



NEC3 Engineering & Construction Contract

Between Airports Company South Africa
(Registration no: 1993/004149/06)

and [Insert at award stage]
(Reg No. _____)

for Design and replacement of aircraft gates at O.R. Tambo
International Airport over a period of 18 months.
ORTIA8278/2026/RFP

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CONTRACT No.

Part C1: Agreements & Contract Data

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C1.1 Form of Offer & Acceptance

Offer

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

Design and replacement of aircraft gates at O.R. Tambo International Airport over a period of 18 months

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

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

The offered total of the Prices exclusive of VAT is	R
Value Added Tax @ 15% is	R
The total offered amount due inclusive of VAT is	R
(in words)	

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



Signature(s)

Name(s)

Capacity

**For the
tenderer:**

*(Insert name and address of
organisation)*

Name &
signature of
witness

Date

Tenderer's CIDB registration number:



Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

Signature(s)

.....



Name(s)	_____	_____
Capacity	_____	_____
for the Employer	Airports Company South Africa, 3rd Floor ACSA North Wing Offices O R Tambo International Airport Kempton Park 1627	
Name & signature of witness	<i>(Insert name and address of organisation)</i>	
		Date
	_____	_____

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.


Schedule of Deviations to be completed by the *Employer* prior to contract award

Note:

1. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1		
2		
3		
4		
5		
6		
7		

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender 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 Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the tenderer:

For the Employer



Signature

Name

Capacity

On behalf
of

(Insert name and address of organisation)

(Insert name and address of organisation)

Name &
signature
of witness

Date



C1.2a ECC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
		A: Priced contract with activity schedule
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		X2 Changes in the law
		X5: Sectional Completion
		X7: Delay damages
		X13: Performance Bond
		X16: Retention
		X18: Limitation of liability
		Z: <i>Additional conditions of contract</i>
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	Airports Company South Africa SOC Limited (reg. no: 1993/004149/06), a juristic person incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at OR Tambo International Airport Airports Company South Africa,



**3rd Floor ACSA North Wing Offices
O R Tambo International Airport
Kempton Park
1627**

10.1 The *Project Manager* is: (Name)

Address

**Airports Company South Africa
O R Tambo International Airport
ACSA Admin. Building
3rd Floor North Wing Offices
Kempton Park
1627**

Tel

e-mail

10.1 The *Supervisor* is: (Name)

Address

**Airports Company South Africa
O R Tambo International Airport
ACSA Admin. Building
3rd Floor North Wing Offices
Kempton Park
1627**

Tel No.

e-mail

11.2(13) The *works* are

Design and replacement of aircraft gates at O.R. Tambo International Airport over a period of 18 months, as fully described in C3.

11.2(14) The following matters will be included in the Risk Register

Live airport, road and airside operations; verified gate dimensions and condition; aviation security and access; restricted work windows; temporary traffic arrangements; existing services; ACSA IT/cybersecurity approvals; interfaces with the Airport Integrated Monitoring Centre; long-lead



gate, drive and control equipment; and continuity of access.

11.2(15)	The <i>boundaries of the site</i> are	O.R. Tambo International Airport	
11.2(16)	The Site Information is in	Part 4: Site Information	
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents	
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa	
13.1	The <i>language of this contract</i> is	English	
13.3	The <i>period for reply</i> is	3 Working days	
2	The Contractor's main responsibilities	Data required by this section of the core clauses is provided by the Contractor in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.	
3	Time		
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	78 weeks after the Contract Date. The contract terminates exactly 78 weeks after the Contract Date unless it is changed according to this contract.	
11.2(9)	The <i>key dates</i> and the <i>conditions</i> to be met are:	Condition to be met	key date
		FIDPM Stage 3 inception, measured surveys, design basis and coordinated design-development plan accepted.	4 weeks after the Contract Date
		Coordinated FIDPM Stage 3 design, discipline design development, design-risk review and mobile/cloud architecture accepted.	10 weeks after the Contract Date



	Stage 4 issued-for-construction design, software/cloud documentation and construction readiness accepted.	16 weeks after the Contract Date
	Application/cloud development environment established and accepted by ACSA ICT/Cybersecurity.	24 weeks after the Contract Date
	Long-lead gate, drive, structural, electrical, control and IoT equipment procured and available for FAT or delivery.	36 weeks after the Contract Date
	Mechanical, structural, civil, electrical, safety and control installation complete at all nine gates; cloud platform and native mobile application build complete.	60 weeks after the Contract Date
	Cybersecurity verification completed and all critical and high-risk findings closed.	66 weeks after the Contract Date
	SAT and performance certification completed for each gate; end-to-end BMS/IMC, cloud and mobile integration and user-acceptance testing accepted.	70 weeks after the Contract Date
	Operations and maintenance training completed.	76 weeks after the Contract Date



		Complete handover dossier and Stage 6 close-out accepted and Completion achieved.	78 weeks after the Contract Date
X5	The completion date for each section of the works is:	Section	Completion Date
		Airlink, SAA Technical and Denel Aviation gates	70 weeks after the Contract Date
		Gates V1 and V2	70 weeks after the Contract Date
		Gates V3A and V3B	70 weeks after the Contract Date
		Gates V4 and V5	70 weeks after the Contract Date
30.1	The <i>access dates</i> are:	Part of the Site	Date
		Airlink, SAA Technical, Denel Aviation, V1 and V2 gates	Starting Date, subject to permits and approved access
		V3A, V3B, V4 and V5 gates	Starting Date, subject to permits and approved access
		Central BMS/IMC interface areas	Starting Date, subject to permits and approved access
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	2 weeks of the Contract Date.	
31.2	The <i>starting date</i> is	The Contract Date.	



32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	4 weeks.
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	
4	Testing and Defects	
42.2	The <i>defects date</i> is	52 weeks after Completion of the whole of the <i>works</i>.
43.2	The <i>defect correction period</i> is	One week for safety-critical gate, interlock, obstruction detection, emergency stop and BMS/IMC defects; two weeks for other Defects, unless the Project Manager accepts another period.
47	The Contractor submits a quality plan for acceptance within:	4 weeks of the Contract Date.
5	Payment	
50.1	The <i>assessment interval</i> is	between the 7th calendar day of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	4 weeks after receipt of a valid tax invoice .
6	Compensation events	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
7	Title	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	1. None.



84.1	The <i>Employer</i> provides these insurances from the Insurance Table	See Annexure D to this Contract Data provided by the Employer.
84.1	The <i>Employer</i> provides these additional insurances	The terms and other matters applicable to these insurances provided by the Employer (and to insurances generally) are detailed in the insurance schedule attached as section C1.4 to the contract (“the insurance Schedule)
84.1	The <i>Contractor</i> provides these additional insurances	As stated in C1.4
84.2	The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the <i>works</i> , Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract for any one event is	The Contractor’s total direct liability to the Employer for all matters arising under or in connection with this contract, other than the excluded matters, is limited to the total of the losses incurred and/or repairs to the damages caused total of the Prices and applies in contract, tort or delict and otherwise to the extent allowed under the law of the contract. The excluded matters are amounts payable by the Contractor as stated in this contract for: - Loss of or damage to the Employer’s property, - Defects liability, - Insurance liability to the extent of the Contractor’s risks - death of or injury to a person. infringement of an intellectual property right
84.2	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor’s</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R [●].
9	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics



used in this section are identified elsewhere in this Contract Data.

