

# WATER TECHNOLOGIES PROCUREMENT

## Study explores ways to increase uptake of innovations in municipal space

*A Water Research Commission-funded study explored the challenges and opportunities presented by South Africa's public procurement legislation in increasing the uptake of water and sanitation innovations. Article by Sue Matthews.*



"The sheer number of the Acts and the Regulations which address procurement issues makes it very difficult for conscientious officials to get a clear understanding of what is required from them," noted the Zondo Commission in Part 1 of the State Capture report.

Government heeded those words and introduced the Public Procurement Bill in the National Assembly on 30 June 2023. Just over a year later, on 23 July 2024, the Public Procurement Act was published in the Government Gazette, having been approved by President Cyril Ramaphosa. Subsequently, National Treasury issued a media statement on 13 August, clarifying that the provisions of the Act are not yet in force and will be phased in through gazetted proclamations. For many of the provisions, regulations first need to be developed through a

consultative process, so in the meantime it's business as usual according to the existing Public Finance Management Act (PFMA), Municipal Finance Management Act (MFMA), Preferential Policy Procurement Framework Act (PPPFA) and their applicable regulations.

It remains to be seen whether the new Act and associated regulations will make procurement and supply chain management (SCM) processes – often perceived as cumbersome and onerous – easier to navigate. Indeed, the WRC had so many of its municipal and utility partners comment on the perceived challenges of scaling up new innovations to full scale in the context of public procurement processes, that it commissioned a study in November 2022 to explore the issue.

A project team led by Bosch Capital conducted an initial desktop review and then identified 86 stakeholders to complete an online survey. Although there was a response rate of only 30%, most categories of stakeholders – national government, end users, innovators, funders, consultants and other – were adequately represented. In-depth interviews were also conducted with 15 key stakeholders, and several workshops were held to discuss procurement issues and the research findings. Three informative engagements were also held with representatives of National Treasury's Office of the Chief Procurement Officer, to sense check interpretation and findings.

The team's research report, *Supporting the enabling environment for public sector uptake of water and sanitation innovations – final evaluation and recommendations (WRC report no. TT 941/24)*, was published earlier this year, accompanied by a practical guideline booklet titled *A water practitioners guide to supply chain management (WRC report no. SP 174/24)*.

The study revealed that challenges in procuring water and sanitation innovations were not so much the rules within the public procurement framework as the application of those rules. In the guideline document, the team highlight several misconceptions that often result in incorrect application of the rules.

One of these is the erroneous belief that value-for-money only equates to the lowest capital cost and the cheapest quote received. Value-for-money is the first of the Five Pillars of Procurement outlined in the General Procurement Guidelines, the others being open and effective competition, ethics and fair dealing, accountability and reporting, and equity. The pillars reflect the principles enshrined in the Constitution that public sector procurement must be fair, equitable, transparent,

