

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

BID NUMBER: RA7322/2023/RFP

TITLE OF PROJECT: THE REPLACEMENT OF DIESEL GENERATORS AT UPINGTON INTERNATIONAL, GEORGE AND KIMBERLEY AIRPORTS, AND REFURBISHMENT OF MEDIUM AND LOW VOLTAGE ELECTRICAL INFRASTRUCTURE INCLUDING THE UPGRADE OF POWER FACTOR CORRECTION SYSTEMS AT GEORGE AIRPORT.

NEC 3: PROFESSIONAL SERVICES CONTRACT (PSC)

Between

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Applicable at Upington International, George and Kimberley Airports

(Registration Number: 1993/004149/30)

and

(Registration Number: _____)

for

THE PROVISION OF ENGINEERING CONSULTANT FOR THE REPLACEMENT OF DIESEL GENERATORS AT UPINGTON INTERNATIONAL, GEORGE AND KIMBERLEY AIRPORTS, AND REFURBISHMENT OF MEDIUM AND LOW VOLTAGE ELECTRICAL INFRASTRUCTURE INCLUDING THE UPGRADE OF POWER FACTOR CORRECTION SYSTEMS AT GEORGE AIRPORT.

Contents:

Part C1	Agreements & Contract Data
Part C2	Pricing Data
Part C3	Scope of Works
Part C4	Site Information

VOLUME 2

NAME OF BIDDER:

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 **REQUEST FOR PROPOSALS FOR THE APPOINTMENT OF AN ENGINEERING CONSULTANT FOR THE REPLACEMENT OF DIESEL GENERATORS AT UPINGTON INTERNATIONAL, GEORGE AND KIMBERLEY AIRPORTS, AND REFURBISHMENT OF MEDIUM AND LOW VOLTAGE ELECTRICAL INFRASTRUCTURE INCLUDING THE UPGRADE OF POWER FACTOR CORRECTION SYSTEMS AT GEORGE AIRPORT.**

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 **Consultant** 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.

CONSOLIDATED OFFER : Professional Fees - Sum of a), b), c) & d)

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VAT IS:

The offered total of the Prices exclusive of VAT is	R
Value Added Tax @ 15% is	R
The offered total of the Prices inclusive of VAT is	R
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 **Consultant** in the conditions of contract identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
Bidder:**

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

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

1 Subject

Details

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.....

2 Subject

Details

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.....
.....

3 Subject

Details

.....

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.....

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 Cape Town International Airport, Private Bag X9002 Cape Town 7525	
Name & Signature of witness	<i>(Insert name and address of organisation)</i>	<i>(Insert name and address of organisation)</i>
Date		

Part C1.2 Contract Data

The conditions of contract are selected from the NEC3 Professional Services Contract, April 2013.

Each item of data given below is cross-referenced to the clause in the NEC3 Professional Services Contract which requires it.

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

Part one - Data provided by the *Employer*

1 General

The *conditions of contract* are the core clauses and the clauses for main Option:

A: Priced contract with activity schedule¹

E: Time based contract²

dispute resolution Option W1: Dispute resolution procedure

and secondary Options

X2 Changes in the law³

X5: Sectional Completion⁴

X6: Bonus for early Completion⁵

X7: Delay damages

X9: Transfer of rights

X10: Employer's Agent⁶

X11: Termination by the Employer⁷

X13: Performance Bond

X18: Limitation of liability

Z: Additional conditions of contract are clause Z1 to Z30, as applicable

of the NEC3 Professional Services Contract, April 2013.

10.1	The <i>Employer</i> is (Name):	Airports Company South Africa Limited SOC
	Address:	Airports Company South Africa Cape Town International Airport Private Bag X9002 Cape Town 7525
	Tel No:	021 937 1200
11.2(9)	The <i>services</i> are	Professional Engineering Services
11.2(10)	The following matters will be included in the Risk Register ¹ • Availability and accuracy of as-built information • Quality and correctness of cost estimates • Site constraints and constructability • Access to Site (approvals and permits, police clearance required) • Deviations from Programme & cash flow • Delay in supply of material and equipment • Statutory requirements and approvals • Working on the live Runway and Taxiways	

11.2(11)	The Scope is	in Part C3: Scope of Work
12.2	The <i>law of the contract</i> is	the law of the Republic of South Africa subject to the jurisdiction of the Courts of South Africa.
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	2 weeks
13.6	The <i>period for retention</i> is	N/A
2	The Parties' main responsibilities	
25.2	The <i>Employer</i> provides access to the following persons, places and things	
	access to	access date
1	Airside	Upon signing of the contract
2	Electrical Complex	Upon signing of the contract
3	Terminal Substation	Upon signing of the contract
3	Time	
31.2	The <i>starting date</i> is	Upon signing of the contract
11.2(3)	The <i>completion date</i> for the whole of the <i>services</i> is	36 months after contract start date.
11.2(6)	The <i>key dates</i> and the <i>conditions</i> to be met are:	
	Condition to be met	key date
1	Prepare (Stage 1) inception Report and submit to Employer for acceptance	As per accepted program
2	Prepare Concept and Viability Report and submit to Employer for acceptance	As per accepted program
3	Coordinating Design Development Report and submit to Employer for acceptance	As per accepted program
4	Coordinating Design Documentation Report and submit to Employer for acceptance	As per accepted program
5	Works Completion Report and submit to Employer	As per accepted program
6	Close-Out Report and submit to Employer	As per accepted program
7	Final Works Completion Report and submit to Employer	As per accepted program
31.1	The <i>Consultant</i> is to submit a first programme for acceptance within	2 weeks after Contract signing Date.
32.2	The <i>Consultant</i> submits revised programmes at intervals no longer than	4 weeks.
4	Quality	

40.2	The quality policy statement and quality plan are provided within	4 weeks of the Contract Date.
41.1	The <i>defects date</i> is	52 weeks after Completion of the whole of the <i>services</i> .
5	Payment	
50.1	The <i>assessment interval</i> is	25th day of each successive month.
51.1	The period within which payments are made is	4 weeks.
51.2	The <i>currency of this contract</i> is the	South Africa Rand (ZAR)
51.5	The <i>interest rate</i> is	1% above the publicly quoted prime rate of interest (calculated on a 365-day year) charged from time to time by Nedbank Bank of South Africa for amounts due in Rands; and the exchange rate published by the South African Reserve Bank from time to time for amounts due in other currencies.
6	Compensation events	No data required for this section of the <i>conditions of contract</i> .
7	Rights to material	No data required for this section of the <i>conditions of contract</i> .
8	Indemnity, insurance and liability	
81.1	The amounts of insurance and the periods for which the <i>Consultant</i> maintains insurance are	
	Event	Cover
	failure by the <i>Consultant</i> to use the skill and care normally used by professionals providing services similar to the <i>services</i>	Refer to C5.3
	death of or bodily injury to a person (not an employee of the <i>Consultant</i>) or loss of or damage to property resulting from an action or failure to take action by the <i>Consultant</i>	Refer to C5.3
	death of or bodily injury to employees of the <i>Consultant</i> arising out of and in the course of their employment in connection with this contract	As prescribed by the 3 years Compensation for Occupational Injuries and Diseases Act No. 130 of 1993
81.1	The <i>Employer</i> provides the insurances	Refer to Insurance Schedule, Annexure C5.3.
82.1	The <i>Consultant's</i> total 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	Refer to Insurance Schedule, Annexure C5.3
	The <i>Consultant</i> provides these additional insurances.	Refer to Insurance Schedule, Annexure C5.3
9	Termination	Refer Secondary Clause X11.

10	Data for main Option clause	
A	Priced contract with activity schedule	
21.3	The <i>Consultant</i> prepares forecasts of the total of the <i>expenses</i> At intervals of no longer than	4 weeks.
E	Time based contract	
21.4	The <i>Consultant</i> prepares forecasts of the total Time Charge and <i>expenses</i> at intervals no longer than weeks.	4 weeks.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is (Name)	TBC
	Address	
	Tel No.	
	Fax No.	
	e-mail	
W1.1	The <i>Adjudicator</i> is	the person selected by the Party intending to refer the dispute, from the Panel of Adjudicators listed in Annexure C.1 of this Contract Data.
W1.2(3)	The <i>adjudicator nominating body</i> is	the Chairman of the Johannesburg Society of Advocates, or his successor or his nominee.
W1.4(2)	The tribunal is	arbitration
W1.4(5)	The <i>arbitration procedure</i> is	as set out in the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	Cape Town, South Africa
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or - if the <i>arbitration procedure</i> does not state who selects an arbitrator, is the Chairman of the Association of Arbitrators (Southern Africa)	The Chairman for the time being of the Arbitration Foundation of South Africa (AFSA) (or its successor body) or his nominee.
12	Data for secondary Option clauses	
X2	Changes in the law	

X2.1	The <i>law of the project</i> is	The law of the Republic of South Africa subject to the jurisdiction of the Courts of South Africa.
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X5 Sectional Completion

X5.1 The *completion date* for each *section* of the *services* is:

section	description	completion date
1	Inception Report (Stage 1) Report and Submit to Employer for acceptance	As per accepted program
2	Concept and Viability Report (Stage 2) Report and Submit to Employer for acceptance	As per accepted program
3	Design Development (Stage 3) Report and submission to Employer for acceptance	As per accepted program
4	Design Documentation (Stage 4) Report and submit to Employer for acceptance	As per accepted program
5	Works Completion Report and submit to Employer	As per accepted program
6	Close-out Report and submission to Employer	As per accepted program
7	Final Works Completion Report (End of Defects Liability Period) and submit to Employer	As per accepted program

X5 and X7 Sectional Completion and delay damages used together

X7.1 Delay damages for late Completion of each *section* of the *services* are:
X5.1

section	description	amount per day
1	Inception Report (Stage 1) Report and Submit to Employer for acceptance	Amount per day is 0.05% up to the maximum of 10% of the total contract value
2	Concept and Viability Report (Stage 2) Report and Submit to Employer for acceptance	Amount per day is 0.05% up to the maximum of 10% of the total contract value
3	Design Development (Stage 3) Report and submission to Employer for acceptance	Amount per day is 0.05% up to the maximum of 10% of the total contract value
4	Design Documentation (Stage 4) Report and submit to Employer for acceptance	Amount per day is 0.05% up to the maximum of 10% of the total contract value

5	Works Completion Report and submit to Employer	Amount per day is 0.05% up to the maximum of 10% of the total contract value
6	Close-out Report and submission to Employer	Amount per day is 0.05% up to the maximum of 10% of the total contract value
7	Final Works Completion Report (End of Defects Liability Period) and submit to Employer	Amount per day is 0.05% up to the maximum of 10% of the total contract value

X7	Delay damages	
X7.1	Delay damages for late Completion of the whole of the services are	Amount per day is 0.05% up to the maximum of 10% of the total contract value.

X10	The Employer's Agent	
X10.1	The Employer's Agent is	Name: Address:
	The authority of the Employer's Agent is	Includes but not limited to the following: - To assess and process all invoices payable by the Employer. - To manage the project on behalf of the Employer. It is the Employer's sole discretion to amend the authority of the Employer's Agent under this contract through prior written communication to the Consultant.

X11	Termination by Employer	Terminate the Consultant's obligation to Provide the services for a reason not stated in this contract by notifying the Consultant.
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X18	Limitation of liability	
X18.1	The Consultant's liability to the Employer 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	The Consultant's 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
X18.3	The Consultant's liability to the Employer for Defects that are not found until after the defects date is limited to	Total of the Prices
X18.4	The Employer's liability to the Consultant for The Consultant's 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.
X18.3	The end of liability date is	52 weeks after Completion of the whole of the services.

Z	Additional conditions of contract
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The *additional conditions of contract* are

AMENDMENTS TO THE CORE CLAUSES

Z1 Interpretation of the law

- Z1.1 Add the following at the end of 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 Add the following at the end of core clause 12:

- Z2.1** In this contract:
- Z2.1.1** references to any Party to the Contract include its successors or permitted assigns;
 - Z2.1.2** references to the *Consultant* include the obligations of its personnel;
 - Z2.1.3** the references to the provisions of any law shall include such provisions as amended, re-enacted or consolidated from time to time in so far as such amendment, re-enactment or consolidation applies or is capable of applying to any works under this Contract;
 - Z2.1.4** references to this Contract and any deed, Contract or instrument are deemed to include references to this Contract or such other deed, agreement or instrument as amended, novated, supplemented, varied or replaced from time to time;
 - Z2.1.5** references to a "person" include a natural person, company or any other artificial person or other corporate entity, a charity, trust, partnership, joint venture, syndicate, or any other association of persons;
 - Z2.1.6** references to "month" shall be to a calendar month;
 - Z2.1.7** headings are for convenience only and will not be taken into consideration in the interpretation of the Contract;
 - Z2.1.8** where any number of days is prescribed, those days shall be reckoned exclusively of the first and inclusively of the last day unless the last day falls on a day that is not a working day, in which event the last day shall be the next succeeding working day;
 - Z2.1.9** any provision in Contract that is or may become illegal, invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such prohibition or unenforceability in such jurisdiction and shall be treated as severed from the balance of Contract in such jurisdiction, without invalidating the remaining provisions of Contract in such jurisdiction or affecting it in any other jurisdiction;
 - Z2.1.10** references to any amount shall mean that amount exclusive of VAT, unless the amount expressly includes VAT;
 - Z2.1.11** the rule of construction that if general words or terms are used in association with specific words or terms that are a species of a particular genus or class, the meaning of the general words or terms shall be restricted to that same class shall not apply, and whenever the word "including" is used followed by specific examples, such examples shall not be interpreted so as to limit the meaning of any word or term to the same genus or class as the examples given;
 - Z2.1.12** the rule of construction that the Contract shall be interpreted against or to the disadvantage of the party responsible for the drafting or preparation of Contract shall not apply;

- Z2.1.13 words and abbreviations that have well known technical or trade meanings are used in the Contract in accordance with such recognized meanings;
- Z2.1.14 references to a "*subsidiary*" or a "*holding company*" shall be references to a direct or indirect subsidiary or holding company as defined in the law of the jurisdiction of the place of incorporation of the company that has a subsidiary or holding company and "*affiliate*" is any company that is under common control with such subsidiary or holding company;
- Z2.2 Time is of the essence in the performance of the parties' respective obligations.
- Z3 Early Warning: add the following at the end of core clause 16.2:**
- The Consultant ensures that a sub-consultant attends risk reduction meeting if its attendance would assist in deciding the actions to be taken.
- Z4 The Consultant's obligations: Delete core clause 21 and replace with the following:**
- Z4.1 The *Consultant* Provides the *Services* in accordance with the *Scope* and with due expedition and without delay.
- Z4.2 The *Consultant's* obligation is to use the skill, care and diligence that is required of a professional providing similar services. The *Consultants* observes and/or exercise the degree of skill, care, diligence, prudence and foresight which would reasonably and ordinarily be exercised by a skilled and experienced *Consultant* in relation to his practices, methods, techniques, specifications and/or standards (whether in respect of design, engineering, construction, performance, safety, workmanship, equipment, components or otherwise) engaged in the same type of undertaking under the same or similar circumstances and conditions to the *Services*.
- Z4.3 The *Consultant* represents that he is and ensures that he is at all times fully experienced, properly qualified, registered, licensed, equipped, organized and financed to perform the *Services* in terms of this contract.
- Z4.4 The *Consultant* warrants that he has satisfied himself, prior to the Contract Date, as to the completeness, sufficiency and accuracy of all information provided to him as at the Contract Date.
- Z5 Sub-consulting**
- Add the following as a new core clause 24.4:** "The *Consultant*, within five days of request by the *Employer*, provides proof to the *Employer* that the *Consultant's* payment obligations towards its sub-consultants have been discharged. Failure by the *Consultant* to provide such proof to the satisfaction of the *Employer* entitles the *Employer* to certify payment directly to any such sub-consultant and the *Consultant* has no recourse to recover such amounts from the *Employer*. Such direct payment does not create privity of contract between the *Employer* and such sub-consultant. The *Employer* may set-off such direct payment from the amounts due to the *Consultant*."
- Z6 Add the following as a new core clause 26: Procedure for acceptance of the Consultant's Design Documents**
- Z6.1 If the Consultant assumes any design responsibility, then the *Consultant* submits the *Consultant's* Design Documents to the *Employer* for acceptance at the times and in the manner and format stated in the *Scope*. For the purposes of this clause, the "***Consultant's Design Documents***" are the drawings, design details and specifications of work, Plant and Materials prepared by the *Consultant* for the works.

- Z6.2 The *Employer* returns each *Consultant's* Design Document to the *Consultant* marked either 'A' (accepted), 'B' (accepted with comments) or 'C' (rejected). If the *Employer* marks a *Consultant's* Design Document 'B' or 'C', he states his reasons. A reason for not accepting a *Consultant's* Design Document is that it does not comply with:
- Z6.2.1 the Scope;
 - Z6.2.2 any previous *Consultant's* Design Documents which the *Employer* has returned marked 'A', or the *Employer* has returned marked 'B' and the *Consultant* has amended to incorporate the *Employer's* comments;
 - Z6.2.3 the applicable laws and regulations; or
 - Z6.2.4 any other provision of this contract.
- Z6.3 The *Employer* responds to the *Consultant* in accordance with clause Z6.2 above as soon as practicable. The *Consultant's* Design Documents shall not proceed to the next stage of the design process without the necessary response from the *Employer*, which response shall not be unreasonable delayed or withheld.
- Z6.4 Where a *Consultant's* Design Document is returned marked 'A', the *Consultant* proceeds with the relevant work in accordance with the *Consultant's* Design Document.
- Z6.5 Where a *Consultant's* Design Document is returned marked 'B', the *Consultant* amends the *Consultant's* Design Document to incorporate the *Employer's* comments and submits the *Consultant's* Design Document as so amended to the *Employer* for the *Employer's* acceptance. The *Employer* responds to the *Consultant's* amended Design Documents above as soon as practicable. The *Consultant's* shall not proceed with the relevant work in accordance with the amended *Consultant's* Design Documents until such amendments are accepted by the *Employer*, which acceptance shall not be unreasonable delayed or withheld.
- Z6.6 Where a *Consultant's* Design Document is returned marked 'C', the *Consultant*:
- Z6.6.1 amends the *Consultant's* Design Document to incorporate the *Employer's* comments,
 - Z6.6.2 re-submits it to the *Employer* for acceptance; and
 - Z6.6.3 does not proceed with the relevant work until the *Employer* has returned it marked 'A' or 'B' and, where it is marked 'B', has complied with clause Z6.5.
- Z6.7 If the *Consultant* disagrees with a comment of the *Employer* on a *Consultant's* Design Document marked 'B' or 'C', he notifies the *Employer* within one week of receipt stating his reasons and that in his opinion compliance with the comment will give rise to a change in the Scope. The *Employer* replies within one week of receipt of the *Consultant's* notice either confirming or withdrawing his comment. A confirmation or withdrawal by the *Employer* is not an acceptance of the *Consultant's* opinion
- Z6.8 If the *Consultant* does not notify the *Employer* within one week that he disagrees with a comment of the *Employer*, compliance with the comment does not give rise to a change in the Scope.
- Z7 Extending the defects date: add the following as a new core clause 42:**
- Z7.1 If the *Employer* cannot use the work 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 work.

Z7.2 The *Employer* notifies the *Consultant* 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.

Z8 Assessing the amount due:

Delete the first sentence of core clause 50.2 and replace with the following:

Invoices submitted by the *Consultant* to the *Employer* include

- the details stated in the Scope to show how the amount due has been assessed, and
- the details required by the *Employer* for a valid tax invoice.

Z9 Payment

Z9.1 Delete the first sentence of core clause 51.1 and replace with the following:

Each payment is made by the *Employer* within three weeks of receiving the *Consultant's* invoice showing the details which this contract requires or, if a different period is stated in the Contract Data, within the period stated.

Z9.2 Add the following as a new core clause 51.6:

If the *Consultant* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.4 is then calculated from the delayed date by when payment is to be made.

Z10 Compensation events: core clause 60.1(1) is amended to read as follows:

- (1) The *Employer* gives an instruction to change the Scope, except
 - a change to the Scope provided by the *Consultant* which is made either at his request or to comply with another part of the Services;
 - a change to the Scope arising from a decision at a risk reduction meeting where such a change is required as a result of the *Consultant's* fault or as a consequence of a risk carried by the *Consultant*.

Z11 Notification of a compensation event: the last sentence of core clause 61.3 is amended to read as follows:

If the *Consultant* does not notify a compensation event within four weeks of the date on which the *Consultant* became aware of the event or ought to have become aware of the event, he is not entitled to a change in the Prices, the Completion Date or a Key Date and the *Employer* is absolved from all liability in connection with the event.

Z12 Assessing compensation events: add the following at the end of core clause 63.4:

The *Consultant* shall only be entitled to changes to the Prices, the Completion Date and/or the Key Date if the compensation event affects a critical path.

Z13 Time periods for compensation events: add the following as a new clause 66.1:

The time periods stipulated in this clause 6 may be amended by agreement between the Parties and the Project Manager if the *Employer's* internal procedures dictate that the time periods be so extended and such agreement shall not be unreasonably withheld by the *Consultant*.

AMENDMENTS TO THE SECONDARY OPTION CLAUSES

Z19 Changes in the Law: Add the following as a new secondary option clause X2.2 (if option X2 is applicable to this Contract):

A change in law is defined as:

- the adoption, enactment, promulgation, coming into effect, repeal, amendment, reinterpretation, change in application or other modification after the Contract Date of any law, excluding (i) the enactment of any bill inside the country, but only if such bill is enacted without any material changes being made to the contents of such bill from the form published in the Gazette (as defined in the Interpretation Act, 1957) as at the Contract Date, and (ii) any such modification in law relating to any taxes, charges, imposts, duties, levies or deductions that are assessed in relation to a person's income; or
- any permit being terminated, withdrawn, amended, modified or replaced, other than (i) in accordance with the terms upon which it was originally granted, (ii) as a result of the failure by the Consultant to comply with any condition set out therein, or (iii) as a result of any act or omission of the *Consultant*, any Sub-Consultant or any affiliate to the *Consultant*.

