



Utility Platform

For strengthening partnerships
of municipal utilities worldwide



Outcome Report 3 – Water Operator Partnership Luapula Water Supply and Sanitation Company in Zambia and Stadtentwässerung Dresden in Germany

IMPRINT

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Utility Platform for Strengthening Partnerships of Municipal Utilities Worldwide

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Partners working together at LpWSC facilities | 09/2023 | Photo: SEDD

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About “Utility Platform for Strengthening Partnerships of Municipal Utilities Worldwide”

Context

In many German partner countries, municipal utilities providing public goods and services such as water and waste disposal are in poor economic shape. As a result, their service provision is only unreliable or does not reach the entire population. Due to the war, utilities in Ukraine are finding it particularly difficult to maintain operations, restore destroyed technology and bring new plants up to European Union standards. In the face of climate change, growing cities and digitalisation, utility companies in Germany and its partner countries are facing similar challenges in order to continue providing their services.

Objective

Municipal utilities in cooperating countries have better access to up-to-date, tried-and-tested knowledge and the technical and institutional expertise of German municipal utilities.

Approach

The Utility Platform promotes and supports 28 partnerships between German municipal utilities and operators in Zambia, Tanzania, South Africa, Jordan, Moldova, Ukraine and Albania in the water and waste sector. The platform promotes close exchange on corporate management and on operating and maintaining plants. Technical advice, mutual visits, job shadowings, virtual meetings and the procurement of technology, particularly for Ukraine, form the core of the cooperation between the companies.

The project has also established a logistics hub that dispatches donations and procurements from German utility companies to their Ukrainian counterparts. Appeals for donations by the Association of Local Utilities (VKU) make it possible to deliver needed technical equipment to Ukraine. In addition to the donations, the logistics partner Go Local also transports the goods that are procured for Ukrainian utilities as part of the 16 solidarity operator partnerships.

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Dr Katharina Welle is an evaluation specialist with expertise in water, sanitation and hygiene and public health in international development. She is based in Brighton, in the UK, where she works as an independent consultant carrying out evaluations, providing organisational support on theory of change, performance monitoring and learning in the WASH sector and beyond.



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ACRONYMS

AfDB	African Development Bank
BMZ	Ministry for Economic Cooperation and Development
DWA	Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall. e.V.
FEO	Fernwasserversorgung Elbaue-Ostharz GmbH
GWOPA	Global Water Operators' Partnerships Alliance
GWP	German Water Partnership
KPI	Key Performance Indicator
LpWSC	Luapula Water Supply and Sanitation Company Limited
SEDD	Stadtentwässerung Dresden GmbH
SDGs	Sustainable Development Goals
WOP	Water Operator Partnership
ZWAV	Zweckverband Wasser und Abwasser Vogtland



EXECUTIVE SUMMARY

This Water Operator Partnership (WOP) between Stadtentwässerung Dresden GmbH (SEDD), Zweckverband Wasser und Abwasser Vogtland (ZWAV), Fernwasserversorgung Elbaue-Ostharz GmbH (FEO) and Luapula Water Supply and Sanitation Company Limited (LpWSC) was funded under the pilot phase of the German Utility Platform for strengthening partnerships of municipal utilities worldwide at the beginning. The Utility Platform is implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Later, it became part of the European Union (EU) WOP programme of the Global Water Operators' Partnerships Alliance (GWOPA).

The GIZ support to this WOP ran from May 2022 until July 2023. It provided a bridging function until the WOP support transitioned to the Global Water Operators' Partnerships Alliance (GWOPA)-managed EU-WOP programme in August 2023. The aim of GIZ's support was to consolidate the partnership and to set up a basis for thematic collaboration. GIZ's bridging function enabled the WOP partners to carry out a fact-finding mission at LpWSC in Zambia in November 2022 in addition to supporting further shorter trips of LpWSC personnel to Germany and online exchanges. A total of € 90,600 was available to the WOP during this phase. WOP partners achieved the aims of the bridging phase. GIZ still continues to be an important contact for networking activities both in Zambia and in Germany.

