

Confidential



KING PHALO AIRPORT

**TENDER NO:
REQUISITION NO:**

SUPPLY, DELIVER, INSTALL, CONFIGURE AND TEST A SCADA PANEL FOR THE ELECTRICAL COMPLEX AT KING PHALO AIRPORT. REMOVAL OF EXISTING INSTALATION AND ISSUING OF DISPOSAL CERTIFICATE.

CONTRACT

VOLUME 2



AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

PROJECT NAME: SUPPLY, DELIVER, INSTALL, CONFIGURE AND TEST A SCADA PANEL FOR THE ELECTRICAL COMPLEX AT KING PHALO AIRPORT. REMOVAL OF EXISTING INSTALATION AND ISSUING OF DISPOSAL CERTIFICATE.

PROJECT NUMBER: ELS...5024

NEC 3: ENGINEERING AND CONSTRUCTION CONTRACT (ECC)

Between AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Applicable at KING PHALO AIRPORT

(Registration Number: 1993/004149/30)

and _____

(Registration Number: _____)

for **SUPPLY, DELIVER, INSTALL, CONFIGURE AND TEST A SCADA PANEL FOR THE ELECTRICAL COMPLEX AT KING PHALO AIRPORT. REMOVAL OF EXISTING INSTALATION AND ISSUING OF DISPOSAL CERTIFICATE.**

Contents:	Page No.
Part C1 Agreements & Contract Data	[3]
Part C2 Pricing Data	[19]
Part C3 Scope of Works	[24]
Part C4 Site Information	[39]



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 a contractor to decommission, dispose of existing Scada panel and issue disposal certificate. Supply, deliver, install, configure and test a Scada panel for the Electrical Complex at King Phalo Airport for A Period OF 12 Months.**

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:

R..... (in figures)

.....

..... (in words);

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.

Signature(s)

Name(s)

Capacity

**For the
Bidder:**

.....
(Insert name and address of organisation)

Date

Name &
signature of
witness



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.

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**

Airports Company South Africa SOC Limited,
King Phalo Airport
66 Settlersway
East London
5201

Name &
signature of
witness

Date

**Schedule of Deviations**

1 Subject .....	.....
Details .....	.....
.....	
.....	
2 Subject .....	.....
Details .....	.....
.....	
.....	
3 Subject .....	.....
Details .....	.....
.....	
.....	
4 Subject .....	.....
Details .....	.....
.....	
.....	
.....	

By the duly authorised representatives signing this agreement, the Employer and the Tenderer agree 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 Contractor**

Signature (s)	.....	.....
Name (s)	.....	.....
Capacity	.....	.....
Name and Address	Airports Company South Africa SOC Limited, King Phalo Airport 66 Settlersway East London 5201	
		
	<i>(Insert name and address of organisation)</i>	<i>(Insert name and address of organisation)</i>
 Name & Signature of witness	.....	.....
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	A: Priced contract with Activity Schedule W1: Dispute resolution procedure
	Secondary Options (incorporating amendments)	X1: Price Adjustment X2: Changes in the law X7: Delay damages X16: Retention X17: Low service damages 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, applicable at KING PHALO AIRPORT
	Address	Airports Company South Africa SOC Limited King Phalo Airport 66 Settlers Way, East London, 5201
10.1	The <i>Project Manager</i> is	Samkelo Luyenge
	Address	Address: Airports Company South Africa SOC Limited King Phalo Airport 66 Settlers Way, East London, 5201
	Telephone	+27 43 706 0358
	E-mail address	Sam.Luyenge@airports.co.za



10.1	The <i>Supervisor</i> is	Siyamcela Ncombo
	Address	Airports Company South Africa SOC Limited King Phalo Airport 66 Settlers Way, East London, 5201
	Telephone	+27 43 7060 323
	E-mail address	Siyamcela.ncombo@airports.co.za
	Cell	+27 72 867 6175
11.2	The <i>works</i> are	Supply, Deliver, Install, Configure and Test a SCADA Panel for the Electrical Complex at King Phalo airport. Removal of existing installation and issuing of disposal certificate as fully detailed in the Scope of Work Part C3.
11.2	The following matters will be included in the Risk Register	• Availability of As-Built information • Access to Site • Statutory approvals and ACSA approvals • Site Constraints and Constructability • Notification of Claims • Financial and Procurement
11.2	The <i>Works Information</i> is in	Part C3 'Scope of Works' section of this contract
11.2	The <i>Site Information</i> is in	Part C4 'Works Information' section of this contract
11.2	The <i>boundary of the site</i> is	King Phalo Airport
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period of reply</i> is	7(seven) business days
3	Time	
31.2	The <i>starting date</i> is	On signing of the Contract by ACSA
11.2	The <i>completion date</i> is	Twelve(12) months after contract starting date
30.1	The <i>access date</i> is	to be agreed with Employer before contract start date.
31.1	The <i>Contractor</i> submits a first (preliminary) programme with the tender by	the tender closing date