Z20 Delay Damages: add the following to as a new secondary option clause X7.3 (if option X7 is applicable in this contract)

If the amount due for the *Consultant's* payment of delay damages reaches the limits stated in this Contract Data for Option X7, the *Employer* may, at its sole discretion, terminate the *Consultant's* obligation to Provide the Services.

Z21 Performance Bond

Z21.1 Amend the first sentence of secondary option clause X13.1 to read as follows: The *Consultant* gives the *Employer* an unconditional, on-demand performance bond, provided by a bank or insurer which the *Employer* has accepted, for the amount stated in the Contract Data and in the form set out in Annexure B of this Contract Data.

Z21.2 Add the following as new secondary option clause X13.2: The *Consultant* 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 *Consultant* extends the validity of the performance bond until the end of the *contract period*. If the *Consultant* 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.

Z22 Limitation of liability: Insert the following new clause as Option X18.4:

Z22.1 The *Employer's* liability to the *Consultant* for the *Consultant's* indirect or consequential loss is limited to R0.00.

Z22.2 Notwithstanding any other clause in this contract, any proceeds received from the security bonds and guarantees provided by the Consultant in terms of this Contract and any insurances or any proceeds which would have been received from any insurances but for the conduct of the *Consultant* shall be excluded from the calculation of the limitations of liability listed in the contract.

ADDITIONAL Z CLAUSES

Z23 Cession, delegation and assignment

Z23.1 The *Consultant* 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 *Consultant*.

Z23.2 The *Employer* may, on written notice to the *Consultant*, cede and delegate its rights and obligations

under this contract to any person or entity.

Z24 Joint and several liability

- Z24.1 If the *Consultant* 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.
- Z24.2 The *Consultant* shall, within 1 week of the Contract Date, notify the *Employer* of the key person who has the authority to bind the *Consultant* on their behalf.
- Z24.3 The *Consultant* 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*.

Z25 Ethics

- Z25.1 The *Consultant* undertakes:
- Z25.1.1 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;
- Z25.1.2 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.
- Z25.2 The *Consultant's* breach of this clause constitutes grounds for terminating the *Consultant's* obligation to Provide the Services or taking any other action as appropriate against the *Consultant* (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.
- Z25.3 If the *Consultant* 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.

Z26 Confidentiality

- Z26.1 All information obtained in terms of this contract or arising from the implementation of this contract shall be treated as confidential by the *Consultant* 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.
- Z26.2 If the *Consultant* is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the *Project Manager*.
- Z26.3 This undertaking shall not apply to –
- Z26.3.1 Information disclosed to the employees of the *Consultant* for the purposes of the implementation of this agreement. The *Consultant* 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;
- Z26.3.2 Information which the *Consultant* is required by law to disclose, provided that the *Consultant* notifies the *Employer* prior to disclosure so as to enable the *Employer* to take the appropriate action to

protect such information. The *Consultant* 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;

- Z26.3.3 Information which at the time of disclosure or thereafter, without default on the part of the *Consultant*, enters the public domain or to information which was already in the possession of the *Consultant* at the time of disclosure (evidenced by written records in existence at that time);
- Z26.3.4 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*.
- Z26.4 The *Consultant* ensures that all his Sub-Consultants abide by the undertakings in this clause.

Z27 Employer's Step-in rights

- Z27.1 If the *Consultant* defaults by failing to comply with his obligations and fails to remedy such default within the period stated in 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 sub-Consultant or supplier of the *Consultant*) to do so on his behalf. The reasonable costs of such remedial works shall be borne by the *Consultant*.
- Z27.2 The *Consultant* 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 *Consultant* 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.

Z28 Liens and Encumbrances

The *Consultant* keeps the Equipment used to Provide the Services free of all liens and other encumbrances at all times. The *Consultant*, 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 Sub-Consultants similarly, vis-a-vis the *Employer*, waive all liens they may have or become entitled to over such Equipment from time to time.

Z29 Intellectual Property

- Z29.1 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.
- Z29.2 IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works*.
- Z29.3 The *Consultant* 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.
- Z29.4 The written approval of the *Consultant* is to be obtained before the *Consultant's* IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any *Consultant'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.

- Z29.5** The *Consultant* 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:
- Z29.5.1** the *Consultant’s* design, manufacture, construction or execution of the Works;
- Z29.5.2** the use of the *Consultant’s* Equipment, or
- Z29.5.3** the proper use of the Works.
- Z29.6** The *Employer* shall, at the request and cost of the *Consultant*, assist in contesting the claim and the *Consultant* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.

AMENDMENTS TO THE W OPTION CLAUSES

- Z30** **Dispute resolution: The following amendments are made to Option W1:**
- Z30.1** **Under clause W1.3, in the fourth row of the first column of the adjudication table, the following words are added after the words “any other matter”:** “excluding disputes relating to termination of the contract”.
- Z30.2** **The following clauses are added at the end of clause W1.3:**
- Z30.2.1** “The Adjudicator shall decide the dispute solely on the written submissions of the parties. No oral submissions shall be heard during adjudication.”
- Z30.2.2** “Disputes relating to or arising from termination of the Contract shall not be determined by an adjudicator. Any such dispute shall be referred directly to arbitration.”

Annexure C1 - Panel of Adjudicators

One of the following adjudicators shall be selected by the referring party as and when a dispute arises.

Potential Adjudicator	Email Address	Chamber
Adv. Mkhululi Duncan Stubbs	duncan.stubbs@gmail.com	Thulamela Chambers
Adv. Arzhar Bham SC	bhamae@law.co.za	Victoria Mxenge
Adv. Mohhamed Chohan SC	chohann@counsel.co.za	Group One
Adv. Benny Makola	benny.makola@gmail.com	Group 621
Adv. Vincent Maleka SC	ivmaleka@mweb.co.za	Thulamela Chambers
Adv. Chris Loxton SC	loxton@counsel.co.za	Group One

C1.2 Contract Data – Part 2

Part two - Data provided by the *Consultant*

The Conditions of Contract are selected from the NEC3 Professional Services Contract, April 2013.

Each item of data given below is cross-referenced to the clause in the NEC3 Professional Services Contract which requires it.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Consultant</i> is (Name): Address Tel No. Fax No.	
22.1	The <i>Consultant's key persons</i> are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job: Responsibilities: Qualifications: Experience: 3 Name: Job: Responsibilities: Qualifications: Experience:	Lead Electrical Engineer Electrical Engineer Resident Engineer (Site Monitoring)
11.2(3)	The <i>completion date</i> for the whole of the services is	Date on which the certificate of final completion is issued.

11.2(10)	The following matters will be included in the Risk Register	• Availability and accuracy of as-built information • Quality and correctness of cost estimates • Site constraints and constructability • Access to Site (approvals and permits, police clearance required) • Deviations from Programme & cash flow • Delay in supply of material and equipment • Statutory requirements and approvals • Working on the live Runway and Taxiways												
25.2	The <i>Employer</i> provides access to the following persons, places and things	<table> <tr> <th></th><th>access to</th><th>access date</th></tr> <tr> <td>1</td><td>All As-built Information & existing services</td><td>Upon contract award</td></tr> <tr> <td>2</td><td>All relevant areas in the Airport</td><td>Upon contract award</td></tr> <tr> <td>3</td><td>Relevant Engineering, Operational and Maintenance Personnel of ACSA</td><td>Upon contract award</td></tr> </table>		access to	access date	1	All As-built Information & existing services	Upon contract award	2	All relevant areas in the Airport	Upon contract award	3	Relevant Engineering, Operational and Maintenance Personnel of ACSA	Upon contract award
	access to	access date												
1	All As-built Information & existing services	Upon contract award												
2	All relevant areas in the Airport	Upon contract award												
3	Relevant Engineering, Operational and Maintenance Personnel of ACSA	Upon contract award												

Part C2: Pricing data

Part C2: Pricing Data

C2.1 Pricing Instructions

The fee for services rendered will be the standard fees and stages as per the:

- ECSA Guideline Scope of Services and Tariff of Fees for Persons Registered in terms of the Engineering Profession Act, 2000, (Act No. 46 of 2000) as amended in Government Gazette No. 44333, 26 March 2021,
- SACPCMP Guideline Scope of Services and Tariff of Fees for Persons Registered in terms of the Project & Construction Management Professions Act, 2000, (Act No. 48 of 2000) as amended in Government Gazette No. 34858 & 42697,

Bidders must only price in accordance with the pricing schedule below, as it will enable ACSA to compare priced offers. **Failure to submit a priced offer using the prescribed schedule will make the bid liable for disqualification.**

Guidelines amended by the Employer.

- The amounts inserted in the Activity Schedules are deemed to include all expenses, costs, profit, general obligations etc, necessary to carry out the professional services described in this Tender document.
- Pricing Assumptions mean the criteria as set out below, read together with all parts of this Tender document, which it will be assumed in the contract that the tenderer has considered when developing his prices.
- The short descriptions given in the Activity Schedule below are brief descriptions used to identify the activities for which prices are required. Detailed descriptions of the activities to be priced are provided in the Scope of Work.
- While it is entirely at the tenderer's discretion with regards to pricing the Activity Schedule below, guideline tariffs of fees or indicative time-based fee rates are gazetted annually by each of the built environment professional bodies, which are useful documents that will give tenderers some idea of industry norms against which they may compare their rates, sums, percentage fees and/or prices as applicable.
- For the Activity Schedule, the following words shall have the meanings hereby assigned to them:
 - Unit: The unit of measurement for each item of work.
 - Quantity: The number of units of work for each item.
 - Rate: The agreed payment per unit of measurement.
 - Amount: The product of the quantity and the agreed rate for an item.
 - Sum: An agreed lump sum payment amount for an item, the extent of which is described in the Scope of Work, but the quantity of work which is not measured in any units.
 - Percentage Fee: The agreed fee for a service, the extent of which is described in the Scope of Works, expressed as a percentage of a construction contract value or part thereof.
- A rate, sum, percentage fee and/or price as applicable, is to be entered against each item in the Activity Schedule. An item against which no price is entered will be considered to be covered by the other prices or rates in the Activity Schedule.
- A price/rate shall be entered against each item in the Activity Schedule. Should the Tenderer not wish to make any charge in respect of an item, a rate of zero "R0.00" or "Nil" shall be entered.
- The Employer reserves the right, by giving written notice to the Service Provider, to cancel the project at any time. Should the Employer exercise this right, the below shall be applicable.

-
- Termination shall be administered per the Contract (NEC PSC) and the applicable ECSA 2021 Gazetted Guidelines.
 - Third Party Service Providers - If a termination is administered, Third Party Service Providers will only be paid for work done. The above applies to Surveying, Geotechnical, Testing, Site Monitoring, Environmental Services, etc.
 - The Employer reserves the right, by giving written notice to the Service Provider, to cancel a project stage at any time.
 - Traveling time, telephonic, electronic and fax communication, special postage and courier deliveries are not payable for this appointment. See disbursement Schedule.
 - Tenderers must only price in accordance with the pricing schedule.
 - Tenderers are to price for all engineering disciplines for this project under Normal Engineering Services.
 - During the project lifecycle, the percentage based professional fees will be adjusted in line with the estimated construction value and percentage fee tendered. The first fee adjustment will be at the end of Stage 3: Design Development. The offered percentage is fixed and will be applied to the final construction awarded value for final fee calculation purposes. The time-based fees will not be adjusted and are fixed.
 - The employer reserves its right to adjust fees based on the Estimated Cost to Completion to justify the recovery of fees from the consultant if the consultant is overpaid. Approvals are to be obtained through internal and/or external governance processes. No adjustment will take effect until all applicable governance processes have been confirmed successfully concluded by the employer's agent.
 - The employer reserves its rights to adjust fees if a change request which affects the project value is approved. Approvals are to be obtained through internal and/or external governance processes. No adjustment will take effect until all applicable governance processes have been confirmed successfully concluded by the employer's agent.
 - The final fees calculation will be determined upon the successful completion of the project stage 6 (Close-Out).
 - Project Closure fees will only be released upon completion and handover of all project documentation at the end of the project. Documents/data will be required in CAD dwg, MS Word, PDF and Excel format. All Third-Party services data must be submitted at project close out.
 - The BPA provided by the Employer will contain the contingency allocation, however, the 10% contingency is not part of the professional fee due to the Service Provider unless agreed with the Employer.
The Contingency as contained in the pricing schedule may only be utilised when approved by the Employer. A formal justification for the release of the funds is required. The justification must be linked to a change in project scope, cost, or time.
 - The monthly rate for construction monitoring services shall be all inclusive i.e. Travelling expenses, for either the return office to site or return home to site journeys, accommodation. Only on approval from the Employer, may the bidder claim the cost for these services as listed in the Activity Schedule.
 - The Consultant will be paid based on the actual quantities of work performed as opposed to the quantities set out in the Pricing Schedule.
 - Claimable disbursement cost is listed in item 4.1.1 (i)(ii) below.

2.1.1 Disbursements

- i. Only project related costs listed below and presented to ACSA will be compensated by ACSA;
 - Miscellaneous cost (ACSA Permits, Construction Permits, Induction, Training Courses, etc)
 - Printing, binding, laminating
 - Building, wayleave or services permits.
 - Third party service provider costs
- ii. No payment for disbursement will be made for the following:
 - 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)
 - Emails (sent or received)
- iii. Disbursements will be paid at proven cost. The onus sits with the consultant to provide proof and prior Approval.

2.1.2 Claimable disbursement cost below:

TYPING AND DUPLICATING (EXCLUDING VAT)

Table 1: Rates for typing and duplicating undertaken by the consultant himself.

From	Typing of original/master per A4	Duplicating				Printed or copied binder set	
		On white paper		On coloured paper			
		A4	A3	A4	A3	A4	A3
2009-08-15	R20,00	R0,55	R1,00	R0,65	R1,15	R14,00	R18,00
2013-01-01	R22,00	R0,65	R1,60	R0,90	R1,70	R18,00	R24,00
2017-09-01	R28,00	R0,85	R2,10	R1,20	R2,40	R26,00	R34,00
2020-04-01	R31,00	R0,95	R2,35	R1,35	R2,70	R28,80	R37,70

From	Duplicating in colour	
	A4	A3
2009-08-15	*R7,00	*R11,00
2013-01-01	*R8,00	*R13,50
2017-09-01	*R8,50	*R14,00
2020-04-01	*R9,40	*R15,50

* Payable only upon prior written approval by Departmental Project Manager.

DRAWING DUPLICATION (EXCLUDING VAT)

Table 2: Rates for drawing duplication undertaken by the consultant himself.

From	Duplicating		
	A2	A1	A0
2009-08-15	R10,00	R14,00	R22,00
2013-01-01	R15,00	R20,00	R33,00
2017-09-01	R18,00	R26,00	R40,00
2020-04-01	R19,95	R28,80	R44,30

Note: Please use 2020 rates when claiming disbursements.
Airport Permit & Training Costs

Airport Training Courses

1. AIT (Airside Induction Training)
Initial – R 570.00 Excl. VAT
Refresher – R 416.00 Excl. VAT
2. AVOP (Airside Vehicle Operator Permit)- Required for driving on Airside.
Initial – R 596.00 Excl. VAT
Refresher – R 416.00 Excl. VAT
3. General Security Awareness Training – R741 (Excl. Vat)

Permit Prices

ACSA PERMIT PRICES - 2021		
Permit Types	Duration	Current Price
PERSONAL PERMITS		
Personal permanent permits	6days-2years	270
Per Icon		70
Personal temporary permits	2-5 days	270
Personal visitors permit	1 day	270
VEHICLE PERMITS		
Vehicle permanent permits	1 year	1141
Vehicle add-on fee	1 year	5105
Vehicle temporary permits	1 - 3mths	300
Prorated add-on fee	1 - 3mths	1452
Vehicle temporary permits	3 -6mths	595
Prorated add-on fee	3 - 6mths	2900
Vehicle temporary permits	1-3 days	138
Vehicle temporary permits	4-30 days	300
Reprint of Vehicle Disc		138
Change of Registration		138
Contractors Vehicles 1- 3 Months		520
Contractors Vehicles 4 - 6 Months		1035
Permanent Contractors Vehicle Permit	1 year	1975
PARKING PERMITS		
Staff Parking	1 year	95
Taxi Parking	1year	95

C2.2 Pricing Schedule

2.2.1 Cost of Works

The estimated cost of works excluding VAT and contingency is as per below.

2.2.2 Remuneration for Professional Services

The pricing structure for the professional services fees are as per below activity schedule.

1. (a)		<u>Normal Engineering Services for Medium and Low Voltage Including Upgrade of Power Factor Correction Project at George Airport</u>	
Estimated Construction Value is: R 10 000 000 (excl. VAT)			
Offered Fees (excl. VAT) is: _____			
Offered Fee Percentage (%) is: _____ in relation to Construction Value.			
Item	Description	% per Stage	Amount (R)
I.	Stage 1 – Inception	5%	
II.	Stage 2 – Concept and Viability	15%	
III.	Stage 3 – Design Development	20%	
IV.	Stage 4 – Documentation & Procurement	20%	
V.	Stage 5 – Contract Administration & Inspection	35%	
VI.	Stage 6 – Close-Out	5%	
VII.	Sub-Total 1	100%	
(b)		<u>Engineering Management Services for Medium and Low Voltage Including Upgrade of Power Factor Correction Project at George Airport</u>	
Estimated Construction Value is : R 10 000 000 (excl. VAT)			
Offered Fees (excl. VAT) is: _____			
Offered Fee Percentage (%) is: _____ in relation to Construction Value.			
Item	Description	% per Stage	Amount (R)
i.	Stage 1 - Inception	5%	
ii.	Stage 2 – Concept and Viability	20%	
iii.	Stage 3 – Design Development	30%	
iv.	Stage 4 – Documentation & Procurement	15%	
v.	Stage 5 – Contract Administration & Inspection	25%	
vi.	Stage 6 – Close-Out	5%	
vii.	Sub-Total 2	100%	
(c)		Sub-Total 3 (Sum of Sub-Total 1 & 2)	
i.	Add Disbursements at 10% of Sub-Total 3		
ii.	Add Contingency at 10% of Sub-Total 3		
iii.	Provisional sum for Sub-Consultants		R400 000
(d)		Site Monitoring	
i.	Description	R/ month	Total Site Supervision fees for 7 months

ii.	Level 2 Site Monitoring		
(e.)	Sub-Total 4 (Sum of Sub-Total 3, Disbursements, Contingency, Prov. Sum for Sub-Consultants & Site Monitoring)		
(f)	Add 15% VAT		
(g)	Total Professional Fees for MV & LV Refurbishment Incl. PFC Upgrade (Inclusive of VAT)		
2. (a)	<u>Normal Engineering Services for Generator Replacement and provision of UPSs at Kimberley Airport</u>		
Estimated Construction Value is: R 5 000 000 (excl. VAT)			
Offered Fees (excl. VAT) is: _____			
Offered Fee Percentage (%) is: _____ in relation to Construction Value.			
Item	Description	% per Stage	Amount (R)
I.	Stage 1 – Inception	5%	
II.	Stage 2 – Concept and Viability	15%	
III.	Stage 3 – Design Development	20%	
IV.	Stage 4 – Documentation & Procurement	20%	
V.	Stage 5 – Contract Administration & Inspection	35%	
VI.	Stage 6 – Closeout	5%	
VII.	Sub-Total 5	100%	
(b)	<u>Engineering Management Services for Generator Replacement and provision of UPSs at Kimberley Airport</u>		
Estimated Construction Value is: R 5 000 000 (excl. VAT)			
Offered Fees (excl. VAT) is: _____			
Offered Fee Percentage (%) is: _____ in relation to Construction Value.			
Item	Description	% per Stage	Amount (R)
i.	Stage 1 – Inception	5%	
ii.	Stage 2 – Concept and Viability	20%	
iii.	Stage 3 – Design Development	30%	
iv.	Stage 4 – Documentation & Procurement	15%	
v.	Stage 5 – Contract Administration & Inspection	25%	
vi.	Stage 6 – Closeout	5%	
vii.	Sub-Total 6	100%	
(c)	Sub-Total 7 (Sum of Sub-Total 5 & 6)		
i.	Add Disbursements at 10% of Sub-Total 7		
ii.	Add Contingency at 10% of Sub-Total 7		
iii.	Provisional Sum for Sub-Consultants		R400 000
(d)	Site Monitoring		
i.	Description	R/ month	Total Site Supervision fees for 5 months
ii.	Level 2 Site Monitoring		

(e.)	Sub-Total 8 (Sub-Total 7, Disbursements, Contingency, Provisional Sum for Sub-Consultants & Site Monitoring)			
(f)	Add 15% VAT			
(g)	Total Professional Fees for Generator Replacement and provision of UPSs at Kimberley Airport (VAT Inclusive)			
3.	Engineering Management Services for the Replacement of Diesel Generators at George Airport (Time-Based Engineering Services)			
	The estimated construction value for the project is R13 000 000 (excl. VAT)			
Item	Description	Qty (Hours)	Rate (R)	Amount (Rands)
i.	Stage 3 – Design Development	400		
ii.	Stage 4 – Documentation & Procurement	50		
iii.	Stage 5 – Contract Administration & Inspection (Including Level 2 Site monitoring)	1200		
iv.	Stage 6 – Closeout	160		
v.	Sub-Total 9			
vi.	Disbursements at 10% of Sub-Total 9			
vii.	Contingency at 10% of Sub-Total 9			
viii.	Provisional Sum for Sub-Consultants			R200 000
ix.	Sub-Total 10 (Sub-Total 9, Disbursements, Contingency & Provisional Sum for Subconsultants)			
x.	Add 15% VAT			
xi.	Total Professional Fees for the Replacement of Diesel Generators at George Airport (VAT Inclusive)			
4.	Engineering Management Services for the Diesel Generator Replacement at Upington International Airport (Time-Based Engineering Services)			
	The estimated construction value for the project is R2 000 000 (excl. VAT)			
Item	Description	Qty (Hours)	Rate (R)	Amount (R)
i.	Stage 3 – Design Development	200		
ii.	Stage 4 – Documentation & Procurement	100		
iii.	Stage 5 – Contract Administration & Inspection (Including Level 2 Site monitoring)	700		
iv.	Stage 6 – Closeout	160		
v.	Sub-Total 11			
vi.	Disbursements at 10% of Sub-Total 11			
vii.	Contingency at 10% of Sub-Total 11			
viii.	Prov. Sum for Sub-Consultants			R200 000
ix.	Sub-Total 12 (Sub-Total 11, Disbursements, Contingency, Provisional Sum for Sub-Consultants)			
x.	Add 15% VAT			
xi.	Total Professional Fees for the Diesel Generator Replacement at Upington International Airport (VAT Inclusive)			

PRICING SCHEDULE SUMMARY – TOTAL COMBINED OFFERED PROFESSIONAL FEES (INCLUSIVE OF VAT)

Professional Engineering Services	TOTAL PROFESSIONAL FEES
a) Refurbishment of Medium Voltage and Low Voltage electrical infrastructure Including Upgrade of Power Factor Correction Systems at George Airport	
Total Professional Engineering Services - Form of Offer	
b) Diesel Generator Replacement and provision of UPSs at Kimberley Airport	
Total Professional Engineering Services – Form of Offer	
c) Replacement of Diesel Generators at George Airport	
Total Professional Engineering Services – Form of Offer	
d) Diesel Generator Replacement at Upington International Airport	
Total Professional Engineering Services – Form of Offer	
TOTAL Professional Fees - Sum of a), b), c) & d) (Carry over to Form of Offer, C1.1)	

a) Time-Based service (Rates Only)

Item	Description	Unit	Amount	
			R	C
1.	Category A - Expert	Hour		
2.	Category B – Principal	Hour		
3.	Category C – Professional	Hour		
4.	Category D – Technical	Hour		

I, the undersigned, do hereby declare that the above is a properly priced Activity Schedule forming part of this Contract Document upon which my/our tender for Tender: **THE APPOINTMENT OF A PROFESSIONAL ENGINEERING CONSULTANT FOR THE REPLACEMENT OF DIESEL GENERATORS AT UPINGTON INTERNATIONAL, GEORGE AND KIMBERLEY AIRPORTS, AND REFURBISHMENT OF MEDIUM AND LOW VOLTAGE ELECTRICAL INFRASTRUCTURE INCLUDING THE UPGRADE OF POWER FACTOR CORRECTION SYSTEMS AT GEORGE AIRPORT** has been based. I/we warrant that no amendments have been made to it from the original, other than amendments issued in any Addenda of this Tender.

