2025

Align to Accelerate Discussion Paper

Towards a set of core indicators and common monitoring and review framework

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Introduction

In 2021 WHO and UNICEF warned that, "Billions of people will lack access to safe water, sanitation and hygiene in 2030 unless progress quadruples".[1] Two years later, these estimates now show that a six-fold increase in current global rates of progress on drinking-water, a five-fold increase for sanitation, and a three-fold increase for hygiene will be required to achieve universal coverage by 2030.[2] While these dramatic figures often grab the headlines, understanding '*why*' and identifying the solutions and actions required to actually accelerate the pace of progress lie in the performance and strength of the systems and the *means of implementation*[3] that deliver and sustain them.

To do this effectively, a systemic change in approach is needed for WASH. The move away from "project-based" approaches and service delivery towards country-led strengthening of national and local WASH systems has been identified as a necessary change for several years in the sector. This evolution of the WASH sector, from an emphasis on construction of infrastructure and ad hoc behaviour change engagement alone towards a recognition that the ultimate goal is delivery of safely managed WASH services that are sustained over time, is resulting in convergence in the sector towards a WASH systems strengthening approach. Responding to current and future global challenges – from climate change, fragility and conflict to competition for scarce resources – require different thinking and action.

At present, the various efforts to describe the components of WASH systems have not yet converged on a common understanding or approach. There is currently a co-existence of various similar, but different, conceptual frameworks and definitions, sometimes being implemented in parallel in the same countries by partners. As a result, in concrete terms, countries and partners are currently using a variety of monitoring methods and indicators to measure the strength and performance of the WASH system. At country-level, this is resulting in fragmentation and duplication in data collection, review and reporting processes. At global and regional levels, there are challenges in comparing results across countries and tracking trends, as well as in developing and consolidating evidence. A strong "common" monitoring and review framework can support a broader sector-wide shift towards a WASH systems strengthening approach.

Background. WHO, UNICEF, in collaboration with the World Bank, launched the ***Align to Accelerate initiative*** (A2A) in June 2024. The goal of A2A is to develop a common monitoring and review framework comprised of an agreed set of core indicators that operate together as "vital signs" to measure and track the strength of the WASH system at national level.

The objectives of A2A are:

- to steer a process for development of a slim set of core indicators (e.g., 15-18 max) and a common monitoring and review framework to monitor the strength of WASH systems;
- to pilot in a few selected, but diverse, country settings: data collection, data visualization and data use by national and regional/global actors, based upon a localized approach; and
- to support governments and partners in the establishment of a process for regular national monitoring and review of the strength of WASH systems, e.g. evidence-based joint sector review-type process, based on a set of national indicators that will include the core indicators.

The A2A initiative is being implemented through a four-phased approach: (1) preparatory phase including consultations, A2A background and discussion papers (June 2024 to March 2025); (2) consultations and

[1] WHO and UNICEF (2021). Billions of people will lack access to safe water, sanitation and hygiene in 2030 unless progress quadruples – warn WHO, UNICEF. Available at: https://www.who.int/news/item/01-07-2021-billions-of-people-will-lack-access-to-safe-water-sanitation-and-hygiene-in-2030-unless-progress-quadruples-warn-who-unicef

[2] Progress on household drinking water, sanitation and hygiene 2000–2022: special focus on gender. New York: United Nations Children's Fund (UNICEF) and World Health Organization (WHO), 2023.

[3] UN General Assembly, Transforming our world : the 2030 Agenda for Sustainable Development, A/RES/70/1, 21 October 2015. The notion of 'Means of implementation' describes the interdependent mix of financial resources, technology development and transfer, capacity building, inclusive and equitable globalization and trade, regional integration, as well as the creation of a national enabling environment required to implement the new sustainable development agenda, particularly in developing countries. TST Issues Brief: Means of Implementation; Global Partnership for achieving sustainable development, 2014.

development of core indicators (March to October 2025); (3) pilot testing to finalize core indicators and develop common monitoring and review framework (mid 2025-mid 2026); and (4) upscaling led by countries with aligned support from development partners (mid-2026 onwards). Country engagement with countries on core indicators is a priority and will take place continuously throughout the initiative.

Table 1. A2A workplan and indicative timeline

A2A workplan	2024		2025				2026		Onwards
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Phase 1. Preparatory Phase									
Phase 2. Selection of core indicators									
Phase 3. Pilot testing of core indicators									
Phase 4. Upscaling use of core indicators									
Country engagement on core indicators									

As part of preparatory work in Phase 1, WHO and UNICEF have prepared this *Discussion Paper* to engage and consult WASH stakeholders on the A2A technical approach. A companion *A2A Background Paper* has also been prepared which presents the in-depth assessments, analysis and reviews that informed the proposals presented in this paper.

Objective and scope

The *A2A Discussion Paper* proposes a technical approach for the selection of a slim set of core indicators (Phase 2). Additionally, to assist the busy reader, a summary of the key findings and inputs from the A2A Background paper is provided to set the scene.

Three specific proposals are provided for review and discussion:

- **Proposal 1. Indicator domain families.** Eight groupings of WASH system-related topics and two priority cross-cutting areas are proposed as the basis for the selection of the core indicators.
- **Proposal 2. Core indicator selection criteria.** Ten criteria are proposed to evaluate and rank potential candidate core indicators.
- **Proposal 3. Process to select and prioritize A2A core indicators.** A multi-step process is proposed to engage and consult a diverse set of stakeholders and subject matter experts to nominate, select and prioritize the set of core indicators.

The paper is designed to be concise and direct in presenting the key elements for feedback and inputs from the WASH community. The details of the reviews, assessments and analyses that inform these technical proposals are available in the *A2A Background Paper*. References will be made throughout this *Discussion Paper* to point readers to the relevant chapters and annexes in the *A2A Background Paper* where further information can be found. A list of A2A terminology with proposed definitions is available in Annex A.

Phase 2 of the A2A initiative will focus on the selection of the set of core indicators. Once the draft set of core indicators is agreed, a common monitoring and review framework will be built to support the operationalisation and use of the set of core indicators in national WASH monitoring and review processes. It will be developed based on the set of core indicators and experience and learning from the pilots (Phases 2 and 3).

Audience. The main audience for this *Discussion Paper* are A2A partners: governments, international development partners (donors, NGOs, UN entities, IFIs), academia and research institutions, as well as intergovernmental organisations, and entities tasked with global and regional monitoring and benchmarking.

Terms and definitions. Establishing a common set of terms and their definitions is an important initial step towards the development of a core set of indicators and common monitoring and review framework. A list of terms and definitions are included in Annex A. This list includes both standard definitions for the same or similar terms in other processes and some proposed formulations for A2A-specific definitions. This list of terminology and definitions is further developed and explain in the *A2A Background Paper* section 5.1.

Scope. In terms of scope, water, sanitation and hygiene - as defined under the internationally agreed Sustainable Development Goals (SDG) indicator framework of the United Nations 2030 Agenda for Sustainable Development:[4]

- Indicator 6.1.1 Safely managed drinking-water services
- Indicator 6.2.1 (a) Safely managed sanitation services and (b) hygiene (a hand-washing facility with soap and water)
- Indicator 6.3.1 Proportion of domestic and industrial wastewater flows safely treated (A2A's focus is on the domestic wastewater flows)
- WASH-related components of other SDG 6 targets and indicators to bridge the silos between WASH, water resources management and freshwater eco-systems: ambient water quality monitored by SDG indicator 6.3.2, SDG targets 6.4 water efficiency and stress, 6.5 water resources management, including transboundary, 6.6 freshwater eco-systems, and the two SDG 6 means of implementation targets 6.a international cooperation (official development assistance) and 6.b participation and their respective indicators.

The goal of A2A is to develop a globally agreed set of 15 – 18 core indicators to monitor the strength of WASH systems that can be integrated into national monitoring systems. **National monitoring systems** are considered to be the nationally mandated system for the production of data, indicators and reports to periodically measure, monitor, and track the progress of implementation of national WASH policies, plans, and/or strategies. Thus, the scope of potential core indicators is defined by their suitability for uptake within national WASH monitoring systems.

In addition to supporting and strengthening national monitoring systems, a core set of WASH systems indicators agreed with national, regional and global partners would help over time to reduce the burden of reporting on countries.

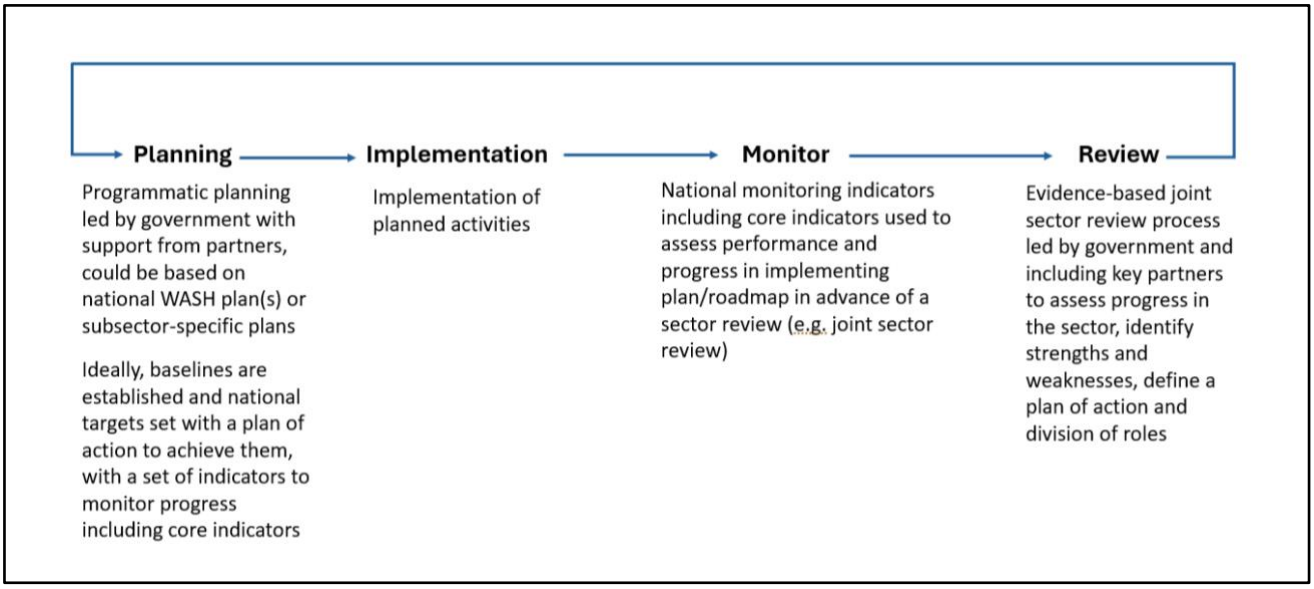


Figure 1. National-level monitoring of the WASH system

[4] United Nations (2017). SDG Indicators. Global Indicator Framework for the Sustainable Development Goals and Targets of the 2030 Agenda for Sustainable Development. Available at: https://unstats.un.org/sdgs/indicators/indicators-list/

Box 1. Why is this important now? The opportunity.