10	Data for main Option clause	
A	Priced contract with activity schedule	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is (Name)	The person appointed jointly by the parties from the list of adjudicators listed in Annexure C of this Contract Data, by the party intending to refer a dispute to him.
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 <i>tribunal</i> is:	Arbitration.
W1.4(5)	The <i>arbitration procedure</i> is	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	In the city where the Site is located, within South Africa.
	The person or organisation who will choose an arbitrator	
	1. if the Parties cannot agree a choice or	the Chairman for the time being or his nominee of
	2. if the arbitration procedure does not state who selects an arbitrator, is	the Association of Arbitrators (Southern Africa) or its successor body.
12	Data for secondary Option clauses	
X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
X7	Delay damages (but not if Option X5 is also used)	



X7.1	Delay damages for Completion of the whole of the <i>works</i> are	R1,000 per calendar day, subject to the contractual limit stated in the Z clauses.
X13	Performance bond	
X13.1	The amount of the performance bond is	5% of the total of the Prices excluding VAT.
X16	Retention (not used with Option F)	
X16.1	The <i>retention percentage</i> is	5% of each amount due; retention-free amount R0; maximum retention 5% of the total of the Prices.
X18	Limitation of liability	
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	Nil - Neither Party is liable to the other for any consequential or indirect loss, including but not limited to loss of profit, loss of income or loss of revenue
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	The Total Costs Incurred and/or Damages Suffered to the Employer's Property
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	The Total Costs Incurred and/or Damages Suffered
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	The Total Costs Incurred and/or Damages Suffered
X18.5	The <i>end of liability date</i> is	The date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.
Z	The <i>Additional conditions of contract</i> are	Z1 to Z24 below.



AMENDMENTS TO THE CORE CLAUSES

Z1 Interpretation and the law

Z1.1 Add to core clause 12.3: Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z1.2 Add the following as a new core clause 12.5:

Z1.2.1 In this contract:

Z1.2.1.1 references to any Party to the Contract include its successors or permitted assigns;

Z1.2.1.2 references to the Contractor include the obligations of its personnel;

Z1.2.1.3 the references to the provisions of any law 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;

Z1.2.1.4 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;

Z1.2.1.5 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;

Z1.2.1.6 references to "month" means a calendar month;

Z1.2.1.7 headings are for convenience only and are not taken into consideration in the interpretation of the Contract;

Z1.2.1.8 where any number of days is prescribed, those days are 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 is the next succeeding working day;

Z1.2.1.9 any provision in Contract that is or may become illegal, invalid or unenforceable in any jurisdiction is ineffective to the extent of such prohibition or unenforceability in such jurisdiction and is 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;



- Z1.2.1.10** references to any amount means that amount exclusive of VAT, unless the amount expressly includes VAT;
- Z1.2.1.11** 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;
- Z1.2.1.12** the rule of construction that the Contract is interpreted against or to the disadvantage of the party responsible for the drafting or preparation of Contract does not apply;
- Z1.2.1.13** words and abbreviations that have well known technical or trade meanings are used in the Contract in accordance with such recognized meanings;
- Z1.2.1.14** references to a "*subsidiary*" or a "*holding company*" is 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;
- Z1.2.1.15** time is of the essence in the performance of the parties' respective obligations.
- Z2 The Project Manager and Supervisor: add the following at the end of core clause 14.2:**
- Z2.1** The Project Manager and the Supervisor may take an action which they have delegated.
- Z3 Early Warning: add the following at the end of core clause 16.2:**
- Z3.1** The Contractor ensures that a subcontractor attends risk reduction meeting if its attendance would assist in deciding the actions to be taken.
- Z4 Providing the Works: Delete core clause 20.1 and replace with the following:**
- Z4.1** The *Contractor* provides the works in accordance with the Works Information and warrants that the results of the Works, when complete, shall be fit for their intended purpose as stated in the Works Information, and if no such purposes is stated, the ordinary purpose of the Works.
- Z5 Subcontracting:**
- Z5.1** **The following clause is added as a new core clause 26.4:** "Within 5 days of request by the *Project Manager*, the Contractor provides proof to the *Project Manager* that the Contractor's payment obligations towards its Subcontractors have been discharged. Failure by the Contractor to provide such



proof to the satisfaction of the *Project Manager* entitles the *Employer* to instruct the *Project Manager* to certify payment directly to any such Subcontractor and the *Contractor* shall have no recourse to recover such amounts from the *Employer*. Such direct payment do not create privity of contract between the Employer and such Subcontractor. The *Employer* may recover such direct payment from the *Contractor*.”

Z6 Other responsibilities: add the following at the end of core clause 27:

- Z6.1** The *Contractor* has satisfied himself, prior to the Contract Date, as to the completeness, sufficiency and accuracy of all information and drawings provided to him as at the Contract Date.
- Z6.2** The *Contractor* is responsible for the correct setting out of the *Works* in accordance with the original points, lines and levels stated in the *Works* Information or notified by the *Project Manager*, *Supervisor* or the *Employer*. Any errors in the positioning of the *Works* are rectified by the *Contractor* at the *Contractor's* own costs.

Z7 Acceleration: add the following new provisions at the end of core clause 36:

- Z7.1** The Project Manager's reply is either:
- Z7.1.1** A notification that the quotation is accepted, in which case, the *Project Manager* changes the Prices, Completion Date and Key Dates and accepts the revised programme; or
- Z7.1.2** A notification that the quotation is not accepted and that the Prices, Completion Date and Key Dates are not changed.

Z8 Extending the defects date: add the following as a new core clause 46:

- Z8.1** If the *Employer* cannot use the *works* due to a Defect, which arises after Completion and before the *defects date*, the *defects date* is delayed by a period equal to that during which the *Employer*, due to a Defect, is unable to use the *works*.
- Z8.2** If part of the *works* is replaced due to a Defect arising after Completion and before the *defects date*, the *defects date* for the part of the *works* which is replaced is delayed by a period equal to that between Completion and the date by when the part has been replaced.
- Z8.3** The *Project Manager* notifies the *Contractor* of the change to a *defect date* when the delay occurs. The period between Completion and an extended *defects date* does not exceed twice the period between Completion and the *defects date* stated in the Contract Data.

