

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

Country name: Luxembourg

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

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

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

I. Transboundary water management at the national level

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

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

Yes /No

If yes, list the main national legislation:

Luxembourgish Water Law (Loi du 19 décembre 2009 relative à l’eau)

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

Yes /No

If yes, list the main national policies, action plans and strategies: [fill in]

Luxembourgish Water Law (Loi du 19 décembre 2009 relative à l’eau)

2nd River Basin Management Plan established according to the Water Framework Directive: https://eau.public.lu/directive_cadre_eau/directive_cadre_eau/2015-2021_2e_cycle/publication-du-plan-de-gestion/index.html

1st Flood Risk Management Plan established according to the Flood Risk Management Directive: https://eau.public.lu/directive_cadre_eau/directive_inondation/1er-cycle/HWRML-PL_final/index.html

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

Precautionary principle Yes /No

Polluter pays principle Yes /No

Sustainable development Yes /No

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

Yes /No

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

According to article 23 (1) c) of the Water Law^a direct or indirect discharge of water of any kind into surface waters or groundwater, including artificial recharge or augmentation of groundwater, are subject to authorization by the competent Minister. Besides, article 23 (1) d) states that the direct or indirect discharge of solid or gaseous substances as well as liquids other than the water referred to under point c), into surface waters and groundwater are also subject to authorization by the competent Minister.

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

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

Yes /No

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

Yes /No

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 checked="" type="checkbox"/> |
| Conditions on permits | <input checked="" type="checkbox"/> |
| Inspectorate | <input checked="" 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]

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

Legislative measures

- | | |
|--|-------------------------------------|
| Norm for uses of fertilizers | <input checked="" type="checkbox"/> |
| Norms for uses of manure | <input checked="" type="checkbox"/> |
| Bans on or norms for use of pesticides | <input checked="" type="checkbox"/> |

Others (please list): [fill in]

Economic and financial measures

- | | |
|--|-------------------------------------|
| Monetary incentives | <input checked="" type="checkbox"/> |
| Environmental taxes (such as fertilizer taxes) | <input type="checkbox"/> |

Others (please list): [fill in]

Agricultural extension services

^a Loi modifiée du 19 décembre 2008 relative à l'eau

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:

Awareness raising and information campaigns.

With regard to the provisions of the EU Water Framework Directive, the measures to reduce diffuse sources of water pollution are described in the second river basin management plan^b.

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

Please tick as appropriate (not all might be relevant)

A regulatory system regarding water abstraction

Monitoring and control of abstractions

Water rights are clearly defined

Water allocation priorities are listed

Water-saving technologies

Advanced irrigation techniques

Demand management activities

Other means (please list)

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

Yes /No

If yes, please describe how:

According to article 36 of the Water Law^c the Luxembourgish Water Management Agency shall coordinate and monitor the maintenance of surface water by ensuring that the necessary measures are taken to prevent the deterioration of these waters as well as aquatic ecosystems.

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

^b https://eau.public.lu/directive_cadre_eau/directive_cadre_eau/2015-2021_2e_cycle/publication-du-plan-de-gestion/index.html

^c Loi modifiée du 19 décembre 2008 relative à l'eau

Yes /No

If yes, please list the most important measures:

Delimitation of drinking water protecting zones where different activities are prohibited or submitted to authorization in order to protect the quality of drinking water (e.g. ban on the use of pesticides, stricter requirements regarding the use of nutrients). The measures implemented in the drinking water protection zones will also help improving the quality of surface waters and groundwater.

According to article 23 (1) c) of the Water Law^d direct or indirect discharge of water of any kind into surface waters or groundwater, including artificial recharge or augmentation of groundwater, are subject to authorization by the competent Minister. Besides, article 23 (1) d) states that the direct or indirect discharge of solid or gaseous substances as well as liquids other than the water referred to under point c), into surface waters and groundwater are also subject to authorization by the competent Minister.

With regard to the provisions of the EU Water Framework Directive, the measures to prevent the pollution of groundwater bodies are described in the second river basin management plan^e.

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

Yes /No

Does your country have procedures for transboundary EIA?

Yes /No

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

Directive 2011/92/UE du Parlement européen et du Conseil du 13 décembre 2011 concernant l'évaluation des incidences de certains projets publics et privés sur l'environnement

Règlement grand-ducal du 7 mars 2003 concernant l'évaluation des incidences de certains projets publics et privés sur l'environnement

Directive 2001/42/CE du Parlement européen et du Conseil du 27 juin 2001 relative à l'évaluation des incidences de certains plans et programmes sur l'environnement

Loi du 22 mai 2008 relative à l'évaluation des incidences de certains plans et programmes sur l'environnement

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

Yes /No

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

International Commission for the Protection of the Rhine
(<http://www.iksr.org/fr/index.html>)

International Commissions for the Protection of the Moselle and the Sarre
(<http://www.iksms-cipms.org/servlet/is/391/>)

^d Loi modifiée du 19 décembre 2008 relative à l'eau

^e https://eau.public.lu/directive_cadre_eau/directive_cadre_eau/2015-2021_2e_cycle/publication-du-plan-de-gestion/index.html

International Meuse Commission (<http://www.meuse-maas.be/Accueil.aspx>)

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

Country name: **Luxembourg**

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

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

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

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

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

One or more agreements or arrangements exist and are in force

Agreement or arrangement developed but not in force

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

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

Convention on the International Commission for the Protection of the Rhine against Pollution (Berne, 29 April 1963)

Convention on the Protection of the Rhine against Chemical Pollution (Bonn, 3 December 1976)

Convention on the Protection of the Rhine against Pollution with Chlorides (Bonn, 3 December 1976)

Additional Agreement concerning the Convention on the International Commission for the Protection of the Rhine against Pollution signed in Berne on 29 April 1963 (Bonn, 3 December 1976)

Additional Protocol to the Chlorides Convention (25 September 1991)

Convention on the Protection of the Rhine (Berne, 12 April 1999)

Rules of Procedure and Financial Regulations for the Cooperation of the International Commission for the Protection of the Rhine (ICPR) with the Coordinating Committee (CC) Rhine

Agreement or arrangement is under development

No agreement

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

^b 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.

