

INVITATION TO BID

REQUEST FOR BID DESCRIPTION:
**APPOINTMENT OF CONTRACTOR FOR THE
DECOMMISSIONING OF EXISTING WATER TREATMENT,
SUPPLY, INSTALLATION AND COMMISSIONING OF CHEMICAL
FREE ELECTROLYSIS WATER TREATMENT SYSTEM AT
ARMSCOR HEAD OFFICE**

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NOTE:

Kindly register on the National Treasury's Central Supplier Database (CSD) via www.csd.gov.za

Bids must ONLY be submitted in hard copy; electronic bid submissions are NOT acceptable.

RETURNABLE DOCUMENTS CHECKLIST

Bidders are required to develop a returnable schedule annexure in accordance with the following table of contents

	List of documents-required.	Submitted [Yes or No]	
		Yes	No
1.	Central Supplier database (CSD) registration report or Unique Registration Reference Number	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2.	Valid Tax Clearance Certificate (s) and or proof of application endorsed by SARS and / or SARS issued verification pin code.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3.	Copies of bidders CIPC Company registration documents listing all members with percentage, See bidding structure for required documents.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.	Copy of the Joint Venture / Consortium Agreement duly signed by all parties	Yes <input type="checkbox"/>	No <input type="checkbox"/>
5.	Copy of the Sub-Contracting Agreement duly signed by all parties	Yes <input type="checkbox"/>	No <input type="checkbox"/>
6.	Valid proof of BBBEE status for the bidder and its sub-contractor(s)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
7.	Designated sectors: Local production and content. (Where applicable)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
8.	Originally certified copy of Identity Document for the Company representative	Yes <input type="checkbox"/>	No <input type="checkbox"/>
9.	Copy of latest audited financial statements	Yes <input type="checkbox"/>	No <input type="checkbox"/>
10.	Bid conditions acceptance form on KD17 (Mandatory)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

BIDDING STRUCTURE

Indicate the type of bidding structure by marking with an 'X' in an appropriate box.	
Individual Bidder	
Joint Venture	
Consortium	
Using Sub-contractors	
Other	

Only fill the relevant category:

If individual bidder, indicate the following:	
Name of Bidder	
Company / Close Corporation Registration Number	
VAT Registration Number	
National Treasury Supplier Number	
Unique Registration Reference Number	
Contact Person	
Telephone Number	
Fax Number	
Email Address	
Postal Address	
Physical Address	
NB: Submit with the bid the following documents:	
Copies of the bidder's CIPC company registration documents listing all members with percentages, in case of a CC	
In case of Individual Bidder supply ID document for local and if foreigner supply passport number or identification as applicable in that country	
Latest copies of all share certificates, in case of a company or any other form of a legal entity	
Shareholding breakdown per race, gender and percentage shareholding with shareholders of the bidding entity	

If Joint Venture or Consortium, indicate the following: (To be completed for each JV/Consortium member)	
Name of Joint Venture / Consortium	
Company / Close Corporation Registration Number	
VAT Registration Number	
National Treasury Supplier Number	
Unique Registration Reference Number	
Contact Person	
Telephone Number	
Fax Number	
Email Address	
Postal Address	
Physical Address	
NB: Submit with the bid the following documents:	
Copies of the bidder's CIPC company registration documents listing all members with percentages, in case of a CC.	
In case of Individual Bidder supply ID document for local and if foreigner supply passport number or identification as applicable in that country	
Latest copies of all share certificates, in case of a company or any other form of a legal entity.	
Shareholding breakdown per race, gender and percentage shareholding with shareholders of the bidding entity.	

If Joint Venture or Consortium, indicate the following:	
Name of Prime Contractor	
Company / Close Corporation Registration Number	
VAT Registration Number	
National Treasury Supplier Number	
Unique Registration Reference Number	
Contact Person	
Telephone Number	
Fax Number	
Email Address	
Postal Address	
Physical Address	
NB: Submit with the bid the following documents:	
Copies of the bidder's CIPC company registration documents listing all members with percentages, in case of a CC.	
In case of Individual Bidder supply ID document for local and if foreigner supply passport number or identification as applicable in that country	
Latest copies of all share certificates, in case of a company or any other form of a legal entity.	
Shareholding breakdown per race, gender and percentage shareholding with shareholders of the bidding entity.	

If using subcontractors, indicate the following:	
Name of Prime -Contractor	
Percentage Value to be subcontracted	
Company / Close Corporation Registration Number	
VAT Registration Number	
National Treasury Supplier Number	
Unique Registration Reference Number	
Contact Person	
Telephone Number	
Fax Number	
Email Address	
Postal Address	
Physical Address	
Subcontractor Details:	
Name of Subcontractor	
Company / Close Corporation Registration Number	
VAT Registration Number	
National Treasury Supplier Number	
Unique Registration Reference Number	
Contact Person	
Telephone Number	
Fax Number	
Email Address	
Postal Address	
Physical Address	
NB: Submit with the bid the following documents for both Prime and Sub-Contractors:	
Copies of the bidder's CIPC company registration documents listing all members with percentages, in case of a CC.	
In case of Individual Bidder supply ID document for local and if foreigner supply passport number or identification as applicable in that country	
Latest copies of all share certificates, in case of a company or any other form of a legal entity.	
Shareholding breakdown per race, gender and percentage shareholding with shareholders of the bidding entity.	

Other:	
Name of Bidder	
Company / Close Corporation Registration Number	
VAT Registration Number	
National Treasury Supplier Number	
Unique Registration Reference Number	
Contact Person	
Telephone Number	
Fax Number	
Email Address	
Postal Address	
Physical Address	
NB: Submit with the bid the following documents:	
Copies of the bidder's CIPC company registration documents listing all members with percentages, in case of a CC	
In case of Individual Bidder supply ID document for local and if foreigner supply passport number or identification as applicable in that country	
Latest copies of all share certificates, in case of a company or any other form of a legal entity	
Shareholding breakdown per race, gender and percentage shareholding with shareholders of the bidding entity.	

Declaration:

I, as the duly authorized representative of the bidder hereby authorize Armscor to request, investigate and process company information including tax compliance via the SARS website.

.....
Name

.....
ID number

Declaration of Bidder’s Past Supply Chain Management Practices

This Standard Bidding Document serves as a declaration to ensure that goods and services being procured are aligned with all reasonable steps are taken to combat the abuse of the supply chain management system. The bid of any bidder may be disregarded if that bidder or any of its directors have been involved in the abuse of public institution’s supply chain management system

In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
1	Is the bidder or any of its directors listed on the National Treasury’s Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury’s website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	<input type="checkbox"/>	<input type="checkbox"/>
	If so, furnish particulars:		
2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury’s website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	<input type="checkbox"/>	<input type="checkbox"/>
	If so, furnish particulars:		
3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	<input type="checkbox"/>	<input type="checkbox"/>
	If so, furnish particulars:		
4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	<input type="checkbox"/>	<input type="checkbox"/>
	If so, furnish particulars:		

CERTIFICATION

I, the undersigned (full name).....certify that the information furnished on this declaration form is true and correct.

I accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

.....
Signature

.....
Date

.....
Position

.....
Name of bidder

BID CONDITIONS ACCEPTANCE FORM

Bidders shall complete and sign this bid conditions acceptance form

I/We hereby offer to supply all or some of the supplies and/or services described in the Pricing Schedule and /or attached documents on the terms and conditions and in accordance with the conditions set out in A-STD-0010 Issue 2 dated 21 April 2014 and A-STD-0020 Issue 4 dated 14 February 2020 (and I/we acknowledge that I/we am/are acquainted therewith) at the price and on the terms of delivery/execution inserted by me/us.

I/We agree -

1. that this bid shall remain binding on me/us and open for acceptance for the period stipulated above;
2. that if my/our bids is accepted, the acceptance will be communicated to me/us by letter or order through the post, and such acceptance shall constitute a contract between me/us and Armscor, subject to the terms and conditions set out in Armscor's General Conditions of Contract (A-STD-0020), Issue 4 dated 14 February 2020, the contents of which I/we acknowledge ourselves to be acquainted with.

I/We choose as domicilium citandi et executandi in the Republic

.....

 (no post box or private bag)

IN BLOCK LETTERS ON BEHALF OF -

Complete registered:
 Name of bidder:.....

AUTHORISED SIGNATURE

..... Date:

Name in block letters:

Capacity:

NB: FAILURE TO COMPLETE AND SIGN THIS PAGE SHALL INVALIDATE THE BID AND WILL BE DISQUALIFIED FROM FURTHER EVALUATION.

SUPPLIER REGISTRATION

- 1.1 Bidders must register on the National Treasury Central Supplier Database (CSD) in terms of National Treasury Instruction Note 3 of 2016/17.
- 1.2 Bidders must electronically register for Security on Armscor website to be considered for orders which are administered by Armscor SOC Ltd on Behalf of clients.

For more information on security registration contact:-

The Security Registration

Private Bag X337

PRETORIA

0001

E-mail:- register@armscor.co.za

ALL BIDDERS SHALL COMPLY WITH THE FOLLOWING:

1. Bidders should check the numbers of the pages correspond with the table of contents as no liability arising from claims owing to the omission or duplication of pages will be recognised by Armscor. The appendices mentioned in these pages form part of the bids.
2. **All bidders shall -**
 - 2.1. insert their name at the top of each price schedule form used (a rubber stamp may be used);
 - 2.2. insert the information in the spaces provided in the price schedules by writing or typing on the dotted lines only (additional information should be contained in a separate annexure);
 - 2.3. if they wish to make more than one bid against an item, as an alternative, apply for additional copies of the bid documents or photocopy one or more pages, and not retype or redraft any of the forms used;
 - 2.4. indicate the prices quoted in the units shown and quote them per item;
 - 2.5. indicate in respect of each item whether the goods/services quoted comply strictly with the specified requirements, and furnish particulars of deviations if this is not so;
 - 2.6. complete all appendices.
3. **Value-added tax, customs duties, *ad valorem* customs duties and surcharges:**
 - 3.1. Value added tax levied by the Receiver of Revenue must not be included in the prices quoted but be shown as a separate line item.
 - 3.2. Where supplies are quoted which are subject to levying of any customs duty, ad valorem customs or excise duty or surcharge by the Department of Customs and Excise, such charges must not be included by the bidder in the prices quoted. The applicable customs duty, ad valorem customs or excise duty or surcharge must, however, be indicated separately where provided for on Armscor's Questionnaire
4. **Security:**
 - 4.1. Classified bids are to be handled in the manner set out in Armscor's Security Instruction, document number A-WI-014, copies of which are obtainable on request from the Contractor Security Section, P O Box 411, Pretoria, 0001.
 - 4.2. Attention is drawn particularly to the procedure set out in chapter 4 of the manual, which is to be complied with when forwarding classified documents.

5. Broad-Based Black Economic Empowerment Compliance:

- 5.1 In terms of the Defence Sector Codes, contracts for goods and services shall only be awarded to a bidder that has Black Equity Ownership of at least 25% in year 1 (12 April 2019 to 31 March 2020), 30% in year 2 (01 April 2020 to 31 March 2021) and 35% in year 3 (01 April 2021) onwards, where applicable.
- 5.2 Failure to comply with the **B-BBEE Mandatory and Compulsory requirements** as stated in the KD24 will lead to disqualification.

6. Advance payments:

Bidders shall furnish the price without advance payment. (Consult paragraph 8 of A-STD-0010).

7. Performance Guarantee:

Armcor reserves the right to request the successful bidder to submit a performance guarantee for the proposed contract. Bidders must submit prices without provision for the performance guarantee as well as prices including the cost of such a guarantee.

8. Commissions:

If any commission is payable by yourself to any person(s) or body as a result of any order which may arise from this Request for Proposal, you must submit full details of the applicable person(s) or body and the amount payable, with this bid.

9. Tax Compliance Requirements

It is a condition of bid that the successful bidder MUST be tax compliant, or that satisfactory arrangements have been made with the South African Revenue Service (SARS) to meet the bidder's tax obligations. FOREIGN COMPANIES ARE REQUIRED TO COMPLETE QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS OF ANNEXURE 1 TO KD 25

- 9.1 In order to meet this requirement the bidder is required to access SARS e-filing and complete the SARS ONLINE "SARS tax compliance status" under tax status. Tax compliance requirements are also applicable to individuals who wish to submit bids.
- 9.2 SARS will then furnish the bidder with a Tax compliance PIN code that will be valid for a period of 1 (one) year from the date of approval.
- 9.3 The Tax compliance PIN letter shall be submitted with the bid, with an authorisation letter for Armcor to use the PIN code for verification of tax compliance status of the supplier.
- 9.4 In bids where Consortia /Joint Ventures / are involved, each party must submit a separate tax compliance PIN with authorisation letter.
- 9.5 In the event of subcontracting, tax compliance PIN letter and authorisation letter for the subcontractor must also be submitted with the bid.

- 9.6 Tax compliance is done via e-filing on the SARS website www.sars.gov.za.
- 9.7 Original valid tax clearance certificates issued before 18 April 2016 are still valid until the expiry date or on replacement with SARS tax compliance PIN.

NOTE: Armscor Suppliers /Bidders and Subcontractors must remain tax compliant for the duration of their contracts.

