

Introduction to SDG Indicator 6.3.2 2020 data drive



Report once, use often

Harmonizing European reporting on SDG Indicator 6.3.2 through re-using WISE water quality monitoring data



Part I

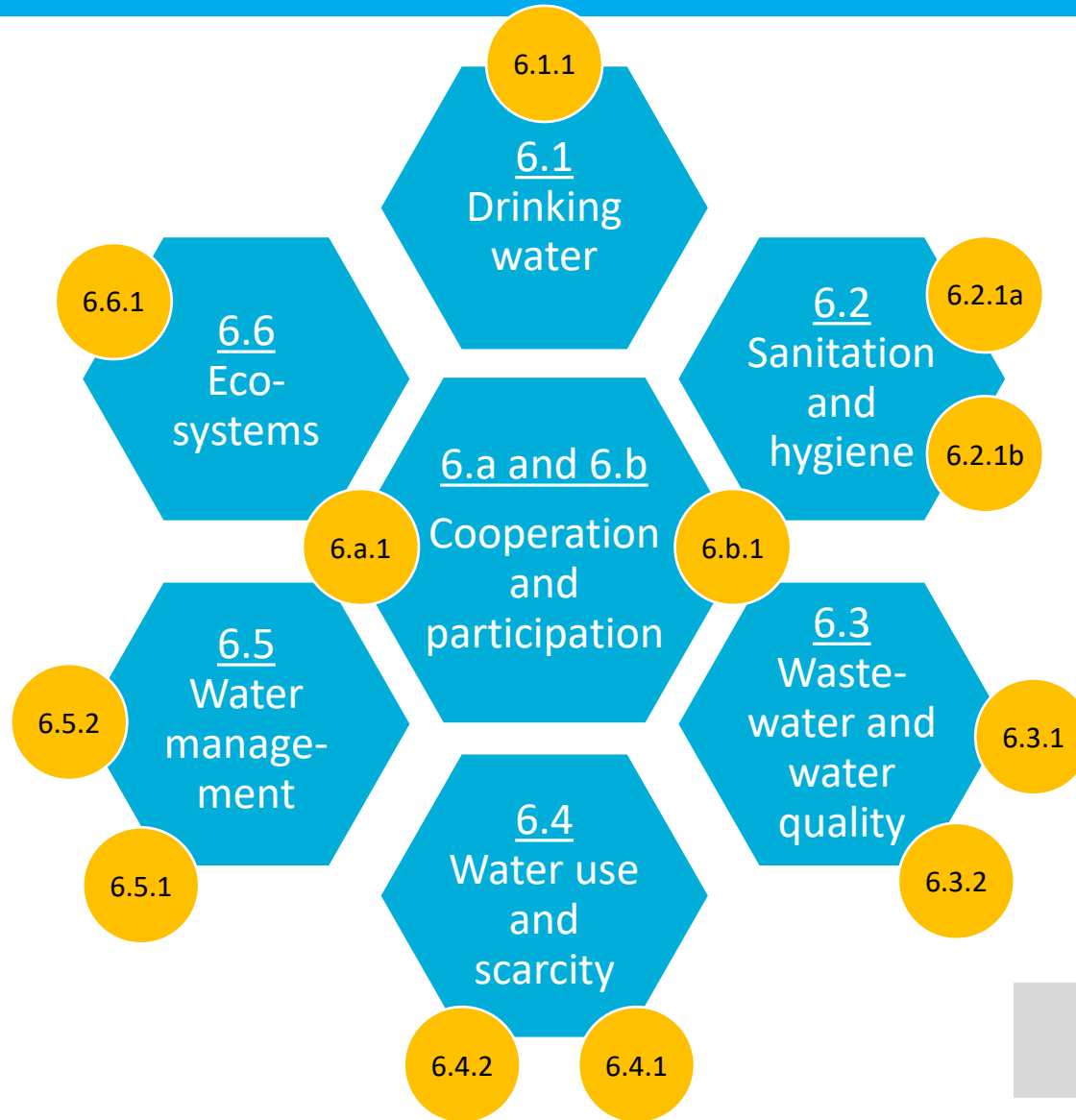
1. Integrated Monitoring and Reporting of SDG 6
2. Introduction to SDG Indicator 6.3.2
3. Reporting process and governance