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

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

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

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

Yes /No

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

Yes /No

If not, what does it cover?: [fill in]

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

Yes /No

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

Commission for the Protection of the Rhine (ICPR): France, Germany, Luxembourg, Netherlands, Switzerland and the European Commission

Coordinating Committee (CC) Rhine: France, Germany, Luxembourg, Netherlands, Switzerland, the European Commission as well as Austria, Liechtenstein, the Region of Wallonia and Italy

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

Yes /No

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

All water uses

A single water use or sector

Several water uses or sectors

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

Water uses or sectors

Industry

Agriculture

Transport (e.g., navigation)

Households

Energy: hydropower and other energy types

Tourism

Nature protection

Other (please list): [fill in]

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

Procedural and institutional issues

Dispute and conflict prevention and resolution

Institutional cooperation (joint bodies)

Consultation on planned measures

Mutual assistance (art. 15)

Topics of cooperation

Joint vision and management objectives

Joint significant water management issues

Navigation

Environmental protection (ecosystem)

Water quality

Water quantity or allocation

Cooperation in addressing floods

Cooperation in addressing droughts

Climate change adaptation

Monitoring and exchange

Joint assessments

Data collection and exchange (art. 13)

Joint monitoring (art. 11)

Maintenance of joint pollution inventories

Elaboration of joint water quality objectives

Common early warning and alarm procedures (art. 14)

Exchange of experience between riparian States

Exchange of information on planned measures

Joint planning and management

Development of joint regulations on specific topics

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

Management of shared infrastructure

Development of shared infrastructure

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

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

Challenges remain in aligning ICPR plans and activities to changing national and EU policies and programmes

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

The main concrete achievement of ICPR has been a tremendous improvement in the ecological and chemical quality of the water of the Rhine^c. This has been achieved through both measures to reduce pollution and river restoration measures among other through improving the ecological connectivity and spawning grounds. Also, the flood management has substantially improved. Next to this, improvements include the exchange of data and information between the parties, including a warning and alarm system^d, and a certain level of alignment of measures and plans in the riparian countries.

Key to this success has been close cooperation at technical level and the subsequent building of trust between the parties.

(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*):

Conventions: <http://www.iksr.org/en/international-cooperation/about-us/history/index.html>

Convention on the Protection of the Rhine: <http://www.iksr.org/en/international-cooperation/legal-basis/convention/index.html>

Rules of Procedure and Financial Regulations for the Cooperation of the International Commission for the Protection of the Rhine (ICPR) with the Coordinating Committee (CC) Rhine: http://www.iksr.org/fileadmin/user_upload/Dokumente_en/IKSR-CC-EN_30.06.10.pdf

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

Yes /No

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

Where there is a joint body (or bodies)

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

Plenipotentiaries

Bilateral commission

Basin or similar commission

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

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

Yes /No

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

France, Germany, Luxembourg, Netherlands, Switzerland and the European Commission as well as Austria, Liechtenstein, the Region of Wallonia and Italy

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

A secretariat

^c <http://www.iksr.org/en/international-cooperation/rhine-2020/index.html>

^d <http://www.iksr.org/en/topics/pollution/warning-and-alarm-plan/index.html>

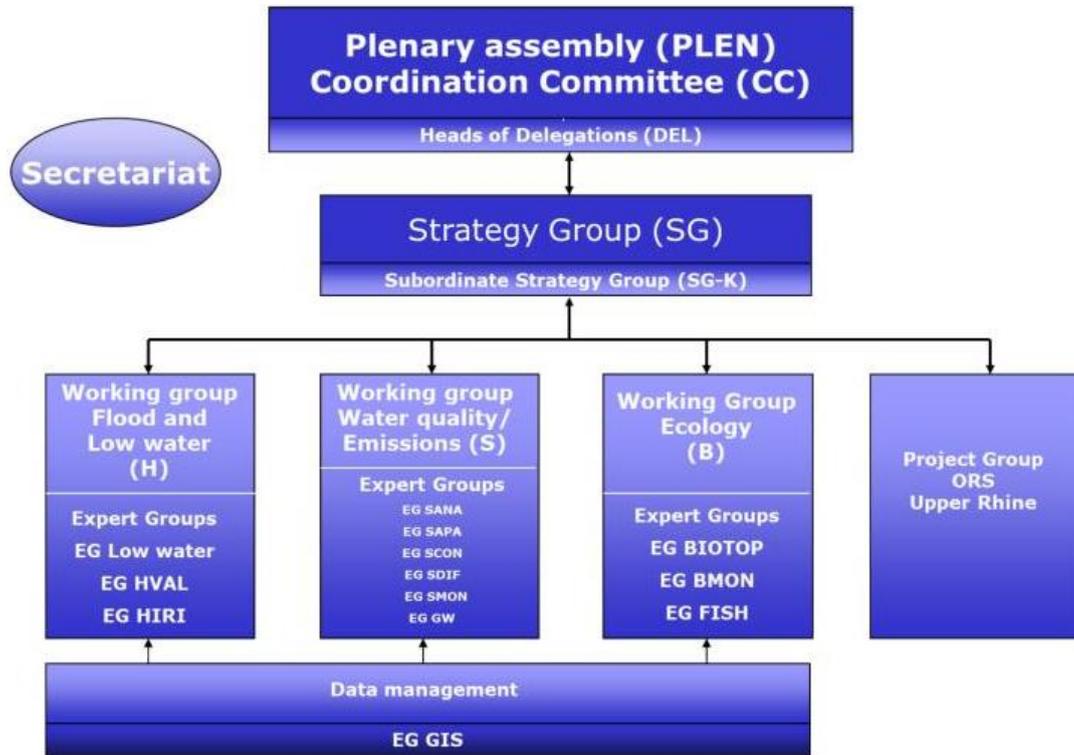
If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):

It is a joint secretariat^e

A subsidiary body or bodies

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

The present working structure for implementing the Convention on the Protection of the Rhine and for coordinating the implementation of the European directives in the international Rhine river basin district is represented in the following organigramme^f



Other features (please list):

Regular ministerial conferences

Adaptive working structure. Project and expert groups are established as needed, often with a time limited mandate

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

Identification of pollution sources

Data collection and exchange

Joint monitoring

Maintenance of joint pollution inventories

Setting emission limits

^e <http://www.iksr.org/en/international-cooperation/about-us/secretariat/index.html>

^f <http://www.iksr.org/en/international-cooperation/about-us/organisation/index.html>

^g 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.