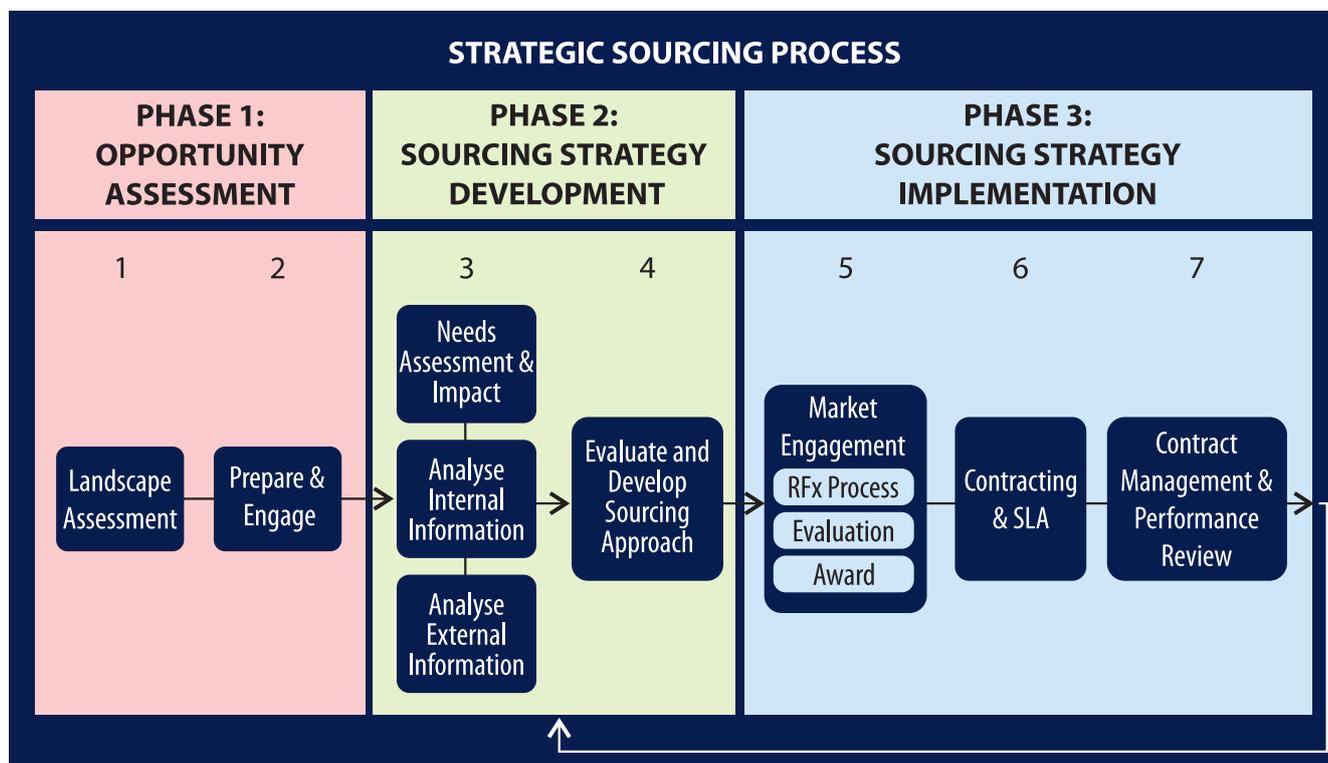
competitive and cost-effective.

"In considering value-for-money, you can't just select the lowest capital cost – you need to take into account the full lifecycle cost as well as the strategic benefits such as eradication of backlogs," says Bosch Capital's Rajiv Paladh. "Many people we engaged said 'No, we don't agree, it doesn't work that way in our organisation', but Treasury confirmed this."

Certainly, the concept is clearly explained in the General Procurement Guidelines as well as the February 2016 issue of *Civilition*, "Focus on: National Treasury Standard for Infrastructure Procurement and Delivery Management", published by the South African Institution of Civil Engineering (SAICE) in collaboration with National Treasury.

Another misconception was that the MFMA does not allow for contracts longer than three years, but Section 33 of the MFMA outlines the process to be used for contracts imposing financial obligations on the municipality beyond three years. This largely involves inviting comment from the local community and other interested persons, National Treasury and the relevant provincial treasury, the national department responsible for local government, as well as the Department of Water and Sanitation (DWS), in the case of contracts involving provision of water or sanitation services. The municipal council must take into account these comments and the impact of the financial obligations on future municipal tariffs and revenue.

"The procurement framework is structured in a manner that is flexible but does require planning processes to be very thorough and detailed prior to committing large budgets for an extended period," says Paladh. "It's important to provide evidence to develop a business case indicating that the expenditure is in the



The strategic sourcing process.

best interests of an institution and the community it serves.”

He points out that Public-Private Partnerships (PPPs) can result in budgetary commitments that extend for up to 30 years. In February, National Treasury called for comments on proposed amendments to the two regulations that govern PPPs – National Treasury Regulation 16 and the Municipal Regulation 309. An accompanying explanatory note states that Government recognises that PPPs can be an important lever to deliver much-needed infrastructure, and the amendments are expected to reduce procedural complexity.