Consolidating the partnership: Based on a two-week fact-finding mission to Zambia and further in-person and online exchanges, the WOP partners developed a trusted relationship, despite several management personnel changes in LpWSC during the period. Partners are highly motivated to work together and learn from each other.

Setting up a thematic programme of work: LpWSC is due to take over modernised and expanded water supply and sanitation infrastructure, financed under a project by the African Development Bank. The aim of the peer-to-peer exchanges is to support LpWSC in this process so that the company is able to effectively operate and maintain the upgraded infrastructure and to provide and expand services in urban areas and rural growth centres in Luapula province.

Under the GIZ-funded WOP period, the partners successfully set up three thematic working areas and developed a logframe and activity plan to achieve them. The work areas are: (1) water production (FEO), (2) water distribution (ZWAV), (3) sanitation (SEDD). Two other working groups are planned to be established in the nearest future: (4) corporate management and (5) human resources management (SEDD). Partners set up working groups and started regular online exchanges. Shortly after transitioning to the GWOPA-funded phase, a second trip to Zambia helped to consolidate the partnership, update workplans and continue the collaboration.

1. INTRODUCTION



UTILITY PLATFORM
for STRENGTHENING
PARTNERSHIPS
of MUNICIPAL UTILITIES
WORLDWIDE

The German Ministry for Economic Cooperation and Development (BMZ) set up a 'Utility Platform for strengthening partnerships of municipal utilities worldwide', as a pilot project running from 2019 until 2024. Another project phase will be starting in July 2024, running until June 2027. The initiative supports partnerships between municipal utilities in Germany and its partner countries to support the implementation of the Sustainable Development Goals (SDGs) and the New Urban Agenda. The partnerships of the pilot project follow principles of peer-support with the aim to build capacity on a not-for-profit basis to enable better service delivery. These principles were derived from the Global Water Operators' Partnerships Alliance (GWOPA), which was founded in 2009.

The Water Operator Partnership (WOP) between Stadtentwässerung Dresden GmbH (SEDD), Zweckverband Wasser und Abwasser Vogtland (ZWAV), Fernwasserversorgung Elbaue-Ostharz GmbH (FEO) and Luapula Water Supply and Sanitation Company Limited (LpWSC) is different than the other WOPs supported under the pilot phase of the Utility Platform: The GIZ support to this WOP provided a bridging function for consolidating the partnership and to set up a basis for further thematic collaboration under the EU-WOP programme managed by GWOPA from August 2023 onwards. This report explains how the partnership came about and documents the achievements of the period covered by the German Utility Platform's pilot programme.

2. THE WATER OPERATOR PARTNERSHIP (WOP)

This section sets out the aim of the WOP, introduces the WOP partners and outlines the key partnership activities under the pilot phase of the German Utility Platform.

2.1 WOP objective under GIZ pilot phase

The WOP was originally set up between LpWSC and a different partner under the GWOPA-managed EU-WOP programme. After the original partner withdrew, SEDD agreed to step in to take on this role in the first half of 2022. GIZ, also a partner on the GWOPA-managed EU-WOP, agreed

to bridge the gap until GWOPA funding would become available to enable an initial set-up phase. The overall aim of the WOP under the EU-WOP initiative is to “Strengthen LpWSC’s capacities to reduce non-revenue water and extend service provision in Luapula province” (SEDD 2022b). The aim of the bridging support provided under the pilot phase of the Utility Platform is to set up open communication and develop a sound basis for thematic collaboration between the partners. To do so, GIZ supported a series of trips and meetings, including a fact-finding mission to jointly develop overall objectives, thematic working areas, and activity plans to achieve these. The GIZ-supported resource envelope for the WOP from May 2022 until August 2023 was € 90,600.