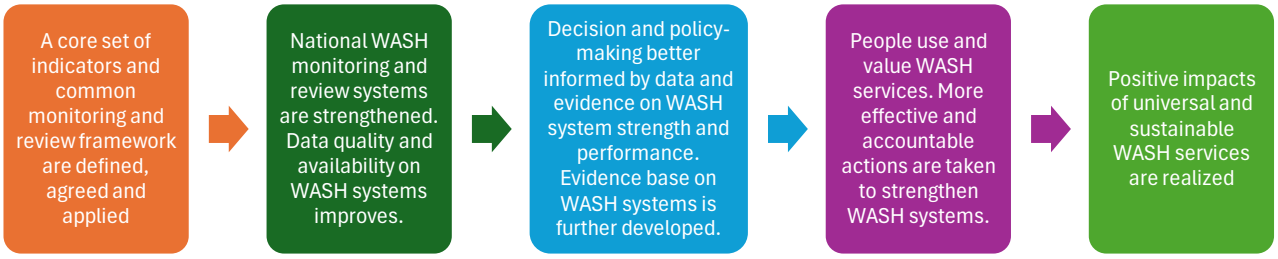
With only five years remaining until 2030, and still significant gaps to close, it's clear that a step change is needed to fulfil the promise of water and sanitation for all. Now is a crucial time for key WASH stakeholders to consolidate evidence and learning and test new monitoring methods that can be used to inform the approach for water and sanitation in the post-2030 sustainable development agenda.

While there are still gaps in evidence, monitoring of WASH systems has been taking place for nearly 10 years. There is a sufficient body of experience and global expert opinion that can start to shape a common approach. There is a huge opportunity to capitalize on current momentum and broad base of support from country champions and a committed group of international partners (technical and donors) that are ready to act.

The Align to Accelerate initiative aims to add value by:

- **Reducing fragmentation** of country-level systems strengthening and monitoring initiatives by providing a common framework that can be used by countries and stakeholders, partners and donors. A2A will foster better harmonization and coherence among development partners and countries.
- **Providing a focus** on incorporating WASH systems-related indicators into national monitoring systems and review processes. This will allow for consistent tracking of the strength of WASH systems in a country over time and across countries.
- **Facilitating improved collaboration** in data generation, analysis and use, and alignment of support behind country monitoring plans and processes. Over time, A2A will strengthen national monitoring systems and reduce the reporting burden on countries.

Simplified theory of change for the Align to Accelerate initiative:



Setting the scene: Preparatory work for A2A Phase 1

The purpose of this section is to provide a snapshot for the "busy reader" of the information and analysis that informed the design of the "three proposals" presented in this *Discussion Paper*. The companion *A2A Background Paper* provides the full in-depth detail, including the supporting documentation and references for the reviews, assessments and analysis carried out as part of this initial phase.

Phase 1 process. The *A2A Background Paper* builds on the "call for evidence" following the webinar held on 17th June 2024 which received submissions from academic institutions and researchers, UN entities, international NGOs, the World Bank, and other stakeholders and was further complemented with a desk review.[5] Additionally, unstructured interviews were conducted with key informants. Two stakeholder consultations were held during the 2024 UNC Water and Health Conference that took place at the University of North Carolina in Chapel Hill from 14th to 18th October 2024.

While this preparatory work aimed to be comprehensive, it is certainly not exhaustive. As a joint initiative, A2A will continuously draw from the extensive expertise, experience and track progress toward national and international goals documented learning from the participating countries and development partners throughout the initiative. Phase 2 and subsequent phases will be designed to not only tap into the collective resources and capacities of A2A partners but also will be iterative to adapt as new evidence and learning are available.

Assessment of global, regional and country WASH frameworks (Section 2.1). As part of A2A Phase 1, WHO conducted a mapping and assessment of 82 WASH frameworks. The sample was comprised of 72 frameworks used by global and regional entities as part of their WASH-related programmes and projects and 10 frameworks used by countries as part of WASH policies, plans and/or national monitoring systems. The full list of frameworks included in the review is in *A2A Background Paper*, Annex A. The 82 WASH frameworks were superimposed to identify common topics among the frameworks for each link of the WASH system results chain. The complete list of common indicator domains and sub-domains identified across the results chain are provided in *A2A Background Paper* Annex B. The common indicator domains from this assessment of WASH frameworks served as the foundation for the selection of A2A indicator domains (see proposal 1).

Box 2. Findings from the assessment and overlay of WASH frameworks

- **Frameworks include various combinations of sub-sectors within and beyond 'WASH'.** It will be important for the A2A initiative to a) define the sub-sectors that will be included in the selection of the set of core indicators and b) decide how to address sub-sector specificities while maintaining a "slim" subset of core indicators for the WASH system to be considered during Phase 2.
- **Outlier topics merit further consideration as possible gaps in current approaches and/or emerging issues.** It is recommended to consider dedicating an indicator domain to potential frontier issues that could be further explored in phase 2 and developed across future phases of A2A.
- **Common WASH frameworks topics tend to be transversal across multiple parts of the results chain.** It is readily apparent that related topics are present in varying forms at multiple segments of the results chain. For the selection of indicator domains, it is recommended to not to tie indicator domains to one segment in the results chains but rather group related domains (and sub-domains) appearing under different links in the results chain into thematic "indicator domain families".
- **Cross-cutting topics inter-relate with other indicator domain groupings across the results chain.** For the selection of indicator domains, it is recommended to establish "gender, equity, disability, social inclusion, affordability and human rights" and "resilience and risk, including climate change" as two explicit "cross-cutting areas" which will be considered within each "indicator domain family" during the selection of potential candidate indicators.

GLAAS 2024 country survey: National monitoring indicators - preliminary results (Section 2.2). As part of the GLAAS 2024 country survey, a new set of questions (question B2) about national WASH monitoring indicators were added to gather more in-depth information on current monitoring practices by countries. Question B2 asks countries if national monitoring indicators have been defined to monitor progress of implementing the national WASH plan(s)/strategy(ies). For countries that have defined national indicators, they are asked to

[5] The list of WASH frameworks received and assessed are included in the *A2A Background Paper* Annex A.

indicate if national indicators have been defined for 16 indicator domains, and if so, they are requested to share the main indicators from their WASH plans/ strategies. Figure 2, below, presents the preliminary results from the 64 countries that reported having indicators that are "agreed and tracked against established baseline data". For reference, the GLAAS 2024 country survey question B2 is included in *A2A Background Paper* Annex C and countries responses in Annex D.

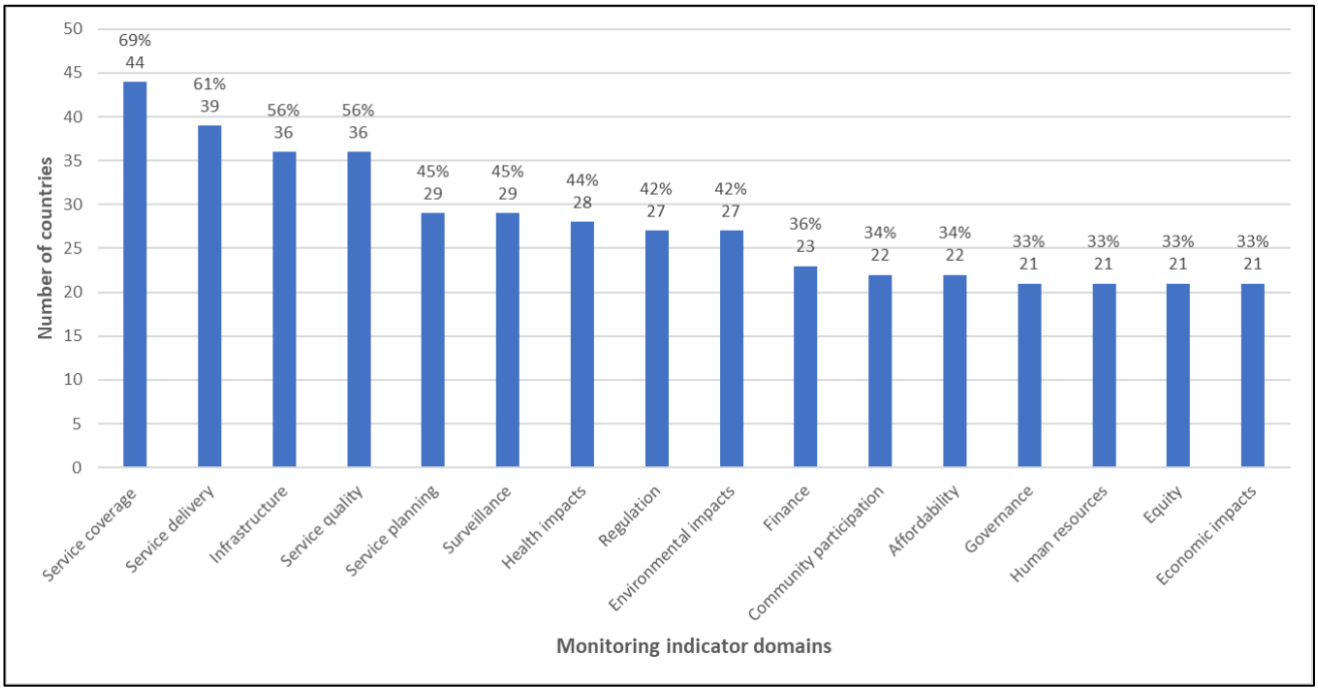


Figure 2. Number of countries that have defined national monitoring indicators to monitor progress of the national WASH plan(s)/ strategy(ies) [*n*=64 countries], where national monitoring indicators are agreed and tracked against baseline data. *Source: GLAAS Country Survey 2024, survey question B2b, preliminary responses received as of 10 January 2025.*

Box 3. Preliminary findings on country responses to the GLAAS 2024 country survey questions on national indicators for national WASH plans/strategies

- **There is already widespread practice by countries of using national monitoring indicators to report on national WASH plans and strategies.** More than three-quarters (77%) of the countries that responded* to the GLAAS 2024 country survey questions on national monitoring indicators, reported that national monitoring indicators have been defined to monitor progress on implementing national WASH plans and/or strategies.
- **The indicators domains currently monitored by the greatest number of countries are infrastructure, service delivery, service quality and service coverage.** These are the areas where countries already have data collection capacities and pipelines to collect, aggregate (as needed) and report data. For areas currently monitored by countries, A2A can assess whether there is an opportunity for greater alignment around a core indicator or whether there is an existing internationally agreed or commonly used indicator that could be directly included as part of the set of core indicators.
- **The indicator domains currently monitored by the least number of countries are governance, finance, human resources, community participation, affordability, equity, and economic impacts**. These are areas where there are potential gaps in current national monitoring indicators.

** As of 10 January 2025, 83 countries responded to GLAAS country survey question B2, 64 countries reported that national monitoring indicators have been defined to monitor progress on implementing national WASH plans and/or strategies.*

Status of evidence and learning on WASH systems approaches (Section 3.1). While there are many on-going programming efforts to strengthen WASH systems, at the present time there is general consensus that the evidence base for 'WASH systems approaches' is still nascent. This is an area that will continue to develop over the course of the A2A initiative. All stakeholders involved in A2A will bring evidence and learning into the process, as well as to identify and reduce any potential gaps and blind spots throughout the initiative.