AIRPORTS COMPANY SOUTH AFRICA

32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	4 (four) weeks																												
35.1	The <i>Employer</i> is not willing to take over the works before the <i>completion date</i>	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 <i>defects date</i> is	12 (twelve) months after Completion of the whole of the <i>works</i>																												
43.2	The <i>defects correction period</i> is	2 (two) weeks																												
5	Payment																													
50.1	The <i>assessment interval</i> is	15th day of each successive month upon receipt of a valid invoice.																												
50.1	The <i>currency of this contract</i> is the	South African Rand																												
51.2	The period within which payment is made is	4 (four) weeks																												
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	<table><tr><td>Month</td><td>Days</td><td>Month</td><td>Days</td></tr><tr><td>January</td><td>3</td><td>July</td><td>1</td></tr><tr><td>February</td><td>1</td><td>August</td><td>1</td></tr><tr><td>March</td><td>1</td><td>September</td><td>1</td></tr><tr><td>April</td><td>2</td><td>October</td><td>1</td></tr><tr><td>May</td><td>1</td><td>November</td><td>2</td></tr><tr><td>June</td><td>1</td><td>December</td><td>1</td></tr></table>	Month	Days	Month	Days	January	3	July	1	February	1	August	1	March	1	September	1	April	2	October	1	May	1	November	2	June	1	December	1
Month	Days	Month	Days																											
January	3	July	1																											
February	1	August	1																											
March	1	September	1																											
April	2	October	1																											
May	1	November	2																											
June	1	December	1																											
7	Title	No data required for this section of the <i>conditions of contract</i>																												
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 <i>conditions of contract</i>																												



10	Data for Main Options	
A	Priced contract with Activity Schedule	as detailed in Part C2
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is	The person appointed jointly by the parties from the list of adjudicators contained below
W1.2	The <i>Adjudicator nominating body</i> is	The current Chairman of Johannesburg Advocate's Bar Council
W1.4	The <i>tribunal</i> 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 0.5%, to the maximum of 10% of the Contract value
X16	Retention	
X16.1	The retention percentage is	10% of the contract value.
	Retention period for performance monitoring	52 weeks after completion of the whole of the works, subject to satisfactory operational performance of the SCADA panel
X18	Limitation of Liability	
X18.1	The <i>Contractor's</i> 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's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	Total of the losses incurred and/or repairs to the damages caused
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	Total of the losses incurred and/or repairs to the damages caused



X18.4	The <i>Contractor's</i> 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 <i>Contractor's</i> total direct liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than the excluded matters, is limited to the total of the losses incurred and/or repairs to the damages caused and applies in contract, tort or delict and otherwise to the extent allowed under the law of the contract.
-------	--	--

The 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 *works*, Plant and Materials),
- death of or injury to a person;
- damage to third party property; and
- infringement of an intellectual property right

Z	The <i>Additional conditions of contract</i> are	Z1 – Z20
	Amendments to the Core Clauses	
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 <i>Project Manager</i> , the <i>Supervisor</i> , or the <i>Adjudicator</i> 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 <i>Contractor</i> 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:	
Z3.1	Add the following at the end of core clause 27: The <i>Contractor</i> 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 <i>Contractor</i> shall be responsible for the correct setting out of the <i>Works</i> in accordance with the original points, lines and levels stated in the <i>Works</i> Information or notified by the <i>Project Manager</i> , <i>Supervisor</i> or the <i>Employer</i> . Any errors in the positioning of the <i>Works</i> shall be rectified by the <i>Contractor</i> at the <i>Contractor's</i> own costs.	
Z4	Extending the defects date:	
Z4.1	Add the following as a new core clause 46: If the <i>Employer</i> cannot use the <i>works</i> due to a Defect, which arises after Completion and before the <i>defects date</i> , the <i>defects date</i> is delayed by a period equal to that during which the <i>Employer</i> , due to a Defect, is unable to use the <i>works</i>	
Z4.2	If part of the <i>works</i> is replaced due to a Defect arising after Completion and before the <i>defects date</i> , the <i>defects date</i> for the part of the <i>works</i> 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 <i>Project Manager</i> notifies the <i>Contractor</i> of the change to a <i>defect date</i> when the delay occurs. The period between Completion and an extended <i>defects date</i> does not exceed twice the period between Completion and the <i>defects date</i> 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 rescue 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 <i>Contractor</i> gives the <i>Employer</i> an unconditional, on-demand performance bond, provided by a bank which the <i>Project Manager</i> and the <i>Employer</i> 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 <i>Contractor ensures</i> that the performance bond is valid and enforceable until the end of the <i>contract period</i> . If the terms of the performance bond specify its expiry date and the end of the <i>contract period</i> does not coincide with such expiry date, four weeks prior to the said expiry date, the <i>Contractor</i> extends the validity of the performance bond until the end of the <i>contract period</i> . If the <i>Contractor</i> fails to so extend the validity of the performance bond, the <i>Employer</i> may claim the full amount of the performance bond and retain the proceeds as cash security
Z7	Limitation of liability:
Z7.1	Insert the following new clause as Option X18.6: The <i>Employer's</i> liability to the <i>Contractor</i> for the <i>Contractor's</i> 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 <i>Contractor</i> 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 <i>Contractor</i> shall not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> , 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 <i>Contractor</i>
Z8.2	The <i>Employer</i> may cede and delegate its rights and obligations under this contract to any person or entity
Z9	Joint and several liabilities
Z9.1	If the <i>Contractor</i> 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 <i>Employer</i> for the performance of the Contract.
Z9.2	The <i>Contractor</i> shall, within 1 week of the Contract Date, notify the <i>Project Manager</i> and the <i>Employer</i> of the key person who has the authority to bind the <i>Contractor</i> on their behalf.
Z9.3	The <i>Contractor</i> 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 <i>Employer</i> .
Z10	Ethics
Z10.1	The <i>Contractor</i> 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 <i>Employer</i> is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.
Z10.2	The <i>Contractor's</i> breach of this clause constitutes grounds for terminating the <i>Contractor's</i> obligation to Provide the Works or taking any other action as appropriate against the <i>Contractor</i> (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