Partners jointly working at Luapula Water Supply and Sanitation Company Limited | 10/2023 |



Photo: Stadtentwässerung Dresden

2.2 WOP partners

The WOP is led by SEDD with two German co-partners, ZWAV and FEO. The international partner is LpWSC, the water and sanitation services operator for the Luapula province in Zambia. SEDD is responsible for the overall delivery of the WOP and for the thematic areas of sanitation and wastewater treatment and human resources and corporate management. All German partners have gone through a process of upgrading and modernising

their infrastructure after the reunification of Germany. During that process, they greatly reduced water losses in their networks - a key challenge faced by LpWSC - and they bring this experience to the partnership. Thematically, the German co-partners FEO and ZWAV collaborate with LpWSC on water production / treatment (FEO) and water distribution (ZWAV) whilst SEDD works with LpWSC on sanitation, corporate and human resources management. Box 1 provides a short description of each partner.

Box 1: WOP partners

Lead Partner in Germany: Stadtentwässerung Dresden GmbH (SEDD) provides wastewater services to 787,000 people in East Saxonia via a wastewater infrastructure network of 1,850 km and a wastewater treatment plant in Dresden-Kaditz. The company has more than 400 employees. The public enterprise has been involved in international cooperation projects since 2012 with a thematic focus on technical trainings for wastewater treatment.



German co-partner Zweckverband Wasser und Abwasser Vogtland (ZWAV) is a communal water and wastewater treatment enterprise in Vogtland, Germany, with headquarters in Plauen serving

approximately 223,000 people. ZWAV caters for a predominantly rural population via a decentralised structure, a similar set-up to LpWSC. ZWAV has undergone a complete restructuring of its infrastructure in the early 2000s and is interested in sharing the lessons learned and experience gained from this period as part of the WOP.



German co-partner Fernwasserversorgung Elbaue-Ostharz GmbH (FEO) serves a population of two million

people with water supply stretching over 9,000 km² distributed across several regions in the North-East of Germany and reached via a water supply distribution network of over 750 km length. It sells water to other public enterprises as well as servicing customers directly.



International partner Luapula Water Supply and Sanitation Company Limited (LpWSC) operates in Luapula province, in the North East region of Zambia. It is mandated to serve

the urban and peri-urban areas in a region with 1.1 million inhabitants but currently the operator serves five out of the 12 districts in the province.

2.3 WOP activities under the GIZ pilot phase

LpWSC was set up in 2008 to provide water supply and sanitation services to urban and rural centres across all 12 districts in Luapula, a population of just over 1.1 million people. LpWSC's work is complemented by third party service providers managing small piped water supply schemes in the province. Since it started working, LpWSC has operated in five of the 12 districts comprising Luapula province. A 35 million USD investment in Luapula's water supply and wastewater infrastructure

financed by the African Development Bank (AfDB) has led to the rehabilitation and expansion of the province's water supply and wastewater infrastructure. At the end of 2023, the upgraded and expanded infrastructure was due to be commissioned in the next few weeks and to be subsequently managed by LpWSC. The enterprise developed a new strategic plan (2023-2025), and the aim of the WOP is to support the Zambian operator in taking over and operating the infrastructure in line with the objectives set out in the plan. Table 1 below provides an overview of the partnership activities during the bridging phase supported by GIZ.

SEDD, FEO and ZWAV colleagues are trained on intercultural communication and the country Zambia by a Zambian expert | 02/2024