Z9 Quality Management System: add the following as a new core clause 47:



- Z9.1** The *Contractor* implements and maintains a quality management system with the requirements stated in the Works Information.
- Z9.2** Within the period stated in the Contract Data, the *Contractor* provides the *Project Manager* with a quality plan for acceptance. A reason for not accepting the quality plan is that it does not allow for the *Contractor* to Provide the Works.
- Z9.3** If any changes are made to the quality plan, the *Contractor* provides the *Project Manager* with the changes quality plan for acceptance.
- Z9.4** The *Project Manager* may instruct the *Contractor* to correct a failure to comply with the quality plan. This instruction is not a compensation event.
- Z10** **Assessing the amount due:**
- Z10.1** **Delete the second bullet point of core clause 50.1 and replace with the following:** “within thirteen weeks of termination of this Contract”
- Z11** **Final assessment: add the following as a new core clause 53:**
- Z11.1** The *Project Manager* makes a final assessment and certifies final payment in accordance with the Contract. The final payment is made within four weeks of the assessment.
- Z11.2** An assessment of the final amount due is conclusive evidence of the final amount due under or in connection with the Contract, unless a Party raises a dispute in relation to the assessment of the final amount due.
- Z11.3** The assessment of the final amount due is changed to include any agreement the Parties reached and/or a decision of the Adjudicator which has not been referred to the tribunal within four weeks of that decision. The changed assessment becomes conclusive evidence of the final amount due under or in connection with the Contract.
- Z12** **Notifying compensation events:**
- Z12.1** **Delete the last sentence in core clause 61.3 and replace with the following:** “If the *Contractor* does not notify a compensation event within four weeks of becoming 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 relation to such event.”
- Z13** **Assessing compensation events:**
- Z13.1** **The following is added at the end of core clause 63.4:** “the *Contractor* shall only be entitled to changes to the Prices, the Completion Date and/or the Key Date if the compensation event affects the



critical path.”

Z14 Termination

Z14.1 Add the following to core clause 91.1, at the second main bullet, fifth sub-bullet point, after the words “assets or”: “business rescue proceedings are initiated or steps are taken to initiate business rescue proceedings”.

AMENDMENTS TO THE SECONDARY OPTION CLAUSES

Z15 Changes in Law: Add the following clause to secondary option X2 as X2.2:

Z15.1 A change in law is defined as:

Z15.1.1 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

Z15.1.2 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 *Contractor* to comply with any condition set out therein, or (iii) as a result of any act or omission of the *Contractor*, any Subcontractor or any affiliate to the *Contractor*.

Z16. Delay damages: add the following to secondary Option X7 (if applicable in this contract)

Z16.1 If the amount due for the *Contractor'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 *Contractor's* obligation to Provide the Works.

Z16.2 If the *Employer* terminates in terms of this clause, the procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table

Z17 Performance Bond

Z17.1 Amend the first sentence of clause X13.1 to read as follows: The *Contractor* gives the *Employer* an unconditional, on-demand performance bond, provided by a bank or insurer which the *Project Manager* and the *Employer* have accepted, for the amount stated in the Contract Data and in the form set out in Annexure B of this Contract Data.



Z17.2 **Add the following new clause as Option X13.2:** The *Contractor* ensures that the performance bond is valid and enforceable until the end of the *contract period*. If the terms of the performance bond specify its expiry date and the end of the *contract period* does not coincide with such expiry date, four weeks prior to the said expiry date, the *Contractor* extends the validity of the performance bond until the end of the *contract period*. If the *Contractor* fails to so extend the validity of the performance bond, the *Employer* may claim the full amount of the performance bond and retain the proceeds as cash security

Z18 **Limitation of liability: Insert the following new clause as Option X18.6:**

Z18.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00.

Z18.2 Notwithstanding any other clause in this contract, any proceeds received from the security bonds and guarantees provided by the *Contractor* 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 *Contractor* shall be excluded from the calculation of the limitations of liability listed in the contract.

ADDITIONAL Z CLAUSES

Z19 **Cession, delegation and assignment**

Z19.1 The *Contractor* shall not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*, which consent shall not be unreasonably withheld. This clause shall be binding on the liquidator/business rescue practitioner /trustee (whether provisional or not) of the *Contractor*.

Z19.2 The *Employer* may, on written notice to the *Contractor*, cede and delegate its rights and obligations under this contract to any person or entity.

Z20 **Joint and several liability**

Z20.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons, these persons are deemed to be jointly and severally liable to the *Employer* for the performance of the Contract.

Z20.2 The *Contractor* shall, within 1 week of the Contract Date, notify the *Project Manager* and the *Employer* of the key person who has the authority to bind the *Contractor* on their behalf.

Z20.3 The *Contractor* does not materially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without prior written consent of the *Employer*.



Z21 Ethics

Z21.1 The *Contractor* undertakes:

Z21.1.1 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;

Z21.1.2 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.

Z21.2 The *Contractor's* breach of this clause constitutes grounds for terminating the *Contractor's* obligation to Provide the Works or taking any other action as appropriate against the *Contractor* (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.

Z21.3 If the *Contractor* is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices, including but not limited to the making of offers (directly or indirectly), payments, gifts, gratuity, commission or benefits of any kind, which are in any way whatsoever in connection with the contract with the *Employer*, the *Employer* shall be entitled to terminate the contract in accordance with the procedures stated in core clause 92.2. The amount due on termination is A1.

Z22 Confidentiality

Z22.1 All information obtained in terms of this contract or arising from the implementation of this contract shall be treated as confidential by the *Contractor* and shall not be used or divulged or published to any person not being a party to this contract, without the prior written consent of the *Project Manager* or the *Employer*, which consent shall not be unreasonably withheld.

Z22.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until otherwise notified by the *Project Manager*.

Z22.3 This undertaking shall not apply to –

Z22.3.1 Information disclosed to the employees of the *Contractor* for the purposes of the implementation of this agreement. The *Contractor* undertakes to procure that its employees are aware of the confidential nature of the information so disclosed and that they comply with the provisions of this clause;

Z22.3.2 Information which the *Contractor* is required by law to disclose, provided that the *Contractor* notifies the *Employer* prior to disclosure so as to enable the *Employer* to take the appropriate action to protect



such information. The *Contractor* may disclose such information only to the extent required by law and shall use reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed;

Z22.3.3 Information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time);

Z22.4 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*.

Z22.5 The *Contractor* ensures that all his Subcontractors abide by the undertakings in this clause.

Z23 Liens and Encumbrances

Z23.1 The *Contractor* keeps the Equipment used to Provide the Services free of all liens and other encumbrances at all times. The *Contractor*, vis-a-vis the *Employer*, waives all and any liens which he may from time to time have, or become entitled to over such Equipment and any part thereof and procures that his Subcontractors similarly, vis-a-vis the *Employer*, waive all liens they may have or become entitled to over such Equipment from time to time

Z24 Intellectual Property

Z24.1 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.

Z24.2 IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works*.

Z24.3 The *Contractor* gives the *Employer* an irrevocable, transferrable, non-exclusive, royalty free licence to use and copy all IP related to the *works* for the purposes of constructing, repairing, demolishing, operating and maintaining the works.

Z24.4 The written approval of the *Contractor* is to be obtained before the *Contractor's* IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any *Contractor's* IP available to any third party the *Employer* shall obtain a written confidentiality undertaking from any such third party on terms no less onerous than the terms the *Employer* would use to protect its IP.

Z24.5 The *Contractor* shall indemnify and hold the *Employer* harmless against and from any claim alleging an infringement of IP rights ("**the claim**"), which arises out of or in relation to:



- Z24.5.1** the *Contractor's* design, manufacture, construction or execution of the Works;
- Z24.5.2** the use of the *Contractor's* Equipment, or
- Z24.5.3** the proper use of the Works.
- Z24.6** The *Employer* shall, at the request and cost of the *Contractor*, assist in contesting the claim and the *Contractor* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.



Annexure A: One-in-ten-year-return *weather data* obtained from SA Weather Bureau for [weather station]

If any one of these *weather measurements* recorded within a calendar month, before the Completion Date for the whole of the *works* and at the place stated in this Contract Data is shown to be more adverse than the amount stated below then the *Contractor* may notify a compensation event.