The research also revealed some confusion as to whether single- and sole-source quotations are permitted in municipalities. Single-source quotations involve a transparent and equitable pre-selection process to request only one amongst a few prospective bidders to make a proposal, while sole-source quotations apply where there is no competition and only one bidder exists. The two guideline documents published by National Treasury, *Supply Chain Management: A guide for accounting officers of municipalities and municipal entities* (October 2005) and *Supply Chain Management: A guide for accounting officers/authorities* (February 2004) – the latter applicable to PFMA-regulated institutions, including water boards – suggest that they are allowed under specified circumstances.

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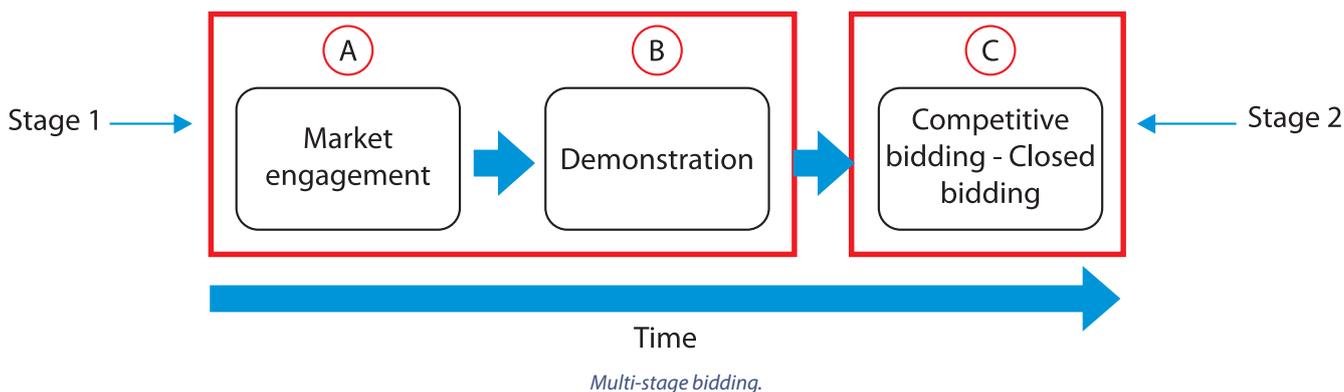
More recently, PFMA SCM Instruction No. 3 of 2021/22 reiterated that single- and sole-source quotations form part of limited bidding, but no similar confirmation could be found amongst the MFMA SCM circulars. The MFMA Municipal SCM Regulations do, however, state in Section 36 that an SCM policy may allow the accounting officer to dispense with the official procurement processes if required goods or services are only available from a single provider. Furthermore, the Standard for Infrastructure Procurement and Delivery Management, published as a Treasury

Instruction in 2015, applies to any municipality or municipal entity that adopts it, and it states that tenders may be solicited from a confined market where goods or services are only available from a sole contractor or a very limited number of contractors.

It is noteworthy, however, that the final sentence of Part 1 of the Zondo Commission’s State Capture report is a recommendation that consideration be given to enacting legislation to discontinue any procurement process deviation based on the concept of a sole-source service provider.

The project team propose an alternative model for procuring innovations in the water and sanitation domain, starting with the adoption of National Treasury’s Strategic Procurement Framework, first issued in May 2016 with a revised version issued in February 2024. It outlines the strategic sourcing process – a step-by-step, collaborative approach to get the best possible service and value from selected suppliers. Critically, the SCM unit is involved early in the process. The importance of this cannot be overstated, as it is only in a partnership between technical practitioners and SCM staff that an optimal outcome can be achieved. In the guideline document, it is recommended that SCM should transition towards an enabler for the implementation of innovations, assisting the organisation to meet business objectives rather than focusing only on compliance with procurement rules.