- | | |
|--|-------------------------------------|
| Elaboration of joint water quality objectives | <input checked="" type="checkbox"/> |
| Management and prevention of flood or drought risks | <input checked="" type="checkbox"/> |
| Preparedness for extreme events, e.g., common early warning and alarm procedures | <input checked="" type="checkbox"/> |
| Water allocation and/or flow regulation | <input type="checkbox"/> |
| Policy development | <input checked="" type="checkbox"/> |
| Control of implementation | <input type="checkbox"/> |
| Exchange of experience between riparian States | <input checked="" type="checkbox"/> |
| Exchange of information on existing and planned uses of water and related installations | <input checked="" type="checkbox"/> |
| Settling of differences and conflicts | <input type="checkbox"/> |
| Consultations on planned measures | <input checked="" type="checkbox"/> |
| Exchange of information on best available technology | <input checked="" type="checkbox"/> |
| Participation in transboundary EIA | <input type="checkbox"/> |
| Development of river, lake or aquifer basin management or action plans | <input checked="" type="checkbox"/> |
| Management of shared infrastructure | <input type="checkbox"/> |
| Addressing hydromorphological alterations | <input type="checkbox"/> |
| Climate change adaptation | <input checked="" type="checkbox"/> |
| Joint communication strategy | <input type="checkbox"/> |
| Basin-wide or joint public participation and consultation of, for example, basin management plans | <input checked="" type="checkbox"/> |
| Joint resources to support transboundary cooperation | <input checked="" type="checkbox"/> |
| Capacity-building | <input checked="" type="checkbox"/> |
| Any other tasks (<i>please list</i>): [fill in] | |
| (f) What are the main difficulties and challenges that your country faces with the operation of the joint body, if any? | |
| Governance issues | <input checked="" type="checkbox"/> |
| <i>Please describe, if any:</i> | |
| Challenges remain in aligning ICPR plans and activities to changing national and EU policies and programmes and coming to agreement on newly arising issues and setting the agenda | |
| Unexpected planning delays | <input type="checkbox"/> |
| <i>Please describe, if any:</i> [fill in] | |
| Lack of resources | <input type="checkbox"/> |
| <i>Please describe, if true:</i> [fill in] | |
| Lack of mechanism for implementing measures | <input type="checkbox"/> |
| <i>Please describe, if true:</i> [fill in] | |
| Lack of effective measures | <input type="checkbox"/> |
| <i>Please describe, if true:</i> [fill in] | |
| Unexpected extreme events | <input type="checkbox"/> |
| <i>Please describe, if any:</i> [fill in] | |

Lack of information and reliable forecasts

Please describe, if any: [fill in]

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

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

No cooperation

They have observer status

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

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

Yes /No

If yes, how frequently does it meet?

The plenary assembly meets once a year and the subsidiary bodies usually meet more often if needed.

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

See point 2. f) above

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

Yes /No

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

Yes /No

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

Some of the relevant coastal states are Party to the joint body (France, Belgium, Netherlands, Germany).

Contacts exist with the OSPAR Convention and the Baltic Sea Convention.

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

Yes /No

If yes, please provide further details:

Internationally coordinated Rhine river basin management plan 2015:
<http://www.iksr.org/en/water-framework-directive/river-basin-management-plan-2015/index.html>

Internationally coordinated Rhine river flood risk management plan 2015:
<http://www.iksr.org/en/floods-directive/flood-risk-management-plan/index.html>

Rhine 2020 – Program on the sustainable development of the Rhine:
<http://www.iksr.org/en/international-cooperation/rhine-2020/index.html>

Sediment Management Plan:
http://www.iksr.org/fileadmin/user_upload/Dokumente_en/Reports/Bericht_175e.pdf and <http://www.iksr.org/en/topics/pollution/sediments/index.html>

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

Afforestation

Restoration of ecosystems

Environmental flow norms

Groundwater measures (e.g., protection zones)

Other measures (*please list*):

See plans mentioned under point 4 above

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

Yes /No

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

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

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

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

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

Point source pollution sources

Diffuse pollution sources

Existing hydromorphological alterations (dams, etc.)

Discharges

Water abstractions

Future planned measures with transboundary impacts, such as infrastructure development

Other subjects (*please list*):

Flood protection measures and their possible effects

Climate change scenarios

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

Yes /No

- (d) Is the database publicly available?

Yes /No

If yes, please provide the web address:

<http://iksr.bafg.de/iksr/>

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

Largely technicalities like frequency, comparability, metadata, number format, etc.

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

Better overview on the whole basin, comparability, improved possibilities for early warning and alarm system, improved understanding of other countries' issues and problems.

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

Yes /No

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

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

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

- National monitoring stations connected through a network or common stations
- Joint and agreed methodologies
- Joint sampling
- Common monitoring network
- Common agreed parameters

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

The long-term cooperation yields long time series of chemical and biological parameters, that enable joint trend analyses and joint conclusions on the trends.

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

Deciding upon parameters and methodologies, and assuring comparability of data.

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

Yes /No

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

Development and Assessment of the Rhine Water Quality 2013-2014: <http://www.iksr.org/en/documentsarchive/technical-reports/reports-and-brochures-individual-presentation/artikel/989/index.html>

River basin management plan 2015: <http://www.iksr.org/en/water-framework-directive/river-basin-management-plan-2015/index.html>

Annual progress reports: <http://www.iksr.org/en/documentsarchive/progress-reports/index.html>

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

Yes /No

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

Based on quality objectives that the EU Water Framework Directive and its daughter directives set for priority substances and priority hazardous substances and for groundwater, and Rhine river specific pollutants.

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

- Notification and communication
- Coordinated or joint alarm system for accidental water pollution

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

No measures

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

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

Notification and communication

Coordinated or joint alarm system for floods

Coordinated or joint alarm system for droughts

Joint climate change adaptation strategy

Joint disaster risk reduction strategy

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

No measures

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

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

Yes /No

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

Several bilateral treaties, independent from the Rhine Convention. They deal with the transboundary cooperation in case of disasters, e.g. on who cooperates how.

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

Yes /No

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

Stakeholders have observer status in a joint body

If yes, please specify the stakeholders for each joint body:

NGO Nongovernmental organisations with an observer status to the ICPR:
http://www.iksr.org/en/international-cooperation/about-us/observers/ngos/index.html?chash=8807a443287c58df64159da272a44316&tx_queofontresizer_pi1%5Bfontresizer%5D=0&cHash=36276852c0b18870a848560b44217a71

Intergovernmental organisations with an observer status to the ICPR:
<http://www.iksr.org/en/international-cooperation/about-us/observers/igos/index.html>

Availability of information to the public

Consultation on planned measures or river basin management plans^h

Public involvement

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

^h Or, where applicable, aquifer management plans.