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

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 gbandi@badela.co.za
Mr. Errol Tate Pr. Eng.	Durban	+27 11 262 4001 Errol.tate@mweb.co.za
Adv. Saleem Ebrahim	Gauteng	+27 11 535-1800 salimebrahim@mweb.co.za
Mr. Sebe Msutwana Pr. Eng.	Gauteng	+27 11 442 8555 sebe@civilprojects.co.za
Mr. Sam Amod	Gauteng	sam@samamod.com
Adv. Sias Ryneke SC	Gauteng	083 653 2281 ryneke@duma.nokwe.co.za
Mr. Emeka Ogbugo (Quantity Surveyor)	Pretoria	+27 12 349 2027 emeka@gosiame.co.za

Z16.2 Appointment of the Arbitrator



AIRPORTS COMPANY SOUTH AFRICA

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. Eng.	Durban	+27 11 262 4001 Errol.tate@mweb.co.za
Adv. Saleem Ebrahim	Gauteng	+27 11 535-1800 salimebrahim@mweb.co.za
Mr. Sebe Msutwana Pr. Eng.	Gauteng	+27 11 442 8555 sebe@civilprojects.co.za
Mr. Sam Amod	Gauteng	sam@samamod.com
Adv. Sias Ryneke SC	Gauteng	083 653 2281 ryneke@duma.nokwe.co.za
Mr. Emeka Ogbugo (Quantity Surveyor)	Pretoria	+27 12 349 2027 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 *Contractor* 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 *Project Manager* 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 *Project Manager* 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 *Contractor* agrees to the following:

- Z20.1** As part of this contract the *Contractor* 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 <i>working areas</i> are	Landside Area
24.1	The <i>Contractor's Key people</i> are:	CV's to be appended to Tender Schedule
	Name:	
	Job Title for this Project:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job Title for this Project:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job Title for this Project:	
	Responsibility:	
	Qualifications:	
	Experience:	



Name:

Job Title for this Project:

Responsibility:

Qualifications:

Experience:



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 and..... 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

C1.4: ACSA INSURANCE CLAUSES

SECTION A: DEFINITIONS

Landside refers to:

- Areas of the airport before the security points, and
- The restricted area beyond the security points but, within the perimeter of gatehouses, passenger terminals and cargo buildings

Airside refers to:

- The Apron / manoeuvring areas
- Area within the airside boundary/perimeter fence, excluding the internal areas of the passenger terminals, perimeter gatehouses and cargo building.

SECTION B: INSURANCE CLAUSES

1. Insurance requirements for contracts with a value below R50million on the LANDSIDE

1.1 Contract Works

- With regards to contract works claims, the contractor/consultant is responsible for a deductible (excess) of R250 000.
- Contractors / consultants may re-insure the deductible

1.2 Public Liability

- In the event of a claim against the contractor / consultant for 3rd party property damage the contractor / consultant will be responsible for a deductible (excess) of R275 000
- In the event of a claim against the contractor / consultant for removal of lateral support, the contractor / consultant will be responsible for a deductible (excess) of R500 000
- Contractors / consultants may re-insure the deductibles

1.3 Professional Indemnity

- All consultants are responsible for Professional Indemnity cover of R5million
- Contractors who have a material design element, excluding typical P & G related work, as part of their scope, are responsible for Professional Indemnity cover of R5million
- In the event of a claim above R5million, the ACSA PI cover will kick in for the amount in excess of R5m.
- Proof of cover in the form of a certificate of insurance should be provided to ACSA before a contract is signed between ACSA and the contractor and/or consultant.

2. Insurance requirements for contracts below R50million on the AIRSIDE

2.1 Contract Works

- With regards to contract works claims, the contractor / consultant is responsible for a deductible (excess) of R250 000.
- Contractors / consultants may re-insure the deductible



2.2 Public Liability

- In the event of a claim brought against the contractor / consultant for 3rd party property damage the contractor / consultant will be responsible for a deductible (excess) of R525 000
- In the event of a claim brought against the contractor / consultant for removal of lateral support, the contractor / consultant will be responsible for a deductible (excess) of R750 000
- In the event of a claim brought against the contractor / consultant for damage to aircraft, the contractor / consultant will be responsible for a deductible (excess) of R750 000
- Contractors / consultants may re-insure the deductibles

2.3 Professional Indemnity

- All consultants are responsible for Professional Indemnity cover of R5million.
- Contractors who have a material design element, excluding typical P & G related work, as part of their scope, are responsible for a Professional Indemnity cover of R5million.
- In the event of a claim above R5million, the ACSA PI cover will kick in for the amount in excess of R5million.

Proof of cover in the form of a certificate of insurance should be provided to ACSA before a contract is signed between ACSA and the contractor and/or consultant.



PART C2: PRICING DATA

C2.1. Pricing Assumptions: Option A

Amplification of or assumptions about measurement items

For the avoidance of doubt the following is provided to assist in the interpretation of descriptions given in the *method of measurement*. In the event of any ambiguity or inconsistency between the statements in the *method of measurement* and this section, the interpretation given in this section shall be used.