NB: BIDDERS MUST COMPLETE THE FORM OF OFFER IN FULL AND SIGN. REFER TO C1.1.

SIGNED ON BEHALF OF THE TENDERER:

Part C3: SCOPE OF WORK

C3.1: Employer's Scope

3.1.1 Project Background

George Airport has two 500kVA standby generators that supply the airport with emergency electricity power in case of power failures and or load shedding. Currently these generators have been in operation as from 1990 - this makes them 34 years old in 2024.

- The Generators have been showing signs of fatigue due to the high frequency of their usage during the last few years of Eskom's related power supply problems. The following maintenance activities had to be procured during the recent financial years:
 - Fuel Pipes replacement
 - Battery replacement
 - Control System – Calibration
 - Coolant sensor
 - Synchronisation PLC failure
 - Controllers Replacement
- George Airport has a solar plant (750kWp) which is grid tied and does not operate during grid failures and loadshedding regimes (power outages) – as it requires a “heartbeat” from the grid to operate. The implication is that during power outages – the generators start up to carry the airport load – even though the airport has a sizeable solar plant that can take the full load. This scenario exerts massive strain on the existing generators – specifically in lieu of the fact that loadshedding has become the norm in the recent years and there is no indication that it can be eliminated in the foreseeable future.
- In conjunction with the above, the local municipality has introduced (01 July 2022) a time off use tariff structure which will allow the unused electricity from the solar plant to be sold (or trade-off) as a form of revenue to the airport. Currently all unused solar generation is freely exported back into the municipal grid. The new tariff structure requires a 4-wire metering configuration and a time-of-use bulk meter. George airport does not have a time-of-use bulk meter and it only has a 3-wire metering configuration.
- The 9000-litre generator fuel tank is located outside of the generator room and the housing shows signs of rust. The tank does not have save guards for fuel monitoring, fuel quality.
- Verification and testing or sampling mechanisms. Poor fuel quality can have a negative impact on the designed lifespan of the generator set equipment. With the current capacity of 9000 litres, a 500 kVA generator uses about 80 litres per hour at 80% of the generator full capacity. This provides redundancy of maximum 4 days only. Recent developments in the world (war in Ukraine) have proved to have negative impact on the fuel market – impacting on airport operations overhead costs. Risks of fuel delivery delays or interruption exists. The previous industry norm of a week redundancy of generation fuel capacity comes immediately under review, specifically with the added Stage 1-6 load shedding implementation from the national electrical grid.
- Traditionally the essential generator power is dedicated to supply the minimum essential electrical loads for airport operations – excluding HVAC equipment and commercial shops. This traditional dedication must be reviewed as the load shedding implementation can have the airport without normal power for long periods. During these lengthy periods no HVAC equipment (OHS act compliance for fresh air) will be powered. Also, limited essential power is

provided to restaurants (and shops) – which negatively impacts on the quality and variety of commercial offerings and passenger satisfaction reviews.

- Integration of existing Solar Farm into the electrical grid to ensure power delivery even when national supplier has cut supply to the airport.

Kimberley Airport has one standby diesel generator (300 kVA) that serves as a backup power supply for aeronautical support services such as airfield ground lighting and airport essential electrical loads current. The generator is more than 20 years old and has started showing signs of deterioration. ACSA useful life recommends an asset life of 20 years for diesel generators. Although the generator is still in working order, it has come to the end of its useful life. The current system has a few short comings:

- Kimberley Airport suffers from the Sol Plaatje Municipality's regular extended power outages that results with the generator running for extended periods, the generator runs for extended periods of time, thus exceeding the recommended load factor of 70% as recommended by ISO 8528-1 for standby generators.
- The Diesel Generator is located next to the office's (MNE, IT Contract security & Cleaners) and the Generator produces a lot of noise at high decibel levels when it run and that might affect the human ear in the future.
- The diesel generator is 26 years old (installed 1998) and has thus reached its 20 years of life cycle as per fixed asset register and ACSA useful lifecycle. The element of lack of maintenance in the past was also instrumental to its guaranteed operation.
- The changeover time for critical asset like AGL's always exceed the prescribed seconds as per ICAO Annex 14 Volume 1 Aerodrome Design and Operation Seventh Edition Chapter 8 recommendation, ICAO Annex 14 recommend for All Stop bars and Runway end to have 1 second delay for change over and that will only be achieved by the introduction of the UPS. Currently, the Airport does not have an uninterrupted power supply (UPS) that supply power to the AGL during generator switchover when there is loss of supply to the airport. This threatens aircraft safety in cases where the generator fails to automatically takeover the load due to controller failure.
- Off lately Kimberley suffers from regular extended power outages that results with the generator running for extended periods. Numerous failures have been experienced on the generator off late, thus bringing performance and reliability of the generator into question by stakeholders.
- Kimberley airport has a solar plant (500kWp) which is grid tied and does not operate during grid failures and loadshedding regimes (power outages) – as it requires a “heartbeat” from the grid to operate. The implication is that during power outages – the generators start up to carry the airport load – even though the airport has a sizeable solar plant that can take the full load.
- Integration of existing Solar Farm into the electrical grid to ensure power delivery even when national supplier has cut supply to the airport.

Upington Airport has an aged diesel back-up generator system which has been earmarked for replacement. Given the move of the ACSA Corporate Office from Bedfordview to ORTIA's Western Precinct location, a spare generator has been identified to replace the one at Upington. This unit will have to be integrated into the existing electrical supply to ensure a seamless back-up as and when necessary.

- Integration of existing Solar Farm into the electrical grid to ensure power delivery even when national supplier has cut supply to the airport.

Refurbishment of the Medium Voltage and Lower Voltage electrical infrastructure including Power Factor Correction (PFC) systems at George Airport

The scope includes the implement of the Refurbishment of MV and LV electrical infrastructure at George Airport. The project scope also comprises of the assessment and upgrade of the Power Factor Correction (PFC) Systems for the airport and development of a masterplan for PFC with reference to specifications, replacement, refurbishment, and improvement. The electrical infrastructure is a critical part of the airport operations, compliance and safety. Some of the installation installations are more than 15 years old and are in a very poor condition, the existing MV underground cables and transformers were installed in 1977 which exceed their life expectancy.

The airport 11kV network is configured with two separate supply points from the George municipality and a ring feed with 4 nodes. Currently the main incoming substation at George airport does not have a bus coupler between the two municipal feeders to the airport. This creates difficulties during breakdowns as the switch of the two feeders are being done at the municipal supply substations.

The miniature substations at Air BP and Flying Club utilise old switching technology, its current circuit breakers are of the oil-type and these have an inferior safety grading during operations as opposed to the newer technology found in vacuum circuit breakers. The mechanical closures of the mini substations are rusted with holes and flaking paintwork, this allows water and rodent penetration resulting to increase in operational and safety risks. The minisubstations are located next to roads and inside tenant's premises, which is accessible to the general public and airport stakeholders. This situation limits ACSA's control of the infrastructure during maintenance.

On the 3.3kV essential ring on the airside, there are also few miniature substations and ring main units (RMU's) that has oil circuit breakers including end-of-life equipment (transformers; cables; enclosures) which requires replacement.

The LV infrastructure within the older parts of the terminal building requires refurbishment as the installations are old and dilapidated and does not have sufficient space for growth and new technology equipment which is sometimes bigger in size. The last terminal upgrade was in 2007 and only certain parts of the building was upgraded. The electrical protection grading requires assessment and possible improvement. The power factor correction system is problematic and requires refurbishment. Space in the terminal building is limited and improvement is required specifically with reference to the strategic location of distribution boards (DB's) feeding electrical loads to critical equipment and stakeholder premises. Optimum efficiency cannot be achieved with stakeholder electrical supplies as the existing infrastructure does not allow for independent usage meters to each stakeholder. This translates in a form of revenue loss and reporting errors.

3.1.2 Purpose of this Tender

The purpose of this bid is to solicit the services of a Professional Engineering Consultant for the Replacement of Diesel Generators at Upington International, George and Kimberley Airports. In addition, for the refurbishment of Medium and Low Voltage electrical infrastructure and upgrade of Power Factor Correction systems at George Airport.

The project will be executed in a live environment, with minimal disturbances to operations.

ACSA requires the services of Professional Engineering Consultant to undertake Engineering Design & Engineering Management Services (Deliverables stipulated in the ECSA Gazetted Guideline). The lead consultant shall where necessary appoint third-party specialists to conduct investigations.

3.1.3 Project Scope of Work:

a) Replacement of Diesel Generators at George Airport

DESCRIPTION OF WORKS

The main objective of this project is to remove the old, and unreliable, 500kVA Diesel Generators located at the Electrical Complex and replace them with modern equipment that will service the airport in the event of power loss from the 11kV Municipal power supply source. The new generator sets are anticipated to be interfaced with, and operate as an integrated service, with the recently installed Solar PV Plant. The Solar PV Plant would then operate in tandem with the generators during the total outage of the 11kV Power Supply from the Municipality Network. Historical and current analogue data and generator operating parameters to be remotely accessible via web interface / portal and via HMI in the main substation.

A secondary requirement is to introduce an independent 200kVA Diesel Generator to provide emergency power to the Terminal Building in the event of a total power loss at the facility.

The Project Scope of Works comprises, inter-alia the following:

1. Diesel Generators

a) Upgrade of 500kVA Diesel Generators

- The two 500kVA Diesel Generator sets housed in the Diesel Room, which forms part of the Electrical Complex, shall be replaced with new units with the same capacity. This includes the replacement of the auxiliary systems of these diesel generator sets.
- All the fuel tanks and associated piping systems shall also be upgraded accordingly. This will require replacement of the existing tanks and piping. The capacity of the containment facilities for the fuel shall also be upgraded.
- Fuel tanks shall be fitted with control system, actuators and pumps that enables circulation of oil.
- Level sensors shall also be installed for the monitoring of the amount of fuel in the tanks.
- SMA Fuel Save system shall be installed to provide for interfacing of the 500kVA Diesel Generators with the Solar PV System. This is aimed at optimised the amount of fuel used during outages.

b) Installation of 200kVA Diesel Generator Set

- New 200kVA diesel generator set shall be installed in a dedicated Generator Room. The generator shall be supplied with a dedicated control panel.
- The room floor shall be assessed to ensure that it can carry the load of the new diesel generator. If not, a plinth will be built specifically for the diesel generator installation.
- The new diesel generator shall also be provided with a facility to contain oil spillage, as required by regulation.
- A 3-phase connection point for a mobile generator at the Terminal Building Substation.

c) Alterations to the Terminal Building

The workshop that was previously used by ATNS situated next to the Electrical Substation at the Terminal Building shall be converted to accommodate the new 200kVA Diesel Generator Set.

The scope of alteration for the workshop at the Terminal Building shall include installation of new building services (i.e., light fittings, socket outlets, air conditioning system, fire detection system, access control,

etc.) that fit the new configuration. The floor shall be revamped to accommodate the footprint of the new 200kVA Diesel Generator Set (i.e. engine, generator, control panel, diesel tank, etc).

The users of the surrounding rooms that are affected by the alterations shall be relocated during the construction period. The enabling works related to this relocation will include provision of temporary shelter for the users concerned.

2. Change-Over Panels

The old change-over panels used with the existing 500kVA Diesel Generators shall be replaced with modern, intelligent devices to fulfil the required protection, control and monitoring functions of the new plant. The components shall be fitted in the 400V Essential Board located at the Electrical Complex.

The Change-Over System that will interface with the new 200kVA diesel generator shall also be fitted on the 400V Essential Board located at the Terminal Building Electrical Substation.

3. Low Voltage Distribution Boards

The old Low Voltage (LV) Switchboard found in the Switchgear Room of the Electrical complex was found to be in a good working condition and is therefore reusable. Refer to Drawing No. EE-072021-TCE-03-02 for the network configuration. The two incomer circuit breakers of the 400V Essential Boards and the Electrical Complex fed from the 500kVA Generator Control Panel were found to be fit for purpose. However, they will have to be modified to accommodate the new Change-Over System.

The existing 400V Essential Board at the Terminal Building will be modified to fit a 250A MCCB to accommodate supply from the new 200kVA diesel generator as well as the new Change-Over System. Refer to Drawing No. EE-072021-TCE-03-01 for the network configuration.

4. Medium Voltage Protection Schemes

Protection and control schemes of the 11kV Main Board found in the Switchgear Room of the Electrical Complex are relatively old and require an upgrade. The old protection relays fitted on the panels shall be replaced with the modern Intelligent Electronic Devices (IEDs). All the auxiliary devices shall also be replaced, and the panel will be rewired. The Battery Tripping Unit (BTU) used to provide essential power to the protection and control circuits shall also be replaced.

5. Control and Monitoring System

a) SCADA System

The Client's requirements include provision of a comprehensive Supervisory, Control and Data Acquisition (SCADA) system with the following functions:

- Real-time monitoring
- Remote monitoring
- Data capturing
- Fault/incident logging
- Data analysis

The above implies that the current SCADA system should be upgraded to replace the existing hardware with modern type. The new electronic devices to be installed on the switchgear and control panels for

different purposes shall also be linked to the new control and monitoring system. The hardware that will be in different locations shall be interlinked by fibre optic cabling. The fibre optic cables installation will require trenching on parts of the routes and new racks in other parts. Coaxial and network cables will be considered for the connection of equipment installed in the same space. These cables shall be supported on suitable racks, trunking and conduits.

b) Diesel Generator Replacement and provision of new UPSs at Kimberley Airport

- Replacement of the existing 300kVA Generator.
 - Decommission the existing system with its associated auxiliary components.
- Perform a full operation analysis of the existing generator and their controls, to formulate a comprehensive scope for implementation.
- Install complete functional generator systems with a diesel generator set, with associated auxiliaries, exhaust system, start-up system, fuel system, batteries, and charger, etc.
- Generator needs to be able to be interfaced with the operations of the other electricity sources to the airport (Solar Plant & Municipal electrical feed) with reference to priority of use and efficiency.
- Install a system that will minimize generator activation during grid outages (Eskom /municipal). This system will ensure that the solar plant (grid-tied) can receive a “heartbeat and remain activated - when the municipal power is off. i.e., Fuel saver, etc.
- Upgrade and increase the size of the fuel tanks with fuel testing mechanisms.
 - Supply, deliver, install, test and commission above ground diesel tank adequate to offer 72 hours back up time – 6000 L.
 - Bund wall to accommodate 6000L and be constructed that there is no leakage into the environment.
 - Install Deluge system for Diesel Tank Protection
 - Construct oil separator with submersible pump to enable fuel drainage with filters (dispose of any contaminations).
- Replace the associated 400 V board with its associated cables with a new cable.
- Installation of Change-over system for low voltage boards
- Modify associated low voltage boards.
- Implement a 4-wire metering configuration and install a time-of-use bulk meter.
- Upgrade of SCADA system and centralized operating desk.
- The installation must make provision for analytics on the operation and output of the generators via intelligent devices with the capability of ethernet communication. The intent is to provide ACSA with regular automatic reports with a search function and database - accordingly.
- Supply, deliver, install and commission 1x 50 kVA static UPS for critical and sensitive loads.

UPS Specifications:

- Type – Static
- Capacity – 50 kVA / 45 kW
- Nominal input voltage 415V, 4 wire
- Input voltage range -15%, +10% from nominal (400V) at 100% load without depleting battery
- Operating frequency of 50 Hz
- Input direct distortion of 5% THD
- Output voltage regulation
- Output voltage regulation $\pm 2\%$ Static; $\pm 5\%$ dynamic at 100% resistive load change, <20 ms response time
- Operating temperature 0°C to +40°C
- Relative humidity 5-95%, non-condensing
- EMC compliance IEC 62040-2
- Quality ISO 9001: 2000 and ISO 14001:1996
- Maintenance Bypass Switches (MBS)

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- Audible noise to be <50dB at 1m clearance according to ISO 7779
 - LCD display
 - SNMP card
 - Bottom side cable entry.

The Battery Bank:

- Maintenance free type offering 10 (Ten) year life span batteries.
- Each battery must have screw-type terminals.
- The batteries must be capable of delivering full load for up to 30 minutes.
- Battery circuit breaker/fuse shall be rated for 50 kVA and installed on steel cabinet with labelling, the door shall be made accessible only with use of universal key.
- All battery connections shall be accessible.
- Battery voltage – 12V DC nominal
- Battery type - Sealed Lead acid batteries. (Environmental free type)
- Battery Capacity – min 120Ah
- Number of batteries in bank – to be calculated based on 30 min back up time.
- All battery connections shall be made tight and dirt free.

Battery Cabinet

- The cabinet shall be upright type.
- The cabinet must be constructed of steel.
- Cabinet rating IP20 with standard washable dust filters

Generator Set Specifications:

- The on-site diesel driven generator set shall be equipped with Automatic Transfer Switch (ATS), to ensure uninterrupted supply to system in the event that the primary source failure.
- Generator with capacity of 500 kVA and offer permissible interrupted time of 72 hours for Airport systems.
- Voltage limits: $\pm 10\%$ of the nominal voltage for 10 seconds or longer
- Frequency limits: ± 2 Hz for 0,1 seconds or longer
- Generator to be based on PF of 0.85 lagging
- Full synchronisation shall be provided to initiate a soft change over during CAT I conditions with a “no break” return to full mains i.e., load transfer, islanding, etc. to conform to CAT I re-instatement times as prescribed in ICAO.
- Radiator cooling shall be provided, with adequate climate control to prevent overheating of the generator in the generator room.
- Sound attenuation and anti-vibration mountings shall be provided to ensure that the sound levels of not more than 72 dB are measured at 10m from the generator room
- An active diesel particulate filter to control particulates emissions from engine as prescribed in EPA Emission Standards during installation.

Diesel Engine Specifications:

- The engine may be air or water cooled
- Engine output to comply with SANS 5514
- The engine must start automatic with easy without any use of special equipment's to assist starting.
- The engine shall not exceed 1 500 rpm at normal full load condition
- The engine shall be suitable for continuous running at the specified speed, delivering its rated output at the specified site conditions.

- The engine shall be capable of delivering an output of 100% of the specified output for one hour in any period of 12 hours consecutive.
- The engine shall have enough capacity to start up and shall within 15 seconds from mains failure, supply the full rated load at the specified voltages and frequency.
- The engine shall be controlled by a governor to maintain governed speed for 50 Hz operation.
- The engine shall be equipped with a 12/24-volt starting system of sufficient capacity to crank the engine at a speed, which will allow starting of the engine.
- The automatic attempts to start shall each be of not less than 10 seconds duration with 10 second intervals between and the manual attempts shall be based on the same cranking period.
- The engine driven battery charging alternator shall have sufficient capacity to recharge the batteries back to normal starting requirements in not more than six hours.
- The engine shall be equipped with the safety controls.
- Diesel Generator Control Panel:
- The panel shall control the generator and its instruments.
- Protective devices to meet both manual and automatic operations.
- Control panel shall be floor mount enclosed inside generator room and must be dust proof.
- Control systems must not use electromagnetic relays.
- Control system must only use microprocessor relays.
- The control system shall consist of a single unit including all indicators/switches.
- A real time monitoring shall be provided to monitor the status of the following:

Equipment	Parameter to be Monitored
Diesel Generator	Fuel Status Oil Pressure Fire Alarms Engine temperature Water Levels Radiator Fan
Power distribution	Power (Voltage, Current, PF) Temperature

Change Over Section:

- Fault current level of 40 kA
- 2500 A circuit breaker. The CB to be adjustable for both thermal and instantaneous overload.
- Current Transformers that are suitable for the rated fault current
- Load, neutral and earth busbars
- Microprocessor control unit capable of indicating:
 - Frequency meter
 - Manual start push button
 - Manual stop push button
 - Oil pressure gauge
 - Engine temperature gauge
 - Engine speed (RPM)
 - Oil pressure gauge
 - Battery voltmeter
 - Battery ammeter
 - Running hour meter
- Door mounted ammeter

- Door mounted voltmeter
- Door mounted manual start push button (for offload test)
- Front panel indicators specified.