Part II

1. EEA Waterbase water quality data availability
2. EEA simple statistical indicator
3. Next steps



SDG 6 global indicators



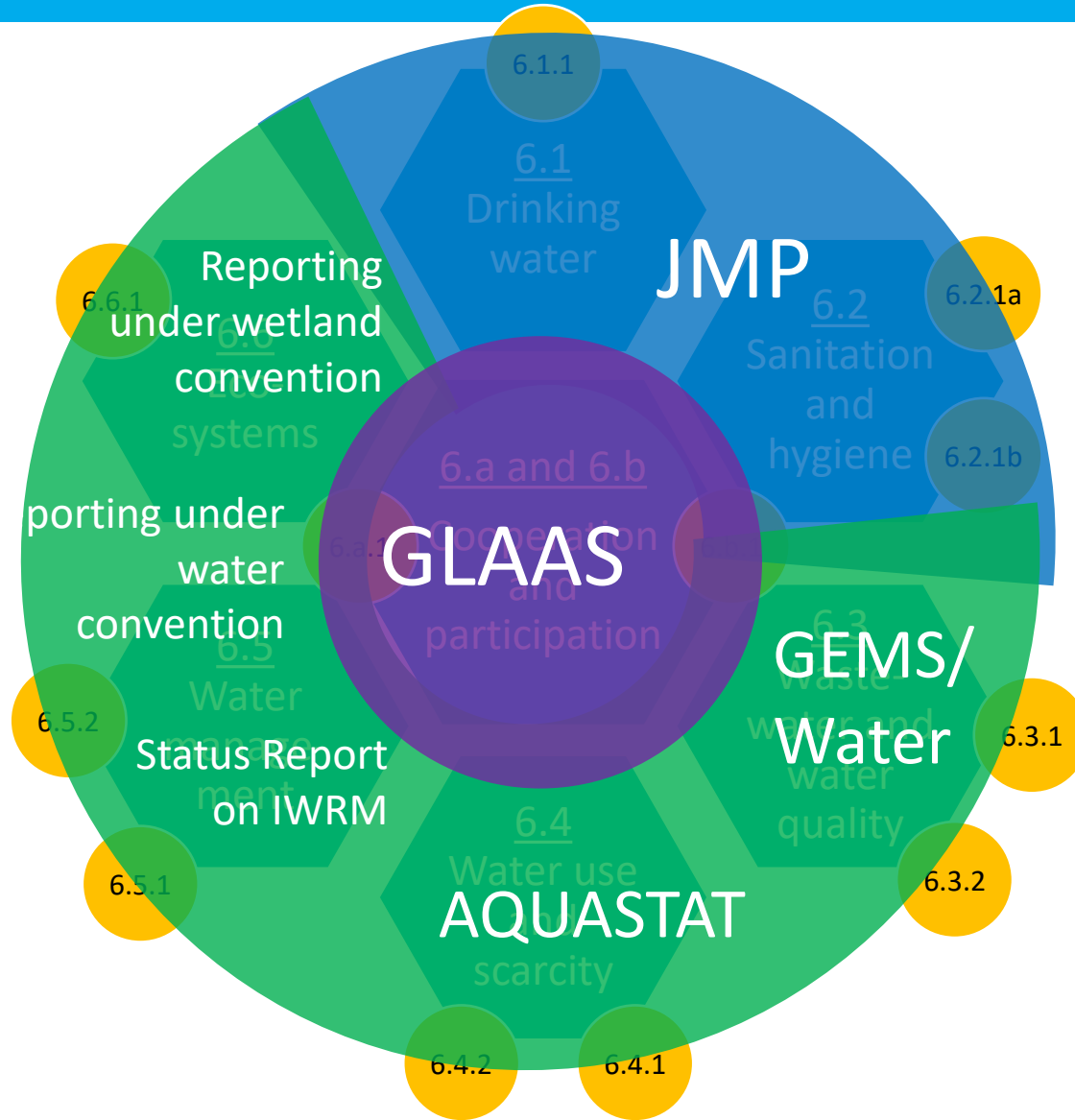
* Tier 1
** Tier 2

6.1.1	Safely managed drinking water services (WHO, UNICEF)**
6.2.1	Safely managed sanitation services and hygiene (WHO, UNICEF)**
6.3.1	Wastewater safely treated (WHO, UN-Habitat, UNSD)**
6.3.2	Good ambient water quality (UNEP)**
6.4.1	Water use efficiency (FAO)*
6.4.2	Level of water stress (FAO)*
6.5.1	Integrated water resources management (UNEP)*
6.5.2	Transboundary basin area with water cooperation (UNECE, UNESCO)*
6.6.1	Water-related ecosystems (UNEP, Ramsar)*
6.a.1	Water- and sanitation-related official development assistance (WHO, OECD)*
6.b.1	Participation of local communities in water and sanitation management (WHO, OECD)*





UN-Water Integrated Monitoring Initiative for SDG 6



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6 CLEAN WATER AND SANITATION

Goal: Acceleration of the achievement of SDG 6 on water and sanitation through evidence based policies, regulations, planning and investments

Purpose: By 2030, increased availability and holistic analysis of high quality data contributes to better informed water and sanitation policy, regulation, planning and investment at all levels

Phases:

1. Global baseline
2015-2018

2. Build national ownership
2019-2022

3. Integrate and mainstream
2023-2026

4. Consolidate and sustain
2027-2030

1. Countries collect, analyse and report SDG 6 data

- Maintain **monitoring framework** for SDG 6 global indicators
- **Technical support to countries** to collect, analyse, report and use water and sanitation data
- Compile country data and **report on global progress** towards SDG 6

2. Policy- and decision-makers at all levels use SDG 6 data

- **Institutional support to countries** on cross-cutting issues and integration
- **Inform policy- and decision-makers** on SDG 6 status and interlinkages
- **Coordinate** global monitoring and reporting





Phase 1

- **Methodologies** developed, tested, and revised
- All SDG 6 global indicators **Tier I or Tier II**
- Development of a range of **tools and capacity building mechanisms**
- Built **awareness** in at least 95 countries on SDG 6 monitoring, initiated process of identifying overall and indicator technical focal points
- Promoted **institutional processes for integrated monitoring** at the national level in 30 countries
- **Global data** collected for all indicators

Phase 1 (2015-2018)

