

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

PROJECT NAME AND NUMBER: DIA: 4823 : IAM: Elec - UPS Replacement

TITLE OF PROJECT: Supply and Installation of Uninterruptable Power Systems

NEC 3: ENGINEERING AND CONSTRUCTION CONTRACT (ECC)

Between	AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED	
	Applicable at [King Shaka International Airport]	
	(Registration Number: 1993/004149/30)	
and		
	(Registration Number:)	
for	[UPS Replacement]	
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Part C1: Agreements and Contract Data

C1.1: Form of Offer and Acceptance

OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of: [UPS Replacement]

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto as listed in the Returnable Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the **Contractor** under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the Contract Data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VAT IS:

(in words) Rands;

(in figures) **R**.....

THE OFFERED PRICES ARE AS STATED IN THE PRICING SCHEDULE

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the **Contractor** in the conditions of contract identified in the Contract Data.

(Insert name and address of organisation)	Date

ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the **Contractor** the amount due in accordance with the conditions of contract identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the tenderer (now **Contractor**) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)	
Name(s)	
Capacity	

for the Employer

(Insert name and address of Name & organisation) signature of Date witness

Schedule of Deviations

1 Subject
Details
2 Subject
Details
3 Subject
Details

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

	For the Employer	For the Bidder
Signature (s)		
Name (s)		
Capacity		
Name and Address	Airports Company South Africa SOC Limited	
	XXX	
Name & Signature of witness	(Insert name and address of organisation)	(Insert name and address of organisation)
Date		

Part C1.2a Contract Data

Part one – Data provided by the *Employer*

The Conditions of contract are selected from the NEC3 Engineering and Construction Contract, April 2013.

Each item of data given below is cross-referenced to the NEC3 Engineering Construction Contract which requires it.

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for Main Option	
	Main Option Dispute resolution Option	B: Priced contract with Bill of Quantities W1: Dispute resolution procedure
	Secondary Options (incorporating amendments)	 X2: Changes in the law X7: Delay damages X13: Performance Bond X16: Retention X18: Limitation of liability Z: Additional conditions of contract of the NEC3 Engineering and Construction Contract, April 2013
10.1	The <i>Employer</i> is (Name)	Airports Company South Africa SOC Limited, King Shaka International Airport
	Address	Airports Company South Africa SOC Limited King Shaka International Airport La Mercy 4407
	Telephone Fax	032 436 6000 032 436 6672
10.1	The Project Manager is	Katlego Mabua
	Address	1 Canelands Drive Administration Office MSO Building King Shaka International Airport La Mercy 4407
	Telephone E-mail address	032 436 6302 Katlego.mabua@airports.co.za

10.1	The Supervisor is	Mduduzi Sikhakhane	
	Address	1 Canelands Drive Administration Office MSO Building King Shaka International Airport La Mercy 4407	
	Telephone Fax Email	032 436 6000 N/A Mduduzi.Sikhakhane@airports.co.za	
11.2	The <i>works</i> are	Supply, Installation, testing, commissioning and decommissioning of the old UPSs of UPSs King Shaka International Airport	
11.2	The following matters will be included in the Risk Register	 Availability of As Built information Access to Site Site Constraints and Constructability Long lead items Weather conditions Existing services Project Program delay Payment delay 	
11.2	The Works Information is in	Part C3 'Scope of Works' section of this contract	
11.2	The Site Information is in	Part C4 'Works Information' section of this contract	
11.2	The boundary of the site is	King Shaka International Airport (Landside and airside)	
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa	
13.1	The language of this contract is	English	
13.3	The <i>period of reply</i> is	Seven (7) days	
3	Time		
31.2	The starting date is	XX	
11.2	The completion date is	XX	
30.1	The access date is	XX	

31.1	The <i>Contractor</i> submits a first (preliminary) programme with the tender by the tender closing date	XX			
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	Four (4) weeks			
35.1	The <i>Employer</i> is not willing to take over the works before the completion date	The <i>Employer</i> and Others will have access to the <i>works</i> during construction or prior to completion. Such access by the Employer and Others shall not relieve the <i>Contractor</i> from liability for the completion of the <i>works</i> in accordance with the Works Information and in terms of this contract.			
4	Testing and Defects				
42.2	The defects date is	Twelve (12) mc <i>works</i>	Twelve (12) months after Completion of the whole of the works		
43.2	The defects correction period is	Two (2) weeks			
5	Payment				
50.1	The assessment interval is	Four (04) week	S		
50.1	The <i>currency of this contract</i> is the	South African Rand			
51.2	The period within which payment is made is	Four (4) weeks			
51.4	The interest rate is	The prime lending rate of the Nedbank Bank. as determined from time to time			
6	Compensation events				
60.1	The <i>weather measurements</i> to be recorded for each calendar month are	the cumulative rainfall (mm) the number of days with rainfall more than 10 mm the number of days with minimum air temperature less than 0 degrees Celsius			
60.1	The place where weather is to be recorded (on the Site) is	At the Construction Site Office and the records to be kept on site in a file clearly marked for this purpose			
60.1	Assumed values for the ten year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are	Month January February March April May June	Days 1 1 2 2 3 3	Month July August September October November December	Days 4 3 2 2 2 2 1
7	Title No data required for this section of the conditions of contract			ons of contract	
8	Risks and Insurance				

84.1	The <i>Employer</i> provides these insurances	Refer to the Insurance Clauses which is attached at the end of the Contract Data
84.2	The <i>Contractor</i> provides the insurance stated in	The Insurance Clauses which is attached at the end of the Contract Data. The insurances are in the joint names of the Parties and provide cover for events which are at the Contractor's risk from the starting date until the Defects Certificate or a termination certificate has been issued.
	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the Contractor arising out of and in the course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993
9	Termination	No data required for this section of the conditions of contract
10	Data for Main Options	
В	Priced contract with Bill of Quantities	Refer to Contract Data Part C2: Pricing Data, Bill of Quantities as per tender submission
11	Data for Option W1	
W1.1	The Adjudicator is	The person appointed jointly by the parties from the list of adjudicators contained below
W1.2	The Adjudicator nominating body is	The current Chairman of Johannesburg Advocate's Bar Council
W1.4	The tribunal is	Arbitration
W1.4	If the <i>tribunal</i> is arbitration, the arbitration procedure is	The <i>arbitration procedure</i> is set out in The Rules for the Conduct of Arbitrations 2013 Edition, 7th Edition, published by The Association of Arbitrators, (Southern Africa)
W1.4	The place where arbitration is to be held is	Johannesburg, South Africa.
W1.4	The person or organisation who will choose an arbitrator	The Arbitrator is the person selected by the Parties as and when a dispute arises in terms of the relevant Z Clause, from the Panel of Arbitrators provided under the relevant Z clause if the arbitration procedure does not state who selects an arbitrator. The Arbitrator nominating body is the Chairman of the Johannesburg Advocates Bar Council.
12	Data for Secondary Option Clauses	
X7	Delay Damages	
	Delay damages of the <i>works</i> are	Amount per day is 0.05%, to the maximum of 10% of the Contract value
-		

X13 Performance bond

X13.1	The amount of the performance bond is	10% of the contract value. Pro-forma draft of a performance bond to be used is attached to this contract.
X16	Retention	
X16.1	The retention percentage is	0% of the Contract value.
X18	Limitation of Liability	
X18.1	The <i>Contractor</i> 's liability to the <i>Employer</i> for indirect or consequential loss is limited to	Nil - Neither Party is liable to the other for any consequential or indirect loss, including but not limited to loss of profit, loss of income or loss of revenue
X18.2	For any one event, the <i>Contractor</i> 's liability to the <i>Employer</i> for loss of or damage to the <i>Employer</i> 's property is limited to	The total of the Prices
X18.3	The <i>Contractor's</i> total liability to the Employer for defects due to his design which are not listed on the Defects Certificate is limited to	The total of the Prices
X18.4	The <i>Contractor</i> 's total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to	The Contractor's total direct liability to the Employer for all matters arising under or in connection with this contract, other than the excluded matters, is limited to the total of the Prices and applies in contract, tort or delict and otherwise to the extent allowed under the law of the contract.
		 The e excluded matters are amounts payable by the Contractor as stated in this contract for Loss of or damage to the Employer's property, Delay damages, Defects liability, Insurance liability to the extent of the Contractor's risks loss of or damage to property (other than the <i>works</i>, Plant and Materials), death of or injury to a person; damage to third party property; and infringement of an intellectual property right
Z	The Additional conditions of Z contract are	1 – Z20
	Amendments to the Core Clause	S

Z1 Interpretation of the law

Z1.1 Add to core clause 12.3:

Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z2 Providing the Works:

Z2.1 Delete core clause 20.1 and replace with the following:

The *Contractor* provides the works in accordance with the Works Information and warrants that the results of the Works, when complete, shall be fit for their intended purpose

Z3 Other responsibilities:

Add the following at the end of core clause 27:

- **Z3.1** The *Contractor* shall have satisfied himself, prior to the Contract Date, as to the completeness, sufficiency and accuracy of all information and drawings provided to him as at the Contract Date
- **Z3.2** The *Contractor* shall be responsible for the correct setting out of the *Works* in accordance with the original points, lines and levels stated in the *Works* Information or notified by the *Project Manager, Supervisor* or the *Employer.* Any errors in the positioning of the *Works* shall be rectified by the *Contractor* at the *Contractor's* own costs.

Z4 Extending the defects date:

Add the following as a new core clause 46:

- **Z4.1** If the *Employer* cannot use the *works* due to a Defect, which arises after Completion and before the *defects date*, the *defects date* is delayed by a period equal to that during which the *Employer*, due to a Defect, is unable to use the *works*
- **Z4.2** If part of the *works* is replaced due to a Defect arising after Completion and before the *defects date*, the *defects date* for the part of the *works* which is replaced is delayed by a period equal to that between Completion and the date by when the part has been replaced
- **Z4.3** The *Project Manager* notifies the *Contractor* of the change to a *defect date* when the delay occurs. The period between Completion and an extended *defects date* does not exceed twice the period between Completion and the *defects date* stated in the Contract Data

Z5 Termination

Z5.1 Add the following to core clause 91.1, at the second main bullet, fifth sub-bullet point, after the words "assets or": "business rescue proceedings are initiated or steps are taken to initiate business recue proceedings".

