Request for Proposals (RFP)

Provision of review report on the current national and international Water Management Systems standards and practices as part of Industrial Water Efficiency study in South Africa

RFP No. 772/05/07/2017

Date of Issue:	21 June 2017	
Closing Date:	05 July 2017	
Place:	Tender box, CSIR Main Reception, Gate 3 (North Gate)	
Enquiries	Strategic Procurement Unit	E-mail: tender@csir.co.za
CSIR business hours	08:00 - 16:30	
Sector	Professional Services	

TABLE OF CONTENTS

SECTION A

1 INTRODUCTION

The Council for Scientific and Industrial Research (CSIR) is one of the leading scientific research and technology development organisations in Africa. In partnership with national and international research and technology institutions, the CSIR undertakes directed and multidisciplinary research and technology innovation that contributes to the improvement of the quality of life of South Africans. The CSIR's main site is in Pretoria, while it is represented in other provinces of South Africa through regional offices.

The National Cleaner Production Centre South Africa (NCPC-SA) is a key industrial sustainability programme of the Department of Trade and Industry that promotes the implementation of Resource efficient and Cleaner Production (RECP) methodologies – identifying and advising on opportunities to optimise the the usage of energy, water, materials and minimise the generation of waste in order to, reduce costs. In response to the increasing demand being placed on the current national water supply, the NCPC-SA recently launched its Industrial Water Efficiency Project. This 3-year project aims to assist industry to respond to the call to reduce and better manage water consumption.

2 BACKGROUND

South Africa is a semi-arid country with high water stress (40 – 60%). This is largely due to the annual rainfall being almost half the world average, high evaporation rates (average of 1 700mm per annum) and increasing demand. With the current projections, shortfalls between available water supply and demand are predicted as early as 2025. Increasing annual temperatures, the continual effect of El Nino and persistent drought conditions have seen dams reaching their lowest levels in decades. These all point to one thing: that changes need to be made to better manage and conserve this scarce and precious resource. As the climate changes, both flooding and droughts are likely to become more frequent in South Africa. Water ecosystems could also change. There is a need to adapt by improving water management. Water, as a natural resource, represents one of the important thematic priorities in the transition to a more resource

efficient South Africa. Access to good quality water is essential, not only for human health, but also nature and economic activities like agriculture, tourism, industry, transport and energy.
To manage water resources properly, quality needs to be monitored closely with the aim to ensure good quality water and that river basin systems are managed in a coordinated way, even if different countries are involved. Similarly, the actions for safeguarding South Africa's water resources set out steps which are needed to make sure that South Africans can enjoy sufficient supplies of good quality water for the foreseeable future. It is clear that more needs to be done to improve the quality and quantity of South Africa's water resources and ensure that people use it wisely and efficiently. Previous studies have shown that a lot of South Africa's water is wasted, and water efficiency could therefore be improved not only by technological improvements alone. An improved approach for a sustainable management of water resources requires close coordination with agriculture, transport, and development of policies and strategies that will address efficiency in industrial water use, as well as effective and fair water pricing.

On this basis, the objectives of this study are:

- First, to analyse industrial water efficiency best practices, standards and how these are approached elsewhere in the world and how can they be adopted to meet South African conditions, in particular exploring how these are used to regulate water demand to water conservation and demand management at plant level; how could industry assess water efficiency;
- Secondly, to analyze and review, incentive (drivers) structures for industrial water efficiency and how they are implemented; and
- Thirdly, to update the knowledge on water conservation demand management to obtain more information on the possibilities of getting drivers that can be used as incentives in line with current policies.

3 INVITATION FOR PROPOSAL

Proposals are hereby invited for the review of the current national and international Water Management Systems standards and practices as part of the Industrial Water Efficiency in South Africa with the aim of producing a report on focussing specifically on:

- The typical best practices, standards for conducting water efficiency in plants – what are they?
- Development of a standard methodology to conduct water efficiency to industrial plants in line with international best practices and standards on water efficiency
- Update the NCPC-SA on knowledge on the policies and strategies of water conservation and demand management.

4 PROPOSAL SPECIFICATION

The Industrial Water Efficiency (IWE) project will be conducted and implemented in South Africa and it will focus on the tasks/issues below with the main areas of services required. It should be noted that tasks can also have a cross-cutting character and hence descriptions should not be considered fixed to one specific task.

Task 1: IWE practices and standards – Analyse water management practices with focus on how water efficiency is typically approached in selected countries in the world. For example, in some cases, water users are reluctant to use efficiency as a water conservation tool, relying instead on business as usual cases as water is relatively cheap in the country.