- The contractor must plan the work in this contract as a set of activities. These should be the same activities as he shows on his programme.
- This schedule covers the items that will be measurable. A lump sum price for each activity shall be entered and no other items will be measured. Costs not covered by the items may be included in the most appropriate items listed. The Contractor has the liberty to insert items, quantities and rates of his own choosing in the said schedule as a separate line item.
- The pricing schedule as completed by the Contractor shall be **VAT exclusive** prices and shall cover, "inter alia" all general risks, liabilities, obligations, profit, expenses, costs, bonuses, all allowances such as shift and standby allowances, sick-leave, other leave, brackets, fixings, incidentals, consumables etc. that will be required to successfully complete this contract as set forth or as implied in the documents on which this Contract is based.
- The contractor is to take note that payment is made for each activity only when it is complete. "Complete" as it is used in this schedule means the complete system or unit as specified in the particular document.
- Unless a separate rate for the supply and for the installation of any item is specifically called for, the supply and installation costs of any item shall be fully included in the price.
- The description of each item shall, unless otherwise stated herein, be held to include making, conveying and delivering, unloading, storing, unpacking, hoisting, setting, fitting and fixing in position, cutting and waste, patterns, models and templates, plant, temporary works, return of packaging, establishment charges, profit and all other obligations arising out of the contractual conditions.
- No alterations to the original text shall be allowed. If any alterations are made, it shall be ignored, and the original wording will apply.
- Variations in the scope and extent of the work shall be allowed to meet the Engineer's requirements and shall be measured and priced at the rates entered in the Activity Schedule, where appropriate, and shall form an addition to or deduction from the total of the Accepted Contract Amount. Any items or variations for which rates have not been included in the Activity Schedule shall be agreed and priced as non-scheduled items.
- All provisional sums and contingency amounts shall be expended as directed by the Engineer and any balance remaining shall be deducted from the contract sum.
- All items described as "provisional" shall be measured as executed and paid for according to prices in the Activity Schedule and any amounts not spent shall be deducted from the contract price. No work for which "provisional" items are provided shall, be commenced without written instructions from the Project Manager.
- No commitment to expending any portion of the contingency amounts and/or provisional sums are made or implied by the Employer.
- The Contractor shall not be entitled to any claim in instances where provisional sums are partially or in total removed from the contract.



DISBURSEMENT SCHEDULE

- (a) Only project related costs listed below and presented to ACSA will be compensated by ACSA.
- (b) Any disbursement costs related to travelling to and from the airport or accommodation for the purpose of the project(s) is deemed to be inclusive in the agreed fee structure, unless otherwise agreed in writing by both parties. Disbursement costs not mentioned below (including under note (e)) may be brought to the attention of the ACSA project representative for approval and agreement on the recoverable amount, prior to incurring such cost.
- (c) All rates are exclusive of VAT
- (d) Health and Safety Agent will be recovered through Disbursements.
- (e) No mark-up on any disbursement cost will be paid.
- (f) No payment for disbursement will be made for the following:
 - Travelling (except for on-site travelling) and accommodation
 - Typing of correspondence, payment certificates, variation orders, progress reports or financial reports
 - Telephone calls
 - Cellular calls
 - Computer costs
 - Telefaxes (outgoing or incoming)
 - Email (sent or received)

C2.2. The Activity Schedule

Item	Description	Unit Cost	Quantity	Total
Section A: Preliminary and General				
1	Project Management, Contract Management and Administration (including required reporting such as project progress reports, risk register and management reports, etc.).	R	1	R
2	All tools and machinery required to complete the Works.	R	1	R
3	All required on-site testing and certification (	R	sum	R
4	Electrical Certificate of Compliance	R	sum	R
5	Safe Disposal Certificate for the old Scada panel.	R	sum	R
6	Erection of safety signage for construction	R	1	R
7	Preparation and submission of a health and safety file for approval to the Employer	R	1	R
Sub-Total A			R	
8	Section B: Installation, Commissioning & Disposal			
	Electrical Complex			
8.1	Supply, deliver, install, configure and test Scada panel	R	1	
9.	DISPOSAL			
9.1	Decommissioning & Removal of Old Scada panel	R	1	
9.2	Allowable off (Contractor to price for the old Scada panel, if contractor intends to buy off ACSA)		1	



AIRPORTS COMPANY
SOUTH AFRICA

Item	Description	Unit Cost	Quantity	Total
Sub-Total B			R	
Sub-Total C (Sub-Total (A+B))			R	
Contingency (10% of Sub Total C)			R	
Sub Total D (Tendered Amount Excluding Vat) (Sub-Total (C + Contingency))			R	
Vat (15% of Sub-Total D)			R	
*Total Tendered Amount (Sub-Total (D + Vat))			R	

*This amount should be carried over to the form of offer PartC1. The total tendered amount shall be fixed, and it is not subject to fluctuation as a result of inflation, foreign, exchange rate variation, etc.