Amendment to the Secondary Option Clauses

Z6 Performance Bond

Z6.1 Amend the first sentence of clause X13.1 to read as follows:

The *Contractor* gives the *Employer* an unconditional, on-demand performance bond, provided by a bank which the *Project Manager* and the *Employer* have accepted, for the amount stated in the Contract Data and in the form set out in Annexure C.ii of this Contract Data.

Z6.2 Add the following new clause as Option X13.2:

The *Contractor ensures* that the performance bond is valid and enforceable until the end of the *contract period*. If the terms of the performance bond specify its expiry date and the end of the *contract period* does not coincide with such expiry date, four weeks prior to the said expiry date, the *Contractor* extends the validity of the performance bond until the end of the *contract period*. If the *Contractor* fails to so extend the validity of the performance bond, the *Employer* may claim the full amount of the performance bond and retain the proceeds as cash security

Z7 Limitation of liability:

Insert the following new clause as Option X18.6:

- **Z7.1** The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00
- **Z7.2** Notwithstanding any other clause in this contract, any proceeds received from any insurances or any proceeds which would have been received from any insurances but for the conduct of the *Contractor* shall be excluded from the calculation of the limitations of liability listed in the contract

Additional Z Clauses

Z8 Cession, delegation and assignment

- **Z8.1** The *Contractor* shall not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*, which consent shall not be unreasonably withheld. This clause shall be binding on the liquidator/business rescue practitioner /trustee (whether provisional or not) of the *Contractor*
- **Z8.2** The *Employer* maycede and delegate its rights and obligations under this contract to any person or entity

Z9 Joint and several liability

- **Z9.1** If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons, these persons are deemed to be jointly and severally liable to the *Employer* for the performance of the Contract.
- **Z9.2** The *Contractor* shall, within 1 week of the Contract Date, notify the *Project Manager* and the *Employer* of the key person who has the authority to bind the *Contractor* on their behalf.
- **Z9.3** The *Contractor* does not materially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without prior written consent of the *Employer*.

Z10 Ethics

- **Z10.1** The *Contractor* undertakes:
- **Z10.1.1** not to give any offer, payment, consideration, or benefit of any kind, which constitutes or could be construed as an illegal or corrupt practice, either directly or indirectly, as an inducement or reward for the award or in execution of this contract;
- **Z10.1.2** to comply with all laws, regulations or policies relating to the prevention and combating of bribery, corruption and money laundering to which it or the *Employer* is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.

- **Z10.2** The *Contractor*'s breach of this clause constitutes grounds for terminating the *Contractor*'s obligation to Provide the Works or taking any other action as appropriate against the *Contractor* (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.
- **Z10.3** If the *Contractor* is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices, including but not limited to the making of offers (directly or indirectly), payments, gifts, gratuity, commission or benefits of any kind, which are in any way whatsoever in connection with the contract with the *Employer*, the *Employer* shall be entitled to terminate the contract in accordance with the procedures stated in core clause 92.2. the amount due on termination is A1.

Z11 Confidentiality

- **Z11.1** All information obtained in terms of this contract or arising from the implementation of this contract shall be treated as confidential by the *Contractor* and shall not be used or divulged or published to any person not being a party to this contract, without the prior written consent of the *Project Manager* or the *Employer*, which consent shall not be unreasonably withheld.
- **Z11.2** If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the *Project Manager*.
- Z11.3 This undertaking shall not apply to –
- **Z11.3.1** Information disclosed to the employees of the *Contractor* for the purposes of the implementation of this agreement. The *Contractor* undertakes to procure that its employees are aware of the confidential nature of the information so disclosed and that they comply with the provisions of this clause;
- **Z11.3.2** Information which the *Contractor* is required by law to disclose, provided that the *Contractor* notifies the *Employer* prior to disclosure so as to enable the *Employer* to take the appropriate action to protect such information. The *Contractor* may disclose such information only to the extent required by law and shall use reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed;
- **Z11.3.3** Information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time);
- **Z11.4** The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*
- **Z11.5** The *Contractor* ensures that all his Subcontractors abide by the undertakings in this clause.

Z12 *Employer*'s Step-in rights

Z12.1 If the *Contractor* defaults by failing to comply with his obligations and fails to remedy such default within 2 weeks of the notification of the default by the *Project Manager*, the *Employer*, without prejudice to his other rights, powers and remedies under the contract, may remedy the default either himself or procure a third party (including any subcontractor or supplier of the *Contractor*) to do so on his behalf. The reasonable costs of such remedial works shall be borne by the *Contractor*

Z12.2 The *Contractor* co-operates with the *Employer* and facilitates and permits the use of all required information, materials and other matter (including but not limited to documents and all other drawings, CAD materials, data, software, models, plans, designs, programs, diagrams, evaluations, materials, specifications, schedules, reports, calculations, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the *Contractor* under the contract or otherwise for and/or in connection with the *works*) and generally does all things required by the *Project Manager* to achieve this end.

Z13 Liens and Encumbrances

Z13.1 The *Contractor* keeps the Equipment used to Provide the Services free of all liens and other encumbrances at all times. The *Contractor*, vis-a-vis the *Employer*, waives all and any liens which he may from time to time have, or become entitled to over such Equipment and any part thereof and procures that his Subcontractors similarly, vis-a-vis the *Employer*, waive all liens they may have or become entitled to over such Equipment from time to time

Z14 Intellectual Property

- **Z14.1** Intellectual Property ("IP") rights means all rights in and to any patent, design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works.
- **Z14.2** IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works*.
- **Z14.3** The *Contractor* gives the *Employer* an irrevocable, transferrable, non-exclusive, royalty free licence to use and copy all IP related to the *works* for the purposes of constructing, repairing, demolishing, operating and maintaining the works
- **Z14.4** The written approval of the *Contractor* is to be obtained before the *Contractor*'s IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any *Contractor*'s IP available to any third party the *Employer* shall obtain a written confidentiality undertaking from any such third party on terms no less onerous than the terms the *Employer* would use to protect its IP
- **Z14.5** The *Contractor* shall indemnify and hold the *Employer* harmless against and from any claim alleging an infringement of IP rights ("**the claim**"), which arises out of or in relation to:
- Z14.5.1 the Contractor's design, manufacture, construction or execution of the Works
- Z14.5.2 the use of the Contractor's Equipment, or
- **Z14.5.3** the proper use of the Works.
- **Z14.6** The *Employer* shall, at the request and cost of the *Contractor*, assist in contesting the claim and the *Contractor* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.

Z16 Dispute resolution:

Z16.1 Appointment of the Adjudicator

The Parties appoint the *Adjudicator* under the NEC3 Adjudicator's Contract, April 2013

Panel of Adjudicators

Name	Location	Contact details
		(phone & e mail)
Adv. Ghandi Badela	Gauteng	+27 11 282 3700
		ghandi@badela.co.za
Mr. Errol Tate Pr.	Durban	+27 11 262 4001
Eng.		Errol.tate@mweb.co.za
Adv. Saleem Ebrahim	Gauteng	+27 11 535-1800
		salimebrahim@mweb.co.za
Mr. Sebe Msutwana	Gauteng	+27 11 442 8555
Pr. Eng.		sebe@civilprojects.co.za
Mr. Sam Amod	Gauteng	sam@samamod.com
Adv. Sias Ryneke	Gauteng	083 653 2281
SC		reyneke@duma.nokwe.co.z
		<u>a</u>
Mr. Emeka Ogbugo	Pretoria	+27 12 349 2027
(Quantity Surveyor)		emeka@gosiame.co.za

Z16.2 Appointment of the Arbitrator

An *Arbitrator* is appointed when a dispute arises from the Panel of Arbitrators below. The referring party nominates an Arbitrator, which nomination is either accepted or rejected by the other party. In the instance of a rejection of the nominated *Arbitrator*, the referring Party refers the appointment deadlock to the Chairman of the Johannesburg Bar Council, who appoints an *Arbitrator* listed in the Panel of *Arbitrators* below Panel of Arbitrators

Name	Location	Contact details
		(phone & e mail)
Adv. Ghandi Badela	Gauteng	+27 11 282 3700
		ghandi@badela.co.za
Mr. Errol Tate Pr.	Durban	+27 11 262 4001
Eng.		Errol.tate@mweb.co.za
Adv. Saleem Ebrahim	Gauteng	+27 11 535-1800
		salimebrahim@mweb.co.za
Mr. Sebe Msutwana	Gauteng	+27 11 442 8555
Pr. Eng.		sebe@civilprojects.co.za
Mr. Sam Amod	Gauteng	sam@samamod.com
Adv. Sias Ryneke	Gauteng	083 653 2281
SC		reyneke@duma.nokwe.co.z
		<u>a</u>
Mr. Emeka Ogbugo	Pretoria	+27 12 349 2027
(Quantity Surveyor)		emeka@gosiame.co.za

Z17 Notification of a compensation event

Z17.1 Delete "eight weeks" in clause 61.3 and replace with "four weeks". Delete the words "unless the event arises from the Project Manager or the Supervisor giving an instruction, issuing a certificate, changing an earlier decision or correcting an assumption.