The task should offer an analysis of the relative merits of approaches to how water efficiency is conducted at an industrial plant, and what standards and best practices can be applied to drive water management, especially in relation to resource efficiency objectives. The task should further analyse how water is consumed in the selected areas of the world to improve efficiency; reflect on why, in some cases, water demand is decreasing if it is at all.

The analysis should work out reasons for the decrease or increase in water consumption in the selected countries (with a focus on the extremes, if possible): is it because of market-based instruments, or introduction of new technologies (e.g. water saving devices, infrastructure renovation leading to reduced leakage, etc.), or a combination? In this line of reasoning, the task

should also consider and provide knowledge on which tools are the most cost effective (based on empirical evidence) to reduce water consumption (i.e. increased resource efficiency), setting standards for water resource management and governance as well as business conduct, including performance indicators and monitoring systems, to ensure compliance with the environmental and participatory requirements for other companies to follow.

The study should bring about international best practices, standards and best methodologies on industrial water efficiency. It must also help in providing a critical review of international best practice in policy instruments to address barriers to water efficiency; and help establish a repository of global best-practice information on water efficiency, including examples of 'investment grade' policy frameworks and project documentation.

Task 2: Based on the understanding of international best practices and standards, as well as knowledge of resource efficiency, the contractor will have to develop a dedicated standard methodology that will be used to assess water efficiency at an industrial plant.

NCPC-SA does assessments at 8 different sectors of the economy, and it would be of importance to the service provider to familiarize themselves on the different sectors and their water challenges, processes and risks, as well asopportunities for water efficiency. This methodology will guide NCPC-SA on the delivery of its mandate to the manufacturing sectors.

The outcomes of this task will assist in lobbying standards authorities to develop water efficiency management standards and methodologies that all industries can make use of to account for their water usage and minimize costs while driving sustainability. The study must assess the need for standardised water management systems and protocols by industry, providing capacity building and assistance in adopting international best practice in managing resources (incl. water management systems), water efficiency standards for equipment and processes (ISO certification i.e. ISO 14046 for water footprinting of products, processes and organisations based on the life cycle approach, labelling scheme, etc.); and promoting knowledge sharing by drawing from lessons learned and disseminate the results of various policy reform activities.

Task 3: Updating the knowledge on water conservation and demand management

The service provider must look into whether water consumption is reactive to water price changes. What is the potential role of economic instruments to reduce abstraction (water use) and polluted discharges.

**Economic instruments refers to a means of considering "external costs" i.e. costs to the public incurred during production, exchange or transport of various goods and services, so as to convey more accurate market signals.*

Task 4: Development of a report

Based on the above tasks, organise the process to and develop a report based on a state-of-the-art review of literature including a quantitative and qualitative analysis.

An inception meeting will be scheduled following the signing of the contract agreement. The purpose will be to discuss the project scope, confirm the delivery schedules and timelines. At the inception meeting, the service provider will be expected to present a summary of the proposed project activities to the NCPC-SA. This will include: how the evaluation will be structured/designed; how data/information will be collected and from where; how the data/information analysis will be undertaken; and lastly, how the information/analysed data will be synthesised.

4.1 **Deliverables –**

The expected deliverables below are to be clearly incorporated in one report

Component	**Activity**	**Out Puts**
Standardised best international methodologies and Standards and best practices	Conduct a study on international best practices to conduct water efficiency at industrial plants, look at international methods that can be adopted to fit South African conditions	Report on best method to be used to conduct IWE assessments, best international standards, that can be adopted to stimulate uptake and adoption in South Africa

Water Management and best methodologies, policies and strategies systems review	This involves the review of existing international water management systems and practices to assess the applicability to SA industry sectors; as part of transforming industry to a more holistic systems based approach.	Standards and methodologies and policies and strategies review

4.2 **Timeframe**

This project is expected to be carried out for a period of 3 months from the date of the signing of the contracts by both parties.

4.3 **Reporting and deliverables**

The successful bidder will be required to produce the following documents at the end of the respective project:

- Gap Analysis Report on Policies and Strategies
- International Best Methods and Standards to conduct IWE
- Project brief/Updates
- Promotional publications and information
- End-of-project presentation

All proposals are to be submitted in a format that is in line with the fuctional evaluation criteria. However, tenderers are welcome to submit additional/alternative proposals over and above the originally specified format.