Photo: SEDD



Timeline	Key events / developments
May 2022	First contact is established , representatives of the partner organisations get to know each other during the 4th network meeting of the Utility Platform in Stuttgart, Germany.
September 2022	A first in-person exchange takes place in Germany. In September, a 2-person delegation from LpWSC visits Dresden as part of the 5th partnership conference between German and African municipalities". As part of the trip, Zambian colleagues meet with SEDD and ZWAV to visit the operators' sites, develop personal connections and to conduct first thematic exchanges.
November 2022	In November, a 14-day fact-finding mission from SEDD, ZWAV and FEO takes place to get to know LpWSC (levels of access, infrastructure, operator culture, current technical steps for water and wastewater treatment) and to adapt operational plans.
December 2022	Set-up of working arrangements. A German-Zambian team is set up across several thematic work areas and partnership working arrangements are established such as frequency of meetings and the format of online interactions. First activities focus on situation analyses for each thematic work area. An obstacle to the collaboration is the interim nature of the management at LpWSC with a new management expected to come in in mid-2023.
January 2023	Thematic areas of collaboration are identified. This includes the development of a logframe identifying activities and outputs of the partnership under the five work areas (see also Box 2).
March 2023	Regular online exchanges are established. The digital exchanges are organised by thematic work areas and documented.
May 2023	Participation in GWOPA congress. The chief engineer of LpWSC participates in the GWOPA Congress, which provides an opportunity for further in-person exchanges and wider networking across congress participants.
August 2023	Transition from GIZ-support to GWOPA. In August 2023, support to the WOP moves from GIZ to GWOPA thereby ending the period where SEDD reports to GIZ under the Utility Platform pilot phase.
February 2024	Intercultural communication training. In February 2024, 10 people from SEDD, FEO and ZWAV meet in Dresden to gain insights into intercultural communication with Zambians. They are trained by a Zambian who is living in Saxony, Germany now.

Table 1: Timeline of key WOP activities



Photo: Anja Schneider

Colleagues from Luapula, Zambia, visit the 5th partnership conference with Africa from SKEW in Dresden together with their partners from SEDD. OOWV colleagues are joining as well, together with their South African partners from East London. | 09/2022

3. PROGRESS TOWARDS RESULTS BY WORK AREA

The objective of the GIZ-financed WOP support was to enable partners to meet and identify WOP work areas and to develop a solid basis for further thematic collaboration under the EU-WOP programme implemented by GWOPA.

3.1 Establishing thematic work areas

Based on the fact-finding mission conducted in November 2022, the WOP partners have established a comprehensive set of thematic work areas under five headings: (1) water production, (2) water distribution, (3) sanitation, (4) corporate management and (5) human resources management. A summary of anticipated activities under the five thematic work areas is provided in Box 2 below. The result areas and activities displayed in Box 2 were developed in January 2023 and are based on the logframe template of the GWOPA EU-WOP monitoring framework.

Partners meet at SEDD facilities and jointly work with measurement devices for the water network | 09/2022 |

Photo: SEDD



Whilst the aim of the WOP was to support LpWSC in the management after the infrastructure modernisation and expansion had been completed, the WOP falls into a time where the infrastructure has not yet been handed over and is not yet fully in operation and where some essential equipment e. g. laboratory equipment has not yet been procured.

1. Water production (FEO)

- a. **Robust operation of water works:** Operation and maintenance: create / updated standard operating procedures and develop basics of maintenance management; on assets, develop a list of assets and maintenance tasks and related checklists
- b. **Quality management:** ensure continuous professional laboratory testing of water quality and optimisation of chemical dosing
- c. **Water safety plan:** develop a basic water safety plan to secure supply and quality
- d. **Energy management:** optimise energy supply

2. Water distribution (ZWAV)

- a. **Support stable operation of the water network:** create / develop standard operating procedures for operation and maintenance
- b. **Non-revenue water:** assess current leakage management and develop a strategy, establish teams, secure prevention of tempering with household connection meters
- c. **Asset:** display the asset inventory in the fixed assets and develop baseline maintenance management

3. Sanitation (SEDD)

- a. **Wastewater treatment plant:** check and optimise stable operation of wastewater treatment plant, evaluate the economic and energetic use of sewage sludge
- b. **Sewer network:** develop basis for the stable operation of the sewer network
- c. **Strategy for expanding service provision:** develop strategy to expand sanitation services, including vacuum tankers to connect more households to wastewater treatment services
- d. **Asset:** digital asset inventory of fixed assets, develop basics of maintenance management