2015

Methodology development

2016

Methodology pilot testing, expert review and revision

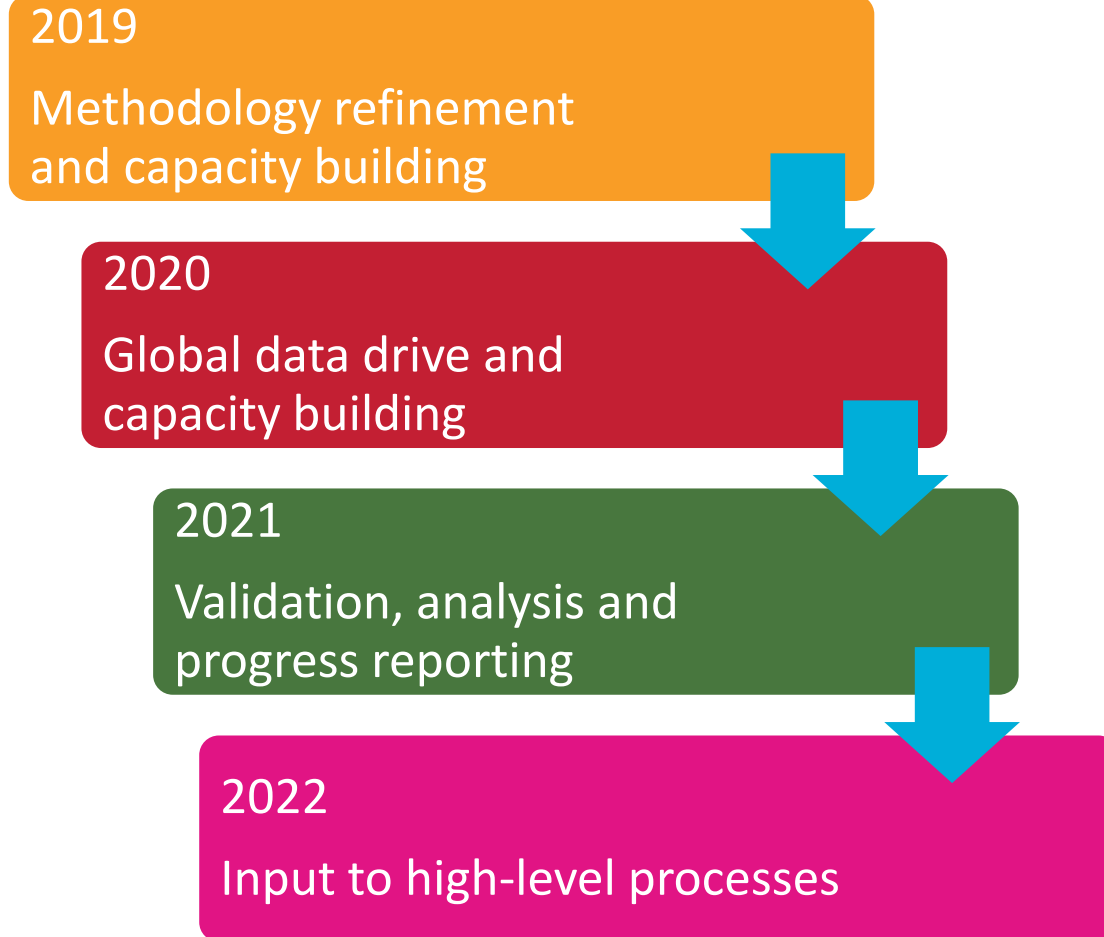
2017

Global implementation, integrated baseline process

2018

Baseline reporting, SDG 6 synthesis reporting

Phase 2 (2019-2022)