Luxembourgish implementation report for the Aarhus Convention:
https://www.unece.org/fileadmin/DAM/env/pp/NIR_2014/NIR_2014_Luxembourg_fre.doc

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

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

Country name: **Luxembourg**

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

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

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

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

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

One or more agreements or arrangements exist and are in force

Agreement or arrangement developed but not in force

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

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

Convention sur la canalisation de la Moselle du 27 octobre 1956

Convention portant création d'une Commission Internationale pour la protection de la Moselle contre la pollution (Paris, 20 décembre 1961)

Convention portant création d'une Commission Internationale pour la protection de la Sarre contre la pollution (Paris, 20 décembre 1961)

Protocole complémentaire relatif à la création d'un secrétariat commun (Bruxelles, 22 mars 1990)

Protocole complémentaire n° 2 (Maria Laach, 13 novembre 1992)

Décision ministérielle de Strasbourg sur le Comité de Coordination (CC) (Strasbourg, 29 janvier 2001)

Agreement or arrangement is under development

No agreement

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

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

^b 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.

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

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

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

Yes /No

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

Yes /No

If not, what does it cover?: [fill in]

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

Yes /No

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

France, Germany, Luxembourg and the Region of Wallonia

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

Yes /No

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

All water uses

A single water use or sector

Several water uses or sectors

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

Water uses or sectors

Industry

Agriculture

Transport (e.g., navigation)

Households

Energy: hydropower and other energy types

Tourism

Nature protection

Other (please list): [fill in]

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

Procedural and institutional issues

Dispute and conflict prevention and resolution

Institutional cooperation (joint bodies)

Consultation on planned measures

Mutual assistance (art. 15)	<input type="checkbox"/>
Topics of cooperation	
Joint vision and management objectives	<input checked="" type="checkbox"/>
Joint significant water management issues	<input checked="" type="checkbox"/>
Navigation	<input type="checkbox"/>
Environmental protection (ecosystem)	<input checked="" type="checkbox"/>
Water quality	<input checked="" type="checkbox"/>
Water quantity or allocation	<input type="checkbox"/>
Cooperation in addressing floods	<input checked="" type="checkbox"/>
Cooperation in addressing droughts	<input checked="" type="checkbox"/>
Climate change adaptation	<input checked="" type="checkbox"/>
Monitoring and exchange	
Joint assessments	<input checked="" type="checkbox"/>
Data collection and exchange (art. 13)	<input checked="" type="checkbox"/>
Joint monitoring (art. 11)	<input checked="" type="checkbox"/>
Maintenance of joint pollution inventories	<input checked="" type="checkbox"/>
Elaboration of joint water quality objectives	<input checked="" type="checkbox"/>
Common early warning and alarm procedures (art. 14)	<input checked="" type="checkbox"/>
Exchange of experience between riparian States	<input checked="" type="checkbox"/>
Exchange of information on planned measures	<input checked="" type="checkbox"/>
Joint planning and management	
Development of joint regulations on specific topics	<input type="checkbox"/>
Development of international or joint river, lake or aquifer basin management or action plans	<input checked="" type="checkbox"/>
Management of shared infrastructure	<input type="checkbox"/>
Development of shared infrastructure	<input type="checkbox"/>
Other (<i>please list</i>): [fill in]	

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

/

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

The main concrete achievement of ICPMS has been an improvement in the ecological and chemical quality of the water of the Moselle and the Sarre^c. This has been achieved through both measures to reduce pollution and river restoration measures. Also, the flood management has substantially improved and work on

^c http://www.iksms-cipms.org/servlet/is/392/Wasserbeschaffenhetsbericht_rapport%20qualit%C3%A9_2013.pdf?command=downloadContent&filename=Wasserbeschaffenhetsbericht_rapport%20qualit%E9_2013.pdf

low flow management has started a few years ago^d. Next to this, improvements include the exchange of data and information between the parties, including a warning and alarm system^e, and a certain level of alignment of measures and plans in the riparian countries.

Key to this success has been close cooperation at technical level and the subsequent building of trust between the parties.

(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*):

<http://www.iksms-cipms.org/servlet/is/398/>

<http://legilux.public.lu/eli/etat/leg/loi/1994/03/22/n3/jo>

http://www.iksr.org/fileadmin/user_upload/Dokumente_fr/Communiqu_s_de_presse/Kommunique-WRRL-f.pdf

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

Yes /No

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

Where there is a joint body (or bodies)

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

Plenipotentiaries

Bilateral commission

Basin or similar commission

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

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

Yes /No

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

France, Germany, Luxembourg and the Region of Wallonia

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

A secretariat

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

It is a joint secretariat^f

A subsidiary body or bodies

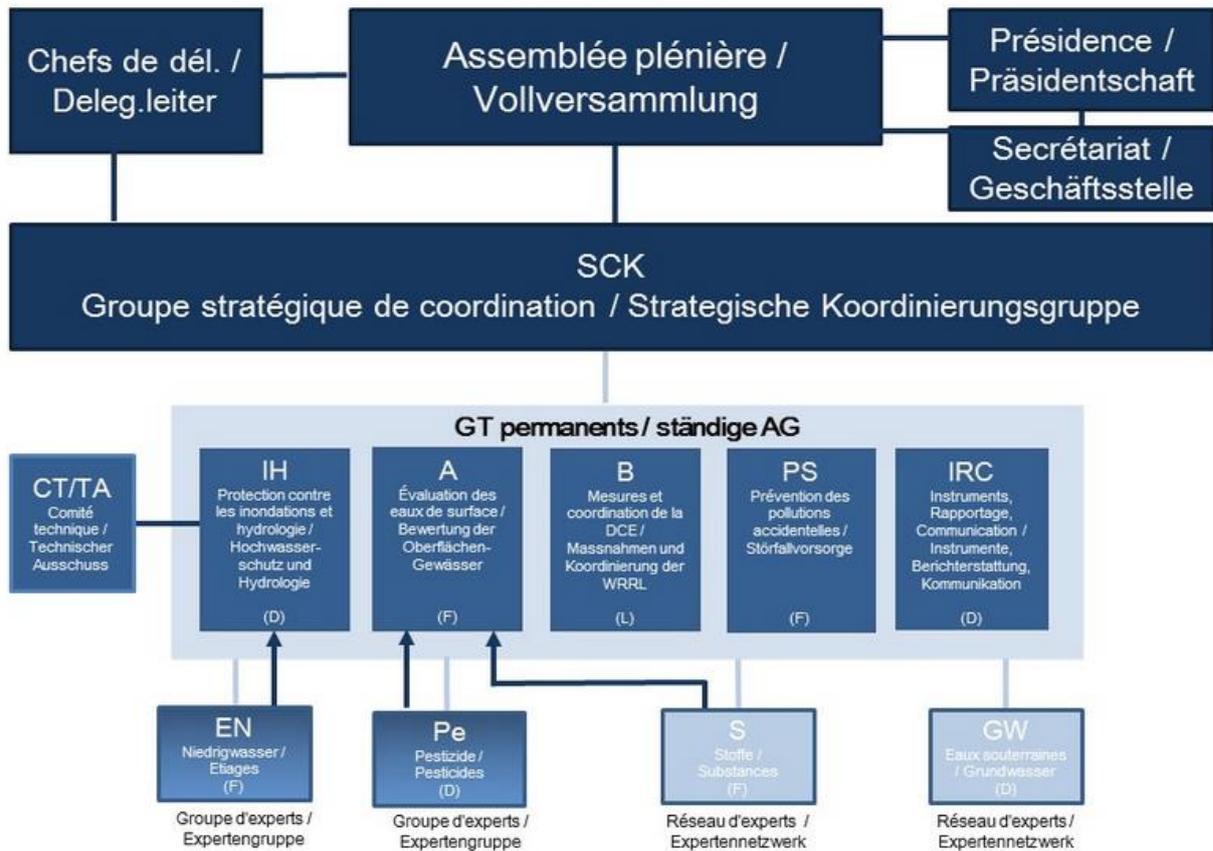
Please list (e.g., working groups on specific topics):