10. Awarding of Bids

The awarding of bids will be in terms of the Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017.
The applicable points are:

Price: (Pp)	80 Points
Broad-Based Black Economic Empowerment:	20 Points
Total:	100 Points

The following formula will be used to calculate the points in respect of a bid up to a rand value of R50 000 000, 00 (all applicable taxes included).
(Armscor may also apply this formula to price quotations with a value of less than R30 000, if and when appropriate):

$$P_s = P_p$$

$$\text{Provided that } \sum (P_{pa}) = 80$$

Where:	P_s	= points scored for bid/bid under consideration
	P_p	= points scored for price
	a	= allocated

$$\text{The points scored for price } (P_p) = P_{pa} * \left(1 - \frac{P_t - P_m}{P_m}\right)$$

Where:	P_{pa}	= points allocated for price
	P_t	= comparative price of bid/bid under consideration
	P_m	= comparative price of lowest acceptable bid/bid

11. Objective Criteria

- 11.1 A contract may be awarded to a bidder that did not score the highest points only in accordance with section 2 (1) (f) of the Act. If Armscor intends on applying objective criteria in terms of section 2(1) (f) of the Act, this will be stated in the bid document.

12. Mandatory local production and content for designated sectors

- 12.1 When applicable, bids not meeting the mandatory local production and content for designated sectors will not be considered for further evaluation.
- 12.2 A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 12.3 If there is no designated sector, Armscor will include as a specific condition of the bid, that only locally produced services or goods or locally manufactured goods with a stipulated minimum threshold for local production and content, will be considered.

RFB SPECIFICATION

APPOINTMENT OF CONTRACTOR FOR THE DECOMMISSIONING OF EXISTING WATER TREATMENT, SUPPLY, INSTALLATION AND COMMISSIONING OF CHEMICAL FREE ELECTROLYSIS WATER TREATMENT SYSTEM AT ARMSCOR HEAD OFFICE

1. AIM OF THE RFB

The aim of the RFB is to appointment of contractor for the decommissioning of existing water treatment, supply, installation and commissioning of chemical free electrolysis water treatment system at armscor head office.

2. DELIVERY PERIOD

The decommissioning and new installation must be completed within 12 months and the maintenance for 2-years after new installation.

3. GENERAL INSTRUCTIONS FOR THE COMPLETION OF THE BID

3.1 Completeness of documentation

- i. The Bidder is required to ensure that the bid pages and appendices are complete, correct and consistent.
- ii. The Bidder is required to ensure that Armscor's bid document KD17 hereto attached, is properly completed and signed.

3.2 Number of Bid copies

The Bidder is required to submit one (1) original document to Armscor. The original document must be clearly marked with the bid number, bid closing date and name of the bidder.

3.3 Communication

The Bidder shall appoint a Contractor Product Manager (CPM) for communication with Armscor. The details of this person shall be included in the content of the bid.

4. BID EVALUATION CRITERIA

The evaluation criteria will be in line with the Preferential Procurement Policy Framework Act 2000: Preferential Procurement Regulations, 2017 and A-PROC-9053. Bids will be evaluated on a five-stage evaluation process. Firstly, bids will be evaluated on Defence Sector Mandatory Requirement: Secondly; **Pre-Qualification Criteria**. Thirdly, on **Critical criteria**, fourthly Functionality criteria, lastly **Preference Point System**.

The requirements of any given stage shall be complied with prior to progression to the next stage.

A 4 staged approach will be used to evaluate a bid as follows:

STAGE 1	Mandatory Black Equity Ownership
STAGE 2	Pre-Qualification
STAGE 3	Critical Criteria
STAGE 4	Preference Point System

4.1 Stage 1: Mandatory Black Equity Ownership

- a. A contract for goods and services shall be awarded to any bidder unless such bidder has Black Equity Ownership of at least 35%.
- b. The bidder shall submit a valid proof of B-BBEE status (B-BBEE certificate issued by a SANAS accredited verification agency or CIPC B-BBEE certificate or B-BBEE sworn affidavit) without which the bid shall not be evaluated further.
- c. A bid that fails to meet the BBEE mandatory criteria stipulated in the bid documents is an unacceptable bid and will be disqualified.

4.2 Stage 2: Pre-qualification Criteria

- a. In line with regulation 4 of the PPPFA 2000 Regulations 2017, the bidder shall have a B-BBEE status level 3 or better.
- b. The bidder shall submit a valid proof of B-BBEE status (B-BBEE certificate issued by a SANAS accredited verification agency or CIPC B-BBEE certificate or B-BBEE sworn affidavit) without which the bid shall not be evaluated further.

4.3 Stage 3: Critical Criteria

Critical Criteria are those criteria that determine whether the bidder complies with certain crucial requirements to perform a task. Failure by the bidder to comply with any criterion will result in the bid being excluded from further evaluation. Kindly refer to table 1 for Critical Criteria.

4.4 Stage 4: Preference Point System

The 80/20 preference point system is applicable to this proposal. Should the value of the development cost be above R50 million, then the 90/10 preference point system will be applied. 80 points shall be allocated for Price & 20 points will be allocated for B-BBEE.

5. GENERAL RULES AND PRINCIPLES

A sub-contractor will not be evaluated in terms of the critical criteria.

6. SPECIAL CONDITION

- a. The contractor shall, within 14 days after the placement of the order, take out public and professional liability insurance, at his own expense, to cover all his risks and liabilities in terms of the order.
- b. Written confirmation of the nature and period of the cover shall be submitted to Armscor within 14 days after acceptance of the order. The Contractor shall produce brokers' certificates evidencing the existence of such insurance. Should the Contractor fail to do so, Armscor reserves the right to take out the necessary insurance at the Contractor's expense.
The bidder shall allocate a construction health and safety officer for the duration of the contractual period.
- c. The bidder shall submit all concept and construction drawings to Plantech and Armscor engineers before the commencement of the project.

7. ADDITIONAL INFORMATION

- a) All other information which will assist in completion of this RFB is as per the technical requirement document attached as Annexure C which needs to be fully complied with by the bidder.
- b) Single envelope approach is applicable to this RFB.
- c) The bidder must complete in full the BOQ as detailed in Annexure D and transfer the totals to KD17 Pricing Schedule page.

EVALUATION CRITERIA

1. **Critical criteria evaluation**

Table 1: Critical Criteria

Criteria No.	Criteria Description	Compliance Evidence
1	The bidder shall attend a compulsory bidder's briefing session which include site inspection	The representative from the bidder shall complete details required in the bidders briefing register on the day of the briefing
2	The bidder shall be in good standing with the Compensation Commissioner in terms of the Compensation of Occupational Injuries and Disability Act (COIDA)	The bidder shall submit a <u>valid</u> COIDA certificate issued by the Department of Employment and Labour or any other agency accredited by the Department of Employment and Labour
3	The bidder shall allocate an Engineer, Technologist or Scientist' who was a project leader for the implementation of at least two (2) chemical free electrolysis water treatment systems in the last 5 years (2016-2021). The two (2) projects must be at different clients or one client but different sites.	The bidder shall submit a copy of their qualification for the allocated Engineer/Technologist or Scientist'. In addition, the bidder shall submit at least two (2) reference letters from the clients confirming that the engineer/technologist/scientist was a project leader for a chemical free electrolysis water treatment project. The reference letters must indicate the year of completion of the implementation.
4.	The bidder shall have completed at least one (1) project for the implementation of chemical free electrolysis water treatment system.	The bidder shall submit at least one (1) client reference letter on the client letterhead signed by a duly authorised person, indicating that the Bidder has implemented a chemical free electrolysis water treatment system
5.	The bidder shall fully comply with the minimum Technical Requirements detailed in Table 1 of the RFB	The bidder shall: •Complete and sign the Bid Condition Acceptance Form on page 7 of the KD17 of the RFB and •Complete Table 1, in full and submit with the Bid indicating that they fully comply with the minimum technical requirement as detailed in Annexure C.
		*Note: Alternative offers to the technical requirements that does not meet/exceed the minimum technical requirements is invalid and will not be evaluated further

Engineer, Technologist or Scientist from any of the Engineering Discipline with the following experience:

- Energy Management Background
 - Water Treatment/Resource Systems Management
 - Fluid Mechanics/Technology
 - Cooling Systems
 - Corrosion Protection Solutions
- Supported by a CV indicating any of the above experience

Note: A sub-contractor of the bidder shall not be evaluated in terms of the critical criteria.

2. Compulsory Bidder's Briefing

ARMSCOR will hold a compulsory bidders briefing session:

VENUE	ADDRESS	DATE	TIME
Armcor Head Office	Armcor Head Office 370 Nossob Street Erasmuskloof Pretoria East	01 February 2022	09H00 10H00

BILL NO 1: PRELIMINARIES & GENERAL

BIDDER NAME:

		[COMPLETE ONLY THIS COLUMN]			
	DESCRIPTION	UNIT	QTY	SUPPLY RATE	AMOUNT
1.0	Safety File	LOT	1		R -
2.0	Safety Management	LOT	1		R -
3.0	Decommissioning (Labour, Rigging, Cranage and Handling)	LOT	1		R -
4.0	Site Establishment	LOT	1		R -
5.0	Supply of "As Built" Drawings	LOT	1		R -
6.0	Supply of O and M Manuals	LOT	1		R -
7.0	Contract Management	LOT	1		R -
8.0	Safe Disposal of existing water treatment system (at no cost to Arms	LOT	0		R -
9.0	Any applicable Technical Assessment (list them)				
9.1		LOT	1		R -
9.2		LOT	1		R -
9.3		LOT	1		R -
BILL 1 TOTAL TO SUMMARY					R -

BILL NO 2: CHEMICAL FREE ELECTROLYSIS HVAC EQUIPMENT

DESCRIPTION		UNIT	QTY	[COMPLETE ONLY THIS COLUMN]	SUBTOTAL
1.0	Containerised electrolysis water treatment system				
1.1	Containerised electrolysis water treatment system				
1.1.1	Complete containerised water treatment system	EA	1	R	-
2.0	Untreated water inlet header				
2.1	Untreated water inlet header				
2.1.1	Complete untreated water inlet header	EA	2	R	-
3.0	Treated water outlet header				
3.1	Treated water outlet header				
3.1.1	Complete water outlet header	EA	2	R	-
4.0	Circulation Pumpsets				
4.1	Circulation Pumpsets				
4.1.1	Supply and install circulation pumpsets 180m3/hr	EA	2	R	-
5.0	Miscellaneous				
	(All items not captured in items 1 to 10 to ensure the safe functional delivery of the full scope of work) [ITEMS TO BE LISTED BELOW]				
5.1					R0,00
5.2					R0,00
6.0	Building Management System (BMS)				
6.1	Supply, install and configure BMS		1	R	-
BILL 2 TOTAL TO SUMMARY					R0,00
					R0,00
					R0,00

BILL NO 3: MAINTENANCE & WARRANTEE

BIDDER NAME:

		[COMPLETE ONLY THIS COLUMN]			
DESCRIPTION		UNIT	QTY	SUPPLY RATE	AMOUNT
3.1	24 x MONTH MAINTENANCE & WARRANTEE SUPPORT SERVICES [Labour - X1 Maintenance Technician] [Labour Cost - x1 Maintenance Assistant]	Monthly Monthly	24 192 192	(rate/hour)	R - R - R -
3.2	24 x SUPPLY OF CONSUMABLE ITEMS Filters All other consumables	Monthly Monthly	24 24	(cost/per service)	R - R - R -
3.3	CONDUCT REGULAR TESTS Conduct monthly water test Submit monthly system condition and performance report	Monthly Monthly	24 24	(cost/per service)	R - R - R -
3.4	TRAINING Conduct training (operational and maintenance)	once-off	1	(once-off)	R - R -
[Note: Armscor will not take any responsibility over the system functionality and maintenance for period of 2-years. The contractor shall attend to all breakdowns, services and provide spares for the duration of the maintenance/warrantee period at not additional cost to Armscor]					
BILL 3 TOTAL TO SUMMARY					R -

BILL NO 4: BUDGETARY ALLOWANCE

BIDDER NAME:

DESCRIPTION	UNIT	QTY	SUPPLY RATE	AMOUNT
4.1 Budgetary Allowance		1	R 600 000,00	R 600 000,00
[Note: This amount shall only be utilised after the contractor has received an Authorisation from Armscor Project Manager. A detailed motivation report must be prepared and submitted prior the commencement of any work which may require funds from this line item]				
BILL 4 TOTAL TO SUMMARY				R 600 000,00

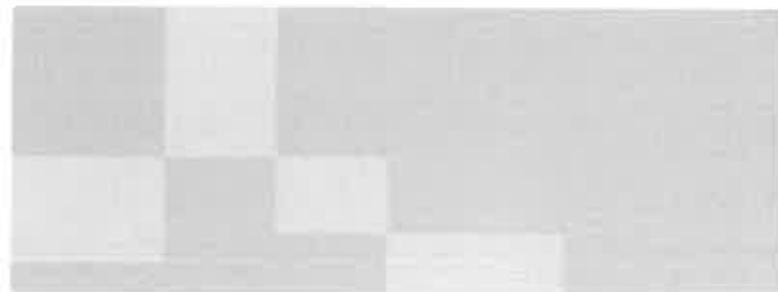
SUMMARY OF BILLS	
BILL NO	AMOUNT
1 PRELIMINARIES AND GENERAL	
2 WATER TREATMENT EQUIPMENT & INSTALLATION	
3 MAINTENANCE & WARRANTEE	
4 BUDGETARY ALLOWANCE	R 600 000,00
TOTAL EXCLUDING VAT	
PLUS 15% VAT	R -
TOTAL TENDER PRICE	R -

TABLE 1: WATER TREATMENT SYSTEM TECHNICAL REQUIREMENTS

The bidder shall complete table 1 in full. Failure to complete any line will lead to automatic disqualification. In areas where the bidder cannot provide what is required, then the answer must be "No" and then provide an alternative offer under the column provided.