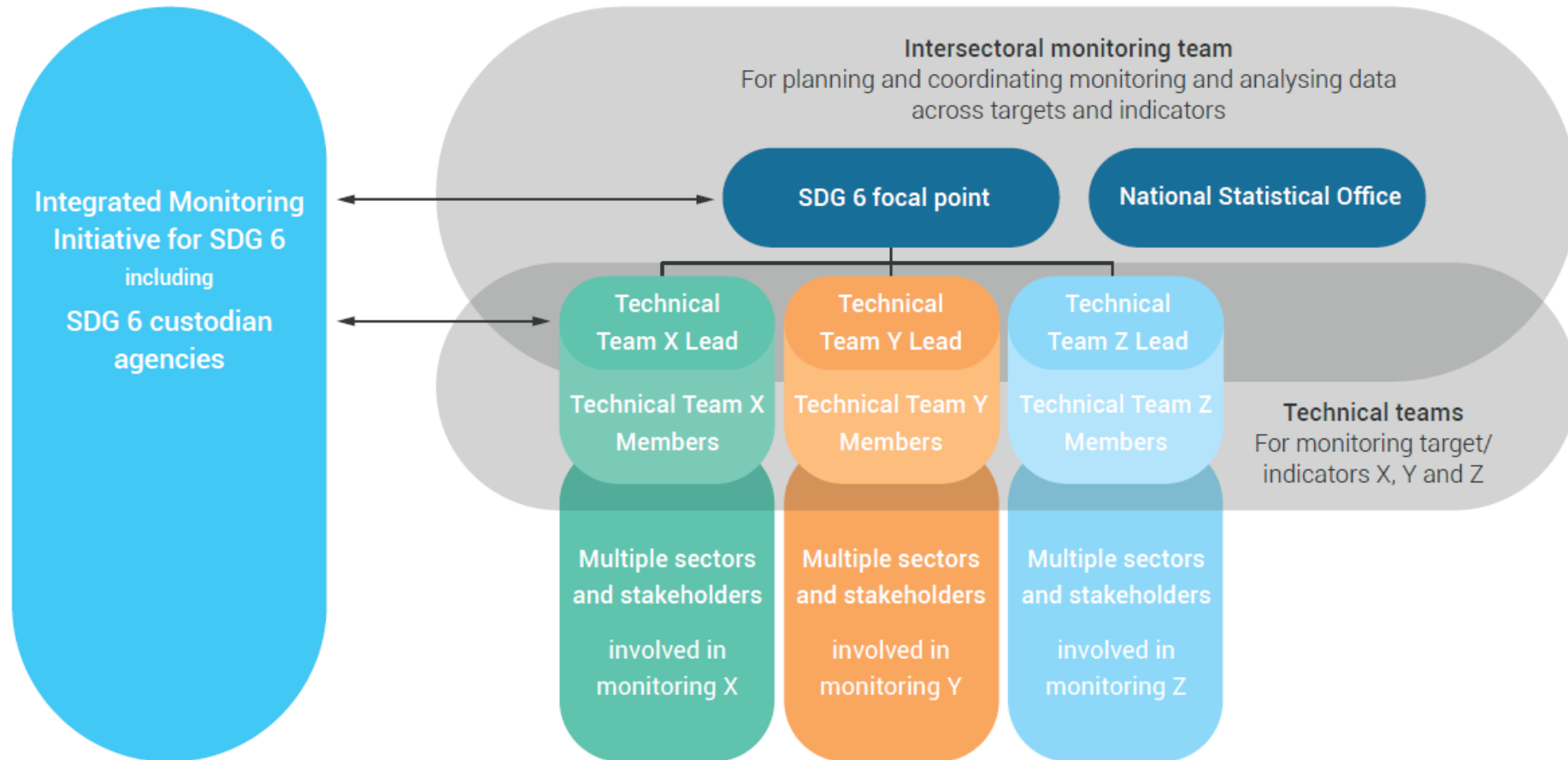


Key external events

- Data requests from UNSD
 - Every year
- High-level Political Forum (HLPF)
 - Every year
 - Next in-depth review of SDG 6?
- One-day high-level meeting of the President of the General Assembly
 - New York in 2021
- Preparatory process Midterm Comprehensive Review of International Decade for Action (2018-2028)
 - Regional and global meetings, 2022
- United Nations Conference on the Midterm Comprehensive Review of International Decade for Action
 - New York, World Water Day 2023



Outreach model





2020 data drive

- Send data requests to countries
- Provide support and capacity development to countries
- Receive data from countries
- Ongoing verification/validation of data together with countries
- Prepare for publication of data, including data submission UNSD, progress reporting, indicator-specific and SDG 6 data portal updates





Introduction to SDG Indicator 6.3.2



Target 6.3 and Indicator 6.3.2

By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

- Indicator 6.3.1 - Proportion of wastewater safely treated
- **Indicator 6.3.2 - Proportion of bodies of water with good ambient water quality**





Indicator 6.3.2 supports water management at national level

No information, or inaccurate information, could lead to incorrect management actions, such as:

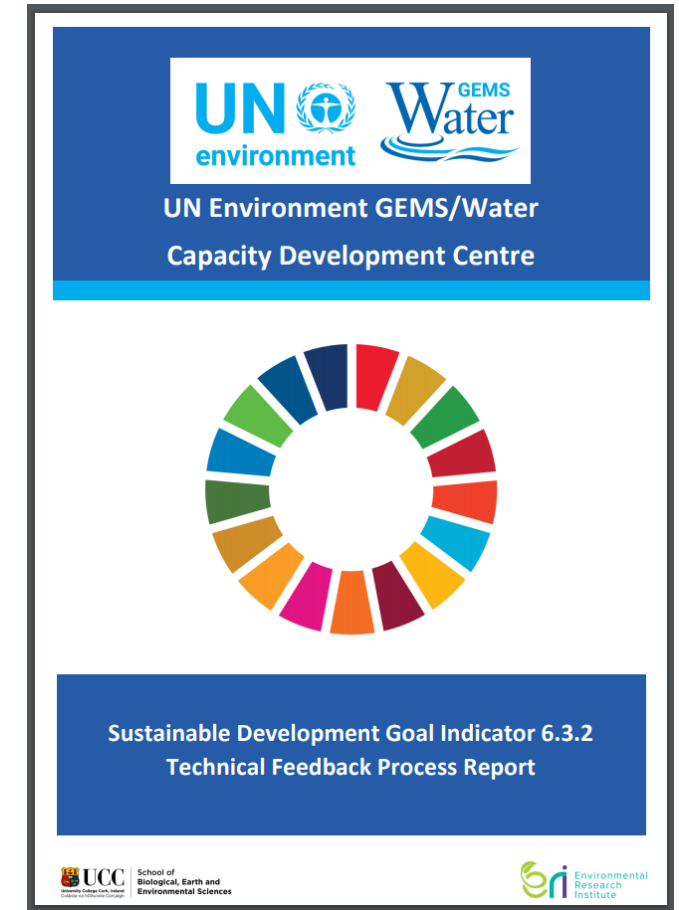
- Lack of appropriate controls on discharges to waterbodies
- Inadequate treatment to waters used for drinking water supplies
- Delayed or inadequate conservation or remediation of waterbodies and wetlands



The first global drive took place in 2017.

In 2018 we undertook a review and sought feedback in order to:

- maximise global participation,
- enhance the national relevance of indicator 6.3.2, and to
- ensure that submissions are globally comparable.



https://www.unwater.org/app/uploads/2018/12/SDG6_Indicator_Report_632_Progress-on-Ambient-Water-Quality_ENGLISH_2018-1.pdf

https://www.ucc.ie/en/media/research/watercapacitydevelopmentcentre/CDC_SDGTechnicalFeedbackProcessReport_20191008.pdf