Front Panel Indicator

CONDITION	ALARM	SHUTDOWN
High Temperature	X	X
Low Oil Pressure	X	X
Overspeed	X	X
Under speed	X	X
Manual/Test Mode		
Heater Fault	X	
Low Fuel	X	
Extra Low Fuel	X	X
Low Radiator Water	X	X
Start Fail	X	
Manual Start		
Emergency Stop	X	X
Mains Phase Rotation Fault		
High Mains Volts		
Low Mains Volts		
Mains On		
Mains On Load		
Alternator On		
Alternator On Load		
Alternator Phase Rotation	X	X
Fault		
High Alternator Volts	X	X
Low Alternator Volts	X	X
Battery Volts Fault	X	X
Alternator Charge Fault	X	
Control System On		

LV Board

- A 400V main distribution board shall be provided in the main substation to replace the existing main distribution board. The switchboard shall be floor standing and installed and constructed in accordance with the relevant SANS standards. The spare capacity in the new LV Board shall be provided for as 20% spare.
- The manufacturer of the LV switchboard shall strictly comply with the Standard Specification and the latest revisions of the following standards:
 - SANS 60439-1
 - SANS 1973-1

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- The switchboard assembly shall have an ingress protection rating of IP44. The complete LV board shall have an internal protection rating of IP2X. IP3X shall be maintained between functional units.
 - Cables shall be bottom entry and non-ferrous gland plates shall be supplied for all air circuit breakers (ACBs)
 - All doors shall have a lockable capability.
 - All switchgear shall be the non-fixed (withdrawable) type and to be fitted with pad-lockable lockout facility.
 - The switch board shall be powder coated and colour to comply to SANS 1091
 - All instrumentation shall be of 1,5 % accuracy and comply with BS 89

The general arrangement drawing shall be produced for acceptance by employer, final dimensions, construction information, busbars and terminations shall be indicated. These drawings shall clearly indicate the gland sizes, spacing and gland plate information and cable installation planning for each tier to ensure that the manufacturer has planned sufficient space for all cables to be installed. All these drawings shall be checked and accepted prior to manufacturing.

c) Diesel Generator Replacement at Upington International Airport

- Perform a full operation analysis of the existing generator and their controls, to formulate a comprehensive scope for implementation.
- Replacement of the existing 315 kVA Generator (Gen 1) with the 275 kVA generator (Gen 2) which is currently stored at ORTIA.
 - Decommission Generator 2 at ACSA premises in Johannesburg and transport to Upington for installation.
 - Decommission Generator 1 and transport to a safe storage.
- Install complete functional generator systems with a diesel generator set, with associated auxiliaries, exhaust system, start-up system, fuel system, batteries, and charger, etc.
- Reinstall and configure existing bus coupler of the Low Voltage distribution board.
- Generator needs to be able to be interfaced with the operations of the other electricity sources to the airport (Solar Plant & Municipal electrical feed) with reference to priority of use and efficiency.
- Install a system that will minimize generator activation during grid outages (Eskom /municipal). This system will ensure that the solar plant (grid-tied) can receive a "heartbeat and remain activated - when the municipal power is off. i.e., SMA Fuel saver, etc.
- Perform the necessary testing to ensure the new installation integrates into the existing network.
- Commission the newly installed equipment.
- The installation must make provision for analytics on the operation and output of the generators via intelligent devices with the capability of ethernet communication. The intent is to provide ACSA with regular automatic reports with a search function and database - accordingly.

d) Refurbishment of Medium Voltage and Low Voltage electrical infrastructure and Upgrade of Power Factor Correction systems at George Airport

- The installation of a bus coupler in the main substation must be investigated and implemented which will facilitate full control of the airport electrical reticulation without involving the municipality's grid.
- Design and Install infrastructure to accommodate the connection of a portable generator in the event of miniature substation failure at all the nodes of the 11kV ring.
- Lifecycle replacement of HT Components
 - a. Transformer Replacements
 - b. Replacing Underground cables
- Upgrade of BP and Flying Club miniature substations.

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- Replace the redundant mechanical housings of the miniature substations to mitigate the penetration of water and rodents.
 - Install overhang roof structures, palisade fence and paving blocks around each miniature substation, in order to provide increased security and control.
 - Replace oil circuit breakers with vacuum type circuit breakers to create uniformity on the electrical ring as the other circuit breakers are already of the vacuum type.
 - Install a separate communication route (sleeve) between all the nodes of the 11kV ring where practically possible and financially viable. This will provide capability for control and analytics.
 - Provide a detailed assessment report of the electrical infrastructure, by documenting the existing equipment, locations of installed equipment, current specifications, underground cable locations, list of recommended spares, labelling standard and standard procedures for maintenance and switching. This will increase efficiency and reduce risk.
 - Replacement and upgrade of LV Distribution boards (DB's)
 - Optimization of LV infrastructure as part of their lifecycle replacement
 - Review compliance of all electrical infrastructure
 - a. Implement cascaded protection.
 - b. Improve cable size where required.
 - c. Compliance against SANS 10124-1 & -2
 - Review the integrity of the electrical earthing and lightning protection.
 - Review and improve the electrical infrastructure for AMR and BMS
 - a. Install DB's in critical locations.
 - b. Provide space and capacity.
 - c. Make provision for improved communication and monitoring technology.
 - Review and improve the electrical infrastructure for effective isolation (Lock-out procedure) failure monitoring.
 - a. Install locking mechanisms on DB's and panels.
 - b. Allow for segregated isolation to stakeholder loads – improve monitoring and time-of use-billing.
 - c. Install monitoring devices.
 - Assess and upgrade the Power Factor Correction (PFC) Systems of the airport and develop a master plan for PFC with reference to specifications, replacement, refurbishment and improvement.

3.1.4 The Consultant Scope of Works

3.1.4.1 The Engineering Consultant will perform all Normal Engineering Services (Stage 1 to 6) duties as described in the ECSA Gazetted Guideline, March 2021. See attached Annexure titled "March 2021 ECSA Guideline Gazette". Only Applicable to the following projects: MV & LV Incl. PFC Upgrade at George Airport and Replacement of Diesel Generator at Kimberley Airport.

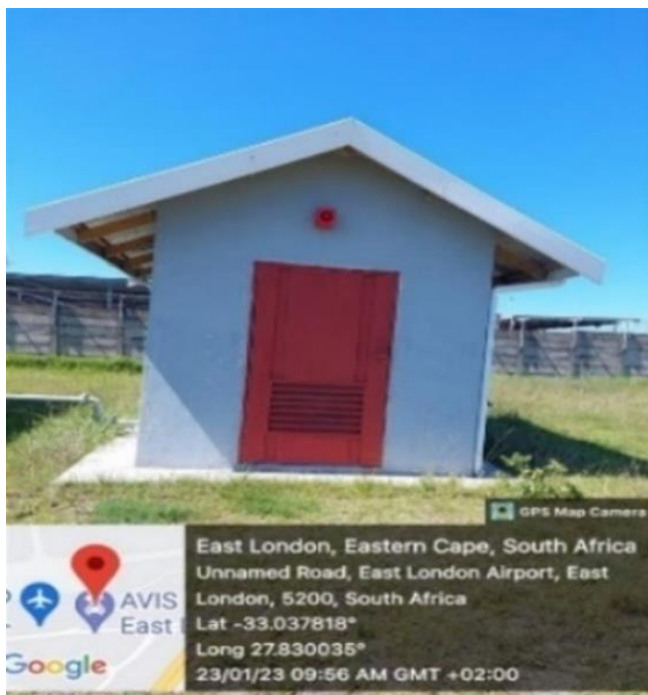
- a) Stage 1- Inception
 - i. Complete an Inception Report for the full construction scope of works.
 - ii. Stage 1 is complete when an Inception Report is approved by ACSA.
- b) Stage 2- Concept and Viability
 - i. All deliverables per the ECSA Gazetted Guideline, March 2021

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- ii. Complete a Concept Design Report for the full construction scope of works.
 - iii. Stage 2 is complete when a Concept Design Report is approved by ACSA.
- c) Stages 3 - Detail Design
- i. All deliverables per the ECSA Gazetted Guideline, March 2021
 - ii. Complete an engineering detail design.
 - iii. Complete a detailed cost estimate for the full construction scope of works.
 - iv. Complete a detail design report for the full construction scope of works.
 - v. Accept design liability by signing off the Detail Design Report and Engineering Design Drawings.
 - vi. Stage 3 is complete when a Detail Design Report is approved by ACSA.
- d) Stages 4 - Documentation and Procurement
- i. Compile construction BOQ, Project Specification and Tender document with the full construction scope of work.
 - ii. Attend Bid Specification and Bid Evaluation meetings, present draft tender to BEC.
 - iii. Write a tender evaluation report – evaluation of the preferred bidder's pricing.
 - iv. The stage is complete when the Final Tender document is accepted, advertised, and the bid evaluation is complete.
- e) Stages 5 – Contract Administration and Inspection
- i. All deliverables as per the ECSA Gazetted Guideline, March 2021.
- f) Stage 6 – Close Out
- i. All deliverables as per the ECSA Gazetted Guideline, March 2021.

3.1.4.2 Additional Services

- a) Engineering Management Services (**for George Airport's MV&LV Incl. PFC Upgrade Project and Replacement of Diesel Generator at Kimberley Airport**)
- i. The provision of Engineering Management Services (Stages 1 – 6 deliverables as stipulated in the ECSA Guideline Gazette, March 2021).
- b) Engineering Management Services (**for Upington International Airport**)
- i. The provision of Engineering Management Services
 - ii. Attend Construction Bid Preparation and Evaluation meetings, present draft tender to Bid Preparation Committee.
 - iii. Write a tender evaluation report – evaluation of the preferred bidder's pricing.
 - iv. Provide project administration, supervision and oversight on the project.
 - v. Conduct condition assessment of the generators (currently installed and the generator to be installed), prepare and submit a recommendation report with a project specification and construction/ installation cost estimate for ACSA acceptance.
 - vi. Manage, administer and monitor the construction contracts and processes including preparation and coordination of procedures and documentation to facilitate completion of the works.
 - vii. Carry out the role of the NEC ECC Project Manager.
 - viii. Fulfil and complete the project close-out including necessary documentation to facilitate effective completion, handover and operation of the project.
- c) The provision of Engineering Management Services **for George Airport Replacement of Generators (Stages 3, 4, 5 & 6 deliverables as stipulated in the ECSA Guideline Gazette, March 2021)**. The Consultant will inter-alia be responsible for the following:

-
- i. Write a construction tender evaluation report – evaluation of the preferred bidder's pricing.
 - ii. Review designs and design reports submitted by the Design and Build Contractor on behalf of the Employer for Employer acceptance.
 - iii. If necessary, make amendments to the designs including project specification.
 - iv. Provide project administration, supervision and oversight on the project implemented through a design and build contract required to complete the project.
 - v. Manage, administer and monitor the construction contracts and processes including preparation and coordination of procedures and documentation to facilitate completion of the works.
 - vi. Carry out the role of the NEC ECC Project Manager.
 - vii. Fulfil and complete the project close-out including necessary documentation to facilitate effective completion, handover and operation of the project.
 - viii. Manage and witness the commissioning and testing of the Generator sets, including ensuring that the project is successfully completed.
- d) Close Out the different Projects in line with Employers Asset Management procedure which shall include and applies to the 3 Cluster 2 Airports;
- i. A list of assets created in accordance with the ACSA Data Dictionary. (ACSA will provide the Data Dictionary)
 - ii. The list of assets must contain all the details required to complete the ACSA Capitalisation form, these are:
 - o Date new asset was complete and came into use.
 - o List of assets to be disposed.
 - o New asset: what is the expected life span of this equipment/infrastructure - consider when deciding under which asset class to add asset.
 - o Provide: Serial numbers, Make and model, Asset Description, Cost Centre
 - o Also inform if there are different components (items that have a different life span)
 - o Bar codes to be added, will be done after all assets has been identified. Barcodes available from ACSA Finance office
 - o The above must match the BOQ attached to the Completion Certificate.
 - o Photos with GPS coordinates are required. See example below.



- e) Construction Monitoring for the 3 Cluster 2 Airports
 - i. The provision of Level 2 Part Time Site Monitoring during construction. It is estimated that most of the construction work will take place at night/ during non-operational hours.

- f) Construction Health and Safety Agent for the 3 Cluster 2 Airports

The Service Provider, in submitting a tender for this professional services contract, shall be deemed to have acknowledged acceptance of the appointment as the Employer's agent in terms of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and the Construction Regulations, 2003, should the Employer accept the tender. The Service Provider shall, as such, execute all of the duties of the Employer as contemplated in the Construction Regulations.

The cost of the OHS specialist must be included in the fee tendered for this aspect of the project.

The Service Provider shall, apart from conducting his own activities in compliance with the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) and Construction Regulations, 2003, ensure that any sub-consultants/sub-contractors employed by the Service Provider also comply with the requirements of the Act and Regulations. The Service Provider shall enter into an agreement with the Employer in this regard before the commencement of any work related to this contract.

Furthermore, the service provider shall be required to ensure that weekly site audits (physical and administration audits) are conducted and a close out report is issued upon completion.

ACSA requires a Pr. CHSA to undertake the duties per the Occupational Health and Safety Act and the Construction Regulations in terms thereof, on behalf of the Employer. The appointed Engineer shall source the services of a Professional Health and Safety Agent, or provide the service if an internal resource exists, providing the resource has the necessary registration criteria as listed in this document. The services should include the following:

- The OHS Agent must arrange, formally and in writing, for the contractor to provide documentary evidence of compliance with all the requirements of the Occupational Health and Safety Act.

-
- The OHS Agent must execute the duties of the Employer, as his appointed agent, as contemplated in the Construction Regulations.

The construction health and safety agent's activities shall include, but not limited to the following:
The Professional Health and Safety Agent to complete the deliverables stipulated in the SACPCMP Guideline Scope of Services (Stages 3, 4, 5 & 6) for Construction Health and Safety Professionals.

The OHS Agent shall be appointed for the below stages;

- Stage 3 – Design Development
- Stage 4 – Documentation and Procurement
- Stage 5 – Construction
- Stage 6 – Close Out
- Mutually Agreed Additional Services

The appointed Professional Health and Safety Agent for this bid will monitor the appointed Occupational Health and Safety Officer appointed under the contractor to ensure the contractor is compliant with the latest Occupational Health and Safety Regulations and advise the Employer of any non-conformance and corrective action that will be undertaken.

The appointed Occupational Health & Safety Agent shall ensure:

- ACSA Safety policies and procedures are adhered to.
- Work is carried out safely without impacting the Airport Operational Environment.

3.1.4.3 Professional Team Registration Requirements

a) Engineering

- Principal/ Lead Electrical Engineer
 - Registered with ECSA as a Professional Electrical Engineer or Technologist with at least 6 years project related experience.
- Electrical Engineer/ Electrical Engineering Technologist
 - Registered with ECSA as a Professional Electrical Engineer or Engineering Technologist with at least 3-5 years project related experience.
- Construction Monitoring Engineer/ Technologist/ Technician (Construction Monitoring Services)
 - Qualification (BEng/ BSc/ BTech/ NHD) in Electrical/ Mechanical Engineering and at least 3-5 years' project related experience.

b) Other Specialist Investigations/ Subconsultant, if required:

- Geotechnical Investigation
- Other testing and investigations (To be determined by Engineer)
- OHS Agent
- Civil/ Structural Engineering services

(Third-Party Service Providers to have applicable registrations in accordance with their discipline). For the appointment of a subconsultant, the lead consultant shall conduct a 3-quote system.

Note: Should any other Engineers or specialists perform work on this project, they shall have the necessary professional industry registration as required by the Employer.

C3.3 General Matters and Requirements

3.3.1. Form of Contract

The conditions of contract are selected from the NEC3 Professional Services Contract, April 2013. **The Form of Offer is contained on Part C1.1. Bidders are to complete the form of offer in full and sign.**

3.3.2. Extent of Services

Refer to Scope of Work.

The services to be provided in terms of this project are inextricably linked to the Employers capital budget. The project will be managed in accordance with the Framework for Infrastructure Delivery and Procurement Management (FIDPM) and ACSA Project Management Processes and Procedures. The Employer reserves the right to terminate the project at any stage should no budget be available.

3.3.3. Reference data

A compulsory clarification session will be held to clarify the Scope of Works and answer queries. Existing Services information shall be made available when the Service Provider is appointed. All existing services information to be verified before commencing design or construction works.

3.3.4. Timeframes and Milestones

Milestones set by the Employer typically revolve around budget cycles and the need to spend the budget in any given financial year. The financial year ends 31 March each year, and the Service Provider will be expected to establish a project programme, in consultation with the Employer, that takes cognisance of the budgets available and the budget cycles. Once agreed, the Service Provider is expected to ensure that the programme is adhered to, and to intervene timeously if necessary.

The Service Provider shall submit a revised programme as and when required by the Employer.

The project must be delivered as part of the overall milestone delivery programme (shown below). ACSA operations cannot be affected by milestones missed and Service Providers are to therefore plan their project programmes carefully.

See the below project milestone deliverables. The **intention is to provide the works stipulated within the timelines provided, or sooner**. The **construction period varies per project**, and the Service Provider is to consider parallel works activities to shorten the duration where possible.

Key Milestone Dates

a) Replacement of Diesel Generators at George Airport

Milestone/Deliverable	Review / Approval	Date Required
ECSA Stage 1 - Inception	Major Role Players / Sponsor	N/A
ECSA Stage 2 - Concept and Viability	Major Role Players / Sponsor	N/A
ECSA Stage 3 - Design Development	Major Role Players / Sponsor	2024/08/31
ECSA Stage 4 - Procurement	Major Role Players / Sponsor	N/A
ECSA Stage 5 - Construction	Major Role Players / Sponsor	2025/05/31
ECSA Stage 6 - Project Close Out	Major Role Players / Sponsor	2026/05/31

b) Replacement of Diesel Generator at Kimberley Airport

Milestone/Deliverable	Review / Approval	Date Required
ECSA Stage 1 - Inception	Major Role Players / Sponsor	2024/09/30
ECSA Stage 2 - Concept and Viability	Major Role Players / Sponsor	2024/10/31
ECSA Stage 3 - Design Development	Major Role Players / Sponsor	2024/12/13
ECSA Stage 4 - Procurement	Major Role Players / Sponsor	2025/03/31
ECSA Stage 5 - Construction	Major Role Players / Sponsor	2025/09/30
ECSA Stage 6 - Project Close Out	Major Role Players / Sponsor	2026/09/30

c) Replacement of Diesel Generator at Upington International Airport

Milestone/Deliverable	Review / Approval	Date Required
ECSA Stage 1 - Inception	Major Role Players / Sponsor	N/A
ECSA Stage 2 - Concept and Viability	Major Role Players / Sponsor	N/A
ECSA Stage 3 - Design Development	Major Role Players / Sponsor	2024/09/30
ECSA Stage 4 - Procurement	Major Role Players / Sponsor	2025/01/30
ECSA Stage 5 - Construction	Major Role Players / Sponsor	2025/06/30
ECSA Stage 6 - Project Close Out	Major Role Players / Sponsor	2026/06/30

d) Refurbishment of Medium Voltage and Low Voltage electrical infrastructure including the Upgrade of Power Factor Correction systems at George Airport

Milestone/Deliverable	Review / Approval	Date Required
ECSA Stage 1 - Inception	Major Role Players / Sponsor	2024/09/30
ECSA Stage 2 - Concept and Viability	Major Role Players / Sponsor	2024/11/15
ECSA Stage 3 - Design Development	Major Role Players / Sponsor	2025/01/27
ECSA Stage 4 - Procurement	Major Role Players / Sponsor	2025/04/30
ECSA Stage 5 - Construction	Major Role Players / Sponsor	2025/11/30
ECSA Stage 6 - Project Close Out	Major Role Players / Sponsor	2026/11/30

During the project lifecycle the Service Provider shall provide a project programme compatible with MS Projects. The below minimum information is required in Gantt Chart format:

- programme activities,
- task dependencies and/ interdependencies,
- task durations,
- project critical path,
- start and completion date.
- total duration of project

3.3.5. Reporting

Aside from the reports required in terms of this appointment (Inception, Concept, Detail Design and Cost Report), the Service Provider may be required to prepare, or contribute to, ad hoc reports on specific aspects of any works project.

The appointed Principal Consultant shall compile a monthly project monitoring report (Project Board Report) as an overall project performance indicator. The monthly progress report shall contain a cost report indicating expenditure in respect of both the Service Provider's appointment and the various

specialists, together with the anticipated spend to the end of the financial year in question. It is anticipated the successful bidder shall manage all consultants appointed under this contract.

The Bidder shall also make allowance for writing other reports in the pricing schedule.

3.3.6. Disbursements

Disbursements will be paid on a proven cost basis. (Refer to Pricing Schedule).

3.3.7. Use of reasonable skill and care

The Service Provider is required to provide all aspects of the service with all reasonable care, diligence and skill in accordance with generally accepted professional techniques and standards, and to ensure that all legal requirements are met, and that all legal processes are adhered to.

It is important to note that the proposed infrastructure is to be built/ installed on Airside. Safety of persons and property is of paramount importance, closely followed by the minimisation of disruption and inconvenience to operations. The Service Provider is to adhere to ACSA Occupational Health and Safety requirements at all times. No leniency will be granted for breach of policy. Resources will be required to attend Airside Induction Training before entering airside.

