

TERMS OF REFERENCE FOR A DIRECTED WRC PROJECT

THEME: Water Use

TITLE: Promoting the uptake and capacity building on the new WRC the Non-Revenue Water tools and portal

TOR NUMBER: 1010014

Rationale

WRC has been in the forefront of NRW over the last decade and have pioneered several valuable products and tools to support and build sector capacity. Recently the WRC has completed three very important outputs on the anticipation that the current state of NRW will be leading for a surge for support and products. These are:

- The first comprehensive NRW portal in South Africa. This website is a portal of advisory packages, solutions, tools, software, technologies, innovations, guidelines, templates, reports, training, case studies, and policies and legislation related to non-revenue water, and provides a 'one stop shop' for all existing solutions that can support municipalities, and organisations working with municipalities, to deal with non-revenue water. <https://managenrw.co.za/about/>
- The latest and updated suite of water loss management tools - The South African Water Research Commission has been helping to support municipalities throughout South Africa to address leakage and wastage from the reticulation systems since the early 1990's. Through the efforts of the WRC, South Africa was one of the first countries outside of the UK to embrace the Burst and Background Estimate methodology in order to quantify and help to reduce water losses in municipal water supply systems. The Burst and Background Estimate methodology was initially developed through numerous experts from various UK water companies in the 1990's which has become the standard approach to management of water losses in municipal water supply systems across the globe. It is a relatively simple and pragmatic approach aimed at helping water supply managers to quantify the level of water losses in their supply systems and what they can and should be doing in order to reduce their losses. The original approach four basic "pillars" each of which was supported by a relatively simple computer model. The four basic models, first introduced into the UK water industry in the early 1990's have now been introduced in most countries worldwide and in South Africa were developed through the WRC in the early 2000's. The four original WRC models were:

SANFLOW: Night flow analysis model.

PRESMAC: Pressure Management Model.

ECONOLEAK: Economics of Active Leakage Control Model.

BENCHLEAK: IWA water balance and water auditing model.

The above tools have all been digitized with supporting training videos and guidelines. It is envisaged that a very novel approach is required through a coerced self-learning and training platform, which leads to an accreditation or certification for completing the full course supported by online exams and quizzes. Thus, it will require an institution which has the credibility to design and roll-out such a novel training process to ensure that working with SALGA we get the commitments from up to 100 Municipalities to expose their staff to this coerced compulsory training and certification.

Objectives

The Specific Objectives are to;

1. developing an intense Municipal training and capacity building drive to share and disseminate knowledge on WRC products and tools.
2. Pilot uptake interventions in 100 Municipalities through a novel weekly competition process which covers all the modules.

Expected Deliverables

1. 100 Municipalities subscribe to supporting the training and deploy their staffCoordinating and developing this virtual support platform and building a community of practice.
2. Continue future rolling out by raising funding for support and continuity
3. Through the process promote WRC NRW portal and other products.

Total Budget: R 600 000.00 (Including VAT)

Year 1: R 300 000.00 (Including VAT)

Duration : 14 months