The *A2A Background Paper* provides a brief snapshot of the current status of academic evidence and learning (Section 3.1). The most recent and comprehensive systematic literature review on WASH systems approaches identified during the call for evidence is "System Approaches to Water, Sanitation, and Hygiene: A Systematic Literature Review" by Valcourt et al. published in the *International Journal of Environmental Research and Public Health* in January 2020.[6] The research and learning component[7] of the *WASH for Systems for Health* (WS4H) programme supported by FCDO is currently in the preparatory phase for a Systematic Literature Review that will examine the effects of WASH systems strengthening initiatives on access, availability (continuity and functionality), affordability and equity of WASH services. These findings will be incorporated into A2A during future phases of the initiative. As part of the same initiative, a global Delphi exercise was conducted to identify *priority research questions to inform WASH system strengthening initiatives.* Twenty-five priority questions were identified during both rounds of the Expert Panels. The results are presented in the *A2A Background Paper* (see Annex E). The study emphasises the need for improved knowledge sharing to bridge gaps between research, policy and practice.

Additionally, there have been literature reviews on specific WASH sub-sectors and topics as part of other indicator selection processes, such as, A Review of Measures and Indicators for Gender in WASH[8] and the *JMP/GLAAS review of indicators for global monitoring of climate resilient WASH*, which is currently underway. There have also been numerous WASH systems multi-country programmes that have documented learning (e.g. *USAID Sustainable WASH Systems: A learning partnership*) as well as numerous efforts to document country case studies of progress[9] which can offer additional insights into how progress has been achieved and solutions to unlock common WASH sector bottlenecks and constraints.

Box 4. Findings on the status of evidence and learning on WASH systems approaches

- **A2A can benefit from new evidence and learning generated on WASH systems.** There are many synergies and opportunities for complementarity between the current research and learning efforts on WASH systems and the A2A initiative. The A2A methodology and processes put in place for selection, testing and review of the set of core indicators and the common monitoring and review framework should be designed to be 'iterative' in order to provide frequent opportunities for new evidence and learning to be incorporated.
- **The A2A initiative can contribute to building the evidence base for WASH systems.** Research and learning efforts can use A2A as a platform to collect data, generate evidence and synthesize learning on WASH systems from a large, diverse group of countries. Close coordination between the research and learning efforts and A2A initiative will be vital to fully capitalize on opportunities for research and learning through the piloting process (Phase 3) and implementation and scale-up phase (Phase 4).

The *A2A Background Paper* also summarizes the topline findings from two recent studies particularly relevant to the A2A initiative that have large sample sizes of participating countries:

- **Extended analysis of data from the GLAAS 2021/2022 cycle (Section 3.2).** The WHO GLAAS team conducted further analysis of the GLAAS 2021/2022 data that is presented in a supplementary report, *National drinking-water and sanitation targets: Extended methodology and results from the GLAAS 2021/2022 cycle*.[10] The analysis examined WASH system indicators where countries "on track" to meet their national targets perform well compared to countries where "acceleration" is needed to meet national targets. The areas and indicators where "on-track" countries perform well should be considered in the selection of the

[6] Valcourt N, Javernick-Will A, Walters J, Linden K. System Approaches to Water, Sanitation, and Hygiene: A Systematic Literature Review. Int J Environ Res Public Health. 2020 Jan 21;17(3):702. doi: 10.3390/ijerph17030702. PMID: 31973179; PMCID: PMC7037755.
[7] IRC, LSHTM, University of Leeds, UK International Development (FCDO). Research and Learning Agenda WASH Systems for Health 2024-2028. Available at https://www.ircwash.org/sites/default/files/ws4h_research_and_learning_agenda.pdf.
[8] A Review of Measures and Indicators for Gender in WASH, Bethany A. Caruso, Allison Salinger, Madeleine Patrick, Amelia Conrad, and Sheela Sinharoy June 2021. https://washdata.org/sites/default/files/2021-10/jmp-2021-gender-review-final-report.pdf
[9] Some examples of case studies submitted to the 'A2A Call for evidence', UNC consultations or identified during the desk review include World Bank's Water Supply and Sanitation Policies, Institutions, and Regulation: Adapting to a Changing World—Synthesis Report, Applying WASH systems Approaches in Fragile contexts (Aguaconsult, Oxfam, Water for Good, Juliane Shillinger), A Handbook of What Works: Solutions for the local implementation of the OECD Principles on Water Governance, UN-Water Country Acceleration Case Studies, Achieving total sanitation and hygiene coverage within a generation: lessons from East Asia (WaterAid), Agenda for Change Systems Strengthening Tools among many others.
[10] National drinking-water and sanitation targets: Extended methodology and results from the GLAAS 2021/2022 cycle.

A2A indicator domains and core indicators. These indicators include resourced national WASH plans, absorption of domestic capital commitments, cost recovery, affordability schemes, human resources for WASH, implementation of risk management approaches, performing independent surveillance, and regulatory authorities that perform key functions.

- **"Listening to Water Leaders" surveys by the Water Policy Group (Section 3.3).** The Global Water Policy Reports prepared by the Water Global Policy Group[11] are intended to support the achievement of better water outcomes globally. This Report is derived from and reflects the opinions, perspectives and experience of ministers, agency heads, senior officials and others whose job it is to make difficult decisions on water management in their respective countries. Two cycles of listening exercises have been conducted thus far in 2021 and 2023. National water leaders have identified their main challenges to achieving and maintaining good water management and the main reasons they consider 'safe and affordable drinking-water' (SDG 6.1) to be impossible or challenging to achieve. The main challenges according to national water leaders include inadequate infrastructure, inadequate and inaccessible data and information, fragmented water institutions, inadequate laws and regulations, conflicts between user groups, inadequate public water awareness, and water being a low priority in the government. The top reasons for not achieving SDG 6 are lack of financing and governance problems. These areas reported by national water leaders as the main challenges and top reasons for not achieving SDG 6.1 should be considered as part of the criteria for the selection of the A2A indicator domains and core indicators. This can help ensure that the core indicators are responsive to countries needs to address and monitor progress on overcoming these challenges.

Looking ahead – WASH beyond 2030 (Section 4). With only five years before the end of the United Nations 2030 Agenda and its SDGs, it is not too soon to look ahead to the next planning horizon taking into account lessons learnt. With the world already dramatically off-track on meeting the water and sanitation targets set for the 2030 Agenda, it is a strategic moment to reflect on what comes next for water and sanitation. In simple terms, *what will the world look like in 2050? and what will WASH systems need to deliver to meet future needs in an evolving context?* As a point of departure in tackling such an ambitious topic, the *A2A Background Paper* explores the megatrends expected to shape the world in 2050 and the implications for the WASH sector (Section 4.1). The megatrends identified include population trends and demographic transition, urbanisation, pollution, climate change, 'economics of water', as well as water science, research and management developments related to innovative technologies, water and health, resource recovery and circular economy. The *A2A Background Paper* also provides an overview of the global political landscape and processes to develop the post-2030 United Nations Sustainable Development Agenda (Section 4.2). Lastly, a short summary has been prepared of relevant main findings and recommendations from the recent SDG 6 MOI strategic assessment concerning the priorities for monitoring the means of implementation for water and sanitation in the post-2030 agenda (Section 4.3).

Box 5. Findings from Looking ahead – WASH beyond 2030

- **Global megatrends and risks will affect the future demand for water and sanitation services and the challenges faced in delivering them.** A sustainable and resilient WASH-future depends on understanding these issues and strengthening WASH systems to address them. Ensure forward-looking perspective by including it as a criterion for the selection of the core indicators. This scan of global trends and risks only scratches the surface of frontier issues facing the WASH sector. A2A should include an indicator domain dedicated to "Frontier Issues" for exploration of horizon issues and experimental new thinking on potential indicators to address them.
- **The next two years are critical to define the international agenda for WASH post-2030.** A2A can be a platform to develop potential candidate indicators for consideration in post-2030 processes, particularly for the 'means of implementation-related' aspects.

Learning from similar processes to select a set of core indicators (Section 5). The process of defining and agreeing on a core set of indicators and common monitoring and review framework is not a new endeavour. The health sector first undertook a similar exercise over a decade ago to develop a common monitoring

[11] Water Policy Group, https://waterpolicygroup.com/

framework for national health system strategies, including core indicators[12] and subsequently generated a global reference list of 100 core health indicators.[13] Similar multistakeholder processes to agree on indicators have also been facilitated by the WASH community. Examples include the development of potential candidate indicators for the post-2015 UN sustainable development agenda (e.g. future SDGs),[14] identification of priority gender-specific WASH indicators,[15] hand hygiene in community settings,[16] as well as the on-going process to develop indicators for climate-resilient WASH services.[17] The proposed technical approach for Phase 2 will draw on experience and learning from the health sector and other previous efforts by the WASH community to agree on common indicators. The *A2A Background Paper* presents terminology and definitions used by similar processes that can be adapted for A2A initiative (5.1) and shares findings from the recent SDG 6 MoI assessment on what makes a good MoI-type indicator (5.2).

Finally, the *A2A Background Paper* summarises the processes and criteria used by six multi-stakeholder processes to select and prioritize core indicators (5.3). These include two examples from the health sector, UNAIDS, OECD Water Governance Indicator Framework, Priority Gender-specific WASH indicators, and the SDG post-2015 process. The A2A initiative can learn from and consider how best to adapt elements from these examples to develop the technical approach to determine the indicator domains and select core indicators for the WASH system.

Box 6. Findings on learning from similar processes to select a set of core indicators

- **Establishing common terminology with clear definitions is an essential foundation for Phase 2.** The proposed list of terms with definitions provided in Section 5.1 is included in the A2A Discussion paper for consultation.
- **Indicator selection criteria and the processes used by others can be adapted for A2A.** While selection of core indicators is not a new endeavour, each process also has its own context and specificities. For example, as the "WASH system" does not already have an agreed conceptual framework or monitoring framework already in place, an additional step will be required to define the indicator domains (or as suggested previously, 'indicator domain families'). A2A can draw on the examples of criteria and processes presented in A2A Background Paper section 5.3 to develop an "A2A-specific" technical approach for Phase 2.

As noted previously, this section provides "busy readers" a brief snapshot of the main findings from the preliminary phase that have informed the proposals presented in this *A2A Discussion Paper*. Greater detail and the supporting documentation, citations and links to the resources are included in the *A2A Background Paper*.

[12] WHO (2011). Monitoring, evaluation and review of national health strategies: a country-led platform for information and accountability. Geneva. Available at: https://iris.who.int/bitstream/handle/10665/85877/9789241502276_eng.pdf?sequence=1
[13] 2018 Global reference list of 100 core health indicators (plus health-related SDGs). Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/259951).
[14] https://washdata.org/sites/default/files/documents/reports/2018-03/JMP-2014-post-2015-WASH-targets-12pp.pdf
[15] https://washdata.org/reports/emory-2024-priority-gender-specific-indicators-for-wash-monitoring
[16] WHO & UNICEF are developing new global Guidelines on Hand Hygiene in Community Settings. Concept note, "Global workshop on systems for hand hygiene in community settings," Kathmandu: 24 June 2024.
[17] Climate resilient WASH, JMP/GLAAS review of indicators for global monitoring of climate resilient WASH, Available at: https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/monitoring-and-evidence/monitoring-of-climate-resilience

Proposal 1. Indicator domain families

The first step towards the identification of potential core indicators requires determining the "indicator domains" for which core indicators will be selected. The health sector defines indicator domains as the "categorization of health-related indicators into general groupings"[18]. However, unlike for health systems, there is not yet an internationally agreed conceptual monitoring framework for WASH systems. Thus, it is necessary for the A2A initiative to determine the relevant indicator domains for the WASH system that will serve as a common point of departure. The determination of the indicator domain families is an intermediate step to enable a structured approach for the selection of a comprehensive, coherent and well-balanced set of core indicators.