Z18 BBBEE Certificate

Z18.1	The <i>Contractor</i> shall be expected to annually present a compliant BEE Certificate. Failure to do adhere to these requirements shall be considered a material breach of the conditions of this Contract, the sanction for which may be a cancellation of this Contract.	
Z19	Communication	
Z19.1	Add a new Core Clause 14.5 and 14.6 to read as follows: The <i>Project Manager</i> requires the written consent of the Employer if an action will result in a change to the design, scope, and Works information that is 5% or more	
Z19.2	The <i>Project Manager</i> requires the written consent of the Employer if an action will result in the Completion Date being extended by more than 30 days.	
Z20	Delegation	
	As stipulated by Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993 as amended the <i>Contractor</i> agrees to the following:	
Z20.1	As part of this contract the <i>Contractor</i> acknowledge that it (mandatory) is an employer in its own right with duties as prescribed in the Occupational Health and Safety Act No 85 of 1993 as amended and agree to ensure that all work being performed, or Equipment, Plant and Materials being used, are in accordance with the provisions of the said Act, and in particular with regard to the Construction Regulations	

PART C1.2b CONTRACT DATA PART TWO – DATA PROVIDED BY THE CONTRACTOR

Clause	Statement	Data
10.1	The Contractor is (Name): Address:	
	Telephone No. Fax No.	
11.2	The working areas are	Only the Site Area. See C4 'Site Information'
24.1	The Contractor's Key people are:	CV's to be appended to Tender Schedule
	Name:	
	Job:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job:	
	Responsibility:	
	Qualifications:	
	Experience:	

Name:

Job:

Responsibility:

Qualifications:

Experience:

11.2	The completion date is	XX
11.2	The following matters will be included in the Risk Register	 Existing Services Access to Site Delay in supply of material and/or equipment Progress of the works against the program Travelling public and ACSA stakeholders Long lead items Weather conditions Existing services Project Program delay Payment delay
11.2	The Works Information is in	Part C3 'Scope of Works' section of this contract
31.1	The programme identified in the	Program schedule as per tender submission

Part C1: Agreements and Contract Data

C1.3: Form of Guarantee

PRO FORMA FOR PERFORMANCE BOND

PERFORMANCE BOND

[TO BE REPLICATED ON BANK'S LETTERHEAD]

Brief description of contract.....

Name and address of Beneficiary.....

..... (whom the contract defines as the Contractor).

We, the undersigned in our capacities as Guarantor's...... of (Registration Number:) (hereinafter called "the Bank") have been informed that hereinafter called the 'Principal') is your Contractor under such contract, which requires him to obtain an irrevocable, unconditional performance security.

At the request of the Principal, we(name of bank) hereby irrevocably undertake to pay you, the Employer, any sum or sums not exceeding in total the amount of(the "Guaranteed Amount") upon receipt by us of your first written demand stating that such an amount (or lesser amount) as may be claimed is due and payable to the Employer.

This guarantee constitute an irrevocable, unconditional, non-negotiable and non-transferable undertaking to pay in accordance with the above, subject to the proviso that this Letter will not be interpreted as extending the Bank's liability to anything more than the Guaranteed Amount.

Notwithstanding anything to the contrary herein contained, the Bank's obligation shall be construed as principal and not as accessory to the contract and shall not be delayed or discharged by the fact that a dispute exists between the Employer and the Contractor.

We undertake to pay you such Guaranteed Amount upon receipt by us, within such period of 14 days, of your first written demand stating that such an amount (or lesser amount) as may be claimed is due and payable to the Employer.

The guarantee shall be governed by and construed in accordance with the laws of the Republic of South Africa

Signed at ______ on _____20....

For: Registration Number:

Name & Position

As witnesses:

1.			
			_

2. _____

PART C1: AGREEMENTS AND CONTRACT DATA

[EACH AIRPORT TO CONFIRM WITH SAFETY DEPARTMENTS WHETHER THERE IS ADDITIONAL SAFETY DOCUMENTATION TO BE ATTACHED THAT CONTRACTOR SHOULD BE AWARE OF] C1.4: OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH & SAFETY ACT (ACT 85 Of 1993) & CONSTRUCTION REGULATION 5.1(k)

OBJECTIVES

To assist Airport Company South Africa (ACSA) in order to comply with the requirements of:

- 1. The Occupational Health & Safety (Act 85 of 1993) and its regulations and
- 2. The Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993) also known as the (COID Act).

To this end an Agreement must be concluded before any contractor/ subcontracted work may commence

The parties to this Agreement are:

Name of Organisation:

AIRPORTS COMPANY SOUTH AFRICA KING SHAKA INTERNATIONAL AIRPORT Physical Address: Airport Company South Africa

1 Canelands Drive Administration Office MSO Building King Shaka International Airport La Mercy 4407

Hereinafter referred to as "Client"

Name of organisation:

Physical Address

Hereinafter referred to as "the Mandatary/ Principal Contractor"

GENERAL INFORMATION FORMING PART OF THIS AGREEMENT

- 1. The Occupational Health & Safety Act comprises of SECTION 1-50 and all unrepealed REGULATIONS promulgated in terms of the former Machinery and Occupational Safety Act No.6 of 1983 as amended as well as other REGULATIONS which may be promulgated in terms of the Act and other relevant Acts pertaining to the job in hand.
- "Mandatary" is defined as including as agent, a principal contractor or a contractor for work, but WITHOUT DEROGATING FROM HIS/HER STATUS IN HIS/HER RIGHT AS AN EMPLOYER or user of the plant
- 3. Section 37 of the Occupational Health & Safety Act potentially punishes Employers (PRINCIPAL CONTRACTOR) for unlawful acts or omissions of Mandataries (CONTRACTORS) save where a Written Agreement between the parties has been concluded containing arrangements and procedures to ensure compliance with the said Act BY THE MANDATARY.
- 4. All documents attached or refer to in the above Agreement form an integral part of the Agreement.
- 5. To perform in terms of this agreement Mandataries must be familiar and conversant with the relevant provisions of the Occupational Health & Safety Act 85 of 1993 (OHS Act) and applicable Regulations.
- 6. Mandatories who utilise the services of their own Mandatories (contractors) must conclude a similar Written Agreement with them.
- 7. Be advised that this Agreement places the onus on the Mandatary to contact the CLIENT in the event of inability to perform as per this Agreement.
- 8. This Agreement shall be binding for all work the Mandatary undertakes for the client.
- 9. All documentation according to the Safety checklist including a copy of the written Construction Manager appointment in terms of construction regulation 8, must be submitted 7 days before work commences.

THE UNDERTAKING

The Mandatary undertakes to comply with:

INSURANCE

- 1. The Mandatary warrants that all their employees and/or their contractor's employees if any are covered in terms of the COID Act, which shall remain in force whilst any such employees are present on the Client's premises. A letter is required prior commencing any work on site confirming that the Principal contractor or contractor is in good standing with the Compensation Fund or Licensed Insurer.
- 2. The Mandatary warrants that they are in possession of the following insurance cover, which cover shall remain in force whilst they and /or their employees are present on the Client's premises, or which shall remain in force for that duration of their contractual relationship with the Client, whichever period is the longest.
 - a. Public Liability Insurance Cover as required by the Subcontract Agreement.
 - b. Any other Insurance cover that will adequately makes provision for any possible losses and/or claims arising from their and /or their Subcontractors and/or their respective employee's acts and/or omissions on the Client's premises.

COMPLIANCE WITH THE OCCUPATIONAL HEALTH & SAFETY ACT 85 OF 1993

The Mandatary undertakes to ensure that they and/or their subcontractors if any and/or their respective employees will at all times comply with the following conditions:

- 1. All work performed by the Mandatary on the Client's premises must be performed under the close supervision of the Mandatary's employees who are to be trained to understand the hazards associated with any work that the Mandatary performs on the Client's premises.
- 2. The Mandatary shall be assigned the responsibility in terms of Section 16(1) of the OHSAct 85 of 1993, if the Mandatary assigns any duty in terms of Section 16(2), a copy of such written assignment shall immediately be forwarded to the Client.
- 3. The Mandatary shall ensure that he/she familiarise himself/herself with the requirements of the OHSAct 85 of 1993 and that s/he and his/her employees and any of his subcontractors comply with the requirements.
- 4. The Mandatary shall ensure that a baseline risk assessment is performed by a competent person before commencement of any work in the Client's premises. A baseline risk assessment document will include identification of hazards and risk, analysis and evaluation of the risks and hazards identified, a documented plan and safe work procedures to mitigate, reduce or control the risks identified, and a monitoring and review plan of the risks and hazards.
- 5. The Mandatary shall appoint competent persons who shall be trained on any Occupational Health & Safety aspect pertaining to them or to the work that is to be performed.
- 6. The Mandatary shall ensure that discipline regarding Occupational Health & Safety shall be strictly enforced.
- 7. Any personal protective equipment required shall be issued by the Mandatary to his/her employees and shall be worn at all times.
- 8. Written safe working practices/procedures and precautionary measures shall be made available and enforced and all employees shall be made conversant with the contents of these practises.
- 9. No unsafe equipment/machinery and/or articles shall be used by the Mandatary or contractor on the Client's premises.
- 10. All incidents/accidents referred to in OHSAct shall be reported by the Mandatary to the Provincial Director: Department of Labour as well as to the Client.
- 11. No user shall be made by the Mandatary and/or their employees and or their subcontractors of any of the Client's machinery/article/substance/plant/personal protective equipment without prior written approval.
- 12. The Mandatary shall ensure that work for which the issuing of permit is required shall not be performed prior to the obtaining of a duty completed approved permit.
- 13. The Mandatary shall ensure that no alcohol or any other intoxicating substance shall be allowed on the Client's premises. Anyone suspected to be under the influence of alcohol or any other intoxicating substance shall not be allowed on the premises. Anyone found on the premises suspected to be under the influence of alcohol or any other intoxicating substance shall not be allowed on the premises. Anyone found on the premises suspected to be under the influence of alcohol or any other intoxicating substance shall be escorted off the said premises immediately.
- 14. Full participation by the Mandatary shall be given to the employees of the Client if and when they inquire into Occupational Health & Safety.