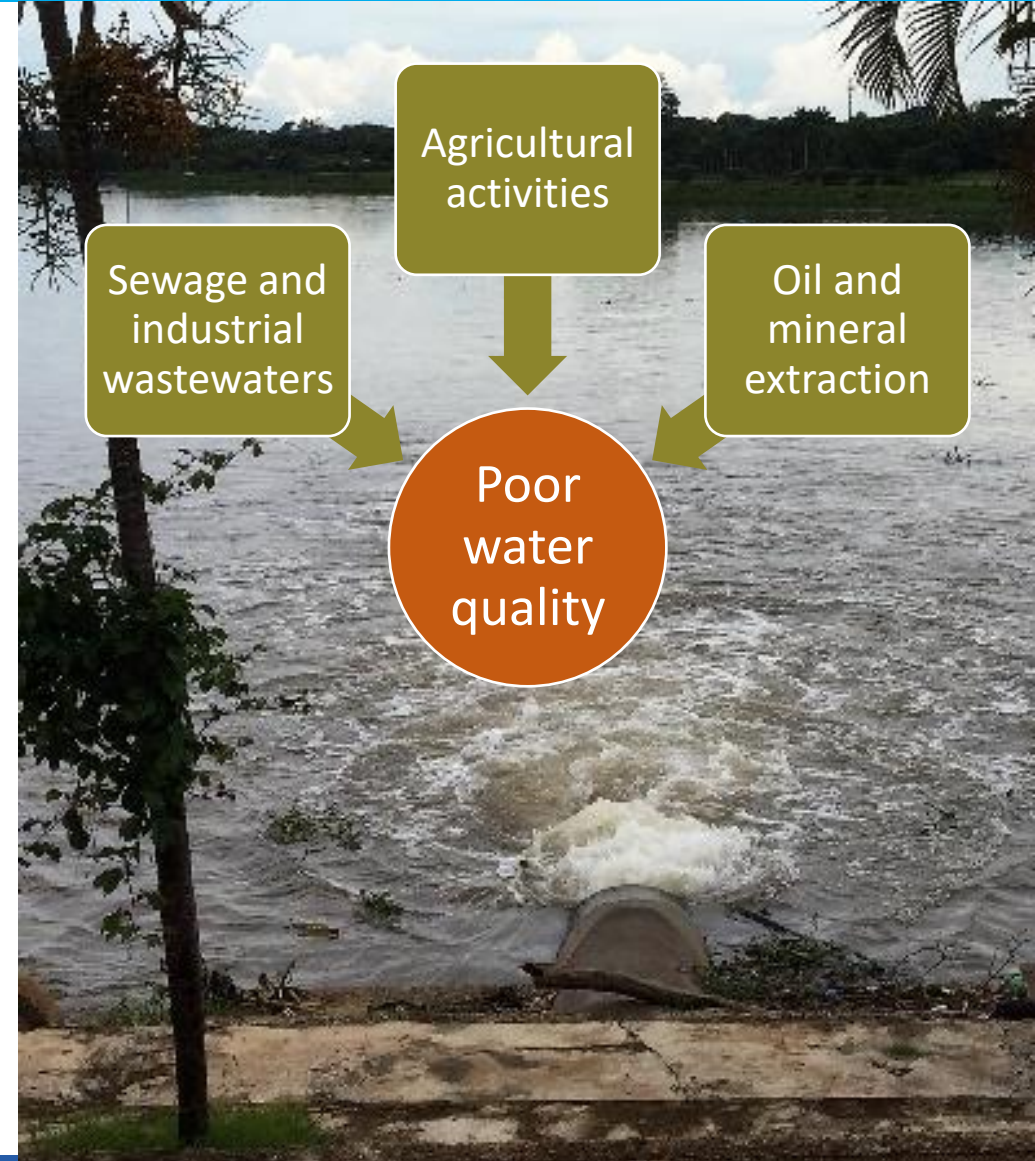
Rationale for the indicator

Good ambient water quality does not damage ecosystem function or present a risk to human health

Supports a balanced ecosystem including fisheries

Requires minimum treatment before domestic, agricultural or industrial use

Safe for recreation, such as water contact activities

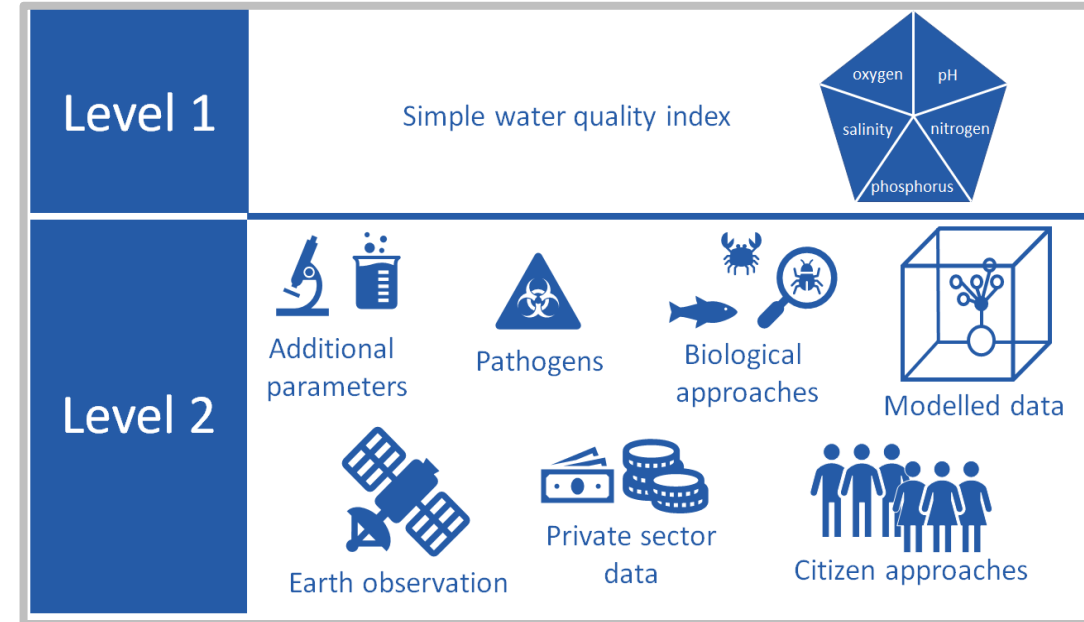




Levels of reporting

SDG indicator 6.3.2 provides information on the quality of freshwaters, and how they change over time.

- The core components of the methodology reflect pressures that are relevant regardless of geography or a country's development status (level 1 reporting).
- The methodology goes further and provides flexibility to allow nationally relevant water quality issues to be reported based on a country's capacity to do so (level 2 reporting).