	<i>Weather measurement</i>				
Month	Cumulative rainfall (mm)	Number of days with rain more than 10mm	Number of days with min air temp < 0 deg.C	Number of days with snow lying at 08:00 CAT	[Other measurements if applicable]
January	[•]	[•]	[•]	[•]	
February	[•]	[•]	[•]	[•]	
March	[•]	[•]	[•]	[•]	
April	[•]	[•]	[•]	[•]	
May	[•]	[•]	[•]	[•]	
June	[•]	[•]	[•]	[•]	
July	[•]	[•]	[•]	[•]	
August	[•]	[•]	[•]	[•]	
September	[•]	[•]	[•]	[•]	
October	[•]	[•]	[•]	[•]	
November	[•]	[•]	[•]	[•]	
December	[•]	[•]	[•]	[•]	

Only the difference between the more adverse recorded weather and the equivalent measurement given above is taken into account in assessing a compensation event.



Annexure B: Pro forma Security Bonds and Guarantee

Pro forma Performance Bond – Demand Guarantee (for use with Option X13)

(to be reproduced exactly as shown below on the letterhead of the Bank providing the Bond / Guarantee)

[Insert *Contractor's* name and registered address]

Bank reference No.

Date:

Dear Sirs,

Performance Bond – Demand Guarantee for [insert name of *Contractor*] required in terms of contract [insert *Contractor's* contract reference number or title]

1. In this Guarantee the following words and expressions shall have the following meanings: -

1.1	"Bank" means	[Insert name of Bank], [●] Branch, Registration No. [●]
1.2	"Bank's Address" means	[Insert physical address of Bank]
1.3	"Contract" means	the written agreement relating to providing the <i>works</i> , entered into between the <i>Employer</i> and the <i>Contractor</i> , on or about the [●] day of [●] 20[●] (Contract Reference No. [●]) as amended, varied, restated, novated or substituted from time to time;
1.4	" <i>Contractor</i> " means	[●] a company registered in accordance with the laws of [●] under Registration No [●].
1.5	" <i>Employer</i> " means	Airports Company South Africa SOC Limited a company registered in accordance with the laws of the Republic of South Africa under Registration Number 1993/004149/30



1.6	"Expiry Date" means	the earlier of the date that the Bank receives a notice from the <i>Employer</i> stating that all amounts due from the <i>Contractor</i> as certified in terms of the contract have been received by the <i>Employer</i> and that the <i>Contractor</i> has fulfilled all his obligations under the Contract, or the date that the Bank issues a replacement Bond for such lesser or higher amount as may be required by the <i>Employer</i>.
1.7	"Guaranteed Sum" means	5% of contract value excluding VAT which must be submitted within 10 working days from notification of award
1.8	"works" means	Design and replacement of aircraft gates at O.R. Tambo International Airport over a period of 18 months

3. At the instance of the *Contractor*, we the undersigned _____ and _____, in our respective capacities as _____ and _____ of the Bank, and duly authorized thereto, confirm that we hold the Guaranteed Sum at the disposal of the *Employer* as security for the proper performance by the *Contractor* of all of its obligations in terms of and arising from the Contract and hereby undertake to pay to the *Employer*, on written demand from the *Employer* received prior to the Expiry Date, any sum or sums not exceeding in total the Guaranteed Sum.

4. A demand for payment under this guarantee shall be made in writing at the Bank's address and shall:

1. be signed on behalf of the *Employer* by a director of the *Employer*;
2. state the amount claimed ("the Demand Amount");
3. state that the Demand Amount is payable to the *Employer* in the circumstances contemplated in the Contract.

4. Notwithstanding the reference herein to the Contract the liability of the Bank in terms hereof is as principal and not as surety and the Bank's obligation/s to make payment:

1. is and shall be absolute provided demand is made in terms of this bond in all circumstances; and
2. is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.

3. The Bank's obligations in terms of this Guarantee:



1. shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
2. shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed, by the fact that a dispute may exist between the *Employer* and the *Contractor*.
3. The *Employer* shall be entitled to arrange its affairs with the *Contractor* in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the *Contractor* or any variation under or to the Contract.
4. Should the *Employer* cede its rights against the *Contractor* to a third party where such cession is permitted under the Contract, then the *Employer* shall be entitled to cede to such third party the rights of the *Employer* under this Guarantee on written notification to the Bank of such cession.
5. This Guarantee:
 1. shall expire on the Expiry Date until which time it is irrevocable;
 2. is, save as provided for in **Error! Reference source not found.** above, personal to the *Employer* and is neither negotiable nor transferable;
 3. shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
 4. shall be regarded as a liquid document for the purpose of obtaining a court order; and
 5. shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.
 6. will be invalid and unenforceable if any claim which arises or demand for payment is received after the Expiry Date.
7. The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.

Signed at _____ on this _____ day of _____ 20__

For and on behalf of the Bank

Bank Signatories(s)



Name(s) (printed)

Witness(s)

Bank's seal or stamp


Annexure C: ACSA Panel of Adjudicators

One of the following adjudicators shall be selected by the referring party as and when a dispute arises. This panel is valid for a period of three years, commencing on 1 May 2020.

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



Annexure D: ACSA Insurance Clauses

INSURANCE CLAUSES FOR LANDSIDE 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) **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) 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)11 723 1400

M: +27 (0)74 535 9075

Buhle.Mnguni@airports.co.za

b) Preserve damage and make it available for inspection by a representative of the Insurers.

c) Wherever possible, photographs of damage should be taken.

d) Inform the police authorities promptly in the event of loss or damage by theft, burglary or any malicious persons(s) for the purpose of recovering any property so lost, discovering the guilty person or persons, and having him, her or them duly prosecuted.

e) Advise the Insurers of any other insurance(s) which may cover the same loss, damage or injury, or any part thereof.



f) Give to the Insurers every assistance to enable the Insurers to settle or resist any claim against the Insured, or institute any proceedings;

g) On completion the Claims Advice Form, the form must be sent to the Employers Insurance Brokers for further action (the original may be emailed to the Employers Insurance Broker). (Please do not remove the Claims Advice Form out of this document. Rather photocopy the form and send the copy to the Employers Insurance Brokers).

h) The Employer and the employers Insurance brokers / Insurers or their appointed loss adjusters shall have the right to make all and any enquiry's on the Site of the Works or elsewhere as to the cause and results of any such occurrence and the Contractor shall co-operate in carrying out such enquiry's.

i) The Contractor, Project Managers and Consultants must allow free access to Insurers' assessors for the purpose of investigating and assessing the loss or damage.

j) The Contractor must not proceed with the making good any off the loss without the prior authorisation of the Insurers.

k) The Contractor must keep separate records of the costs involved in making good any loss or damage and these records should be available at all times for inspection by Insurers. Such records should include inter alia the entire cost of labour, materials, transport and equipment.

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.

1. Insurance Effected by the Contractor.



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

2.1 Without limiting the Contractor's obligations, responsibilities and liabilities, the Contractor and Sub-contractor shall maintain at the Contractor's and Subcontractor's expense and where applicable provide as a minimum the following insurances:

a) **Insurance of Construction Plant and Equipment** (including tools offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.