	CRITICAL REQUIREMENTS	YES/NO	IF "NO", PROVIDE ALTERNATIVE OFFER HERE
5.1	The proposed electrolysis water treatment system is a chemical-free water treatment solution with propriety control systems. Note: No chemical-based water treatment system shall be considered.		
5.2	The proposed electrolysis water treatment equipment can be adjusted or customised for site specific chiller water system requirement.		
5.3	The proposed electrolysis water treatment equipment is able to operate to maximum efficiency using borehole water as the primary source with provision to use potable water as a secondary source.		
5.4	The proposed electrolysis water treatment system can be fully integrated and monitored by the HVAC BACnet Building Management System (BMS). The input must include water supply from primary or secondary source and all error codes and operation messages.		
5.5	The proposed system has the ability to send all information to a single point of access with a user-friendly interface. The interface shall have a graphical schematic of the HVAC chilled water system for ease of maintenance that will indicate all required information clearly. The set points can also be adjustable from the HVAC BMS interface.		
5.6	The proposed system has the ability to remove excess minerals from the cooling system.		
5.7	The proposed system has the ability to manage corrosion and Bio-life in cooling tower basins.		
5.8	The proposed system must reduce potable water consumption by up to 16% (reducing blow-down by minimum 75% compared to chemical-based solutions)		
5.9	The proposed system must have a Filter with capability to remove > than 10 microns of suspended solids from cooling tower basins		
5.10	The proposed system must reduce maintenance and energy consumption due to improved heat transfer efficiencies because of historical scale removal and preventing future scale formation		

PLANTECH



TENDER DOCUMENT
for the Chemical Free
Electrolysis water treatment of
the HVAC Installation
at ARMSCOR in Erasmuskloof

DOCUMENT REVISION HISTORY:

Revision	Revision Date	Revision Comments	Originator	Reviewed by	Admin check
0	2021-08-19		KDP	MvJ	MLE / AV

DOCUMENT DISTRIBUTION LIST:

Name	Company	Designation
Stanley Netshiya	ARMSCOR	Client Representative / Project Manager
Cynthia Tiwani	ARMSCOR	Operations

ORIGINATOR DETAILS:

Name:	Kristof du Plessis
Designation:	Director
Pr. Eng Number:	20160126
Signed:	

REVIEWER DETAILS:

Name:	Marius van Jaarsveldt
Designation:	Senior Associate
Signed:	

FILE LOCATION:

A-1870-31 Armscor HQ - HVAC Refurbishment Chilled Water Treatment R0.docx

**SPECIFICATION FOR THE CHEMICAL FREE ELECTROLYSIS
HVAC WATER TREATMENT INSTALLATION
FOR
ARMSCOR**

CONTENT OVERVIEW

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FORM OF TENDER

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A-COND-01-01-W11

FILE 8

SECTION 1
FORM OF TENDER
FOR

JBCC® Minor Works Agreement: Edition 5.2 May 2018

PLANTECH

ELECTRICAL AND MECHANICAL
CONSULTING ENGINEERS

P O BOX 146

PERSEQUOR PARK

0020

TEL.: [012] 349-2253

FAX : [012] 349-2390

EMAIL: plantech@plantech.co.za

PLANTECH

2021/08

A-1870-31
Revision 0

1. FORM OF TENDER

The Extended Form of Tender (Clause 2) and the Tender Schedule (Clause 3) form part of the Form of Tender.

It is intended that this tender will be accepted by the Employer named in the Tender Schedule.

The Contractor will be appointed as a Direct Contractor in terms of the JBCC® Minor Works Agreement: Edition 5.2 May 2018.

Any conditions appended by the tenderer which are at variance with the conditions set out herein may invalidate the tender.

The lowest tender or any part thereof need not necessarily be accepted.

All information regarding the tender closing date, time and place is set out in the INVITATION TO TENDER: Section 1.

I/We the undersigned, agree to contract to perform and complete the works described herein in accordance with the tender conditions contained these documents for the total tender sum of:

R _____

In words _____

Carried over from SCHEDULE OF PRICES (Section 8) including VAT and contingencies.

Name of Firm _____

Address _____

Code _____ Tel _____ Fax _____

Contact Person: _____

The tender is submitted together with the following documents which are enclosed herewith:

Number of letters.....	
Number of catalogues.....	
Number of drawings.....	
Copies of other documents.....	

Signed: _____ Date: _____

Name of Signatory: _____

2. EXTENDED FORM OF TENDER

2.1 STATEMENT OF COMPLIANCE OR OF QUALIFICATIONS BY TENDERER

Explanatory remarks with regard to variations to the design of the Installation, or remarks regarding the Specification, Drawings or Conditions of Contract, shall be described in the space provided below or in a separate letter accompanying the tender and also enumerated in the space below. Should no remarks be made it shall be interpreted that the Installation offered in the tender fully complies with this Document, the Drawings and Conditions of Contract and Tender.

SECTION	CLAUSE NO.	QUALIFICATION

2.2 SCHEDULE OF SUB-CONTRACTORS PROPOSED BY TENDERER

The Tenderer shall state in the schedule below the names of all Specialist and other Sub-Contractors he wishes to employ for the Works and shall define their duties and outline their experience.

NAME OF SUB-CONTRACTOR	PROPOSED DUTIES	EXPERIENCE

2.3 AUTHORITY OF SIGNATORIES

I/We, (the undersigned) am/are authorised to submit a Tender and/or to enter into Contract on behalf of

by virtue of a director's meeting dated the _____

2.4 SCHEDULE OF CONTRACT PRICE ADJUSTMENT

The Contract sum will be adjusted as follows:

Fixed Price Sub-contract in terms of Clause 2.4.1 YES

2.4.1 Fixed Price Sub-Contract

The Tender/Sub-Contract sum will be "fixed", and no adjustment will be made due to cost escalation except for the following:

- (a) Alteration to the scope of work by means of a variation order.

- (b) Adjustment due to statutory adjustment of taxes and levies after date of tender.
- (c) Exchange rate adjustment from tender date to date of the letter of Intent/Acceptance. Forward cover from this date will be for the account of the sub-contractor.

2.5 SCHEDULE OF EXCHANGE RATE ADJUSTMENT

Refer to Clause 2.4.1(c)

Adjustment of price due to fluctuations of exchange rate on imported equipment/material will only be made for equipment listed below, provided all information required has been completed. All Tenderers offering foreign equipment/material against this Enquiry shall indicate the exchange rate used by the Tenderer, which shall be the rates applicable at date of Tender. Exchange rate adjustment will only be applied to the "Free on Board" or "Cost In Freight" portion of foreign components. No further price adjustment of imported equipment/materials will be made other than for exchange rate.

EQUIPMENT/ MATERIAL	COUNTRY OF ORIGIN	CURRENCY AND RATE OF EXCHANGE*	FOB/CIF VALUE

2.6 SCHEDULE OF TENDERER'S INFORMATION

2.6.1 Name of firm to enter into contract: _____

(Items 2.6.3 to 2.6.8 below applies to this firm)

2.6.2 Name of holding company: _____

2.6.3 Bank: _____

Name: _____

Branch: _____ Account No.: _____

2.6.4 How many years has the firm been in operation in present form? _____ years.

2.6.5 Turnover per year/for previous 3 years:

Year ending.	Have figures been audited?	
This year: 20__/__/__	Yes/No	R _____
Last year: 20__/__/__	Yes/No	R _____
Three years ago: 20__/__/__	Yes/No	R _____

2.6.6 Value of largest project to date:

Project: _____

Value R _____

2.6.7 Largest 3 projects during last 3 years:

PROJECT	VALUE	STATUS

2.6.8 Value of work currently in progress:

R _____

DATE

SIGNATURE OF TENDERER

3. TENDER SCHEDULE

All items in this schedule form part of the FORM OF TENDER and will apply to this sub-contract. The reference clauses refer to the JBCC® Minor Works Agreement: Edition 5.2 May 2018.

Clause	DESCRIPTION
19.1.1	EMPLOYER
	Name : ARMSCOR
19.1.2	PRINCIPAL AGENT
	Name : Plantech (Pty) Ltd
	Telephone : [012] 349 2253
19.1.2	CONSULTING ENGINEERS Plantech (Pty) Ltd, P O Box 146, PERSEQUOR PARK, 0020 Tel: [012] 349-2253; Fax [012] 349-2390; Email: plantech@plantech.co.za
	PROJECT DESCRIPTION The installation of new chemical free electrolysis chilled water treatment equipment alongside the refurbishment of the existing chilled water HVAC system at ARMSCOR
19.1.3	WORKS DESCRIPTION
	The installation of new chemical free electrolysis water treatment system coinciding with the refurbishment of the existing chilled water HVAC system at ARMSCOR
19.1.4	SITE DESCRIPTION
	ARMSCOR, Nossob St & Delmas Road, Erasmuskloof, Pretoria, 0048
19.1.7	The Law applicable to this agreement shall be that of the Republic of South Africa.
19.1.8	Public Liability Insurance by the Employer in the amount of R
19.1.9	Contract Works Insurance by the Employer in the amount of R
19.1.11	Anticipated commencement on site
19.1.15	Anticipated practical completion date
19.1.16	Penalty per calendar for non-completion R _____ / day
19.2.1	SECURITY AND GUARANTEES The Contractor is not required to provide security in the form of the JBCC Minor Works Guarantee. Security will be in the form of increasing the retention held in terms of Clause 13.9 to 10% of the value of work completed until the Engineer certifies the Contract as completed (Form D). 5% retention will be held for the Defects Liability Period.
	PAYMENT FOR MATERIALS OFF SITE The Engineer will only certify the payment of materials and equipment after delivery to site.

	<p>DEFECTS LIABILITY PERIOD The Contractor shall fully guarantee and shall also be responsible for the comprehensive maintenance of the complete installation for the Defects Liability Period of 24 months from date of the Practical Completion Certificate (Form C).</p>
	<p><u>List of other Sub-Contractors on Project:</u></p> <ul style="list-style-type: none"> • Building Contractor : None • Electrical Contractor : None • Plumber : None <p>The Contractor shall liaise and programme his activities with all the other contractors on this project, since the Contractor will be held responsible for any delays caused by his non-performance.</p>
	<p>All site procedures such as dates for submission of payment applications, payments, attendance, security, storage, scaffolding and hoisting shall be agreed with the Employer.</p>
	<p>Type of sub-contract = Direct Contract</p>
	<p>This tender is for work to be carried out in accordance with both the design drawings and specification of the Consulting Engineer as contained in this document.</p>
	<p>The Engineering General Conditions of JBCC® Minor Works Agreement: Edition 5.2 May 2018 will apply to this contract.</p>
	<p>Adjustment to the Contract Price will be done as per Clauses 2.4 and 2.5 of the EXTENDED FORM OF TENDER.</p>

DATE

SIGNATURE OF TENDERER

4. **FORM OF AGREEMENT**

WORKS DESCRIPTION: _____

THIS AGREEMENT made between

of _____
(hereinafter called "the Employer")

and _____
(hereinafter called "the Employer")

agree to:

1. The Contractor hereby undertakes to construct, complete and remedy and defects in the Works in conformity in all respects with the provisions of the Contract.
2. The Employer hereby undertakes to pay to the Contractor in consideration of the execution of the Works the Contract Sum at the times and in the manner prescribed by the Contract.
3. The following documents shall be deemed to form and be read and construed as part of this Agreement:

The Complete Specification of the Consulting Engineer including Conditions of Tender, Conditions of Contract, Specifications, Schedules, Drawings and the Letter of Acceptance.

4. The Contract Sum inclusive of VAT (15 %) is R _____

Singed in the presence of the witnesses:

At _____ for and behalf of the Employer on this ____ day of ____

EMPLOYER As Witnesses: 1. _____
2. _____

At _____ for and behalf of the Contractor on this ____ day of ____

CONTRACTOR As Witnesses: 1. _____
2. _____

SECTION 2

CONDITIONS OF CONTRACT

FOR

MINOR WORKS AGREEMENT JBCC SERIES 2000 (Edition 5.1 March 2014)

PLANTECH

Electrical, Electronic &
Mechanical Engineers

P O Box 146

PERSEQUOR PARK

0020

Tel: [+2712] 349-2253

Fax: [+2712] 349-2390

E-mail: plantech@plantech.co.za

CONDITIONS OF CONTRACT FOR MINOR WORKS AGREEMENT
JBCC® Minor Works Agreement: Edition 5.2 May 2018

1. GENERAL CONDITIONS OF CONTRAT

1.1 The Contract shall be entered into by the Employer and the Contractor as set out in Section 2 in terms of the following:

1.1.1 JBCC® Minor Works Agreement: Edition 5.2 May 2018.

1.1.2 This Specification of the Consulting Engineer including all drawings and all sections and schedules listed in the specification

1.1.3 Latest JBCC Engineering General Conditions.

1.2 Special Conditions of Contract

Amendments to Clause 19.2.1 Security and Guarantees of Standard Agreement.

1.3 Forms to be used under this Contract

None.