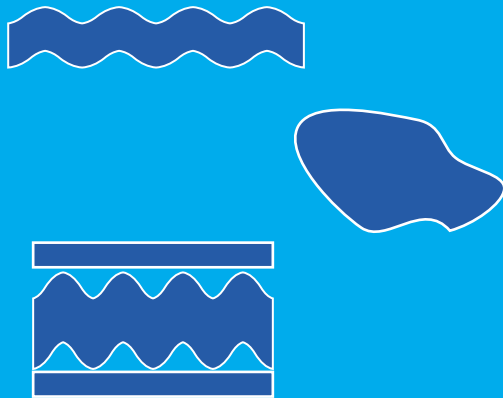




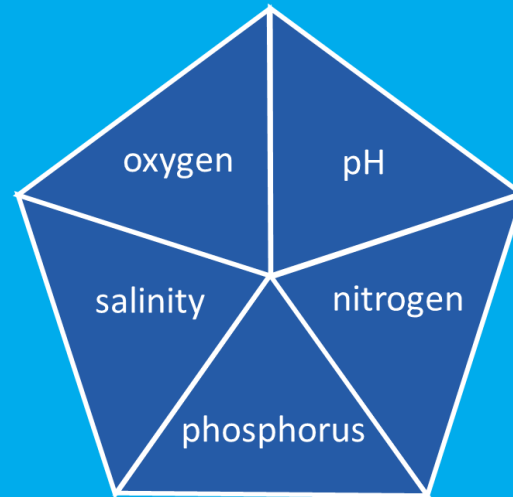
Proportion of bodies of water with good ambient water quality

Waterbodies need to be defined within the country:

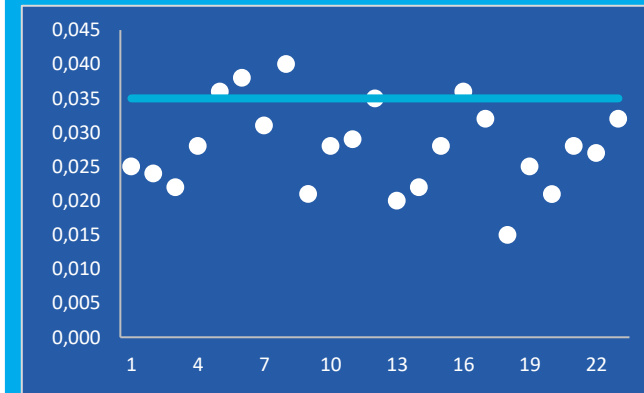
rivers,
lakes, and
groundwaters



Water quality is classified by comparing measurements with **target values** for specific **parameters** from specific **parameter groups**



Good water quality represents at least **80%** compliance of measurements with target values for all included parameters over a three-year time period before the assessment (e.g. 2016-2018)

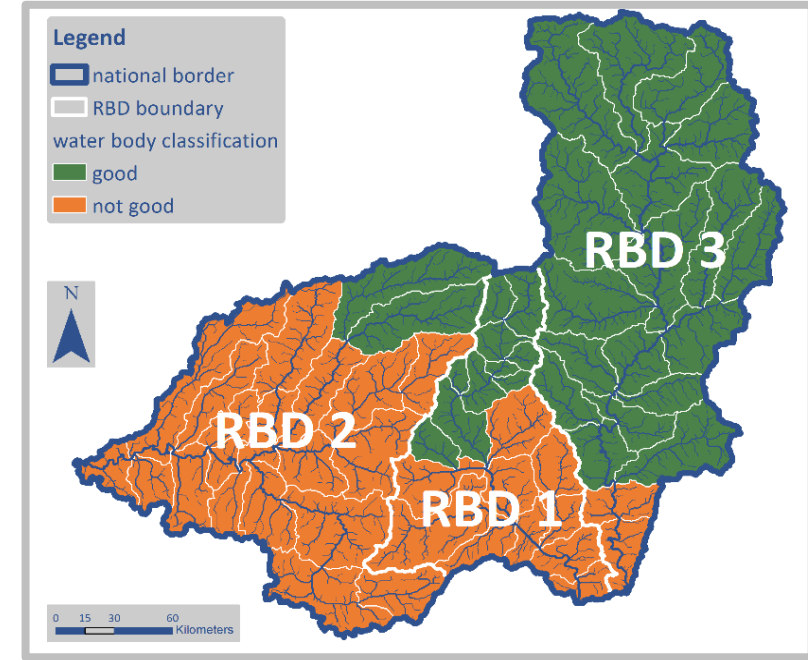




Water bodies and Reporting Basin Districts

Indicator 6.3.2 is based on similar spatial concepts as the Water Framework Directive

- Water quality is assessed at the level of inland surface and groundwater bodies, grouped into reporting (river) basin districts (RBD).
- Coastal water bodies are not included.
- There is only a broad categorization into rivers, lakes and groundwater bodies (no detailed typology as in the WFD).
- It is recommended to re-use existing delineations of water bodies and reporting basin districts from the WFD for SDG 6.3.2 reporting.



Surface water bodies: Water body category						
Measure	River	Lake	Transitional	Coastal	Territorial	Total
Number	total	total	total	total	total	total
% (col)	% (col)	% (col)	% (col)	% (col)	% (col)	% (col)
All	111 958	25 403	977	5 228	46	139 612
EU	100 000	22 400	900	4 800	40	128 140
EU27	90 000	20 000	800	4 500	35	115 300
EU28	100 000	22 400	900	4 800	40	128 140
EU29	100 000	22 400	900	4 800	40	128 140
EU30	100 000	22 400	900	4 800	40	128 140
EU31	100 000	22 400	900	4 800	40	128 140
EU32	100 000	22 400	900	4 800	40	128 140
EU33	100 000	22 400	900	4 800	40	128 140
EU34	100 000	22 400	900	4 800	40	128 140
EU35	100 000	22 400	900	4 800	40	128 140
EU36	100 000	22 400	900	4 800	40	128 140
EU37	100 000	22 400	900	4 800	40	128 140
EU38	100 000	22 400	900	4 800	40	128 140
EU39	100 000	22 400	900	4 800	40	128 140
EU40	100 000	22 400	900	4 800	40	128 140
EU41	100 000	22 400	900	4 800	40	128 140
EU42	100 000	22 400	900	4 800	40	128 140
EU43	100 000	22 400	900	4 800	40	128 140
EU44	100 000	22 400	900	4 800	40	128 140
EU45	100 000	22 400	900	4 800	40	128 140
EU46	100 000	22 400	900	4 800	40	128 140
EU47	100 000	22 400	900	4 800	40	128 140
EU48	100 000	22 400	900	4 800	40	128 140
EU49	100 000	22 400	900	4 800	40	128 140
EU50	100 000	22 400	900	4 800	40	128 140
EU51	100 000	22 400	900	4 800	40	128 140
EU52	100 000	22 400	900	4 800	40	128 140
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EU70	100 000	22 400	900	4 800	40	128 140
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EU96	100 000	22 400	900	4 800	40	128 140
EU97	100 000	22 400	900	4 800	40	128 140
EU98	100 000	22 400	900	4 800	40	128 140
EU99	100 000	22 400	900	4 800	40	128 140
EU100	100 000	22 400	900	4 800	40	128 140



