



**DEPARTMENT OF WATER AND SANITATION
REPUBLIC OF SOUTH AFRICA**

REQUEST FOR BID

REQUEST FOR BID NUMBER: WP11569

DESCRIPTION

**APPOINTMENT OF A PROFESSIONAL SERVICE PROVIDER (PSP) TO DEVELOP, REVIEW AND UPDATE
A REAL-TIME DECISION SUPPORT SYSTEM FOR THE LOWER ORANGE RIVER SYSTEM IN THE
CENTRAL PLANNING AREA FOR A PERIOD OF 36 MONTHS**

ISSUE DATE: 14 September 2026

**CLOSING DATE: 15 October 2026
TIME: 11:00**

Briefing Session non Compulsory

Date: 23 September 2026

Time: 10:00 - 12:00

<https://teams.microsoft.com/meet/317849397514825?p=VJHM260iCqJAifJ45r>

Meeting ID: 317 849 397 514 825

Passcode: r6kU9No7

SUBMIT TENDER DOCUMENT

TO

**ALL BID REPONSES MUST BE SUBMITTED ONLINE THROUGH E-TENDER'S
E-SUBMISSION PORTAL**

**PLEASE NOTE THAT NO BID DOCUMENTS WILL BE ACCEPTED VIA EMAIL OR
DEPARTMENTAL TENDER BOX.**

TENDERER: (Company address and stamp)

**SCAM ALERT: BIDDERS ARE ALERTED TO SCAM SYNDICATES OPERATING AS DEPARTMENT OFFICIALS.
BIDDERS ARE THEREFORE ADVISED TO REPORT ANY SUSPICIOUS INFORMATION TO THE DEPARTMENT.
DEPARTMENT OFFICIALS WILL NOT CONTACT BIDDERS FOR BRIBES IN EXCHANGE OF BID AWARDS**



DIRECTIVE TO BIDDERS ON COMPLETION OF SBD FORMS AND PACKAGING OF BID PROPOSAL

The purpose of this document is to guide bidders on the completion of SBD forms and packaging of a Bid Proposals with each document being placed under the correct Annexure. The last column of the table below (this column must be ticked as an indication that each document and its requirements have been complied with by the bidder). The dates on this all-SBD forms must be a date which is within the bid advert period

TABLE OF CONTENTS FOR BID PROPSALS

DOCUMENT	ANNEXURE	DIRECTIVE	COMPLIED/NOT COMPLIED
SBD 1	A	Bidders are required to complete this document in full and be signed off. The date on this form must be a date which is within the bid advert period	
SBD .3.3	B	Bidders are required to complete the applicable form in full and ensure that the amounts in the document are properly calculated. The total amount (inclusive of VAT) as reflected herein will be regarded as the Total Bid Price. Bidders who are not VAT Vendors are not allowed to charge VAT Bidders are required to constantly verify their TAX Status on CSD to ensure that their task matters are in order	
SBD 4	C	This document must be completed in full. Bidders' attention is drawn particularly to paragraph 2.3 which requires the bidder to disclose if the company or any of its directors have interest in other companies whether they have bidded or not. Bidders are required to provide all information. Should a bidder have more companies to declare, such information can be provided on a separate sheet in the format prescribed in the form and be attached to the SBD 4. Information captured must be in line with what is captured in the CSD report	
SBD 6.1	D	This document must be completed in full. Bidders are advised to ensure that information captured in this this form is aligned to information contained in the CSD Reports.	
BBBEE Certificate/Sworn affidavit	E	Bidders are required to submit a valid BBBEE Certificate or sworn affidavit.	
CSD Report	F	Bidders are requested to provide copies of reg CSD Report.	
Certificate of authority for signatory	G	3 Different forms are attached. Bidders are required to only complete one form which is relevant to their situation	
Copy of an Identity document of the authorised individual	H	The ID copy to be attached should be that of a person authorised to represent the Service provider as per the completed certificate of authority for signatory form	
Copy of Company's CIPC Certificate	I	Bidders are required to attach copies of the CIPC Certificates	
Bid Proposal	J	A detailed bid proposal inline with the Specifications must be attached	

PART A INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)					
BID NUMBER:	WP11569	CLOSING DATE:	15 October 2026	CLOSING TIME:	11H00
DESCRIPTION	APPOINTMENT OF A PROFESSIONAL SERVICE PROVIDER (PSP) TO DEVELOP, REVIEW AND UPDATE A REAL-TIME DECISION SUPPORT SYSTEM FOR THE LOWER ORANGE RIVER SYSTEM IN THE CENTRAL PLANNING AREA FOR A PERIOD OF 36 MONTHS				
BID RESPONSE TO					
ALL BID REPONSES MUST BE SUBMITTED ONLINE THROUGH E-TENDER'S E-SUBMISSION PORTAL					
PLEASE NOTE THAT NO BID DOCUMENTS WILL BE ACCEPTED VIA EMAIL OR DEPARTMENTAL TENDER BOX.					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO			TECHNICAL ENQUIRIES MAY BE DIRECTED TO:		
CONTACT PERSON	MR SOLOMON BULUNGA		CONTACT PERSON	MS CELIWE NTULI	
TELEPHONE NUMBER	012 336 5819		TELEPHONE NUMBER	012 336 7618	
CELLPHONE			CELLPHONE		
E-MAIL ADDRESS	bulungas@dws.gov.za		E-MAIL ADDRESS	ntulic@dws.gov.za	
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] ☐ Yes ☐ No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		TICK APPLICABLE BOX] ☐ Yes ☐ No
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?		☐ Yes ☐ No [IF YES, ANSWER PART B:3]
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS					

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?

☐ YES ☐

NO

DOES THE ENTITY HAVE A BRANCH IN THE RSA?

☐ YES ☐

NO

DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?

☐ YES ☐ NO

DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?

☐ YES ☐

NO

IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?

☐ YES ☐

NO

IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

**PART B
TERMS AND CONDITIONS FOR BIDDING**

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED--(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.**
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. **THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).**

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:

.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:

.....

(Proof of authority must be submitted e.g. company resolution)

DATE:

.....

PRICING SCHEDULE
(Professional Services)

NAME OF BIDDER: BID NO: **WP11569**

CLOSING TIME 11:00 CLOSING DATE: 15 October 2026

OFFER TO BE VALID FOR 180 DAYS FROM THE CLOSING DATE OF BID.