3.3.8. Meetings

Regular meetings are necessary for the management of the project, including but not limited to cost review, project board and project management meetings scheduled during the lifecycle of the project. The relevant senior personnel are expected to attend on behalf of the Service Provider and consultants as and when required.

i. Employer Management Meetings

The Service Provider will be expected to attend **monthly** Employer Management meetings to provide feedback on project progress. The Service Provider shall facilitate and co-ordinate these meetings and ensure all the required project stakeholders are present. Programme, risk, and overall project issues shall be presented and proposed solutions discussed with the Employer.

ii. Project Board Meetings

The Service Provider will be expected to attend **monthly** Project Board meetings with the Employer. The objective of this meeting is to provide ACSA Senior Leadership with overall project progress. The Service Provider is expected to complete a Project Board Report in preparation for this meeting. On appointment, the project board report template will be shared.

iii. Client Management (Technical/ Non-Technical meetings)

The Service Provider shall be responsible for all aspects of the project. Regular meetings (**a minimum of 2 meetings per month**) must be held with the designated representatives of the Employer. These meetings will be structured to gain final approval and obtain technical input from Employer for all design aspects of the work. The Service Provider shall arrange and co-ordinate meetings in advance to ensure all stakeholders are present.

iv. Documentation and procurement stage Meetings

During Stage 4: Documentation and Procurement stage - the Service Provider shall attend and participate in the scheduled meetings in order to present the tender document to the Employer and Contractors. The Consultant Team will be required to compile the tender

document and participate in the tender evaluation located at Upington International, George and Kimberley Airports.

v. Site Meetings & Inspections

During Stage 5: Contract Administration and Monitoring stage of this project, the Service Provider shall convene and run **fortnightly** site meetings where the Employer and Contractor will be present. Technical meetings with the contractor may also be required to ensure the successful implementation of this project. The Service Provider shall price for all site meetings and site inspections.

vi. Ad-hoc Meetings

The Service Provider will be expected to attend ad hoc meetings from time to time, with the Employer, Stakeholder Groups, or other Service Authorities, to address specific issues as and when the need arises.

vii. General

The Service Provider shall be represented at all meetings by at-least one of the key personnel. The Service Provider shall provide secretarial services (for record keeping purposes) at all meetings.

3.3.9. Payment of fees

Payment of fees shall be paid in accordance with work completed as per the agreed cash flow approved by the ACSA Project Manager. Period for payment of monthly fee claims will be 30 days from date of invoice, that is correctly submitted and approved, in line with ACSA's payment cycle.

All fee claims for Kimberley Airport are to be addressed to:

Airports Company South Africa SOC Ltd
Upington International Airport
Private Bag x5936
Upington
8800
Vat No: 4930138393

All fee claims for George Airport are to be addressed to:

Airports Company South Africa SOC Ltd
George Airport
Private Bag x10 000
George
6530
Vat No: 4930138393

All fee claims for Upington International Airport are to be addressed to:

Airports Company South Africa SOC Ltd
Kimberley Airport
Private Bag x5052
Kimberley
8301
Vat No: 4930138393

and are to be submitted via the ACSA CTIA PPM, addressed to the ACSA Project Manager.

The Service Provider must ensure that the following are shown on the invoice:

- Service Provider Vat No. and address

-
- Service Provider banking details
 - Employer's purchase order number;
 - Employers VAT Registration no. and address
 - the contract number and title; and
 - the total amount claimed excluding VAT, and incl. VAT

3.3.10. Employers right to recover costs

The Employer reserves the right to recover, by way of a deduction from any amount due to the Bidder, any additional cost which the Employer incurs arising out of non-performance/negligence of the Bidder.

Although this project documents may be scrutinised by the ACSA departmental specialists, this shall in no way relieve the Service Provider of their professional responsibility for the proper and prompt execution of duties. In the event of professional default or negligence, ACSA reserves the right to claim compensation or damages. ACSA shall also be entitled to have any documentation or calculations verified by other experts. In the event of any errors being proven therein, the Service Provider will be held liable for costs resulting there from.

3.3.11. Place for performing specific tasks.

It is recommended that the successful bidder have a presence at Upington International, George and Kimberley Airports. Refer to the Disbursement and Claimable cost compensated by ACSA. The Service Provider's personnel may also be required to attend meetings elsewhere in the Upington, George and Kimberley areas as and when required. Bidders are to price accordingly. It is anticipated that the bulk of the bidder's deliverables will be undertaken on site (Upington International, George and Kimberley Airports). During construction, it is expected the successful bidder maintain a strong presence on site.

3.3.12. Interface with other projects and services

The consultant/s are to make themselves aware of all other ongoing works in the vicinity of the project, communicate and manage the risks, incorporate the interface with adjacent works into the programme and liaise with the parties involved.

Where there are services such as cables and electrical services, the consultant needs to be aware of and manage the risks present and build this into the project planning.

3.3.13. Safety and Security

It is an explicit condition of this appointment that partners, directors and/or the members of staff who will have an insight into the planning of projects requiring a security clearance, be kept to a minimum and that such persons will not object to be submitted to a security clearance if ACSA so requires.

All documents pertaining to these projects must be stored in a safe place when not in use to ensure that the level of security of the projects is maintained.

ACSA will not accept liability for any costs in this regard. The Service Provider is to ensure that his personnel always comply with airport security and safety. Further details are contained in the attached Annexure- ACSA Special Requirements.

3.3.14. Key Personnel/Resourcing requirements

The proposed structure and composition of the project team i.e., key staff members functions and proposed technical support staff in the format of a project specific organisational chart must be submitted.

The roles and responsibilities of each key staff member/expert must be set out as job descriptions.

The Service Provider's key persons become a contractual commitment upon award. Any proposed change should be handled formally by way of written request and approval. Replacement personnel shall be of same or better competence and experience as those initially accepted.

The Service Provider must be adequately resourced to deliver the project to the satisfaction of the Employer.

Should there be a material change to the style, management, or composition of the Service Provider project delivery team which, in ACSA's opinion, substantially affects the strength of empowerment of previously disadvantaged professionals and skills transfer to such persons, then ACSA reserves the right to review the Service Providers continued involvement on this project.

In the event of the Service Provider failing to meet the agreed programme, ACSA reserves the right to insist that you supplement your resources to achieve and maintain programmed dates at no additional cost to ACSA.

In the event of the Service Provider failing to meet the agreed programme and budgetary constraints, ACSA reserves the right to take appropriate action for poor services rendered.

In the event key personnel are changed during the project lifecycle, approval must be sought from the ACSA Project Manager. Should personnel not meet the criteria of this Tender, ACSA reserves the right to terminate this appointment.

In the event of the Service Provider repeatedly breaching any of the items of this appointment in such manner that your conduct is inconsistent with the intention or ability to carry out the provisions of this appointment then ACSA shall be entitled at its sole discretion to prematurely terminate this appointment.

3.3.15. As-built documentation

All Consultants appointed for this project, shall submit Close Out documents at the end of the project lifecycle. During the submission of such documents to the Employer, the Principal Lead/ Project Manager will be required to provide written and signed off confirmation that the As-Built and Close Out information submitted to the Employer is a true reflection of what is built on site.

3.3.16. Approvals

The Service Provider shall be responsible for overseeing/ managing the following approvals:

- Approval of the implementation programme
- Approval of the FIDPM Stag 1 Inception Report
 - The Service Provider must sign off the Inception Report.
 - Final sign-off to be obtained from ACSA key stakeholders.
- Approval of the FIDPM Stag 2 Concept and Viability Report
 - The Service Provider must sign off the Concept Report.
 - Final sign-off to be obtained from ACSA key stakeholders.
- Approval of the FIDPM Stage 3 Detail Design Report,
 - The Service Provider must sign off the Detail Design Report including engineering drawings.
 - Final sign-off to be obtained from ACSA key stakeholders.

-
- Approval of FIDPM Stage 4 – (Completion of Tender Documentation, i.e. Project Specification, Tender Drawings and Tender Document).
 - Approval to proceed to various project stages.
 - Approval to commence construction works.
 - Wayleave approval or permits from all service authorities (*if required*).
 - Approval of Construction Monitoring Engineer.
 - Approval to utilise disbursements and contingencies as indicated in the pricing schedule.
 - Approval to employ specialist sub-consultants.

Notwithstanding approvals received from the Employer, the Service Provider shall remain responsible for all work carried out in terms of this contract, which includes specialist subconsultant appointments.

3.3.17. Access to site

At Upington International, George and Kimberley Airports access to public areas is not restricted, however, personal access permits are required for access to restricted areas. The Service Provider will be required to apply for such personal access permits prior to the commencement of the project. The Service Provider shall make provision for the cost of obtaining permits in the pricing schedule. All resources must display a personal access permit when on site. (Refer to ACSA permit cost contained under the disbursement schedule).

Permits shall be obtained before access will be granted to airside. When access is required to site, the Employer shall be informed in advance.

3.3.18. Format of communication

All requests for formal approval from the Employer, or any other body, shall be submitted in writing. Ad-hoc communication between the Employer and the Service Provider may be conducted in electronic format (e-mail).

All drawings, final reports and contract documents shall be submitted for approval in hardcopy format or unless agreed otherwise with Employer.

3.3.19. Previous Correspondence

Previous correspondence or discussion of whatever nature that has taken place about this appointment shall be deemed to be null and void and superseded by the terms and conditions contained herein.

3.3.20. Local Content

It is the policy of ACSA to give preference to South African manufacturers. The team is requested to ensure that, wherever possible, designs are based on locally manufactured equipment and materials, which can meet the specification requirements at competitive prices.

3.3.21. Copy Right

Copyright pertaining to all drawings and documentation for this project must be ceded to ACSA.

3.3.22. Professional Indemnity and Public Liability Insurance

Refer to Annexure C5.3 - ACSA Insurance requirements.

3.3.23. Non-disclosure

All information including design information, annexures and other supporting documentation for this project may not be shared with 3rd parties without written consent of ACSA. All persons involved in this project will be required to sign a non-disclosure agreement.

3.3.24. Applicable National and International Standards

The Service Provider shall ensure that cognisance of all National and International standards is taken in the execution of his/her own work and that of his/her sub-consultants in the design and compilation of specifications for this project. International Standards should only be used where no South African national standards exist, or where it is the norm to use or refer to international standards. All designs shall be in accordance with all applicable bylaws and building regulations. Aviation design compliance standards (ICAO) and ACSA policy and procedures shall be always adhered to.

FIDPM (Framework for Infrastructure Delivery and Procurement Management)

The project will also be delivered in line with the implementation of projects as set out in the Framework for Infrastructure Delivery and Procurement Management (FIDPM) which should be aligned to the project work stages. Bidders are to familiarise themselves with the project stage deliverables as stated in the FIDPM. See attached Annexure C5.6.

Projects will also be managed in accordance with the ACSA Project Management Manual and Processes.

C3.4 Government's Programme for Broad-Based Black Economic Empowerment

C3.3.1 SCOPE

1. GOVERNMENT POLICY

There is a compelling need to elevate development of previously disadvantaged individuals and enterprises, and leadership. ACSA is required to establish the framework for the development of previously disadvantaged individuals and enterprises.

The objective of ACSA is to promote equity ownership across the different contracting categories and grades, as well as improving skills and performance in the delivery and maintenance of capital works across the public sector.

APPLICABLE LEGISLATION

All tenders will be considered with specific reference to applicable legislation in force from time to time and which are specifically applicable to organs of state for example the following: -

- 2.1 Public Finance Management Act No. 1 of 1999;
- 2.2 Preferential Procurement Policy Framework Act No. 5 of 2000;
- 2.3 The Constitution of South Africa
- 2.4 Broad-Based Black Economic Empowerment Act No. 53 of 2003
- 2.5 National Small Business Amendment Act No. 26 of 2003

C3.3.2 DEFINITIONS

- 1) **BBBEE**
Broad-Based Black Economic Empowerment

-
- 2) **BO**
Black Owned
 - 3) **BWOYO**
Black Woman Owned, Youth Owned
 - 4) **CIDB**
Construction Industry Development Board
 - 5) **CPG**
Contract Participation Goals
 - 6) **EME**
Exempted Micro Enterprise
 - 7) **ISO**
Quality management systems standards
 - 8) **JV**
Joint Venture
 - 9) **NCDP**
National Contractors Development Programme
 - 10) **PPFA**
Preferential Procurement Policy Framework Act
 - 11) **PWPDO**
Persons with Physical Disability Owned
 - 12) **SADC**
Southern African Development Community
 - 13) **TSS PPM**
Technical Services Solutions – Project Portfolio Management

TABLE A

Size	Total Gross asset value (fixed property excluded) (less than)	Total annual turnover (less than)	Total full time equivalent of paid employees (less than)
Medium	R 5 m	R 26 m	200
Small	R 1 m	R 6 m	50
Very Small	R 0.5 m	R 3 m	20
Micro	R 0.1 m	R 0.2 m	5

C3.3.3 CONTRACT PARTICIPATION

Airports Company South Africa aims to contract predominantly with Empowering Suppliers per the definition in P010 004P (ACSA internal transformation policy) were this relates to:

- an increase in local production,
- raw material beneficiation
- retention and employment of black people
- the transfer of skills to black owned EME's and QSE's.

1. Contract Participation Goals (CPG)

CPG refers to the extent to which the contracted resources achieve predetermined transformation objectives, expressed as a percentage (%) of the contract value. Bidders are expected to achieve this target by the end of the project.

- 2. Bidders are to submit to submit a transformation proposal meeting the CPG target for all contracts over R1m including VAT.
- 3. CPG for this contract will be at 50% which will consist of the following B-BBEE elements:
 - 3.1. Equity (Target 50%): 40% weighting.
 - 3.2. Management (Target 50%): 10% weighting
 - 3.3. Enterprise and supplier development: 50% weighting

3.4. Socio Economic Development: 2.5% weighting

4. To facilitate achievement of targets set out in 3, and transfer of skills, the tenderer **may** subcontract up to 30% of the contract value to entities that are women owned, youth owned, PWPDO, or allocate to EME, QSE that are 51% black owned entities.
5. In the event that the Contractor/consultant fails to substantiate that any failure to achieve the contract participation goal relating to the granting of a preference was due to quantitative underruns, the elimination of items, or any other reason beyond the Contractor's control which may be acceptable to the Employer, the Contractor/Consultant shall be liable to pay to the Employer a financial penalty calculated in the following manner:

$$P = (0,15 \times (D - Do) \times CA)/100$$

- where D is the tendered contract participation goal percentage;
- Do is the contract participation goal which the Employer's representative, certifies based on the credits passed, as being achieved upon completion of the contract;
- CA is the contract amount.
- P is the monetary value of penalty payable

No financial award is due for over performance on CPG.

6. Sample score sheet for Calculation of Contract Participation goals.

Transformation score sheet							
<i>(Only Populate the white blocks/cells)</i>							
Ownership target 51%	Method 1	% of contract executed by prime contractor	% Black Ownership	Effective	Total CPG/ Element	Weighting CPG	Contract CPG
		70%	51%	0,357			
	Method 2	% contract being executed by targeted JV Partners	% Black Ownership	0,2			
		20%	100%				
	Method 3		% Black Ownership				
		30%	100%	0,3	86%	40%	34%
Management target 51%	Method 1	% of contract executed by prime contractor	% Management	Effective	Total CPG/ Element	Weighting	
		50%	51%	0,255			
	Method 2	% contract being executed by targeted JV Partners	% Management	0,2			
		20%	100%				
	Method 3		% Management				
		30%	100%	0,3	76%	10%	8%
ESD				Effective	Total CPG/ Element	Weighting	
	Method 2	% contract being executed by targeted JV Partners	% Black management	0,2			
		20%	100%				
	Method 3	% on contract being executed by targeted subcontractors	% Black management				
			30%	100%			
							67%

Part C4: Site Information

The sites are situated at Upington International, George and Kimberley Airports. The works will be carried out on landside and on restricted areas and on airside. The Consultant is reminded that these are National Key Points and as such must adhere to all airport's rules and regulations regarding health and safety, environmental, security, fire and access control. The below aerial images of the airports.



Figure C4.1: UPN Aerial View Image

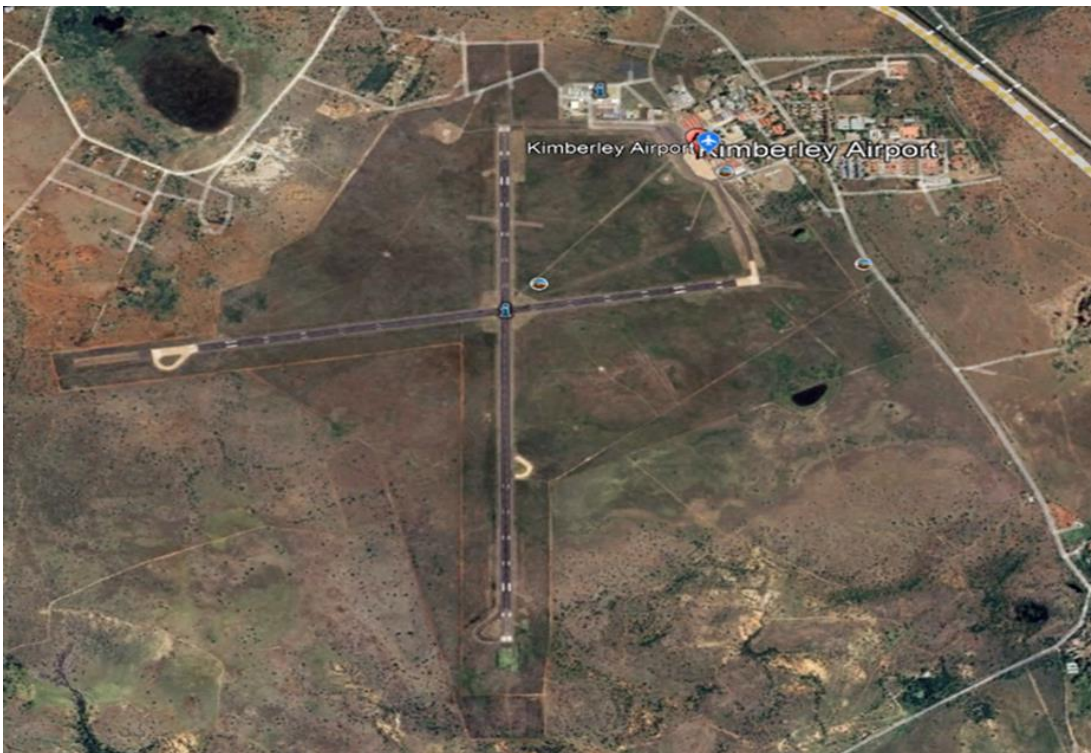


Figure C4.2: KIM Aerial View Image



Figure C4.1: GRJ Aerial View Image

Part C5: Annexures

Annexure C5.1: ACSA Generic Occupational Health and Safety Specifications

Project: THE REPLACEMENT OF DIESEL GENERATORS AT UPINGTON INTERNATIONAL, GEORGE AND KIMBERLEY AIRPORTS, AND REFURBISHMENT OF MEDIUM AND LOW VOLTAGE ELECTRICAL INFRASTRUCTURE INCLUDING THE UPGRADE OF POWER FACTOR CORRECTION SYSTEMS AT GEORGE AIRPORT.

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 27. Explosive Actuated Fastening Devices
 28. Cranes
 29. Lifting Equipment, Tackle, Material Hoist and Cranes
 30. Construction Vehicles & Mobile Plant
 31. Electrical Installations and Machinery on Construction Sites
 32. Use of Temporary Storage of Flammable Liquids on Construction Sites
 33. Housekeeping and General Safeguarding on Construction Site
 34. Stacking and Storage on Construction Sites
 35. Fire Precautions on Construction Sites
 36. Construction Employees' Facilities
 37. Ladders
 38. Pressure Equipment
 39. Employees Exposed to Excessive Noise
 40. Public Safety and Security
 41. Night Work
 42. Hot Work
 43. Hired Plant and Machinery
 44. Road Construction Work
 45. Edge Protection and Penetration
 46. Batch Plants
 47. Confined Space Entry
 48. Liquor, Drugs, Dangerous Weapons, Firearms
 49. Internal/External Audits
 50. Penalties

INTRODUCTION

In terms of the Construction Regulation 5(1) b the client, is required to compile a Health & Safety specification for any intended project and provide such specification to any prospective contractor and designers. The contractor, on appointment shall submit a Health & Safety plan which shall address the requirements of this specification.

This specification objective is to ensure that the contractor(s) entering into a contract with ACSA achieve an acceptable level of OH&S performance. This document forms an integral part of Project Information and the

contract. Principle and other contractors should make it part of any contract that they may have with their contractors and /or suppliers.

Compliance with this document does not absolve the client from complying with minimum legal requirements and the client remains responsible for the health & safety of his employees and those of his mandatories. ACSA reserves the right to audit, monitor and where necessary regulate the site work activities of any principle contractor or appointed subcontractor as per Construction Regulation 5(1) (o) and section 5 of this document.

1. SCOPE

This Specification is intended for all ACSA Service Providers.

2. DEFINITIONS

The definitions as listed in the OHS Act and Construction Regulations 84 of 7 February 2014 shall apply. Therefore, all references to the old Construction Regulations will change to the new Construction Regulations.

Client: means any person for whom construction work is being performed.

Principal Contractor: means an employer appointed by the client to perform construction work.

