



**water & sanitation**

Department:  
Water and Sanitation  
REPUBLIC OF SOUTH AFRICA



## TERMS OF REFERENCE FOR A SOLICITED WRC PROJECT

<b>THEME</b>	<b>Water Advisory</b>
<b>TITLE</b>	<b>Operationalising the interlinkages between SDG 6.3 (water quality and wastewater), other SDG 6 targets and the remaining SDGs</b>
<b>TOR NUMBER</b>	1010029

### **Rationale:**

South Africa is one of the countries that have committed to the 2030 Agenda for Sustainable Development, which includes the 17 Sustainable Development Goals (SDGs). Sustainable Development Goal 6 (SDG 6) aims to ensure availability and sustainable management of water and sanitation for all by 2030. It consists of 8 targets, with progress monitored through 11 indicators.

The Department of Water and Sanitation (DWS) is the lead department responsible for SDG 6. A core component of this responsibility is to ensure monitoring and reporting of the correct indicators at the correct scales in a manner that effects real change through informing policy formulation and decision-making. This involves collaborating with Statistics South Africa, which coordinates national reporting against all SDGs. The DWS also engages with the departments responsible for other SDGs, to ensure that interlinkages between SDG 6 and all other SDGs are adequately considered. This approach recognises that the outputs of SDG 6 underpin the achievement of other SDGs (e.g. education, food security, health, poverty). Equally, efforts towards achievement of other SDGs may impact on the ability to achieve SDG 6. An integrated approach is required, so as not to constrain the success of the entire SDG programme.

Within DWS, an SDG Working Group has been established to coordinate activities related to SDG 6. The Working Group consists of a Target Task Team for each of the eight SDG 6 targets, along with five Cross Cutting Task Teams (Research and Innovation, Sector Support and Collaboration, SDG Interlinkages, Climate Change, and the Water and Sanitation Sector Leadership Group) that provide support to the Target Task Teams. It is through the Research & Innovation Task Team that a research programme was facilitated through the Water Research Commission (WRC) to consider the trade-offs and synergies between SDG 6 and the other 16 SDGs. The findings of the research programme were so significant to the success of the SDG programme and so valuable in achieving SDG 6 specifically, that a separate SDG Interlinkages Cross Cutting Task Team was initiated to drive the findings of this research and turn the proposed recommendations into workable solutions that can be implemented by the sector.

## **Specifics Related to SDG Interlinkages:**

### ***Background:***

One innovative feature of the 2030 Agenda is the integration of its SDGs. SDG interlinkages refer to the complex network of interconnections existing across the SDGs, their targets and indicators. These interlinkages can be positive, negative or have a mixed nature. If interlinkages are not understood and managed, conflicts may arise if achieving one target has a negative impact on another.

Since decisions and actions to advance any SDG will likely affect the achievement of the others, a better understanding of the interactions between SDGs is needed. This information is key to unlocking the full potential of the SDGs at any scale, as well as ensuring that progress made in some areas is not at the expense of progress in others (See Note 1). Substantial economic, social and environmental benefits can be obtained from well-coordinated actions that capitalise on synergies between multiple SDGs. In order to accelerate the SDG programme, the need for a holistic, integrated approach is required. Such an approach will require, as a starting point, an analysis of the synergies (strengthening) and conflicts (trade-offs) between targets, together with thorough stakeholder analysis and engagement (Note 2).

In 2021 the WRC published a study that explored the interlinkages (synergies and trade-offs) between SDG 6 indicators and other SDG indicators in a South African context (Note 3). Further in-roads are now needed to establish exact needs and opportunities for collaboration and alignment with those institutions responsible for leading and reporting on the other SDGs, such that the targets for SDG 6 may be achieved, and the water sector is able to support the water and sanitation-related needs of the other SDGs.

Over the past 12 months the Interlinkages Task Team has developed a complex tool (Note 4) that considers the synergies and trade-offs between each of the 11 SDG 6 indicators and all indicators under the other SDGs (approximately 230 in total, see Note 5). To put the assessment scope into perspective, to review each interlinkage between all indicators individually requires in excess of 3 000 assessments to consider both synergies and trade-offs between each. Although a big task, implementing the DWS interlinkages tool will inform the SDG 6 programme of the scope of water and sanitation interventions required to achieve all other SDGs. In addition, it will provide data that allows interventions to be prioritised by other SDGs that will significantly contribute towards SDG 6 being achieved. It is a potential 'win-win' solution for all involved in the SDG programme and has been identified by the United Nations as an initiative that could benefit other participating countries globally.

Given the potential magnitude of understanding and unpacking each of the interlinkages, a single target needed to be selected for the purpose of piloting through a full cycle of data gathering, assessment and interpretation, and establishing proposed tangible interventions that can be implemented in support of the National Water Resource Strategy (NWRS) through the DWS National Water and Sanitation Master Plan (NW&S MP). When comparing targets, the UN 2017

study (Note 2) found that Target 6.3 (Note 6) was the target with the most direct relationship with other targets. It has both trade-offs and synergies with other targets and will lead to improvements in many other indicators. As such a decision was made by the Task Team to first focus on SDG Target 6.3 and its interlinkage with all other SDGs.

SDG 6.3 has two domesticated indicators (6.3.1D: Proportion of water containing waste lawfully discharged and 6.3.2D: Proportion of bodies of water that comply with the water quality objectives). The pilot study would therefore include approximately 920 assessments (Note 7). The findings could significantly assist in addressing Target 6.3 in South Africa which is indeed a critical Target where progress is lagging. The pilot would not only collect useful data that will contribute towards achieving the Target 6.3 but will also provide an opportunity to refine the DWS tool before dealing with the remaining SDG 6 targets and their interlinkage with the 16 other SDGs.