ITEM NO	DESCRIPTION	BID PRICE IN RSA CURRENCY ** (ALL APPLICABLE TAXES INCLUDED)	
1.	The accompanying information must be used for the formulation of proposals.	R.....	
2.	Bidders are required to indicate a ceiling price based on the total estimated time for completion of all phases and including all expenses inclusive of all applicable taxes for the project.	R.....	
3.	PERSONS WHO WILL BE INVOLVED IN THE PROJECT AND RATES APPLICABLE (CERTIFIED INVOICES MUST BE RENDERED IN TERMS HEREOF)		
4.	PERSON AND POSITION	HOURLY RATE	DAILY RATE
	-----	R-----	-----
	-----	R-----	-----
	-----	R-----	-----
	-----	R-----	-----
	-----	R-----	-----
5.	PHASES ACCORDING TO WHICH THE PROJECT WILL BE COMPLETED, COST PER PHASE AND MAN-DAYS TO BE SPENT		
	-----	R-----	----- days
	-----	R-----	----- days
	-----	R-----	----- days
	-----	R-----	----- days
5.1	Travel expenses (specify, for example rate/km and total km, class of airtravel, etc). Only actual costs are recoverable. Proof of the expenses incurred must accompany certified invoices.		
	DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY AMOUNT
	-----		 R.....
	-----		 R.....
	-----		 R.....
	-----		 R.....
		TOTAL: R.....	

***" all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

Bid No.:

Name of Bidder:

- 5.2 Other expenses, for example accommodation (specify, e.g. Three star hotel, bed and breakfast, telephone cost, reproduction cost, etc.). On basis of these particulars, certified invoices will be checked for correctness. Proof of the expenses must accompany invoices.

DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY	AMOUNT
.....			R.....
.....			R.....
.....			R.....
.....			R.....

TOTAL: R.....

6. Period required for commencement with project after acceptance of bid
7. Estimated man-days for completion of project
8. Are the rates quoted firm for the full period of contract? *YES/NO
9. If not firm for the full period, provide details of the basis on which adjustments will be applied for, for example consumer price index.

*[DELETE IF NOT APPLICABLE]

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of his invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

- 2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

Name of company related to	CSD Registration number of the company related to

3 DECLARATION

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

the awarding of the contract.

- 3.5 There have been no consultations, communications, agreements, or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....	
Signature	Date
.....	
Position	Name of bidder

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and

1.2 To be completed by the organ of state

a) The applicable preference point system for this tender is the 80/20 preference point system.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences,

in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} \text{80/20} & \text{or} & \text{90/10} \\ \\ Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right) & \text{or} & Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right) \end{array}$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} 80/20 & \text{or} & 90/10 \\ P_s = 80 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right) & \text{or} & P_s = 90 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right) \end{array}$$

Where

P_s = Points scored for price of tender under consideration

P_t = Price of tender under consideration

P_{max} = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system: or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
- then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.
(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Women	5	
People with disability	5	
Youth (35 and below)	5	
Location of enterprise (Province)	2	
B-BBEE status level contributors from level 1 to 2 which are QSE or EME	3	
Total points for SPECIFIC GOALS	20	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

Partnership/Joint Venture / Consortium

One-person business/sole propriety

Close corporation

Public Company

Personal Liability Company

(Pty) Limited

Non-Profit Company

State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify

that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation.
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

.....
SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

STANDARD EVALUATION CRITERIA IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

THE 80/20 POINTS AWARDED FOR PRICE AND SPECIFIC GOALS

The 80/20 Preferential Procurement System will be used in evaluating these bids:

Evaluation element	Weighting (Points)
SPECIFIC GOALS	20
PRICE	80
Total	100

Price

A maximum of 80 points are allocated for price on the following basis:

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where:

P_s = Points scored for comparative price of bid under consideration

P_t = Comparative price of bid under consideration

$P_{\min}$ = Comparative price of lowest acceptable bid

Preference point system

SPECIFIC GOALS	NUMBER OF POINTS TO BE ALLOCATED
Women	5
People with disability	5
Youth (35 and below)	5
Location of enterprise (Province)	2
B-BBEE status level contributors from level 1 to 2 which are QSE or EME	3
Total points for SPECIFIC GOALS	20

Documents Requirement for verification of Points allocation: -

Procurement Requirement

Women
Disability
Youth
Location

Required Proof Documents

Full CSD Report
Full CSD Report
Full CSD Report
Full CSD Report

B-BBEE status level contributors from level 1 to 2 which are QSE or EME

Valid BBBEE certificate/sworn affidavit
Consolidated BEE certificate in cases of Joint Venture
Full CSD Report

The definition and measurement of the goals above is as follows:

Women, disability, and youth:

This will be measured by calculating the pro-rata percentage of ownership of the bidding company which meets this criterion. E.g., Company A has five shareholders each of whom own 20% of the company. Three of the five shareholders meet the criterion, i.e. they are women/disability/youth. Therefore, this bidder will obtain 60% of the points allowable for this goal.

Location of enterprise

Local equals province. Where a project cuts across more than one province, the bidder may be located in any of the relevant provinces to obtain the points.

B-BBEE status level contributors from level 1 to 2 which are QSE or EME

Measured in terms of normal BBBEE requirements.

Note: Formula for calculating points for specific goals

Preference points for entities are calculated on their percentage shareholding in a business, provided that they are actively involved in and exercise control over the enterprise. The following formula is prescribed:

$$PC = \frac{Mpa \times P\text{-own}}{100}$$

Where

PC= Points awarded for specific goal

Mpa= The maximum number of points awarded for ownership in that specific category

P-own = The percentage of equity ownership by the enterprise or business

GOVERNMENT PROCUREMENT
GENERAL CONDITIONS OF CONTRACT
July 2010

NOTES

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid, should be compiled separately for every bid (if applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

TABLE OF CLAUSES

1. Definitions
2. Application
3. General
4. Standards
5. Use of contract documents and information; inspection
6. Patent rights
7. Performance security
8. Inspections, tests and analysis
9. Packing
10. Delivery and documents
11. Insurance
12. Transportation
13. Incidental services
14. Spare parts
15. Warranty
16. Payment
17. Prices
18. Contract amendments
19. Assignment
20. Subcontracts
21. Delays in the supplier's performance
22. Penalties
23. Termination for default
24. Dumping and countervailing duties
25. Force Majeure
26. Termination for insolvency
27. Settlement of disputes
28. Limitation of liability
29. Governing language
30. Applicable law
31. Notices
32. Taxes and duties
33. National Industrial Participation Programme (NIPP)
34. Prohibition of restrictive practices

General Conditions of Contract

1. Definitions

1. The following terms shall be interpreted as indicated:
 - 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
 - 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
 - 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
 - 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
 - 1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
 - 1.7 "Day" means calendar day.
 - 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
 - 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
 - 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
 - 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.

- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.

- 1.25 "Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.
- 2. Application**
- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.
- 3. General**
- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za
- 4. Standards**
- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.
- 5. Use of contract documents and information; inspection.**
- 5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.
- 6. Patent rights**
- 6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.
- 7. Performance**
- 7.1 Within thirty (30) days of receipt of the notification of contract award,

security

the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.

- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
 - (b) a cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1 All pre-bidding testing will be for the account of the bidder.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the

cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.

- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

- 10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

- 10.2 Documents to be submitted by the supplier are specified in SCC.

11. Insurance

- 11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

- 12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:

- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
- (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties,

- provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.

15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.

15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser

may have against the supplier under the contract.