Contractor: means an employer who performs construction work;

Construction work: means any work in connection with,

- the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition.
to a building or any similar structure; or
- the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

Competent person: means a person who,

- a) has in respect of the work or task to be performed the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and
- b) is familiar with the Act and with the applicable regulations made under the Act;

Designer: means

- a) competent person who
 - (a) prepares a design;
 - (b) checks and approves a design; or
 - (c) arranges for any person at work under his or her control to prepare a design
 - (d) including an employee of that person where he/she is the employer or
 - (e) designs temporary work, including its components,
- b) an architect or engineer contributing to, or having overall responsibility for a design;

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- c) a building services engineer designing details for fixed plant;
 - d) a surveyor specifying articles or drawing up specifications;
 - e) A Contractor carrying out design work as part of a design and building project; or
 - f) an interior designer, shop-fitter or landscape architect;

Fall prevention equipment: means equipment used to prevent persons from falling from a fall risk position, including personal equipment, a body harness, lanyards, lifelines or physical equipment such as guardrails, screens, barricades, anchorages or similar equipment;

Fall arrest equipment: means equipment used to arrest a person in a fall, including personal equipment such as body harness, lanyards, deceleration devices, lifelines or similar equipment.

Hazard: means a source of or exposure to danger

Hazard identification: means the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed

Risk assessment: means the process contemplated in paragraph 10 of the specifications.

Excavation work: means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;

Ergonomics: means the application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimise human well-being and overall system performance;

3. NOTIFICATION OF CONSTRUCTION

(Construction Regulation 4)

The Principal Contractor who intends to carry out any construction work must at least 7 days before that work is to be carried out notify the provincial director in writing in a form similar to Annexure 2 if the intended construction work will—

- (a) include excavation work;
- (b) include working at a height where there is risk of falling;
- (c) include the demolition of a structure; or
- (d) Include the use of explosives to perform construction work.

4. DUTIES OF THE PRINCIPAL CONTRACTOR AND CONTRACTOR

(Construction Regulation 7)

The Principal Contractor must:

- (a) Provide and demonstrate to the client a suitable, sufficiently documented and coherent site specific health and safety plan, based on the client's documented health and safety specifications. The plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the Principal Contractor as work progresses;

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- (b) Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and this specification, which must be made available on request to an inspector, the client, the client's agent or Contractor; and
 - (c) On appointing any other Contractor, in order to ensure compliance with the provisions of the Act—
 - i. Provide contractors who are tendering to perform construction work for the Principal Contractor, with the relevant sections of the health and safety specifications pertaining to the construction work which has to be performed;
 - ii. Ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
 - iii. Ensure that no contractor is appointed to perform construction work unless the Principal Contractor is reasonably satisfied that the contractor that he/she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
 - iv. Ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
 - v. Appoint each contractor in writing for the part of the project on the construction site;
 - vi. Take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site;
 - vii. Ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the Contractor and Principal Contractor, but at least once every 30 days;
 - viii. Stop any contractor from executing construction work which is not in accordance with the client's health and safety specifications and the Principal Contractor's health and safety plan or which poses a threat to the health and safety of persons;
 - ix. Where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the contractor to execute the work safely; and
 - x. Discuss and negotiate with the contractor the contents of the health and safety plan and must thereafter finally approve that plan for implementation;
 - (d) Ensure that a copy of his or her health and safety plan, as well as the contractor's health and safety plan is available on request to an employee, an Inspector, a Contractor, the Client or the Client's Agent;
 - (e) Hand over a consolidated health and safety file to the client upon completion of the construction work and must, in addition to the documentation include a record of all drawings, designs, materials used and other similar information concerning the completed structure;
 - (f) In addition to the documentation required in the health and safety file, include and make available a comprehensive and updated list of all the Contractors on site accountable to the Principal Contractor, the agreements between the parties and the type of work being done; and
 - (g) Ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

The Principal Contractor must take reasonable steps to ensure co-operation between all contractors appointed by the Principal Contractor to enable each of those contractors to comply with this specification.

No contractor may allow or permit any employee or visitor to enter the site, unless that employee or visitor has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry and must ensure all have the necessary personal protective equipment.

The Contractor must prior to performing any construction work:

- (a) Provide and demonstrate to the Principal Contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the client's health and safety specification. The aforementioned plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the contractor as work progresses;
- (b) Open and keep on site a health and safety file, which must include all documentation required in terms of the Act and this specification, and which must be made available on request to an Inspector, the Client, the Client's Agent or the Principal Contractor;
- (c) Before appointing another contractor to perform construction work, be reasonably satisfied that the contractor that he/she intends to appoint has the necessary competencies and resources to perform the construction work safely;
- (d) Co-operate with the Principal Contractor as far as is necessary ensuring all comply with the provisions of the Act; and
- (e) As far as is reasonably practicable, promptly provide the contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the health and safety plan.

Where the contractor appoints another contractor to perform construction work, the duties determined in **section 5** of this document applies to the contractor as if he/she were the Principal Contractor.

A Contractor must at all times keep records of the health and safety induction training and such records must be made available on request to an inspector, the client, the client's agent or the principal contractor.

A Contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

5. MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

(Construction Regulation 8)

The Principal Contractor must in writing appoint one full-time competent person as the Construction Manager with the duty of managing all the construction work on a single site, including the duty of ensuring Occupational Health and Safety compliance, and in the absence of the Construction Manager an alternate must be appointed by the Principal Contractor.

The Principal Contractor must upon having considered the size of the project, in writing appoint one or more assistant Construction Managers for different sections thereof: Provided that the designation of any such person does not relieve the Construction Manager of any personal accountability for failing in his or her management duties in terms of this regulation.

No Construction Manager appointed under paragraph 6 above may manage any construction work on or in any construction site other than the site in respect of which he/she has been appointed.

A Contractor must, after consultation with the client and having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction health and safety officer in writing to assist in the control of all health and safety related aspects on the site.

No Contractor may appoint a Construction Health and Safety Officer to assist in the control of health and safety related aspects on the site unless he/she is reasonably satisfied that the construction health and safety officer that he/she intends to appoint has necessary competencies and resources to assist the Principal Contractor

A Construction Manager must in writing appoint Construction Supervisors responsible for construction activities and ensuring Occupational Health and Safety compliance on the construction site.

A Contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the Construction Supervisor contemplated in **paragraph 6** above, and every such employee has, to the extent clearly defined by the Principal Contractor in the letter of appointment, the same duties as the Construction Supervisor: Provided that the designation of any such employee does not relieve the Construction Supervisor of any personal accountability for failing in his or her supervisory duties in terms of this section in the specification..

No Construction Supervisor appointed under paragraph 6 above may supervise any construction work on or in any construction site other than the site in respect of which he/she has been appointed: Provided that if a sufficient number of competent employees have been appropriately designated on all the relevant construction sites, the appointed Construction Supervisor may supervise more than one site.

6. REGISTRATION WITH THE WORKMEN'S COMPENSATION OR LICENSED INSURER

The Principal Contractor(s) must ensure that ACSA is provided with a valid letter of good standing, including a registration number with the Compensation for Occupational Injury and Diseases Fund or an alternative scheme approved in writing by the Commissioner to the COID Fund, at least 10 days prior commencement of construction work. It must remain the Principal Contractor's responsibility to furnish ACSA with a valid letter of good standing or keep a copy available for perusal by a Client, Client Representatives or any other person authorised thereto.

7. MANDATARY AGREEMENT

A duly signed mandatar form also referred to as 'OHS Act section 37.2' must be obtained from ACSA Safety Department. It must be signed and returned to ACSA by the Principal Contractor at least 10 days prior to commencement of construction work. The Principal Contractor must ensure that all its contractors have completed a similar document and a proof of such signed documents is submitted to ACSA for reference purposes.

8. ASSIGNED PERSON IN TERMS OF OCCUPATIONAL HEALTH & SAFETY ACT OF 1993 & APPLICABLE REGULATIONS

A written letter of appointment must be forwarded to ACSA duly signed by responsible persons at least 3 days prior commencement of construction work for the following duties: **(Further appointments could become necessary as the project progresses and as per the requirements of OHS Act 85/1993)**

- (a) Person assigned duties in terms of the 16.2 appointees of the Act
- (b) Construction Manager CR8(1)
- (c) Assistant Construction Manager CR8(2) - *where applicable*
- (d) Full-time or part-time Construction Safety Officer CR8(5)
- (e) Construction Supervisor CR8(7))

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- (f) Assistant Construction Supervisor CR8(8) - *where applicable*
 - (g) Risk Assessor CR9(1)
 - (h) Fall Protection Developer/Planner CR10(1) - *where applicable*
 - (i) Temporary Works Designer CR11(1) - *where applicable*
 - (j) Temporary Works Supervisor CR11(2) - *where applicable*
 - (k) Excavation Supervisor CR13(1)a - *where applicable*
 - (l) Demolition Work Supervisor and Controller CR14(1) - *where applicable*
 - (m) Scaffolding Supervisor CR16(1) - *where applicable*
 - (n) Scaffolding Team leader CR16(1) - *where applicable*
 - (o) Scaffolding Inspector CR16(1) - *where applicable*
 - (p) Scaffolding Erector CR16(1) - *where applicable*
 - (q) Suspended Platforms Supervisor CR17(1) - *where applicable*
 - (r) Rope Access Supervisor CR18(1)a - *where applicable*
 - (s) Rope Access Fall Protection Plan Developed (R18(2)b) - *where applicable*
 - (t) Material Hoist Inspector CR19(8)a - *where applicable*
 - (u) Bulk Mixing Plant Supervisor CR20(1) - *where applicable*
 - (v) Explosive Actuated Fastening Device Operator CR21(2)b - *where applicable*
 - (w) Explosive Actuated Fastening Device Controller CR21(2)g(i) - *where applicable*
 - (x) Construction Vehicles and Mobile Plant Operator CR23(1)d(i) - *where applicable*
 - (y) Temporary Electrical Installations Controller CR24(c) - *where applicable*
 - (z) Portable Electrical Equipment Supervisor CR24(d) - *where applicable*
 - (aa) Fire Equipment Inspector CR29(h) - *where applicable*
 - (bb) First Aider GSR3(4) -- *where applicable*
 - (cc) Stacking Supervisor (CR28(a)) (GSR2(a))
 - (dd) Competent Person in Confined Space Entry GSR5(1) - *where applicable*
 - (ee) Gas Cutting/Welding Supervisor (GSR9(a)) - *where applicable*
 - (ff) Ladder Supervisor and Inspector (GSR13(a)) - *where applicable*
 - (gg) Lifting Machine Inspector (DMR18(7)) - *where applicable*
 - (hh) Lifting Tackle Inspector (DMR18(10)e) - *where applicable*
 - (ii) Lifting Machine Supervisor (DMR18(11)) - *where applicable*
 - (jj) Supervisor of Machinery (GMR1) - *where applicable*
 - (kk) Safety Representatives (OHS Act Sec.17 - *where applicable*
 - (ll) Hazardous Chemical Substances Controller/Co-ordinator HCSR10 - *where applicable*

(mm) Incident Investigator (GAR9(2))

(nn) Blasting Supervisor (Supervision Of Explosives Workplace ER12) - *where applicable*

9. HEALTH AND SAFETY DOCUMENTATION

The Principal Contractor must provide and demonstrate to ACSA a suitable, sufficiently documented and coherent site specific health and safety plan, based on ACSA's documented health and safety specifications. The health and safety plan must include but not limited to the following during tendering process, before commencement of construction work and during construction:

Principal Contractor's Health & Safety Policy

The Principal Contractor must provide a health & safety policy signed by the Chief Executive Officer (CEO) which outlines Principal Contractor's commitment towards health and safety

Health and Safety Organogram

The Principal Contractor must provide a health & safety organogram which outlines related appointments in terms of the OHS Act and applicable Regulations. Contact numbers should also be provided for easy reference.

10. RISK ASSESSMENT

(Construction Regulation 9)

A Contractor must, before the commencement of any construction work and during such construction work, have risk assessments performed by a competent person appointed in writing, which risk assessments form part of the health and safety plan to be applied on the site, and must include—

- (a) the identification of the risks and hazards to which persons may be exposed to;
- (b) an analysis and evaluation of the risks and hazards identified based on a documented method;
- (c) a documented plan and applicable safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (d) a monitoring plan; and
- (e) a review plan.

A Contractor must ensure that:

- (f) as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment
- (g) that all employees under his or her control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures and or control measures before any work commences, and thereafter at the times determined in the risk assessment monitoring and review plan of the relevant site
- (h) Principal Contractor must ensure that all Contractors are informed regarding any hazard that is stipulated in the risk assessment before any work commences, and thereafter at the times that may be determined in the risk assessment monitoring and review plan of the relevant site
- (i) consult with the health and safety committee or, if no health and safety committee exists, with a representative trade union or representative group of employees, on the monitoring and review of the risk assessments of the relevant site

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- (j) copies of the risk assessments of the relevant site are available on site for inspection by an inspector, the client, the client's agent, any Principal Contractor, any employee, a representative trade union, a health and safety representative or any member of the health and safety committee
 - (k) review the relevant risk assessment—
 - i. where changes are effected to the design and or construction that result in a change to the risk profile; or
 - ii. when an incident has occurred.

11. FALL PROTECTION PLAN

(Construction Regulation 10)

A Contractor must

- (a) designate a competent person to be responsible for the preparation of a fall protection plan;
- (b) ensure that the fall protection plan contemplated above is implemented, amended where and when necessary and maintained as required; and
- (c) take steps to ensure continued adherence to the fall protection plan.

The Fall Protection Plan must include

- (a) a risk assessment of all work carried out from a fall risk position and the procedures and methods used to address all the risks identified per location;
- (b) the processes for the evaluation of the employees' medical fitness necessary to work at a fall risk position and the records thereof;
- (c) a programme for the training of employees working from a fall risk position and the records thereof;
- (d) the procedure addressing the inspection, testing and maintenance of all fall protection equipment; and
- (e) a rescue plan detailing the necessary procedure, personnel and suitable equipment required to affect a rescue of a person in the event of a fall incident to ensure that the rescue procedure is implemented immediately following the incident.

A Contractor must ensure that:

- (a) **The Construction Manager** appointed under **Construction Regulation 8(1)** is in possession of the most recently updated version of the fall protection plan.
- (b) all unprotected openings in floors, edges, slabs, hatchways and stairways are adequately guarded, fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;
- (c) no person is required to work in a fall risk position, unless such work is performed safely as contemplated in above;
- (d) fall prevention and fall arrest equipment are
 - i. approved as suitable and of sufficient strength for the purpose for which they are being used, having regard to the work being carried out and the load, including any person, they are intended to bear; and

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- ii. securely attached to a structure or plant, and the structure or plant and the means of attachment thereto are suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who could fall; and
 - (e) fall arrest equipment is used only where it is not reasonably practicable to use fall prevention equipment.

Where roof work is being performed on a construction site, the Contractor must ensure that, in addition to the requirements set out above, it is indicated in the fall protection plan that:

- (a) the roof work has been properly planned;
- (b) the roof erectors are competent to carry out the work;
- (c) no employee is permitted to work on roofs during inclement weather conditions or if any conditions are hazardous to the health and safety of the employee;
- (d) all covers to openings and fragile material are of sufficient strength to withstand any imposed loads;
- (e) suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported; and
- (f) suitable and sufficient guard-rails, barriers and toe-boards or other similar means of protection prevent, as far as is reasonably practicable, the fall of any person, material or equipment.

Principal Contractor / Contractor - Competency Assessment

(Construction Regulation 7)

The Principal Contractor must be reasonably satisfied that the sub-contractors he intends to appoint also have the necessary competencies and resources to safely conduct the work they will be appointed for. This must be established at tender stage and before appointments are made.

In order to ensure this, the Principal Contractor must demonstrate to the Client that it has a suitable and sufficiently.

12. ADMINISTRATIVE CONTROLS AND THE OCCUPATIONAL HEALTH & SAFETY FILE

(Construction Regulation 7)

The Occupational Health and Safety File

The Principal Contractor will keep an Occupational Health and Safety File on site containing the following documents (where applicable) as a minimum:

- Accident/Incident Register. (Annexure 1 of the General Admin Regulations)
- Health and safety Representatives Inspections Register.
- Construction Vehicles & Mobile Plant Inspection.
- Daily Inspection of Vehicles.
- Plant and other Equipment by the Operator/Driver/User.
- Demolition Inspection Register.
- Electrical Installations, Equipment & Appliances. (including Portable Electrical Tools)
- Excavations Inspection.

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- Explosive Powered Tool Inspection/Maintenance/Issue>Returns Register. (incl. cartridges & nails)
 - Fall Protection Inspection Register.
 - First Aid Box Contents.
 - Fire Equipment Inspection & Maintenance.
 - False work Inspections.
 - Hazardous Chemical Substances Record.
 - Ladder Inspections.
 - Lifting Equipment Register.
 - Machinery Safety Inspection Register. (incl. machine guards, lock-outs etc.)
 - Scaffolding Inspections.
 - Stacking & Storage Inspection.
 - Inspection of Structures.
 - Inspection of Pressure Equipment.
 - Welding Equipment Inspections.
 - All other applicable records.
 - An equipment inventory register, detailing all major items of equipment such as Construction Vehicles and Mobile Plant etc...

If any work is to be performed on Airside. The contractor must performing such work must provide ACSA with an airside safety plan.

On completion of the project or on completion of the contractors work each contractor must surrender the completed OHS file to the Principal Contractor for consolidation into one "Master File". **A Principal Contractor must** hand over a consolidated health and safety file to ACSA upon completion of the construction work and must, in addition to the documentation referred to in **paragraph 5** of this document include a record of all drawings, designs, materials used and other similar information concerning the completed structure. (These records will then be archived by ACSA for future reference purposes)

13. HEALTH AND SAFETY REPRESENTATIVES

The Principal Contractor must ensure that Health and Safety Representative(s) is/are elected and delegated in writing and necessary training has been provided by a competent person where there are more than 20 employees at the workplace. A proof of training certificate must be provided to ACSA.

Health and Safety Representatives must conduct monthly inspections by completing a checklist developed by the Principal Contractor. Safety defects noted must be recorded and reported to the supervisor for remedial action. Health and Safety Representative Inspection findings must be made available to ACSA for reference for audits purposes.

Health and Safety Representatives and their reports must form part of the safety committee which must meet on a monthly bases.

The Principal Contractor must hold health and safety committee meetings on site. Minutes of such meetings and action taken by management must be kept on file and made available to ACSA for reference purposes. Members of the committee must receive proper training and a proof of such training must be made available.

The Committee must consider, at least, the Following Agenda:

- Opening & Welcome
- Present/ Apologies/ Absent
- Minutes of previous Meeting
- Matters Arising from the previous Minutes
- OH&S Reps Reports
- Incident Reports & Investigations
- Incident /Injury Statistics
- Other Matters
- Endorsement of Registers and other statutory documents by a representative of the Principal Contractor
- Close/Next Meeting

The Principal Contractor must ensure that ACSA Safety Department is invited to such meetings. These meetings do not substitute for Principal Contractor's Site meetings.

14. HEALTH & SAFETY TRAINING

Environmental Health and Safety Induction

The Principal Contractor must conduct an induction training session prior commencement of construction work. An attendance register must be kept in the Principal Contractor's health and safety file.

For any construction work to be conducted on the Airside, Airside Induction training (AIT) must be attended by all persons entering who are to enter Airside and a course fee determined by ACSA must be paid by the Principal Contractor. A security permit to access airside must be issued on production of proof of attendance.

Induction Conducted by the Principal Contractor and Competent Person

A manual /copy of such training must be provided to ACSA for reference purposes. As determined by the risk assessment. The Principal Contractor must ensure that all employees under his/her control are trained by a competent person and a proof of such training is kept on file for reference.

Toolbox Talks

The Principal Contractor must ensure that employees attend a formal Toolbox Talk to be held at least once a week. Toolbox Talks must cover a wide variety of topics related to health and safety. An attendance register must be completed by employees who attended such talks. The register must indicate the topic covered presenter, date and signatures of employees attended. Records for Toolbox Talks must be kept in a health and safety file and be made available to ACSA for perusal.

First Aid Training

The Principal Contractor must appoint competent First Aider(s) in writing where more than 10 employees are employed. A letter of appointment must be kept on file for reference made available to ACSA Safety. Duly designated First Aider(s) must have attended training at an accredited institution prior commencement of construction work and a proof of certificate be submitted to ACSA for reference.

The Principal Contractor must ensure that the first aid box(s) is/are controlled by qualified First Aider(s) and kept fully stocked with necessary first aid contents related to the hazards and risks identified. A first aid box(s) must be accessible and location of such box(s) is clearly displayed on site.

15. FIRE PREVENTION AND PROTECTION

The Principal Contractor must ensure that adequate fire equipment is provided in strategic places (that is, where there is a mobile distribution board, flammable liquids, pressure equipment, confined spaces, hot work). The Principal Contractor must ensure that such equipment is inspected by a competent person on a monthly basis and such inspections are recorded on a register. The Principal Contractor must ensure that all fire equipment is serviceable and person(s) have been professionally trained on how to use the equipment. A proof of such training must be provided prior commencement of construction work.

16. EMERGENCY PREPAREDNESS

The Principal Contractor must provide ACSA with an emergency plan and procedure which will include, but not limited to emergencies such as fire, bomb threat, civil unrest, medical treatment, environmental incidents, accidents to employees and other persons other than their employees.

Emergency procedure must be communicated to employees and a proof of such training must be kept on file for reference. A list of emergency contact numbers must be conspicuously displayed on site for ease reference. An evacuation plan must be displayed in strategic places.

In case of medical and/or fire emergency contact ACSA Fire & Rescue Services:

(053) 830 7145

The Principal Contractor must provide ACSA Safety with a full record of any incidents which may occur on site.

17. INCIDENTS/ACCIDENTS REPORTING AND INVESTIGATION

The Principal Contractor must ensure that all incidents/accidents (this includes near miss, first aid cases and section 24 cases) are reported by employees immediately to the Construction Manager for further investigation and remedial action. The Principal Contractor must ensure that all OHS Act section 24 incidents/accidents are reported to the Department of Labour immediately and preliminary investigation is conducted by a competent person within seven days. If construction work will be finished within 3 days after occurrence, an investigation must be conducted before such construction work is completed. Proof of such investigation must be submitted to ACSA immediately or within 24 hours after investigation.