Water quality core parameters

- Level 1 reporting maintains the global comparability of the indicator by using simple to measure characteristics of water quality that represent pressures that are relevant everywhere.
- These pressures are: nutrient enrichment, oxygen depletion, salinization and acidification.
- The core parameter groups match the general physico-chemical QEs for ecological classification of surface waters in the WFD (Annex V).
- Most countries in Europe regularly monitor these core parameters and report annually to the EEA WISE (WISE-4/6).

Parameter group	Parameter	River	Lake	Ground-water
Oxygen	Dissolved oxygen	•	•	
	Biological oxygen demand, Chemical oxygen demand	•		
Salinity	Electrical conductivity Salinity, Total dissolved solids	•	•	•
Nitrogen*	Total oxidised nitrogen Total nitrogen, Nitrite, Ammoniacal nitrogen	•	•	
	Nitrate**			•
Phosphorus*	Orthophosphate Total phosphorus	•	•	
Acidification	pH	•	•	•

* Countries should include the fractions of N and P which are most relevant in the national context

** Nitrate is suggested for groundwater due to associated human health risks



Water quality targets

- Target values are specific to each water quality parameter and represent concentrations that aim to preserve these ecosystems or to return them to their natural or near natural condition. The targets must also ensure that human health is not directly threatened by consumption or use of the water.
- Target values may be water quality standards that are defined by national legislation or they may be less binding and derived from information on the natural or reference condition of a water body. Establishing a harmonised approach and applying a common strategy to setting targets helps to ensure the global comparability of the indicator.

	National level	RBD level	Typology level	Water body level	Monitoring station level
Rivers					
Lakes					
Groundwaters					



WFD surface water targets (EQS) reported during the 2nd RBMPs

- The WFD reporting guidance for the 2nd River Basin Management Plans (RBMPs) requires the Member States to report their targets (standards) for all the physico-chemical parameters (quality elements) supporting ecological status (WFD Annex V).
- The targets (standards) for the general physico-chemical parameters (quality elements) describe the boundary between good and moderate status. They are often type-specific and should support good ecological status for the relevant biological parameters (quality elements) for the same types of water bodies.
- The ranges of targets (standards) reported by the Member States were found to span several orders of magnitude for several parameters (determinants), and comparability is difficult due to the use of different units or statistical types of targets (standards) for the same parameter (determinant), as well as various other issues, such as the typology used for the physico-chemical parameters (quality elements).

Source: Summary note on standards for physico-chemical quality elements reported by Member States with their 2nd RBMPs



Indicator calculation and reporting (level 1)

The indicator is calculated stepwise:

- **Water body:** The measurements of all monitoring sites are compared to the defined target values. If 80% of the measurements in the (three-year) assessment period comply with the targets, the water body is classified as having good quality.
- **RBD score:** The ratio of all water bodies classified as having good quality to the total number of classified water bodies in a RBD.
- **National score:** The ratio of all water bodies classified as having good quality to the total number of classified water bodies in the country.

Score Level	Count	Aggregation of Indicator Score			Notes
National Indicator score	1	50 %			The national score is calculated from the RBD scores (this can be separated by water body type)
RBD Scores	3	RBD 1 50 %	RBD 2 10 %	RBD 3 90 %	Each RBD score is calculated from the water body scores
Water body scores	60				Each water body is classified as good if 80 per cent or more monitoring stations within it are classified as good
Monitoring station scores	240				Each water body has four monitoring stations , and each station classified as good or not
Monitoring event scores	960				Data for the core parameters for four monitoring events are collected at each monitoring station