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

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

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

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

In the event that a claim is made against the Employer in connection with such insurance, the Contractor shall indemnify and hold harmless the Employer against any such claim.

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

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 1.1(a) and (c) be considered to be unacceptable to the Contractor, then the Contractor must obtain Buy Down cover for these



deductibles to a deductible considered by the Contractor as being acceptable in respect of the works being undertaken.

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

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

f) **Public Liability** insurances in excess of the Employers Public Liability insurances as stated under clause 1.1(a).

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

h) **Marine Cargo Insurance (If Applicable)**

Cover: Imports of cargo, equipment, goods, plant, machinery and materials ("**Insured Property**") to the site where the Permanent Works will be constructed.

Sum Insured: Not less than the value of the largest single cargo shipment, conveyance or the value in storage, whichever is the greater (CIF plus 10%).

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

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

j) **Miscellaneous Insurance**



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

2.2 The insurances to be provided by the Contractor and his Sub-contractor shall be effected with Insurers and on terms approved by the Employer (which approval shall not be unreasonably withheld) and shall be maintained in force for the duration required (including any period of maintenance/defects liability period). The Contractor shall within twenty eight (28) days of commencement of the contract produce to the Employer the relevant Policy or Policies of Insurance.

2.3 In the event that the Contractor or his Sub-contractor receives any notice of cancellation or restrictive modification to the insurance provided to them they shall immediately notify the Employer in writing of such cancellation or restriction and shall advise what action the Contractor or his Sub-contractor will take to remedy such action.

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

2.4 **Sub-Contractors.**

The Contractor shall:

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



APPENDIX A

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

Send to : Airports Company South Africa

E-Mail The Following People :

Nokulunga.Masiza@airports.co.za

Buhle.Mnguni@airports.co.za

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

1. (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: _____

Locality of Incident _____



How did the loss occur (cause)? _____

Details and nature of loss or damage to Contract Works _____

Details of other property damaged _____



Names and address of witnesses _____

Estimated cost of repairs (Separate records of all costs must be kept) R_____

Person whom assessor should contact _____

Telephone/Mobile Numbers Of Contact Person _____

Email Address of Contact Person _____



C1.2b Contract Data

Part two - Data provided by the Contractor**Notes to a tendering contractor:**

1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)¹ in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 152 to 154 of the ECC3 Guidance Notes.
 2. The number of the clause which requires the data is shown in the left-hand column for each statement however other clauses may also use the same data
- Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	% %
11.2(18)	The <i>working areas</i> are the Site and	
24.1	The <i>Contractor's</i> key persons are: 1 Name: Job: Responsibilities: Qualifications:	



	Experience: 2 Name: Job Responsibilities: Qualifications: Experience:	CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .
11.2(14)	The following matters will be included in the Risk Register	

PART 2: PRICING DATA

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	
C2.2	The <i>activity schedule</i>	

C2.1 Pricing assumptions: Option A

The conditions of contract

How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, April 2013 (ECC3) Option A states:

Identified and defined terms	11 11.2	(20) The Activity Schedule is the <i>activity schedule</i> unless later changed in accordance with this contract.
		(22) Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not excluding the cost of preparing quotations for compensation events.
		(27) The Price for Work Done to Date is the total of the Prices for each group of completed activities and each completed activity which is not in a group. A completed activity is one which is without Defects which would either delay or be covered by immediately following work.
		(30) The Prices are the lump sum prices for each of the activities on the Activity Schedule unless later changed in accordance with this contract.

Option A is a lump sum form of contract where the work is broken down into activities, each of which is priced by the tendering contractor as a lump sum. Only completed activities are assessed for payment at each assessment date; no part payment is made if the activity is not completed by the assessment date. **Function of the Activity Schedule**

Clause 54.1 in Option A states: "Information in the Activity Schedule is not Works Information or Site Information". This confirms that instructions to do work or how it is to be done are not included in the Activity Schedule but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Activity Schedule. The Activity Schedule is only a pricing document.

Link to the programme

Clause 31.4 states that “The *Contractor* provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance”. Hence when compiling the *activity schedule*, the tendering contractor needs to show each activity on the programme he submits with his tender.

Preparing the *activity schedule*

The tendering contractor prepares the *activity schedule* and should study the ECC3 Guidance Notes pages 19 and 20 before doing so. The *Employer* may have instructed the tendering contractor to include particular activities which he has specified and requires the *Contractor* to identify them in his *activity schedule*.

1. Generally it is the Contractor who prepares the Activity Schedule as part of his tender by breaking down the work described within the Works Information into suitable activities which can be well defined, priced as a lump sum and shown on the programme. The Employer, in his Conditions of Tender or in a Tender Schedule, may have listed some items that he requires the Contractor to include in his activity schedule and be priced accordingly.
2. The Prices are defined in clause 11.2(20) as the lump sum for each activity in the activity schedule and the Price for Work Done to Date (PWDD) (the amount due to the contractor) is defined in clause 11.2(24) as the total of the Prices for each activity that has been completed. Hence activities in the activity schedule should be structured so as to provide an acceptable monthly cash flow as they are only assessed for payment on the assessment date if they have been completed.
3. As the Contractor has an obligation to correct Defects (core clause 43.1) and there is no compensation event for this unless the Defect was due to an Employer's risk, the lump sum Prices must also include for the correction of Defects.
4. If the Contractor has decided not to identify a particular activity, the cost to the *Contractor* of doing the work must be included in, or spread across, the other Prices in order to fulfil the obligation to complete the works for the tendered total of the Prices.

5. There is no adjustment to the lump sum activity schedule price if the amount, or quantity, of work within that activity later turns out to be different to that which the contractor estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event. See Clause 60.1.
6. Hence the Prices tendered by the Contractor in the *activity schedule* are inclusive of everything necessary and incidental to Providing the Works in accordance with the Works Information, as it was at the time of tender, as well as correct any Defects not caused by an Employer's risk.
7. However, the Contractor does not have to allow in his Prices for matters that may arise as a result of a compensation event. It should be noted that the list of compensation events includes those arising as a result of an Employer's risk event listed in core clause 80.1.

An activity schedule could have the following format:

Item No.	Programme Reference	Activity description	Price

Pricing instructions

The Contractor enters a price for every activity. Prices include everything necessary to Provide the Works, including design, labour, supervision, plant, materials, transport, testing, temporary works, overheads and profit, except only items expressly stated otherwise in the Contract Data or Scope.

The total of the Prices is the sum of the activity prices excluding VAT. Payment is assessed in accordance with NEC3 ECC Option A and the accepted programme. An activity is complete only when the detailed activity or completed deliverable has been fully provided in accordance with the Scope.

The specified allowances are included in the relevant activity prices. Expenditure against an Employer-controlled allowance is made only following the Project Manager's written instruction.