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

**C3.1: EMPLOYER'S WORKS INFORMATION****1. Description of the works****a) Supply:**

- Supply a new Scada panel at King Phalo Airport
- Supply all necessary hardware, software, accessories, wiring and
- Provide manufacturer's warranty and technical data sheets.

b) Delivery:

- Deliver the new Scada panel and accessories to King Phalo Airport's Electrical Complex
- Ensure proper packaging and transport to avoid damage.
- Verify all components on delivery against the approved bill of quantities (BOQ)

c) Installation:

- Decommission and disconnect the existing Scada panel safely.
- Remove the existing Scada panel from site.
- Install the new Scada panel, including electrical connections, communication interfaces,
- Ensure compliance with local electrical codes and safety standards.

d) Testing and Commissioning:

- Perform pre-commissioning inspection and verify correct installation.
- Carry out Site acceptance tests (SAT).
- Integration with substation /plant automation system.
- Carry out end-to-end functional testing under live conditions.
- Verification of interlocks and safety logic.
- Carry out final performance verification and system stabilization.
- Training of ACSA relevant employees and handover.
- Submission of commissioning reports and as built documentations,



e) Removal and Disposal:

- Remove the old Scada panel from site.
- Handle and transport old Scada panel as per waste regulations.
- Provide a disposal certificate issued by a certified waste management facility.
- Ensure full compliance with environmental and safety laws.

In addition, if the contractor show interest in purchasing the old existing Scada panel, the contractor/supplier will be allocated opportunity to provide pricing for the Old Scada panel. The price will be deducted to the total invoiced for the New Scada panel.

2. Contract Management

Management meetings¹

The Contractor will be expected to attend meetings relating to operations, contract management and other issues that may arise from time to time. As far as is practicable, the Contractor will make all required persons available for these meetings. The Contractor shall not submit claims for payment for staff attending any of these meetings.

Regular meetings of a general nature may be convened and chaired by the *Project Manager* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Project progress meeting and safety inspections	Bi-Weekly	Onsite	Contractor, Supervisor and Employer's safety officers
Overall contract progress and feedback	Monthly	Onsite/telecon/skype	Project Manager, Contractor and 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.

¹ The information in this section is required by the contract. Do not delete.



Health and safety risk management

The *Contractor* shall comply with the health and safety requirements contained in this document.

The Project Manager shall be entitled to fine the Contractor an amount of **R3000.00** for each non-conformance to Health and Safety matters. This shall not transfer any of the Contractor's responsibilities in this regard to the Employer by any means.

The Contractor shall be fully responsible for compliance to the Occupational Health and Safety Act for all persons, equipment and installations relating to this Contract. The Contractor is expected to sign the undertaking in this regard as attached in the annexes.

It shall be the Contractor's responsibility to ensure that all relevant labour and safety legislation is adhered to in rostering staff.

All persons on company premises shall obey all health and safety rules, procedures and practices. In particular, NO SMOKING signs and the prohibition of the carrying of smoking materials in designated areas shall always be obeyed. A copy of the Safety Rules booklet is available on request from the ACSA Safety Department.

All the applicable requirements of the Occupational Health and Safety Act (1993) and Regulations and any amendments thereto, shall be met. Where the OHS, Act prescribes certification of competency of persons performing certain tasks, proof of such certification shall be provided to the Project Manager.

The contractor's Workmen's Compensation fees must be up to date. A copy of the Contractor's WCA registration shall be produced on request.

The following areas in the company are declared as "HOT WORKS PERMIT" areas:

All airside areas

All basement areas

All areas accessible to the public

All enclosed areas

The terminal building.

Any process in the above-mentioned areas involving open flames, sparks, or heat shall be authorised by the issue of a permit to work - obtainable from the ACSA Safety department. Any work done under the protection of a permit to work shall be in strict compliance with every prescription regarding the permit.

Safety equipment shall be used where applicable (e.g. safety, goggles, boots, harness, etc.) The Contractor, at his/her own expense shall provide such equipment, for his/her employees. The Contractor shall apply the necessary discipline and control to ensure compliance by his workers.

All Contractors must ensure that his/her employees are familiar with the existing emergency procedures and must co-operate in any drills or exercises, which might be held. Emergency / fire equipment and extinguishers shall not be obstructed at any time.

No person shall perform an unsafe / unhygienic act or operation whilst on Company premises.

No unsafe/dangerous equipment or tools may be brought onto or used on Company premises. The Company reserves the right to inspect all equipment/tools at any time and to prevent/prohibit their use, without any penalty to the Company and without affecting the terms of the Contract in any way.

The Company reserves the right to act in any way to ensure the safety/security of any persons, equipment or goods on its premises and will not be liable for any cost or loss evoked by the action. This includes the right to search all vehicles and persons entering, leaving or on the premises and to inspect any parcel, package, handbag and pockets. Persons who are not willing to permit such searches may not bring any such items or vehicles onto the premises.

The Contractor shall maintain good housekeeping standards in the area where he is working for the duration of the contract.

At no time must the Contractor interfere with, or put at risk, the functionality of any fire prevention system. Care must also be taken so as to prevent fire hazards.

The Contractor is required to issue all staff with standard uniforms. This shall as a minimum include: safety shoes, overalls (clearly marked with Contractor's company logo) and numbered reflective jackets (as per Airport requirements). All costs relating to uniforms shall be for the Contractor's account.

Environmental constraints and management



The Contractor shall comply with the environmental criteria and constraints stated in Annexure [B] to this Works Information



Quality assurance requirements

All work must be executed in accordance with prevailing industry norms and standards relating to quality, such as ISO9001.

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.

Invoicing and payment

Within two days of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Project Manager's* payment certificate.

The *Contractor* shall address the tax invoice to the following Address,

Airports Company South Africa SOC Limited
KING PHALO AIRPORT
66 Settlers Way,
East London,
5201

and include on each invoice the following information:

Name and address of the *Contractor* and the *Project Manager*.