FURTHER UNDERTAKING

- 1. Only a duly authorised representative appointed in terms of Section 16.2 of the OHS Act is eligible to sign this agreement on behalf of the Mandatary. The signing power of this representative must be designated in writing by the Chief Executive Officer of the Mandatary. A copy of this letter must be made available to the Client.
- 2. The Mandatary confirms that he has been informed that he must report to the Client's management, in writing anything he/she deems to be unhealthy and /or unsafe. He has versed his employees in this regard.
- 3. The Mandatary warrants that he/she shall not endanger the health & safety of the Client's employees and other persons in any way whilst performing work on the Client's premises.
- 4. The Mandatary understands that no work may commence on the Client's premises until this procedure is duly completed, signed and received by the Client.
- 5. Non-compliance with any of the above clauses may lead to an immediate cancellation of the contract.

ACCEPTANCE BY MANDATARY

In terms of section 37(2) of the Occupational Health & Safety Act 85 of 1993 and section 5.1(k) of the Construction Regulations 2014,

Mandatary – WCA/ Federated Employers Mutual No.....

Expiry date

SIGNATURE ON BEHALF OF MANDATARY (Warrant his authority to sign) DATE

SIGNATURE ON BEHALF OF THE CLIENT AIRPORT COMPANY SOUTH AFRICA DATE

PART C1: AGREEMENTS AND CONTRACT DATA C1.5: ACSA INSURANCE CLAUSES

Each Party shall be responsible for effecting and maintaining the relevant insurances as specified below and to the extent relevant to the Contract.

1. Insurance Effected By The Employer (Principle Controlled Insurance ("PCI"))

1.1 Notwithstanding anything elsewhere contained in this Contract and without limiting the obligations, liabilities or responsibilities of the Contractor in anyway whatsoever (including but not limited to any requirement for the provision by the Contractor of any other insurances) the **Employer** shall effect and maintain for the duration of the construction and maintenance periods of the Contract - as appropriate in the joint names of the Employer, the Contractor and where relevant Sub-Contractors the following insurances which are subject to the terms, limits, exceptions and conditions of the Policy:

a)Contract Works/Contractors Public Liability/ Removal Of Lateral Support Liability

Section 1 Of The Policy – Contract Works

Contract Works Insurance for the full value of the Works to provide cover against accidental physical loss of or damage to the Works, Temporary Works and materials intended for incorporation in the Works all being the subject matter of this Contract including to the extent provided for in the policy whilst in transit or temporarily stored at any premises en route to or from the Site (other than where this is a continuation of Marine Transit) within the territorial limits of the policy.

This insurance may specifically exclude any cost necessary to replace or rectify any of the property insured, which is in a defective condition due to defect in design, plan specification, material or workmanship.

This insurance contains the following limitations and warrantees ;

Open Trench Limitation

In respect of loss or damage to open trenches and pipes, conduits or cables laid therein, caused directly or indirectly by rain, inundation or flood, Insurers liability shall be limited in respect of the aggregate length of open trenches at any one time to 2,500 meters.

Exposed Layer Works (applicable to works involving paving, roadways, bulk earthworks and runways and taxiways)

In respect of loss or damage to Exposed Layer Works relating to paving, roadways and runways (including taxiways) caused directly or indirectly by rain, inundation or flood, Insurers liability shall be limited in respect of the aggregate length of Exposed Layer Works at any one time to 2,500 meters.

Section II of the Policy – Contractors Public Liability

Public Liability Insurance which provides indemnity against legal liability in the event of accidental death of or injury to persons and/or loss of or damage to property(other than the Works the subject matter of this Contract) arising from the execution of the Contract with a limit of indemnity of **R100,000,000** in respect of any one occurrence or series of occurrences consequent on or attributable to one source or original cause.

Section III of the Policy – Removal Of Lateral Support Liability

Removal Of Lateral Support Liability which provides indemnity against legal liability in the event of accidental death of or injury to persons and/or loss of or damage to property (other than the Works the subject matter of this Contract) arising out of or in connection with shock or vibration or the removal or weakening of or interference with support to property in the vicinity of the Contract Site and arising out of or in connection with the Insured Contract (but not in respect of tunneling works) and occurring during the Period of Insurance.

The Limit of Indemnity being limited to R50,000,000 attributable to one source or original

cause

b) <u>Contract Works SASRIA</u> – Providing physical loss of or damage to the Works, Temporary Works and materials intended for incorporation in the Works as covered by the underlying Contract Works policy as noted in (a) above due to perils as covered in terms of the SASRIA Contract Works wording as issued by SASRIA SOC.

The Contract Works SASRIA cover excludes consequential or indirect loss or damage of any kind or description whatsoever.

The SASRIA Contract Works policy is limited to **R500,000,000 (Incl VAT)** in the aggregate during the policy period of insurance.

The Contract Works SASRIA policy wording can be obtained from the SASRIA website <u>http://www.sasria.co.za/</u> which notes the covers and policy exclusions.

c) Design & Construct Professional Indemnity Insurance which provides indemnity against legal liability to pay compensation as a result of any actual or alleged negligent act, error or omission in the performance of the Professional Duties of the insured and arising from the execution of this project. The limit of indemnity under this insurance shall be *R25,000,000 in the aggregate during the annual policy period of insurance that ACSA effect such cover during the policy period from 1 April to 31 March during each policy period of insurance.

*The limits of indemnity applies to all ACSA contracts as a whole and does not apply specifically to this contract. The aggregate limit could be exhausted by claims under other ACSA contracts and there is no guarantee that this insurance cover will provide sufficient cover to this specific contract should the aggregate limit be exhausted.

The Policy only covers the rectification of the works and excludes all consequential losses.

Professional Duties do not include:

- a) Labour and construction work which would normally be the responsibility of the building or engineering contractor.
- b) Supervision of the construction works usually undertaken by a building or engineering contractor.
- 1.2 The **Contractor** shall familiarise itself fully with the details of such insurance effected by the Employer. The Contractor shall comply to all the terms and conditions of the Employer arranged policies and the Contractor shall be deemed to be fully aware of all the conditions, limits, limitations, exclusions/exceptions and deductibles that are contained in the Employer arranged policies. Copies of the Employer arranged policies are obtainable on request from the Employer and if the Contractor is of the opinion that additional insurance is required, such shall be for the Contractors account.

- 1.3 The Employer shall pay the premium in connection with the insurances effected by the Employer. The Employer is entitled to all return premiums, dividends, discounts, or adjustments in connection with the insurances effected by the Employer.
- 1.4 The Contractor shall not include any premium charges for this insurance except to the extent, which he may deem necessary in his own interests to effect supplementary insurance to the insurance effected by the Employer. The Employer reserves the right to call for full information regarding insurance costs included by the Contractor.

In the event that the Contractor purchases any insurances in addition to those indicated above, the premium and taxes, duties, etc. shall be borne entirely by the contractor.

- 1.5 Any further clarification of the scope of cover provided by the Policies arranged by the Employer should be obtained from the Employer.
- 1.6 The Contractor and/or any other party who obtains indemnity under the policies effected under 1.1 shall become liable for the deductibles (first amount payable) which are applicable in respect of each and every occurrence or series of occurrences attributable to one source or cause giving rise to loss or damage or indemnifiable liability. The deductibles applicable to the policies effected under 1.1 are as follows:
 - a) Contract Works/Contractors Public Liability/ Removal Of Lateral Support Liability

Unless stated otherwise in the Policy Extensions the Deductibles shall be as follows which will apply in respect of each and every occurrence or series of occurrences arising out of or in connection with any one event giving rise to loss or damage:

Section 1 Of The Policy – Contract Works

In respect of all loss or damage **R150,000** but increased to **R250,000** in respect of loss or damage arising out of or in connection with testing and commissioning.

Section 2 Of The Policy – Contractors Public Liability

<u>R75,000</u> each and every claim in respect of Property Damage.

Section 3 Of The Policy – Removal Of Lateral Support Liability

R75,000 each and every claim.

b) <u>Contract Works SASRIA</u>

In respect of theft as a result of the SASRIA perils insured - R25,000 each and every occurrence .

c) Design & Construct Professional Indemnity Insurance

a) R50 million at award – R5,000,000.	In respect of contracts under
b) R50 million at award – R10,000,000	In respect of contracts over

- 1.7 In the event of any occurrence which is likely to give rise to a claim under the insurance arranged by the Employer, the Contractor shall:
 - a) In addition to any statutory requirement or other requirements contained in the Contract immediately notify the Employer and the Employer's Insurance Brokers by telephone, mobile phone or email giving the circumstances, nature and an estimate of the loss or damage or liability. The Contractor must also complete the Claim Advice Form (Appendix "A").

The following persons/insurers must be advised immediately on the occurrence of a claim on site or even a possibility of a claim arising due to an incident occurring on site:

Airports Company South Africa :

Nokulunga Masiza

Tel: +27 (0)11 723 1400

M: +27 (0)79 512 0532

Nokulunga.Masiza@airports.co.za

Buhle Mnguni

D: +27 (0)11 723 1400 M: +27 (0)74 535 9075

Buhle.Mnguni@airports.co.za

- b) Preserve damage and make it available for inspection by a representative of the Insurers.
- c) Wherever possible, photographs of damage should be taken.
- d) Inform the police authorities promptly in the event of loss or damage by theft, burglary or any malicious persons(s) for the purpose of recovering any property so lost, discovering the guilty person or persons, and having him, her or them duly prosecuted.
- e) Advise the Insurers of any other insurance(s) which may cover the same loss, damage or injury, or any part thereof.
- f) Give to the Insurers every assistance to enable the Insurers to settle or resist any claim against the Insured, or institute any proceedings;
- g) On completion the Claims Advice Form, the form must be sent to the Employers
 Insurance Brokers for further action (the original may be emailed to the Employers
 Insurance Broker). (Please do not remove the Claims Advice Form out of this document.
 Rather photocopy the form and send the copy to the Employers Insurance Brokers).
- h) The Employer and the employers Insurance brokers / Insurers or their appointed loss adjusters shall have the right to make all and any enquiry's on the Site of the Works or elsewhere as to the cause and results of any such occurrence and the Contractor shall co-operate in carrying out such enquiry's.
- i) The Contractor, Project Managers and Consultants must allow free access to Insurers' assessors for the purpose of investigating and assessing the loss or damage.
- j) The Contractor must not proceed with the making good any off the loss without the prior authorisation of the Insurers.

