒/No ☐

If yes, please briefly describe the most important measures: [fill in]

- Groundwater Act, B.E. 2520 (1977) on the use, prevention, and control of groundwater pollution.
- Groundwater quality investigation measure according to the Announcement of the Environment Board No. 20, B.E. 2543 (2000) follows Enhancement and Conservation of National Environmental Quality Act, B.E. 2535 (1992).
- Technical criteria and measures prescribed in the announcement of the Ministry of Industry No.5, B.E. 2521 (1978) follows Groundwater Act, B.E. 2520 (1977), Subject “Establish criteria and technical measures for draining water into groundwater wells” such as the water to be discharged into the well must be the water that has been analyzed and have no more than the maximum criteria specified in the water standard for discharging into the groundwater well. The water must be drained into aquifer where the groundwater has characteristics unsuitable for consumption, agriculture or industrial and there is no use of groundwater in that aquifer. That aquifer must have no part continuous in geology, hydrology or hydraulic with other aquifers where groundwater is used.
- Pollution Control Department Announcement, Subject “Set criteria for the suitability of the design and construction of hygienic landfill ponds to prevent contamination 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. [fill in]

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

Thailand has the study and transboundary environmental impact assessment from hydropower development project in the Mekong mainstream with implementation time frame from 2014 – 2028.

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 | ☒ |
| 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. foreign affairs, finance, forestry and energy | ☒ |
| Women organisations or groups | ☐ |
| Indigenous peoples' organisations or groups | ☐ |
| Youth organisations or groups | ☐ |
| 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] | |

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

5. Details of the person(s) who filled out the questionnaire (*please insert*):

Name: [fill in]

Dr. Surasri Kidtimonton

Gender: Female ☐ / Male ☒ / Other ☐ / Prefer not to answer ☐

Contact details: [fill in]

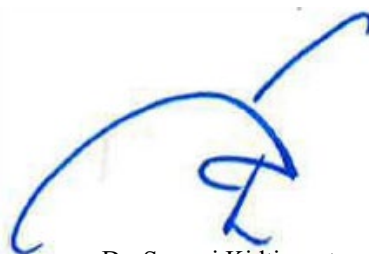
Office of the National Water Resources, Juthamard Building, No.89/168-170, Vibhavadi Rangsit Road,
Talat Bang Khen Sub-District, Lak Si District, Bangkok, 10210, Thailand

If different to the above, details of the person(s) who signed the questionnaire:

Name: [fill in]

Gender: Female ☐ / Male ☒ / Other ☐ / Prefer not to answer ☐

Date: [fill in] Signature: [fill in]



Dr. Surasri Kidtimonton

Secretary-General of ONWR

22 September 2023

Kingdom of Thailand



Office of The National Water Resources

Office of The Prime Minister

Juthamad Building. 89/168 – 170 Vibhavadi Rangsit Rd.,

Talad Bangkhen Sub – District, Lak Si District, Bangkok 10210

Tel. +662 554 1800 ext. 1098, Fax. +662 521 9144