18. PERSONAL PROTECTIVE CLOTHING/EQUIPMENT

The Principal Contractor must ensure that personal protective equipment or clothing needs analysis is conducted and incorporated into the risk assessment. Records must be provided by the Principal Contractor prior to the commencement of construction work. The Principal Contractor must ensure that SABS approved personal protective equipment or clothing is provided to personnel. The Principal Contractor must ensure that no personnel are allowed to work on site without necessary personal protective equipment or clothing. The Principal Contractor must ensure that PPE or Clothing is kept in good working order and clearly stipulate procedures to be followed when PPE or Clothing is lost or stolen, worn or damaged. ACSA will remove any person from the construction site who is working without necessary personal protective equipment and/or clothing. Worn or tattered personal protective clothing will not be permitted on airport premises.

19. FALL PROTECTION (WORKING IN ELEVATED POSITIONS)

(Construction Regulation 10)

A pre-emptive Risk Assessment will be required for any work to be carried out above two metres from the ground or any floor level and will be classified as "Work in Elevated Positions".

As far as is practicable, any person working in an elevated position will work from a platform, ladder or other device that is at least as safe as if he/she is working at ground level and whilst working in this position be

wearing and using a full body harness that will be worn to prevent the person falling from the platform, ladder or other device utilised.

This safety harness will be, as far as is possible, secured to a point away from the edge over which the person might fall and the double lanyard must be of such a length that the person will not be able to move over the edge.

In addition any platform, slab, deck or surface forming an edge over which a person may fall must be fitted with guard rails at two different heights as prescribed in SABS 085' Code of Practice for the Design, Erection, Use and Inspection of Access Scaffolding

Workers working in elevated positions must be trained to do this safely and without risk. Proof of training must be maintained on the contractors site safety file. Medical certificates of fitness for all employees working in elevated positions must be available on site. This must be issued by an Occupational Health Practitioner.

Where work on roofs are carried out, the Risk Assessment must take into account the possibility of persons falling through fragile material, skylights, soffits and openings in the roof, steel support work trusses and purlins so designed as to support the roof structure.

The Risk Assessments shall place specific emphasis on the placing and handling of roofing materials such as Inverted Box Rib Sheeting (IBR sheeting) or similar materials, (including contingency safety measures), which when exposed to windy conditions represents a serious safety hazard.

20. RISK ASSESSMENT FOR CONSTRUCTION WORK

(Construction Regulation 9)

Every Contractor performing Construction work shall, before the commencement of any construction work and during such work, have a Risk Assessment performed by a competent person, appointed in writing, and the Risk Assessment shall form part of the OH&S Plan.

Each activity must define individual tasks associated with that identified activity. These and all associated hazards must be identified and listed in the risk assessment. This ensures that critical tasks and associated hazards are not missed.

The Risk Assessment must include:

- The identification of the risks and hazards to which persons may be exposed to
- The analysis and evaluation of the risks and hazards identified
- A documented plan and applicable safe work procedures (SWP) to mitigate, reduce or control the risks and hazards that have been identified
- A monitoring plan and
- A review plan

A Contractor must ensure that:

- As far as is reasonably practicable ergonomic related hazards are analysed, evaluated and addressed.
- All employees under his/her control are informed, instructed and trained by a competent person regarding any hazards.

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- A Principal Contractor must ensure all Contractors are informed regarding any hazard as stipulated in the risk assessment before any work commences.
 - Consult with health and safety committee on monitoring and review risk assessment on site.
 - Ensure a copy of risk assessments is available for inspection.
 - Review relevant risk assessments where changes are affected to the design or construction that result in a change to the risk profile or when an incident occurred.

N.B. A risk assessment will be performed for all unplanned work and submitted to ACSA for approval prior to work commencing.

21. STRUCTURES

(Construction Regulation 11)

The Contractor will ensure that in terms of Construction Regulation 11 the following is adhered to:

- That the structure on/in which works are to be performed has been inspected by a certified structural engineer declaring the structure to be safe for construction/demolition/renovations work processes.
- Steps are taken to ensure that no structure becomes unstable or poses a threat of collapse due to demolition and construction work being performed on it, or in the vicinity of it.
- No structure is overloaded to the extent where it becomes unsafe; if uncertainty arises then the structural engineer is to be consulted.
- He/she has received from the designer the following information:
- Information on known or anticipated hazards relating to the construction/demolition work and the relevant information required for the safe execution of the construction/demolition work.
- A geo-scientific report (where applicable).
- The loading the structure is designed to bear.
- The methods and sequence of the construction/demolition process.
- All drawings pertaining to the design are on site and available for inspection.

The structural engineer shall carry out inspections at appropriate and sufficient intervals of the construction work involving the design of the relevant structure to ensure compliance with the design and record the results of these inspections in writing.

22. TEMPORARY WORK

(Construction Regulation 12)

Temporary work must be carried out under the supervision of a competent person designated in writing.

Temporary works structures must be so designed, erected, supported, braced and maintained such that it will be able to support any vertical or lateral loads that may be applied.

No load is to be imposed onto the structure that the structure is not designed to carry.

Temporary works must be erected in accordance with the structural design drawings for that temporary works and, if there is any uncertainty, the designer must be consulted before proceeding with the erection/use of the temporary works.

All design drawings pertaining to the temporary works must be kept available on site.

All equipment used in the erection of temporary works must be checked by a competent person before use.

The foundation or base upon which temporary works is erected must be able to bear the weight and keep the structure stable.

Employees erecting temporary works must be trained in the safe work procedures for the erection, moving and dismantling of temporary works.

Safe access/egress (and emergency escape) must be provided for workers.

A competent person must inspect temporary works structures that have been erected before, during and after pouring of concrete or the placing of any other load and thereafter daily until the temporary works is stripped.

The results of all inspections must be recorded in a register kept on site.

The temporary works must be left in place until the concrete has reached sufficient strength to bear its own weight plus any additional weight that may be imposed upon it and not until the designated competent person has authorised its stripping in writing.

Any damaged temporary works must be repaired/rectified immediately Deck panels must be secured against displacement.

The contractor must ensure that no employee is exposed, or required to work on slippery and dangerous surfaces.

Person's health must be protected when use is made of solvents, oils or other similar substances.

Ensuring that the OEL (Occupational Exposure Limit) for any substances that they may be exposed to does not exceed the legal limits and that the necessary PPE is used.

23. EXCAVATIONS

(Construction Regulation 13)

The Principal Contractor must ensure excavation work is conducted under supervision of a competent person who has been appointed in writing. A letter of appointment must be provided to ACSA Safety prior commencement of work. A risk assessment outlining safe work procedures to be adhered to if excavation is more than 1.0m deep must be provided to ACSA prior commencement of work. The Principal Contractor must ensure that no person works in an excavation which is not adequately braced or shored.

The Principal Contractor must ensure that every excavation including bracing and shoring are inspected daily prior each shift starts and such records are kept on site for reference.

The Principal Contractor must ensure that all precautionary measure as stipulated for confined spaces as stated in the General Safety Regulation of OHS Act 85/1993 are complied with when entering any excavation. The Principal Contractor must ensure that warning signs are conspicuously displayed where excavation work involves the use of explosives and a method statement developed by a competent person is provided to ACSA prior commencement.

The Principal Contractor must ensure that safe and convenient means of access is provided to every excavation when required. Such access must not be further than 6m from the point where any worker within the excavation is working.

The Principal Contractor must communicate, train and enforce safe work procedures pertaining to excavation work to his/her employees.

24. DEMOLITION WORK

(Construction Regulation 13)

The Principal Contractor must ensure that a detailed structural engineering survey is conducted by a competent person and a method statement on the procedure to be followed is provided to ACSA Safety. The Principal Contractor must ensure that demolition work is conducted under the supervision of a competent person appointed in writing.

The Principal Contractor must ensure that safety precautionary measures stipulated in Asbestos Regulations is adhered to if demolition work involves asbestos material and that asbestos work is conducted under the supervision of a registered Asbestos Principal Contractor.

25. SCAFFOLDING

(Construction Regulation 16)

Access Scaffolding must be erected, used, and maintained safely in accordance with Construction Regulation 16 and SA Bureau of Standards Code of Practice, SANS 10085/1 entitled, "The Design, Erection, and Use & Inspection of Access Scaffolding.

Detailed consideration must be given to all scaffolding to ensure that it is properly planned to meet the working requirements, designed to carry the necessary loadings and maintained in a sound condition. It must also be ensured that there is sufficient material available to erect the scaffolding properly.

Scaffolding may only be erected, altered or dismantled by a person who has the appropriate training and experience in this type of work or under the supervision of such a person

Specific attention must be given to the appointment of Scaffolding Inspectors and Scaffolding Erectors who shall not be the same person. The continuous inspection of scaffolding structures must be recorded on the applicable Scaffold register.

Tagging/Signs reflecting the status of the scaffold must be always used and fixed to the structure. (Safe to use / Scaffold not Safe)

On completion of the erection, the Supplier will inspect the structure and will ensure it is in sound working order and complies with all statutory regulations. The Supplier will then issue a Handover Certificate, Drawings, design, and specifications shall be signed by a registered professional engineer.

An inspection of the completed scaffold shall also be inspected by the registered professional engineer for approval prior to use. Should any additional load i.e., a hoist or advertising banners be added to the scaffold at a later stage, the professional engineer must approve the modification.

26. SUSPENDED PLATFORMS

(Construction Regulation 17)

The Contractor to design, erect, use and maintain suspended platforms in accordance with the requirements of Construction Regulation 17.

27. EXPLOSIVE ACTUATED FASTENING DEVICES

(Construction Regulation 21)

Every Explosive Powered Tools (EPT) must be:

- Provided with a guard around the muzzle to confine flying fragments or particles

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- A firing mechanism that will prevent the EPT from firing unless it is pushed against the surface and at a right angle (where the EPT is fitted with an intermediate piston between the charge and the nail this requirement is waived)
 - The Contractor or user must ensure that:
 - Only the correct type of cartridge is used (product specific)
 - The EPT is cleaned and inspected daily before use by an appointed competent person who maintains a register with the findings of his inspection and the details of cleaning, service and repairs
 - The safety devices are in good working order before the EPT is used
 - When the EPT is not being used it is stored in an unloaded condition together with the cartridges in a safe/secure place inaccessible to unauthorised persons
 - A warning notice is displayed at the point where the EPT is in use
 - The issue and return of cartridges must be controlled by maintaining the issue/returns register signed by both issuer and user and empty cartridge cases must be returned with unspent cartridges.
 - Users/operators of the EPT have received the necessary training and have been authorised as being competent to use/operate the EPT
 - Users/operators must wear the prescribed PPE whilst using/operating the tool

28. CRANES

(Construction Regulation 22)

A Crane permit must be obtained from ACSA and submitted before erection of crane.

A contractor must, in addition to compliance with the Driven Machinery Regulations, 1988 ensure that where tower cranes are used—

- (a) they are designed and erected under the supervision of a competent person;
- (b) a relevant risk assessment and method statement are developed and applied;
- (c) the effects of wind forces on the crane are taken into consideration and that a wind speed device is fitted that provides the operator with an audible warning when the wind speed exceeds the design engineer's specification;
- (d) the bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured;
- (e) the tower crane operators are competent to carry out the work safely; and
- (f) the tower crane operators have a medical certificate of fitness to work in such an environment, issued by an occupational health practitioner in the form of Annexure 3.

29. LIFTING EQUIPMENT, TACKLE, MATERIAL HOIST AND CRANES

The Principal Contractor must ensure that all lifting equipment and tackle are inspected before use and a monthly register is completed by a competent person. Proof of such inspections must be recorded and kept on file for reference. The Principal Contractor must ensure that a safe working load is conspicuously displayed on lifting equipment and tackle and service certificate is provided prior commencement of work.

The Principal Contractor must ensure operators are properly trained on how to operate the above-mentioned equipment and a proof of competency is provided prior commencement of work.

The Principal Contractor must provide information on procedures to be followed in the case of:

- (a) Malfunctioning of equipment; and
- (b) Discovery of a suspected defect in the equipment

The Principal Contractor must ensure that safety measures stipulated in Driven Machinery Regulation and Construction Regulation with regard to above equipment are adhered to at all times.

30. CONSTRUCTION VEHICLES & MOBILE PLANT

(Construction Regulation 13)

Construction Vehicles and Mobile Plant may be inspected by ACSA prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment will be required to comply with this specification as well as the OHS Act and Regulations.

Construction Vehicles and Mobile Plant (CV & MP) to be:

- of acceptable design and construction
- maintained in good working order
- used in accordance with their design and intention for which they were designed
- Operated/driven by trained, licensed competent and authorised operators/drivers. No unauthorised persons to be allowed to drive or operate CV & MP
- Operators and drivers of CV & MP must be in possession of a valid medical certificate declaring the operator/driver physically and psychologically fit to operate or drive CV & MP.
- fitted with adequate signalling devices to make movement safe including reversing
- excavations and other openings must be provided with sufficient barriers to prevent CV & MP from falling into same
- Provided with roll-over protection, appropriate seat fitted which shall be used during CV & MP operations.
- inspected daily before start-up by the driver/operator/user and the findings recorded in a register/log book
- CV & MP to be fitted with two head and two taillights whilst operating under poor visibility conditions, in addition they shall be equipped with 'hazard warning' lights, which must be used whenever the CV & MP is on site.
- No loose tools, material etc. is allowed in the driver/operators compartment/cabin nor in the compartment in which any other persons are transported
- CV & MP used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported
- Operators to be issued with Personal Protective Equipment as required and identified by the Risk Assessments
- Only licensed and road worthy vehicles will be allowed on the public roads

No person may ride on a CV & MP except in a safe place provided by the manufacturer for this purpose

The construction site must be organized to facilitate the movement of CV & MP so that pedestrians and other vehicles are not endangered. Traffic routes are to be suitable, sufficient in number and adequately demarcated.

CV & MP left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights reflectors or barricades to prevent moving traffic coming into contact with the parked CV & MP.

In addition CV & MP left unattended after hours must be parked with all buckets, booms etc. fully lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely

Workers employed adjacent to, or on public roads must wear reflective safety vests

All CV & MP inspection records must be kept in the OH&S File.

31. ELECTRICAL INSTALLATIONS AND MACHINERY ON CONSTRUCTION SITES

(Construction Regulation 24)

The Principal Contractor must, in addition to compliance with the Electrical Installation Regulations, 2009, and the Electrical Machinery Regulations, 1988, promulgated by Government Notice No. R. 1593 of 12 August 1988, ensure that—

- (a) before construction commences and during the progress thereof, adequate steps are taken to ascertain the presence of and guard against danger to workers from any electrical cable or apparatus which is under, over or on the site;
- (b) all parts of electrical installations and machinery are of adequate strength to withstand the working conditions on construction sites;
- (c) the control of all temporary electrical installations on the construction site is designated to a competent person who has been appointed in writing for that purpose;
- (d) all temporary electrical installations used by the contractor are inspected at least once a week by a competent person and the inspection findings are recorded in a register kept on the construction site; and
- (e) all electrical machinery is inspected by the authorized operator or user on a daily basis using a relevant checklist prior to use and the inspection findings are recorded in a register kept on the construction site.

The Principal Contractor must ensure that prior notice is given to ACSA Electrical Department of any work involving electrical installation. A lock-out certificate must be issued to the relevant Principal Contractor. The Principal Contractor must ensure that a lock-out procedure is adhered to by his/her employees whenever required. The Principal Contractor must ensure that safety measures stipulated in the Electrical Installation Regulations, Machinery Regulations, General Machinery Regulations and Construction Regulations are adhered to at all times.

32. USE AND TEMPORARY STORAGE OF FLAMMABLE LIQUIDS ON CONSTRUCTION SITES

(Construction Regulation 25)

The Principal Contractor to ensure that:

- No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapours being present.

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- No flammable substance is used or applied e.g. in spray painting, unless in a room or cabinet or other enclosure specially designed and constructed for that purpose, unless due to imposed controls that the ventilation provided is sufficient to ensure that the Lower Explosive Limit and Lower Fire Limit are not exceeded. Furthermore that the risk assessments are reviewed to ensure that all the related hazards have been addressed and that adequate P.P.E. is provided.
 - The workplace is effectively ventilated. Where this cannot be achieved:
 - Employees must wear suitable respiratory equipment
 - No smoking or other sources of ignition is allowed into the area
 - The area is conspicuously demarcated as "flammable materials"
 - Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container approved by the local Fire Department, cage or room that is kept locked with access control measures in place and sufficient firefighting equipment installed and fire prevention methods practised e.g. proper housekeeping
 - Flammables stored in a permanent flammables store are stored so that no fire or explosion is caused i.e.: stored in a locked well-ventilated reasonably fire resistant container, cage or room conspicuously demarcated as "Flammable Store -No Smoking or Naked Lights"
 - Adequate and suitable firefighting equipment installed around the flammables store and marked with the prescribed signs
 - All electrical switches and fittings to be of a flameproof design, or where necessary, intrinsically safe.
 - Any work done with tools in a flammables store or work areas to be of a non-sparking nature
 - No Class A combustibles such as paper, cardboard, wood, plastic, straw etc. to be stored together with Flammables
 - The flammable store to be designed and constructed so that in the event of spillage of liquids in the store, it will contain the full quantity + 10% of the amount liquid stored.
 - Where the use of Bulk Storage facilities is contemplated, the contractor must ensure compliance to the local Authority bylaws.
 - A sign indicating the capacity of the store to be displayed on the door
 - Containers (including empty containers) to be kept closed to prevent fumes/vapours from escaping and accumulating in low lying areas
 - Metal containers to be bonded to earth whilst decanting to prevent build-up of static electricity
 - Welding and other flammable gases to be stored and segregated as to type of gas and empty and full cylinders
 - All permanently installed storage facilities to comply with SANS 10089.

33. HOUSEKEEPING AND GENERAL SAFEGUARDING ON CONSTRUCTION SITES

(Construction Regulation 27)

The Principal Contractor must ensure that suitable housekeeping is continuously implemented on each construction site, including—

- (a) the proper storage of materials and equipment;
- (b) the removal of scrap, waste and debris at appropriate intervals;
- (c) ensuring that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways;
- (d) ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals;
- (e) ensuring that construction sites in built-up areas adjacent to a public way are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons; and
- (f) ensuring that a catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under, or fencing off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.

The Principal Contractor must ensure that safety precautionary measures stipulated in Environmental Regulations for Workplaces and Construction Regulations and Construction Environmental Specification are adhered to at all times.

34. STACKING AND STORAGE ON CONSTRUCTION SITES

(Construction Regulation 28)

The Principal Contractor must ensure contractor must ensure that:

- (a) a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- (b) adequate storage areas are provided;
- (c) there are demarcated storage areas; and
- (d) storage areas are kept neat and under control a competent person is appointed in writing with a duty of supervising all stacking and storage on a construction work or site. A proof of such appointment must be provided prior commencement of construction work. The Principal Contractor must ensure that stacking is conducted under supervision and good housekeeping is maintained at all times.

35. FIRE PRECAUTIONS ON CONSTRUCTION SITES

(Construction Regulation 29)

The Principal Contractor must ensure that:

- (a) all appropriate measures are taken to avoid the risk of fire;
- (b) sufficient and suitable storage is provided for flammable liquids, solids and gases;
- (c) smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- (d) in confined spaces and other places in which flammable gases, vapours or dust can cause danger—
 - (i) only suitably protected electrical installations and equipment, including portable lights, are used;
 - (ii) there are no flames or similar means of ignition;

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- (iii) there are conspicuous notices prohibiting smoking;
 - (iv) oily rags, waste and other substances liable to ignite are without delay removed to a safe place; and
 - (v) adequate ventilation is provided;
 - (e) combustible materials do not accumulate on the construction site;
 - (f) welding, flame cutting and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;
 - (g) suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order;
 - (h) the fire equipment contemplated in paragraph (g) is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof;
 - (i) a sufficient number of workers are trained in the use of fire- extinguishing equipment;
 - (j) where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
 - (k) the means of escape is kept clear at all times;
 - (l) there is an effective evacuation plan providing for all—
 - (i) persons to be evacuated speedily without panic;
 - (ii) persons to be accounted for; and
 - (iii) plant and processes to be shut down; and
 - (m) a siren is installed and sounded in the event of a fire.

36. CONSTRUCTION EMPLOYEES' FACILITIES

(Construction Regulation 30)

A Contractor must provide at or within reasonable access of every construction site, the following clean, hygienic and maintained facilities:

- (a) Shower facilities after consultation with the employees or employees' representatives, or at least one shower facility for every 15 persons;
- (b) at least one sanitary facility for each sex and for every 30 workers;
- (c) changing facilities for each sex; and
- (d) sheltered eating areas.

A Contractor must provide reasonable and suitable living accommodation for the workers at construction sites who are far removed from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

37. LADDERS

The Principal Contractor must ensure that all ladders are numbered, inspected before use and monthly inspections are recorded in a register. The Principal Contractor must ensure that a competent person who carries the above inspections is appointed in writing.

38. PRESSURE EQUIPMENT

The Principal Contractor must ensure that pressure equipment is identified, numbered and entered in a register. Furthermore he/she must ensure that inspections are carried out and certificates of testing are available and kept on file as per the Regulations.

39. EMPLOYEES EXPOSED TO EXCESSIVE NOISE

The Principal Contractor must ensure that all employees exposed to excessive noise, equal or above 85 dB(A), have undergone a baseline audiometric test prior commencement of construction work and SABS approved ear protection is provided and worn at all times.

40. PUBLIC SAFETY AND SECURITY

The Principal Contractor must ensure that notices and signs are conspicuously displayed at the entrance and along the perimeter fence indicating "No Unauthorized Entry", "Visitors to report to office", "helmet and safety shoes" etc.

Health and safety signage must be well maintained throughout the project. This must entail cleaning, inspection and replacement of missing or damaged signage.

Furthermore the Principal Contractor must ensure that:

- a) Nets, canopies, fans etc. are provided to protect the public passing or entering the site
- b) A security guard is provided where necessary and provided with a way of communication and an access control measures or register is in place
- c) All visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site.