Based on the extensive assessments and analyses undertaken as part of the Phase 1 preparatory work, WHO and UNICEF have developed and applied a three-step methodology to determine indicator domains for the WASH system:

Step 1. Map the common indicator domains for the WASH system across the results chain. The basis for the mapping of common indicator domains was the assessment of 82 global, regional and country WASH frameworks and analysis of the preliminary responses from 64 countries to the GLAAS 2024 country survey undertaken as part of the preparatory work presented in the accompanying *A2A Background Paper*. This initial mapping was then reviewed based on the review of evidence and learning and look-forward at trends and issues post-2030 presented in the *A2A Background Paper* sections 3 and 4, respectively. The "base map" of common indicator domains for the WASH system is presented in Annex B- step 1.

Step 2. Identify indicator domains where internationally agreed core indicators already exist. Some indicator domains and sub-domains already have internationally agreed core indicators, notably indicators within the UN SDG indicator framework. For these cases, the A2A initiative will directly select the internationally agreed indicator for consideration as part of the set of core indicators. The indicator domains in the "base map" that already have internationally agreed core indicators were identified in blue and then removed from the base map (Annex B- step 2).

A2A's efforts will focus on selecting core indicators for indicator domains that do not currently have agreed indicators. However, relevant existing internationally agreed indicators (e.g., SDG indicators) will be considered to be included in the final set of core indicators during later stages of the process (see proposal 3). The full set of core indicators will ultimately be comprised of both existing internationally agreed indicators as well as the 'new' indicators identified through the A2A initiative.

Step 3. Group remaining indicator domains into inter-related "families". The remaining thematic topics across the segments of the results chain were grouped together into "indicator domain families" (Annex B- step 3). The proposed "indicator domain families" bring together topics that reflect closely inter-related WASH system functions across different parts of the results chain. Potential core indicator(s) will be identified and selected from within each family of indicator domains. The final result is presented below in Figure 3.

The "indicator domain family" approach is a recommendation from the *A2A Background Paper* (Section 2.1) based on the results of the assessment of 82 WASH framework. The assessment of WASH frameworks demonstrated that common topics often cut across multiple parts of the results chain (e.g., finance-related topics were identified as inputs, processes, outputs and outcomes). This approach allows for fluidity across the results chain in the identification and selection of the most suitable core indicator(s) for each respective group of topics. Additionally, selecting candidate core indicators from across the indicator domain families will enable a balanced, logical approach to compose a slim set of core indicators that can monitor the strength and performance of different parts of the WASH system across the results chain.

[18] 2018 Global Reference List of 100 Core Health Indicators (plus health-related SDGs). Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.

Figure 3. Proposed A2A indicator domain families

INDICATOR DOMAIN FAMILY 1	INDICATOR DOMAIN FAMILY 2	INDICATOR DOMAIN FAMILY 3
Policy	Institutions	Regulatory Framework
Legislation	Institutional capacity	Regulations, rules, technical standards
Sector reform	Institutional framework	Regulatory functions[a]
Strategy	Institutional arrangements	Compliance, enforcement, reporting
Planning, monitoring, review	Coordination	Surveillance
Learning and adaptation	Partnerships and cooperation	Accountability mechanisms
Data and information	Government leadership	Audits, Corporate Governance
Anti-corruption framework	Prioritization of WASH	Service level & quality[b]
		Operational sustainability & efficiency *(non-revenue water, cost recovery)*
		Commercial efficiency & performance
		Environmental sustainability
		Circularity

INDICATOR DOMAIN FAMILY 4	INDICATOR DOMAIN FAMILY 5	INDICATOR DOMAIN FAMILY 6
Public engagement processes	Human capital	Infrastructure assets
Levels of participation	WASH workforce	Service delivery models
Public Satisfaction	Human resources management[c]	Technical management & support
Public information	Capacity development/ training	Asset Management
Public awareness, outreach	Staffing levels, performance	Infrastructure development[d]
Behaviours and attitudes	Job creation	New construction and rehabilitation[e]
Behaviour change programme	Worker Safety	Service delivery
Behaviour change		Maintenance
		Functionality
		Water resources availability
		Water storage capacity

INDICATOR DOMAIN FAMILY 7	INDICATOR DOMAIN FAMILY 8	CROSS - CUTTING AREAS
Funding, Financing	*Frontier Issues*	Area 1. Gender, equity, disability, affordability, social inclusion, human rights
Financial Management	Emerging topics, including innovation(s)	Area 2. Resilience and risk, including climate change
Tracking Finance Flows	Exploratory indicators, including composite indicators	*Other areas:*
Budgeting, Expenditure		Interactions between domains
Financial performance		Private sector: Role, participation, partnerships (PPPs)[f]
Financial viability		
Creditworthiness		

[a] Regulatory Functions: service standards, tariffs, performance management, pro-poor regulation, consumer protection-accountability-transparency, role of private sector.
[b] Service level & quality: access, availability, continuity, quality, reliability, water quality, chlorination, volumes (WW treated, water produced), service delivery KPIs.
[c] Human resources management: needs assessment, attract, retain and develop talent and capabilities, contractual formalization, performance management.
[d] Infrastructure development: project design, investment preparation, procurement.
[f] Roles, partnerships and participation of the private sector will be addressed within the relevant indicator domain family.
[e] New construction and rehabilitation: wells, catchment, storage, conveyance, treatment, distribution, HH connections, collection, discharge, disposal.

Description of proposed A2A indicator domain families

As a result of Step 3 described above, eight indicator domain families and two cross-cutting areas are proposed. Descriptions of each "indicator domain family" are provided below. At this initial stage, the indicator domain families have simply been numbered, not 'given short titles' to keep all topics within each family on equal footing.

Indicator domain family 1. This family includes topics related to national policy, legislation, sector reforms, strategy and anti-corruption frameworks as well as data and information. It also includes processes related to planning, monitoring, review, learning and adaptation.

Indicator domain family 2. This family focuses predominately on institutions. It includes institutional capacities, roles and responsibilities, frameworks, and arrangements such as coordination across line ministries and levels of government, as well as cooperation and partnership. Government leadership and prioritization of WASH are also included in this family.

Indicator domain family 3. Family 3 brings together topics related to (a) regulation and accountability mechanisms (frameworks; norms and standards; functions; surveillance; audits and corporate governance; compliance, enforcement, and reporting) and (b) service delivery performance, efficiency and sustainability (service level and quality, operational sustainability and efficiency including non-revenue water and cost recovery, as well as commercial efficiency, environmental sustainability and circularity). These topics are grouped together in the same family for the practical reason that the sources for nationally aggregated data on service delivery performance will most likely be the national regulatory agency.

Indicator domain family 4. The fourth family captures public engagement processes, awareness, outreach, information, as well as the 'level of participation' and public/customer satisfaction. It is also proposed to also include behaviours, attitudes, behaviour change, and the related behaviour change programmes which are often closely coordinated with public awareness and outreach activities.

Indicator domain family 5. This family groups together indicator domains related to the workforce, human capital, human resources management, capacity development, staffing levels and performance, as well as job creation and worker safety. Specific aspects of "human resources management" that were identified in the assessment of frameworks include attract, retain and develop talent and capabilities; contractual formalization; and performance management.

Indicator domain family 6. The sixth indicator domain family is comprised of aspects related to physical infrastructure, asset management and functionality; infrastructure development, including project design, investment preparation, and procurement; new infrastructure construction and rehabilitation; as well as service delivery models, technical support and management, operation and maintenance.

Indicator domain family 7. The family covers topics related to funding and financing, including tracking finance flows, financial management, budgeting, expenditure, financial performance, financial viability, and creditworthiness.

Indicator domain family 8. It is proposed to establish an eighth family that encompasses "*frontier Issues"*. It was highlighted during the consultation process that this process should not limit itself to status quo of what is currently being monitored by the WASH community. A2A should also explore areas that might be important to monitor but are missing in the current monitoring landscape. Indicator domain family 8 can be used to explore emerging topics and innovations, as well as "exploratory indicators', including composite indicators and systemic change, that do not yet have significant amounts of evidence or widespread use context, but that have potential or show promising signs that merit consideration.

Description of proposed A2A cross-cutting areas

In addition to the indicator domain families, two priority ***cross-cutting areas*** are also proposed. These are areas that will require special consideration by the eight indicator domain families to identify and select candidate core indicators that address these areas. As sector-wide indicators and monitoring frameworks already exist for some of these cross-cutting elements, efforts will be made to draw on these existing agreed indicators to ensure that these areas are sufficiently reflected within the final A2A set of core indicators.

Area 1. Gender equality, equity, disability, social inclusion, affordability, and human rights. A sizeable portion of WASH frameworks and national monitoring indicators assessed and analysed during preparatory phase include at least some reference to these topics. Some of the common indicator domains identified include data, policies, targeting resources, finance allocations, tariff setting, design standards, participation in decision-making, service accessibility and affordability, and application of pro-poor measures, as well as disaggregation of population data. For some of the topics within this cross-cutting area, common indicator and monitoring frameworks have been developed United Nations entities and/or consortiums using consultative processes. A few existing frameworks that can be used as sources for this cross-cutting area include gender,[19] human rights,[20] affordability,[21] disability,[22] and inequalities.[23]

Area 2. Risk and resilience, including climate change. The assessment of frameworks and analyses of national monitoring indicators identified a diverse array of risks, hazards and other shocks that can affect the WASH system including climate change, natural disasters, drought, flooding, disease outbreaks, humanitarian situations, conflicts and fragility, economic crisis and cyberattacks among others. Indicator domains where issues related to risk and resilience were highlighted include integration and incorporation into policy frameworks, data, assessments, planning, management practices, technical operations, emergency training and preparedness planning, and implementation of risk management measures in new projects and delivery of services. At outcome and impact level, indicators measured resilience and adaptive capacity to climate-related hazards and natural disasters in all countries of the population and society.

The A2A initiative will closely coordinate with the JMP/GLAAS review of indicators for global monitoring of climate resilient WASH[24] and the Global WASH Cluster initiative to develop the WASH Insecurity Analysis sector-wide analytical framework to inform evidence-based decision-making across the humanitarian–development continuum.[25] Additionally, several indicators were identified during the assessment of WASH frameworks, notably in the utility-oriented frameworks on topics related to cybersecurity and emergency preparedness training and plans.

In addition to these two cross-cutting areas, ***interactions*** between indicator domain families will be another cross-cutting aspect taken into consideration during the core indicator selection process. These interactions will be explored in greater depth during Phase 2. The recommendations from the systematic literature review

[19] Priority Gender-Specific Indicators for WASH Monitoring under SDG Targets 6.1 and 6.2: Recommendations for National and Global Monitoring. Bethany A. Caruso, Jenala Chipungu, Julie Hennegan, Albert Motivans, Lauren Pandolfelli, Madeleine Patrick, Beesan Shonnar, Sheela Sinharoy, Nicole Stephan. New York: United Nations Children's Fund (UNICEF) and World Health Organization (WHO), 2024.