The present working structure is represented in the following organigramme^g

^d <http://www.iksms-cipms.org/servlet/is/60262/>

^e <http://www.iksms-cipms.org/servlet/is/2069/>

^f <http://www.iksms-cipms.org/servlet/is/1126/>



Other features (*please list*):

Adaptive working structure. Project and expert groups are established as needed, often with a time limited mandate

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

- | | |
|--|-------------------------------------|
| Identification of pollution sources | <input type="checkbox"/> |
| Data collection and exchange | <input checked="" type="checkbox"/> |
| Joint monitoring | <input type="checkbox"/> |
| Maintenance of joint pollution inventories | <input checked="" type="checkbox"/> |
| Setting emission limits | <input type="checkbox"/> |
| Elaboration of joint water quality objectives | <input checked="" type="checkbox"/> |
| Management and prevention of flood or drought risks | <input checked="" type="checkbox"/> |
| Preparedness for extreme events, e.g., common early warning and alarm procedures | <input checked="" type="checkbox"/> |

^g <http://www.iksms-cipms.org/servlet/is/405/>

^h 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.

- | | |
|---|-------------------------------------|
| Water allocation and/or flow regulation | <input type="checkbox"/> |
| Policy development | <input checked="" type="checkbox"/> |
| Control of implementation | <input type="checkbox"/> |
| Exchange of experience between riparian States | <input checked="" type="checkbox"/> |
| Exchange of information on existing and planned uses of water and related installations | <input checked="" type="checkbox"/> |
| Settling of differences and conflicts | <input type="checkbox"/> |
| Consultations on planned measures | <input checked="" type="checkbox"/> |
| Exchange of information on best available technology | <input checked="" type="checkbox"/> |
| Participation in transboundary EIA | <input type="checkbox"/> |
| Development of river, lake or aquifer basin management or action plans | <input checked="" type="checkbox"/> |
| Management of shared infrastructure | <input type="checkbox"/> |
| Addressing hydromorphological alterations | <input type="checkbox"/> |
| Climate change adaptation | <input checked="" type="checkbox"/> |
| Joint communication strategy | <input type="checkbox"/> |
| Basin-wide or joint public participation and consultation of, for example, basin management plans | <input checked="" type="checkbox"/> |
| Joint resources to support transboundary cooperation | <input checked="" type="checkbox"/> |
| Capacity-building | <input type="checkbox"/> |
| Any other tasks (<i>please list</i>): [fill in] | |
- (f) What are the main difficulties and challenges that your country faces with the operation of the joint body, if any?
- | | |
|---|--------------------------|
| Governance issues | <input type="checkbox"/> |
| <i>Please describe, if any:</i> | |
| Unexpected planning delays | <input type="checkbox"/> |
| <i>Please describe, if any:</i> [fill in] | |
| Lack of resources | <input type="checkbox"/> |
| <i>Please describe, if true:</i> [fill in] | |
| Lack of mechanism for implementing measures | <input type="checkbox"/> |
| <i>Please describe, if true:</i> [fill in] | |
| Lack of effective measures | <input type="checkbox"/> |
| <i>Please describe, if true:</i> [fill in] | |
| Unexpected extreme events | <input type="checkbox"/> |
| <i>Please describe, if any:</i> [fill in] | |
| Lack of information and reliable forecasts | <input type="checkbox"/> |
| <i>Please describe, if any:</i> [fill in] | |
| Others (<i>please list and describe, as appropriate</i>): [fill in] | |
- (g) If not all riparian States are members of the joint body how does the body cooperate with them?
- | | |
|----------------|--------------------------|
| No cooperation | <input type="checkbox"/> |
|----------------|--------------------------|

They have observer status

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

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

Yes /No

If yes, how frequently does it meet?

The plenary assembly meets once a year and the subsidiary bodies usually meet more often if needed.

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

See point 2. f) above

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

Yes /No

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

Yes /No

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

Some of the relevant coastal states are Party to the joint body (France, Belgium, Germany).

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

Yes /No

If yes, please provide further details:

Internationally coordinated Moselle-Sarre river basin management plan 2015:
<http://www.iksms-cipms.org/servlet/is/66956/>

Internationally coordinated Moselle-Sarre river flood risk management plan 2015:
<http://www.iksms-cipms.org/servlet/is/66958/>

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

Afforestation

Restoration of ecosystems

Environmental flow norms

Groundwater measures (e.g., protection zones)

Other measures (*please list*):

See plans mentioned under point 4 above

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

Yes /No

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

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

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

- Emission monitoring data (art. 13, para. 1 (c))
- Planned measures taken to prevent, control or reduce transboundary impacts (art. 13, para. 1 (d))
- Point source pollution sources
- Diffuse pollution sources
- Existing hydromorphological alterations (dams, etc.)
- Discharges
- Water abstractions
- Future planned measures with transboundary impacts, such as infrastructure development
- Other subjects (*please list*):
 - Flood protection measures and their possible effects
 - Climate change scenarios

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

Yes /No

(d) Is the database publicly available?

Yes /No

If yes, please provide the web address:

<http://www.iksms-cipms.org/servlet/is/64807/>

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

Largely technicalities like frequency, comparability, metadata, number format, etc.