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|---|---|
| 16. Payment | <p>16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.</p> <p>16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.</p> <p>16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.</p> <p>16.4 Payment will be made in Rand unless otherwise stipulated in SCC.</p> |
| 17. Prices | <p>17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.</p> |
| 18. Contract amendments | <p>18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.</p> |
| 19. Assignment | <p>19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.</p> |
| 20. Subcontracts | <p>20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.</p> |
| 21. Delays in the supplier's performance | <p>21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.</p> <p>21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.</p> <p>21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.</p> <p>21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily</p> |

available.

21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.

21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without canceling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
- (b) if the Supplier fails to perform any other obligation(s) under the contract; or
- (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

23.4 If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the

envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.

23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.

23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:

- (i) the name and address of the supplier and / or person restricted by the purchaser;
- (ii) the date of commencement of the restriction
- (iii) the period of restriction; and
- (iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him

25. Force Majeure	25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure. 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.
26. Termination for insolvency	26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.
27. Settlement of Disputes	27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation. 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party. 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law. 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC. 27.5 Notwithstanding any reference to mediation and/or court proceedings herein, (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and (b) the purchaser shall pay the supplier any monies due the supplier.
28. Limitation of liability	28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6; (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and

	(b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
29. Governing language	29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
30. Applicable law	30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
31. Notices	31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice 31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
32. Taxes and duties	32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country. 32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser. 32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.
33. National Industrial Participation Programme (NIP)	33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.
34. Prohibition of Restrictive practices	34.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging). 34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.

- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

Js General Conditions of Contract (revised July 2010)

RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of:

(Legally correct full name and registration number, if applicable, of the Enterprise)

Held at _____ (place)
on _____ (date)



COMPANY - CLOSE
CORPORATION - PAR

RESOLVED that:

1. The Enterprise submits a Bid /Tender, in consortium/Joint Venture with the following Enterprises:

(List all the legally correct full names and registration numbers, if applicable, of the Enterprises forming the Consortium/Joint Venture)

to the Department of Water and Sanitation in respect of the following project:

(Project description as per Bid /Tender Document)

Bid / Tender Number: _____ (Bid / Tender Number as per Bid / Tender Document)

2. *Mr/Mrs/Ms: _____
in *his/her Capacity as: _____ (Position in the Enterprise)
and who will sign as follows: _____

be, and is hereby, authorised to sign a consortium/joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium/joint venture, in respect of the project described under item 1 above.

3. The Enterprise accepts joint and several liability with the parties listed under item 1 above for the due fulfilment of the obligations of the joint venture deriving from, and in any way connected with, the Contract to be entered into with the Department in respect of the project described under item 1 above.
4. The Enterprise chooses as its *domicilium citandi et executandi* for all purposes arising from this joint venture agreement and the Contract with the Department in respect of the project under item 1 above:

Physical address: _____



Resolution of Board of Directors to enter into Consortia or Joint Ventures

_____ (code)



Postal Address: _____

_____ (code)

Telephone number: _____

Fax number: _____

	Name	Capacity	Signature
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The bidding enterprise hereby absolves the Department of Water and Sanitation from any liability whatsoever that may arise as a result of this document being signed

Note:

1. * Delete which is not applicable.
2. **NB:** This resolution must, where possible, be signed by all the Directors / Members / Partners of the Bidding Enterprise.
3. In the event that paragraph 2 cannot be complied with, the resolution must be signed by Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (attach proof of shareholding / ownership hereto).
4. Directors / Members / Partners of the Bidding Enterprise may alternatively delegate a person to sign this document on behalf of the Bidding Enterprise, which person must be so authorized by way of a duly completed Delegation of Authority letter, signed by the Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (proof of shareholding / ownership and Delegation of Authority letter are to be attached hereto).
5. Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

ENTERPRISE STAMP



SPECIAL RESOLUTION OF CONSORTIA OR JOINTVENTURES

RESOLUTION of a meeting of the duly authorized representatives of the following legal entities who have entered into a consortium/joint venture to jointly bid for the project mentioned below: *(legally correct full names and registration numbers, if applicable, of the Enterprises forming a Consortium/Joint Venture)*

1.

2.

3.

4.

5.

6.

7.

8.



Held at _____

(place)
on _____
(date)
e)

RESOLVED that:

- A. The above-mentioned Enterprises submit a Bid in Consortium/Joint Venture to the Department of Water and Sanitation in respect of the following project:

(Project description as per Bid /Tender Document)

Bid / Tender Number: _____ (Bid / Tender Number as per Bid /Tender Document)

- B. *Mr/Mrs/Ms: _____ in _____ *his/her
Capacity as: _____ (Position in the
Enterprise) and who will sign as follows: _____

be, and is hereby, authorized to sign the Bid, and any and all other documents and/or correspondence in connection with and relating to the Bid, as well as to sign any Contract, and any and all documentation, resulting from the award of the Bid to the Enterprises in Consortium/Joint Venture mentioned above.

- C. The Enterprises constituting the Consortium/Joint Venture, notwithstanding its composition, shall conduct all business under the name and style of:

- D. The Enterprises to the Consortium/Joint Venture accept joint and several liability for the due fulfilment of the obligations of the Consortium/Joint Venture deriving from, and in any way connected with, the Contract entered into with the Department in respect of the project described under item A above.

- E. Any of the Enterprises to the Consortium/Joint Venture intending to terminate the consortium/joint venture agreement, for whatever reason, shall give the Department 30 days written notice of such intention. Notwithstanding such decision to terminate, the Enterprises shall remain jointly and severally liable to the Department for the due fulfilment of the obligations of the Consortium/Joint



Venture as mentioned under item D above.

- F. No Enterprise to the Consortium/Joint Venture shall, without the prior written consent of the other Enterprises to the Consortium/Joint Venture and of the Department, cede any of its rights or assign any of its obligations under the consortium/joint venture agreement in relation to the Contract with the Department referred to herein.
- G. The Enterprises choose as the *domicilium citandi et executandi* of the Consortium/Joint Venture for all purposes arising from the consortium/joint venture agreement and the Contract with the Department in respect of the project under item A above:

Physical address: _____

(code) Postal Address: _____

_____ (code)

Telephone number: _____

Fax number: _____

	Name	Capacity	Signature
1			
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3			
4			
5			



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The bidding enterprise hereby absolves the Department of Water and Sanitation from any liability whatsoever that may arise as a result of this document being signed.

Note:

1. * Delete which is not applicable.
2. **NB:** This resolution must be signed by all the Duly Authorized Representatives of the Legal Entities to the consortium/joint venture submitting this tender, as named in item 2 of **RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES**
3. Should the number of the Duly Authorized Representatives of the Legal Entities joining forces in this tender exceed the space available above, additional names, capacity and signatures must be supplied on a separate page.
4. **RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES**, duly completed and signed, from the separate Enterprises who participate in this consortium/joint venture, must be attached to this **SPECIAL RESOLUTION OF CONSORTIA OR JOINT VENTURES**

LETTER OF AUTHORITY FOR SOLE PROPRIETOR OR SOLE TRADER

I,hereby confirm that I am the
sole owner of the business trading as

Signature: Sole owner.....