[20] UN General Assembly, The human right to water and sanitation: resolution / adopted by the General Assembly, A/RES/64/292, 3 August 2010, https://www.refworld.org/legal/resolution/unga/2010/en/76535 [accessed 15 February 2025]

[21] The measurement and monitoring of water supply, sanitation and hygiene (WASH) affordability: a missing element of monitoring of Sustainable Development Goal (SDG) Targets 6.1 and 6.2. New York: United Nations Children's Fund (UNICEF) and the World Health Organization, 2021.

[22] United Nations Children's Fund, Make it Count: Guidance on disability inclusive WASH programme data collection, monitoring and reporting, UNICEF, New York, 2021.

[23] Inequalities, WHO/ UNICEF JMP. Available at: https://washdata.org/monitoring/inequalities

[24] Climate Resilient WASH, WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. Available at https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/monitoring-and-evidence/monitoring-of-climate-resilience

[25] WASH insecurity analysis, Global WASH Cluster. Available at: https://www.washcluster.net/WASH-insecurity-analysis

undertaken by Valcourt et al[26] call for further investigation and application of system approaches that explicitly consider factor interactions. Thus, this is a specific area where further investigation, new evidence and learning can play a key role in identifying interactions that positively drive acceleration or contribute to unlocking bottlenecks to progress.

The assessment of WASH frameworks also identified the role and participation of ***private sector*** as a common topic that inter-relates with numerous indicator domains. Some examples include government policies, financing, public-private partnerships (PPPs), regulations (rules and codes), licensing, capacity development, and role in service delivery which will be addressed within the relevant indicator domain family. Additionally, the assessment of WASH frameworks also included topics outside of areas monitored by national WASH monitoring systems, notably those led by the private sector such as markets, market performance and product availability, predominately from sub-sector frameworks related to market-based sanitation, hand hygiene and menstrual hygiene management. While the A2A scope is limited to areas monitored within national WASH monitoring systems, other partners are encouraged to further explore opportunities to improve monitoring for these areas.

Proposal 1. Guiding questions for discussion and feedback

- Do the eight indicator domain families capture the key topics for which core indicators should be selected? Is anything important missing?
- Are the topics grouped together in the most suitable families? Should any topics be moved to other families?
- To ensure that A2A is forward-looking, are there any specific "frontier issues" that should be taken up by indicator domain family 8?

[26] Valcourt N, Javernick-Will A, Walters J, Linden K. System Approaches to Water, Sanitation, and Hygiene: A Systematic Literature Review. Int J Environ Res Public Health. 2020 Jan 21;17(3):702. doi: 10.3390/ijerph17030702. PMID: 31973179; PMCID: PMC7037755.

Proposal 2. Core indicator selection criteria

Throughout the consultations during the preparatory phase, many A2A partners stressed the importance of getting the selection of the core indicators "right". Several A2A partners highlighted the practical reality associated with monitoring that, in simple terms, '*what gets measured gets managed*,' which introduces both an opportunity to bring greater attention to certain areas alongside a risk that more monitoring, attention and resources in one area could be at the expense of something else equally or more important.

Hence, it will be necessary for the A2A process to capture two angles in the approach to select core indicators:

- **From a technical WASH perspective:** '*what should be monitored*' to focus greater attention and resources on what really matters most or is the most meaningful to monitor? Improved monitoring of these areas can drive and accelerate progress, unlock bottlenecks, inform decision-making, and bring more resources. Simply stated, this approach embodies the dictum "*measure what you treasure*."
- **From a monitoring perspective**: '*what is currently monitored*' and '*what can be monitored*' given existing data availability and methods. For these aspects, greater alignment on monitoring and measurement methods can help to develop a 'common denominator' for WASH systems monitoring approaches.

Mindful of these orientations – the opportunities, limitations and the risks, this section of the *Discussion Paper* will propose criteria for the selection of A2A core indicators.

The *A2A Background Paper* summarises the processes and criteria used by six multi-stakeholder processes to select core indicators. These include two examples from the health sector, UNAIDS, OECD Water Governance Indicator Framework, Priority Gender-specific WASH indicators, and the SDG post-2015 process. The A2A initiative can learn from and consider how best to adapt elements from these examples to develop the technical approach to determine the indicator domains and select core indicators for the WASH system.

Table 2. Source documents for criteria to select A2A core indicators

Source Number	Source references
1	Common metrics for health system performance: Initial list of candidate indicators for inclusion in the slim common metrics for review and consideration by countries and partners. Strengthening PHC-oriented health system performance measurement: Aligning behind country-led plans and systems to drive impact, 25-26 June 2024. Developed by WHO, UNICEF, World Bank, Gavi, Global Financing Facility, Global Fund, and USAID.
2	2018 Global reference list of 100 core health indicators (plus health-related SDGs). Geneva: World Health Organization; 2018. Available at: https://iris.who.int/handle/10665/259951.
3	An introduction to indicators. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS); 2010 Available at: https://www.unaids.org/sites/default/files/sub_landing/files/8_2-Intro-to-IndicatorsFMEF.pdf
4	OECD (2018), *Implementing the OECD Principles on Water Governance: Indicator Framework and Evolving Practices*, OECD Studies on Water, OECD Publishing, Paris, Available at: https://doi.org/10.1787/9789264292659-en.
5	Priority Gender-Specific Indicators for WASH Monitoring under SDG Targets 6.1 and 6.2: Recommendations for National and Global Monitoring. Bethany A. Caruso, Jenala Chipungu, Julie Hennegan, Albert Motivans, Lauren Pandolfelli, Madeleine Patrick, Beesan Shonnar, Sheela Sinharoy, Nicole Stephan. New York: United Nations Children's Fund (UNICEF) and World Health Organization (WHO), 2024.
6	*Discussion paper on Principles of Using Quantification to Operationalize the SDGs and Criteria for Indicator Selection*, United Nations Statistical Division; Expert Group Meeting on the indicator framework for the post-2015 development agenda- New York - 25-26 February 2015. Available at link.

The following 10 criteria are proposed for the selection and prioritization of A2A core indicators. These criteria build on the examples presented in the *A2A Background Paper* (Section 5.3). The original source of the criterion is noted based on the 'source number' in Table 2 above.

Group 1. What should be monitored:

1. **Usefulness to Practitioners, Policy-Makers.** Data generated by the indicator has potential to be of use to and/or addressed by policy-makers, practitioners. (1, 2, 3, 4, 5, 6)

2. **Driver of progress.** There is evidence that the indicator topic is a driver of progress and important and/or relevant to measuring WASH systems strength and/or performance taking into account what has worked and not worked in the past. Evidence can be of varied forms, including but not limited to formal research and grey literature, as well as other sources. (1, 2, 3, 4, 5, 6)

3. **Forward-looking.** The outlook over the next 15 years may be significantly different from the past 15 years. Indicators should be forward-looking and address emerging and future changes, including population dynamics that will affect WASH systems. (6)

Group 2. What can be monitored:

4. **Definition and Measurability.** The indicator can be fully defined. It can be measured through/by/using national WASH monitoring systems. In later stages we will assess and define measurement methods more specifically for each indicator. (1, 2, 3, 4, 5, 6)

5. **Reasonable potential for change over time.** The indicator measures topic(s) that have reasonable potential to change over time, and change can be seen in reasonable time frames (e.g. not only after 20 years or more) with change accomplished through WASH-specific actions. (1, 2, 4, 5)

6. **Availability of Data - *stable and sustainable*.** The indicator should be measured in a cost-effective and practical manner by countries. A regular and timely data collection mechanism has been or can be developed with reasonable costs and effort. To the greatest extent possible, indicators should be constructed from well-established sources of public and private data. The statistical capacity or potential capacity for data collection and analysis to support the indicator must exist at national and international levels. (2, 3, 4, 6)

Group 3. What is relevant and possible to monitor at national, regional and global levels?

7. **Comparability.** The data points generated by the measurement of the indicator are comparable across different countries and are relevant for all country typologies. (5)

8. **Universal with national adaptation.** Indicators must be tailored and customized to reflect different country-specific circumstances and typologies. It is essential to generate country ownership and encourage countries to strive for accelerated progress. (4, 6)

9. **Easy to interpret and communicate.** The indicator is clear and easy to understand for policymakers, the general public and other stakeholders, and unambiguous for interpreting. Use of language and terminology and the presentation of information should be carefully considered. (2, 4, 6)

10. **Consistent with existing international frameworks and agreements.** Indicator formulation should be consistent and coherent with the numerical targets or commitments in existing international frameworks and agreements or new agreements that will be reached. (1, 2, 6)

Proposal 2. Guiding questions for discussion and feedback

- Are the three groups the "right" criteria for the selection of A2A core indicators? Should additional criterion be added? Any that should be removed?
- Are the proposed criteria descriptions clear? Will it be feasible to apply these criteria to evaluate and rank potential core indicators?

Proposal 3. Process to select and prioritize A2A core indicators

As a sector-wide initiative, A2A will draw upon the expert opinion and experience of WASH sector partners and countries to collectively select and prioritize core indicators. Given that the end goal is sector-wide product, the process must be participatory and inclusive from the onset. Moreover, as the assessment of WASH frameworks identified that thousands of WASH indicators are currently monitored by countries and WASH partners, a practical and structured approach will be required to agree on a slim set of indicators (e.g., 15-18 max).

A multi-step process is proposed to engage and consult a diverse set of stakeholders and subject matter experts, while also being mindful of time and resource constraints since A2A is a voluntary initiative. Subject matter experts will be invited to be members of thematic expert groups for "indicator domain families" and as key informants for cross-cutting areas. Diverse stakeholders will be consulted through webinars, targeted focus group discussions, written inputs and key informant interviews.

Figure 4. Proposed process to select and prioritize the A2A set of core indicators

Step 1. "Nominate" potential core indicators. The objective of this step is to generate a "long-list" of potential core indicators for each indicator domain family, including indicators that reflect cross-cutting areas.

a) A2A will convene eight "thematic expert groups" for each of the eight A2A indicator domain families (proposal 1). It is envisaged to have a staggered start for the thematic expert groups to manage the workload for the support team and allow for learning and adaptation as needed. Experts will be identified and selected on the basis of both organizational and individual expertise and experience with the subject matter. There is a target number of 5-10 experts per thematic group. Two experts will be kindly requested to co-lead the coordination of the thematic expert group with support from the A2A technical support team.

b) Thematic expert group members will each "nominate" 1-3 potential core indicators for the respective indicator domain family. They will be asked to submit information on the indicator definition, measurement methods, data sources and any experience and learning from the use of the indicator in a country context. Cross-cutting area experts will contribute relevant potential core indicators for the respective indicator domain family.

c) The A2A technical support team will compile the "nominated" potential core indicators received from the thematic expert group members and cross-cutting area experts.