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

Better overview on the whole basin, comparability, improved possibilities for early warning and alarm system, improved understanding of other countries' issues and problems.

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

Yes /No

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

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

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

National monitoring stations connected through a network or common stations

Joint and agreed methodologies

Joint sampling

Common monitoring network

Common agreed parameters

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

The long-term cooperation yields long time series of chemical and biological parameters, that enable joint trend analyses and joint conclusions on the trends.

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

Deciding upon parameters and methodologies, and assuring comparability of data.

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

Yes /No

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

Evolution of the Water Quality of the Moselle and the Sarre 1990-2010:
[http://www.iksms-cipms.org/servlet/is/410/Wasserbeschaffenhetsbericht_Rapport%20qualit_2013.pdf](http://www.iksms-cipms.org/servlet/is/410/Wasserbeschaffenhetsbericht_Rapport%20qualit_2013.pdf?command=downloadContent&filename=Wasserbeschaffenhetsbericht_Rapport%20qualit_2013.pdf)

River basin management plan 2015: <http://www.iksms-cipms.org/servlet/is/66956/>

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

Yes /No

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

Based on quality objectives that the EU Water Framework Directive and its daughter directives set for priority substances and priority hazardous substances and for groundwater, and Rhine river specific pollutants.

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

Notification and communication

Coordinated or joint alarm system for accidental water pollution

Other (please list): [fill in]

No measures

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

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

Notification and communication

Coordinated or joint alarm system for floods

Coordinated or joint alarm system for droughts

Joint climate change adaptation strategy

Joint disaster risk reduction strategy

Other (please list): [fill in]

No measures

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

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

Yes /No

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

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

Yes /No

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

Stakeholders have observer status in a joint body

If yes, please specify the stakeholders for each joint body:

Availability of information to the public

Consultation on planned measures or river basin management plansⁱ

Public involvement

Other (please specify): [fill in]

Luxembourgish implementation report for the Aarhus Convention:
https://www.unece.org/fileadmin/DAM/env/pp/NIR_2014/NIR_2014_Luxembourg_fre.doc

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

ⁱ Or, where applicable, aquifer management plans.

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

Country name: **Luxembourg**

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

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

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

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

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

One or more agreements or arrangements exist and are in force

Agreement or arrangement developed but not in force

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

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

Accord concernant la protection de la Meuse (Charleville-Mézières, le 26 avril 1994)

Accord international sur la Meuse (Gand, le 3 décembre 2002)

Agreement or arrangement is under development

No agreement

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

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

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

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

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

^b 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.

Yes /No

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

Yes /No

If not, what does it cover?: [fill in]

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

Yes /No

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

France, Germany, Netherlands, Luxembourg, Belgium, Brussels-Capital Region,
Region of Wallonia and Flemish Region

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

Yes /No

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

All water uses

A single water use or sector

Several water uses or sectors

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

Water uses or sectors

Industry

Agriculture

Transport (e.g., navigation)

Households

Energy: hydropower and other energy types

Tourism

Nature protection

Other (please list): [fill in]

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

Procedural and institutional issues

Dispute and conflict prevention and resolution

Institutional cooperation (joint bodies)

Consultation on planned measures

Mutual assistance (art. 15)

Topics of cooperation

Joint vision and management objectives

Joint significant water management issues

Navigation

Environmental protection (ecosystem)

- Water quality
- Water quantity or allocation
- Cooperation in addressing floods
- Cooperation in addressing droughts
- Climate change adaptation
- Monitoring and exchange**
- Joint assessments
- Data collection and exchange (art. 13)
- Joint monitoring (art. 11)
- Maintenance of joint pollution inventories
- Elaboration of joint water quality objectives
- Common early warning and alarm procedures (art. 14)
- Exchange of experience between riparian States
- Exchange of information on planned measures
- Joint planning and management**
- Development of joint regulations on specific topics
- Development of international or joint river, lake or aquifer basin management or action plans
- Management of shared infrastructure
- Development of shared infrastructure

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

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

/

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

The main concrete achievement of IMC has been the elaboration of the internationally coordinated river basin management plans in 2009 and 2015 as well as of the internationally coordinated flood risk management plan in 2015. Besides, improvements include the exchange of data and information between the parties. An international warning and alarm system has been put in place and work on low flow management has started a few years ago.

Key to this success has been close cooperation at technical level and the subsequent building of trust between the parties.

(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*):

http://www.meuse-maas.be/CIM/media/ACCORDS/accord-charleville_f.pdf

http://www.meuse-maas.be/CIM/media/ACCORDS/accord-gand_f.pdf

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

Yes /No

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

Where there is a joint body (or bodies)

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

Plenipotentiaries

Bilateral commission

Basin or similar commission

Other (please describe): [fill in]

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

Yes /No

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

France, Germany, Netherlands, Luxembourg, Belgium, Brussels-Capital Region, Region of Wallonia and Flemish Region

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

A secretariat

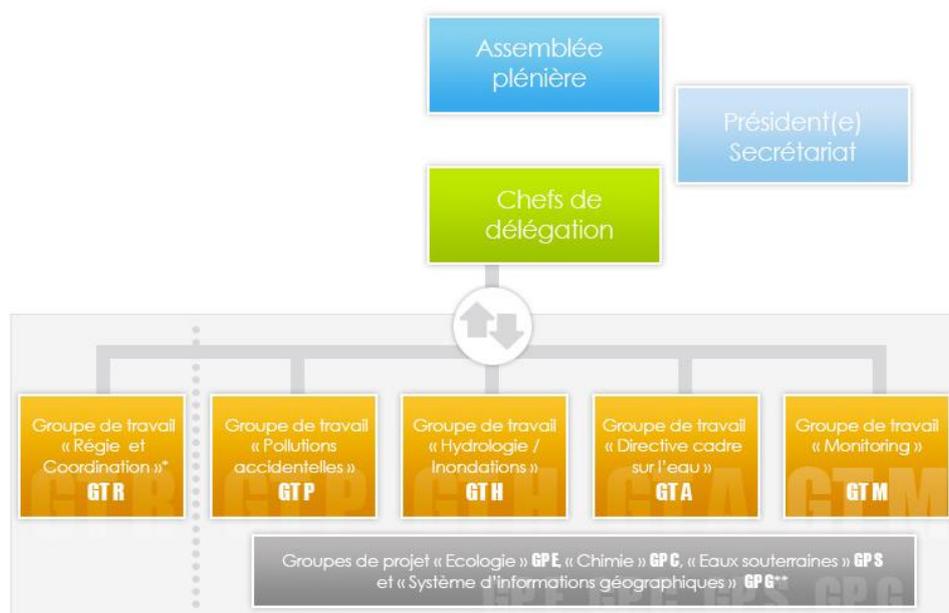
If the secretariat is a permanent one, is it a joint secretariat or does each country host its own secretariat? (Please describe):