Date.....

Witnesses:

1. _____

Date : _____

2. _____

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ENTERPRISE STAMP

RESOLUTION OF BOARD OF DIRECTORS FOR COMPANY /CLOSE CORPORATION/ PARTNERSHIP

RESOLUTION of a meeting of the Board of *Directors / Members / Partners of:

(legally correct full name and registration number, if applicable, of the Enterprise)

Held at _____ *(place)*

on _____ *(date)*

RESOLVED that:

- The Enterprise submits a Bid / Tender to the Department of Water and Sanitation in respect of the following project:

(project description as per Bid / Tender Document)

Bid / Tender Number: _____ *(Bid / Tender Number as per Bid / Tender Document)*

- *Mr/Mrs/Ms: _____

in *his/her Capacity as: _____ *(Position in the Enterprise)*

and who will sign as follows: _____

be, and is hereby, authorized to sign the Bid / Tender, and any and all other documents and/or correspondence in connection with and relating to the Bid / Tender, as well as to sign any Contract, and any and all documentation, resulting from the award of the Bid / Tender to the Enterprise mentioned above.

	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

Resolution of Board of Directors

14			
15			
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18			
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20			

The bidding enterprise hereby absolves the Department of Water and Sanitation from any liability whatsoever that may arise as a result of this document being signed.

Note:

1. * Delete which is not applicable.
2. **NB:** This resolution must, where possible, be signed by all the Directors / Members / Partners of the Bidding Enterprise.
3. In the event that paragraph 2 cannot be complied with, the resolution must be signed by Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (attach proof of shareholding / ownership hereto).
4. Directors / Members / Partners of the Bidding Enterprise may alternatively delegate a person to sign this document on behalf of the Bidding Enterprise, which person must be so authorized by way of a duly completed Delegation of Authority letter, signed by the Directors / Members / Partners holding a majority of the shares / ownership of the Bidding Enterprise (proof of shareholding / ownership and Delegation of Authority letter are to be attached hereto).
5. Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page.

ENTERPRISE STAMP

TERMS OF REFERENCE

DEVELOPMENT, REVIEW AND UPDATE OF REAL-TIME DECISION SUPPORT SYSTEM FOR THE OPERATION OF THE LOWER ORANGE RIVER SYSTEM IN THE CENTRAL PLANNING AREA FOR A PERIOD OF 36 MONTHS

Version 2
August 2026



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

**Sub-Directorate: Systems Operation
Directorate: Water Resource Management Planning
Chief Directorate: National Water Resources Planning**

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1. PURPOSE OF THE TERMS OF REFERENCE

The purpose of this Terms of Reference (ToR) is to provide an outline of the project and responsibilities of the Professional Service Provider (PSP) interested in tender for this study. The interested PSPs must therefore be able to provide the diverse skills and expertise commensurate with the job.

2. BACKGROUND

Most of South Africa experiences semi-arid climatic conditions, where water is a scarce commodity requiring careful management. This scarcity is likely to be exacerbated by increasing variability in weather patterns due to climate change, with more severe and frequent droughts placing greater stress on water resources, as evidenced by the 2015/16 drought. The National Water Act (Act 36 of 1998), among other objectives, aims to address historical water access imbalances. This occurs as water requirements progressively increase, driven by the country's socio-economic development. Improved living standards and population growth are also translating into an exponential increase in domestic water demand. This is in addition to the ecological requirements of the reserve, which aim to ensure that development does not harm the ecosystem. However, the current water resources infrastructure may not fully accommodate these increasing demands, and opportunities for new infrastructure development are limited. Therefore, the country must make better use of existing resources.

The Orange-Senqu River basin is one of the largest river basins in Southern Africa, with a catchment area of approximately 1 million km². The Orange River, located within this basin, originates in the Lesotho Highlands and flows west for approximately 2,200 km before discharging into the Atlantic Ocean on the west coast of South Africa and Namibia. Vanderkloof Dam is the most downstream dam on the river, with the Lower Orange River beginning downstream of Vanderkloof Dam and continuing to the river mouth (estuary). The Lower Vaal River, on the other hand, begins downstream of Bloemhof Dam on the Vaal River and flows south until its confluence with the Orange River near Douglas.

Water scarcity is a significant challenge in the Orange-Senqu River basin and requires coordinated efforts in the development, management, and conservation of water resources. Gariep Dam and Vanderkloof Dam support water demands in the Lower Orange River to the river mouth, with releases from Vanderkloof Dam. Releases from Vanderkloof Dam tend to be larger, as they account not only for required water demands but also for operational losses, which cannot be precisely determined due to the longer stretch of the river. While the Vaal River is operated to minimize outflows from the Vaal River System, inflows from the Vaal River System still enter the Lower Orange River. These inflows result from uncontrolled spills from major upstream dams, local runoff generated in the incremental catchment downstream of the major dams and upstream of the Orange-Vaal confluence, and operational losses in the Lower

Vaal River downstream of Bloemhof Dam and Vaalharts Weir. As with the Lower Orange River, operational losses also occur in the Lower Vaal River, as it is nearly impossible to release the exact volume required by users downstream of the main storage dam.

Real-time modelling and monitoring, combined with annual operating rules, is a management tool that enables timely decision-making, thus serving as a Decision Support System (DSS). Real-time modelling and monitoring will ensure that releases from Vanderkloof Dam are coordinated and optimized, not only in line with inflows from the Lower Vaal River but also with releases from the recently constructed Neckartal Dam in the Fish River (a tributary of the Orange River further downstream near the river mouth), once the operating rules or release schedules from Neckartal Dam are known. Real-time monitoring will also enable efficient implementation of the Reserve, as river flows at various points along the river will be gauged. Environmental water releases (EWRs), currently provided by releases from Vanderkloof Dam, are approximately 287 million m³/year and are expected to be approximately 942 million m³/year once the preferred Reserve is implemented. The impact on yield is therefore significant.

Furthermore, while Polihali Dam in Lesotho is expected to increase the yield of the Vaal River System, the yield of the Orange River System is expected to be reduced by about 284 million m³/year after commissioning of Polihali. Dam The project is currently under construction. In addition, the transfer from Gariep Dam to the Greater Bloemfontein Metropolitan Area, which is already experiencing water shortages due to demands exceeding yield, is expected to be approximately 90 million m³/year.

Previous studies have shown that implementing real-time monitoring and modeling will result in an additional 80 million m³/year increase in the system's yield. The project is already behind schedule according to the 2015 Orange River Reconciliation Strategy, which recommended that real-time monitoring and modelling be implemented by 2016. The future operation, including the sustainability of the system in terms of water supply, depends on the implementation of real-time modelling and monitoring. As a prelude to the recommended real-time monitoring and modelling, minimum river flows to be attained at selected gauging stations in the Lower Vaal and Lower Orange Rivers were introduced in line with the system's operating rules, starting with the 2020/2021 operating year. The idea is to monitor river flows and supplement them with releases from Vanderkloof Dam if they are inadequate for downstream users. However, the river flow data is often delayed and received late, which is insufficient for real-time operation. The real-time DSS will also assist in implementing the Environmental Water Requirements in accordance with the preliminary Reserve.

