Country Survey Instrument for SDG Indicator 6.5.1

Degree of integrated water resources management implementation (0 – 100)

Submission Form	
Country	**GERMANY**
Date this document was submitted	13.08.2020
National SDG 6.5.1 Focal Point information	
Name	Janine Muzau
Organisation	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
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Are you the national Focal Point for any other SDG indicator (apart from 6.5.1)? **If yes, please insert 'X' for all that apply:** __6.1.1 __6.2.1 __6.3.1 __6.3.2 __6.4.1 __6.4.2 __6.5.2 __6.6.1 __6.a.1 __6.b.1 __Other SDG indicator(s) (please specify here):	
SDG 6.5.1 in-country data collection and reporting process overview *(Please provide further details on the consultation process in Annex E)*	
Were other institutions/stakeholders involved and consulted in the reporting process for this indicator? _x_Yes __No	
If yes, please indicate the mode(s) of consultation (please provide further details in Annex E): __Phone calls _x_Email exchanges _x_In-person meetings __Dedicated stakeholder workshop(s) __Other (please specify):	
Contact person regarding further questions/clarifications relating to this submission	
_x_SDG 6.5.1 Focal Point listed above __Other (please specify contact details here):	

Part 1 – Introduction

This is the official survey instrument for country reporting on Sustainable Development Goal (SDG) indicator 6.5.1: "Degree of integrated water resources management implementation (0 – 100)". The indicator measures progress towards target 6.5: "By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate". The target supports the equitable and efficient use of water resources, which is essential for social and economic development, as well as environmental sustainability. The actions to achieve target 6.5 directly underpin the other water-related targets within SDG-6: "Ensure availability and sustainable management of water and sanitation for all". Further guidance on completing this survey instrument is provided in the SDG indicator 6.5.1 monitoring guide. Both this survey instrument and the monitoring guide are available from UN Environment in six UN languages (Arabic, Chinese, English, French, Russian and Spanish), and Portuguese through the Help Desk by emailing iwrmsdg651@un.org.

About the indicator:

Indicator 6.5.1 represents the degree of integrated water resources management (IWRM) implementation, on a scale of 0 – 100. It is calculated based on scores from approximately 30 questions covering different aspects of IWRM.

About the survey instrument

The primary purpose of the survey instrument is global monitoring and reporting on indicator 6.5.1. It has been designed to also be useful as a simple diagnostic tool for countries to identify strengths and weaknesses of different aspects of IWRM implementation. It measures implementation in incremental steps, which allows countries to identify barriers and enablers to furthering IWRM. The completed survey instrument can be used as an input to planning and working towards target 6.5.

The survey contains four sections, each covering a key dimension of IWRM (see definition in Annex A: Glossary):

1. **Enabling environment:** Policies, laws and plans to support IWRM implementation.
2. **Institutions and participation:** The range and roles of political, social, economic and administrative institutions and other stakeholder groups that help to support implementation.
3. **Management instruments:** The tools and activities that enable decision-makers and users to make rational and informed choices between alternative actions.
4. **Financing:** Budgeting and financing made available and used for water resources development and management (apart from drinking water supply and sanitation) from various sources.

Each section has two sub-sections covering the "National" and "Other" levels, to address the target 6.5 wording "… at all levels." "Other" levels include sub-national, basin, local and transboundary (see Annex A - Glossary). Questions relate to these levels depending on their relevance to the particular aspect of IWRM. For most "other level" questions, the score should reflect the situation in most of the basins/aquifers/jurisdictions, unless specified otherwise. For the transboundary level questions, the score should reflect the situation in most of the 'most important' transboundary basins / aquifers, which should be listed in the table in Annex B. Filling out that table: increases the transparency of the transboundary questions; makes the information more useful for dialogue with neighbouring countries; and enhances coordination with SDG indicator 6.5.2 on arrangements for transboundary cooperation. It is recognised that water resources management in federal countries may be

more complex due to responsibilities at different administrative levels. You may further explain any specific circumstances relating to the level of decentralization of water resources management and responsibility in your country (e.g. federal countries and other large countries) in Annex C.

How to complete the survey

<u>Scoring:</u> For each question, a score between 0 and 100 should be selected, in increments of 10, unless the country judges the question to be 'not applicable (n/a)'. It is not possible to omit questions. The score selection is guided by descriptive text for six thresholds, which are specific to each question. If a country judges the degree of implementation to be between two thresholds, the increment of 10 between the two thresholds may be selected. The potential scores that may be given for each question are: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.

The thresholds for each question are defined sequentially. This means that the criteria for all lower levels of implementation must be met in order for a country to respond that it has reached a specific level of implementation for each question. Furthermore, if an aspect of IWRM is specified in a lower threshold, it is implicit that this aspect is also addressed in the higher thresholds for that question. **Bold** text in the thresholds helps the reader differentiate between thresholds.

The thresholds are indicative and are meant to guide countries in choosing the most appropriate responses, i.e. selected responses should be a reasonable match, but do not have to be a perfect match, as each country is unique.

Instructions on how to calculate the overall indicator 6.5.1 score are provided in section 5.

<u>Narrative responses:</u> for each question, there are two free-text fields: "Status description" and "Way forward". General guidance on the type of information that countries may find useful to include in each field is as follows:

Status description: e.g. refer to relevant activities/initiatives/laws/policies/plans/strategies or similar; comment on the degree of implementation as it relates to the threshold descriptions; barriers/enablers; and reflect on progress since the first round of reporting on SDG indicator 6.5.1 (baseline in 2017/18). Where possible, provide a brief explanation of why the score is different to the baseline. If reporting was not submitted for the SDG baseline, reflect on recent rates of implementation of relevant activities.

Way forward: e.g. already planned or recommended activities to advance implementation of that aspect of IWRM, including identifying barriers and enablers. Include draft interim target-setting for each question where appropriate (e.g. consider actions or recommendations for making progress). Any actions or recommendations provided in this field are neither binding nor comprehensive, but may be used as inputs to country planning processes.

Specific additional guidance is provided in each field for each question. Experience from baseline reporting shows that the free-text responses to each question are important, as they: increase the robustness, transparency and objectivity of the indicator scores; facilitate stakeholder consensus on each question score; help countries track progress between reporting periods; and help countries to analyse what is required to reach the next threshold.

In each field, enter the narrative response by replacing "xxx". It is recommended that the guidance text is left in the free-text fields during the data collection process, but that this guidance text is deleted before final submission.

Progress and differences since baseline reporting

172 countries established a baseline for indicator 6.5.1 in 2017/18. This is the second round of data collection. Where available, countries should refer to the baseline survey responses, available here: http://iwrmdataportal.unepdhi.org/. Countries are encouraged to consider progress, or lack of progress, since the baseline, in the 'Status description' fields, and give reasoning for differences in scores.

The current survey version is highly comparable, though not completely identical, to the baseline survey. Some minor amendments have been made following a review process, and noteworthy changes to the baseline are described in footnotes for relevant questions. A summary of changes is provided in the SDG indicator 6.5.1 monitoring guide.

Data collection and submission

A broad stakeholder engagement process is encouraged to complete the survey instrument. This helps to increase stakeholder participation and ownership of water management and decision-making processes, and makes the completed survey instrument a more robust and useful diagnostic tool for further discussions and planning. Country Focal Points are asked to fill in the Reporting Process Form in Annex E to increase transparency and increase stakeholder confidence in the results at all levels. The extent and mode of stakeholder engagement is up to each country, and further guidance is provided in the monitoring guide. Coordination with Focal Points for other SDG indicators is encouraged where feasible and relevant.[1]

The national IWRM Focal Point is responsible for the Quality Assurance and formal submission of the completed survey instrument to UN Environment. The survey instrument should be emailed to the IWRM Help Desk at UN Environment: iwrmsdg651@un.org.