5 FUNCTIONAL EVALUATION CRITERIA

5.1 The evaluation of the functional/technical detail of the proposal will be based on the following criteria.

Criteria	Weight
Proposal Structure & Quality Content	5%
Understanding of the context, objectives and rationale of the project including demonstrating knowledge of the economic aspects of water efficiency, conservation and demand management, incentives (drivers), and water price elasticity.	25%
Understanding of the tasks and their relation including the quality of the proposed approach/assessment framework in encapsulating the issues in a structured and organised approach.	25%
Qualifications and relevant skills in integrated water resource management, resource use efficiency etc.	25%
Organisation of the work with a detailed implementation plan and time schedule. Quality and relevance of the organisation of the work and of the allocation of human resources including description of the availability and involvement of experts (specifying the role of each expert), interaction and coordination of tasks, distribution of the work between the team members, where applicable. Quality assurance and quality control processes put in place.	20%

5.2. Proposals with functionality points of less than the **pre-determined** minimum percentage of **70%** and less than **50%** on any individual criteria shall be eliminated from further evaluation.

5.3. Refer to **Annexure A** for the scoring sheet that will be used to evaluate functionality.

6 ELIMINATION CRITERIA

Proposals will be eliminated under the following conditions:

- Submission after the deadline;
- Proposals submitted at incorrect location.

7 NATIONAL TREASURY CENTRAL SUPPLIER DATABASE REGISTRATION

Before any negotiations will start with the winning bidder it will be required from the winning bidder to:

- be registered on National Treasury's Central Supplier Database (CSD). Registrations can be completed online at: www.csd.gov.za;
- provide the CSIR of their CSD registration number; and
- provide the CSIR with a certified copy of their B-BBEE certificate. If no certificate can be provided, no points will be scored during the evaluation process. (RSA suppliers only).

SECTION B

8 VENUE FOR PROPOSAL SUBMISSION

All proposals must be submitted at:

- **CSIR GATE 3 - Main Reception Area** (in the **Tender box**) at the following address
  Council for Scientific and Industrial Research (CSIR)
  Meiring Naudé Road
  Brummeria
  Pretoria

9 TENDER PROGRAMME

The tender program, as currently envisaged, incorporates the following key dates:

- Issue of tender documents: **21 June2017**
- Closing/submission Date: **05 July 2017**

10 SUBMISSION OF PROPOSALS

10.1 All proposals are to be sealed. No open proposals will be accepted!

10.2 All proposals are to be clearly marked with the RFP number and the name of the tenderer on the outside of the main package. Proposals must consist of two parts, each of which is placed in a separate sealed package clearly marked:
PART 1: Technical Proposal: RFP No.: 772/05/07/2017
PART 2: Pricing Proposal, B-BBEE and other Mandatory Documentation:
RFP No.: 772/05/07/2017

10.3 Proposals submitted by companies must be signed by a person or persons duly authorised.

10.4 The CSIR will award the contract to qualified tenderer(s)' whose proposal is determined to be the most advantageous to the CSIR, taking into consideration the technical (functionality) solution, price and B-BBEE.

11 DEADLINE FOR SUBMISSION

Proposals shall be submitted at the address mentioned above no later than the closing date of **05 July 2017** during CSIR's business hours. Where a proposal is not received by the CSIR by the due date and stipulated place, it will be regarded as a late tender.
Late tenders will not be considered.

12 EVALUATION PROCESS

12.1 Evaluation of proposals

All proposals will be evaluated by an evaluation team for Functionality, Price and BBBEE

Based on the results of the evaluation process, the CSIR will approve the awarding of the contract to successful tenderers. The following two-phase evaluation process will be followed:

- First phase includes functionality on **Technical evaluation** and content
- Second phase includes the evaluation of **price** and **B-BBEE** status

Pricing Proposals will only be considered after the functionality phase has been adjudicated and accepted. Only proposals that have achieved a minimum qualification score for functionality will be evaluated further using the preference points system.

12.2 Preference points system

The 80/20 preference point system will be used where 80 points will be dedicated to price and 20 points to B-BBEE status.

13 PRICING PROPOSAL

13.1 Pricing proposal must be cross-referenced to the sections in the Technical Proposal. Any options offered must be clearly labelled. Separate pricing must be provided for each option offered to ensure that pricing comparisons are clear and unambiguous.

13.2 ***Price needs to be provided in Rands ZAR (excl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.***

13.3 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable.

13.4 Only firm prices* will be accepted during the tender validity period. Non–firm prices** (including prices subject to rates of exchange variations) will not be considered.