SECTION 3
PROJECT SPECIFICATION
FOR THE NEW CHEMICAL FREE ELECTROLYSIS
WATER TREATMENT SYSTEM
FOR THE
HVAC INSTALLATION
FOR
ARMSCOR

PLANTECH

Electrical, Electronic &
Mechanical Engineers

P O Box 146

PERSEQUOR PARK

0020

Tel: [+2712] 349-2253

Fax: [+2712] 349-2390

E-mail: plantech@plantech.co.za

SECTION 3

CHEMICAL FREE ELECTROLYSIS WATER TREATMENT SYSTEM FOR THE HVAC INSTALLATION FOR ARMSCOR

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**CHEMICAL FREE ELECTROLYSIS WATER TREATMENT SYSTEM FOR THE
HVAC INSTALLATION FOR ARMSCOR
SECTION 3
PROJECT SPECIFICATION**

1. GENERAL

1.1 NOTES

1.1.1 The project specification together with all other documentation such as the conditions of tender and contract, the standard specifications, and all schedules and drawings as described in this tender document, constitute the specification and will be the basis of the contract.

1.1.2 Scope of Work

The Work to be performed under this contract includes the supply, procurement, delivery, erection, testing, commissioning and handing over of a complete chemical free electrolysis water treatment system for the air conditioning and ventilation installation for this building, fully operational to the Employer and the guarantee and comprehensive maintenance thereof for a further period of 24 months.

The installation includes the following 1 x Water Treatment System that doesn't use chemicals but electrolysis technology.

1.2 SPECIFICATIONS

This detail specification is specifically applicable to this installation and will have preference over the Standard Specifications.

The latest revision of the Standard Specifications listed in Section 5 of this document will apply to this contract.

1.3 RESPONSIBILITY OF THE CONTRACTOR

1.3.1 The Contractor shall only use qualified and experienced personnel for this project.

1.3.2 The Contractor is responsible to hand over a complete and fully operational installation to the Employer and shall therefore include for all minor items not specifically specified, but which are required for the proper operation of the systems as specified.

1.4 ARRANGEMENTS WITH THE SUPPLY AUTHORITY

The Contractor shall register with, pay all fees, and notify the electrical supply authority regarding all electrical work performed as part of this Contract.

1.5 CONTRACT

Refer to the attached documents regarding all conditions of contract and sub-contract. In the standard conditions, Contractor refers to the Water Treatment System supplier and installer for the Air Conditioning System. In the Project and Standard Specifications, the HVAC Water Treatment Contractor is referred to as Contractor and the Principal Building Contractor is referred to as such.

1.6 QUALITY AND QUALITY ASSURANCE

- 1.6.1 The Contractor is primarily responsible to ensure that the installation meets the requirements of the Specification.
- 1.6.2 Refer to Clause 6 of Standard Specification A-SPES-00-01
- 1.6.3 It is not compulsory for this project that the Contractor shall be approved to ISO 9001:2000, but it will be expected of the Contractor to implement written systems by competent persons to ensure that the quality of the installation will meet the requirements of this Specification to the satisfaction of the Engineer.

1.6.4 **Hold Points**

To assist the Contractor in order that corrective action can be taken in good time, the Engineer requires that at least the following quality control programme be implemented.

- Engineer's approval of Data Sheets for all major equipment prior to placing of orders.
- Approval of Circuit Diagrams and General Arrangement Drawings of all Control Boards.
- Approval of all shop drawings before commencing installation.

Written approval shall be obtained from the Engineer prior to proceeding after each Hold Point is reached.

1.7 PROGRAMMING

- 1.7.1 The Contractor shall compile a detail programme in conjunction with all parties, as set out in Clause 8 of Standard Specification A-SPES-00-01.
- 1.7.2 This programme shall be submitted to the Engineer within 2 weeks from date of appointment.

1.8 SITE, SITE CONDITIONS & SITE FACILITES

1.8.1 **Site Location**

As per SECTION 2.

1.8.2 **Site Conditions**

The Contractor shall acquaint himself fully of the prevailing site conditions, access to the site, storage, and other facilities prior to submitting a tender since no claim in this regard will be considered.

1.8.3 **Site Visits by Tenderers**

Arrangements to visit the site during the tender period shall be made with the Engineer if considered necessary.

1.8.4 **Hoisting of Equipment**

The Contractor shall allow in his tender price for the cost of hoisting and handling of all material and equipment. The lifts in the building may not be used by contractors at any time.

1.8.5 **Site Establishment**

The contractor shall allow in his tender price for site establishment including the provision of an area to store materials and equipment.

1.9 CLAIMS

Refer to Clause 9 of the Standard Specification A-SPES-00-01.

1.10 DRAWINGS

1.10.1 Refer to the Standard Specification for details regarding DRAWINGS

1.10.2 The Contractor will be required to keep a separate set of all approved drawings on site and to continually "mark-up" any alteration, additional information in order that he can produce "as installed" drawings.

1.11 RESPONSIBILITY OF OTHER PARTIES

The Contractor shall co-ordinate his activities with the client representative before commencing with any work. Written notice shall be given to the client and to Plantech about any downtime 2 weeks prior of the HVAC system.

1.12 OPERATING AND MAINTENANCE MANUALS

One hard copy and one soft copy of the complete operating and maintenance manuals, including "as installed" drawings shall be supplied to the Engineer in terms of Clause 11 of Standard Specification A-SPES-00-01, prior to the Engineer accepting the installation for "Take-over".

1.13 INSPECTION, TESTING, COMMISSIONING AND HANDING OVER

The requirements of Clause 12 of the Standard Specification A-SPES-00-01 will apply.

1.14 TRAINING OF EMPLOYER'S PERSONNEL

The requirements of Clause 13 of the Standard Specification A-SPES-00-01 will apply.

1.15 TOOLS, EQUIPMENT AND TEST INSTRUMENTS AND MAINTENANCE TOOLS

The requirements of the Standard Specification shall apply.

1.16 CODING, LABELLING, NOTICES AND NAME BOARDS

The requirements of the Standard Specification shall apply.

1.16.1 Contractor's Name Plate

In addition to the above requirements, the Contractor shall install a name plate in a position as indicated by the Engineer indicating the installation, the firm's name, and emergency telephone numbers.

1.16.2 Name Boards

No project name board will be required as part of this Contract.

1.17 GUARANTEE PERIOD

The Contractor shall guarantee the complete installation for a period of 24 months after the Final Completion Certificate - Form D has been issued, or as agreed to by the Engineer, in terms of Clause 19 of the Standard Specification A-SPES-00-01.

1.18 MAINTENANCE PERIOD

1.18.1 The Contractor shall comprehensively maintain the Installation for a period of 24 months after the Final Completion Certificate - Form D has been issued, or as agreed to by the Engineer, in terms of the Standard Specification.

The Contractor shall attend promptly within 24 hours to all complaints received by email and shall report to the Employer's nominated representative (maintenance manager) on arrival and departure and shall ensure that his written report is countersigned in the "Logbook".

The 24-month maintenance shall include monthly visits to site to check all operating components and parameters, as well as one major annual service of all of the installed components.

1.19 SITE PROCEDURES

Site and other procedures will be issued from time to time by the Employer or Principal Contractor such as security arrangements, access control etc.

1.20 CERTIFICATE OF COMPLIANCE

The Engineer will not issue a Final Completion Certificate - Form D until he is in receipt of a Certificate of Compliance in terms of Clause 20 of the Standard Specification A-SPES-00-01.

2. DESIGN DATA

Altitude	:	1326 m
Summer Ambient	:	32.1°C DB / 17.5°C WB
Winter Ambient	:	3°C DB
Condenser Coil	:	40°C
Inside Design Conditions (Air Cond)	:	22°C DB ±2°C (Summer)
	:	21°C DB ±2°C (Winter)

3. CHEMICAL FREE WATER TREATMENT SYSTEM

- 3.1. A chemical free electrolysis water treatment system shall be supplied and installed for the cooling tower water treatment. No chemical water treatment system shall be considered.
- 3.2. The water treatment equipment shall be selected and sized by the manufacturer based on the new chilled water system being installed at Armscor.
- 3.3. The primary source of water shall be borehole water, a point shall be provided by the client. The secondary source of water shall be potable water, an existing point is already in the cooling tower plant.
- 3.4. The contractor shall be responsible for the monitoring & maintenance of this water treatment system and shall be priced accordingly.
- 3.5. The changes to the water piping & circulation pump to incorporate this water treatment system shall be the responsibility of the HVAC water treatment contractor.
- 3.6. The electrolysis water treatment system shall be fully integrated and monitored by the new HVAC BMS system.
- 3.7. The contractor will provide a chemical-free water treatment solution with propriety control systems.

4. CONTROLS

- 4.1. A centralised HVAC BMS system shall be installed by the HVAC main contractor, with BACnet capabilities, that will monitor the following equipment:
 - Water Treatment
 - All error codes and operation messages
 - Water supply from primary or secondary source.
- 4.2. All information shall be sent to a single point of access with a user-friendly interface. The interface shall have a graphical schematic of the HVAC chilled water system for ease of maintenance that will indicate all required information clearly.
- 4.3. The set points shall also be adjustable from the HVAC BMS interface.

5. ELECTRICAL INSTALLATION

The Contractor shall confirm all electrical supplies within two weeks after the tender is awarded.

6. KEY PERFORMANCE INDICATORS

The water treatment solution focuses on the following Key Performance Indicators (KPI's):

- 6.1. Remove excess minerals from the cooling system,
- 6.2. Manage corrosion and Bio-life in cooling tower basins,
- 6.3. Eliminate the use of chemicals in cooling tower basins,
- 6.4. Reduce potable water consumption by up to 16% (reducing blow-down 75%)
- 6.5. Filter remove suspended solids from cooling tower basins > than 10 microns,
- 6.6 Reduce maintenance and energy consumption due to improved heat transfer efficiencies because of historical scale removal and preventing future scale formation.

SECTION 4

QUALITY MANAGEMENT PLAN, METHOD STATEMENT

AND

STANDARD SPECIFICATION

FOR THE CHEMICAL FREE ELECTROLYSIS

HVAC WATER TREATMENT INSTALLATION

FOR

ARMSCOR

PLANTECH

Electrical, Electronic &
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QUALITY MANAGEMENT PLAN, METHOD STATEMENT AND STANDARD SPECIFICATION FOR GENERAL REQUIREMENTS AND PROCEDURES

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STANDARD SPECIFICATION FOR GENERAL REQUIREMENTS AND PROCEDURES

GENERAL

Documentation - The specification for this installation consists of all written documents such as Conditions of Tender and Contract, Standard Specifications, Project or Detail Specifications, Bills of Quantities and Schedules together with applicable Drawings.

Discrepancies, Conflicts And Ambiguities - Any discrepancy or contradiction between the Tender/Contract documents and drawings, shall be brought to the notice of the Engineer in writing for a ruling, prior to submitting a Tender.

SCOPE OF WORK

The installation and scope of works is fully described in the Project Specification.

Unless otherwise specified the specification includes the design, supply, delivery, erection, testing, commissioning and handing over in complete working order as well as the maintenance and guarantee for a period of 24 months after acceptance by the Engineer.

The installation shall be complete and shall include all material and equipment necessary for the proper functioning thereof.

SPECIFICATIONS

The Project Specification will specifically apply to this installation and will have precedence over the Standard Specifications.

The Standard Specifications of the Engineer which apply to this Contract are listed in the Project Specification.

REFERENCE SPECIFICATIONS

The latest revisions of any Specification or Code issued by the SABS/ISO or other Standards referred to in this Specification, will be applicable.

STATUTORY AND REGULATORY REQUIREMENTS

The Contractor shall ensure that the Installation, including all equipment used, is designed, installed and maintained in compliance with the following regulations:

SANS 10142: Code of Practice for Wiring of Premises.

Occupational Health and Safety Act - Act 85: 1993 as amended by the Occupational Health and Safety Amended Act No. 181 of 1993 and the Labour Relations Act, No. 66 of 1995.

National Building Regulations - Act 103 of 1977 a.a. as deemed to be satisfactory in terms of SANS 10400-2010 a.a.

Applicable regulations of Telkom S.A.

Municipal, Local or where applicable other authorities by laws and regulations with regard to building, electrical, fire, gas, water, traffic and health requirements.

The Montreal Protocol for refrigerants.

General Machinery Regulations GNR 1521 of 5 August 1988.

General Safety Regulations GNR 1031 of 30 May 1986.

General Administrative Regulations GNR 929 of 25 June 2003.

The latest revisions amendments or additions to the above-mentioned regulations will apply.

The Contractor shall exempt the Employer from any claims, losses or expenditure which may arise as a result of the Contractor's negligence or failure to comply with the above-mentioned regulations.

The Contractor shall be responsible for all notifications and payments required by any Authority for inspections, tests and supply of any service required for this Installation. The Tenderers are therefore required to fully acquaint themselves with these requirements prior to Tendering.

The Contractor shall supply and install all notices and warning signs that are required by relevant laws or regulations, to the full approval of the Engineer and the applicable authorities. All uncertainties of any such requirements shall be clarified prior to tendering. The cost of all such notices shall be allowed for in the tender.

Refer to Clause 21 specifically with regard to the OHS requirements.

CONTRACT

Refer to the Conditions of Contract in this regard.

QUALITY OF MATERIALS AND WORKMANSHIP

All material and equipment for this installation shall be new and undamaged, unless otherwise stated in the Project Specification.

