



THE BENEFITS:
**NON-REVENUE WATER REDUCED TO 6%
AND CUSTOMER SATISFACTION INCREASED**

The most striking impact of the solution has been the reduction in Non-Revenue Water. In the new environment under the AMR project, Non-Revenue Water levels are 6%, compared to levels as high as 42% in the environment not covered by the project. In just a few months, the quality of the remote data reading has enabled ELDOWAS to dramatically reduce illegal water traffic, fraud and theft during the night.

Data is now generated remotely on a daily basis, empowering ELDOWAS to deliver more accurate billing and detect leaks much more quickly. As a result, customer complaints have been significantly reduced.

Thanks to network alarms for leaks and hardware problems, ELDOWAS has managed to reduce the time required for maintenance work. Previously, it could take months to resolve network problems. Today, most issues are fixed within a week.

According to the World Bank, NRW should be less than 25% of the total water produced. ELDOWAS is now able to deliver on these international recommendations, enabling it to better serve its customers while simultaneously ensuring the company's sustainability and the preservation of water resources.



CSW 10/2021

**Pioneering customer satisfaction
in Kenya by tackling
Non-Revenue Water**

ELDOWAS Customer Case





ELDOR ET WATER AND SANITATION (ELDOWAS)

Eldoret Water and Sanitation Company Limited (ELDOWAS) is a water service provider for Eldoret town in the Rift Valley of Kenya. The company was the first water service provider in Kenya to attain ISO 9001:2008 certification in international Quality Management Standards. Ever ambitious, it planned to continue setting national standards as a pioneer in customer satisfaction. However, its network was facing a number of challenges, including extensive leaks and Non-Revenue Water.

By partnering with Diehl Metering to implement a pilot AMR (Automatic Meter Reading) project, ELDOWAS has managed to overcome these challenges. Thanks to regular and accurate data readings, the company can now quickly address network issues and has increased overall stakeholder satisfaction. Additional meters are set to be added to further expand the network.



74%
OF THE NETWORK

was affected by problems relating to readings, estimations and coverage

6% vs 42%
NON-REVENUE WATER

6% Non-Revenue Water was reported after implementation of the AMR solution, compared with 42% in areas not covered by the solution.

700
METERS IN 2020

500 Altair v4 volumetric meters & 200 Aquila V5 single jet meters had been installed by the end of 2020.

THE CHALLENGE: IMPROVE NETWORK SERVICE TO BOOST CUSTOMER SATISFACTION

The long-term ambition of ELDOWAS has always been to provide exceptional customer service to all its stakeholders, including end consumers and its principal shareholder, the County Government of Uasin Gishu. To become recognised as a leader in customer satisfaction, it needed to address a number of network problems.

At around 42%, Non-Revenue Water was a significant challenge. Fraud and water theft meant that ELDOWAS needed to monitor its network much more closely. In addition, the company faced extensive coverage problems, as well as inaccurate readings and estimations. Water leaks were also common, particularly in areas at very high altitude when air in the pipes often caused differential pressure issues.



Based in Ruiru, Kenya, DANCO is a leading pipe manufacturer with over 40 years experience providing durable and sustainable solutions in East Africa. Part of the Spinners and Spinners Group, it is a partner and supplier of Diehl Metering water meters.



"Thanks to ELDOWAS's progressive vision, the pilot AMR project has been a great success. After choosing a new site, they immediately saw the performance benefits of automation without any legacy issues. The project has helped them to monitor consumption, build new connections, and keep NRW down to 6% for that district metered area."

Sachin Dhanani,
Co-CEO & Founder, DANCO

THE SOLUTION: AN AMR NETWORK FOR REMOTE AND ACCURATE READINGS

In October 2018, Diehl Metering began working with ELDOWAS to implement a pilot AMR project, enabling the company to read meters remotely. This was one of the first AMR projects in Kenya, and initially comprised 100 meters.

The network was then expanded, and is now composed of 500 Altair V4 volumetric water meters, 200 Aquila V5 single jet meters and 3 WESAN Bulk Meters. Readings are transmitted using 703 IZAR RCI G4 radio modules, 2 RDC Standard receivers, and a Mobile reading solution (IZAR@MOBILE2 – CATS41 – Bluetooth Receiver – OptoHead). All the network data can then be easily accessed by ELDOWAS using the IZAR PLUS PORTAL software.

Throughout the project, the Diehl Metering team in Africa has worked closely with its partner Eastern Africa DANCO Limited to provide the necessary support and expertise to ELDOWAS technicians.