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
1. Contract management, mobilisation and compliance			
1.1	FIDPM 3–6 / NEC3 controls	Contract start-up, insurances, bonds and Contract Data submissions	R_____
1.2	FIDPM 3–6 / NEC3 controls	Detailed scope compliance matrix and responsibility assignment matrix	R_____
1.3	FIDPM 3–6 / NEC3 controls	Mobilise the Project/Construction Manager and approved multidisciplinary key persons	R_____
1.4	FIDPM 3–6 / NEC3 controls	Mobilise mechanical, electrical, C&I, civil/structural and functional-safety design teams	R_____
1.5	FIDPM 3–6 / NEC3 controls	Mobilise mobile application, cloud, database, API, cybersecurity and IoT specialists	R_____
1.6	FIDPM 3–6 / NEC3 controls	Health and safety plan, statutory appointments, construction work permit support and safety file	R_____
1.7	FIDPM 3–6 / NEC3 controls	Airport security permits, inductions, access control, escorts and operational permits	R_____
1.8	FIDPM 3–6 / NEC3 controls	Quality plan, inspection and test plans, hold points and document control	R_____
1.9	FIDPM 3–6 / NEC3 controls	Environmental plan, waste controls and lawful disposal arrangements	R_____
1.10	FIDPM 3–6 / NEC3 controls	Stakeholder, operational-interface and communications management plan	R_____
1.11	FIDPM 3–6 / NEC3 controls	Site establishment, welfare, secure storage, temporary services, barricading and signage	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
1.12	FIDPM 3–6 / NEC3 controls	Accepted baseline programme for FIDPM Stages 3 to 6, including design, procurement, gate outages and commissioning	R_____
1.13	FIDPM 3–6 / NEC3 controls	Programme updates, early warnings, risk register and mitigation management	R_____
1.14	FIDPM 3–6 / NEC3 controls	Monthly progress, commercial, quality, safety and financial reporting	R_____
1.15	FIDPM 3–6 / NEC3 controls	Survey control, common data environment, document numbering and asset-tagging convention	R_____
2. FIDPM Stage 3 – surveys, investigations and design development			
2.1	Stage 3 inception	Confirm information requirements, design criteria, responsibilities, interfaces and deliverables register	R_____
2.2	Stage 3 – Airlink	Measured survey and condition assessment of Airlink gate (80 m; single gate; dual track), including structure, foundations, rails/wheels, drives, power, controls, sensors, drainage, paving and interfaces	R_____
2.3	Stage 3 – SAA Technical	Measured survey and condition assessment of SAA Technical gate (120 m; single gate; dual track), including structure, foundations, rails/wheels, drives, power, controls, sensors, drainage, paving and interfaces	R_____
2.4	Stage 3 – Denel Aviation	Measured survey and condition assessment of Denel Aviation gate (80 m; single gate; dual track), including structure, foundations, rails/wheels, drives, power, controls, sensors, drainage, paving and interfaces	R_____
2.5	Stage 3 – V1	Measured survey and condition assessment of V1 gate (60 m; single gate; wheel axle), including structure, foundations, rails/wheels, drives, power, controls, sensors, drainage, paving and interfaces	R_____
2.6	Stage 3 – V2	Measured survey and condition assessment of V2 gate (60 m; single gate; wheel axle), including structure, foundations, rails/wheels, drives, power, controls, sensors, drainage, paving and interfaces	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
2.7	Stage 3 – V3A	Measured survey and condition assessment of V3A gate (50 m; dual gate; wheel axle), including structure, foundations, rails/wheels, drives, power, controls, sensors, drainage, paving and interfaces	R_____
2.8	Stage 3 – V3B	Measured survey and condition assessment of V3B gate (50 m; dual gate; wheel axle), including structure, foundations, rails/wheels, drives, power, controls, sensors, drainage, paving and interfaces	R_____
2.9	Stage 3 – V4	Measured survey and condition assessment of V4 gate (60 m; dual gate; wheel axle), including structure, foundations, rails/wheels, drives, power, controls, sensors, drainage, paving and interfaces	R_____
2.10	Stage 3 – V5	Measured survey and condition assessment of V5 gate (60 m; dual gate; wheel axle), including structure, foundations, rails/wheels, drives, power, controls, sensors, drainage, paving and interfaces	R_____
2.11	FIDPM Stage 3	Existing services and underground-utility detection for all work areas	R_____
2.12	FIDPM Stage 3	Operational, aviation-safety, security and access impact assessment	R_____
2.13	FIDPM Stage 3	Gate-by-gate outage, temporary security and business-continuity strategy	R_____
2.14	FIDPM Stage 3	Safair gate benchmarking and lessons-learned assessment	R_____
2.15	FIDPM Stage 3	Gate configuration and replacement option assessment	R_____
2.16	FIDPM Stage 3	Comparative assessment of steel, aluminium and other suitable gate materials	R_____
2.17	FIDPM Stage 3	Mechanical concept: enclosed/protected chain drive, wheels, shafts, bearings, gearbox, brake and disengagement	R_____
2.18	FIDPM Stage 3	Manual and semi-manual emergency-operation philosophy for loss of drive or power	R_____
2.19	FIDPM Stage 3	Civil and structural concept: foundations, rails, drainage, paving and interfaces	R_____
2.20	FIDPM Stage 3	Wind, fatigue, dynamic loading and anti-tipping assessment	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