4. Corporate management (SEDD)

- a. **Principles of modern corporate governance established:** create and publicise guiding principles, understand responsibilities at all levels and levels of staff motivation
- b. **Introduction of a new organisational structure**
- c. **Customer relationship and public relations:** establish a public relations department, develop a communication and information strategy
- d. **Establishment of a customer centre**

5. Human Resources management (SEDD)

- a. **Creation of a conducive work environment to improve employee performance:** accompany the introduction of a new organisational structure, develop and implement a company-wide training programme, monitor the implementation of occupational safety measures

Partners meet at SEDD facilities and jointly work with measurement devices for the water network | 09/2022 |



Source: Annex E Logical Framework Final Updated for PMP

3.2 Setting up trusted relationships between partners

During the first year of collaboration, partners were able to develop trusted relationships between technical colleagues. Partners confirmed that the in-person exchanges in Germany and Zambia during the GIZ-funded bridging period played a key role in establishing these relationships. The second in-person mission took place in September 2023, shortly after the handover, allowing the partners to make a head start in the GWOPA-funded phase of the WOP.

SEDD colleagues confirmed that there is strong motivation towards the WOP amongst all partners. This is evidenced by LpWSC's excellent organisation of the September 2023 visit to Zambia, who also made staff and logistical support available to the German partners during their stay.

The setting-up of trusted relationships has been partially hampered by frequent changes at the management level of LpWSC since the start of the collaboration (now the 3rd managing director). There is confidence that the management situation will now stabilise, and that the collaboration will continue to be productive amongst the WOP partners. Another challenge is finding the time for making progress on thematic areas between online meetings as all participating partners work on WOP topics on top of their day-to-day responsibilities, an issue shared more widely across WOPs. This notwithstanding, partners are eager to learn from each other and look forward to collaborating on the thematic work areas.

Partners from SEDD and LpWSC taking part at the 5th partnership conference for Africa from SKEW in Dresden | 09/2025



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Interviews

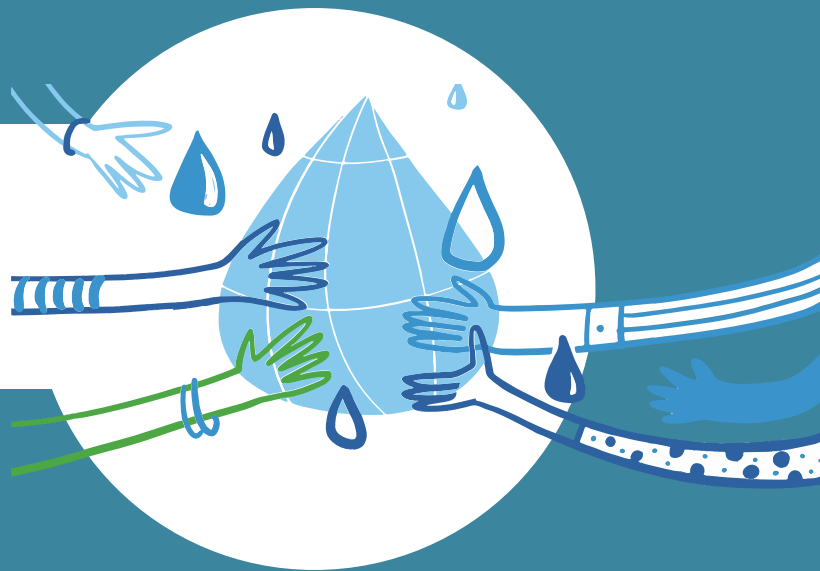
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Thank you to all employees from Luapula Water Supply and Sanitation Company Limited (LpWSC), Stadtentwässerung Dresden GmbH (SEDD), Zweckverband Wasser und Abwasser Vogtland (ZWAV) and Fernwasserversorgung Elbaue-Ostharz GmbH (FEO) who contributed to this publication via interviews, photos, editing etc.!

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