3. OBJECTIVES OF THE STUDY

The objective is to establish a real-time Decision Support System (DSS) to coordinate and optimize releases from Vanderkloof Dam, maximizing the Orange River System's yield by utilizing flows from major tributaries, namely the Lower Vaal and the Fish River in Namibia,

while meeting both ecological and water use requirements. This overarching objective encompasses the following specific aims:

1. **Assess the existing real-time DSS for the Lower Orange River.** This DSS is currently implemented on the MIKE Operation platform (2017 version).
2. **Evaluate the existing real-time gauges within the Orange River and Lower Vaal.** This assessment will determine their adequacy for facilitating an efficient and effective real-time DSS for the Orange River, with the goals of maximizing yield from Vanderkloof Dam and minimizing losses.
3. **Assess the existing hydraulic model.** The current one-dimensional hydraulic model is implemented in MIKE 11. The assessment will determine whether the cross-sections and other parameters are sufficient to accurately simulate the temporal and spatial variability of the river's hydraulic processes.
4. **Develop a weekly/bi-weekly water order system for the Lower Orange River.** Given that the majority of water use in the Lower Orange River is for irrigation, a system of weekly/bi-weekly water accounting for irrigators will be developed. This will be done in collaboration with the relevant Water Users Associations within the Lower Orange River
5. **Develop a hydraulic model to simulate the temporal and spatial variability of the hydraulic processes within the Orange River system.** This model will assist with maximizing the yield from Vanderkloof Dam and improving flood control management of the Gariep and Vanderkloof dam.
6. **Develop a method to optimize releases from Vanderkloof Dam** to meet environmental and water use requirements in the Lower Orange River.
7. **Develop a method to optimise hydropower generation from Gariep and Vanderkloof Dams**
8. **Develop a user interface for operating, monitoring, and disseminating results from the DSS**
9. **Provide training, capacity building, and technical support.**

4. GENERAL APPROACH TO THE STUDY

The studies will be managed by the Directorate: Water Resource Management Planning. Due to specific features of the dams/systems, close collaboration with the relevant DWS Provincial Offices, CMAs, WRIB and municipal/water service providers is essential. Other DWS directorates, such as Strategic Water Resources Planning, Water Resource Development

Planning, Water Use Efficiency, Infrastructure Management: Central Operation, Northern Cape Provincial Office and Vaal Orange Catchment Management Agency (VOCMA), will also have to be involved.

5. SCOPE OF THE STUDY

The Study is expected to take approximately 36 months. The main components will include a review of the existing real-time monitoring decision support system, the development of a calibrated hydraulic model for the Lower Orange River, a system to optimize water releases from Vanderkloof Dam, and a new real-time decision support system. The study will be conducted by a service provider (PSP) with the required experience and specialized expertise. The first phase will be an inception phase to confirm the scope of work and establish a mutual understanding between the PSP and the client.

A partially calibrated hydraulic model for the Lower Orange River already exists, built using the MIKE 11 and MIKE Operation platforms. A key part of this project is to assess this existing DSS and determine whether it can be updated or needs to be replaced. The envisioned real-time DSS will comprise four components: real-time data acquisition, a weekly/bi-weekly water order/accounting system, a one-dimensional hydraulic model of the Lower Orange River that considers tributary contributions, a system to optimize reservoir releases from Vanderkloof Dam to minimize losses, and desktop/web dashboards to present relevant model results and statistics.

The Department currently holds licenses for the 2017 versions of MIKE 11 and MIKE Operation. The PSP can utilize these platforms to implement the real-time DSS or propose a cost-effective alternative platform. If the PSP chooses to use the MIKE software, they should include the cost of updating the software to the latest version.

6. STUDY AREA

The study area for this project encompasses the upper Orange, including Gariep and Vanderkloof dams, and a stretch of the Orange River downstream of Vanderkloof Dam to the Orange River Estuary. This area includes Gariep and Vanderkloof Dam, an extensive system of canals and various weirs, and several tributaries that contribute to the main river, including the Vaal River, Fish River, and others.

7. TASKS

7.1 Inception phase

The first task will be an initiation meeting to clarify the scope and project objectives as outlined in these terms of reference, ensuring agreement between the PSP and the client. This will be

followed by a situation assessment conducted through workshops with Provincial DWS offices, Infrastructure Operations, local communities, agriculture, Eskom and municipalities to gather relevant information for developing the real-time DSS. This assessment will also include reviewing and confirming the existing real-time gauges, evaluating existing systems that could contribute to the DSS development, assessing the current hydraulic model and DSS for the Orange River, and determining the necessary technologies, equipment, and facilities. The system shall integrate with existing DWS systems (e.g. HYDSTRA, NIWIS, ArcGIS Enterprise etc.). The system shall be developed using technologies supported by DWS ICT policies. The DSS will function as an operational optimisation tool, not a system of water information.

7.2 Situation Assessment

The purpose of this task is to familiarize the PSP with the current operation of the Integrated Orange River System by compiling a description of existing systems' operation and management practices, along with lessons learned from current operational plans.

7.2.1 Comparative assessment of applicable methodologies and approaches

This information will be gathered through a literature review of existing documented reports from the Department including annual operating rules reports and questionnaires distributed to water resources operating managers in the field. The consultant will use this information to present a comparative assessment of applicable methodologies and approaches. The resulting report should not simply summarize the current situation but also provide solutions for improving system operation and management plans for the specific context.

7.2.2 Review of appropriate hydraulic models

The proposed solution will likely consist of two distinct modelling tools/software packages: a hydrodynamic model and an open, user-friendly "shell" integration software. This "shell" will include a relevant database and input, output, and presentation capabilities, linking the various hydrodynamic models to each other and relevant real-time flow and water quality data. Examples of such "shell" integration software packages include DHI's MIKE Operations, the Delft FEWS system (currently used for the National Flood Forecasting System in the UK), and GeoGui (used for various real-time hydraulic modelling solutions, also in the UK, and successfully implemented with ISIS). HEC-RTS, currently used in the United States, is another example. A review and recommendation of a suitable "shell" integration tool is required. The selected modelling tool/software package will be subject to approval by the Departmental Enterprise Architecture and Standards Committee (EASC), should the IT requirements (tangible and non-tangible) not form part of the Departmental standard IT products.

7.2.3 Data Acquisitions

This task involves collecting data and preparing input files for water availability, demand schedules, and hydraulic parameters that affect water flow through the system. It also includes interfacing the modeling system with hydro-meteorological monitoring network data and integrating it with the model setup for scenario analysis.

The following information (but not limited to) is expected to be collected during this task:

- Physical characteristics of the extended river system. This includes cross-sectional data, roughness coefficients, and physical attributes of the monitoring system.
- Water demands and release patterns.
- Evaporation data.
- Previously recorded water quantity data.
- Input and output requirements of operation and management personnel.
- Rainfall data

7.2.4 Water Accounting System

Assess current operational practices and develop a water accounting system that allows water users to place orders on a weekly or bi-weekly basis, enabling operators to track actual water use against the scheduled amounts. The system user interface must be designed to align with the Department's ICT policies and digital standards.