2.21	FIDPM Stage 3	Electrical load assessment and normal, essential and backup-power philosophy	R_____
2.22	FIDPM Stage 3	Robust UPS philosophy and autonomy sizing for PLC, networks, sensors and safety devices	R_____
2.23	FIDPM Stage 3	Latest supported Allen-Bradley safety-rated PLC, HMI and compatible PowerFlex VFD architecture	R_____
2.24	FIDPM Stage 3	Safety integrity assessment and SIL 2 requirement justification	R_____
2.25	FIDPM Stage 3	Dual-technology and dual-OEM obstruction/presence sensing with redundant voting	R_____
2.26	FIDPM Stage 3	Safety devices, limit switches, emergency stops, sirens, beacons and traffic-light philosophy	R_____
2.27	FIDPM Stage 3	Mobile application architecture for Android and iOS	R_____
2.28	FIDPM Stage 3	Cloud, IoT, continuous database, dashboards, analytics and REST API architecture	R_____
2.29	FIDPM Stage 3	BMS/IMC integration requirements and point-list development	R_____
2.30	FIDPM Stage 3	Stage 3 coordinated design, risk assessment, cost plan and gateway submission	R_____
3. FIDPM Stage 4 – detailed design and construction information			
3.1	FIDPM Stage 4	Gate-by-gate design basis, design criteria and interface matrix	R_____
3.2	FIDPM Stage 4	Mechanical calculations and drawings for gate frames, wheels, shafts, bearings and guides	R_____
3.3	FIDPM Stage 4	Enclosed/protected chain-drive, tensioning, lubrication and guarding design	R_____
3.4	FIDPM Stage 4	Motor, gearbox, brake, coupling and drive-disengagement sizing and selection	R_____
3.5	FIDPM Stage 4	Manual/semi-manual emergency-operation detailed design and safe work instruction	R_____
3.6	FIDPM Stage 4	Structural calculations for static, dynamic, cyclic wind, fatigue and anti-tipping loads	R_____
3.7	FIDPM Stage 4	Foundation, rail, drainage, paving and disturbed-services detailed design	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
3.8	FIDPM Stage 4	Material selection, corrosion-protection system and finish specification	R_____
3.9	FIDPM Stage 4	Electrical load schedules, single-line diagrams, distribution, isolation, earthing and protection	R_____
3.10	FIDPM Stage 4	Normal, essential and backup supply interfaces and reduced-load operation	R_____
3.11	FIDPM Stage 4	UPS sizing, autonomy, bypass, monitoring and battery-replacement design	R_____
3.12	FIDPM Stage 4	Power, control, network and instrumentation cable schedules and route drawings	R_____
3.13	FIDPM Stage 4	Safety-rated Allen-Bradley PLC, PowerFlex VFD, HMI, safety I/O and panel design	R_____
3.14	FIDPM Stage 4	PLC/HMI/VFD software functional design specification and cause-and-effect matrix	R_____
3.15	FIDPM Stage 4	Dual-technology/dual-OEM sensor layout, coverage and redundant voting logic	R_____
3.16	FIDPM Stage 4	Emergency stops, limits, interlocks, sirens, beacons and traffic lights detailed design	R_____
3.17	FIDPM Stage 4	SIL 2 lifecycle plan, verification plan, proof-test requirements and validation protocol	R_____
3.18	FIDPM Stage 4	Kotlin Multiplatform modular design, repositories, ViewModels and core routines	R_____
3.19	FIDPM Stage 4	Jetpack Compose and nested-navigation design for Android and iOS	R_____
3.20	FIDPM Stage 4	Ktor, Koin and SQLDelight detailed integration and offline-data design	R_____
3.21	FIDPM Stage 4	Firebase Authentication, Storage and Firestore roles, rules and audit design	R_____
3.22	FIDPM Stage 4	IoT, continuous database, dashboards, analytics and REST API detailed design	R_____
3.23	FIDPM Stage 4	Cybersecurity, identity, logging, retention, backup and disaster-recovery design	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
3.24	FIDPM Stage 4	Factory, site, functional-safety, power-failure, endurance and digital test specifications	R_____
3.25	FIDPM Stage 4	Issued-for-construction drawings, specifications, schedules, method statements and ITPs	R_____
3.26	FIDPM Stage 4	Stage 4 cost plan, procurement schedule, construction programme and gateway submission	R_____
4. FIDPM Stage 5 – procurement, manufacture and common enabling works			
4.1	FIDPM Stage 5	Approved procurement schedule, technical submittals and supplier data	R_____
4.2	FIDPM Stage 5	Manufacture of approved gate structures and mechanical assemblies	R_____
4.3	FIDPM Stage 5	Manufacture of protected chain drives, drive units, brakes and emergency-operation equipment	R_____
4.4	FIDPM Stage 5	Manufacture of electrical panels, essential/backup interfaces and UPS assemblies	R_____
4.5	FIDPM Stage 5	Manufacture of Allen-Bradley safety-control panels, HMI, VFD and I/O assemblies	R_____
4.6	FIDPM Stage 5	Procurement of dual-technology/dual-OEM sensors and all safety/warning devices	R_____
4.7	FIDPM Stage 5	Factory acceptance testing of mechanical, electrical, C&I, safety and communications assemblies	R_____
4.8	FIDPM Stage 5	Delivery, off-loading, incoming inspection, secure storage and preservation	R_____
4.9	FIDPM Stage 5	Common power, control, sensor and network cable containment and routes	R_____
4.10	FIDPM Stage 5	Common electrical distribution, isolation, earthing and surge protection	R_____
4.11	FIDPM Stage 5	Common network, communications and airport-system interface infrastructure	R_____
4.12	FIDPM Stage 5	Gate outage implementation, temporary barricading and security controls	R_____
5. FIDPM Stage 5 – Airlink gate (80 m; single gate; dual track)			