All equipment and material shall be of the highest quality as specified and shall be suitable for the application and prevailing conditions on site.

A comprehensive CV of the person responsible for site supervision shall be submitted to the Engineer. The Engineer may require an interview with the proposed supervisor and may request replacement of the supervisor, which shall in no way alter the contract tender amount.

The labour used by the Contractor on this installation shall at all times be adequately qualified and experienced for the particular task and shall execute the work in a professional manner to the full satisfaction of the Engineer.

The Contractor is responsible to ensure that the installation meets all the requirements of this Specification.

Refer to the specific requirements for this Contract regarding Quality Assurance procedures.

Under no circumstances may any material or equipment be ordered or installed other than the equipment offered in the respective schedules of Information, without obtaining written approval from the Engineer.

APPROVAL OF EQUIPMENT SELECTIONS

The Contractor shall obtain written approval from the Engineers in writing before major equipment is ordered.

SAMPLES

The Contractor shall, if requested to do so, provide samples of any material, equipment or test section of a fabrication process.

SITE LOCATION, SITE CONDITIONS & SITE FACILITIES

The location of the site is described in the Project Specification.

SITE VISIT

Tenderers are advised to visit the site and acquaint themselves fully of all local conditions pertaining to the execution of the contract before the tender closing date, since no claims arising from insufficient knowledge of site or related conditions will be considered.

STORAGE OF MATERIAL

The Contractor shall provide the necessary storage facilities to ensure that all material and equipment is safely stored and protected against any possible loss or damage.

Unless otherwise agreed in writing payment will only be made for materials delivered and stored on site.

SITE OFFICE

The Contractor shall provide the site office and all other necessary facilities required by his personnel for the proper execution of this Contract.

PROJECT MANAGEMENT AND PROGRAMMING

The Contractor shall at all times ensure that he has the necessary experience and expertise for the successful internal project management, programming and reporting of the total project.

The programme to carry out the Work shall be submitted in detail covering all significant operations and shall be presented as a bar chart to the Engineer within 4 weeks from date of appointment.

The Contractor's programme shall cover each item of equipment in the Contract and indicate periods for:

Preparation, approval and finalization of manufacturing drawings.
Ordering and procurement
Manufacturing
Inspection and testing during manufacture
Delivery
Installation on Site
Testing
Commissioning.
Take-over
Maintenance visits

The programme shall furthermore clearly indicate the required cashflow, as well as the full details of the planned manpower requirements throughout the project.

The programme shall be updated regularly and the required copies shall be supplied to the Engineer at each meeting.

A written progress report, clearly indicating the latest progress as well as any deviations from the approved programme, complete with proposals for corrective action, shall be submitted at each site meeting.

All procedures to be followed during the execution of the Contract will be determined at a Briefing Meeting to be attended by all concerned parties shortly after the awarding of the Contract.

CLAIMS

All claims which may result in additional cost or extension of time shall be submitted to the Engineer as set out in the Conditions of Contract, but the following shall apply at all times irrespective of that which is stated elsewhere:

The Engineer shall be notified of any possible claim within 7 days of the occurrence.

The cost of the claim shall be submitted within a further 14 days.

Should an event/instruction cause a possible disruptive influence on the progress of the Contractor, it shall immediately be brought under the attention of the Engineer in writing, in order that the necessary arrangements and possible reprogramming can be done to eliminate or minimize the disruption or delay.

STANDARD OF DRAWINGS

All drawings shall be of a sufficient quality to ensure clear and legible copies at all times.

BUILDER'S WORK DRAWINGS

The Contractor shall provide Builder's Work Drawings in accordance with the construction programme but not later than 4 weeks after acceptance of his tender which shall indicate all openings in concrete slabs, brick walls or building structure, walls or structure to be temporary left out for access to install equipment, the mass and dimensions of all heavy equipment, wooden frames and any other builder's work such as plinths, bases etc. including services to be provided i.e. electrical, water and drainage.

DETAIL DESIGN DRAWINGS (SHOP DRAWINGS)

The Contractor shall submit to the Engineer, in accordance with the construction programme, 2 copies of each shop drawing for approval. A marked-up copy with the Engineer's and if applicable Architect's comments will be returned to the Contractor who will update the original accordingly after which the original shall be submitted to the Engineer for his signature.

The Engineer's approval shall not relieve the Contractor of his responsibility for erection or installation or of errors or omissions in the shop drawings.

Two (2) copies of each certified drawing or revision shall be issued to the Engineer for distribution during construction. The Contractor will be required to produce the following Project Design Drawings:

(a) Electrical Systems
General Arrangement Drawings
Schematic and Circuit Diagrams
Basic Logic Diagrams
Interconnection Diagrams
Cable Schedules
Cable Route Lay-out Drawings, complete with supporting details

(b) Mechanical Systems
General Arrangement Drawings
Process Flow Diagrams

(c) Instrumentation System
Control Diagrams
Sequence Diagrams
Logic Diagrams

The drawings shall be sufficiently in detailed to enable the Employer's staff to maintain, dismantle, reassemble and adjust all parts of the works. The layouts shall indicate the location of all manual and automatic control devices, control panels, sensors, thermostats, etc. The wiring diagrams shall indicate all motor kilowatt ratings and circuit breaker and contactor ratings and protection settings.

A copy of the wiring diagram shall be mounted in the plant room in a glass fronted frame. The diagrams shall be printed by a non-fading process.

"AS INSTALLED" DRAWINGS

Drawings shall be updated as work progresses in order that the "As-Installed" Drawings on completion reflect the final installation.

One set of hard copy and soft copy drawings shall form part of each O&M manual.

Soft copy drawings shall be compatible with AUTOCAD software.

OPERATING AND MAINTENANCE MANUAL

The Contractor shall prepare and supply O & M manuals for the successful operation and maintenance of the installation.

The manual shall include:

A system description of the Installation

Step-by-step operating instructions with start-up and shut-down procedures

Full information of the Contractor including emergency telephone and fax numbers and contact persons.

A list of equipment (and spares) giving the following information for each item:

Description	:	
Make	:	
Model No	:	
Manufacturer/Agent	:	(Name, address, tel & fax no)
Comment	:	(Indicate spares to be held if of a critical nature)

Data sheets, characteristic curves and calculations

Catalogues and brochures

List of recommended lubricants

Set of "As-Installed" drawings

All commissioning data and settings

Test certificates

Completed Certificate of Compliance

A draft copy shall be submitted to the Engineer prior to commencement of commissioning. Prior to Taking-over the Installation by the Employer, the Contractor shall supply 3 complete manuals which have been updated and which include all commissioning data and "As-Installed" drawings called for in Clause 9. The Engineer will not issue "Form C" until all the approved O & M manuals and drawings have been received.

INSPECTIONS, TESTING, COMMISSIONING AND TAKING OVER

PROGRESS INSPECTIONS

The Engineer will hold inspections at his discretion during the contract to ensure that the Contractor meets the requirements of the Specification and that the Contractor is fulfilling his responsibility regarding quality control.

Should remedial action be required the Engineer will notify the Contractor, and the Contractor shall rectify this work within 7 days.

"HOLD POINT" INSPECTIONS AND TESTS

"Hold Point" inspections and Tests are identified in the Project specification and the Contractor requires written approval to proceed.

The Engineer is required to inspect, and test certain equipment listed in the specification under "Hold Points" at their place of manufacture and such equipment may not be delivered to the Contract site, nor may the Contractor proceed with the manufacture and/or installation of such equipment without prior written consent from the Engineer.

The Contractor must give the Engineer at least 7 days advance notice of the date at which such tests and inspection are to be carried out unless otherwise agreed by both parties.

COMPLETION AND TAKE-OVER PROCEDURES

In terms of the Conditions of Contract the following procedure will apply to the "take-over" of the Installation, or if required by the Employer to the sectional completion of a portion thereof.

FORM A: APPLICATION FOR PRACTICAL COMPLETION INSPECTION (COMPLETION TEST INSPECTION – FIDIC)

After the physical completion of manufacturing and upon completion of the installation, the Contractor shall carry out his own internal quality control checks on all the various items of the installation, where after such "Contractor's Inspection List"

shall be signed off by the Contractor and be submitted to the Engineer together with a "Form A" to apply to the Engineer within one week for the Practical Completion Inspection List.

Subject to the discretion of the Engineer detailed in writing, the Installation may be divided into different sections for the application of the above inspection procedure.

Any inspection carried out by the Engineer on the request of the Contractor without the above documentation will be regarded as unofficial, and the cost may be recovered from the Contractor.

FORM B: PRACTICAL COMPLETION INSPECTION CERTIFICATE (COMPLETION TEST CERTIFICATE – FIDIC)

Once the Engineer has received a "Form A" from the Contractor he will officially inspect the Installation, listing all minor outstanding items still to be rectified on a Practical Completion List - Form B1.

Commissioning:

All site testing and all commissioning activities as specified shall be carried out in close co-operation with the Engineer.

It is a requirement of this Contract that the Contractor shall submit a complete testing and commissioning procedure to the Engineer for approval, at least two weeks prior to the commencing of the actual testing and commissioning activities on Site.

All testing and commissioning shall be carried out in the presence of the Engineer or his duly authorised representative and shall at all times be thorough and in strict accordance with the specified requirements and approved procedures. All tests carried out without the Engineer been duly notified, will be regarded as unofficial and may at the discretion of the Engineer have to be repeated at the cost of the Contractor.

FORM C: WORKS COMPLETION CERTIFICATE (TAKE-OVER CERTIFICATE – FIDIC)

The Engineer will issue Form C, after the items listed on Form B1 have been completed to his satisfaction, together with his Final Completion List containing all outstanding and unacceptable work (except undetected patent and latent defects). The Contractor shall complete all items listed within 20 working days.

The Engineer will only issue Form C if all O&M manuals, and "As-Installed" drawings have been received and training of personnel has taken place.

FORM D: FINAL COMPLETION CERTIFICATE (PERFORMANCE CERTIFICATE – FIDIC)

The Engineer will issue, on request by the Contractor, a Final Completion Certificate at the end of the Defects Liability (Retention) Period.

COST OF RE-INSPECTIONS

Should the Engineer, after an inspection or test, find that the number of outstanding defects is of such a nature that he is unable to issue a meaningful list or certificate, or that due to the Contractor not attending to previous lists or reports, re-inspections are required, such re-inspections will be charged to the Contractor and deducted from the balance of his account by means of a variation order. The Engineer will be compensated accordingly by the Employer.

TRAINING OF EMPLOYER'S PERSONNEL

Once the Contractor has completed and commissioned the Installation and issued the O & M manuals to the satisfaction of the Engineer, he shall train the Employer's personnel the proper operation and maintenance of the plant. The Contractor shall prepare and submit a recommended training program to the Engineer for approval. The Contractor shall give the Engineer sufficient time to make the necessary arrangements. The Contractor will remain responsible to operate the Installation on a daily basis until he has adequately trained such personnel.

TOOLS, EQUIPMENT AND TEST INSTRUMENTS

The Contractor shall provide all tools and equipment necessary for the proper and efficient execution of the work.

The Contractor shall provide all test instruments necessary for the proper testing of equipment or systems to ensure that the specified requirements are met.

The Contractor shall provide valid calibration certificates for all instruments.

If necessary the Engineer will arrange for test instruments and the cost will be recovered from the Contractor.

MAINTENANCE TOOLS

The Contractor shall provide one complete set of all special tools, such as gland keys, lockshield valve keys, air cock keys, etc., required for testing, dismantling or operating all items of equipment.

Duplicate keys shall be provided for all control panels, instrument locks, safety valve locks etc.

CODING, LABELLING AND NOTICES

The language shall be English, or as specified by the Engineer.

To reduce the possibility of incorrect wording the Contractor shall submit a proposed "Schedule of Labels and Notices" to the Engineer for approval prior to manufacture and at least 4 (four) weeks in advance thereof.

MANUFACTURER'S NAMEPLATE

All equipment shall be provided with a manufacturer's nameplate, which shall be a copper, anodised aluminium or stainless-steel tag, welded or riveted to the equipment. (No "glue-on" plates will be accepted.) The lettering thereon shall be suitable to withstand the climatic or other conditions under which the equipment is to operate.

The nameplates shall display the information required by the relevant SANS specifications. At least the following shall be shown:

Manufacturer's name

Model number

Volume where applicable

Size, Speed, Power input, Power output, FLA,

All letters shall be hard stamped and at least 4 mm.

Supply Voltage, etc whichever may be applicable.

IDENTIFICATION TAG

The Contractor shall provide an identification tag or label with the equipment identification code, in approved format, screwed or riveted next to each piece of equipment (no 'glue on' attachment will be accepted).

Labelling shall be CRITCHLEY UNILABEL Cable Marker or engraved "IVORENE" or "TRAFOLITE" labels.

Black letters on a white background shall be used.

The minimum height of letters shall be as follows:

Equipment identification = 10 mm

NOTICES

The Contractor shall install all notices required in terms of Statutory Regulations and shall amongst others include the following:

Prohibiting unauthorised persons from entering.

Prohibiting unauthorised persons from handling or interfering with electrical apparatus.

Directions and procedures to be followed in case of fire or emergency.

Directions as to resuscitation of persons suffering from the effects of electrical shock.