- k) The Contractor must keep separate records of the costs involved in making good any loss or damage and these records should be available at all times for inspection by Insurers. Such records should include inter alia the entire cost of labour, materials, transport and equipment.
- Where required by the Employer, negotiate the settlement of claims with the Insurer or their appointed loss adjusters through the Employer's Insurance Brokers and shall obtain the Employer's approval of such settlement.
- m) Once the amount of a claim is agreed by the Insurers and the Contractor, an
 "Agreement of Loss" form must be signed by the Contractor and if required this shall be counter signed by the Employer or the Project Managers.
- n) The proceeds of such claim will, if required by the Employer, be paid net of any Deductible applicable under the policy by the Insurers to the Employer who on receipt thereof will arrange for payment to be made in terms of the Conditions of Contract. In the event that it is agreed by the Employer that such claims payment be made directly to the Contractor, the Contractor shall arrange for the Employer to endorse the "Agreement of Loss" to this effect.

2. Insurance Effected by the Contractor.

In addition to Clause 1.1 in respect of the insurances effected by the Employer the following Insurances to be effected by the Contractor :

- 2.1 Without limiting the Contractor's obligations, responsibilities and liabilities, the Contractor and Sub-contractor shall maintain at the Contractor's and Subcontractor's expense and where applicable provide as a minimum the following insurances:
 - a) Insurance of Construction Plant and Equipment (including tools offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.

The Employer shall be named as additional insured and a waiver of subrogation shall be provided to the Employer.

b) Contractor's Common Law Liability/ Worker's Compensation Insurance

The Contractor shall take out and maintain employer's liability insurance with a limit of indemnity of not less than **R20,000,000** and/or workmen's compensation insurance covering personal injury to or death of the employees of the Contractor engaged in connection with the Works to the minimum value required by applicable law.

The Contractor shall procure that its Subcontractors take out and maintain similar insurance in respect of its Subcontractor's personnel performing the Works.

In the event that a claim is made against the Employer in connection with such insurance, the Contractor shall indemnify and hold harmless the Employer against any such claim. The Employer shall be named as additional insured and a waiver of subrogation shall be provided to the Employer.

 Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability indemnity with a limit of indemnity of not less than R5 000 000 for all owned, non-owned, leased and hired vehicles.

d) Insurance For Buy-Down Cover Of Employer's Deductibles

Should the Contractor believe that the Employer effected Contract Works, Public Liability and Design & Construct Professional Indemnity deductibles as noted in Clause 1.1 (a) and (c) be considered to be unacceptable to the Contractor, then the Contractor must obtain Buy Down cover for these deductibles to a deductible considered by the Contractor as being acceptable in respect of the works being undertaken.

e) Where the Contract involves manufacturing and/or fabrication of the Works or parts thereof at premises other than at the Contract Site the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the Works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such Works during manufacture or fabrication then such interest shall be noted by endorsement to the relevant Policies of Insurance.

Such insurance shall name Employer as an additional insured, and shall be primary to any insurance maintained by the Employer.

- **f) Public Liability** insurances in excess of the Employers Public Liability insurances as stated under clause 1.1(a).
- **g) Contractor's Professional Indemnity Insurance** in excess of the Employers Design & Construct Professional Indemnity insurances as stated under clause 1.1(c) and if applicable to cover the deductible that applies to the Employer effected insurance.

h) Marine Cargo Insurance (If Applicable)

- Cover : Imports of cargo, equipment, goods, plant, machinery and materials ("Insured Property") to the site where the Permanent Works will be constructed.
- **Sum Insured**: Not less than the value of the largest single cargo shipment, conveyance or the value in storage, whichever is the greater (CIF plus 10%).

Marine / Air Cargo Insurance covering the Insured Property against all risks of physical loss or damage while in transit by land, sea or air from country of origin anywhere in the world to the site where the Permanent Works will be constructed including loading, or vice versa, from the commencement of the time the insured items are loaded prior leaving the warehouse or factory for shipment to the said site.

The insured parties are the Employer, the Contractor and its Subcontractors, and all their personnel involved in the execution of any Works on the construction site.

j) Miscellaneous Insurance

Other insurance as is customary, desirable or necessary to comply with applicable Laws in the Country.

- 2.2 The insurances to be provided by the Contractor and his Sub-contractor shall be effected with Insurers and on terms approved by the Employer (which approval shall not be unreasonably withheld) and shall be maintained in force for the duration required (including any period of maintenance/defects liability period). The Contractor shall within twenty eight (28) days of commencement of the contract produce to the Employer the relevant Policy or Policies of Insurance.
- 2.3 In the event that the Contractor or his Sub-contractor receives any notice of cancellation or restrictive modification to the insurance provided to them they shall immediately notify the Employer in writing of such cancellation or restriction and shall advise what action the Contractor or his Sub-contractor will take to remedy such action.

If the Contractor fails to effect and keep in force the insurances referred to then the Employer may effect and keep in force any such insurances and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount paid by the Employer from any monies due or which may become due to the Contractor or recover same as a debt from the Contractor.

2.4 Sub-Contractors.

The Contractor shall:

- a) ensure that all potential and appointed Sub-contractors are aware of the whole contents of these Insurance Clauses, and
- enforce the compliance by sub contract agreement between the Contractor and Sub-Contractor and where applicable that the Sub Contractor effect similar insurance relating to the insurances required to be effected by the Contractor under Clause 2 (Contractor effected insurances).

APPENDIX A

CONTRACTORS CLAIMS ADVICE FORM - FOR ACSA INSURED CONTRACTS UNDER THE ANNUAL POLICY

Send to : Airports Company South Africa	
	*
E-Mail The Following People :	
0 - 1 -	
Nokulunga.Masiza@airports.co.za	

Buhle.Mnguni@airports.co.za	
* (Please provide name of contracting company, site address, teleph <u>RE :ACSA CONTRACTORS : CAR/PL/PI : CLAIM</u>	none numbers and e-mail address).
Date of loss :	
Reported to site agent by :	Date :
Reported to Insurance Broker by :	Date :
Locality of Incident	
How did the loss occur (cause) ?	
Details and nature of loss or damage to Contract Works	
Details of other property damaged	
Names and address of witnesses	
Estimated cost of repairs (Separate records of all costs must be kept	:) R
Person whom assessor should contact	
Telephone/Mobile Numbers Of Contact Person	

Email Address of Contact Person_____

PART C2: PRICING DATA

C2.1: PRICING INSTRUCTIONS

- 2.1.1 The Pricing Schedules /Bill of Quantities form part of and must be read in conjunction with the entire bid document.
- 2.1.2 Prices must be quoted in South African Currency (Rands).
- 2.1.3 Prices must be fixed and firm.
- 2.1.4 There is No CPI escalation on the prices.
- 2.1.5 Bidders must price in accordance with the pricing schedules hereafter to enable ACSA to compare priced offers.
- 2.1.6 Failure to submit a priced offer using the prescribed schedules will make the bid liable for disqualification.
- 2.1.7 Do not leave any area blank in the pricing schedules (e.g. if not applicable (N/A) or included in cost elsewhere, indicate accordingly).
- 2.1.8 Corrections must be countersigned.

2.1.9 All Provisional Sums and Estimated Quantities will be reimbursed against proven costs upon approval by ACSA representative. Tenderers are reminded that this amount is for illustrative purposes only and that ACSA will not be under any obligation to expend the full or any portion of this amount.

2.1.10 Should there be any queries regarding the pricing schedule/s, same must be sent in writing via e-mail by the Query Closure Date.

2.1.11 Permit costs:

- Permit costs will need to be paid up front by the successful bidder and ACSA will reimburse against proof of payment.
- No mark-up to be levied on Permit costs.
- All employees will be checked for criminal records.
- Cost for lost permits and new employees will not be reimbursed by ACSA.
- Foreign Nationals will need to provide a valid working permit.
- 2.1.12 No cost/mark-up to be levied on items provided by ACSA (e.g. Electricity etc.)
- 2.1.13 3rd Party Procured Items/Services:
 - VAT shall not form part of mark-up calculations.
 - All Discounts to be deducted prior to mark-up
 - Price to include delivery to site
- 2.1.14 The Bid offer must be inclusive of VAT.
- 2.1.15 The VAT portion must be indicated separately.

C2.2 PRICING SCHEDULES

Works for this bid to be carried out after the last flight and before the first flight. suppliers. 22:30 – 04:00.