Step 2. "Select" candidate core indicators. The objective of this step is to select a "short-list" of candidate core indicators for each indicator domain family using a participatory approach based on agreed criteria.

a) The A2A technical support team will share the compiled "long list" of potential core indicators nominated by the thematic expert group members and cross-cutting area experts during step 1.

b) The thematic expert group members for each indicator domain family will evaluate the "nominated" potential candidate core indicators using the A2A core indicator selection criteria (proposal 2) presented above in Section 4 of this *A2A Discussion Paper*. A scoring model will be developed to facilitate a semi-

quantitative approach drawing on the experience from other processes, notably for example the *Priority Gender-Specific Indicators for WASH Monitoring under SDG Targets 6.1 and 6.2*.[27]

c) The A2A technical support team will compile the evaluations from the thematic expert group members and prepare a presentation of the results in coordination with the co-leads of the thematic expert group for the respective domain area.

d) A virtual technical consultation meeting will be organized with the thematic expert group members to present the outcomes of the exercise. Following the presentation, a discussion on the outcomes will be facilitated by the two co-leads of the thematic expert group to get feedback and any additional input or contextualization of the results. This will also be an opportunity to make any necessary adjustments, for example to ensure the inclusion of candidate core indicators that reflect cross-cutting areas relevant for the respective indicator domain family.

e) Based on the results of the scoring and follow-up consultation, the top 2-3 indicators will be considered as the "selected" candidate core indicators for the respective indicator domain and transmitted by the co-leads of the thematic expert group to the A2A technical support team on behalf of the group. In the event of disagreement in the group, the co-leads will be requested to provide a final input on behalf of the group, taking note of any complementary inputs or divergent perspectives.

f) The A2A technical support team will compile the 2-3 "selected" candidate core indicators for the eight indicator domain families. This will be considered the "short list" of candidate core indicators.

Step 3. "Prioritize" a slim set of core indicators. The objective of this step is to prioritize a subset of the candidate core indicators from the compiled "short-list". The ultimate goal is to agree on a preliminary slim set of coherent and well-balanced core indicators that monitor the "vital signs" of the strength and performance of the WASH system.

a) It is proposed to convene an integrated technical working group (TWG) comprised of the co-leads of the thematic expert groups for each indicator domain family and cross-cutting areas experts. To ensure a well-balanced and representative group, additional experts and stakeholders with relevant, complementary experience and expertise will be invited to join this group (e.g., regional secretariats for intergovernmental processes, WASH sub-sector experts, monitoring specialists, etc.). This TWG will be co-led by WHO and UNICEF.

b) The TWG members will rank each of the candidate core indicators from the "short list" using the A2A core indicator selection criteria (proposal 2). Additional criteria may be added during the process to ensure a coherent, balanced and slim set of core indicators.

c) A2A technical support team will compile this preliminary prioritized set of A2A core indicators based on the ranking exercise.

d) A consultation process will be organized with diverse groups of stakeholders to present and solicit feedback on the preliminary prioritized set of A2A core indicators. A variety of different platforms and formats will be used to gather feedback including virtual consultation webinars, focus group discussions, key informant interviews, as well as through existing groups such as the Systems and Finance Working Group of Sanitation and Water for All and UN-Water WASH Expert Group. Feedback from governments, including those responsible for national WASH monitoring systems will be a crucial stakeholder, so special attention will be required to ensure these perspectives are taken into account.

[27] Priority Gender-Specific Indicators for WASH Monitoring under SDG Targets 6.1 and 6.2: Recommendations for National and Global Monitoring. Bethany A. Caruso, Jenala Chipungu, Julie Hennegan, Albert Motivans, Lauren Pandolfelli, Madeleine Patrick, Beesan Shonnar, Sheela Sinharoy, Nicole Stephan. New York: United Nations Children's Fund (UNICEF) and World Health Organization (WHO), 2024.

e) Once the consultation process is completed, the A2A technical support team will prepare a summary report with the main feedback and findings from the consultations on the preliminary prioritized set of A2A core indicators.

f) The TWG will be re-convened to discuss the results from the consultation process and make any necessary adjustments to the preliminary set of A2A core indicators to ensure that the set is slim, coherent, and balanced while allowing for some flexibility during in-country piloting that is foreseen in Phase 3.

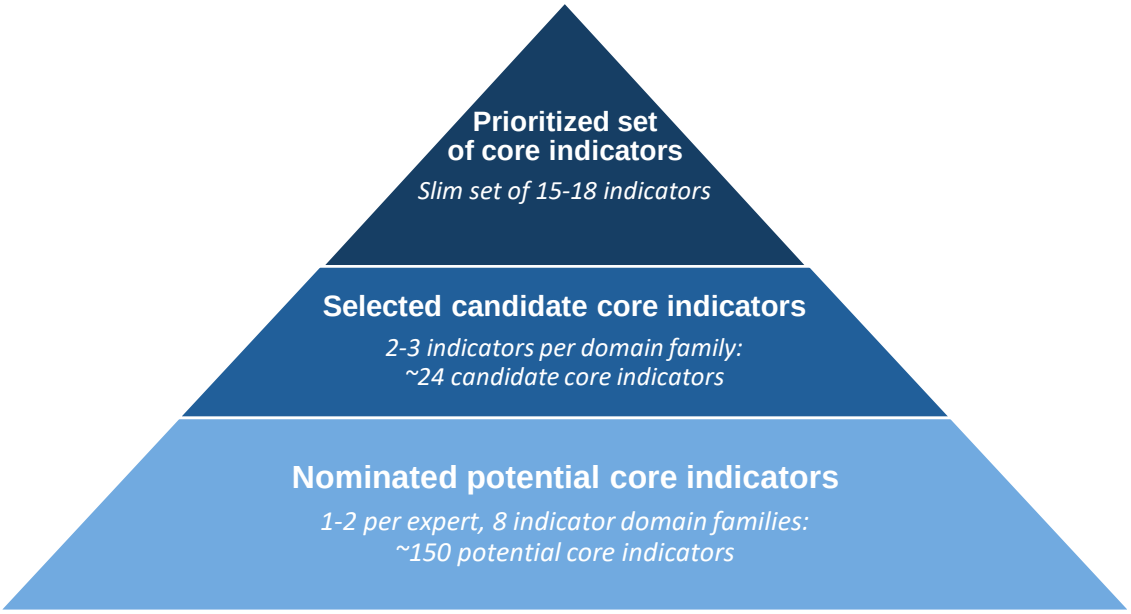


Figure 5. Proposed pyramid for the selection and prioritization of A2A core indicators

Proposal 3. Guiding questions for discussion and feedback

- Is the proposed process technically sound, logical, efficient, and inclusive? Will it lead to the desired outcome? Any risks that should be managed?
- Do you have any advice on preferred methods for evaluating and/or ranking indicators using a stakeholder process?

Issues for further consideration and next steps

This preparatory phase has identified several issues that will require further consideration during the next phases of the A2A initiative.

- Given the evolving state of evidence, it will be necessary to bring in more evidence throughout the future phases of A2A. To address this, A2A process should be agile and flexible, while also maintaining an inclusive, structured and rigorous process.
- While A2A aims to cover all WASH sub-sectors, the assessment of WASH frameworks highlighted that there are specificities for the respective WASH sub-sectors – drinking-water services, sanitation services and hygiene, that influence what is important to monitor. Additionally, it was noted that for some indicator domains the modalities of rural and urban services do not have the same indicators.
- As part of the desk review for the *A2A Background Paper*, systems and indicator frameworks were identified for sustainable food systems[28], sustainable energy[29], and education[30] sectors. It was beyond the scope of the *Background Paper* to assess addition frameworks from other sectors; however, it could be valuable for Phase 2 to compare approaches and monitoring indicators for common areas such as financing, human resources/workforce, capacity development, regulation, etc. Additionally, the SDG indicator framework for the means of implementation indicators can also be a useful source for examples of indicators used by other sectors that could potentially be adapted for WASH systems.

These issues and others identified throughout the consultation process will be documented for consideration during the relevant upcoming phases of the A2A initiative.

Next Steps

As a next step, the zero draft of the *A2A Discussion Paper* will be circulated for review to a wide, diverse group of stakeholders representing governments, United Nations entities, NGOs, international financial institutions, academics, and other technical and financial development partners. A joint virtual consultation will be organised to present the paper and discuss with stakeholders. On the basis of the comments and feedback, this *A2A Discussion Paper* will be revised and finalised.

In parallel to the review process, initial steps are being taken to prepare Phase 2. WHO and UNICEF, in collaboration with the World Bank, will undertake a mapping of stakeholders, identify thematic and cross-cutting area experts, and start the set-up of the thematic expert groups for the respective indicator domain families.

ANNEXES

ANNEX A. A2A terminology and definitions

ANNEX B. Methodology to determine A2A indicator domain families

[28] FAO, Sustainable food systems: concept and framework. Available at: https://openknowledge.fao.org/server/api/core/bitstreams/b620989c-407b-4caf-a152-f790f55fec71/content

[29] Energy Sector Management Assistance Program (ESMAP). 2022. Regulatory Indicators for Sustainable Energy (RISE). Washington, DC: World Bank.

[30] OECD (2021), Education at a Glance 2021: OECD Indicators, OECD Publishing, Paris, https://doi.org/10.1787/b35a14e5-en.

ANNEX A. A2A terminology and definitions

Establishing a common set of terms and their definitions is an important initial step towards the development of a core set of indicators and common monitoring and review framework. This annex provides a possible list of terms that can be useful for A2A alongside standard definitions for the same or similar terms in other processes and a proposed A2A definition. It was developed in Section 5.1 of the *A2A Background Paper.*

To avoid over-footnoting in this section, the list of source documents is presented in the table below. The definitions in the list of terms will reference the number of the source in this list.

Table A1. Source documents for terms and definitions

Source Number	Source references
1	2018 Global reference list of 100 core health indicators (plus health-related SDGs). Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/259951).
2	An introduction to indicators. Geneva: Joint United Nations Programme on HIV/AIDS (UNAIDS); 2010 (https://www.unaids.org/sites/default/files/sub_landing/files/8_2-Intro-to-IndicatorsFMEF.pdf)
3	Common metrics for health system performance: Initial list of candidate indicators for inclusion in the slim common metrics for review and consideration by countries and partners. Strengthening PHC-oriented health system performance measurement: Aligning behind country-led plans and systems to drive impact, 25-26 June 2024. WHO, UNICEF, World Bank, Gavi, Global Financing Facility, Global Fund, USAID
4	GLAAS 2024 country survey guidance. Geneva: World Health Organization; 2024 (https://www.who.int/publications/m/item/glaas-2024-2025-country-survey)
5	Health indicators. Conceptual and operational considerations. Washington DC: Pan American Health Organization; 2018 (https://iris.paho.org/handle/10665.2/49056).
6	Huston, A. and Moriarty, P. (2021) Building Strong WASH Systems for the SDGs: Understanding the WASH System and Its Building Blocks. IRC Working Paper. (https://www.ircwash.org/washsystems)
7	OECD (2018), *Implementing the OECD Principles on Water Governance: Indicator Framework and Evolving Practices*, OECD Studies on Water, OECD Publishing, Paris, https://doi.org/10.1787/9789264292659-en.
8	UNEP-WCMC (2024) Guidance for developing plans for national monitoring systems in support of the Kunming-Montreal Global Biodiversity Framework. 26pp. Cambridge, UK. (https://www.learningfornature.org/wp-content/uploads/2024/10/Guidance-for-plans-for-national-monitoring-systems-Final-Sept24-ENGLISH.pdf)
9	UNICEF WASH systems strengthening: reference guide for programming; 2025 (https://knowledge.unicef.org/wash/resource/unicef-wash-systems-strengthening-framework)
10	UN General Assembly Resolution 70/1 (2015) - Transforming our world: the 2030 Agenda for Sustainable Development.
11	Water, Sanitation and Hygiene Terminology Guide, UNICEF; 2024 (https://knowledge.unicef.org/wash/resource/water-sanitation-and-hygiene-terminology-guideunicef)
12	WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) (https://washdata.org/)
13	WHO (2011) Monitoring, Evaluation and Review of National Health Strategies: Country Platform for Information and Accountability. Geneva (https://www.who.int/publications/i/item/9789241502276)
14	World Health Organization (https://www.who.int/health-topics/water-sanitation-and-hygiene-wash#)
15	Wong, C. (2014). Indicator Selection Criteria. In: Michalos, A.C. (eds) Encyclopedia of Quality of Life and Well-Being Research. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_1428

16	Demystifying the M&E framework: A guide for effective evaluation [website]. Evalcommunity (https://www.evalcommunity.com/career-center/me-framework/

A list of relevant terms, definitions from published literature and proposed definitions for A2A are presented below in Table A2.