Upon request, the Help Desk will provide support to the national IWRM focal points on matters such as interpretation of questions and thresholds, the appropriate level of stakeholder engagement in countries, and support to submitting the final indicator scores.

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[1] Monitoring of 6.5.1 is being done as part of the UN-Water initiative on integrated monitoring of SDG 6. Support is provided in collaboration with UN-Water members and partners. For a list of questions that relate to other SDG indicators (mainly in section 3), please see the monitoring guide.

Part 2 – The survey

1   Enabling environment

This section covers the enabling environment, which is about creating the conditions that help to support the implementation of IWRM. It includes the most typical policy, legal and planning tools for IWRM[2]. Please refer to the glossary for any terms that may require further explanation. **Please take note of all footnotes as they contain important information and clarification of terms used in the questions and thresholds**.

Enter your score, **in increments of 10**, from 0-100, or "n/a" (not applicable), in the yellow cell immediately below each question. Enter free text in the "Status description" and "Way forward" fields below each question as advised in the Introduction in Part 1. This will help achieve agreement among different stakeholders in the country, as well as help monitor progress over time. Suggestions for the type of information that may be useful are provided. You may also provide further information you think is relevant, or links to further documentation.

1. Enabling Environment						
	Degree of implementation (0 – 100)					
	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
1.1 What is the status of policies, laws and plans to support Integrated Water Resources Management (IWRM) at the national level?						
a. National water resources **policy,** or similar. Score **90**	Development **not started** or not progressing.	**Exists**, but not based on IWRM.	Based on IWRM, **approved** by government and starting to be used by authorities to guide work.	Being **used** by the majority of relevant authorities to guide work.	Policy objectives consistently **achieved.**	Objectives consistently achieved, and periodically **reviewed** and revised.
Status description: EU water directives (Water Framework Directive 2000, Flood Directive 2007), basin related, all water uses and flood protection, Basin management plans and flood risk management plans every 6 years, national and transboundary, regular monitoring of implementation National Biodiversity Strategy 2007 (Federal Government) National Sustainability Strategy 2017 (Federal Government)						
Way forward: More integration among different ministries needed, more efforts will be taken to achieve improvement.						
b. National water resources **law(s)**. Score **90**	Development **not started** or not progressing**.**	**Exists**, but not based on IWRM.	Based on IWRM, **approved** by government and starting to be applied by authorities.	**Being applied** by the majority of relevant authorities**.**	All laws are being **applied** across the country.	All laws are **enforced** across the country, and all people and organizations are held accountable.
Status description: Different national water acts, on federal and regional level, e.g. National Water Act, Water Discharges Act Different ordinances on surface water, ground water, fertilizers etc.						
Way forward: New challenges will have to be taken into account in the coming years also in legislation, like the effects of climate change, e.g. water availability, less discharges in rivers affecting aquatic ecosystems, spread of invasive species. No clear trends to be seen yet.						

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[2] For examples of good practices of policies, laws and plans, please see case studies under 'enabling environment' in the Global Water Partnership (GWP) IWRM ToolBox.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
c. National integrated water resources management (IWRM) **plans**, or similar. Score **90**	Development **not started** or not progressing**.**	**Being prepared**, but not approved by government.	**Approved** by government and starting to be implemented by authorities.	Being **implemented** by the majority of relevant authorities.	Plan objectives consistently **achieved**.	Objectives consistently achieved, and periodically **reviewed** and revised.

Status description: River basin management plans and programmes of measures according to the EU Water Framework Directive, basin related, 10 river basins, mostly international Integrated flood risk planning according to EU-Flood Risk Management Directive and marine protection according to EU Marine Strategy Framework Directive, both coordinated with river basin management plans.

Way forward: Enhancing implementation of those plans in practical terms. Resources (staff, money) are not enough. Other obstacles like missing room for river development etc.

1.2 What is the status of policies, laws and plans to support IWRM at other levels?

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
a. Sub-national[3] water resources **policies** or similar. Score **90**	Development **not started** or delayed in most sub-national jurisdictions.	**Exist** in most jurisdictions, but not necessarily based on IWRM.	Based on IWRM, **approved** by the majority of authorities and starting to be used to guide work.	Being **used** by the majority of relevant authorities to guide work.	Policy objectives consistently **achieved** by a majority of authorities.	Objectives consistently achieved by all authorities, and periodically **reviewed** and revised.

Status description: Regional water acts and policies in the 16 German federal states.

Way forward:

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
b. Basin/aquifer management plans[4] or similar, based on IWRM. Score **100**	Development **not started** or delayed in most basins/aquifers of national importance.	**Being prepared** for most basins/aquifers.	**Approved** in the majority of basins/aquifers and starting to be used by authorities.	Being **implemented** in the majority of basins/aquifers.	Plan objectives consistently **achieved** in majority of basins/aquifers.	Objectives consistently achieved in all basins/aquifers, and periodically **reviewed** and revised.

Status description: 16 federal states have established river basin management plans and programmes of measures concerning their shares of national and international river basins. Plans are updated – if needed – every six years. Regular monitoring. These plans are coordinated with flood risk planning and marine protection planning.

Way forward:

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[3] Sub-national includes jurisdictions <u>not</u> at national level, such as: states, provinces, prefectures, counties, councils, regions, or departments. In cases where there are no explicit sub-national policies, please answer this question by considering how national policies are being implemented at sub-national levels. Responses should consider the highest, non-national level(s) as appropriate to the country. In the status description, please explain which level(s) are included in the response.

[4] At the basin/aquifer level, please include only the most important river basins, lake basins and aquifers for water supply or other reasons. This question only refers to these basins/aquifers. These basins/aquifers are likely to cross administrative borders, including state/provincial borders for federal countries. The basins may also cross national borders, but this question refers to management of the portions of basins within each country. Question 1.2c refers specifically to transboundary arrangements for basins/aquifers shared by countries.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
c. Arrangements for transboundary water management.[5]	Development **not started** or not progressing.	**Being prepared** or negotiated.	Arrangements are **adopted**.	Arrangements' provisions are **partly implemented**.	Arrangements' provisions are **mostly implemented**.	The arrangements' provisions are **fully implemented**.
Score 100						

Status description: See German answers on indicator 6.5.2.

Six international river basin conventions and commissions. One international cooperation (Ems) on the basis of exchange of ministerial letters.

See www.iksr.org, www.meuse-maas.be, www.iksms-cipms.de, www.icpdr.org, www.ikse-mkol.de, www.mkoo.pl, www.ems-eems.de

4 bilateral commissions on mainly water bodies at the borders with The Netherlands, Poland, Czech Republic and Austria

Cooperation with neighbouring countries on marine protection issues concerning land based sources within OSPAR (North-East Atlantic) and HELCOM (Baltic Sea)

Way forward:

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
d. Sub-national water resources **regulations**[6] (laws, decrees, ordinances or similar).[7]	Development **not started** or delayed in most sub-national jurisdictions.	**Exist** in most jurisdictions, but not necessarily based on IWRM**.**	Based on IWRM, **approved** in most jurisdictions and starting to be applied by authorities in some jurisdictions.	**Some** regulations **being applied** in the majority of jurisdictions.	**All** regulations **being applied** in the majority of jurisdictions.	All regulations being applied and **enforced** in all jurisdictions, and all people and organizations are held accountable.
Score 100						

Status description: Water acts and ordinances of the 16 German federal states. Too many to list. All available via the websites of the 16 federal states' environment ministries

Way forward:

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[5] For 'transboundary' definition and guidance on how to fill out all transboundary level questions, see Annexes A and B. All transboundary level questions should reflect the situation in most of the 'most important' transboundary basins/aquifers, as listed in Annex B. An 'arrangement' should be a formal commitment, and may be referred to as a bilateral or multilateral agreement, treaty, convention, protocol, joint declaration, memorandum of understanding, or other arrangement between riparian countries on the management of a transboundary basin/aquifer. Refers to international basins/aquifers only. Arrangements may be interstate, intergovernmental, inter-ministerial, interagency or between regional authorities. They may also be entered into by sub-national entities.