PRIC	PRICE SCHEDULE 1: PRELIMINARY AND GENERAL						
Item	Description	UOM	QTY	PRICE EXCLUDIN	NG VAT		
1	Site Establishment & removal	Sum	1	R			
2	Network communication termination & BMS integration	Provisional sum	1	R	800 000.00		
3	Provisional Sum for cabling and accessories (re-measurable item)	Provisional sum	1	R	300 000.00		
4	Safety file	Sum	1	R			
5	Provisional Sum for Permits	Provisional sum	1	R	5 000.00		
6	Drawings and manuals	Sum	1	R			
7	Additional Warranty - 1 year: UPS Static Type	Sum	1	R			
8	Additional Warranty - 1 year: UPS Modular Type:	Sum	1	R			
SUB	TOTAL 1		R				

Bidder/Contractor's Name : _____

_	PRICE SCHEDULE 2: STATIC TYPE UPSs Price to include Supply, delivery, installation, testing and commissioning of new UPSs						
ltem No.	Description	TOTAL Excluding VAT					
1	UPS – Static	1kVA	Each	12	R	R	
2	UPS – Static	2KVA	Each	4	R	R	
3	UPS – Static	3KVA	Each	65	R	R	
4	UPS – Static	6KVA	Each	16	R	R	
SUB	-TOTAL 2	R					

Bidder/Contractor's Name : _____

PRICE SCHEDULE 3: MODULAR TYPE UPSs Price to include Supply, delivery, installation, testing and commissioning of new UPSs						
Item No.	Description	Size	иом	QTY	PRICE EACH Excluding VAT	TOTAL Excluding VAT
		10KVA		39		
1	UPS - Modular		Each		R	R
		30 kVA		4		
2	UPS - Modular		Each		R	R
		40 KVA		11		
3	UPS - Modular		Each		R	R
		60 KVA		4		
4	UPS - Modular		Each		R	R
		250 KVA		1		
5	UPS - Modular		Each		R	R
SUB-	TOTAL 3					R

Bidder/Contractor's Name : _____

PRICE SCHEDULE 4: DECOMMISSIONING Price to include Decommissioning and ACSA personnel to collect to KSIA storage site.							
ltem No.	Description	Size	UOM	QTY	PRICE EACH Excluding VAT	TOTAL Excluding VAT	
1	UPS	10kVA	Each	28	R	R	
2	UPS	250kVA	Each	1	R	R	
3	UPS	3kVA	Each	65	R	R	
4	UPS	1kVA	Each	12	R	R	
5	UPS	2 kVA	Each	4	R	R	
6	UPS	6kVA	Each	15	R	R	
7	UPS	15 kVA	Each	10	R	R	
8	UPS	30kVA	Each	4	R	R	
9	UPS	40kVA	Each	10	R	R	
10	UPS	60kVA	Each	4	R	R	
11	UPS	7,5kVA	Each	2	R	R	
SUB-T	OTAL 4	·	·		•	R	

Bidder/Contractor's Name : _____

Signature / Stamp: _____

SUMMARY PRICING SCHEDULE					
PRICE SCHEDULE	DESCRIPTION	TOTAL EXCLUDING VAT			
1	Preliminary and General	R			
2	Static Type UPSs	R			
3	Modular Type UPSs	R			
4	Decommissioning of Existing UPSs (All Static type)	R			
TOTAL EXC		R			
VAT @ 15%	,	R			
	LUDING VAT Form of Offer and Acceptance)	R			

Bidder/Contractor's Name : _____

PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	Employer's Works Information	
C3.2	Contractor's Works Information ¹	
	Total number of pages	

Develop Scope of Work using guidance provided .Note that this document is merely a guideline of what to include in the scope of work. The contract manager will be required to apply his / her mind and delete or add any information required, depending on the nature of the works. Where the contract requires information to be included in the scope of works, the relevant heading will contain a footnote indicating that the information is compulsory. Complete this document by replacing the guidance notes in [square brackets] with the relevant information. When the document is complete, delete this note and ALL footnotes.

For further guidance refer to guidance notes on CIDB website: http://www.cidb.org.za/procurement/procurement_toolbox/overview/contract_sec/default.aspx

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¹ Insert at award stage or delete if not applicable. Delete this note once a selection is made.

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C3.1: EMPLOYER'S WORKS INFORMATION

1. Description of the works

Scope Overview

Project Scope Inclusion:

- Decommissioning (disconnecting only) of the existing UPSs for ACSA personnel to collect to KSIA storage site
- Supply and delivery of new UPSs
- Installation of a new UPSs
- During the installation of the new UPSs, the existing UPSs capability should not be compromised.
- Installation, testing and commissioning of the UPSs.
- The contractor will be fully responsible for meeting all requirements stated in the scope of work

WORKING HOURS FOR THIS TENDER

Works for this bid to be carried out after the last flight and before the first flight viz. from 22:30 – 04:00.

Background

The electrical network reticulation design philosophy for King Shaka International Airport includes a divided essential and non-essential power supply to different electrical loads that serve critical and normal operation at the airport. The critical loads inside the terminal include Domestic and International terminal checking counters & desk, boarding desk & counters, bussing gates and security checking points, IT wire centres and core rooms. Power outage compromises these areas and affects operations and running of the airport and this will result in financial implications to ACSA due to SLAs between ACSA and stakeholders, also it might have an impact on customer satisfaction.

The purpose of this project is to provide reliable and uninterruptible power solution to identified critical equipment at the airport terminal building, freight, and airside.

Standard Recommended

Provision of uninterruptible power supply (UPS) at the airport to ensure uninterrupted supply of power to critical loads and complying to SACAA regulations.

Shortcomings

They currently installed UPSs have reached their end-of-life span as per OEM recommendations. Once the end of life has been reached there will be multiple failures which will increase maintenance.

1 Goals and Objectives

Goals: To ensure that ACSA has uninterrupted supply of power to critical loads and thus complying to SACAA regulations.

Objectives: To source a suitable service provider for the full supply, installation, network integration, testing, commissioning of the uninterruptible power supply across various locations at King Shaka International Airport

Employer's requirements for the services

The contractor shall always be responsible for ensuring that on site staff is competent and enough manpower is available throughout the project.

Minimum Key Personnel:

1 x Contract Manager 1 x Technician/Electrician

Employer's requirements for the services

The contractor shall always be responsible for ensuring that on site staff is competent and enough manpower is available throughout the project.

2. Interpretation and terminology

Abbreviation	Meaning given to the abbreviation	
ACSA	Airport Company South Africa	
AVOP	Airside Vehicle Operating Procedure	
CAT	Category	
CATS	Civil Aviation Technical Standards	
СТU	Control Tower Unit	
DME	Distance Measuring Equipment	
IEC	International Electrotechnical Commission	

ILS	Instrument Landing System	
LV	Low Voltage	
KSIA	King Shaka International Airport	
RCSU	Remote control status unit	
SACAA	South African Civil Aviation Authority	
SOC	State Owned Company	
VAT	Value Added Tax	
V	Volt	

3. Contract Management

Management meetings²

- Risk Reduction meeting to be held monthly
- Representatives of the contractor and the Airports Company South Africa to be present in the meeting
- Meeting to be held at the Employer's site and a venue to be communicated a week in advance

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk reduction meeting and compensation events	Monthly	KSIA/MS Teams	Contractor, Employer, Supervisor
Overall contract progress and feedback	Monthly	KSIA/MS Teams	Employer, Contractor, Supervisor,

Meetings of a specialist nature may be convened as specified elsewhere in this Works Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *works*. Records of these meetings shall be submitted to the *Project Manager* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

Health and safety risk management

- The contractor shall have a toolbox meeting stating all the health and safety related issues and must be documented as such before any work can start.
- The Contractor shall comply with the health and safety requirements contained Part C1.4 to this Works Information.
- The contractor shall ensure that all personnel performing work have correct PPE

² The information in this section is required by the contract. Do not delete.

Environmental constraints and management

The contractor to ensure that the design and his associated activities (installation, disposal of waste, noise, pollution etc.) complies with ACSA environmental policy. The contractor is required to report monthly on any environmental issues that affect the project or affected by project

Quality assurance requirements

- Within the period stated in the Contact Data, the *Contractor* submits his complete quality control and assurance system (with all quality control and assurance procedures and manuals) for review and acceptance by the *Employer*. The manual includes pro-forma checklists for all requirements of the *Contractor*'s quality control and assurance program and those called for in the Scope.
- Acceptance by the *Employer* of the *Contractor*'s quality assurance programme, quality plans and/or inspection and/or test plans, or of those of his Subcontractors will not relieve the *Contractor* of his obligation to provide services which meet the requirements of the Contract.

Programming

The program is as per Tender submission. The first revised program shall be submitted within two weeks after the start date.

The Contractor's Personnel

As per Tender submission

Insurance provided by the Employer

As per Part C1.5

Provision of bonds and guarantees

Without limitation to the Employer's rights under the Contract, the Employer may withhold payment of amounts due to the Contractor until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the Contractor by the Project Manager to receive and accept such bond or guarantee. Such withholding of payment due to the Contractor does not affect the Employer's right to termination stated in this contract.

Records of Defined Cost, payments & assessments of compensation events to be kept by the *Contractor.* The records should be filed by the contractor as hard copies and share with

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Project Manager on soft copy (emailed) without limitation to the Employer's rights under the Contractor.

Training workshops and technology transfer

The contractor shall conduct technology transfer on Completion of the works.

4. Engineering and design of the works

Employer's design

The Employers' design is limited to the following:

Layout of the existing buildings and equipment

Parts of the works which the Contractor is to design³

The Contractor is responsible for the detail design of the following:

• See C3.2 below.

Procedure for submission and acceptance of Contractor's design

The contractor's design as well as Employer specification and installation requirements as per tender submission will be used for this project. The As built drawings to be prepared by the Contractor and submitted to the Project Manager for acceptance.

Use of Contractor's design

The contractor to ensure adherence to the specification as per tender documents and built thee final product for purpose that is intended for.

Equipment required to be included in the works⁴

The contractor may use any electrical equipment or tool to ensure the proper completion of works. The list of all tools to be used onsite to be presented as the part of safety file including the safe operating procedures for those tools.

As-built drawings, operating manuals and maintenance schedules

The contractor to provide As-built drawings, operating manuals and maintenance as stated in the Bill of Quantities as the part of the hand-over documentation.

5. Procurement

Personnel:

Minimum requirements of people employed on the Site

No Minimum requirements of people employed on the Site.

Subcontracting

Preferred subcontractors

No preferred subcontractor or supplier by Employer.

Limitations on subcontracting

The main contractor will be responsible for the subcontractor and must ensure that he complies to ACSA regulations and always have the correct PPE and comply to ACSA health and safety requirements

Plant and Materials

Plant & Materials provided "free issue" by the Employer

Plant & Material storage and safeguard is the responsibility of the contractor. The contractor to clearly state the lead times on Contractor's procurement of plant and materials.