It is a joint secretariat

A subsidiary body or bodies

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

The present working structure is represented in the following organigramme^c



^c <http://www.meuse-maas.be/Organigramme.aspx>

Other features (*please list*):

Adaptive working structure. Project and expert groups are established as needed, often with a time limited mandate

- (e) What are the tasks and activities of this joint body (art. 9, para. 2)?^d
- | | |
|---|-------------------------------------|
| Identification of pollution sources | <input type="checkbox"/> |
| Data collection and exchange | <input checked="" type="checkbox"/> |
| Joint monitoring | <input type="checkbox"/> |
| Maintenance of joint pollution inventories | <input checked="" type="checkbox"/> |
| Setting emission limits | <input type="checkbox"/> |
| Elaboration of joint water quality objectives | <input checked="" type="checkbox"/> |
| Management and prevention of flood or drought risks | <input checked="" type="checkbox"/> |
| Preparedness for extreme events, e.g., common early warning and alarm procedures | <input checked="" type="checkbox"/> |
| Water allocation and/or flow regulation | <input type="checkbox"/> |
| Policy development | <input checked="" type="checkbox"/> |
| Control of implementation | <input type="checkbox"/> |
| Exchange of experience between riparian States | <input checked="" type="checkbox"/> |
| Exchange of information on existing and planned uses of water and related installations | <input checked="" type="checkbox"/> |
| Settling of differences and conflicts | <input type="checkbox"/> |
| Consultations on planned measures | <input type="checkbox"/> |
| Exchange of information on best available technology | <input checked="" type="checkbox"/> |
| Participation in transboundary EIA | <input type="checkbox"/> |
| Development of river, lake or aquifer basin management or action plans | <input checked="" type="checkbox"/> |
| Management of shared infrastructure | <input type="checkbox"/> |
| Addressing hydromorphological alterations | <input type="checkbox"/> |
| Climate change adaptation | <input checked="" type="checkbox"/> |
| Joint communication strategy | <input type="checkbox"/> |
| Basin-wide or joint public participation and consultation of, for example, basin management plans | <input checked="" type="checkbox"/> |
| Joint resources to support transboundary cooperation | <input checked="" type="checkbox"/> |
| Capacity-building | <input type="checkbox"/> |
| Any other tasks (<i>please list</i>): [fill in] | |
- (f) What are the main difficulties and challenges that your country faces with the operation of the joint body, if any?
- | | |
|-------------------|--------------------------|
| Governance issues | <input type="checkbox"/> |
|-------------------|--------------------------|
- Please describe, if any:*

^d 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.

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*): [fill in]

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

No cooperation

They have observer status

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

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

Yes /No

If yes, how frequently does it meet?

The plenary assembly meets once a year and the subsidiary bodies usually meet more often if needed.

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

See point 2. f) above

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

Yes /No

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

Yes /No

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

Some of the relevant coastal states are Party to the joint body (France, Belgium, Germany, Netherlands).

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

Yes /No

If yes, please provide further details:

Internationally coordinated Meuse river basin management plan 2015:
http://www.meuse-maas.be/CIM/media/Rapport-faitier-dec-2015/Rapport_faitier_Maqua_15_1rev11_f_.pdf?ext=.pdf

Internationally coordinated Meuse river flood risk management plan 2015:
http://www.meuse-maas.be/CIM/media/DI/PGRI%20-%20d%C3%A9c%202015/pr-PGRI_Minond_15_4rev2_f_.pdf?ext=.pdf

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

Afforestation

Restoration of ecosystems

Environmental flow norms

Groundwater measures (e.g., protection zones)

Other measures (*please list*):

See plans mentioned under point 4 above

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

Yes /No

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

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

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

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

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

Point source pollution sources

Diffuse pollution sources

Existing hydromorphological alterations (dams, etc.)

Discharges

Water abstractions

Future planned measures with transboundary impacts, such as infrastructure development

Other subjects (*please list*):

Flood protection measures and their possible effects

Climate change scenarios

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

Yes /No

- (d) Is the database publicly available?

Yes /No

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

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

Largely technicalities like frequency, comparability, metadata, number format, etc.

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

Better overview on the whole basin, comparability, improved possibilities for early warning and alarm system, improved understanding of other countries' issues and problems.

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

Yes /No

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

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

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

National monitoring stations connected through a network or common stations	<input checked="" type="checkbox"/>
Joint and agreed methodologies	<input checked="" type="checkbox"/>
Joint sampling	<input type="checkbox"/>
Common monitoring network	<input type="checkbox"/>
Common agreed parameters	<input checked="" type="checkbox"/>

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

The long-term cooperation yields long time series of chemical and biological parameters, that enable joint trend analyses and joint conclusions on the trends.

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

Deciding upon parameters and methodologies, and assuring comparability of data.

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

Yes /No

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

River basin management plan 2015: http://www.meuse-maas.be/CIM/media/Rapport-faitier-dec-2015/Rapport_faitier_Maqua_15_1rev11_f_.pdf?ext=.pdf

http://www.meuse-maas.be/CIM/media/PUBLICATIONS_Rapport-faitier-monitor_progr-surveillance/Brochure_RMH_2011_2013_Mmonitor_15_10rev4_f_.pdf?ext=.pdf

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

Yes /No

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

Based on quality objectives that the EU Water Framework Directive and its daughter directives set for priority substances and priority hazardous substances and for groundwater, and Rhine river specific pollutants.