[6] Sub-national includes jurisdictions not at national level, such as: states, provinces, prefectures, counties, councils, regions, or departments. In cases where there are no explicit sub-national regulations, please answer this question by considering how national regulations are being implemented at sub-national levels. Responses should consider the highest, non-national level(s) as appropriate to the country. In the status description, please explain which level(s) are included in the response.

[7] This question has replaced question 1.2d from the baseline survey instrument, which was for federal countries only.

2 Institutions and participation

This section is about the range and roles of political, social, economic and administrative institutions that support the implementation of IWRM. It includes institutional capacity and effectiveness, cross-sector coordination, stakeholder participation and gender equality. The 2030 Agenda stresses the importance of partnerships that will require public participation and creating synergies with the private sector.

The burdens of water-related work carried out predominantly by women have been acknowledged for decades,[8] which has led to a focus on women's practical needs around water, especially in relation to carrying water and managing it within the home. In the context of water resources management, there has been growing recognition that, a strategic and practical focus on increasing women's voice and influence, at all levels of decision-making, must become a priority. Furthermore, mainstreaming gender in the water sector supports a range of targets in the SDGs, including under Goal 5 on achieving gender equality and empowering all women and girls.[9] Including a gender-related question in this survey (q.2.2d) also addresses the call for gender disaggregated data in the 2030 Agenda.[10]

Please take note of all footnotes as they contain important information and clarification of terms used in the questions and thresholds. Please refer to the glossary for any terms that may require further explanation.

Enter your score, **in increments of 10**, from 0-100, or "n/a" (not applicable), in the yellow cell immediately below each question. Enter free text in the "Status description" and "Way forward" fields below each question as advised in the Introduction in Part 1. This will help achieve agreement among different stakeholders in the country, as well as help monitor progress over time. Suggestions for the type of information that may be useful are provided. You may also provide further information you think is relevant, or links to further documentation.

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[8] E.g. Dublin Principle Nr. 3 (1992): "Women play a central part in the provision, management and safeguarding of water". "[the] role of women … has seldom been reflected in institutional arrangements for the … management of water resources. Acceptance and implementation of this principle requires positive policies to address women's specific needs and to equip and empower women to participate at all levels in water resources programmes, including decision-making and implementation, in ways defined by them."
[9] E.g. SDG target 5.5 "Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life."
[10] E.g. SDG target 17.18 "By 2020, … increase … the availability of … data disaggregated by … gender, … and other characteristics relevant in national contexts."

2. Institutions and Participation						
	Degree of implementation (0 – 100)					
	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
2.1 What is the status of institutions for IWRM implementation at the national level?						
a. National **government authorities**[11] for leading IWRM implementation. Score **90**	**No** dedicated government authorities for water resources management.	Authorities **exist**, with clear mandate to lead water resources management.	Authorities have clear mandate to lead IWRM implementation, and the capacity[12] to effectively lead IWRM plan **formulation**.	Authorities have the capacity to effectively lead IWRM plan **implementation**.	Authorities have the capacity to effectively lead periodic monitoring and **evaluation** of the IWRM plan(s).	Authorities have the capacity to effectively lead periodic IWRM plan **revision**.
Status description: Federal Government Ministries (Environment, Transport, Agriculture etc.) supported by their national agencies. Same ministries on the level of the 16 German federal states supported by agencies of the federal states. District, county and municipal water authorities.						
Way forward:						
b. Coordination between national government authorities representing **different sectors**[13] on water resources, policy, planning and management. Score **80**	**No information** shared between different government sectors on policy, planning and management.	**Information** on water resources, policy, planning and management is made available between different sectors.	**Communication:** Information, experiences and opinions are **shared between** different sectors.	**Consultation:** Opportunities for different sectors to **take part** in policy, planning and management processes.	**Collaboration:** Formal **arrangements** between different government sectors with the objective of agreeing on collective decisions on important issues and activities.	**Co-decisions and co-production:** Shared power between different sectors on joint policy, planning and management activities.
Status description: Joint implementation of EU law by transposing it into national German law, coordination is needed. Cooperation between environment and transport with regard to waterways. Cooperation between agriculture and environment concerning fertilizers, nutrients, pesticides.						
Way forward Enhancing exchange among authorities.						

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[11] 'Government authorities' could be a ministry or ministries, or other organizations/institutions/agencies/bodies with a mandate and funding from government.

[12] 'Capacity' in this context is that the responsible authorities should be adapted to the complexity of water challenges to be met and have the required knowledge and technical skills, including planning, rule-making, project management, finance, budgeting, data collection and monitoring, risk/conflict management and evaluation. Beyond having the technical capacity, authorities should also have the financial capacity to actually be leading the implementation of these activities.

[13] Relates to coordination between the government authorities responsible for water management and those responsible for other sectors (such as agriculture, energy, climate, environment etc.) that are dependent on water, or impact on water. Coordination between groundwater and surface water development/management should also be optimised. The relevant sectors should be considered according to their importance for the country.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
c. Public participation[14] in water resources, policy, planning and management at national level.	**No information** shared between government and the public on policy, planning and management.	**Information** on water resources, policy, planning and management is made available to the public.	**Communication:** Government authorities **request** information, experiences and opinions of the public**.**	**Consultation:** Government authorities regularly **use** information, experiences and opinions of the public.	**Collaboration: Mechanisms**[15] established, and regularly used, for the public to take part in relevant policy, planning and management processes.	**Representation:** Formal representation of the public in government processes contributing to decision making on important issues and activities, as appropriate.
Score 90						

Status description: Implementation of relevant EU and national law.
Public participation in licencing of bigger water uses and hydromorphological changes.
Public participation in river basin management and flood risk and marine management processes.
Public participation in EIA and SEA.
General public, stakeholders concerned (from all sectors)
Acknowledged observers in river basin commissions.
Special stakeholder dialogues on the "reduction of the inputs of micropollutants into water" and on a "water-strategy for 2050".

Way forward: More activities needed to reach the broad public.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
d. Private sector[16] **participation** in water resources development, management and use.	**No information** shared between government and private sector about water resources development, management and use.	**Information** made available between government and private sector about water resources development, management and use.	**Communication** between government and private sector about water resources development, management and use.	**Consultation:** Government authorities regularly involve the private sector in water resources development, management and use activities.	**Collaboration: Mechanisms**[17] established, and regularly used, for private sector involvement and partnership.	**Representation:** Effective private sector involvement established for water resources development, management and use activities.
Score 80						

Status description: See answer to c above.
Some targeted cooperation, e.g. stakeholder-specific dialogues on Federal and federal states' level (agriculture, industry etc.)

Way forward:

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[14] 'The public' includes all interested parties who may be affected by any water resources issue or intervention. They include organizations, institutions, academia, civil society and individuals. They do not include government organizations. The private sector is addressed separately in the next question.

[15] Mechanisms can include policies, laws, strategies, plans, or other formal operational procedures for public participation.

[16] Private sector includes for-profit businesses and groups. It does not include government or civil society. While this question is mainly focused at the national level, please respond at the level that is most relevant in the country context. Please explain this, including differences between implementation at different levels, in the 'Status description' field.