FIRE EXTINGUISHERS

The Contractor shall install the fire extinguishers specified in the Project Specification which meet the requirements of SANS 1910 / 1151 as applicable and to the approval of the Local Authorities in all locations where installation work is done as part of this Contract.

EMERGENCY EQUIPMENT, MEDICINE AND FIRST AID

The Contractor shall provide a first aid box or boxes as specified in the Project Specification in the plant room(s) which meets the requirements of Machinery and Occupational Safety Act (Act no. 6 of 1983) a.a.

GUARANTEE PERIOD

The Contractor is required to guarantee the complete installation against defective material and workmanship for a minimum period of 24 months after the Final Completion Certificate - Form D has been issued by the Engineer. During this period the Contractor will be required to rectify or replace all defective items at his cost.

The Contractor shall cede all manufacturers' warranties to the Employer.

MAINTENANCE PERIOD

The Contractor shall comprehensively maintain the installation as part of this Contract for a minimum period of 24 months after the Final Completion Certificate - Form C has been issued by the Engineer.

The Contractor shall submit a maintenance programme to the Engineer for approval and shall allow for a monthly maintenance visit during this period.

The Employer shall not be expected to do any maintenance work during this period and only consumable items such as water, electricity etc. and items specifically mentioned in the Project Specification will be paid for by the Employer, while all other costs will be for the account of the Contractor.

In addition to regular maintenance visits, the Contractor shall attend and react promptly to all complaints by the Employer, regarding failure of any item of equipment.

The Contractor shall report to the Employer's nominated representative on site both his arrival and departure times and shall make the necessary entries in the "Maintenance Log Book" of all visits to the Installation.

The Contractor shall timeously, prior to the expiry of the 24-month maintenance period, submit a quotation to the Employer for a further maintenance contract.

OCCUPATIONAL HEALTH AND SAFETY ACT REQUIREMENTS

The Contractor shall ensure that all requirements of the Act are adhered to and shall point out any shortcomings in this regard.

CERTIFICATE OF COMPLIANCE FOR ELECTRICAL INSTALLATIONS

The Contractor shall issue a Certificate of Compliance for all electrical work which forms part of the installation under his control. The Engineer will not certify the installation as complete until he is in possession of this certificate.

SAFETY

The safety specification of Plantech (Pty) Ltd is as follows and the Contractor shall adhere to, but not limited, to the following: All requirements of the latest OSH Act and Regulations will apply.

The Contractor shall take note of the potential hazards related to a construction site, such as:

Explosive materials will not be allowed.

Work in confined spaces and fumes – adequate ventilation shall be provided.

Excessive dust – Take measures to reduce dust and issue dust masks to workers.

Work above 2 m – Provide workers with harnesses and ensure that scaffolding is inspected for safety.

Excavations deeper than 1 m – Provide anti-subsidence measures.

Falling materials – Ensure that all workers wear hand hats and safety shoes.

Electrical equipment – Check cords and connections daily and ensure that earth leakage relays and circuit breakers operate correctly

Welding – Ensure adequate ventilation and take measures against potential fire hazards.

Ensure that flammable and combustible materials are safely stored.

Ensure that fire fighting equipment is functioning and clearly identified with approved notice signage.

Safety plan – The Contractor shall compile a safety plan prior to the commencement of work on site.

Safety training – The Contractor shall train all workers on site regarding safety and provide induction courses for all persons who enter the site.

Safety audits – The Contractor shall appoint a safety officer. The Contractor shall prepare regular safety reports and appoint a safety consultant if he does not have the necessary safety skills.

PRESSURE VESSELS

All pressure vessels shall be manufactured and tested as required by the Act.

APPENDIX TO STANDARD SPECIFICATION

FORM A : Application for Practical Completion Inspection

The forms below are not necessarily included in the Tender Document but are available:

FORM B : B: Practical Completion Certificate (Completion Test Certificate – FIDIC)

B1: Practical Completion List

FORM C : Works Completion Certificate (Take-Over Certificate - FIDIC)

FORM D : Final Completion Certificate (Performance Certificate – FIDIC)

**PLANTECH (Pty) Ltd
FORM A**

APPLICATION FOR PRACTICAL COMPLETION INSPECTION (COMPLETION TEST INSPECTION - FIDIC)

PROJECT :

INSTALLATION :

PORTION :

CONTRACTOR :

REFERENCE NO. :

As Contractor responsible for the erection of the abovementioned Installation, I hereby certify that the Installation has been completed in full accordance with the Specification and the Engineer's instructions, and that initial commissioning has been completed.

As responsible person of the Contractor I hereby certify that I have inspected the installation and that all the items as listed on my "Contractor's Inspection List", a copy of which is attached, have been completed to my satisfaction.

I therefore officially request that the "Practical Completion Inspection" in terms of the contract be performed by the Engineer. I accept that should the inspection prove fruitless due to false declarations in the above paragraphs, I will be liable for the Engineer's cost in performing additional inspections.

I herewith hand over draft copies of the Operation and Maintenance Manual, "As Installed Drawings" and Commissioning Procedures for the Engineer's comments.

SIGNED : _____
For Contractor Print Name

DATE :/...../.....

COPIES:

Plantech (Principal Agent & Engineer)

Principal Contractor

PLANTECH (Pty) Ltd
FORM B

PRACTICAL COMPLETION CERTIFICATE (COMPLETION TEST CERTIFICATE - FIDIC)

PROJECT :

INSTALLATION :

PORTION :

CONTRACTOR :

REFERENCE NO. :

NOTE: A Practical Completion Certificate will be issued for each portion for sectional completion.

The installation is substantially completed and can be used for the purposes intended and has passed the initial tests.

ENGINEER'S REPORT

Contractor's Final Inspection List received? NO/YES DATE :/...../.....

Draft O & M Manual received? NO/YES DATE :
...../...../.....

Draft "As Installed Drawings" received? NO/YES DATE :
...../...../.....

Commissioning Data received? NO/YES DATE :/...../.....

The items listed on the attached Practical Completion List (Form B1) shall be rectified before the Contractor requests a Works Completion Inspection.

The Principal Agent shall ensure that the items marked as the responsibility of other parties be attended to by such parties.

SIGNED:

For Plantech (Pty) Ltd

Date

COPIES:

Employer

Principal Contractor

PLANTECH (PTY) LTD	FORM B1			
QUALITY REPORT / PRACTICAL COMPLETION LIST (Delete if not applicable)				
PROJECT :			
INSTALLATION :			
PORTION :			
CONTRACTOR :			
REFERENCE NO. :			
<p>NOTE: This Quality Report gives a "running" record of quality and other matters which require attention and rectification and the outstanding items at date of the issue of the Practical Completion Certificate, becomes the Practical Completion List.</p>				
ITEM	DESCRIPTION	RESPONSIBLE PARTY	DATE OF INSPECTION	DATE ACCEPTED
<p>SIGNED: _____</p> <p>For Plantech (Pty) Ltd Date</p>				

PLANTECH (PTY) LTD

FORM C

WORKS COMPLETION CERTIFICATE (TAKE-OVER CERTIFICATE - FIDIC)

PROJECT :

INSTALLATION :

PORTION :

CONTRACTOR :

REFERENCE NO. :

The items marked for the responsibility of the Contractor on the Practical Completion List (Form B1) have been rectified and completed. The defects liability period will commence on the date of this Certificate.

Three hard & soft copies of the Operation and Maintenance Manual were received and that two copies have been handed to the Employer NO/YES DATE:

Three hard and soft copies of the "As-Installed" drawings have been received and two sets has been handed over to the Employer NO/YES DATE:

The Employer's personnel have been trained by the Contractor to operate the Installation. NO/YES DATE:

The Contractor has satisfactorily completed all his contractual commitments in terms of the Contract with the exception of his responsibilities during the maintenance and guarantee period, which he undertakes to do punctually.

All rights of equipment guarantees and warranties are hereby ceded by the Contractor to the Employer.

All parties accept the final contract sum to be R..... including VAT, as the full and final payment regarding the Contract signed and declares that no further claims will be submitted.

Refer to the attached Final Contract Sum Summary.

The Employer shall take cognisance of the expiry date of the one-year maintenance and guarantee period by the Contractor and will be responsible for all maintenance of the Installation from

The Employer shall take cognisance that from the date of this Certificate he is fully responsible for the Installation and the safe operation thereof in terms of the Occupational Health and Safety Act (Act 85 of 1993).

Admission to the installation for retention and maintenance work shall be under the full control and authority of the Employer and the Contractor shall approach the Employer in order to make arrangements for admission for such work during the Guarantee and Maintenance period.

The Employer shall record all complaints regarding the operation of the Installation in the "Maintenance Log Book" and notify the Contractor thereof.

Dates of all visits and reports on written complaints recorded by the Employer or User shall be signed by both the Contractor and the representative of the Employer in the "Maintenance Log Book" held on site.

Final Completion List: The following additional remedial items shall be attended to by the Contractor within 20 days.

ITEM	DESCRIPTION	DATE ACCEPTED

SIGNED:

For Plantech (Pty) Ltd

Date

Employer

Principal Agent

Principal Contractor

Copies: Issued to all above

PLANTECH (PTY) LTD	FORM D	
<u>FINAL COMPLETION CERTIFICATE (PERFORMANCE CERTIFICATE – FIDIC)</u>		
PROJECT :	
INSTALLATION :	
CONTRACTOR :	
REFERENCE NO. :	
<p>It is hereby certified that the Contractor has completed his obligations during the Defects Liability Period (Defects Notification Period – FIDIC) and will be relieved of further responsibilities upon acceptance by the Engineer of the following defects identified during the said period.</p>		
ITEM	DESCRIPTION	DATE OF ACCEPTANCE
For JBCC contracts	The Contractor shall complete all his responsibilities in respect of the remaining maintenance and guarantee period.	As per Contract
<p>Liability for Latest Defects will be in accordance with the Contract.</p>		
SIGNED:		
_____	_____	_____
For Plantech (Pty) Ltd	Date	
COPIES:		

Employer		

Principal Contractor		

SECTION 5
STANDARD SPECIFICATION

FOR

CHEMICAL FREE ELECTROLYSIS EQUIPMENT

PLANTECH

Electrical, Electronic &
Mechanical Engineers

P O Box 146

PERSEQUOR PARK

0020

Tel: [+2712] 349-2253

Fax: [+2712] 349-2390

E-mail: plantech@plantech.co.za

PLANTECH

STANDARD SPECIFICATION

STANDARD SPECIFICATION FOR CHEMICAL FREE ELECTROLYSIS EQUIPMENT**1. GENERAL**

All materials shall be suitable for the purpose for which they are to be used. All materials and properties claimed for these materials shall, unless specified otherwise in this Section, comply with the requirements of the latest edition of the appropriate South African or other internationally recognised standard specification at the time of Tender. For each type of Plant, the Contractor shall indicate the materials used for each of the proposed sub-assemblies. The Plant shall be manufactured using new prime quality materials taking into account the latest technical innovations. Recycled and/or reconstituted materials will only be considered if they are fully justified and approved by the Engineer prior to manufacture and/or supply. The Contractor shall provide full references of suppliers and materials and Plant supplied as well as all original copies of all the Certificates of Conformity regarding raw materials used to manufacture the Plant.

2. DRAWINGS

The Contractor shall submit relevant component design, workshop and installation drawings to the Engineer for approval, at least 12 weeks before commencement of installation of the CHEMICAL FREE ELECTROLYSIS WATER TREATMENT system. The drawings shall be submitted as per the requirements set out below, and shall confirm the information provided in the Tender and include dimensions, material details of Plant and descriptions of the proposed systems, including the Contractor's Installation Test Procedure and Method Statement.

The Contractor shall be responsible for the provision of "as-built" drawings of all hardware and Plant installed as part of this Contract.

3. INSTALLATION AND OPERATING REQUIREMENTS**3.1 GENERAL**

All Plant shall be installed and erected flush, level and square as required. No Plant shall be damaged during the installation. Damaged Plant shall be replaced at the Contractor's expense. All installed Plant shall be securely fixed and fastened, taking into account the life span, the weight and the local conditions. The installations shall, at all times, comply as a minimum to the manufacturer's specification and guidelines.

3.2 BUILDING WORKS

The Contractor shall install all wall and floor sleeves for louvres, ductwork, pipework, conduit as required for the installation of the CHEMICAL FREE ELECTROLYSIS WATER TREATMENT systems.

3.3 POWER SUPPLY AND ELECTRICAL INSTALLATION

The Contractor shall provide 50 Hz power points in close proximity to the positions shown on the Drawings or as required by the final installation position of the CHEMICAL FREE ELECTROLYSIS WATER TREATMENT systems. The power supply shall terminate in a suitable isolator from where the control panel and switches as applicable and CHEMICAL FREE ELECTROLYSIS WATER TREATMENT Plant shall be wired. The electrical installation shall include for all cabling, conduits, cable racks, trays, switchgear, panels, distribution boards, etc., necessary for the satisfactory operation of the CHEMICAL FREE ELECTROLYSIS WATER TREATMENT system.

Plant intended for outdoor installation shall be rated IP65 and for indoor use IP55.

3.4 WIRING

Wiring of the Plant shall be carried out by the Contractor in surface work in the pump room, VSD Rooms, Low- and Medium- Voltage Rooms, UPS room, CHEMICAL FREE ELECTROLYSIS WATER TREATMENT room and Battery room and concealed work in the Control Room, PLC and Server Rooms,

Staff Facilities and Guard House.