The contract number and title;

Contractor's VAT registration number;

The *Employer's* VAT registration number 4930138393;

Description of work done by cross reference to *Project Manager's* certificate;

Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;

Quote purchase order number as a reference

The Contractor should arrange with ACSA's finance department for making all payments electronically.

Invoices should be submitted via email to Invoices.Acsa@airports.co.za

Provision of bonds and guarantees.

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

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.



3. Specifications of the works

Employer's Specifications

3.1 General Specifications

The following are the minimum specifications:

1. General Information
The product shall be SABS approved
2. Design And Additional Features
a) Panel Construction: - Indoor, floor-mounted, free-standing design - Heavy-duty sheet steel enclosure (minimum 2.0 mm thickness) - Degree of protection: IP54 or higher - Powder-coated finish with anti-corrosion treatment. - Front access for operation and maintenance. - Clearly labeled equipment, terminals, and wiring. - Adequate ventilation or forced cooling as required. b) Control and Automation Equipment - Industrial-grade PLC or RTU suitable for MV network applications. - Modular I/O system with minimum 20-30% spare capacity. - Interposing relays for safe interfacing with MV switch gear. - Internal wiring neatly routed, ferruled and numbered.
3. INPUT / OUTPUT Electrical Characteristics
a. Digital Inputs (DI) - Rated for 24 V DC field signals. - Accepts dry contacts and voltage signal from field devices. - Typical inputs include: - Circuit breaker OPEN/CLOSE status - Circuit breaker Trip indication - Isolator/earthing switch status. - Protection relay alarms and trip outputs.



- Electrical isolation between field circuits and control electronics
- Noise-immune design suitable for MV substation environments.
- Status indication and time stamping of all digital inputs.

b. Digital Outputs (DO)

- Volt-free (Potential-free) relay contacts or 24V DC outputs.
- Used for:
 - Circuit breaker **OPEN**/**CLOSE** commands.
 - Reset and acknowledge commands.
 - Control of auxiliary devices.
- Adequate contact rating for control circuits.
- Interposing relays provided where required for safety.
- Fail-safe operation on loss of power or communication.

c. Analog Inputs (AI)

- Signal ranges:
 - 4-20 mA
 - 0-10 V (if required)
- Inputs sourced from:
 - Energy meters
 - Transducers for voltage, current, power and frequency.
- High accuracy and resolution suitable for operational monitoring
- Galvanic isolation from field circuits.
- Scaled and displayed correctly on HMI/SCADA

d. Analog Outputs (AO)

- Signals ranges:
 - 4-20 mA or 0-10 V
- Used for control or reference signals where required.
- Stable and noise-immune output performance.
- Electrically isolated from control electronics.
-



4. Efficiency and Performance

I. Operational Efficiency

- Designed for continuous 24/7 operation without performance degradation.
- Fast processing of input signals to ensure real time monitoring and control.
- Minimal Internal power losses to reduce heat generation and improve component life.
- Efficient power distribution within the panel to ensure stable operation of all I/O modules.

II. Input / Output Performance

- Digital Inputs:
 - Reliable detection of status changes without false triggering.
 - High Immunity to electrical noise and interference
 - Accurate and stable signal recognition from field devices.
- Digital Outputs:
 - Rapid and reliable execution of control commands
 - Consistent output performance under varying load conditions
 - Fail-safe behaviour on power loss or system fault.
- Analog Inputs:
 - High accuracy and repeatability of measured values.
 - Stable readings with minimal drift over time.
 - Proper scaling and resolution for operational monitoring.
- Analog Outputs:
 - Smooth and stable output signals
 - Accurate reproduction of control values without oscillation or distortion.

III. System Response Time

- Fast response from field input change to SCADA/HMI display.
- Timely execution of control commands from SCADA to field devices.
- Event recording and alarm generation without delay.
- Suitable response times for MV network protection coordination and operational needs.

IV. Reliability and Availability

- High system availability with no single point of failure in critical I/O functions.



AIRPORTS COMPANY SOUTH AFRICA

- Redundant power supplies and communication paths where specified.
- Continuous self monitoring of I/O modules and internal power health.
- Alarm generation for module failure, power loss, or communication errors.

5. Product specifications

i. Hardware Components

- a. Central Scada Servers
 - Dual servers (active/standby)
 - 19" rackmount with:
 - Multi-core CPUs
 - Minimum 64GB Ram
 - RAID storage (SSD)
 - Redundant power supplies.
- b. Human-Machine Interface (HMI) stations
 - Workstations in Electrical Complex of KPA
 - High-resolution dual monitors recommended.
- c. RTUs/PLCs
 - Ruggedized units rated for MV environment.
 - Support local I/O expansion modules.
 - IEC 61850 and/or IEC 60870-5-104 native support.
- d. Communication Equipment
 - Managed switches
 - Firewalls (Industrial grade)
 - Optional wireless radios/cellular routers
 - GPS clocks for time synchronization



AIRPORTS COMPANY SOUTH AFRICA

ii. Software Requirements

(a) Scada Platform

- Scada software with:
 - Real-time visualization (single-line diagrams)
 - Alarm and event management
 - Trending and historical data
 - Report Generation
 - User and role management.

(b) Database

- Historian or time-series database
- Minimum retention of 5 years (configurable).