[17] Mechanisms can include policies, laws, strategies, plans, or other formal operational procedures for private sector participation.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
e. Developing IWRM capacity.[18] Score **80**	**No** capacity development specific to water resources management.	**Occasional** capacity development, generally limited to **short-term** / ad-hoc activities.	**Some long-term** capacity development initiatives are being implemented, but geographic and stakeholder coverage is **limited**.	**Long-term** capacity development initiatives are being implemented, and geographic and stakeholder coverage is **adequate**.	Long-term capacity development initiatives are being implemented, with **effective** outcomes, and geographic and stakeholder coverage is **very good**.	Long-term capacity development initiatives are being implemented with **highly effective** outcomes, and geographic and stakeholder coverage is **excellent.**
Status description: In principle no capacity development at national level needed. Sometimes NGOs have limited capacities to get involved all processes.						
Way forward:						
2.2 What is the status of institutions for IWRM implementation at other levels?						
a. Basin/aquifer level[19] **organizations**[20] for leading implementation of IWRM. Score **100**	**No** dedicated basin authorities for water resources management.	Authorities **exist**, with clear mandate to lead water resources management.	Authorities have clear mandate to lead IWRM implementation, and the capacity[21] to effectively lead IWRM plan **formulation**.	Authorities have the capacity to effectively lead IWRM plan **implementation**.	Authorities have the capacity to effectively lead periodic monitoring and **evaluation** of the IWRM plan(s).	Authorities have the capacity to effectively lead periodic IWRM plan **revision**.
Status description: See answers to 1.2 above						
Way forward:						

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[18] IWRM capacity development: refers to the enhancement of skills, instruments, resources and incentives for people and institutions at all levels, to improve IWRM implementation. Capacity needs assessments are essential for effective and cost-effective capacity development. Capacity development programs should consider gender balance and disadvantaged/minority groups in terms of participation and awareness. Capacity development is relevant for many groups, including: local and central government, water professionals in all areas - both public and private water organisations, civil society, and in regulatory organisations. In this instance, capacity development may also include primary, secondary and tertiary education, and academic research concerning IWRM.

[19] At the basin/aquifer level, please include only the most important river basins, lake basins and aquifers for water supply or for other reasons. This question only refers to these basins/aquifers. These basins/aquifers likely cross-administrative borders, including state/provincial borders for federal countries. The basins may also cross national borders, but this question refers to management of the portions of basins within each country. Question 2.2e refers specifically to transboundary management of basins/aquifers shared by countries.

[20] Could be organization, committee, inter-ministerial mechanism or other means of collaboration for managing water resources at the basin level.

[21] For the definition of 'capacity' in this context, see footnote 12. Beyond having the capacity, authorities must also actually be leading the implementation of these activities.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
b. Public participation[22] in water resources, policy, planning and management at the **local level.**[23] Score	**80**					
	No information shared between government and the public on policy, planning and management.	**Information** on water resources, policy, planning and management is made available to the public**.**	**Communication:** Government authorities **request** information, experiences and opinions of the public**.**	**Consultation:** Government authorities regularly **use** local level information, experiences and opinions of the public.	**Collaboration: Mechanisms**[24] established, and regularly used, for the public to take part in relevant policy, planning and management processes.	**Representation:** Formal representation of the public in local authority processes contributing to decision making on important issues and activities, as appropriate.
Status description: Municipal councils, local water projects involve local people, legal provisions with regard to water uses'licencing						
Way forward:						
c. Participation of vulnerable groups in water resources planning and management.[25] Score						
	Participation of vulnerable groups **not explicitly addressed** in laws, policies, or plans.	Vulnerable groups **partially addressed,** but no explicit procedures in place.[26]	**Some procedures in place**, but limited budget and human capacity for implementation.	Procedures in place, with **moderate participation** of vulnerable groups (moderate budget and human capacity).	**Regular participation** of vulnerable groups (sufficient budget and human capacity, and participation is monitored).	**Meaningful**[27] **and regular participation** of vulnerable groups, as appropriate.
Status description:						
Way forward:						

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[22] 'The public' includes all interested parties who may be affected by any water resources issue or intervention. They include organizations, institutions, academia, civil society and individuals. They do not include government organizations. The private sector is dealt with separately in question 2.1d.

[23] Examples of 'local level' include municipal level (e.g. cities, towns and villages), community level, basin/tributary/aquifer/delta level, and water user associations.

[24] Mechanisms can include policies, laws, strategies, plans, or other formal operational procedures for public participation.

[25] Vulnerable groups: groups of people that face economic, political, or social exclusion or marginalisation. They can include, but are not limited to: indigenous groups, ethnic minorities, migrants (refugees, internally displaced people, asylum seekers), remote communities, subsistence farmers, people living in poverty, people living in slums and informal settlements. Also referred to as 'marginalised' or 'disadvantaged' groups. While women are often included in definitions of 'vulnerable groups', in this survey gender issues are addressed separately in question 2.2d. The score given for this question should reflect the situation for the majority of the vulnerable groups. This question has been added since the baseline to capture an element of stakeholder participation which is important in the context of 'leave no-one behind' – one of the key principles of Agenda 2030.

[26] 'Procedures' can include operational processes to, for example, raise awareness, reduce language barriers, and facilitate interaction with specific vulnerable groups.

[27] 'Meaningful' implies voices of vulnerable groups are heard, contribute to decision-making, and influence outcomes. It follows the UN Statement of Common Understanding on Human Rights-Based Approaches to Development Cooperation which provides for "Participation and Inclusion: … all peoples are entitled to active, free and meaningful participation in, contribution to, and enjoyment of civil, economic, social, cultural and political development in which human rights and fundamental freedoms can be realized."

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
d. Gender included in laws/plans or similar within water resources management.[28]	Gender considerations **not explicitly included** in national/ subnational laws/plans or similar.	Gender considerations **partially included** in laws/plans or similar.	Gender considerations **included** (but limited implementation, budget or monitoring)**.**	Gender **objectives**[29] **partly achieved** (activities partially monitored and funded).	Gender objectives **mostly achieved** (activities adequately monitored and funded).	Gender objectives **consistently achieved** and effectively address gender issues (activities and outcomes reviewed and revised).
Score						

Status description:

Way forward:

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
e. Organizational framework for transboundary water management.[30]	**No** organizational framework(s).	Organizational framework(s) **being developed**.	Organizational framework(s) **established**.	Organizational framework(s)' mandate is **partly fulfilled**.	Organizational framework(s)' mandate is **mostly fulfilled**.	Organizational framework(s)' mandate is **fully fulfilled**.
Score	100					

Status description: See answers to 1.2 above.

Way forward:

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[28] See gender discussion at beginning of section 2. Gender-responsive mechanisms can include laws, policies, plans, strategies or other frameworks or procedures aimed at achieving gender objectives related to women's participation, voice and influence. Gender-responsive mechanisms may originate within the water sector or at a higher level, but if they are primarily addressed at a higher level, then there should be evidence of gender mainstreaming within the water sector to achieve scores in this question. In the baseline survey, national, sub-national, and transboundary levels were addressed in three separate questions. These questions have been merged into a single question, allowing countries to answer the question at the level which is most relevant in the national context. The situation at different levels can be explained in the 'Status description' cell, as appropriate.

[29] Gender objectives ultimately refer to equal participation and influence in water resources management at all levels. Ways of monitoring this include (please identify any of these or similar in the 'Status description' field): 1) Presence of Gender Focal Point responsible for gender policy and gender concerns in authorities that deal with water resources; 2) Gender parity in decision-making processes at all levels (e.g. in meetings or board members/committee members); 3) Presence of gender-specific objectives and commitments in strategies, plans and laws related water policy; 4) Presence and role of local women's groups/organizations receiving technical and/or financial support from government/non-government organizations involved in water resources management activities; 5) Budget allocation, and procedures for collection and analysis of sex-disaggregated data of local populations, when planning for water-related programmes / projects, including infrastructure; 6) Presence of measures for improving gender parity and equity in human resources (HR) policies of authorities. Source: adapted from UNESCO WWAP Toolkit on Sex-disaggregated Water Data, 2019.