All electrical material and installation work shall be as required in Section – Electrical General and – Electrical Plant and Installation.

3.5 CABLE TRAYS

The Contractor shall supply and install all cable trays or ladders as specified or as required by the cable routes including the necessary supports, clamps, hangers, fixing materials, bends, angles, junctions, reducers, T-pieces, etc.

3.6 EARTHING

The whole installation shall be efficiently earthed to the satisfaction of the Engineer, the Inspector of Factories, the Supply Authority, and strictly in accordance with the Code of Practice for the Wiring of premises as required (Earthing and Lightning Protection). Any points proposed as earthing points by the Contractor shall first be approved by the Engineer before connection.

4. OPERATION AND MAINTENANCE MANUALS

Submission of O&M Manuals shall be as required under Section 48 – Tests on Completion.

In addition to the requirements of Clause 48.4.4.3, these Manuals shall contain the following information:

- a) A comprehensive description of the installation; and
- b) Operating Instructions:
 - i) Starting and stopping instructions;
 - ii) Prestart checks; and
 - iii) Plant running checks.

The following information shall be provided in full for each item of Plant:

- a) General information - Description, Make, Model Number, Name and Address of Supplier, Manufacturer, etc.;
- b) Design information - Design Data Sheet containing all design and selection parameters, calculations, selection curves, etc.;
- c) Settings and values recorded during commissioning;
- d) Test certificates, inspections certificates;
- e) Manufacturer's Brochures and Pamphlets;
- f) Maintenance Data and Schedules - The lapse of time between services and the description of the service required of each part, lubrication requirements, etc.; and
- g) Detailed contact information of suppliers.

**ARMAMENTS CORPORATION OF SOUTH AFRICA SOC LTD
(ARMSCOR)**

QUESTIONNAIRE

REPLIES

1 What is the request for bid number?

2 If applicable: Price basis of bid
(if not delivered into store)

3 Indicate which of the following applies:

3.1 The prices are fixed.

3.2 The prices are not fixed (NB: See par 9 of A-Std-0010).

4 Is the delivery period (commencement after receipt of order) fixed? Y/N

.....
.....

WHERE SUPPLIES OFFERED ARE TO BE IMPORTED, THE QUESTIONS BELOW MUST BE ANSWERED.

5 Foreign content:

5.1 What amount in foreign currency must be remitted overseas?

5.2 What is the rate of exchange used in converting the amount into ZAR1,00=.....

SA Rand and the date on which this is based? Date

6 Statutory costs:

6.1 Are the goods quoted on subject to customs duty,
ad valorem customs or surcharge?

6.2 If so, what is the amount payable in respect of

a) Customs duty?

b) Ad valorem customs duty?

PRICE BREAKDOWN

7. The following particulars must be furnished, failure of which may invalidate the bids.

	AMOUNT	% OF TOTAL PRICE
7.1	FOB/FCA cost of item	
7.2	Sea/Air freight	
7.3	Insurance charges	
7.4	Clearance charges	
7.5	Customs duties	
7.6	Ad valorem customs duties	
7.7	Delivery costs from port/airport to your premises	
7.8	Local content (excluding (10.10)	
7.9	Delivery costs from your premises into store	
7.10	Balance (detail to be submitted)	
	TOTAL	

BROAD-BASED BLACK ECONOMIC EMPOWERMENT

ACRONYMS AND ABBREVIATIONS

B-BBEE	Broad-Based Black Economic Empowerment
CIPC	Companies and Intellectual Property Commission
COTS	Commercial Off The Shelf
EME	Exempted Micro Enterprises
MOTS	Military Off The Shelf
QSE	Qualifying Small Enterprises
SANAS	South African National Accreditations Systems

1. MANDATORY B-BBEE REQUIREMENT:

- 1.1 In terms of the Defence Sector Codes, contracts for goods and services shall only be awarded to a bidder that has Black Equity Ownership of at least 25% in year 1 (12 April 2019 to 31 March 2020), 30% in year 2 (01 April 2020 to 31 March 2021) and 35% in year 3 (01 April 2021) onwards, where applicable.
- 1.2 EMes are exempted from compliance with the mandatory B-BBEE requirement.

2. COMPULSORY B-BBEE REQUIREMENTS

2.1 Pre-Qualification Criteria

- 2.1.1 Pre-Qualification criteria will be applied to advance certain designated groups with specific bidding conditions that only one or more of the bidders may respond:

- a) Stipulated minimum B-BBEE status level e.g. level 4
- b) EMes or QSEs
- c) Sub-contract a minimum 30% of the value of the contract to one or more:
 - (i) At least 51% black owned EMes or QSEs
 - (ii) At least 51% black youth owned EMes or QSEs
 - (iii) At least 51% black women owned EMes or QSEs
 - (iv) At least 51% black owned EMes or QSEs by people living with disabilities
 - (v) At least 51% black owned EMes or QSEs by people living in rural or underdeveloped areas
 - (vi) At least 51% black owned EMes or QSEs by military veterans
 - (vii) EMes or QSEs

2.2 Sub-Contracting

- a) For a contract above R30 000 000 (million), Armscor may apply subcontracting to advance designated groups.
- b) The successful bidder must subcontract 30% of the contract value to one or more of the following:
 - (i) At least 51% black owned EMes or QSEs
 - (ii) At least 51% black youth owned EMes or QSEs
 - (iii) At least 51% black women owned EMes or QSEs
 - (iv) At least 51% black owned EMes or QSEs by people living with disabilities
 - (v) At least 51% black owned EMes or QSEs by people living in rural or underdeveloped areas
 - (vi) At least 51% black owned cooperatives
 - (vii) At least 51% black owned EMes or QSEs by military veterans
 - (viii) EMes or QSEs

NB: Failure by the bidder to comply with the B-BBEE Mandatory and Compulsory Requirements as stated herein above will lead to disqualification.

3. PREFERENCE POINTS FOR BROAD-BASED BLACK ECONOMIC EMPOWERMENT

3.1 The B-BBEE preference points will be awarded in terms of the Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017.

3.2 The 80/20 preference point system is applicable to all bids with a Rand value of up to R50 000 000,00 (all applicable taxes included)

3.3 Preference points for this bid shall be awarded for:

PRICE	80
B-BBEE STATUS	20
Total points for Price and B-BBEE must not exceed	100

3.4 **Bidders who do not submit a valid proof of B-BBEE status will score zero (0) for preference points.**

4. ALLOCATION OF B-BBEE POINTS

4.1 The B-BBEE points are to be claimed and allocated according to the table below for acquisition of services, works or goods with a value of up to R50 000 000, 00 and must be substantiated by means of a valid proof of B-BBEE.

B-BBEE status level	Points Allocated
Level 1	20
Level 2	18
Level 3	14
Level 4	12
Level 5	8
Level 6	6
Level 7	4
Level 8	2
Non-compliant	0

4.2 The Armscor BBE Division reserves the right to require a bidder and/or its sub-contractor(s) to substantiate any claim at any stage in the bidding process to verify and confirm the B-BBEE status of the bidder and/or its sub-contractor(s).

5. PRINCIPLES**5.1 Valid proof of B-BBEE status is either of the following:****5.1.1 A B-BBEE Sworn Affidavit fully completed and**

- 5.1.1.1 Deposed and signed in the presence of the Commissioner of Oaths
- 5.1.1.2 Does not contradict itself (% black ownership matches compliance level)
- 5.1.1.3 Commissioner of Oaths credentials and signature are reflected.

5.1.2 A B-BBEE Certificate issued by either the CIPC or a SANAS Accredited Verification Agency**5.1.3 An unincorporated Joint Venture / Consortium must submit a Consolidated B-BBEE Certificate in the name of the Joint Venture / Consortium issued by a SANAS accredited Verification Agency.****5.1.4 B-BBEE status must be based on the latest financial year-end information, otherwise it is invalid and unacceptable.****5.2 Sub-Contracting****5.2.1 A bidder awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the bidder concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.****5.2.2 A bidder awarded a contract must obtain the approval of Armscor prior to any changes in the subcontracting arrangement.**

B-BBEE DECLARATION

1. Confirmation of the Bidder's Turnover

Name of the Bidder			
Registration Number			
Financial Year End			
Turnover (As at the latest financial year end)	R	Starting (Day, Month, Year)	
		Ending (Day, Month, Year)	

2. Confirmation of Subcontractors involved in the execution of the order:

Bidder	% Black Ownership	B-BBEE Status	% Value to be Contracted
1.			
Subcontractors	% Black Ownership	B-BBEE Status	% Value to be Contracted
1.			
2.			
3.			

*Percentages of the bid value which will be subcontracted including main contractor must add up to 100%.

3. Confirmation of Suppliers involved in the execution of the order:

Supplier's name	% Black Ownership	B-BBEE status	% Value to be Supplied
1.			
2.			
3.			
4.			
5.			

I, the undersigned, am duly authorised to certify on behalf of the abovementioned entity that the information contained herein above is true and correct.

AUTHORISED SIGNATURE : Date:

Name in block letters :

Capacity :

DECLARATION OF INTEREST

1. Any legal person, including persons employed by Armscor or the State, or persons who act on behalf of Armscor or the State or person having a kinship with persons employed by Armscor or the State, including a blood relationship, may make an bid or bids in terms of this invitation. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by Armscor or the State, or to person who acts on behalf of Armscor or the State, or to persons connected with or related to them, it is required that the bidder or his authorized representative signing the KD17 document shall declare his position vis-á-vis the evaluating authority and/or take an oath declaring his interest, where-
 - the bidder is employed by Armscor or the State or acts on behalf of Armscor or the State; and/or
 - the legal person on whose behalf the bid document is signed, has a relationship with persons/a person who are/is involved with the evaluation of the bidder(s), or where it is known that such a relationship exists between the person of persons for or on whose behalf the declarant acts and persons who are involved with the evaluation of the bid.

In order to give effect to the above, the following questionnaire shall be completed and submitted with the bid.

* Delete whichever is not applicable

2. Are you or any person connected with the bidder directly or indirectly, (i.e. connected by kinship or marriage or associated in an enterprise, business partnership or as colleagues) employed by Armscor or the State?

*YES / NO

2.1. If yes, state particulars.

.....

.....

.....

.....

3. Do you, or any person connected by kinship or marriage or associated in an enterprise, business, partnership or as colleagues with the bidder, directly or indirectly have any relationship or association (family, friend, other) with a person employed in the Department of Defence or South African Police Service, Correctional Service or Armscor, and who may be involved with the evaluation or adjudication of this bid.

*YES / NO

3.1. If yes, state particulars.

.....

.....

4. Are you, or any person connected by kinship or marriage or associated in an enterprise, business partnership or as colleagues connected with the bidder, aware of any relationship (family, friend, other) between the bidder and any person employed by the Department of Defence, South African Police Service, Correctional Service or Armscor, who may be involved with the evaluation or adjudication of this bid?

*YES / NO

4.1. If yes, state particulars.

.....

.....
Signature of Declarant

.....
Bid number

.....
Date

.....
Position of Declarant
(See Paragraph 1)

.....
Name of Company or Bidder

DEFENCE SECTOR BBBEE SWORN AFFIDAVIT – EXEMPTED MICRO ENTERPRISE

I, the undersigned,

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.

2. I am a Member / Director / Owner of the following enterprise and am duly authorised to act on its behalf:

Enterprise Name:	
Trading Name (If Applicable):	
Registration Number:	
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):	
Nature of Business:	
Definition of "Black People"	As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians – (a) who are citizens of the Republic of South Africa by birth or descent; or (b) who became citizens of the Republic of South Africa by naturalisation- i. before 27 April 1994; or ii. on or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior to that date;"
Definition of "Black Designated Groups"	"Black Designated Groups means: (a) unemployed black people not attending and not required by law to attend an educational institution and not awaiting admission to an educational institution; (b) Black people who are youth as defined in the National Youth Commission Act of 1996; (c) Black people who are persons with disabilities as defined in the Code of Good Practice on employment of people with disabilities issued under the Employment Equity Act; (d) Black people living in rural and under developed areas; (e) Black military veterans who qualifies to be called a military veteran in terms of the Military Veterans Act 18 of 2011;"

ANNEXURE 1 TO KD24

3. I hereby declare under Oath that:

- The Enterprise has _____% Black Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- The Enterprise has _____% Black Female Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- The Enterprise has _____% Black Designated Group Beneficiaries as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- Black Designated Group Owned % Breakdown as per the definition stated above:
 - Black Youth % = _____%
 - Black people living with disabilities % = _____%
 - Black Unemployed % = _____%
 - Black People living in Rural areas % = _____%
 - Black Military Veterans % = _____%
- Based on the Financial Statements/Management Accounts and other information available on the latest financial year-end of _____, the annual Total Revenue was R5,000,000.00 (Five Million Rands) or less
- Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**

100% Black Owned	Level One (135% B-BBEE procurement recognition)	
At Least 51% Black Owned	Level Two (125% B-BBEE procurement recognition)	
Less than 51% Black Owned	Level Four (100% B-BBEE procurement recognition)	

- 4. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
- 5. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Commissioner of Oaths	Deponent
Credentials and Signature	
	_____ Signature
_____ Date	_____ Date

ANNEXURE 2 TO KD24

DEFENCE SECTOR BBBEE SWORN AFFIDAVIT – QUALIFYING SMALL ENTERPRISE

I, the undersigned,

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a Member / Director / Owner of the following enterprise and am duly authorised to act on its behalf:

Enterprise Name:	
Trading Name (If Applicable):	
Registration Number:	
Type of Entity (CC, (Pty) Ltd, Sole Prop etc.):	
Nature of Business:	
Definition of "Black People":	<p>As per the Broad-Based Black Economic Empowerment Act 53 of 2003 as Amended by Act No 46 of 2013 "Black People" is a generic term which means Africans, Coloureds and Indians –</p> <p>(a) who are citizens of the Republic of South Africa by birth or descent; or</p> <p>(b) who became citizens of the Republic of South Africa by naturalisation-</p> <p>i. before 27 April 1994; or</p> <p>ii. on or after 27 April 1994 and who would have been entitled to acquire citizenship by naturalization prior to that date;"</p>
Definition of "Black Designated Groups"	<p>"Black Designated Groups means:</p> <p>(a) unemployed black people not attending and not required by law to attend an educational institution and not awaiting admission to an educational institution;</p> <p>(b) Black people who are youth as defined in the National Youth Commission Act of 1996;</p> <p>(c) Black people who are persons with disabilities as defined in the Code of Good Practice on employment of people with disabilities issued under the Employment Equity Act;</p> <p>(d) Black people living in rural and under developed areas;</p> <p>(e) Black military veterans who qualifies to be called a military veteran in terms of the Military Veterans Act 18 of 2011;"</p>

Issued in terms of the Defence Sector Code (Gazette 42391 - 12 April 2019)

3. I hereby declare under Oath that:

- The Enterprise has _____% Black Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- The Enterprise has _____% Black Female Owned as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- The Enterprise has _____% Black Designated Group Beneficiaries as per Amended Code Series 100 of the Amended Codes of Good Practice issued under section 9 (1) of B-BBEE Act No 53 of 2003 as Amended by Act No 46 of 2013,
- Black Designated Group Owned % Breakdown as per the definition stated above:
 - Black Youth % = _____%
 - Black people living with disabilities % = _____%
 - Black Unemployed % = _____%
 - Black People living in Rural areas % = _____%
 - Black Military Veterans % = _____%
- Based on the Financial Statements/Management Accounts and other information available on the latest financial year-end of _____, the annual Total Revenue was between R5,000,000.00 (Five Million Rands) to R50,000,000.00 (Fifty Million Rands)
- Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**

100% Owned	Black	Level One (135% B-BBEE procurement recognition)	
At Least Black Owned	51%	Level Two (125% B-BBEE procurement recognition)	

4. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.

5. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Commissioner of Oaths	Deponent
Credentials and Signature	
	_____ Signature
_____ Date	_____ Date

ANNEXURE 1 TO KD25

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF ARMSCOR			
BID NUMBER:	CLOSING DATE:	CLOSING TIME:	
DESCRIPTION	BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT :		
ARMSCOR BID BOX VISITORS ENTRANCE (BLOCK 8), 370 NOSSOB STREET,			
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO		TECHNICAL ENQUIRIES MAY BE DIRECTED TO:	
CONTACT PERSON	Mr. A.L Mmbengwa	CONTACT PERSON	Mr. A.L Mmbengwa
TELEPHONE NUMBER	012 428 3610	TELEPHONE NUMBER	012 428 3610
FACSIMILE NUMBER	N/A	FACSIMILE NUMBER	N/A
E-MAIL ADDRESS	scmbids@armscor.co.za	E-MAIL ADDRESS	scmbids@armscor.co.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] <input type="checkbox"/> Yes <input type="checkbox"/> No	B-BBEE STATUS LEVEL SWORN AFFIDAVIT	[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS			
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A BRANCH IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO		
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO		
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	<input type="checkbox"/> YES <input type="checkbox"/> 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.			

ANNEXURE 1 TO KD25

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, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
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:

**ARMAMENTS CORPORATION OF SOUTH AFRICA LIMITED
(ARMSCOR)**

INTELLECTUAL PROPERTY REQUIREMENTS

1 INTRODUCTION

1.1 What is Intellectual Property?

Intellectual Property (or "IP") means the result or outcome of human creative effort as typically, but not exclusively, manifested and embodied in or taking the form of data items or documents.

IP typically includes design and mental activities, e.g.:

- Bills of Material (BOM's)
- Instructions,
- Reports,
- Specifications,
- Interface designs,
- Manufacturing processes,
- Material Specifications,
- Processes,
- Product designs,
- Re-engineering (maintenance/obsolescence),
- Software,
- Algorithms,
- Source Codes,
- System/integration designs,
- Test and Evaluation Methods, etc.

IP typically excludes Project Management activities and Hardware created/built according to a design or following a "recipe".

1.2 How is IP manifested?

IP is typically manifested and embodied in Data Items or Documents.

"Data items or Documents" means any recorded information, however recorded, including but not limited to books, manuscripts, reports, studies, algorithms, computer software, invention descriptions, registered patents, drawings, designs, plans, analyses, calculations, standards, data packs, process documents, instructions, specifications, mathematical or simulation models, compositions, photographs, video recordings, audio recordings, reports, holographic recordings, trademarks, graphical images, etc.

NOTE:

- The document itself is not IP
- The contents of a document represent IP
- The document becomes the tangible and recordable carrier of IP

1.3 What is Background IP?

For definition, refer to A-STD-0020 "Armcor General Conditions of Contract".

"Background IP" belongs to a contractor because he fully paid for the generation thereof or had bought it at his own cost, which may be used or serve as a basis from which to develop new Foreground IP.

ANNEXURE 1 TO KD25

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, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
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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.
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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:

**ARMAMENTS CORPORATION OF SOUTH AFRICA LIMITED
(ARMSCOR)**

INTELLECTUAL PROPERTY REQUIREMENTS

1 INTRODUCTION

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- Instructions,
- Reports,
- Specifications,
- Interface designs,
- Manufacturing processes,
- Material Specifications,
- Processes,
- Product designs,
- Re-engineering (maintenance/obsolescence),
- Software,
- Algorithms,
- Source Codes,
- System/integration designs,
- Test and Evaluation Methods, etc.

IP typically excludes Project Management activities and Hardware created/built according to a design or following a “recipe”.

1.2 How is IP manifested?

IP is typically manifested and embodied in Data Items or Documents.

“Data items or Documents” means any recorded information, however recorded, including but not limited to books, manuscripts, reports, studies, algorithms, computer software, invention descriptions, registered patents, drawings, designs, plans, analyses, calculations, standards, data packs, process documents, instructions, specifications, mathematical or simulation models, compositions, photographs, video recordings, audio recordings, reports, holographic recordings, trademarks, graphical images, etc.

NOTE:

- The document itself is not IP
- The contents of a document represent IP
- The document becomes the tangible and recordable carrier of IP

1.3 What is Background IP?

For definition, refer to A-STD-0020 “Armcor General Conditions of Contract”.

“Background IP” belongs to a contractor because he fully paid for the generation thereof or had bought it at his own cost, which may be used or serve as a basis from which to develop new Foreground IP.

1.4 What is Historic IP?

“Historic IP” is existing IP which was created previously, and which may serve as a basis from which to develop new Foreground IP.

1.5 What is Foreground IP?

For definition, refer to A-STD-0020 “Armcor General Conditions of Contract”.

“Foreground IP” is new intellectual property that is created during the execution of the order.

1.6 When is IP Shared or Jointly Owned or Co-owned?

For the definition, refer to A-STD-0020 “Armcor General Conditions of Contract”.

“Shared” or “Jointly Owned” or “Co-owned” IP is IP which belongs to both the DOD and a contractor, because both contributed to the cost of generation thereof. Ownership is typically (and preferably) proportional to contribution.

Historic and Foreground IP may be either

1. Wholly owned by the DOD; or
2. Shared or Jointly Owned or Co-owned between DOD or the contractor

2. IP RECORDAL REQUIREMENTS

It is a requirement that prospective suppliers provide all information about applicable Intellectual Property (IP) to the bid. Armcor will record the information on their IP System that will generate a Statement of IP which will be appended to the order. The Statement of IP will serve as a contractual agreement between Armcor and the contractor in so far as IP related matters are concerned.

The recordal requirements are further described herein and broken down to an appropriate level, as follows:

2.1 Background IP Utilised

For each Background IP Item that will be modified or utilised to generate Foreground IP in the execution of the quoted scope of work, provide the following details:

- Short IP description
- Original Supplier
- Cost of Establishment (If available)

2.2 Historic IP Utilised

For each Historical IP item that will be modified or is required as a prerequisite in the execution of the quoted scope of work, provide the following details:

- Armcor IP Number (if available)
- Short IP description
- The next information is to be provided **per order**, on which Historic IP was established:
 - Order Number on which Historic IP was generated
 - Master record index (MRI) reference
 - Original Supplier
 - Cost of Establishment
 - Percentage Ownership (DOD)
 - Associated Milestone / Line item on the order under which the IP was established

2.3 Foreground IP to be generated

For each new Foreground IP item that will be generated in the execution of the quoted scope of work, provide the following details:

- IP number of Historic IP, if IP is enhanced (modified/improved/upgraded).
- Short IP description
- Master record index (MRI) reference with version and date
- Original Supplier
- Cost of Establishment
- Percentage Ownership (DOD)
- Associated Milestone / Line item on the order under which the IP will be established.

Note 1: The cost of establishment has always been included in item/milestone prices of order, and will continue to be so included, but will in future become visible by being shown separately in the Statement of IP appended to orders in order to properly manage such IP;

Note 2: To facilitate the easy and correct recording of IP, bidders and contractors will be required to utilise the specially constructed spread sheet from Armscor's web site. After completion, the spreadsheet must be printed and attached to the bid, which will thus form an integral part of the bid.

3. SAFEGUARDING OF IP

3.1 IP Agreement

The IP agreement which will be embodied in the Statement of IP will be concluded with the main contractor in the name of the main contractor and will apply to the creating sub-contractor(s), who will remain the design authority for his particular IP.

3.2 Management and Safeguarding of IP

The main contractor will be responsible for the management of IP he generated during the execution of the order, as well as the management of IP generated by his sub-contractors. Upon completion of the project or order, the relevant IP will be formally transferred to the main contractor, who will then be responsible for the continued management of such IP.

The main contractor will be responsible for proper safeguarding and configuration control of IP, including off-site back-ups, as further described in various other Armscor documents, e.g. A-STD-0020 "Armscor General Conditions of Contract, K-STD-61 "Armscor Standard for Technical Contract Conditions", A-WI-014 "Armscor Security Instruction" and other documents that may be applicable.

3.3 IP Delivery

Notwithstanding 3.2 above, upon completion of the order, the main contractor will deliver all data items or documents relating to the IP generated during the execution of the order to Armscor ADAC Department.

3.4 IP Audits

Armscor is by law required to conduct an IP or intangible asset audit of all existing DOD IP every financial year. The main contractor will cooperate with Armscor's Intellectual Property Management Division and the Auditor General during the audit period and will make available all relevant information required to conduct the audit.

4. COMPLETION OF THE IP INFORMATION BY MEANS OF THE ELECTRONIC FORM

4.1 Background

The electronic form of the KD27 IP Information.xlsx is available as a Microsoft Excel workbook on the Armscor website (www.armscor.co.za/Downloads/Download.asp) and must be used as template to provide the relevant IP information.

The workbook consists of the following three spreadsheets:

- "Background IP" provides a form to capture all background IP information
- "Historic IP" provides a form to capture all historic IP information.
- "Foreground IP" provides a form to capture all foreground IP information.

4.2 Electronic Form Definitions

The column definitions as provided in the forms are as follows:

IP Name	A short descriptive name to identify the IP item.
IP Number	Armscor Number provided to Historic IP.
IP Description	An abridged description of the IP Item.
Original Supplier	The name of the supplier at which the IP item exists or was established.
Establishment Cost	The amount paid by Armscor to establish the IP Item (including VAT).
MRI Reference	The Master Record Index (MRI) or other document reference that uniquely describe the IP.
DOD Shareholding	The percentage of the IP that belongs to the DOD through Armscor
Associated Milestone/Item	The contractual milestone or item, which when completed, will define the point in time at which the IP will be established.

5. INTELLECTUAL PROPERTY QUESTIONNAIRE

I/We, the undersigned, who warrant that I/we am/are duly authorised to do so on behalf of the firm certify that the following information is correct and complete in terms of Intellectual Property relevant to the offered scope of work. (Please circle the relevant answer)

Will Background IP be applicable during the execution of the quoted scope of work? Yes No

If yes, state particulars by completing the 'Background IP' worksheet. Indicate each IP item as a separate line.

Will Historic IP be utilised and/or is it required as a prerequisite to execute the quoted scope of work? Yes No

If yes, state particulars by completing the 'Historic IP' worksheet for each IP item. Indicate each IP item as a separate line;

Will any of these Historic IP items be enhanced during the execution of the quoted scope of work? Yes No

If yes, also complete the 'Foreground IP' worksheet for those IP items

Will new Foreground IP be generated during the execution of the quoted scope of work? Yes No

If yes, state particulars by completing the 'Foreground IP' worksheet for each IP item. Indicate each IP item as a separate line.

This completed form, along with all additional information, as requested above where relevant, populated on the KD27 Spreadsheet, have to be attached to the bid.

WITNESSES:

1 _____

2 _____

<p>_____</p> <p>SIGNATURES OF BIDDER(S)</p>

DATE: _____

ADDRESS: _____