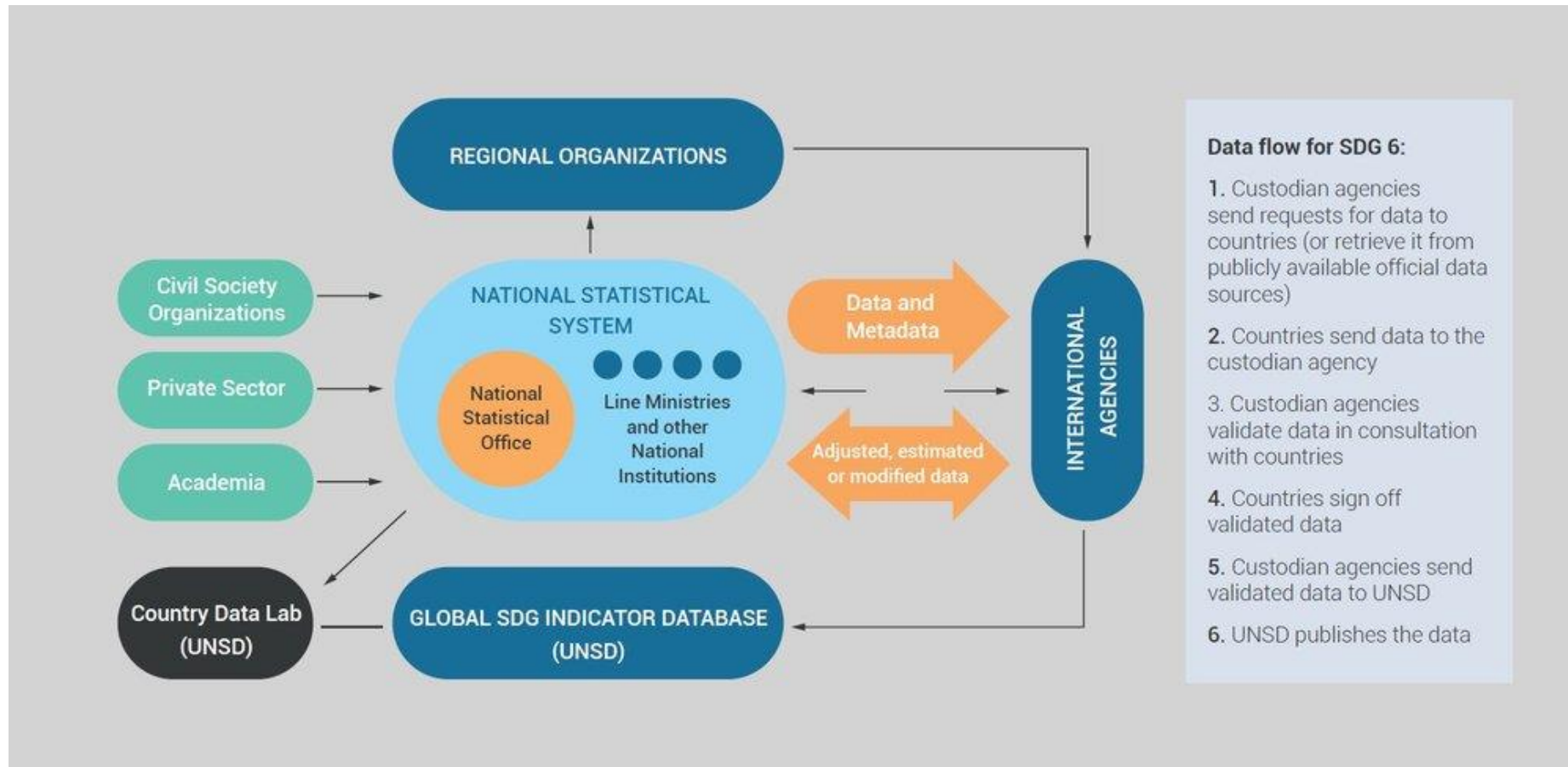
The results at RBD and national level together with metadata about the number of monitoring sites, measurements, parameters and targets is reported to UNEP



Reporting process and governance



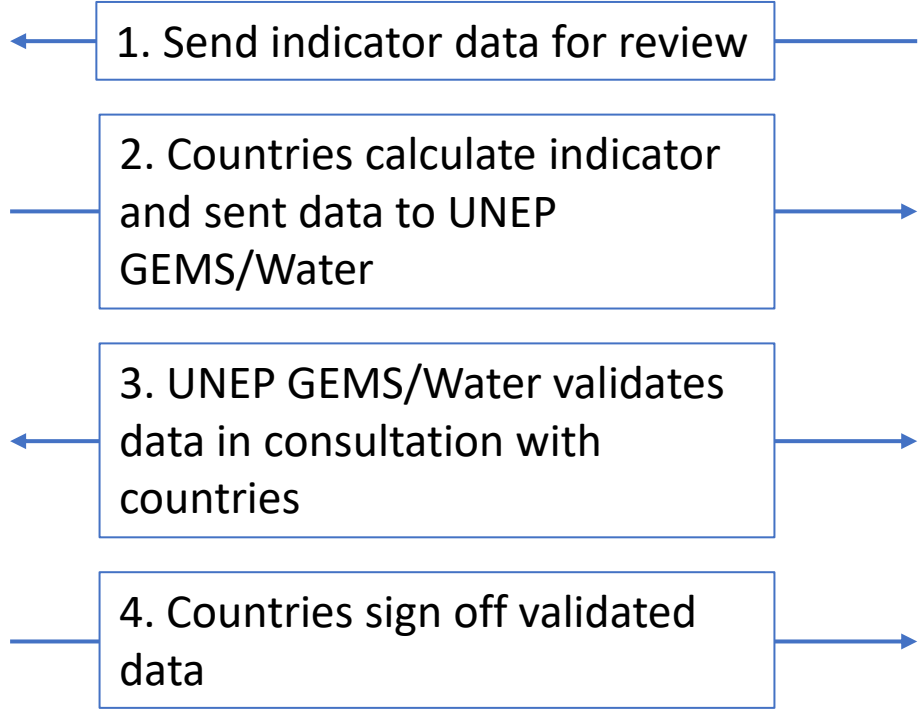
SDG 6 reporting process



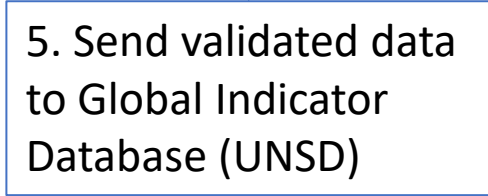
Data is requested through an Excel spreadsheet requiring data about:

- Reporting basin district information (name, size, transboundary)
- Applied water quality parameters and water quality targets (aggregated at RBD level)
- Proportion of water bodies having good quality, by water body category and total; reported both at RBD and national levels
- Number of monitoring stations and data values, by water body category and total; reported both at RBD and national levels

Reporting process and governance



Traditional approach: Countries report available national data directly



Reporting process and governance

Alternative options re-using EEA Waterbase data for indicator reporting