The pilot requires assessment of the linkages (direction, type, strength, and interdependency) between the two indicators under Target 6.3 and the indicators under the other targets under SDG 6 and the other 16 SDGs. It is expected that the project will engage with the SDG 6 Target Task Teams and lead departments of other SDGs to capture and assess required information, build an in-depth understanding of the interlinkages and produce recommendations.

Given that this will be the first attempt at work of this nature, the initiative to develop an interlinkage analysis report for Target 6.3 will need to include a component on lessons learnt to inform further initiatives by the task team. An important consideration for the approach to be used is that the tool should be tested and optimised to reveal gaps and potential opportunities for strengthening the actions across the development agenda to achieve Target 6.3 and to strengthen the water quality management activities of DWS to achieve the 17 SDGs, including SDG 6.

This pilot study must be designed to contribute towards the following broader outcomes:

- Improved knowledge on SDG interlinkages across goals, targets and indicators in a South African context.
- Availability of evidence to inform DWS in prioritising actions with larger synergistic impacts and prompting effective investments to enable limited resources to be used more efficiently and sustainably.
- Greater integration and communication among various stakeholders operating in diverse contexts across the SDGs.

**Objectives:**

**General:**

To pilot the implementation of the DWS SDG interlinkages tool by examining the relationships between Sustainable Development Target 6.3, other SDG 6 targets and the remaining SDGs.

**Specific:**

1. Test and refine the DWS SDG interlinkages tool in the context of Target 6.3;

2. Explore the potential of the tool and the SDG 6 Working Group as mechanisms for improving cooperative governance within DWS, across the water sector and with lead departments of other relevant SDGs;
3. Identify the data and implementation actions the lead departments for other SDGs require from the water sector so that they may achieve their goals and reporting requirements;
4. Identify what the water sector requires from the other SDGs to achieve the SDG 6.3 targets and how this may be integrated into their sector plans; and
5. Synthesise and prioritise actions, to be incorporated in the NW&S MP, required to strengthen synergies and mitigate trade-offs identified between Target 6.3 and other targets.

**Deliverables:**

The following deliverables are indicative and may be tailored to suit the proposed approach:

1. Inception report;
2. Compilation of documents sourced during the study, catalogued according to their relevance to specific interlinkages;
3. Target 6.3 interlinkages analysis report including:
  - o description of interlinkages;
  - o identified gaps and recommended actions;
  - o recommendations for updates to relevant sectoral strategies and plans;
  - o stakeholder identification and analysis; and
  - o recommendations for the approach to tackling the interlinkages of other SDG 6 targets.
4. Report on performance of the interlinkages tool including governance recommendations for improving its potential to support an integrated approach to SDG implementation; and
5. Updated tool and populated interlinkages framework.

**Notes:**

1. ICSU. 2017. A guide to SDG interactions: From science to implementation. International Council for Science, Paris.
2. United Nations. 2017. Integrated Approaches for Sustainable Development Goals Planning: The case of Goal 6 on water and sanitation. United Nations Economic and Social Commission for Asia and the Pacific, Thailand.
3. Libala, N., Nyingwa, A. and Griffin, N. 2021. Mapping water and sanitation interlinkages across the Sustainable Development Goals. Water Research Commission Report No. 2933/1/20. <https://wrcwebsite.azurewebsites.net/wp-content/uploads/mdocs/2933%20final.pdf>
4. Tool available at [https://wrcorgza-my.sharepoint.com/:x/g/personal/johnd\\_wrc\\_org\\_za/EccuNwP-AZVCmeAljnGAZSMBNcl0XsThT3YVNQij1-DMJQ?e=nrk8aF](https://wrcorgza-my.sharepoint.com/:x/g/personal/johnd_wrc_org_za/EccuNwP-AZVCmeAljnGAZSMBNcl0XsThT3YVNQij1-DMJQ?e=nrk8aF)
5. This is a tentative number that excludes duplicates and additional indicators. To evaluate the interlinkages properly in this project, proposed methodologies should include a step focusing on the confirmation and, if necessary, updating of the spectrum of SDGs, targets and indicators captured in the 'Look-up Table' of the tool before commencing with the

assessments of interlinkages. It will be particularly important to ascertain the number of indicators per target, including the additional indicators that have been developed.

6. Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
7. An indicative estimate calculated as follows: 2 indicators being investigated under 6.3 x 2 interlinkage directions per indicator (inbound and outbound) x 230 other indicators being investigated
8. Addressing this scope of work requires a diverse range of skills and experience. Proposals must include the details of all team members, their experience and expertise relevant to this assignment and their role in the project.
9. Further details on these ToR can be accessed at <http://www.wrc.org.za/opportunities/>. Proposals must be submitted online via the WRC Business Management System (<https://wrc.microsoftportals.com/>). Further information on submission of proposals can be accessed at <http://www.wrc.org.za/submissions/>. For technical queries regarding the Business Management System, contact [bms-support@wrc.org.za](mailto:bms-support@wrc.org.za).
10. Prior to capturing a proposal on BMS, proposers should familiarise themselves with the guidelines for submission of research proposals (<https://wrcwebsite.azurewebsites.net/wp-content/uploads/BMS-Guidelines-for-proposal-submission-2019.pdf>). Particular attention should be given to the section in the guidelines on budgeting.

**Time Frame:**

12 months

**Total Funds Available:**

R1,000,000