7.3 Conceptualise and configure (or update) the Hydraulic model

Develop and configure a hydraulic model that includes all the infrastructure, water use and ecological requirements and conveying canals to represent accurately the temporal and spatial variability in the river.

7.4 Calibration and validation of the hydraulic model

The calibration of the model is to ensure that the DSS produces accurate results, particularly travel times of flow rates moving down the Orange River. The PSP should use readily available and accessible data or propose and apply the most cost-effective alternative and digital technologies (e.g., Remote sensing, Artificial Intelligence, Machine Learning) to ensure that there is sufficient and reliable data for calibration and validation of model results. Verify the accuracy of the input data that will be used in the configuration of the hydraulic model. Find the reasonably accurate input data for the building of the model. Develop and configure a hydraulic model that includes all the infrastructure, water use, ecological requirements, and conveying canals to accurately represent the river's temporal and spatial variability. Calibrate the model with observed data and test the model with independent data to assess its

predictivity ability. Use statistical metrics to evaluate the accuracy of the model and its predictive ability by comparing simulated/forecasted results against the observed information.

7.5 Optimisation of Vanderkloof Dam releases

This task aims to develop a method for optimising the day-to-day management of releases from Vanderkloof dam by implementing the annual operating rules and balancing the downstream water use requirements, ecological requirements, and hydropower generation operation. The optimised releases are expected to assist with maximising the yield from the dam and minimising the losses to the Orange River Estuary.

7.6 Develop a method to optimise hydropower generation from Gariep and Vanderkloof Dams

The purpose of this task is to develop a method that enables the department to manage floods effectively on the Gariep and Vanderkloof dams and optimise hydropower generation by minimising spill from the two dams. The Storage Curve Control (SCC) rule was developed to reduce non-generating spillage by creating flood attenuation storage in dams. ESKOM is allowed to generate electricity on demand up to the maximum capacity of the turbines when the dam levels are above the SCC. Hence, the method should help to forecast the dam levels based on the incoming flows to maximise the electricity generated and minimise the spillage from both dams.

A spreadsheet tool has been developed as part of the Annual Operating Rules for the Orange River System. The spreadsheet is currently used to make release decisions from Gariep and Vanderkloof during high flow season to minimise spills, and it has three-day forecast window. The aim is to improve the accuracy and forecast window using hydraulic modelling and an optimisation method.

7.7 Implementation of the DSS

The purpose is to

- Effectively implement the operational DSS at the recommended operation offices for the extended Orange River System
- Develop a concise clear user manual outlining procedures for implementing the DSS
- Install the DSS at relevant/applicable DWS offices.

7.8 Capacity Building and Training

The purpose of this task will be to provide training and technology transfer to Department officials and nominated individuals. This is considered to be a key component of the assignment, not only because it will serve to develop the competence and expertise of the individuals in question, but also because it will establish a common understanding of technical

aspects between the Study team and the Client (DWS) and thereby contribute to the overall success of the assignment and related activities.

Ten (10) Departmental staff members at various levels will be identified for training in consultation with the Client during the Inception Phase of the study. A proposal in this regard will be made at the first study management meeting for approval.

The training programme to be undertaken will involve two distinct components, namely:

10. A formal training course in line with the training schedule reflected in Table 1 which will be held to provide trainees with a general background of the processes involved with developing and implementing operating rules. The course will address issues such as the basic principles of water resources assessment, planning, use of water resources systems models, developing operating rules, water resources allocation, water balances, restricting water users, configuring the hydraulic model, validate the hydraulic model, optimise release to meet water requirements and hydropower generation, operate, monitoring of systems performance in relation to the operating rules and disseminating results from the DSS.

- The PSP must present clear proposals on capacity building in line with the outline in this paragraph. This proposal should involve the actual participation of attendees in the practical aspects of the assignment and will involve the periodic short-term secondment of five (5) trainees to the offices of the PSP. This will focus on technical processes and the application of models. In cases where there is a limited number of DWS officials identified for training, the PSPs will be expected to recruit young engineers/scientists for skills transfer. For this purpose, the following distinct instruction methods will be employed:
 - Discussions, where technical processes are discussed in a workshop environment;
 - Demonstrations, where a specific process or model application is demonstrated by a specialist for the benefit of the trainee;
 - Applications, where the trainee applies a model practically, under the supervision of a specialist. The application should focus on all aspects of the project. This activity aims to enable progressive internalization of the tasks within DWS and the water sector.

The aspects which will be addressed as part of the training that is required for individuals are summarized in Table 1. The table also provides an indication of the instruction method which should be employed in each case, as well as the extent of participation required by the trainee. Specific dates are not scheduled and will depend on the progress of the assignment as well as the availability of the individuals involved.

Table 1: Training Schedule

Description	Instruction method	Estimated Period of participation (days)
Preparation of Input Data and Development of a Hydraulic Model	In person	3-5
Optimisation Method of Vanderkloof Reservoir Release	In person	1-3
Optimisation Method to Maximise Power Generation at Gariep and Vanderkloof dams	In person	1-3
Orange Real-time Decision Support System	In person	3

8. DELIVERABLES

8.1 Inception Report

The outcome of the inception phase will be the inception report, which, considering the dynamics of conditions in the catchments, will seek to establish the extent of prevailing conditions on the ground and the scope of work for the tasks to ensure alignment with the client's needs. However, a budget adjustment at this stage is not admissible.

8.2 Situation Assessment

The outcome of the situation assessment phase will be the situation assessment report. The report should

1. summarise the current operations but also provide solutions for improving system operations and management plans for the specific context;
2. outline the review of different hydraulic models and user-friendly "shell" integration software that is suitable for real-time decision support systems that facilitate the management of reservoir operations and river management of low and high flow conditions.
3. conceptualize the piloted accounting system that allows water users to place orders on a weekly or bi-weekly basis, enabling operators to track actual water use against the scheduled amounts.

8.3 Calibrated and Validated Hydraulic Model

The outcome of this phase is a calibrated and validated hydraulic model that includes all the infrastructure, water use, ecological requirements, and conveying canals to accurately represent the river's temporal and spatial variability.

8.4 Optimisation of Vanderkloof Dam Releases

The outcome of this phase is a functional method that optimises the releases from the Vanderkloof dam by implementing the annual operating rules and balancing the downstream water use requirements, ecological requirements, and hydropower generation operation. The method is expected to maximise yield from the dam.

8.5 Develop a method to optimise hydropower generation from Gariep and Vanderkloof Dams

The outcome of this phase is a method that helps the department to manage floods effectively on the Gariep and Vanderkloof dams and optimise hydropower generation by minimising spill from the two dams. The method is expected to include the hydraulic model setup of the upper Orange River and the two dams.

8.6 Decision Support System

The outcome of this phase is a functional decision-support system that has a user interface with the functionality of real-time data acquisition and integrates real-time input data with the developed hydraulic model and dashboards that display the results of the model scenarios.