41. NIGHT WORK

The Principal Contractor must ensure that necessary arrangements have been made with ACSA before conducting any night work and that there is adequate lighting for any work to be conducted and failure to do so will result in work being stopped.

42. HOT WORK

The Principal Contractor must ensure that ACSA Fire & Rescue Department is notified of any hot work to be conducted during construction work. A hot work permit accompanied with a gas free certificate must be issued to the relevant Principal Contractor by ACSA Fire & Rescue Department when satisfied that the area is safe and that the Principal Contractor understands the procedure. The Principal Contractor must ensure that a hot work procedure is adhered to at all time by his/her employees.

43. HIRED PLANT AND MACHINERY

The Principal Contractor must ensure that any hired plant and/or machinery brought to site is inspected by a competent person before use and records confirming that it is safe for use are provided prior usage of such equipment. Such plant or machinery complies at all times with the requirements of the Occupational Health & Safety Act.

The Principal Contractor must ensure that hired operators receive induction prior commencement of work and that said hired operators have proof of competency.

The Principal Contractor must provide information on procedures to be followed in the case of:

- (a) Malfunctioning of equipment; and

(b) Discovery of a suspected defect in the equipment

44. ROAD CONSTRUCTION WORK

The Principal Contractor must ensure that construction work conducted on the public road all necessary caution signage, cones, flag man etc. are provided as stipulated in the Road Traffic Ordinance is adhered to. The caution signage to be conspicuously displayed to warn the drivers of any construction work ahead must be provided at least at 75 m away from the cones; flag man; actual construction work etc.

45. EDGE PROTECTION AND PENETRATION

The Principal Contractor must ensure that all exposed edges and floor openings are guarded and demarcated at all times until permanent protection has been erected. Guardrails used for edge protection must be 500mm and 900mm apart (double railing) above the platform/ floor surface.

The Principal Contractors fall protection plan must include the procedure to be followed regarding the management of edge protection and penetration.

46. BATCH PLANTS

Should a batch plant be used, it must conform to the requirements as set out on Construction Regulation (February 2014) of OHS Act 85/93. These must include but not limited to appointment of a competent person to operate and supervise batch plant operations.

47. CONFINED SPACE ENTRY

The Principal Contractor must ensure that all necessary health and safety provisions prescribed in the General Safety Regulations are complied with when entering confined spaces.

48. LIQUOR, DRUGS, DANGEROUS WEAPONS, FIREARMS

The Principal Contractor must ensure that no person is allowed on site that appears to be under the influence of intoxicating liquor or drugs.

The Principal Contractor must encourage his/her workforce to disclose the medication that poses a health and safety threat towards his/her fellow employees. No person must be allowed to enter the site and work if the side effects of such medication do constitute a threat to the health or safety of the person concerned or others at such workplace.

No dangerous weapons or firearms allowed on the construction site.

49. INTERNAL/EXTERNAL AUDITS

The Principal Contractor must conduct monthly safety, health and environment audits and such records must be kept on site. The Principal Contractor must ensure that corrective measures are taken to ensure compliance.

ACSA must conduct monthly audits and defects noted must be reported to the relevant Principal Contractor for remedial action. Inspections must be conducted by ACSA and non-conformances noted must be recorded and provided to the relevant Principal Contractor for remedial action. ACSA must stop any Principal Contractor from executing any construction work which is not in accordance with the health and safety plan.

The Principal Contractor must ensure that all necessary documents stipulated in this document are kept on the health and safety file and made available when requested.

50. PENALTIES

Penalties will be imposed by ACSA on Principal Contractors who are found to be infringing these specifications, legislation and safety plans.

The Principal Contractor will be advised in writing of the nature of the infringement and the amount therefor. The Principal Contractor must determine how to recover the fine from the relevant employee and/or sub-contractor. The Principal Contractor must also take the necessary steps (e.g. training) to prevent a recurrence of the infringement and must advise ACSA accordingly. The Principal Contractor is also advised that the imposition of penalties does not replace any legal proceedings.

Penalties will be between R200 and R20 000, depending upon the severity of the infringement. The decision on how much to impose will be made by the ACSA SHE Representative, and will be final. In addition to the penalties, the Principal Contractor must be required to make good any damage caused as a result of the infringement at his/her own expense.

The preliminary list below outlines typical infringements against which ACSA may raise penalties; however, this list must not be construed as final:

- Failure to keep a copy of OHSACT on site.
- Failure to maintain an up-to-date letter of good standing with the Compensation Commissioner / FEM.
- Working on site without attending Safety Induction Training.
- Failure to conduct Safety Induction for personnel and visitors on site.
- Failure to issue and wear Personal Protective Clothing and Equipment.
- Failure to fully stock first aid box in accordance to the risks identified.
- Failure to disclose or report first aid cases and /or minor/major/fatalities as prescribed by the OHSACT.
- Failure to adhere to written safe work procedure as stipulated in the Hazard Identification and Risk Assessment and safety plan.
- Failure to maintain records and registers as per the OHS Act of 1993 and its regulations.
- Failure to conduct audits and inspections as required by legislation.
- Keeping un-serviced fire equipment on site.
- Failure to make use of ablution facilities.
- Failure to remove personnel on site who appears to be under the influence of intoxicating liquor or drugs.
- Failure to close out previously raised non-conformances.
- Failure to make and update legislative appointments.
- Failure to adhere to the OHS Act of 1993 and its regulations.

I, _____ (name & surname) of

_____(company) Upon receipt of this specification, agree and acknowledge ACSA's right to impose penalties should I or any of my employees or contractors fail to comply with these conditions.

Signed: _____

On this date: _____ (dd/mm/yyyy)

At: _____ (Airport Name)

Annexure C5.2: ACSA Baseline Hazard identification risk assessment (HIRA)

Baseline Risk Assessment	
Project Name	THE REPLACEMENT OF DIESEL GENERATORS AT UPINGTON INTERNATIONAL, GEORGE AND KIMBERLEY AIRPORTS, AND REFURBISHMENT OF MEDIUM AND LOW VOLTAGE ELECTRICAL INFRASTRUCTURE INCLUDING THE UPGRADE OF POWER FACTOR CORRECTION SYSTEMS AT GEORGE AIRPORT.
Document Number: HIRA 1	Revision Number: 001

1. Risk assessment of the Project

Risk Severity Definition	Description: Consequences (can lead to)...	Examples of what to look out for...
Category A Catastrophic	One or more multiple deaths and complete loss or destruction of equipment	A major accident
Category B Hazardous	Serious injuries or minor equipment damage	Large reduction in safety margins, a reduction in the ability of the operators cannot be relied upon to perform their tasks accurately or completely
Category C Major	Minor injuries or minor equipment damage	A significant reduction in safety margins, a reduction in the ability of the operators to cope with adverse operating conditions as a result of conditions impairing their efficiency.
Category D Minor	Incidents	Operating limitations are breached. Procedures are not used correctly.
Category E Negligible	Negligible or inconvenience	Few consequences, No safety consequences. Nuisance

2. Generic Hazard Assessment of the Project

Likelihood Probability	Description	Examples of what to look out for...
Category 1	Extremely Improbable (Rare)	Almost inconceivable that the event shall occur
Category 2	Improbable (Seldom)	Very unlikely that the event shall occur. It is not known that it has ever occurred before
Category 3	Remote (Unlikely)	Unlikely but could possibly occur. Has occurred rarely.
Category 4	Occasional	Likely to occur sometimes. Has occurred infrequently.
Category 5	Frequent	Likely to occur many times or regularly. Has occurred frequently or regularly

		Catas-trophic	Hazardous	Major	Minor	Negligible
		A	B	C	D	E
Frequent	5	5A	5B	5C	5D	5E
Occasional	4	4A	4B	4C	4D	4E
Remote	3	3A	3B	3C	3D	3E
Improbable	2	2A	2B	2C	2D	2E
Extremely Improbable	1	1A	1B	1C	1D	1E

Required to Complete a Generic Hazard Assessment of the Project

Generic Hazard	Specific component of Hazard	Hazard related consequence	Existing defences to control risk	Safety Risk Index
Site establishment	Delivering of containers and materials; increased vehicle movements and location of services	Operational disruptions, incidents and service disruptions	Site plan location requires prior approval, services to be identified by ACSA representatives and drivers to be competent and vigilant of other road users. Vehicle inspections are to be conducted daily	2D
Site Access	Access is to be controlled and movement of vehicles and staff are to be monitored to reduce impact on operations	Injuries to Airport users, traffic build up, operational delays, vehicle incidents	Site is to be access controlled. All visitors to site are to report to the site office. Entrance to site camp is to be kept clean, swept after truck deliveries to minimize impact to operations.	2D
Persons on airside	Accidents and injuries	Injury to persons/Fatality	All staff wishing to work on the Airside are to go for Airside induction training. These staff members are to have valid Permits with them at all times. Personal protective equipment required for Airside includes but is not limited to high visibility jackets (as per the procedure, hearing protection, safety shoes & hard hats (if required). An airside safety plan must be submitted before commencement of work.	3A

Vehicles on airside	Accidents and injuries	Damage to aircraft/vehicles/property/persons	All vehicles operating on the Airside are to be fitted with a strobe light, appropriate signage in the form of a prefix, have the necessary vehicle permit in place, to be fitted with a fire extinguisher and is to be serviceable. Vehicles are to be checked by Airside Safety prior to be granted Airside access	4A
Driving on airside	Incidents	Damage to aircraft/vehicles/property/ persons	Airside induction is required for all persons entering the Airside. For persons wishing to drive on the Airside Service Road an AVOP 2 permit is required. Where work is to be conducted on the Airfield, then contractors are required to be under escorts or have undergone Radio Licence training and be in the possession of an AVOP 3 permit. The speed limit on the Apron Service Roads is 30km/h, 15km/h at the back of stand and 60km/h on the Perimeter Road. During period of Low Visibility (LVP) will be effected and no vehicular movements are allowed on the Airfield. Low visibility procedures will be in place	4A
Driving on and taxiways without permission	Incursion (include definition)	Collision with aircraft/property damage or fatality/ies	Runway and taxiway markings are indicated as per ICAO Annex 14. Permission is required from Air Traffic Control when crossing runways and taxiways. Signage indicating movement areas are painted on the ground or by means of illuminated signage boxes. Only persons in possession of a valid Airside Vehicle Operators Permit with the necessary radio licence (Partac training) will be permitted to drive in restricted areas. Vehicles under escort must follow at reasonable distance.	3A

Noise	Health Risks	Noise induced hearing loss	Baseline and annual audiograms are to be conducted. Contractors are to implement a hearing conservation programme and issue staff with hearing protection and provide the necessary training in this regard. Contractors to identify noisy operations in passenger areas and are to conduct noise generating operations at off peak times were possible or if unavoidable with ACSA's Project Leaders written permission.	3B
Jet blast	Potential injuries and property	Damage to vehicles/property/persons	Signage warning against jetblast is installed at high-risk areas. Risks associated with jetblast are covered during Airside Induction Training. Caution to be taken around aircraft when the anti-collision lights are activated in the Apron bays. 75 meter clearance behind aircraft to be observed to prevent jetblast. Contractors to be aware of aircraft movements	4C
Perimeter fence breach	Security risk	National Key Point Violation	Access and egress points are strictly enforced. Contractors are only to use the entry points as provided by the ACSA Project Leader. No materials are to be stored within 3meter of the perimeter fence.	3B
Crane operations	Height of crane	Flight path obstruction/collision with aircraft	30 meter height restriction procedure – refer to Airfield Operation Department for further information	2A
Weather	Adverse weather conditions	Damage to aircraft/vehicles/equipment	Weather warnings are issued by the Airside Safety Department as and when required. All equipment on the Airside is to be secured	4A

Construction works	Foreign Object Debris (FOD)	Ingestion into aircraft engine	Airside induction is required for all staff working on the Airside, FOD bins are to be used for any FOD found lying on the ground. All waste to be secured to prevent it from becoming airborne (refer to Environmental Terms and Conditions)	4B
Construction works	Working at Height	Injury /fatality	Fall protection plan to be devised by the contractors in line with the Construction Regulations 2014. Rescue plans are to be included	3A
Construction works	Storage of hazardous chemicals substances	Contamination/ fire/ injury to persons/ environmental impact	ACSA's Environmental terms and conditions are to be adhered to. All relevant legislation and bylaws are to be adhered to. All necessary permits are to be applied for by the contractor such as transport permits, possession permits and flammable certificates. ACSA Environment and Fire and Rescue to be notified where a spill occurs.	4B
Construction works	Waste	Attracts rodents and birds which leads to bird strikes and adds to FOD	Waste management to be implemented in line with ACSA's Environmental Terms and Conditions	4B
Construction works	Spillages (fuels/oils/hydraulics/chemicals/human waste)	Contamination/Pollution/injury to persons/adverse health effects	ACSA's Environmental terms and conditions and applicable legislative controls are to be adhered to. ACSA Environment and Fire and Rescue to be notified where a spill occurs	4B
Construction works	Dust	Damage to aircraft/injury to persons/adverse health effects/	Dust suppression measures are to be implemented and PPE used where required	4A

Construction works/ Trenching	Damage to underground services. Interruption of critical services	Electrocution, loss of critical services, damage to property, major injuries, aircraft diversions	Consult as-built plans. Scan area before trenching. Trenching to be done under competent supervision.	4A
Delivery of materials	Falling materials or stones or sand	Vehicle/pedestrian accidents	Materials are to be delivered within specified time frames, flagman to be utilised during deliveries, load limitations to be observed, netting is to be used, contractors to clean road after deliveries	4E
Lack of signage – warning signs	Injuries and accidents	Injuries and accidents	Contractors to install sufficient demarcations around construction sites along with the necessary warning signs and beacon lights (refer to Construction Regulations and Traffic Act) No signs are to be removed without prior permission and notification. Temporary way finding signage is required if signage has been disturbed	2D
Road crossing Central Boulevard	Not using the tunnel crossing	Vehicle and pedestrian accidents	Contractor staff are to cross the Boulevard via the North or South tunnels	4B
Waste management	Environmental impact	Illegal dumping	Temporary laydown areas to be identified and no illegal dumping is permitted.	3C
Trolleys	Damaging trolleys through misuse	Injuries and property damage	Contractors to provide their own trolleys. ACSA's trolleys are for passenger use only	5D
Golf carts	Misuse of golf carts	Injuries and property damage	Contractor staff to be aware of golf cart movements on the Landside. Golf cart use for airport users only and not for contractor use for transporting materials. Golf cart operate in predetermined routes – contractors to be aware thereof	3D

Fire equipment	Use and abuse of fire equipment	Injuries and property damage	Fire equipment is only to be used during emergencies. Contractors to provide their own fire equipment. No materials to be stored in ACSA fire cabinets. Emergency exits are to be kept clear at all times	2B
Unattended bags	Security risk	injuries/fatality to Airport users/stakeholders/ACSA employees. Bomb threat-damage to property, vehicle. Operational disruptions	Contractors are not permitted to leave bags unattended as they will be removed and will be handed to SAPS	5C
Speed limits	Car accidents	Injuries and vehicle damage	Speed limits on the Central Boulevard and Elevated Road are 40km/h, exiting the road networks is 50km/h, Tower Road is 50km/h and Freight Road is 50km/h. Speed humps are installed along Tower Road and Freight Road to reduce speeding	3C
Deliveries	Elevated Road	Disrupt traffic and passenger movements	No trucks allowed, deliveries to be done via North or South Delivery Yards, delivery notes are required and delivery times are to be specified.	2C
Overhead works	Falling items	Injuries, vehicles, property damage	Fall protection plan required as per the Construction Regulations 2014.	5C
General housekeeping	Damage to escalators	Injuries, property damages	Escalators are not to be used to transport heavy items in the Parkade	4C

Annexure C5.3: ACSA INSURANCE CLAUSES

INSURANCE CLAUSES FOR AIRSIDE CONSTRUCTION CONTRACTS WHERE THE AWARDED CONTRACT VALUE DOES NOT EXCEED R150 MILLION, AND THE CONSTRUCTION PERIOD DOES NOT EXCEED 36 MONTHS, AND THE DEFECTS LIABILITY PERIOD DOES NOT EXCEED 24 MONTHS

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 warranties;

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) **Contract Works SASRIA** – 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 <http://www.sasria.co.za/> which notes the covers and policy exclusions.

- c) **Aviation 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 **R2,000,000,000** in respect of any one occurrence or series of occurrences consequent on or to one source or original cause.

This insurance is in respect of liability relating to aircrafts.

- d) **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

R75,000 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) Contract Works SASRIA

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

c) Aviation Liability Insurance ;

In respect of each and every loss or damage or injury - **US\$250,000**.

d) Design & Construct Professional Indemnity Insurance

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

b) **In respect of contracts over R50 million at award – R10,000,000**

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 7231400

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.

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- 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.
 - l) 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:

- a. 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.

- c) **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 1.6 (a),(c) and (d) 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.

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

i) **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.

- b. 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.
- c. 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.

d. **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
- b) enforce the compliance by subcontract 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 :

Nokulunga.Masiza@airports.co.za

Buhle.Mnguni@airports.co.za

*.....
.....
.....
.....
.....
.....

* (Please provide name of contracting company, site address, telephone numbers and e-mail address).

RE: ACSA CONTRACTORS : CAR/PL/PI : CLAIM

Date of loss : _____

Reported to site agent by: _____ Date: _____

Reported to Insurance Broker by: _____ Date: _____

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 _____

ANNEXURE C5.4: POPIA AGREEMENT

CONFIDENTIALITY AND DATA PROTECTION

Save as provided in this clause (*Confidentiality and Data Protection*), each Party shall, and shall procure that its Affiliate and their respective officers, directors, employees, agents, auditors and advisors shall, treat as confidential all information relating to the other Party or its Affiliates thereof or relating to their respective businesses that is of a confidential nature and which is obtained by that Party in terms of, or arising from the implementation of this Agreement, which may become known to it by virtue of being a Party, and shall not reveal, disclose or authorise the disclosure of any such information to any third party or use such information for its own purpose or for any purposes other than those related to the implementation of this Agreement.

The obligations of confidentiality in this clause shall not apply in respect of the disclosure or use of such information in the following circumstances:

in respect of any information which is previously known by such Party (other than as a result of any breach or default by any Party or other person of any agreement by which such Confidential Information was obtained by such Party);

in respect of any information which is in the public domain (other than as a result of any breach or default by either Party);

any disclosure to either Party's professional advisors, executive staff, board of directors or similar governing body who (i) such Party believes have a need to know such information, and (ii) are notified of the confidential nature of such information and are bound by a general duty of confidentiality in respect thereof materially similar to that set out herein;

any disclosure required by law or by any court of competent jurisdiction or by any regulatory authority or by the rules or regulations of any stock exchange;

any disclosure made by a Party made in accordance with that Party's pursuit of any legal remedy;

any disclosure by a Party to its shareholders or members pursuant to any reporting obligations that Party may have to its shareholders or members, provided that each such shareholder or member is notified of the confidential nature of such information and is bound by a general duty of confidentiality in respect thereof materially similar to that set out herein;

In the event that a Party is required to disclose confidential information as contemplated in this clause, such Party will:

advise any Party/ies in respect of whom such information relates (the "**Relevant Party/ies**") in writing prior to disclosure, if possible;

take such steps to limit the disclosure to the minimum extent required to satisfy such requirement and to the extent that it lawfully and reasonably can;

afford the Relevant Party/ies a reasonable opportunity, if possible, to intervene in the proceedings;

comply with the Relevant Party/ies' reasonable requests as to the manner and terms of such disclosure; and

notify the Relevant Party/ies of the recipient of, and the form and extent of, any such disclosure or announcement immediately after it was made.

Either Party may, by notice in writing, be entitled to demand the prompt return of the whole or any part of any confidential information supplied by it to the other Party, and each Party hereby undertakes to comply promptly with any such demand.

In line with the provisions of Protection of Personal Information Act, No 4 of 2013 (POPIA), particularly section 20 and 21, the service provider (referred to as Operator in POPIA) shall observe the following principles when processing personal information on behalf of the Company (referred to as Responsible Party in POPIA):

the Service Provider shall only act on the Company's documented instructions, unless required by law to act without such instructions;

the Service Provider shall ensure that its representatives processing the information are subject to a duty of confidence;

the Service Provider shall take appropriate measures to ensure the security of processing. The Service Provider shall ensure and hereby warrants that they have minimum IT and or physical security safeguard to protect personal information;

the Service Provider shall notify the Company immediately where there are reasonable grounds to believe that the personal information of a data subject has been accessed or acquired by any unauthorised person;

the Service Provider shall only engage a sub-operator with the Company's prior authorisation and under a written contract;

the Service Provider shall take appropriate measures to help the Company respond to requests from data subjects to exercise their rights;

taking into account the nature of processing and the information available, the Service Provider shall assist the Company in meeting its POPIA obligations in relation to the security of processing, the notification of personal information breaches and data protection impact assessments;

the Service Provider shall delete or return all personal information to the Company (at the Company's choice) at the end of the contract, and the service

provider shall also delete existing personal information unless the law requires its storage; and

the Service Provider shall submit to audits and inspections. The Service Provider shall also give the Company whatever information it needs to ensure that the Parties meet their Section 20(1) obligations.

1. SIGNATURES

FOR AIRPORTS COMPANY SOUTH AFRICA

THUS DONE AND SIGNED AT _____ ON THIS _____ DAY OF _____ 2024.

FOR SERVICE PROVIDER

THUS DONE AND SIGNED AT _____ ON THIS _____ DAY OF _____ 2024.

AUTHORIZED SIGNATORY _____

The below listed Annexures are attached separately.

- **Annexure C5.5: ACSA CAD Drawing Standards**
- **Annexure C5.6: FIDPM**
- **Annexure C5.7: ECSA Guidelines**
- **Annexure C5.8: SACPCMP**
- **Annexure C5.9: ELECTRICAL DRAWINGS**