[30] An organizational framework can include a joint body, mechanism, authority, committee, commission or other institutional arrangement. Refers to international basins/aquifers.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
f. Sub-national[31] **authorities** for leading IWRM implementation.[32]	**No** dedicated sub-national authorities for water resources management.	Authorities **exist**, with clear mandate to lead water resources management.	Authorities have clear mandate to lead IWRM implementation, and the capacity[33] to effectively lead IWRM plan **formulation**.	Authorities have the capacity to effectively lead IWRM plan **implementation**.	Authorities have the capacity to effectively lead periodic monitoring and **evaluation** of the IWRM plan(s).	Sub-national authorities have the capacity to effectively lead periodic IWRM plan **revision**.
Score 100						
Status description: See answers to 1.2 above						
Way forward:						

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[31] Sub-national can include, but not limited to: provincial, state, county, local government areas, council. In this case, sub-national should not include basin/aquifer levels as this is dealt with in question 2.2a. Answer this question for the highest sub-national level(s) that are relevant in the country, and specify what these are.

[32] This question has replaced question 2.2f from the baseline survey, which was for federal countries only. This is in recognition of the fact that many countries have sub-national authorities for water resources management, even if they are not federal countries.

[33] For the definition of 'capacity' in this context, see footnote 12. Beyond having the capacity, authorities must also actually be leading the implementation of these activities.

3   Management instruments

This section includes the tools that enable decision-makers and users to make rational and informed choices between alternative actions. It includes management programs, monitoring water resources and the pressures on them, knowledge sharing and capacity development. Many of the questions in this section relate to other SDG 6 targets and indicators (see 6.5.1 monitoring guide), and coordination between different SDG reporting processes is encouraged where feasible.

Terminology used in the questions:

- **Limited, Adequate, Very good, Excellent:** Are terms used describe the status, coverage and effectiveness of the management instruments assessed in this section. Respondents should apply their own judgement based on the 'best-practice' descriptions of management instruments in the glossary, the section introduction, and through footnotes. For example, 'adequate' may imply that the basic minimum criteria for that particular management instrument are met. Please provide qualifying information to the question score in the 'Status description' cell immediately below each question.
- **Management instruments:** Can also be referred to as management tools and techniques, which include regulations, financial incentives, monitoring, plans/programs (e.g. for development, use and protection of water resources), as well as those specified in footnotes on questions and thresholds below.
- **Monitoring:** collecting, updating, and sharing timely, consistent and comparable water-related data and information, relevant for science and policy. Effective monitoring requires ongoing commitment and financing from government. Resources required include appropriate technical capacity such as laboratories, portable devices, online water use control and data acquisition systems. May include a combination of physical data collection, remote sensing, and modelling for filling data gaps.
- **Short-term / Long-term:** In the context of management instruments, short-term includes ad-hoc activities and projects, generally not implemented as part of an overarching program with long-term goals. Long-term refers to activities that are undertaken as part of an ongoing program that has more long-term goals/aims and implementation strategy.

Please take note of all footnotes as they contain important information and clarification of terms used in the questions and thresholds.

Enter your score, **in increments of 10**, from 0-100, or "n/a" (not applicable), in the yellow cell immediately below each question. Enter free text in the "Status description" and "Way forward" fields below each question as advised in the Introduction in Part 1. This will help achieve agreement among different stakeholders in the country, as well as help monitor progress over time. Suggestions for the type of information that may be useful are provided. You may also provide further information you think is relevant, or links to further documentation.

3. Management Instruments						
	Degree of implementation (0 – 100)					
	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
3.1 What is the status of management instruments to support IWRM implementation at the national level?						
a. National monitoring of water availability[34] (includes surface and/or groundwater, as relevant to the country). Score `90`	**No** national monitoring systems in place.	Monitoring systems established for a **limited** number of **short-term** / ad-hoc projects or similar.	**Long-term** national monitoring is carried out but with **limited** coverage and limited use by stakeholders.	**Long-term** national monitoring is carried out with **adequate** coverage but limited use by stakeholders.	Long-term national monitoring is carried out with **very good** coverage and adequate use by stakeholders.	Long-term national monitoring is carried out with **excellent** coverage and excellent use by stakeholders.
Status description: Monitoring of groundwater quantity and surface water flow. Long term statistics on overall water availability and water uses.						
Way forward:						
b. **Sustainable and efficient water use management**[35] from the national level, (includes surface and/or groundwater, as relevant to the country). Score `90`	**No** management instruments being implemented.	Use of management instruments is **limited** and only through **short-term** / ad-hoc projects or similar.	**Some** management instruments implemented on a more **long-term** basis, but with **limited** coverage across different water users and the country.	Management instruments are implemented on a **long-term** basis, with **adequate** coverage across different water users and the country.	Management instruments are implemented on a long-term basis, with **very good** coverage across different water users and the country, and are **effective**.	Management instruments are implemented on a long-term basis, with **excellent** coverage across different water users and the country, and are **highly effective**.
Status description: Water saving technologies in households and industry. Very small water losses in pipes. Average use is 123 l/person a day in households and small businesses. Rather low. Long term statistics on water use show declining trends in all use-categories. No nationwide water stress.						
Way forward:						

[34] See definition of monitoring in Terminology.

[35] Management instruments include demand management measures (e.g. technical measures, financial incentives, education and awareness raising to reduce water use and/or improve water-use efficiency, conservation, recycling and re-use), monitoring water use (including the ability to disaggregate by sector), mechanisms for allocating water between sectors (including environmental considerations).

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
c. Pollution control[36] from the national level. Score **90**	**No** management instruments being implemented.	Use of management instruments is **limited** and only through **short-term** / ad-hoc projects or similar.	**Some** management instruments implemented on a more **long-term** basis, but with **limited** coverage across sectors and the country.	Management instruments are implemented on a **long-term** basis, with **adequate** coverage across sectors and the country.	Management instruments are implemented on a long-term basis, with **very good** coverage across sectors and the country, and are **effective**.	Management instruments are implemented on a long-term basis, with **excellent** coverage across sectors and the country, and are **highly effective**.

Status description: Regular monitoring.
Monitoring of the chemical status of groundwater and surface water on regional and international level. Regular. Event driven specific monitoring programmes for special substances.

Way forward:

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
d. Management of water-related ecosystems[37] from the national level. Score **80**	**No** management instruments being implemented.	Use of management instruments is **limited** and only through **short-term** / ad-hoc projects or similar.	**Some** management instruments implemented on a more **long-term** basis, but with **limited** coverage across different ecosystem types and the country.	Management instruments are implemented on a **long-term** basis, with **adequate** coverage across different ecosystem types and the country. Environmental Water Requirements (EWR) analysed in some cases.	Management instruments are implemented on a long-term basis, with **very good** coverage across different ecosystem types and the country, and are **effective**. EWR analysed for most of country.	Management instruments are implemented on a long-term basis, with **excellent** coverage across different ecosystem types and the country, and are **highly effective**. EWR analysed for whole country.

Status description: EU and national water and nature conservation law.
River basin management plans, cooperation between water and nature conservation authorities, win-win-measures like dyke relocations or revitalisation of floodplains

Way forward: more research in order to better understand the relationships between water and ecosystems as well as ecosystem services.

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[36] Includes regulations, water quality guidelines, water quality monitoring, economic tools (e.g. taxes and fees), water quality trading programs, education, consideration of point and non-point (e.g. agricultural) pollution sources, construction and operation of wastewater treatment plants, watershed management.