**Firm price is the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax which, in terms of a law or regulation is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;*
***Non-firm price is all prices other than "firm" prices.*

13.5 Payment will be according to the CSIR Payment Terms and Conditions.

14 VALIDITY PERIOD OF PROPOSAL

Each **proposal** shall be valid for a minimum period of three (3) months calculated from the closing date.

15 APPOINTMENT OF SERVICE PROVIDER

15.1 The contract will be awarded to the tenderer who scores the highest total number of points during the evaluation process, except where the law permits otherwise.

15.2 Appointment as a successful service provider shall be subject to the parties agreeing to mutually acceptable contractual terms and conditions. In the event of the parties failing to reach such agreement CSIR reserves the right to appoint an alternative supplier.

15.3 Awarding of contracts will be announced on the National Treasury website and no regret letters will be sent to unsuccessful bidders.

16 ENQUIRIES AND CONTACT WITH THE CSIR

Any enquiry regarding this RFP shall be submitted in writing to CSIR at **tender@csir.co.za** with "***RFP No 772/05/07/2017 – The provision of review report on the current national and international Water Management Systems standards and practices to Conduct Industrial Water Efficiency in South Africa to the CSIR*** as the subject.

Any other contact with CSIR personnel involved in this tender is not permitted during the RFP process other than as required through existing service arrangements or as requested by the CSIR as part of the RFP process.

17 MEDIUM OF COMMUNICATION

All documentation submitted in response to this RFP must be in English.

18 COST OF PROPOSAL

Tenderers are expected to fully acquaint themselves with the conditions, requirements and specifications of this RFP before submitting proposals. Each tenderer assumes all risks for resource commitment and expenses, direct or indirect, of proposal preparation and participation throughout the RFP process. The CSIR is not responsible directly or indirectly for any costs incurred by tenderers.

19 CORRECTNESS OF RESPONSES

19.1 The tenderer must confirm satisfaction regarding the correctness and validity of their proposal and that all prices and rates quoted cover all the work/items specified in the RFP. The prices and rates quoted must cover all obligations under any resulting contract.

19.2 The tenderer accepts that any mistakes regarding prices and calculations will be at their own risk.

20 VERIFICATION OF DOCUMENTS

20.1 Tenderers should check the numbers of the pages to satisfy themselves that none are missing or duplicated. No liability will be accepted by the CSIR in regard to anything arising from the fact that pages are missing or duplicated.

20.2 *One hard copy and one electronic copy (CD or USB memory key)* of each proposal must be submitted. In the event of a contradiction between the submitted copies, the hard copy shall take precedence.

20.3 Pricing schedule and B-BBEE credentials should be submitted with the proposal, but as a separate document and no such information should be available in the technical proposal.

20.4 If a courier service company is being used for delivery of the proposal document, the RFP description must be endorsed on the delivery note/courier packaging to ensure that documents are delivered to the tender box, by the stipulated due date.

21 SUB-CONTRACTING

21.1 A tenderer will not be awarded points for B-BBEE status level if it is indicated in the tender documents that such a tenderer intends sub-contracting more than **25%** of the value of the contract to any other enterprise that does not qualify for at least the points that such a tenderer qualifies for, unless the intended sub-contractor is an exempted micro enterprise that has the capability and ability to execute the sub-contract.

21.2 A tenderer awarded a contract may not sub-contract more than **25%** of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an exempted micro enterprise that has the capability and ability to execute the sub-contract.

22 ENGAGEMENT OF CONSULTANTS

The consultants will only be remunerated at the rates:

22.1 Determined in the "Guideline for fees", issued by the South African Institute of Chartered Accountants (SAICA); or

22.2 Set out in the "Guide on Hourly Fee Rates for Consultants", by the Department of Public Service and Administration (DPSA); or

22.3 Prescribed by the body - regulating the profession of the consultant.

23 TRAVEL EXPENSES

23.1 All travel expenses for the CSIR's account, be it directly via the CSIR's travel agent or indirectly via re-imbursements, must be in line with the CSIR's travel policy. The following will apply:

23.1.1 Only economy class tickets will be used.

23.1.2 A maximum of R1300 per night for accommodation, dinner, breakfast and parking will be allowed.

23.1.3 No car rentals of more than a Group B will be accommodated.

24 ADDITIONAL TERMS AND CONDITIONS

24.1 A tenderer shall not assume that information and/or documents supplied to CSIR, at any time prior to this request, are still available to CSIR, and shall consequently not make any reference to such information document in its response to this request.

24.2 Copies of any affiliations, memberships and/or accreditations that support your submission must be included in the tender.