Table A2. Proposed list of A2 terms and definitions

Term	Definition	Source[31]
Core indicator	Core indicators may be defined in collaboration with all key stakeholders (e.g. ministry of health, national statistics office, other relevant ministries, professional organizations, experts, and major disease-focused programmes), and depends on the priority monitoring requirements related to health and health-related SDGs, among other health priorities.	1
Data	Specific quantitative and qualitative information or facts that are collected and analyzed.	2
External Factors	Factors that influence the WASH sector, but that are not within the mandates of the WASH sector. These include inter alia: structural factors such as demography, geography, economy, and institutional factors such as decentralization, social norms, anti-corruption means and provisions and public finance management	9
Impact	Higher level long-term goals	4
Impact indicator	impact indicators measure usually long-term results (e.g. improved health, water security)	7
	Measures the ultimate objective that programmes are designed to affect, such as decreases in mortality and morbidity. Sometimes referred to as long-term outcome (21).	1
Indicator	A quantitative or qualitative variable that provides a valid and reliable way to measure achievement, assess performance or reflect changes connected to an activity, project or programme.	2
Indicator definition	How the indicator is measured, including numerators, denominators, data type and disaggregation in common use. The indicator definition should be unambiguous and be expressed in universally applicable terms.	5
Indicator domain	Categorization of health-related indicators into general groupings.	1
	Proposed A2A definition. Categorization of WASH-related indicators into general groupings.	*for review*
Indicator domain family	A collection of inter-related indicator domains or sub-domains	*for review*
Indicator Selection Criteria	Indicator selection criteria are a set of guiding principles used to systematically assess the value and practicalities of potential indicators for measuring the phenomenon concerned. This should be seen as part of the indicator methodology.	15
Indicator set	A useful collection or grouping of related indicators. The nature of the relationship between indicators in a set can vary; for example, there can be indicators grouped by their utility in global, national, subnational, thematic and/or project settings.	2
Input	Financial, human, and other resources mobilized to support activities undertaken to achieve results	4
Input indicator	Input indicators can measure the inputs needed to produce the outputs, e.g. in terms of legal and policy instruments, human/financial resources; process indicators monitor actions	7

[31] The number in the 'source' column refers to table 15 above.

	contributing to the achievement of outcomes (e.g. planning, budgeting, service delivery, etc.)	
	Measures human and financial resources, physical facilities, equipment and operational policies that enable programme activities to be implemented.	1
Logical framework (or results chain)	Management tool used in the design of a programme or project. It correlates key strategic elements, including objectives, inputs, outputs, outcomes and impact, with indicators as well as the assumptions and risks that may affect the implementation of the programme or project. Logframes are useful for the planning, execution and evaluation of programmes and projects.	2
Measure	A standard unit used to express the size, amount, or degree of something.	5
Measurement	Refers to the extent, dimension, quantity, etc. of an attribute.	5
Metric	A standard of measurement. For example, indicators use a quantitative or qualitative metric to measure the impact of programmes, projects and activities.	2
Monitoring	Routine tracking and reporting of priority information about a programme and its intended outputs and outcomes.	2
	A continuous process of collecting and analysing data for performance indicators to compare how well a development intervention, partnership or policy reform is being implemented against expected results (achievement of outputs and progress toward outcomes).	11
Monitoring and evaluation (M&E) framework	A structured and systematic tool used in project management and programme implementation to assess performance, measure outcomes, and ensure the achievement of objectives. It consists of several core components, including clear project objectives, key performance indicators, data collection methods, data sources, and responsibilities. It defines how data will be collected, analysed and reported, ensuring that the project or programme remains on track (100,101).	16
	Monitoring, evaluation and review of activities of the national health strategy. It provides a logical and results-chain representation of the key components of the national health system monitoring and evaluation.	13
Monitoring and review framework	***Proposed definition for A2A.*** Guidance on operationalizing monitoring and review of activities as part of National WASH policies, plans, and/or strategies	*for review*
National monitoring indicators	***Proposed definition for A2A.*** A set of indicators that are monitored to assess progress of the National WASH policies, plans, and/or strategies. These indicators may be established within the National WASH policies, plans, and/or strategies or may be defined in a separate monitoring and evaluation plan for the respective strategy/plan/ policy. *(based on GLAAS country survey guidance*)	*for review*
National monitoring system	A nationally-mandated system for the production of data, indicators and reports to periodically measure and monitor implementation of the GBF through NBSAPs.	8
	Proposed definition for A2A. A nationally-mandated system for the production of data, indicators and reports to periodically measure and monitor implementation of National WASH policies, plans, and/or strategies	*for review*

Outcome	Uptake, adoption or use of outputs by beneficiaries	4
Outcome indicator	Outcome indicators measure short- to medium-term results generated by such outputs (e.g. service expansion and quality improvement)	7
	Measures whether the programme is achieving the expected effects/changes in the short, intermediate and long term, such as changes in intervention coverage or health-related behaviours. Some programmes refer to their longest-term/most distal outcome indicators as impact indicators (21).	1
Output	Events, products, capital goods or services that result from an intervention (e.g. process/activity)	4
Output indicator	Output indicators are related to results of inputs and process, for example in terms of the number of wastewater treatment plants built, the volume of water produced, fees collected, etc.	7
	Measures the immediate products provided or services delivered as a result of the processes conducted in a programme or project	1
Process	Action taken or work performed by which inputs are converted into specific outputs	4
Process indicator	Measures a programme's activities. This indicates whether the programme is being implemented as planned.	1
Set of core indicators	A slim sub-set of indicators with standard definitions that can be used by countries and can help provide a shared understanding among country stakeholders, partners and donors on how countries are making progress towards PHC oriented health systems. They can be used to guide country level action and investment and to inform global partner reporting and to demonstrate the impact of investments.	3
	Proposed definition for A2A. A useful, slim collection of indicators with standard definitions that can be used by countries and can help provide a shared understanding among stakeholders of the strength and performance of the WASH system. The overall set of core indicators should be coherent and balanced.	*for review*
WASH	Water supply, sanitation and hygiene (JMP)	12
	Safe drinking water, sanitation and hygiene (WHO)	14
	Water, sanitation and hygiene - as defined under the internationally-agreed Sustainable Development Goals (SDG) framework of the United Nations 2030 Agenda for Sustainable Development: Indicator 6.1.1 Safely managed drinking water services Indicator 6.2.1 (a) Safely managed sanitation services and (b) hygiene (a hand-washing facility with soap and water) Indicator 6.3.1 Proportion of domestic and industrial wastewater flows safely treated Additionally, this includes the WASH-related components of ambient water quality monitored by SDG indicator 6.3.2, as well as SDG targets 6.4 water efficiency and stress, 6.5 water resources management including transboundary, 6.6 freshwater eco-systems and the two SDG 6 means of implementation targets 6a international cooperation (official development assistance) and 6b participation and their respective indicators.	10
WASH system	Refers here to the entire set of hydro-social relations that make possible the distribution of water, sanitation, and hygiene services. In this encompassing understanding, a WASH system involves a wide range of layered and interconnected actors and their interactions. Using the categories of UNICEF's Enabling Environment, the WASH system includes the WASH sector and its governance institutions and processes (the building blocks), in addition to the broader context (structural and institutional factors and political leadership) that	11

	influences the management of the sector and its policies, capacities, regulations, monitoring, institutions, and financing. When WASH systems are strong and resilient, they deliver services that last and meet people's needs. (UNICEF)	
	All the social, technical, institutional, environmental and financial factors, actors, motivations and interactions that influence WASH service delivery in a given context. (IRC)	6

ANNEX B. Methodology to determine A2A indicator domain families

Step 1. Map the common indicator domains for the WASH system across the results chain.

Input Domain Groupings
Funding, financing, financing frameworks, mechanisms, budget lines, ODA, external support (SDG 6.a.1)
Legislation, policy frameworks
Institutional framework, roles and responsibilities, capacities; Institutional arrangements
Regulatory frameworks, technical standards
Data and information
Human capital, human resources, WASH workforce
Equity, Human rights, Gender mainstreaming, social inclusion, affordability policies
Participation policies and procedures (SDG 6.b.1)
Service delivery models, service provider frameworks; frameworks for private sector participation
Governance - general
Resilience, risks, hazards, shocks assessments, incorporated in policy frameworks
Government Leadership & political will
Water Resources
Infrastructure assets
Private sector, markets, market rules, technology, supply chains
Innovation governance, eco-system, readiness
Anti-corruption frameworks
Attitudes, behaviours, mental models
Environmental Management Framework (1)
Public Goods (1)

Process Domain Groupings
Planning, organization strategy, monitoring, review, learning
Financial management, financing strategy, financial flow tracking, budgeting, spending, expenditure rate (absoption, utilisation)
Regulatory functions, strong accountability mechanisms, surveillance
Human resources management, training & capacity building programmes, staffing levels (recruit, retain, succession), Worker safety, gender mainstreaming
Technical management, capacity and support; asset management; operations, maintenance, service delivery
Water resources management implementation (SDG 6.5.1, 6.5.2)
Coordination (intersectoral, levels of government, multistakeholder)
Partnerships, International cooperation, collaborative behaviours, includes private sector participation, PPPs
Community/ stakeholder engagement, implementation of participatory processes, public awareness and outreach programmes
Risk-informed management, climate adaptation actions, emergency planning/ training
Innovation, research and development, technological advancement
Equity in targeting resources, finance allocations, design standards, gender and socially inclusive decision-making
Audits, corporate governance, transparency in decision-making, integrity, management control
Infrastructure development, project preparation pipelines (bankable), investment preparation, procurement
Commercial Management, customer services
Progress toward strengthening identified systemic bottlenecks
Sector reform implementation
Government leadership
Hygiene behaviour change programmes, IEC
Environmental and Social impact assessments
Support for markets (1)

Output Domain Groupings
Service level & quality (access, availability, continuity, quality, reliability), water quality, chlorination, volume of WW treated, volume of water produced, service delivery performance KPIs,
Infrastructure outputs (new construction, expansion of service, capital projects)
Operational sustainability & efficiency (Non-revenue water, operating cost recovery, energy efficiency)
Service affordability, pro-poor measures; social inclusion in service delivery
Regulatory compliance, monitoring and performance reporting
Functionality (physical condition)
National proportion of domestic and industrial wastewater flows safely treated (SDG 6.3.1)
Environmental management and sustainability, circular economy/ reuse, pollution control and remediation, greenhouse gas emissions
Level of public/ local community participation
Increased water resources availability, water storage capacity, reduced demand, efficient use of water resources
Commercial Operations/ Management performance (meter ratio, billing, complaints resolved);
Behaviour change
Financial performance, investment performance and sustainability (includes per capital investment cost)
Risk-informed, climate smart measures implemented/ applied; infrastructure, services resilient to climate change shocks
Product availability, quality, market performance, competition
System performance - composite score
Job creation
Worker and public safety in operations (1)
Adoption of innovative solutions (1)