8.7 Capacity Building and Training

The outcome of this phase is a training manual, capacity building and technology transfer to Department officials and nominated individuals.

9. PROJECT MANAGEMENT

9.1 Client

DWS is the Client of the proposed studies. The Directorate of Water Resource Management Planning (D: WRMP) will form the Study Management Committee (SMC) that will guide the study. The Project Manager will be the Scientific Manager of Systems Operation, who will be assisted by the respective Engineer/Scientist responsible for the corresponding planning area.

The Project Manager and/or her assistant will be expected to keep an up-to-date record of all decisions taken during the execution of the study, identifying issues raised, findings of the investigations and decisions taken.

9.2 Professional Service Provider (PSP)

Prospective PSPs are being invited to submit proposals for the study. Previous experience and knowledge of similar systems will have an added advantage. The appointed PSPs will be required to perform the analyses as described in this brief. After the appointment, there will be an initiation meeting between the PSP and the Client.

The PSP will then proceed to undertake all technical work of the project and will be reporting progress as may be required to the Study Management Committee (SMC).

The Study Leader (PSP) will be responsible for the day-to-day execution of the study, arrangement of Progress meetings and reports as and when required, distribution of the agenda and minutes, and other related tasks. The PSP will also be responsible for the recording of the proceedings of all meetings and making presentations as required.

9.3 Study Management Committee (SMC)

The SMC will comprise technical representatives from DWS, and the Water Resource Infrastructure Agency as owners of dams and bulk supply infrastructure. The SMC will undertake the general management of the study. Progress meetings as required by the Project Manager (Client) will be held for the SMC to monitor and review progress against the approved programme. The meeting venues will be chosen based on what is most practical and cost-effective. It is anticipated that about four SMC meetings will be required every year.

10.4 Study Steering Committee (SSC)

The SSC will comprise technical representatives from DWS, water management institutions, water services authorities, and other owners of dams and bulk supply infrastructure. The main objective of the SSC is to guide the project, provide a consultative platform for implementation, monitoring, auditing, reviewing and updating of the system. This also entails capacitating water control officers, operators and water users. The role of SSC members is to disseminate information and give feedback on measures taken to comply with abstraction allocations. The establishment of the SSC also aims to ensure equity and transparency in decision making process. It is anticipated that about two SMC meetings will be required every year, at least one physical meeting should be arranged per year.

10. INFORMATION TO BE PROVIDED IN THE PROPOSAL BY THE PSP

10.1 The Technical and Financial Proposals

The Technical and Financial Proposals should be bound separately and be submitted in separate envelopes to the DWS.

10.2 Extent of proposals

The text of the Proposal, including a Work Programme Schedule and a detailed Schedule of Resources versus Costs, should be to the point and not longer than 15 A4 pages (excluding CVs) at a font size of 10- and 1.5-line spacing.

10.3 Scope of work

The scope of work must reveal that the PSP understands the requirements of the Study. The proposed approach, methodology and models to be used during the Study should be outlined. The PSP is encouraged to use this Section in the proposal to present innovative approaches or other special features of the PSP's response to the ToR.

10.4 Study team and summary of capacity, capability and experience

The Proposal must present the Key Components of the Study Team in the form of an Organogram. The proposal must also contain explicit information about the relevant capacity, capability and experience of Key Personnel, with particular reference to:

- Experience with the models and modelling fields;
- Experience in and knowledge of historical or current water resource investigations and/or management in the Study Area;
- The roles of individual Key Personnel in the study;
- Experience of working in multi-disciplinary teams in the water resource domain.

10.5 CVs

Abbreviated two-page CVs of all Key Personnel included in the study team must form attachments to the Proposal, highlighting relevant qualifications and experience in relation to this project.

10.6 Study budget

The Study budget shall present the full resourcing associated with each major component and each primary task in the Study, as well as the timing of the cost involved. The resourcing must

provide details of the employment of all study personnel. The hourly fee rates of all study personnel must be stated and must be in accordance with the labour rates. The tender will be invoiced per deliverables.

The Study Budget must provide a breakdown by Study team member of fees to be earned based on the following categories: Black male; Black female; White female; Disabled person; and White male.

10.7 Administrative Compliance

Bidders are required to comply with the following listed below:

No	Criteria	Yes	No
1	Companies must be registered with National Treasury's Central Supplier Database. Provide proof of print out from CSD.		
2	Tax compliant with SARS (to be verified through CSD and SARS).		
3	Complete sign and submit SBD1, SBD3.2, SBD4, SBD6.1		
4	The service provider (and in the case of a consortium or joint venture – at least one member of such consortium or joint venture) should submit a notary agreement between the parties must clearly identify the lead partner (if applicable)		
5	CERTIFICATE OF AUTHORITY FOR SIGNATORY (bidders to complete the relevant form.)		
6	Copy of an Identity document of the authorised individual to represent the Service provider as per the CERTIFICATE OF AUTHORITY FOR SIGNATORY form		

10.8 Evaluation System

The Department of Water and Sanitation will evaluate all proposals in terms of the Preferential Procurement Regulations 2022. A copy of the Preferential Procurement Regulations 2022 can be downloaded from www.treasury.gov.za. In accordance with the Preferential Procurement Regulations 2022, submissions will be adjudicated on an 80/20 points system and the evaluation criteria.

During the evaluation process, the evaluation Committee will be following a **three (3) phases** approach as follows:

10.8.1 Phase 1: Mandatory Compliance

Bidders must submit the following mandatory documents:

MANDATORY CRITERIA	REQUIREMENT	Yes	No
Study leader must be a civil/water resource engineer or hydrologist registered with the relevant professional body (ECSA or SACNASP) as Professional Engineer or Professional Natural Scientist	Attach Study Leader's valid Copy of Registration Certificate with ECSA or SACNASP		

Phase 2: Functionality (Technical) Evaluation

The 80/20-point system will be used in evaluating all proposals. The criteria and guideline weighting points applicable are detailed in the following paragraphs

Values: 0 Very Poor..... 1 Poor.....2 Average.....3 Good....4 very good..... 5 Excellent

Functionality Evaluation Criteria			
Criteria		Points value	Weighting Points Awarded
Functionality	10 years of Past Experience of the company in: • Development of real-time operational systems for low and high flow management. • Water Resource management projects and • Development of hydraulic models. for real-time systems • Experience in Reservoir release optimisation		25
	≥10 years on all 4 items	5	
	Minimum 7 years on all 4 items	4	
	Minimum 5 years on all 4 items	3	
	Minimum 3 years on all 4 items	2	
	Minimum 2 years on all 4 items	1	