24.3 In case of proposal from a joint venture, the following must be submitted together with the proposal:

- Joint venture Agreement including split of work signed by both parties;
- The original or certified copy of the B-BBEE certificate of the joint venture;
- The Tax Clearance Certificate of each joint venture member;
- Proof of ownership/shareholder certificates/copies of Identity document; and
- Company registration certificates.

24.4 An omission to disclose material information, a factual inaccuracy, and/or a misrepresentation of fact may result in the disqualification of a tender, or cancellation of any subsequent contract.

24.5 Failure to comply with any of the terms and conditions as set out in this document will invalidate the Proposal.

25 CSIR RESERVES THE RIGHT TO

25.1 Extend the closing date;

25.2 Verify any information contained in a proposal;

25.3 Request documentary proof regarding any tendering issue;

25.4 Give preference to locally manufactured goods;

25.5 Appoint one or more service providers, separately or jointly (whether or not they submitted a joint proposal);

25.6 Award this RFP as a whole or in part;

25.7 Cancel or withdraw this RFP as a whole or in part.

26 DISCLAIMER

This RFP is a request for proposals only and not an offer document. Answers to this RFP must not be construed as acceptance of an offer or imply the existence of a contract between the parties. By submission of its proposal, tenderers shall be deemed to have satisfied themselves with and to have accepted all Terms & Conditions of this RFP. The CSIR makes no representation, warranty, assurance, guarantee or endorsements to tenderer concerning the RFP, whether with regard to its accuracy, completeness or otherwise and the CSIR shall have no liability towards the tenderer or any other party in connection therewith.

DECLARATION BY TENDERER

Only tenderers who completed the declaration below will be considered for evaluation.

RFP No: …….

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / proposal specifications stipulated in RFP No …… at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the proposal.

I confirm that I am satisfied with regards to the correctness and validity of my proposal; that the price(s) and rate(s) quoted cover all the services specified in the proposal documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this proposal as the principal liable for the due fulfilment of this proposal.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT) ……

CAPACITY ……...

SIGNATURE ……

NAME OF FIRM ……..…

DATE ……

WITNESSES

1 ……

2 ……

DATE: ……..

ANNEXURE A – Technical evaluation scorecard

Weight	Criteria	0	5	7	10
5%	Proposal Structure & Quality Content	Poor Structure provided in specified in RFP	Good structure as specified in RFP	Enhanced structure is in accordance with the structure specified in RFP	Excellent structure is in accordance with the RFP and contains further relevant information/content beyond the specified RFP structure
25%	Integrated Water Resource management, Resource use efficiency and Policies and Strategies				
		Bidder has not completed projects on resource use efficiency. Integrated water resource management	Bidder has atleast 5 successfully completed projects on resource use efficiency. Integrated water resource management	Bidder has 6 - 7 successfully completed projects on resource use efficiency. Integrated water resource management	Bidder has successfully completed more than 7 projects on resource use efficiency. Integrated water resource management
25%	Understanding of International best practice and standards on Industrial Water Efficiency (water conservation and demand management	Provides no indication of understanding of international best practices on the water efficiency and standards	Provides understanding of international best practices on the water efficiency and standards with use of tools methodology with use of tools	Provides evidence of understanding of international best practices on the water efficiency and standards provides tools to be used,	Provides evidence of proven understanding of international best practices on the water efficiency and standards tools to be used.
		Provide less than 3 successfully completed projects in the field of water efficiency or resource use efficiency	Provide 6-8 successfully completed projects in the field of water efficiency or resource use efficiency	Provide 9-11 successfully completed projects in the field of water efficiency or resource use efficiency	Provide more than 11 successfully completed projects in the field of water efficiency or resource use efficiency

20%	Qualifications and relevant skills in green technological solutions	No Indication of team composition available to perform policy review and understanding of industrial water efficiency best practices and standards	Appropriatie Indication of team composition available to perform policy review and understanding of industrial water efficiency best practices and standards to deliverables. Indicated best suited according to skills, experience	Expert team composition available to perform policy review and understanding of industrial water efficiency best practices and standards to deliverables. Indicated best suited according to skills, experience	Highly skilled experts team composition available to perform policy review and understanding of industrial water efficiency best practices and standards to deliverables. Indicated best suited according to skills, experience
20%	Capacity Building	Provides sequencing of events	Provides logical sequencing of events with timing e.g. including a basic Gantt chart	Provides logical sequencing of events with acceptable timing e.g. including a Gantt chart with team resource allocated	Provides logical sequencing of events with desirable timing e.g. including advanced Gantt chart with timing of individual resources allocated