[37] Water-related ecosystems include rivers, lakes and aquifers, as well as wetlands, forests and mountains. Management of these systems includes tools such as management plans, the assessment of Environmental Water Requirements (EWR), and protection of areas and species. Monitoring includes measuring extent and quality of the ecosystems over time.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
e. Management instruments to reduce impacts of water-related disasters[38] from the national level.	**No** management instruments being implemented.	Use of management instruments is **limited** and only through **short-term /** ad-hoc projects or similar.	**Some** management instruments implemented on a more **long-term** basis, but with **limited** coverage of at-risk areas.	Management instruments are implemented on a **long-term** basis, with **adequate** coverage of at-risk areas.	Management instruments are implemented on a long-term basis, with **very good** coverage of at-risk areas, and are **effective**.	management instruments are implemented on a long-term basis, with **excellent** coverage of at-risk areas, and are **highly effective**.

Score `80`

Status description: Flood risk management plans.
Plans on national, regional and local level in case of water-related disasters like floods or extreme rainfall.

Way forward: Activities to be better prepared for droughts, which have increased in the past years.

3.2 What is the status of management instruments to support IWRM implementation at other levels?

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
a. Basin management instruments.[39]	**No** basin level management instruments being implemented.	Use of basin level management instruments is **limited** and only through **short-term /** ad-hoc projects.	**Some** basin level management instruments implemented on a more **long-term** basis, but with **limited** geographic and stakeholder coverage.	Basin level management instruments implemented on a more **long-term** basis, with **adequate** geographic and stakeholder coverage.	Basin level management instruments implemented on a more long-term basis, with **effective** outcomes and **very good** geographic and stakeholder coverage.	Basin level management instruments implemented on a more long-term basis, with **highly effective** outcomes and **excellent** geographic and stakeholder coverage.

Score `90`

Status description: Basin related management and flood risk managements in all basins (national and international)

Way forward:

[38] 'Management instruments' can cover: understanding disaster risk; strengthening disaster risk governance; investing in disaster risk reduction; and enhancing disaster preparedness. 'Impacts' include social impacts (such as deaths, missing persons, and number of people affected) and economic impacts (such as economic losses in relation to GDP). 'Water-related disasters' include disasters that can be classified under the following: Hydrological (flood, landslide, wave action); Meteorological (convective storm, extratropical storm, extreme temperature, fog, tropical cyclone); and Climatological (drought, glacial lake outburst, wildfire).

[39] Basin and aquifer management: involves managing water at the appropriate hydrological scale, using the surface water basin or aquifer as the unit of management. This may involve basin and aquifer development, use and protection plans. It should also promote multi-level cooperation, and address potential conflict among users, stakeholders and levels of government. To achieve 'Very high (100)' basin and aquifer management scores, surface and groundwater management should be integrated.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
b. Aquifer management instruments.[40] Score **90**	**No** aquifer level management instruments being implemented.	Use of aquifer level management instruments is **limited** and only through **short-term** / ad-hoc projects.	**Some** aquifer level management instruments implemented on a more **long-term** basis, but with **limited** geographic and stakeholder coverage.	Aquifer level management instruments implemented on a more **long-term** basis, with **adequate** geographic and stakeholder coverage.	Aquifer level management instruments implemented on a more **long-term** basis, with **effective** outcomes and **very good** geographic and stakeholder coverage.	Aquifer level management instruments implemented on a more **long-term** basis, with **highly effective** outcomes and **excellent** geographic and stakeholder coverage.
Status description: Groundwater bodies or aquifers are included in the river basin management plans and in the bilateral coordination with other countries. Rather few agreements only on groundwater.					
Way forward:					
c. Data and information sharing <u>within</u> countries at all levels.[41] Score **90**	**No** data and information sharing.	**Limited** data and information sharing on an **ad-hoc** basis.	Data and information sharing arrangements **exist** on a more **long-term** basis between major data providers and users.	Data and information sharing arrangements **implemented** on a more **long-term** basis**,** with **adequate** coverage across sectors and the country.	Data and information sharing arrangements implemented on a more **long-term** basis**,** with **very good** coverage across sectors and the country.	All relevant data and information are online and freely accessible to all.
Status description: River basin management is based on data and information sharing among the 16 federal states. Joint provisions on monitoring programmes. Regular data exchange or data compilation centralised in certain basins. Collection of data in Federal agencies for special reporting obligations and information of the public on water issues.					
Way forward:					
d. Transboundary data and information sharing <u>between</u> countries. Score **80**	**No** data and information sharing.	**Limited** data and information sharing on an **ad-hoc** or informal basis.	Data and information sharing arrangements **exist**, but sharing is **limited.**	Data and information sharing arrangements **implemented adequately.**	Data and information sharing arrangements **implemented effectively.**[42]	All relevant data and information are online and accessible between countries.
Status description: River basin management is based on data and information sharing. Mostly on the basis of the basins international level), more aggregated on EU-level. Joint monitoring programmes in international basins, joint assessments of results					
Way forward:					

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[40] See previous footnote on basin management instruments, which also applies to aquifers.

[41] Includes more formal data and information sharing arrangements between users, as well as accessibility for the general public, where appropriate.

[42] E.g. institutional and technical mechanisms in place that allow for exchanging data as agreed upon in agreements between riparians (e.g. regional database or information exchange platform with a river basin organization including technical requirements for data submission, institutionalized mechanisms for QA and for analysing the data, etc.).

4   Financing

This section concerns the adequacy of the finance available for water resources development and management from various sources.

Finance for investment and recurrent costs can come from many sources, the most common being central government budget allocations to relevant ministries and other authorities. Finance from Official Development Assistance (ODA) specifically for water resources should be considered part of the government budget. Note that the level of coordination between ODA and national budgets is tracked by the 'means of implementation' SDG indicator 6.a.1: "Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan", as part of reporting on Target 6.a: "By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies".

"Various sources" include fees and tariffs levied on water users, polluter fees or grants from philanthropic or similar organisations. In-kind support should not be included as it is not easily measurable but can be mentioned in the 'Status description' field.

Investments should cover all aspects of water resources development and management but exclude any related to drinking water supply, sanitation and hygiene services as they are covered in other monitoring processes.

Please take note of all footnotes as they contain important information and clarification of terms used in the questions and thresholds.

Enter your score, **in increments of 10**, from 0-100, or "n/a" (not applicable), in the yellow cell immediately below each question. Enter free text in the "Status description" and "Way forward" fields below each question as advised in the Introduction in Part 1. This will help achieve agreement among different stakeholders in the country, as well as help monitor progress over time. Suggestions for the type of information that may be useful are provided. You may also provide further information you think is relevant, or links to further documentation.

4. Financing						
	Degree of implementation (0 – 100)					
	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
4.1 What is the status of financing for water resources development and management at the national level?						
a. National budget[43] for water resources **infrastructure**[44] (investment and recurrent costs). Score **80**	**No budget** allocated in national investment plans.	**Some budget** allocated but only partly covers planned investments.	**Sufficient budget** allocated for planned investments but insufficient funds disbursed or made available**.**	Sufficient budget allocated and **funds disbursed for most** planned programmes or projects.	Sufficient funds disbursed for investment and recurrent costs, and **being utilised in all** planned projects.	Budget **fully utilised** for investment and recurrent costs, post-project evaluation carried out, budgets reviewed and revised.
Status description:, Monitoring, infrastructure devices (e.g. for flood protection), licensing of all water uses, river basin management are paid mainly out of the regional budgets of the 16 federal states (taxes, fees, EU funds) and the Federal budget (international cooperation, waterways, supra-regional flood protection).						
Way forward: Increase resources for implementation of measures.						
b. National budget for **IWRM elements**[45] (investments and recurrent costs). Score **80**	**No budget** allocations made for investments and recurrent costs of the IWRM elements.	**Allocations** made for **some** of the elements and implementation at an early stage.	Allocations made for **at least half** of the elements but insufficient for others.	Allocations for **most** of the elements and some implementation under way.	Allocations include **all** elements and implementation regularly carried out (investments and recurrent costs).	Planned budget allocations for all elements of the IWRM approach **fully utilised**, budgets reviewed and revised.
Status description: Law making and planning, institutional strengthening, coordination, stakeholder participation, capacity building, and management instruments such as research and studies, gender and environmental assessments, data collection, monitoring are tax financed activities on the national level whenever the competence for the task is on the national level.						
Way forward:						

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[43] Allocations of funding for water resources may be included in several budget categories or in different investment documents. Respondents are thus encouraged to examine different sources for this information. When assessing the allocations respondents should take account of funds from government budgets and any co-funding (loans or grants) from other sources such as banks or donors.