Contractor's procurement of Plant and Materials

Contractor to ensure that the material procured are compliant with the specification on the tender document, where possible the procurement preference should be given to Black owned suppliers

Tests and inspections before delivery⁵

A proof of Factory testing will be required prior the delivery of material.

Marking Plant and Materials outside the Working Areas⁶

The contractor need to state how the material will be marked once the deposit amount is paid. The contractor to indicate how the guarantee of the material delivery will be ensured once the deposit is paid upfront

Contractor's Equipment (including temporary works)

Contractor equipment and material to be safely secured at all times especially when not used on the airside

6. Construction

Temporary works, Site services & construction constraints

Site establishment and equipment to be based on the airside. It will be a contractor's responsibility to provide a secure environment for their equipment. The contractor's personnel will be restricted to the contractors own established site and the agreed area of work. The contractor's personnel will not be permitted at the Airside/restricted areas without the necessary reflective jackets.

Employer's Site entry and security control, permits, and Site regulations

An induction course must be attended by the contractor and all personnel who would be involved on site. The contractor to make his own arrangement for staff full medicals and schedule with the ACSA's project manager for the induction course. Security arrangements would be discussed at the induction meeting and should be strictly adhered to. It should be noted that ACSA premises complies to National Key Point Regulations, every person who conduct work at the airport will be subjected to security vetting. ACSA will not be held liable should one of the contractor member fail SAPS vetting process

The Contractor shall procure the services at King Shaka International Airport. All airside services are in restricted areas and access controlled areas, accordingly it is crucial for the Contractor to note that King Shaka International Airport is a National Key Point and governed as such.

(b) The Contractor shall be compensated for costs relating to Employer required permits.

(c) The Contractor must ensure that he/she is, at all times, familiar with the Employer's safety and security requirements relating to permits in order for no services to be delayed as a result thereof. This includes the permit application process (available to the Contractor upon request).

(d) The Contractor shall have no claim against the Employer in the event that a permit request is refused for reasons not attributable to the Employer.

(e) The following table is not all inclusive, but is provided for illustration purposes:

Permit	Required by/for	Department

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AVOP – Airside Vehicle Operator permit	All drivers of vehicles on airside	ACSA Safety
Airside Vehicle Permit	All vehicles that enter airside	ACSA Safety
Basement Parking permit	All vehicles allowed to enter the delivery basement	ACSA Parking
Personal permit	All persons employed on the airport	ACSA Security
Cell phone permit	All persons taking cell phones to airside	ACSA Security
Lap top permit	All persons taking lap top computers to airside	ACSA Security
Camera permit	All persons taking cameras or camera equipment to airside	ACSA Security
Hot Works Permit	All welding and/metal cutting services	ACSA Safety / Fire & Rescue

(f) Proof of having attended the airside induction training course is required for all personal permit applications. Persons applying for an AVOP must provide proof of having attended an AVOP course. Fees are levied for these courses. Fees are further levied for all permit renewals and refresher courses - where applicable.

(g) Use of cell phones on airside is not permitted unless the user is in possession of an appropriate Airport permit for the device. Cell phone permit issuing authority lies with the ACSA Security department.

(h) The Contractor shall not be allowed to use two-way radios at on the Employer's Premises unless these radios are of the type as approved by the ACSA IT department and are intrinsically safe.

Restrictions to access on Site, roads, walkways and barricades

The Contractor shall protect the site properly and shall so arrange his operations that the minimum danger and inconvenience is caused to airport operations. For this purpose, he shall provide and maintain sufficient signs, lights, barriers, fencing and guarding as may be necessary or required

People restrictions on Site; hours of work, conduct and records

It is expected that contractors wear visible company uniform or reflector jackets with contractor name there-on when entering the premise as form of identification. Permits to be displayed at all times whilst on site. Work will be conducted at night (10pm – 4am) to minimize the impact on operations. Work program to be submitted with the tender to ensure the manoeuvring area is clear of aircraft movements prior and during construction work.

Title to materials from demolition and excavation⁷

The contractor must submit a method statement to the environmental department regarding explosion and excavations.

Contractor's Equipment

Contractor to keep record of equipment on site, service history etc. and keep a copy on site

Site services and facilities provided by the Employer⁸

The Contractor shall be entitled to use such supplies of electricity and water as may be available on the Site for the purpose of the Works and at his own expense, shall provide any apparatus necessary for such use. The Contractor shall notify ACSA of any equipment or facility, which will be a consumer of electricity and water. The Contractor shall provide everything else necessary for Providing the Works

Facilities provided by the Contractor

Facilities e.g. storage, site offices, vehicle, equipment provided by the contractor should be safeguarded by the contractor during the construction, and be removed off site upon the completion of the contract

Existing premises, inspection of adjoining properties and checking work of Others

All operations required in connection with the Agreement shall, as far as the provisions of the Agreement permit, not unnecessarily or in an improper manner encroach upon the use of airport facilities.

The contractor is to take cognizance that the airport is used by others and other contractors may be on site for unrelated projects/services

site conditions and requirements

Safety measures to be adhered to according OHS Act. Adhere to ACSA airside safety requirements regarding equipment, vehicles, and personnel operating on the airside.

Full risk analysis on working on height, next to aircraft and airside and mitigation thereof to considered as part of safety file requirements

Contractor to ensure that other Underground services, other existing services, cable and pipe trenches and covers are identified to prevent any disruption to these services due to contractor's activities.

Contractor to take necessary steps to control noise, dust, water and waste during his/her activities onsite.

Completion, testing, commissioning and correction of Defects

Work to be done by the Completion Date⁹

All work is to be done by the Contractor shall be completed by the Completion Date, save for the following: [list project-specific exceptions and state by when the work should be completed]

The *Project Manager* cannot certify Completion until all the work except that listed above has been completed and is also free of Defects which would have, in his opinion, prevented the *Employer* from using the *works* and Others from doing their work.

Use of the works before Completion has been certified¹⁰

The Employer may use any part of the works before Completion has been certified but if he does so he takes over the part of the works. Any defect must be attended to as stipulated in the defect clause

Materials facilities and samples for tests and inspections

The contractor to present the product sample to the Project Manager prior the installation and submit the relevant factory test certificates

Commissioning

The contractor to submit the commission procedures and plan to the Project Manager for approval. The commissioning procedure and plans will be adhered to during commissioning.

Start-up procedures required to put the works into operation

The contractor to ensure that he complies with all ACSA security, safety, environmental and operational requirements prior to the commencement of works complete accordingly

Take over procedures

The works will be handed over partially or fully once commissioned and certified by Project Manager. The commissioning should be witnessed by both ACSA representative and the contractor representative

Access given by the Employer for correction of Defects¹¹

The Project Manager arranges for the Employer to allow the Contractor access to and use of a part of the works which has been taken over if needed to correct a Defect. After the works have been put into operation, the Employer may require the Contractor to undertake certain procedures before such access can be granted. Performance tests after Completion Performance tests after Completion

Contractor to ensure all necessary tests and calibrations are conducted and submit all reports to the *Employer*

Operational maintenance after Completion

Maintenance manuals and training will be provided by the contractor on completion of works

7. Plant and Materials standards and workmanship

Investigation, survey and Site clearance

Contract to ensure that a thorough inspection and clearance is conducted prior commencement of work of any other services that might be impacted by contractor's activities

Building works

Product specification and installation standard to be compliant with the standard stated above in the Scope of Works

Civil engineering and structural works

As per Scope of Work

Electrical & mechanical engineering works

As per Scope of Work

8. List of drawings

1.1. Drawings issued by the *Employer*

[This is the list of drawings issued by the Employer at or before the Contract Date and which apply to this contract]

Drawing number	Revision	Title

C3.2 CONTRACTOR'S WORKS INFORMATION

Detailed Equipment scope

Supply and installation of various static and modular UPS across KSIA location as per BOQ and within specification.

Information below (PART A and PART B) are of existing equipment.

Part	Α

Current Technology Type	Replacement Technology Type	Size	Quantity
Static UPS	Static UPS	1kVA	12
Static UPS	Static UPS	2kVA	4
Static UPS	Static UPS	3KVA	65
Static UPS	Static UPS	6KVA	15
Static UPS	Static UPS	7.5 KVA	2

Part B

Current Technology	Replacement	Size	Quantity
Туре	Technology Type		
Static UPS	Modular UPS	10KVA	28
Static UPS	Modular UPS	15 KVA	10
Static UPS	Modular UPS	30KVA	4
Static UPS	Modular UPS	40KVA	10
Static UPS	Modular UPS	60KVA	4
Static UPS	Modular UPS	300 KVA	1
Rotary UPS	Modular UPS	200KVA	1

Standards and Specifications

The Contractor shall supply, install, testing, network integration, and commission accordingly to comply with the following requirements:

Specification for Modular UPS

General specification			
General specification			
System capacity	10 KVA		
Active power	10 KW		
System	Modular, expandable and redundant UPS system		
Classification	On-line double conversion		
UPS input spec.			
Input voltage	1ph + N+ PE (220 – 230) V		
Input	45 – 65 Hz		
Input voltage range	230V+15%/ -20%		
THD input current	<3% at full load		
Input power factor	>0.99		
UPS output spec			
Output Voltage	1ph + N + PE (220– 230) V		
Efficiency	Up to 98%		
Efficiency in eco mode	99%		
Nominal output frequency	50/60Hz		
Crest factor	3:1		
Waveform	sinusoidal		
Output voltage tolerance	+/- 1%		
THD output voltage	< 1%		
Overload capacity	10 minutes at 115%		
Bypass	Automatic bypass and manual maintenance bypass.		
Batteries			
Battery module	Plug & Play		
Battery series type/ Voltage	VRLA – AGM / 240Vdc		
Operating time	5 minutes minimum at full load		
Battery charger	Smart charge technology 3 stage advanced cycle.		
Communication and management			
Display and signals	Digital display		
	Touch screen menu.		
	LED multi-colour status indicator.		
	 Alarms full description (not coded or referencing 		
	to manual).		
	Audio signals.		
Communication ports	 2 RS232 serial ports, 1 logical gate, 5 ports with 		
	• 2 R3232 senar ports, 1 logical gate, 5 ports with dry contacts.		
	 Alarms and controls to be connected into the 		
	existing 2 x SCADA system (IMC & Electrical) for		

	network monitoring (IMC) and remote control (Electrical)	
Back feed protection	NC/NO auxiliary contact	
Emergency power off	yes	
Remote management	Available	
Ambient condition		
Operating temperature	0 – 40°C / 0 – 95% non-condensing	
Protection rating	IP65	
Max audible noise	58 – 62 (dBA)	
General specification		
System capacity	30 – 250 KVA	
Active power	30 – 250 KW	
Module power	3.4 – 10 - 50 KW	
System	Modular, expandable and redundant UPS system	
Classification	On-line double conversion	
UPS input spec.		
Input voltage	3ph + N+ PE (380 – 415) V	
Input	45 – 65 Hz	
Input voltage range	400V+15%/ -20%	
THD input current	<3% at full load	
Input power factor	>0.99	
UPS output spec		
Output Voltage	3ph + N + PE (380 – 415) V	
Efficiency	Up to 98%	
Efficiency in eco mode	99%	
Nominal output frequency	50/60Hz	
Crest factor	3:1	
Waveform	sinusoidal	
Output voltage tolerance	+/- 1%	
THD output voltage	< 1%	
Overload capacity	10 minutes at 115%	
Bypass	Automatic bypass and manual maintenance bypass.	
Batteries		
Battery module	Plug & Play	
Battery series type/ Voltage	VRLA – AGM / 240Vdc	
Operating time	5 minutes minimum at full load	
Battery charger	Smart charge technology 3 stage advanced cycle.	
Communication and management		
Display and signals	Digital display	
Touch screen menu.		
LED multi-colour status indicator.		
	Alarms full description (not coded or referencing	

	to manual).
	Audio signals.
Communication ports	 2 RS232 serial ports, 1 logical gate, 5 ports with dry contacts. Alarms and controls to be connected into the existing 2 x SCADA system (IMC & Electrical) for monitoring (IMC) and remote control (Electrical)
Back feed protection	NC/NO auxiliary contact
Emergency power off	yes
Remote management	Available or network monitoring
Ambient condition	
Operating temperature	0 – 40°C / 0 – 95% non-condensing
Protection rating	IP65
Max audible noise	58 – 62 (dBA)

Specification for static UPS

SN	TECHNICAL PARAMETERS	PARAMETER DESCRIPTION		
1.	Туре	Single phase, IGBT based, True sine wave Online UPS		
2.0	Input	240V±10% V AC, Single phase-three wire		
		(Phase + Neutral +Ground)		
		50±5% Hz		
		Power factor: ≥ 0.9 Lag		
3.0	Output:			
		1 - 6KVA		
		230V±10% V AC, Single phase-three wire		
		(Phase + Neutral +Ground),		
		50±5% Hz		
		≤ 0.75 to ≥ 0.95 (Lag)		
	Voltage Regulation	≤ ±2%		
4.0	Inverter Efficiency	≥ 85%		
5.0	Crest factor	≥ 3:1		
6.0	Overload Capability	110%: ≥10 Minutes		
		125%: ≥05 Minutes		
		150%: ≥30 Seconds		
7.0	Current Harmonic distortion	<5% at Full load		
	(THDI)			
		-Less than ±10% voltage variation at sudden		
8.0	Transient response & recovery	application/removal		
	period	of full load		
		-Rated voltage shall be recovered within 500msec.		
9.0	Bypass: Static Switch Transfer /	≤10ms (UPS to static bypass & vice versa)		
	Retransfer Time	Maintenance Bypass: No interruption		
10.0	Battery Charger	Float / Boost Charging Mode shall be provided		
		Battery Charging Voltage & Current shall be adjustable		
		Line & load Regulation: ≤ ±1%		

		Output Ripple: ≤ 3%	Output Ripple: ≤ 3%			
		5 minutes minimum at full	5 minutes minimum at full			
	Battery Running Time	load	load			
11.0	Control Switch	i) Input ON/OFF				
	(MCB/Fuse/Isolator)	ii) Output ON/OFF				
		iii) Battery				
		iv) Maintenance Bypass Sw				
12.0	Protections	UPS shall trip on following				
		i) Input AC Under/Ove	5			
		ii) Output overload / Sł				
		ii) DC Under/Over volta	age			
		iv) Over temperature				
13.0	Indications & Alarms					
13.1	LED Indications	Mains Healthy	Output Overload			
		UPS Healthy	Load on Battery			
		UPS Trouble / Trip				
13.2	Alarms (Audible for	Mains fail	Battery Low/ Discharging			
	Trouble/fault)	Charger fail	Output overload			
		DC Under/Over voltage	Over temperature			
13.3	Metering: LCD Display	Input/Mains Voltage	Charger / Battery Voltage			
			Battery Charging /			
		UPS Output Voltage	Discharging			
		UPS Output /Load Current	Current			
14.0	Environment	0-55°C & 95% RH				
		 RS232 serial ports, 1 logical gate, 5 ports with 				
		contacts.				
		 Alarms and controls to be connected into the connected intot the connected into the connected i				
		existing 2 x SCADA system (IMC & Electrical) for				
		•	network monitoring (IMC) and remote control			
15.0	Communication (Optional)	(Electrical)	(Electrical)			

Modular UPS Installation

UPS greater than 10 kVA

a. UPS shall be housed in a free-standing cabinet and offer minimum IP-33 protection ratingb. The cabinet shall be fitted with heat extraction and cooling fans for adequate ventilation to

ensure that all components operate within their environmental ratings.

c. Rectifier and Inverter sections shall be housed in separate cabinet/panels and shall be complete with all interconnections.

d. Hinged doors shall be provided at the front and back where required, with dust tight gaskets.

e. Cable entry: Standard cable entry for the UPS cabinet shall be through either the enclosure bottom or top. A dedicated wireway shall be provided within the UPS cabinet for routing user input and output wiring.

f. Busbars shall be colour coded and live parts shall be properly shrouded to ensure complete safety to personnel intending routine inspection by opening the panel doors.

g. All equipment inside the cabinet and on door shall have suitable nameplates and device number as prescribed by ACSA.

Inspection, Tests and Commissioning

On completion, inspect and test the services installation in accordance with SANS10142-2 and the Occupational Health and Safety Act 85/1993. Record test results on printed test sheets and submit to the employer or representative.

The UPS shall be tested for the following in the presence of employer's representative:

Commissioning checklist

- Visually inspect all equipment for signs of damage or foreign materials
- Observe the type of ventilation, the cleanliness of the room, the use of proper signs, and any other safety related factors
- Check all the power connections for tightness
- Check all the control wiring terminations and plugs for tightness or proper seating.
- Check the DC bus for a possible short circuit
- Check input and Bypass power for proper voltages and phase rotation.
- Check all lamp test functions

Testing of the electrical installation shall include the following:

• Ensure correct polarity, phase rotation and balance load between the phases. Verify polarity and phase identification.

- Continuity and resistance of earth conductor including all bonding conductors
- Continuity of ring circuit
- Earth electrode resistance
- Insulating resistance
- Earth fault loop impedance test
- Operation of earth leakage protection devices and circuit breakers

After inspection and testing, timeously arrange for any inspection and test by the appointed network operator if required.

Submit a "Certificate of Compliance by an accredited person" Annexure 1 in terms of the Occupational Health and Safety Act 85/1993, Electrical Installation Regulation 1992, to the Employer and forward a copy to the Engineer.

Handover documents

Description of Handover requirement	Requirement met
Design reports include design calculations of the UPS load distribution	
As-built drawings (.dwg format) includes load supplied	
A list of "Nameplate Data" giving full particulars of serial numbers and other	
descriptive data pertaining to the equipment installed	
Electronic datasheets of equipment purchased	
User Guide Manuals and maintenance manuals	
An electronic and hard copy of all routine tests results, and measurements	
as recorded during site and factory testing	
Formal record of the training provided to the ACSA staff by the Tenderer.	
A list of minimum spares, tools and testing equipment required	
All certificates and records of the testing and commissioning phase	

- SANS 62040-1
- SANS 62040-4
- SANS 10142-1

Location of the works

The works is located at King Shaka International Airport at various locations in restricted areas and access-controlled areas. It is crucial for the Contractor to note that King Shaka International Airport is a National Key Point and governed as such.

Quality Control and Reporting

The Contractor shall provide a complete set of reports and control documents in accordance with the contractor's quality management to manage the report process and action all aspects of the installation program. The detail report will be made up by the following reports:

- Test Reports
- Feedback Reports
- Installation Reports
- Hand-Over Reports
- Health and Safety Reports
- Calibration reports

Extend of The Works

The Contractor will be fully responsible for meeting all requirements in this document regarding the works. In addition, all works will be carried out in accordance with SANS standards and as required by the Engineering working procedures, as well as any applicable governing law and/or regulations.

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PART C4: SITE INFORMATION

Document reference		Title			No of pages
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http://www.cidb.org.za/procurement/procurement_toolbox/overview/contract_sec/default.aspx

Develop Site Information for engineering and construction works contract only using guidance provided in the Compiler guidance note for Component document: C4 – Site Information

Core clause 11.2(16) states

"Site Information is information which describes the Site and its surroundings and is in the documents which the Contract Data states it is in."

In Contract Data, reference has been made to this Part 4 of the contract for the location of Site Information.

Description of the Site and its surroundings

General description

The works is located at King Shaka International Airport at various locations in restricted areas and accesscontrolled areas. It is crucial for the Contractor to note that King Shaka International Airport is a National Key Point and governed as such.

Other reports and publicly available information

KSIA is a national key point and the contractor must read the national key point ACT to familiarise themselves with the regulations.