	<1 years on all 4 items	0	
	Methodology: • Understanding of the scope of work and Compliance with ToR; • Detailed, clear, feasible and effective method for each task • Quality assurance and control. And the Capacity to execute the methodology. • Detailed programme that includes project management, timelines and resource allocation. • Innovations or added value to the ToR.		35
	All 5 items addressed	5	
	4 items addressed	4	
	3 items addressed	3	
	2 items addressed	2	
	1 item addressed	1	
	No item addressed	0	
	Team Capability • The study leader should have relevant experience of at least 10 years. • Team should have a range of experts in various fields (water resource engineer, hydrologist, software Programmer) minimum of 5 years of experience and • Other support structures GIS professionals, Admin, finance, messengers.		30

	Study leader must be a civil/water resource engineer or hydrologist registered with the relevant professional body (ECSA or SACNASP) as Professional Engineer or Professional Natural Scientist, with min 10 years relevant experience and registered hydrologists/engineers with a minimum of 5 years, and support staff	5	
	Study leader must be a water resource engineer or hydrologist registered with the relevant professional body (ECSA or SACNASP) as Professional Engineer or Professional Natural Scientist, with min 8 years relevant experience and hydrologists/engineers with a minimum of 4 years, and support staff	4	
	Study leader must be a water resource engineer or hydrologist registered with the relevant professional body (ECSA or SACNASP) as Professional Engineer or Professional Natural Scientist, with min 7 years relevant experience and hydrologists/engineers with a minimum of 3 years, and support staff	3	
	Study leader must be a water resource engineer or hydrologist registered with the relevant professional body (ECSA or SACNASP) as Professional Engineer or Professional Natural Scientist, with min 6 years relevant experience and hydrologists/engineers with a minimum of 2 years and support staff	2	

	Study leader must be a water resource engineer or hydrologist registered with the relevant professional body (ECSA or SACNASP) as Professional Engineer or Professional Natural Scientist, with min 5 years relevant experience and hydrologists/engineers with minimum of 2 years and support staff	1	
	Study leader must be a water resource engineer or hydrologist registered with the relevant professional body (ECSA or SACNASP) as Professional Engineer or Professional Natural Scientist, with min 3 years relevant experience and hydrologists/engineers with minimum of 1 years and no support staff	0	
	Capacity building and training: • Provide clear proposals on Capacity building and training of 10 DWS officials in the hydraulic model, optimisation methods, the DSS and/or technical aspects to be undertaken as part of this Study.		10
	Shows innovation in ensuring the successful transfer of skills to DWS staff	5	
	Provides detailed methodology of training and capacity building as per ToR	4	
	Provides some methodology, but not all aspects	3	
	Training in a workshop format, only including the Hydraulic model	2	
	Training in a workshop format only excluding the Hydraulic model	1	
	No training & capacity building plan provided	0	

Total		100
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Technical Proposals will be evaluated and scored without reference to the Financial Proposals.

The Bidder must obtain minimum 70 (%) points on functionality (Past Experience, Methodology Team capability and Capacity building and training) in order to qualify for further evaluation. Further evaluation is based on **Price and Preference** after the minimum functionality score of 70% has been achieved by the bidder.

10.8.2 Phase 3: The 80/20 Principle based on Price and Specific Goals

The 80/20 Preferential Procurement System will be used in evaluating these bids:

Evaluation element	Weighting (Points)
SPECIFIC GOALS	20
PRICE	80
Total	100

Price

A maximum of 80 points are allocated for price on the following basis:

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where:

P_s = Points scored for comparative price of bid under consideration

P_t = Comparative price of bid under consideration

$P_{\min}$ = Comparative price of lowest acceptable bid

Preference point system

	NUMBER OF POINTS TO BE ALLOCATED
SPECIFIC GOALS	
Women	5
People with disability	5
Youth (35 and below)	5
Location of enterprise (Province)	2
B-BBEE status level contributors from level 1 to 2 which are QSE or EME	3
Total points for SPECIFIC GOALS	20

Documents Required for verification of Points allocation: -

Procurement Requirement	Required Proof Documents
Women	Full CSD Report
Disability	Full CSD Report
Youth	Full CSD Report
Location	Full CSD Report
B-BBEE status level contributors from level 1 to 2 which are QSE or EME	Valid BBBEE certificate/sworn affidavit Consolidated BEE certificate in cases of Joint Venture Full CSD Report

The definition and measurement of the goals above is as follows:

Women, disability, and youth:

This will be measured by calculating the pro-rata percentage of ownership of the bidding company which meets this criterion. E.g., Company A has five shareholders each of whom own 20% of the company. Three of the five shareholders meet the criterion, i.e. they are women/disability/youth. Therefore, this bidder will obtain 60% of the points allowable for this goal.

Location of enterprise

Local equals province. Where a project cuts across more than one province, the bidder may be located in any of the relevant provinces to obtain the points.

B-BBEE status level contributors from level 1 to 2 which are QSE or EME

Measured in terms of normal BBBEE requirements.

Note: Formula for calculating points for specific goals

Preference points for entities are calculated on their percentage shareholding in a business, provided that they are actively involved in and exercise control over the enterprise. The following formula is prescribed:

$$PC = Mpa \times \frac{P\text{-own}}{100}$$

Where

PC= Points awarded for specific goal

Mpa= The maximum number of points awarded for ownership in that specific category

P-own = The percentage of equity ownership by the enterprise or business

Bidders must submit their original and valid **B-BBEE status level verification certificate** or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.

Scores obtained for Price and B-BBEE Status Level are combined to obtain an overall score for each bid. The Functionality score is not factored in the final score, it is only used for screening bids that qualify from those that do not qualify to enter the last stage of evaluation.

Conditions:

- Only bidders who obtain at least 70% under Functional/ Technical Evaluation will be considered for further evaluation.
- Bidders are requested to provide a clear agreement regarding joint venture/consortia. The percentage involvement of each company in the joint venture agreement should be indicated.
- The department reserves the right to engage with the successful service provider to negotiate the prices as submitted. If it is envisaged that negotiations will be conducted only with the successful supplier, the negotiations will be based on a best estimate of the cost of the works.
- In the event that any key staff member appointed by the Bidder is unable to continue in their role due to resignation, death, or other valid reasons, the Bidder shall, within thirty (30) calendar days, propose a replacement of equivalent or superior qualifications and experience. Such replacement shall be subject to the prior written approval of DWS.
- The Bidder shall provide documentary proof of the circumstances necessitating the replacement, such as a certified copy of the death certificate in the case of death, or a formal resignation letter in the case of resignation.
- The Bidder shall ensure that the continuity of services is maintained during the transition period and that project delivery is not adversely affected. All costs associated with the replacement of team members under these circumstances shall be borne by the Bidder.
- For positions designated as key personnel, replacements shall only be permitted under exceptional circumstances (such as death, serious illness, or resignation) and must be fully justified to the satisfaction of DWS.

11. FURTHER INFORMATION

Relevant tender documents are distributed with this Terms of Reference.

- For Technical information, you can contact the Scientific Manager, Ms Celiwe Ntuli at NtuliC@dws.gov.za, on the telephone (012) 336 7618 or on 063 251 9494 or Mr Sifiso Maseko at MasekoS@dws.gov.za-Tel 012 336 8072, or
- For Administrative matters and SCM-related queries Ms on telephone (012) 336 7518