[44] Infrastructure includes 'hard' structures such as dams, canals, pumping stations, flood control, treatment works etc., as well as 'soft' infrastructure and environmental measures such as catchment management, sustainable drainage systems etc. **For this survey do not include infrastructure for drinking water supply or sanitation services.** Budgets should cover initial investments and recurrent costs of operation and maintenance.

[45] 'IWRM elements' refers to all the activities described in sections 1, 2 and 3 of this survey that require funding, e.g. policy, law making and planning, institutional strengthening, coordination, stakeholder participation, capacity building, and management instruments such as research and studies, gender and environmental assessments, data collection, monitoring etc.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
4.2 What is the status of financing for water resources development and management at other levels?						
a. Sub-national or basin budgets for water resources **infrastructure**[46] (investment and recurrent costs). Score **80**	**No budget** allocated in sub-national or basin investment plans.	**Some budget** allocated but only partly covers planned investments.	**Sufficient budget** allocated for planned investments but insufficient funds disbursed or made available.	Sufficient budget allocated and **funds disbursed for most** planned programmes or projects.	Sufficient funds disbursed**,** for investment and recurrent costs, and **being utilised in all** planned projects.	Budget **fully utilised**, for investment and recurrent costs, post-project evaluation carried out, budgets reviewed and revised.
Status description: See answer to 4.1 above – whenever the competence for the task is on the regional or local level, then the activities are tax-financed on this level.						
Way forward:						
b. Revenues raised for IWRM elements.[47] Score **80**	**No revenues** raised for IWRM elements.	**Processes in place** to raise revenue but **not yet implemented**.	**Some revenue raised,** but generally not used for IWRM activities.	Revenues raised cover **some** IWRM activities.	Revenues raised cover **most** IWRM activities.	Revenues raised **fully cover** costs of IWRM activities.
Status description: The revenues of the wastewater charges (and the water abstraction fees can be used additionally by the 16 German federal states for financing measures to improve water status within IWRM.						
Way forward:						

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[46] Infrastructure includes 'hard' structures such as dams, canals, pumping stations, flood control, treatment works etc., as well as 'soft' infrastructure and environmental measures such as catchment management, sustainable drainage systems etc. **For this survey do not include infrastructure for drinking water supply or sanitation services.** Budgets should cover initial investments and recurrent costs of operation and maintenance.

[47] For 'IWRM elements', see above footnote. **Level**: revenues are likely to be raised from users at the local, basin, or aquifer levels, though may also be raised at other sub-national or national levels (please indicate which level(s) in the status description). **Revenue raising** can occur through public authorities or private sector, e.g. through fees, charges, levies, taxes and 'blended financing' approaches. E.g. dedicated charges/levies on water users (including household level *if* revenues are spent on IWRM elements); abstraction & bulk water charges; discharge fees; environmental fees such as pollution charges, Payment for Ecosystem Services (PES) schemes; and the sale of secondary products and services.

	Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
c. Financing for transboundary cooperation.[48] Score `100`	**No specific funding** allocated from the Member State (MS) budgets nor from other regular sources.	MS **agreement** on country share of contributions **in place** and in-kind support for the cooperation organisation/arrangement.	**Funding less than 50%** of that expected as contributions and by regulation.	Funding **less than 75%** of that expected as contributions and by regulation.	Funding **more than 75%** of that expected as contributions and by regulation.	**Full funding** of that expected as contributions and by regulation.
Status description: German obligatory contributions to international river basin commissions, voluntary contributions with regard to joint studies or workshops etc						
Way forward:						
d. Sub-national or basin budgets for **IWRM elements**[49] (investment and recurrent costs). Score `90`	**No budget** allocations at sub-national or basin level for investments and recurrent costs of IWRM elements.	**Allocations** made for **some** of the elements and implementation at an early stage.	Allocations made for **at least half** of the elements but insufficient for others.	Allocations for **most** of the elements and some implementation under way.	Allocations include **all** elements and implementation regularly carried out (investments and recurrent costs).	Planned budget allocations for all elements of the IWRM approach **fully utilised**, budgets reviewed and revised.
Status description: Federal Government pays contributions to the budget of international river commissions, co-finances transboundary studies or projects. Federal states co-finance transboundary projects with neighbouring countries or in the basins						
Way forward:						

[48] In this question "Member States (MS)" refers to riparian countries that are parties to the arrangement. "Contributions" refers to the annual share of funds agreed from MS national budgets to support the agreed TB cooperation arrangement. Regular funds obtained from for example, water user fees (e.g. hydropower charges) and polluter-pays fees based on existing regulation are also considered as sustainable funding. As variable and unsustainable, donor support should not be considered in the scoring, but may be referred to in the 'Status description' and 'Way forward' fields.

[49] 'IWRM elements' refers to all the activities described in sections 1, 2 and 3 of this survey that require funding, e.g. policy, law making and planning, institutional strengthening, coordination, stakeholder participation, capacity building, and management instruments such as research and studies, gender and environmental assessments, data collection, monitoring etc. This question has been added since the baseline survey, acknowledging the importance of funding being available at more 'operational' levels.

5   Indicator 6.5.1 score

How to calculate the indicator 6.5.1 score

Please complete the table below as follows:

1. Calculate the average score of each of the four sections by averaging all question scores in each section, rounded to the nearest whole number.
    Example: Section average of 41.5 should be rounded to 42. Section average of 70.2 should be rounded to 70. If 'not applicable' is selected for any question, this should not be included in the indicator calculations, and therefore will not affect the average score. However, questions with a score of '0' (zero) should be included.
2. Calculate the average of the four section scores (whole numbers) to give the overall score for indicator 6.5.1, rounded to the nearest whole number.
    Example: Calculating final IWRM score from four section scores: (81+ 63 + 47 + 58)/4 = 62.25. Final 6.5.1 score (rounded to a whole number) = 62.

Section	Average Scores (all values rounded to nearest whole number)
Section 1 Enabling environment	94
Section 2 Institutions and participation	89
Section 3 Management instruments	87
Section 4 Financing	85
Indicator 6.5.1 score = Degree of IWRM implementation (0-100)*	**89**

* Use rounded section average scores (to the nearest whole number), to calculate the indicator score, and round this to the nearest whole number.

Interpretation of the score

The score indicates the 'degree of implementation of integrated water resources management', on a scale of 0 to 100, with 0 signifying 'very low' implementation, and 100 signifying 'very high' implementation. However, the true value of the survey to countries lies within the scores, 'status description' and 'way forward' for each question, as this helps to identify which actions need to be taken to move towards a greater degree of implementation of IWRM. See the monitoring guide for further information on interpretation of scores and target setting.