(c) Intergration Intwefaces

- API (REST/OPC UA)
- Support for exporting data to:
 - Energy Management Systems (EMS)
 - Airport operations center (AOC)
 - Maintenance Systems.

iii. Performance Criteria

Metric	Requirement
Data Update Cycle	≤1 second (configurable)
System Uptime	99.99%
Alarm response	<1 second
Historical data resolution	1 sec-1min



AIRPORTS COMPANY SOUTH AFRICA

6. Standards & Compliance
• IEC 61850, IEC 60870-5-104 • IEEE C37.x series (protection coordination) • IEC 61000 (EMC standards) • Local grid code compliance (Eskom/airport power regulations)
7. Installation & Commissioning
• Site survey and design documentation. • FAT, SAT and commissioning tests. • Calibration of I/O and communications. • Scada tags tagging and database verification.
8. Documentation & Training
• As-built drawings • Wiring and configuration diagrams • Operation and maintenance manuals • On-site training for Operators & technicians. • Handover session with airport operations team.
9. Warranty & Support
• Minimum 24-month warranty • The warranty shall cover: - Hardware defects - Software defects - Commissioning/Integration issues • The supplier shall commit to service levels during the warranty period, for example: 1. Response Time: - Critical (Scada down / MV control unavailable): 4 hours on-site or remote initiation. - High (Major function degraded): 8 business hours remote, 1 business day on-site. - Medium/Low: 2-3 business days



AIRPORTS COMPANY SOUTH AFRICA

2. On-site Support

- The supplier shall provide on-site support for critical failures during the warranty period on a defined schedule (e.g 24/7 critical escalation, weekday standard support).

3. Extended Support & Long-term Service Agreement (LTSA)

- After the warranty period ends, the supplier must offer a formal support & maintenance agreement with options as:
 - Software Support:
 - Updates, patches, bug fixes for the scada application and HMI within supported versions.
 - Technical Support:
 - 24/7 remote helpdesk.
 - On-site visits per agreed SLA.
 - Preventive Maintenance:
 - Periodic health checks, system backups, database integrity checks.
 - Lifecycle Services:
 - Upgrades support for future expansion (new substations, devices), version migrations and performance tuning.

4. Extended Warranty Options

- The project may require extended warranty options beyond the standard:
 - +12 months warranty extension
 - +24 months warranty extension
 - 5 year comprehensive OEM warranty.
- Extended warranty shall include:
 - Parts and labor
 - Software reconfiguration after vendor updates.
 - On-site visits where remote resolution is impossible.

3.2 Electrical Characteristics

All control gear shall be suitable for operation with the specified manufacture's specifications.



3.3 Electrical connections

- The contractor shall ensure that all connections of the new Scada panel installation is in accordance with SANS 10142-The contractor shall ensure the removal of existing installation and issuing of disposal certificate.

3.5 Testing

- Successful test results shall be presented to the Employer after delivery, installation and commissioning of SCADA panel.

4. Applicable Standards and norms:

The below list should be used as a guide; however, it is not exhaustive. The Contractor shall ensure compliance to current and relevant industry standards and norms pertaining to the Works.

Note: in a case where a stringent standard was used than the below mentioned, a stringent standard shall take precedence.

- Occupational Health and Safety Act of 1993
- SANS 10142-1 (Latest edition)
- SANS 16368
- SANS 60598-2-3
- SANS 475



5 Personnel

A schedule of key personnel to this Contract will be provided to the Project Manager at commencement of this Contract. This will, as a minimum, include all persons from technician/artisan level to management level. For the full duration of this Contract, none of these persons will be replaced by a person of lesser ability or qualification. All on-site staff leaves shall be reported and agreed with the Project Manager. The Project Manager may request the replacement of any person with unsatisfactory performance or fails to comply with this contract.

It is the contractor's responsibility to ensure that there is always sufficient competent staff to perform the works as planned. It shall be the Contractor's responsibility to ensure that all relevant labour and safety legislation is adhered to in rostering staff.

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

Permit	Required by/for	Department
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 work	ACSA Safety

Subcontracting

Should any part of the works be subcontracted, the Contractor will be responsible for all Works as if it was done so by the Contractor.

No casual labour (i.e., “off the street” labour) may be employed by the Contractor unless pre-arranged with ACSA. Whenever this is required, the Contractor shall come to a suitable arrangement with ACSA regarding sourcing and screening of such individuals.



6 Annexes to the Scope of Work

6.1 Annexures issued by the *Employer*.

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

Annexure	Revision	Title
Annexure A	1	Occupational Health and Safety Agreement
Annexure B	2	Environmental Terms and Condition
Annexure C	3	Service Level table

**ANNEXURE A:****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 (COLD 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 SOC LIMITED KING PHALO AIRPORT
Physical Address: Airport Company South Africa SOC Limited KING PHALO AIRPORT 66 Settlers Way, East London, 5201

Hereinafter referred to as “Client”

Name of organisation:
Physical Address

Hereinafter referred to as “the Mandatory/ Principal Contractor”

MANDATORY’S MAIN SCOPE OF WORK

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.
2. “Mandatory” 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 Mandatory 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 duly 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 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,

I a duly authorised 16.2 Appointee acting for and on behalf of(company name) undertake to ensure that the requirements and the provision of the OHSAct 85 of 1993 and its regulations are complied with.

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

**ANNEXURE B:****ENVIRONMENTAL TERMS AND CONDITIONS - EMS 048**

The following Environmental Terms and Conditions shall be strictly adhered to by all contractors when conducting works for ACSA. ACSA shall audit contractor activities, products and services on an ad hoc basis to ensure compliance to these environmental conditions. Any pollution clean-up costs shall be borne by the contractor.