10. What are the measures implemented to prevent or limit the transboundary impact of accidental pollution (art. 14)?
- Notification and communication
- Coordinated or joint alarm system for accidental water pollution
- Other (*please list*): [fill in]
- No measures
- If not, why not? What difficulties does your country face in putting in place such measures?:* [fill in]
11. What are the measures implemented to prevent or limit the transboundary impact of extreme weather events (art. 14)?
- Notification and communication
- Coordinated or joint alarm system for floods
- Coordinated or joint alarm system for droughts
- Joint climate change adaptation strategy
- Joint disaster risk reduction strategy
- Other (*please list*): [fill in]
- No measures
- If not, why not? What difficulties does your country face in putting in place such measures?:* [fill in]
12. Are procedures in place for mutual assistance in case of a critical situation (art. 15)?
- Yes /No
- If yes, please provide a brief summary:* [fill in]
13. Are the public or relevant stakeholders involved in transboundary water management in the basin, river, lake or aquifer? (art. 16)?
- Yes /No
- If yes, how? (please tick all applicable) (Please note: If your country is a Party to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), you may refer to your country's report under that Convention.):*
- Stakeholders have observer status in a joint body
- If yes, please specify the stakeholders for each joint body:*
- Availability of information to the public
- Consultation on planned measures or river basin management plans^e
- Public involvement
- Other (*please specify*): [fill in]
- Luxembourgish implementation report for the Aarhus Convention:
https://www.unece.org/fileadmin/DAM/env/pp/NIR_2014/NIR_2014_Luxembourg_fre.doc

^e Or, where applicable, aquifer management plans.

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

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

Country name: **Luxembourg**

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

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

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

III. Calculation of SDG indicator 6.5.2

Methodology

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

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

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

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

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

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

- There is a joint body, joint mechanism or commission (e.g. a river basin organization) for transboundary cooperation,
- There are regular (at least once per year) formal communications between riparian countries in form of meetings (either at the political or technical level),

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

- There is a joint or coordinated water management plan(s), or joint objectives have been set, and
- There is a regular (at least once per year) exchange of data and information.

Calculation of indicator 6.5.2

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

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

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

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

Name of transboundary basin / sub-basin	Countries shared with	Surface area of the basin / sub-basin (in km ²) within the territory of the country	Surface area of the basin / sub-basin (in km ²) covered by an operational arrangement within the territory of the country
Rhine	Netherlands, Germany, Belgium, France, Switzerland, Liechtenstein, Austria, Italy	2524,55	2524,55
Moselle-Sarre	France, Germany, Belgium	2524,55	2524,55
Meuse	France, Germany, Belgium, Netherlands	72,82	72,82
Total surface area of transboundary basins / sub-basins of rivers and lakes covered by operational arrangements within the territory of the country (in km²) [A] (do not double count sub-basins)			2597,37
Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km²) [B] (do not double count sub-basins)		2597,37	

Transboundary aquifers [please add rows as needed]

Name of the transboundary aquifer ^b	Countries shared with ^c	Surface area (in km ²) ^d within the territory of the country	Covered by an operational arrangement (yes/no)
Dévonien (MESout 1)	Belgium (Region of Wallonia)	835	Yes
Trias-Nord (MESout 6)	Belgium (Region of Wallonia)	538	Yes
Trias-Est (MESout 7)	Germany (Saarland)	423	Yes
Lias inférieur (MESout 3)	Belgium (Region of Wallonia) France (Region Great East)	912	Yes
Lias supérieur / Dogger (MESout 5)	France (Region Great East)	21	Yes
Sub-total: surface area of transboundary aquifers covered by operational arrangements (in km²) [C]			2729
Total surface area of transboundary aquifers (in km²) [D]		2729	

Indicator value for the country

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

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:

Additional information regarding transboundary aquifers:

The information provided is referring to the groundwater bodies which have been delimited in the second river basin management plan^e. No groundwater bodies have been delimited in the Meuse river basin district and all the groundwater bodies belong to the Rhine river basin district.

^b The information provided is referring to the groundwater bodies (see explanation under “Additional information”)

^c The information provided is referring to partner countries and partner regions (see explanation under “Additional information”)

^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 https://eau.public.lu/directive_cadre_eau/directive_cadre_eau/2015-2021_2e_cycle/publication-du-plan-de-gestion/index.html

No transboundary groundwater bodies as such have been designated but transboundary aquifers exist. This means that the groundwater bodies do not spread over the national borders even though the related aquifers stretch out into the neighbouring countries. Within this context the concept of partner countries / regions has been introduced in Luxembourg. This means that for each groundwater body, for which the relevant groundwater aquifer has a significant extent beyond the national borders as well as significant hydraulic changes, a joint management of the groundwater resources is developed, if needed, with the corresponding partner countries / regions.

Spatial information

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

Maps can be found in the river basin management plans under the following links:

Rhine: <http://www.iksr.org/en/water-framework-directive/river-basin-management-plan-2015/index.html>

Moselle-Sarre: <http://www.iksms-cipms.org/servlet/is/66956/>

Meuse: http://www.meuse-maas.be/CIM/media/Rapport-faitier-dec-2015/Rapport_faitier_Maqua_15_1rev11_f_.pdf?ext=.pdf

Luxembourg: https://eau.public.lu/directive_cadre_eau/directive_cadre_eau/2015-2021_2e_cycle/publication-du-plan-de-gestion/index.html

As well as under the following links:

Moselle-Sarre (GeoExplorer): <http://www.iksms-cipms.org/servlet/is/61968/>

Luxembourg (Geoportail): <http://map.geoportail.lu/theme/eau>

European Environment Agency (EEA) :

<http://www.eea.europa.eu/themes/water/interactive/soe-wfd/wfd-ground-water-viewer>

<http://www.eea.europa.eu/themes/water/interactive/soe-wfd/wfd-surface-water-viewer>

IV. Final questions

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

/

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

The main achievements in implementing the Convention and cooperating on transboundary waters are:

- facilitates work in general as we can have fruitful and constructive exchanges with other countries and learn from their experiences. As Luxembourg is a small country the number of experts available is limited and therefore it is very important to be able to discuss water related issues with experts from other countries and to learn how these issues are tackled in other countries.
- facilitates exchanges with other countries as we already know each other and work together in a climate of confidence.
- facilitates the implementation of measures, policies etc. at the national level as we can refer to experiences gained abroad.
- facilitates the understanding of especially upcoming issues and to find solutions to tackle them.

The keys to achieving that success was the early involvement of Luxembourg in international river basin commissions such as the International Commission for the Protection of the Rhine (ICPR), which exists for more than 60 years, and the International Commissions for the Protection of the Moselle and the Sarre, which exist for more than 50 years.

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

Anne-Marie Reckinger

Administration de la gestion de l'eau

1, avenue du Rock'n'Roll

L-4361 Esch-sur-Alzette

E-mail: anne-marie.reckinger@eau.etat.lu

Date: 11.5.2017

Signature: 

4. Please include any additional information on the process of preparing the report (e.g., whether there was an exchange or consultation within the joint body or with riparian countries), in particular which institutions have been consulted *(please describe)*: [fill in]
5. If you have any other comments please add them here *(insert comments)*: [fill in]

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