The strategic procurement process then helps to inform public institutions of the type of bidding process to follow to allow for an optimal service delivery outcome. The project recommends, however, that a multi-stage bidding process has emerged as a possible method for procuring water and sanitation innovations that have the potential to be upscaled from demonstration to full scale implementation. Multi-stage bidding would be particularly useful for innovations that need to be demonstrated at a larger scale before wider implementation, such as non-sewered sanitation systems (NSSS). In such a bidding process, innovators would be invited through an Expression of Interest (EoI) process to demonstrate their NSSS at selected sites, with performance criteria used to evaluate the innovations – such as effluent quality, water savings and maximum operating costs – clearly specified. Following the demonstration period, innovators whose NSSS met the performance criteria would be invited to respond to a Request for Proposal (RFP) process to provide a price for implementing their NSSS at a larger scale. Currently, the WRC is partnering with the City of Cape



Town to demonstrate three NSSS innovations – the EnviroLoo Clear Recirculation toilet system, the NEWgenerator recycling sanitation system and Aquonic treatment system for septic tanks – in five informal settlements. The intention is to pilot and then scale up the implementation of these technologies in the city's underserved communities. Rather than using municipal funds, however, the pilot project was made possible through a US\$4.5 million grant from the Bill & Melinda Gates Foundation (BMGF), paid over multiple financial years through the South African Sanitation Technology Enterprise Programme (SASTEP). SASTEP is an innovation platform established by the WRC in partnership with BMGF and the Department of Science and Innovation (DSI), and with the support of DWS, to accelerate the adoption of innovative and emerging sanitation technologies.

Even when tested and piloted at limited scale, though, large-scale implementation may not be practical for some innovations. The project team note that it is critical to document the entire process and lessons learnt for the benefit of both the institution – for example, to build a robust business case for adoption of an innovation or to respond to concerns about wasteful expenditure if it proves ineffective at scale – and other sector institutions. In September, the WRC launched the Next Generation Sanitation (NGS) Knowledge Hub on the SASTEP website to share case studies and other resources, such as policy briefs and access to funding opportunities. Similar initiatives that could offer useful insight and assistance include the DSI-WRC Water Technologies Demonstration Programme (WADER), the DSI Technology Innovation Agency (TIA), the CSIR Water Centre, and the recently established Water Partnership Office (WPO), which is a DWS programme with the Development Bank of South Africa (DBSA) and South African Local Government Association (SALGA) as partners. Its aims include supporting municipalities and water boards to prepare bankable projects and facilitating blended financing, where appropriate.

A key recommendation emanating from the research project was that institutions should develop innovation policies that signal their intent to innovate and that are aligned to SCM, budgeting and governance structures, allowing innovation to be integrated into regular operations.

“Innovation policy is sometimes developed in isolation, with a very siloed approach,” says Dr Chantal Kotze, Managing Director of Isle Utilities: South Africa, which was also part of the project team. “Our water boards do much better than most municipalities in implementing innovations, partly because they have more capacity in terms of scientific and technical staff but mainly because they have been structured in a way that allows them to undertake this sort of work. At Rand Water, for example, there is robust engagement across departments and divisions, and proper engagement at executive levels on policies, processes and how they feed into each other. There has to be organisation-wide agreement and consensus that we do want to invest in innovation, and we do need to look at solutions where traditional technologies and infrastructure are just not going to be suitable, or where value can be added by complementary innovations.”

The project team suggest that SALGA and the Water Institute of South Africa (WISA) could play a valuable capacity-building role

in empowering municipal officials to develop and implement innovation policies, respectively. They also recommend that DWS considers including criteria in the Blue Drop and Green Drop programmes that would incentivise implementation of innovation policies and adoption of innovations aimed at improving service delivery or quality compliance.

To access the research report, *Supporting the enabling environment for public sector uptake of water and sanitation innovations - final evaluation and recommendations* (WRC report no. TT 941/24), visit: <https://wrcwebsite.azurewebsites.net/wp-content/uploads/mdocs/TT%20941%20final%20web.pdf>

Or check out the practitioner's guide, [https://wrcwebsite.azurewebsites.net/wp-content/uploads/mdocs/SP%20174\\_final.pdf](https://wrcwebsite.azurewebsites.net/wp-content/uploads/mdocs/SP%20174_final.pdf)