Annexes:

Annex A: Glossary

- **Authorities:** could be ministry or ministries, or other organizations/institutions/departments/agencies/bodies with a mandate and funding from government.
- **Basins:** Includes rivers, lakes and aquifers, unless otherwise specified. For surface water, the term is interchangeable with 'catchments' and 'watersheds'.
- **Federal countries:** Refers to countries made up of federated states, provinces, territories or similar terms.
- **IWRM:** Integrated Water Resources Management (IWRM) is a process that promotes the coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. IWRM is not an end in itself but a means of achieving three key strategic objectives:
    - efficiency to use water resources in the best way possible;
    - equity in the allocation of water across social and economic groups;
    - environmental sustainability, to protect the water resource base, as well as associated ecosystems.
- **National (level):** Refers to the highest level of administration in a country.
- **Sub-national / state (level):** refers to levels of administration other than national. For federal countries, these are likely to be provinces or states. Non-federal countries may still have sub-national jurisdictions with some responsibility for water resources management, e.g. regions, counties, departments.
- **Programs:** Nation-wide plans of action with long-term objectives, for example to strengthen monitoring, knowledge sharing and capacity development, with details on what work is to be done, by whom, when, and what means or resources will be used.
- **Transboundary:** Refers to surface and groundwater basins that cross one or more national borders (see Annex B).
- **Stakeholders:** In this survey, stakeholders are the main groups important for water resources management, development and use. Examples of stakeholders in each group are given in footnotes as they appear in the survey.
- **Water Resources Management** is the activity of planning, developing, distributing and managing the optimum use of water resources. Ideally, water resource management planning considers all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands. An integrated approach (see IWRM) is needed to ensure water resources management is not isolated within sector silos resulting to inefficiencies, conflicts and unsustainable resource use.

Annex B: Transboundary level

The transboundary questions for indicator 6.5.1 focus on the degree of implementation of IWRM at the transboundary level, as relevant to implementation of IWRM 'at all levels', as specified in target 6.5. Countries sharing basins of transboundary waters (rivers, lakes or aquifers) should answer the questions on transboundary issues. This information is complemented by indicator 6.5.2 'Proportion of transboundary basin area with an operational arrangement for water cooperation'.

To enable tracking of progress over time and for transparency, in the table below please list the transboundary (or 'international') basins or aquifers that are included in this survey. The 6.5.1 baseline reporting may be used as a starting point. Only the most important transboundary basins or aquifers that are regarded as significant, in terms of economic, social or environmental value to the country (or neighbouring countries), need to be included in this survey. It is up to countries to decide which ones these are. Where feasible, basins/aquifers listed in this table, and the scores given, should be cross-referenced with tables and scores in the 6.5.2 reporting template (www.sdg6monitoring.org/indicators/target-65/indicators652/), and the focal point for 6.5.2 should be consulted in this process. In the absence of 6.5.2 data or national databases, global databases on transboundary river basins (http://twap-rivers.org/indicators/), and transboundary aquifers (https://www.un-igrac.org/ggis/explore-all-transboundary-groundwaters), may be referred to. If you include a national (sub-basin) as part of a larger transboundary basin, please ensure to also include the name of the larger basin. When answering transboundary questions, the majority of the basins below must meet the criteria described in each threshold to achieve the score for that threshold.

The columns on the right of the table are optional though recommended. Filling them out would: provide countries with valuable information and a quick diagnostic tool for the status in each basin/aquifer; increase the transparency of the transboundary level responses in this survey for stakeholders both within and between countries; help countries reach consensus on scores for the transboundary questions; and provide a valuable cross-reference for indicator 6.5.2. For each basin/aquifer, a score should be given for each of the four transboundary questions in the survey, following the guidance and thresholds in the survey questions. To supplement this data, you are encouraged to provide a summary of the situation for the transboundary basins/aquifers in the 'Status description' and 'Way forward' fields to transboundary questions within Part 2 of this survey, to the extent feasible.

	Important transboundary basins	OPTIONAL THOUGH RECOMMENDED*			
		Arrangements (1.2c)	Institutions (2.2e)	Data sharing (3.2d)	Financing (4.2c)
1.	[Name]				
2.					
3.					
	Please add/delete rows as needed				
	Important transboundary aquifers				
1.					
2.					
3.					
	Please add/delete rows as needed				

* These columns may be useful to countries in determining the approximate status for each transboundary basin/aquifer, and thereby be useful in discussions on the respective question scores in Part 2 of this survey instrument.

Annex C: Barriers, enablers and next steps for furthering IWRM implementation

This section is not used in calculating indicator 6.5.1, but is designed to be useful for countries to identify the main challenges and next steps to further IWRM implementation. It builds on the free text fields for each question – "Status description" and "Way forward" – to identify the key issues.

The third question below aims to improve transparency by documenting the main differences in opinion between stakeholders. You may amend the structure to make it more useful to the planning process in the national context. For each question, you may consider aspects under each of the four IWRM dimensions in the survey, or you may identify aspects/issues that cut-across questions and IWRM dimensions. Some issues not addressed by the questions may also be brought up here.

1) What are the main challenges/barriers to progress of IWRM implementation in the country?

2) What are the main next steps to overcome challenges and further IWRM implementation?

3) What were the main points of difference in stakeholder opinion in answering the survey questions?

4) Additional comments

Annex D: Priority water resource challenges

Please indicate the challenge level for each of the water resource issues below. This information will not affect the overall indicator score.

This checklist may be useful to countries in stakeholder discussions and planning. Over time, it can also help countries to evaluate whether the implementation of IWRM can help to reduce the challenge level relating to different water resources issues. The information will also help to develop regional and global oversight of key water resources challenges, and track progress of how challenge levels may change over time.

Note that 'challenge level' in this case refers to the level of difficulty associated with addressing each issue. For example, if effective and financed systems are in place for providing water for domestic use, then this may be assigned a 'low' challenge level, even though this issue would likely be classified as high priority / importance in most countries. 'Low', 'Medium' and 'High' are intentionally broad and intuitive categories.

Water resource challenges	Level of difficulty associated with addressing the challenge				Comments (optional):
	Low	Medium	High	Not relevant	
Water uses					
Water for agriculture	☐	☐	☒	☐	
Water for domestic use	☒	☐	☐	☐	
Water for industry	☒	☐	☐	☐	
Water for energy	☐	☒	☐	☐	
Water for ecosystems/environment	☐	☒	☐	☐	
Water for growing cities	☒	☐	☐	☐	
Threats to the resource					
Water scarcity / over-abstraction (surface)	☒	☐	☐	☐	
Water scarcity / over-abstraction (groundwater)	☒	☐	☐	☐	
Water quality / pollution (surface)	☐	☒	☐	☐	
Water quality / pollution (groundwater)	☐	☐	☒	☐	
Water-related ecosystem degradation	☐	☒	☐	☐	
Water-related ecosystem loss	☒	☐	☐	☐	
Threats to people and economic activity					
Floods	☐	☒	☐	☐	
Droughts	☒	☐	☐	☐	
Coastal vulnerability	☐	☒	☐	☐	
Conflicts over water resources	☒	☐	☐	☐	

Annex E: 6.5.1 country reporting process form

A common query received after the baseline data collection period was on the reporting process and which stakeholders were involved in reporting.

To improve transparency and increase confidence in results, you are invited to provide a brief overview of the reporting process. e.g. main actors involved; meetings/workshops held; other means of gathering inputs from stakeholders; and finalisation/approval processes. Also note the main challenges/strengths of the process. Use as much space as needed.

Focal Point affiliation	Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
Brief process overview: Consultation between national ministry and national environmental authority. The latter also having information on IWRM practices of local Governments. Local authorities were not involved in the consultation process in order to alleviate the already heavy reporting burden of local authorities.	

Stakeholder groups	Level of engagement (mark with 'X')			Additional information (e.g. which stakeholder organisations were involved)
	Low (given opportunity to contribute)	Medium (some input)	High (discussion/ negotiation)	
National water agencies				
Other public sector agencies				
Sub-national water agencies				
Basin/Aquifer agencies				
Water User Associations				
Civil society				
Private sector				
Vulnerable groups				
Gender expertise				
Research/academia				
Transboundary expertise				
Other SDG focal points				*(e.g. FPs from other indicators)*
Please add rows if required				