ISSUE	REQUIREMENT
Environmental Policy	ACSA's Environmental Policy shall be communicated, comprehended and implemented by all ACSA appointed contractor staff.
Storm water, Soil and Groundwater Pollution	- No solid or liquid material may be permitted to contaminate or potentially contaminate storm water, soil or groundwater resources. - Any pollution that risks contamination of these resources must be cleaned-up immediately. Spills must be reported to ACSA immediately. Contractors shall supply their own suitable clean-up materials where required. - Washing, maintenance and refuelling of equipment shall only be allowed in designated service areas on ACSA property. It is the contractor's responsibility to determine the location of these areas. - No leaking equipment or vehicles shall be permitted on the airport.
Air Pollution	- Dust: Dust resulting from work activities that could cause a nuisance to employees or the public shall be kept to a minimum. - Odours and emissions: All practical measures shall be taken to reduce unpleasant odours and emissions generated from work related activities. - Fires: No open fires shall be permitted on site.
Noise Pollution	- All reasonable measures shall be taken to minimize noise generated on site due to work operations. - The Contractor shall comply with the applicable regulations regarding noise.
Waste Management	- Waste shall be separated as general or hazardous waste. - General and hazardous waste shall be disposed of appropriately at a permitted landfill site should recycling or re-use of waste not be feasible. - Under no circumstances shall solid or liquid waste be dumped, buried or burnt. - Contractors shall maintain a tidy, litter free environment always in their work area. - Contractors must keep on file: - The name of the contracting waste company - Waste disposal site used - Monthly reports on quantities – separated into general, hazardous and recycled - Maintained file of all Waste Manifest Documents and Certificates of Safe Disposal - Copy of waste permit for disposal site This information must be available during audits and inspections.
Handling & Storage of Hazardous Chemical Substances (HCS)	- All HCS shall be clearly labelled, stored and handled in accordance to Materials Safety Data Sheets. - Materials Safety Data Sheets shall be stored with all HCS. - All spillages of HCS must be cleaned-up immediately and disposed of as hazardous waste. (HCS spillages must be reported to ACSA immediately). - All contractors shall be adequately informed with regards to the handling and storage of hazardous substances. - Contractors shall comply with all relevant national, regional and local legislation regarding the transport, storage, use and disposal of hazardous substances.
Water and Energy Consumption	ACSA promotes the conservation of water and energy resources. The contractor shall identify and manage those work activities that may result in water and energy wastage.



AIRPORTS COMPANY SOUTH AFRICA

Training Awareness	&	The conditions outlined in this permit shall be communicated to all contractors and their employees prior to commencing works at the airport.
-------------------------------	--------------	---

Penalties

Penalties shall be imposed by ACSA on Contractors who are found to be infringing these requirements and/or legislation. The Contractor shall be advised in writing of the nature of the infringement and the amount of the penalty. The Contractor shall take the necessary steps (e.g. training/remediation) to prevent a recurrence of the infringement and shall advise ACSA accordingly.

The Contractor is also advised that the imposition of penalties does not replace any legal proceedings, the Council, authorities, land owners and/or members of the public may institute against the Contractor.

Penalties shall be between R200 and R20 000, depending upon the severity of the infringement. The decision on how much to impose will be made by ACSA's Airport Environmental Management Representative in consultation with the Airport Manager or his/her designate and will be final. In addition to the penalty, the Contractor shall be required to make good any damage caused due to the infringement at his/her own expense.

I, of agree to the above conditions and acknowledge ACSA's right to impose penalties should I or any of my employees or sub-contractors fail to comply with these conditions.

Signed: _____ on this date: _____ (dd/mm/yyyy)

at:

**ANNEXURE C:**

SERVICE CATEGORY	PERFORMANCE STANDARD	METHOD OF MEASUREMENT	TARGET	Low Service Damages (Penalties)
Uniforms and staff personal protective equipment	Use of correct Personal Protective Equipment	No incidents related to non-use of PPE	100% compliance	Contractor pays R500 per staff member if staff members found non-compliant
Airport permits	Airport permits must always be displayed by the staff.	Random inspections by ACSA staff member	100 % compliance	Contractor pays R500 per staff member if staff members found non-compliant
Installation of Light Fittings	Weather permitting, contractor is expected to commence with activities within 48hours after delivery and acceptance of test certificate	Number of days to complete the work order	100 % compliance	Contractor pays 10% per day exceeded after 48 hours.
Notices displayed	Display relevant notices per section during activities	No incidents related to non- displaying of notices	100 % compliance	Contractor pays R1000 for failing to display Notices
Interaction with the employer	Attend Bi Weekly meetings	Complete attendance register	100% compliance	Contractor pays R1500 per scheduled meeting not attended

Parties agree to the following low service table. The low service damages does not influence the calculation of the contract sum/value.

I, _____ (name & surname) of _____
 _____ (company) agree to the above conditions and acknowledge ACSA's right to impose penalties should I or any of my employees or sub-contractors fail to comply with these conditions.

Signed: _____ on this date: _____ (dd/mm/yyyy)

at: _____ (airport name).



C3.2 CONTRACTOR'S WORKS INFORMATION

The Contractor should include information such as the Contractor's design and Plant and Materials specifications and schedules etc



PART C4: SITE INFORMATION

Figure 1: KPA 11 SUBSTATION