Outcome Domain Groupings
National WASH coverage estimates - population using safely managed WASH services, includes schools and HCF (SDG 6.1, 6.2, 1.4, 4a)
Equitable and inclusive access to WASH services (population view), includes disaggregated data and resources targeted to LNOB
Public/ customer satisfaction with quality of service, User experience
Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (SDG 6.4.2); reduction in future water demand
National and local WASH systems are strengthened (sustainable, bottlenecks removed)
WASH systems are resilient to shocks and stresses - climate, conflict, humanitarian emergencies
Water for economic growth, productivity, Water use efficiency improved (SDG 6.4.1)
Political and social prioritization of WASH
Affordability of services (population view)
Increased investment, improved financial viability and creditworthiness
Sustainable development objectives of other sectors (education, health, nutrition, environment etc.) (17 SDGs)
Systemic Change - Change in relationships, power dynamics, norms and behaviours
Strengthened accountability; effective management of public services
Improved menstrual health and hygiene
Effective international cooperation and partnership (1)
Market maturity (1)

Impact Domain Groupings
Health (SDG 3) Burden of disease from WASH (SDG 3.9.2)
Environment, environmental sustainability, including improved ambient water quality and freshwater ecosystems (SDG 6.3.2, SDG 6.6.1)
Economic growth, green growth, circular economy, job creation, livelihoods, prosperity (SDG 8)
Human Rights and dignity; universal access to services (Periodic review)
Nutrition and food security (SDG 2)
Gender equality (SDG 5) and social inclusion (SDG 10)
Peace (SDG 16) ; International cooperation (SDG 17)
Water security (SDG 6)
Education (SDG 4)
Human well-being, living conditions (SDG 3)
Resilience, including climate adaptation (SDG 13)
Sustainable development - (2030 Agenda)
Safety, freedom from violence (SDG 16)
End extreme poverty; poverty reduction (SDG 1)
Responsible production and consumption (SDG 12) (1)
Governance- responsive, accountable, efficient, effective (SDG 16) (1)
Urban development (SDG 11) (1)

Notes:

- Indicator domains found in only one framework out of the 82 total frameworks assessed were removed in step 1 as they are not “common” indicator domains.

Step 2. Identify indicator domains where internationally agreed core indicators already exist.

Input Domain Groupings
Funding, financing, financing frameworks, mechanisms, budget lines, ODA, external support (SDG 6.a.1)
Legislation, policy frameworks
Institutional framework, roles and responsibilities, capacities; Institutional arrangements
Regulatory frameworks, technical standards
Data and information
Human capital, human resources, WASH workforce
Equity, Human rights, Gender mainstreaming, social inclusion, affordability policies
Participation policies and procedures (SDG 6.b.1)
Service delivery models, service provider frameworks; frameworks for private sector participation
Resilience, risks, hazards, shocks assessments, incorporated in policy frameworks
Government Leadership & political will
Water Resources
Infrastructure assets
Private sector, markets, market rules, technology, supply chains
Innovation governance, eco-system, readiness
Anti-corruption frameworks
Attitudes, behaviours, mental models

Process Domain Groupings
Planning, organization strategy, monitoring, review, learning
Financial management, financing strategy, financial flow tracking, budgeting, spending, expenditure rate (absoption, utilisation)
Regulatory functions, strong accountability mechanisms, surveillance
Human resources management, training & capacity building programmes, staffing levels (recruit, retain, succession), Worker safety, gender mainstreaming
Technical management, capacity and support; asset management; operations, maintenance, service delivery
Water resources management implementation (SDG 6.5.1, 6.5.2)
Coordination (intersectoral, levels of government, multistakeholder)
Partnerships, International cooperation, collaborative behaviours, includes private sector participation, PPPs
Community/ stakeholder engagement, implementation of participatory processes, public awareness and outreach programmes
Risk-informed management, climate adaptation actions, emergency planning/ training
Innovation, research and development, technological advancement
Equity in targeting resources, finance allocations, design standards, gender and socially inclusive decision-making
Audits, corporate governance, transparency in decision-making, integrity, management control
Infrastructure development, project preparation pipelines (bankable), investment preparation, procurement
Commercial Management, customer services
Progress toward strengthening identified systemic bottlenecks
Sector reform implementation
Government leadership
Hygiene behaviour change programmes, IEC
Environmental and Social impact assessments

Output Domain Groupings
Service level & quality (access, availability, continuity, quality, reliability), water quality, chlorination, volume of WW treated, volume of water produced, service delivery performance KPIs,
Infrastructure outputs (new construction, expansion of service, capital projects)
Operational sustainability & efficiency (Non-revenue water, operating cost recovery, energy efficiency)
Service affordability, pro-poor measures; social inclusion in service delivery
Regulatory compliance, monitoring and performance reporting
Functionality (physical condition)
National proportion of domestic and industrial wastewater flows safely treated (SDG 6.3.1)
Environmental management and sustainability, circular economy/ reuse, pollution control and remediation, greenhouse gas emissions
Level of public/ local community participation
Increased water resources availability, water storage capacity, reduced demand, efficient use of water resources
Commercial Operations/ Management performance (meter ratio, billing, complaints resolved);
Behaviour change
Financial performance, investment performance and sustainability (includes per capital investment cost)
Risk-informed, climate smart measures implemented/ applied; infrastructure, services resilient to climate change shocks
Product availability, quality, market performance, competition
System performance - composite score
Job creation

Outcome Domain Groupings
National WASH coverage estimates - population using safely managed WASH services, includes schools and HCF (SDG 6.1, 6.2, 1.4, 4a)
Equitable and inclusive access to WASH services (population view), includes disaggregated data and resources targeted to LNOB
Public/ customer satisfaction with quality of service, User experience
Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (SDG 6.4.2); reduction in future water demand
National and local WASH systems are strengthened (sustainable, bottlenecks removed)
WASH systems are resilient to shocks and stresses - climate, conflict, humanitarian emergencies
Water for economic growth, productivity, Water use efficiency improved (SDG 6.4.1)
Political and social prioritization of WASH
Affordability of services (population view)
Increased investment, improved financial viability and creditworthiness
Sustainable development objectives of other sectors (education, health, nutrition, environment etc.) (17 SDGs)
Systemic Change - Change in relationships, power dynamics, norms and behaviours
Strengthened accountability; effective management of public services
Improved menstrual health and hygiene

Impact Domain Groupings
Health (SDG 3) Burden of disease from WASH (SDG 3.9.2)
Environment, environmental sustainability, including improved ambient water quality and freshwater ecosystems (SDG 6.3.2, SDG 6.6.1, SDG 15)
Economic growth, green growth, circular economy, job creation, livelihoods, prosperity (SDG 8)
Human Rights and dignity; universal access to services (Periodic review)
Nutrition and food security (SDG 2)
Gender equality (SDG 5) and social inclusion (SDG 10)
Peace (SDG 16) ; International cooperation (SDG 17)
Water security (SDG 6)
Education (SDG 4)
Human well-being, living conditions (SDG 3)
Resilience, including climate adaptation (SDG 13)
Sustainable development - (2030 Agenda)
Safety, freedom from violence (SDG 16)
End extreme poverty; poverty reduction (SDG 1)

Notes:

- The indicator domains in 'blue' colour are currently measured and periodically monitored by Member States through indicators agreed in the United Nations SDG indicator framework.

Step 3. Group remaining indicator domains into inter-related "families".

Input Domain Groupings
Funding, financing, financing frameworks, mechanisms, budget lines
Legislation, policy frameworks
Institutional framework, roles and responsibilities, capacities; Institutional arrangements
Regulatory frameworks, technical standards
Data and information
Human capital, human resources, WASH workforce
Equity, Human rights, Gender mainstreaming, social inclusion, affordability in policies
Service delivery models, service provider frameworks; frameworks for private sector participation
Resilience, risks, hazards, shocks assessments, incorporated in policy frameworks
Government Leadership & political will
Water Resources
Infrastructure assets
Private sector, markets, market rules, technology, supply chains
Innovation governance, eco-system, readiness
Anti-corruption frameworks
Attitudes, behaviours, mental models

Process Domain Groupings
Planning, organization strategy, monitoring, review, learning
Financial management, financing strategy, financial flow tracking, budgeting, spending, expenditure rate (absoption, utilisation)
Regulatory functions, strong accountability mechanisms, surveillance
Human resources management, training & capacity building programmes, staffing levels (recruit, retain, succession), Worker safety, gender mainstreaming
Technical management, capacity and support; asset management; operations, maintenance, service delivery
Coordination (intersectoral, levels of government, multistakeholder)
Partnerships, International cooperation, collaborative behaviours, includes private sector participation, PPPs
Community/ stakeholder engagement, implementation of participatory processes, public awareness and outreach programmes
Risk-informed management, climate adaptation actions, emergency planning/ training
Innovation, research and development, technological advancement
Equity in targeting resources, finance allocations, design standards, gender and socially inclusive decision-making
Audits, corporate governance, transparency in decision-making, integrity, management control
Infrastructure development, project preparation pipelines (bankable), investment preparation, procurement
Commercial Management, customer services
Progress toward strengthening identified systemic bottlenecks
Sector reform implementation
Government leadership
Hygiene behaviour change programmes, IEC
Environmental and Social impact assessments

Output Domain Groupings
Service level & quality (access, availability, continuity, quality, reliability), water quality, chlorination, volume of WW treated, volume of water produced, service delivery performance KPIs,
Infrastructure outputs (new construction, expansion of service, capital projects)
Operational sustainability & efficiency (Non-revenue water, operating cost recovery, energy efficiency)
Service affordability, pro-poor measures; social inclusion in service delivery
Regulatory compliance, monitoring and performance reporting
Functionality (physical condition)
Environmental management and sustainability, circular economy/ reuse, pollution control and remediation, greenhouse gas emissions
Level of public/ local community participation
Increased water resources availability, water storage capacity, reduced demand
Commercial Operations/ Management performance (meter ratio, billing, complaints resolved);
Behaviour change
Financial performance, investment performance and sustainability (includes per capital investment cost)
Risk-informed, climate smart measures implemented/ applied; infrastructure, services resilient to climate change shocks
Product availability, quality, market performance, competition
System performance - composite score
Job creation

Outcome Domain Groupings
Equitable and inclusive access to WASH services (population view), includes disaggregated data and resources targeted to LNOB
Public/ customer satisfaction with quality of service, User experience
National and local WASH systems are strengthened (sustainable, bottlenecks removed)
WASH systems are resilient to shocks and stresses - climate, conflict, humanitarian emergencies
Political and social prioritization of WASH
Affordability of services (population view)
Increased investment, improved financial viability and creditworthiness
Systemic Change - Change in relationships, power dynamics, norms and behaviours
Strengthened accountability; effective management of public services
Improved menstrual health and hygiene

Legend - Step 3
Indicator Domain Family 1
Indicator Domain Family 2
Indicator Domain Family 3
Indicator Domain Family 4
Indicator Domain Family 5
Indicator Domain Family 6
Indicator Domain Family 7
Indicator Domain Family 8
Cross-cutting Areas