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
5.1	Airlink gate	Set out, isolate and decommission the existing gate and affected services	R_____
5.2	Airlink gate	Dismantle and remove affected gate structure, drives, controls, cables and sensors	R_____
5.3	Airlink gate	Construct or repair foundations, plinths, rails, drainage, paving and service crossings	R_____
5.4	Airlink gate	Supply, erect, align and protect the replacement gate structure	R_____
5.5	Airlink gate	Install wheels, shafts, bearings, guides and anti-tipping/restraint equipment	R_____
5.6	Airlink gate	Install enclosed/protected chain drive, sprockets, tensioners, lubrication and guards	R_____
5.7	Airlink gate	Install motor, gearbox, brake, coupling and drive-disengagement equipment	R_____
5.8	Airlink gate	Install manual/semi-manual emergency-operation equipment and instructions	R_____
5.9	Airlink gate	Install normal, essential and backup-power distribution, isolation, earthing and protection	R_____
5.10	Airlink gate	Install robust UPS, bypass, batteries and monitored supplies for controls and sensors	R_____
5.11	Airlink gate	Install power, control, instrumentation and network cabling, containment and terminations	R_____
5.12	Airlink gate	Install latest supported Allen-Bradley safety PLC, PowerFlex VFD, HMI, safety I/O and panel	R_____
5.13	Airlink gate	Install diverse obstruction/presence sensors, limits, emergency stops and redundant voting inputs	R_____
5.14	Airlink gate	Install sirens, beacons, traffic lights, interlocks and local operating controls	R_____
5.15	Airlink gate	Complete PLC/HMI/VFD software configuration, calibration and point-to-point testing	R_____
5.16	Airlink gate	Complete mechanical run, brake, emergency-operation and wind/restraint inspections	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
5.17	Airlink gate	Complete electrical, power-failure, backup-supply and UPS commissioning tests	R_____
5.18	Airlink gate	Complete safety-function, sensor-diversity, voting and site acceptance tests	R_____
5.19	Airlink gate	Complete operational trial, reinstate the work area and return the gate to service	R_____
6. FIDPM Stage 5 – SAA Technical gate (120 m; single gate; dual track)			
6.1	SAA Technical gate	Set out, isolate and decommission the existing gate and affected services	R_____
6.2	SAA Technical gate	Dismantle and remove affected gate structure, drives, controls, cables and sensors	R_____
6.3	SAA Technical gate	Construct or repair foundations, plinths, rails, drainage, paving and service crossings	R_____
6.4	SAA Technical gate	Supply, erect, align and protect the replacement gate structure	R_____
6.5	SAA Technical gate	Install wheels, shafts, bearings, guides and anti-tipping/restraint equipment	R_____
6.6	SAA Technical gate	Install enclosed/protected chain drive, sprockets, tensioners, lubrication and guards	R_____
6.7	SAA Technical gate	Install motor, gearbox, brake, coupling and drive-disengagement equipment	R_____
6.8	SAA Technical gate	Install manual/semi-manual emergency-operation equipment and instructions	R_____
6.9	SAA Technical gate	Install normal, essential and backup-power distribution, isolation, earthing and protection	R_____
6.10	SAA Technical gate	Install robust UPS, bypass, batteries and monitored supplies for controls and sensors	R_____
6.11	SAA Technical gate	Install power, control, instrumentation and network cabling, containment and terminations	R_____
6.12	SAA Technical gate	Install latest supported Allen-Bradley safety PLC, PowerFlex VFD, HMI, safety I/O and panel	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
6.13	SAA Technical gate	Install diverse obstruction/presence sensors, limits, emergency stops and redundant voting inputs	R_____
6.14	SAA Technical gate	Install sirens, beacons, traffic lights, interlocks and local operating controls	R_____
6.15	SAA Technical gate	Complete PLC/HMI/VFD software configuration, calibration and point-to-point testing	R_____
6.16	SAA Technical gate	Complete mechanical run, brake, emergency-operation and wind/restraint inspections	R_____
6.17	SAA Technical gate	Complete electrical, power-failure, backup-supply and UPS commissioning tests	R_____
6.18	SAA Technical gate	Complete safety-function, sensor-diversity, voting and site acceptance tests	R_____
6.19	SAA Technical gate	Complete operational trial, reinstate the work area and return the gate to service	R_____
7. FIDPM Stage 5 – Denel Aviation gate (80 m; single gate; dual track)			
7.1	Denel Aviation gate	Set out, isolate and decommission the existing gate and affected services	R_____
7.2	Denel Aviation gate	Dismantle and remove affected gate structure, drives, controls, cables and sensors	R_____
7.3	Denel Aviation gate	Construct or repair foundations, plinths, rails, drainage, paving and service crossings	R_____
7.4	Denel Aviation gate	Supply, erect, align and protect the replacement gate structure	R_____
7.5	Denel Aviation gate	Install wheels, shafts, bearings, guides and anti-tipping/restraint equipment	R_____
7.6	Denel Aviation gate	Install enclosed/protected chain drive, sprockets, tensioners, lubrication and guards	R_____
7.7	Denel Aviation gate	Install motor, gearbox, brake, coupling and drive-disengagement equipment	R_____
7.8	Denel Aviation gate	Install manual/semi-manual emergency-operation equipment and instructions	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
7.9	Denel Aviation gate	Install normal, essential and backup-power distribution, isolation, earthing and protection	R_____
7.10	Denel Aviation gate	Install robust UPS, bypass, batteries and monitored supplies for controls and sensors	R_____
7.11	Denel Aviation gate	Install power, control, instrumentation and network cabling, containment and terminations	R_____
7.12	Denel Aviation gate	Install latest supported Allen-Bradley safety PLC, PowerFlex VFD, HMI, safety I/O and panel	R_____
7.13	Denel Aviation gate	Install diverse obstruction/presence sensors, limits, emergency stops and redundant voting inputs	R_____
7.14	Denel Aviation gate	Install sirens, beacons, traffic lights, interlocks and local operating controls	R_____
7.15	Denel Aviation gate	Complete PLC/HMI/VFD software configuration, calibration and point-to-point testing	R_____
7.16	Denel Aviation gate	Complete mechanical run, brake, emergency-operation and wind/restraint inspections	R_____
7.17	Denel Aviation gate	Complete electrical, power-failure, backup-supply and UPS commissioning tests	R_____
7.18	Denel Aviation gate	Complete safety-function, sensor-diversity, voting and site acceptance tests	R_____
7.19	Denel Aviation gate	Complete operational trial, reinstate the work area and return the gate to service	R_____
8. FIDPM Stage 5 – V1 gate (60 m; single gate; wheel axle)			
8.1	V1 gate	Set out, isolate and decommission the existing gate and affected services	R_____
8.2	V1 gate	Dismantle and remove affected gate structure, drives, controls, cables and sensors	R_____
8.3	V1 gate	Construct or repair foundations, plinths, rails, drainage, paving and service crossings	R_____
8.4	V1 gate	Supply, erect, align and protect the replacement gate structure	R_____
8.5	V1 gate	Install wheels, shafts, bearings, guides and anti-tipping/restraint equipment	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
8.6	V1 gate	Install enclosed/protected chain drive, sprockets, tensioners, lubrication and guards	R_____
8.7	V1 gate	Install motor, gearbox, brake, coupling and drive-disengagement equipment	R_____
8.8	V1 gate	Install manual/semi-manual emergency-operation equipment and instructions	R_____
8.9	V1 gate	Install normal, essential and backup-power distribution, isolation, earthing and protection	R_____
8.10	V1 gate	Install robust UPS, bypass, batteries and monitored supplies for controls and sensors	R_____
8.11	V1 gate	Install power, control, instrumentation and network cabling, containment and terminations	R_____
8.12	V1 gate	Install latest supported Allen-Bradley safety PLC, PowerFlex VFD, HMI, safety I/O and panel	R_____
8.13	V1 gate	Install diverse obstruction/presence sensors, limits, emergency stops and redundant voting inputs	R_____
8.14	V1 gate	Install sirens, beacons, traffic lights, interlocks and local operating controls	R_____
8.15	V1 gate	Complete PLC/HMI/VFD software configuration, calibration and point-to-point testing	R_____
8.16	V1 gate	Complete mechanical run, brake, emergency-operation and wind/restraint inspections	R_____
8.17	V1 gate	Complete electrical, power-failure, backup-supply and UPS commissioning tests	R_____
8.18	V1 gate	Complete safety-function, sensor-diversity, voting and site acceptance tests	R_____
8.19	V1 gate	Complete operational trial, reinstate the work area and return the gate to service	R_____
9. FIDPM Stage 5 – V2 gate (60 m; single gate; wheel axle)			
9.1	V2 gate	Set out, isolate and decommission the existing gate and affected services	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
9.2	V2 gate	Dismantle and remove affected gate structure, drives, controls, cables and sensors	R_____
9.3	V2 gate	Construct or repair foundations, plinths, rails, drainage, paving and service crossings	R_____
9.4	V2 gate	Supply, erect, align and protect the replacement gate structure	R_____
9.5	V2 gate	Install wheels, shafts, bearings, guides and anti-tipping/restraint equipment	R_____
9.6	V2 gate	Install enclosed/protected chain drive, sprockets, tensioners, lubrication and guards	R_____
9.7	V2 gate	Install motor, gearbox, brake, coupling and drive-disengagement equipment	R_____
9.8	V2 gate	Install manual/semi-manual emergency-operation equipment and instructions	R_____
9.9	V2 gate	Install normal, essential and backup-power distribution, isolation, earthing and protection	R_____
9.10	V2 gate	Install robust UPS, bypass, batteries and monitored supplies for controls and sensors	R_____
9.11	V2 gate	Install power, control, instrumentation and network cabling, containment and terminations	R_____
9.12	V2 gate	Install latest supported Allen-Bradley safety PLC, PowerFlex VFD, HMI, safety I/O and panel	R_____
9.13	V2 gate	Install diverse obstruction/presence sensors, limits, emergency stops and redundant voting inputs	R_____
9.14	V2 gate	Install sirens, beacons, traffic lights, interlocks and local operating controls	R_____
9.15	V2 gate	Complete PLC/HMI/VFD software configuration, calibration and point-to-point testing	R_____
9.16	V2 gate	Complete mechanical run, brake, emergency-operation and wind/restraint inspections	R_____
9.17	V2 gate	Complete electrical, power-failure, backup-supply and UPS commissioning tests	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
9.18	V2 gate	Complete safety-function, sensor-diversity, voting and site acceptance tests	R_____
9.19	V2 gate	Complete operational trial, reinstate the work area and return the gate to service	R_____
10. FIDPM Stage 5 – V3A gate (50 m; dual gate; wheel axle)			
10.1	V3A gate	Set out, isolate and decommission the existing gate and affected services	R_____
10.2	V3A gate	Dismantle and remove affected gate structure, drives, controls, cables and sensors	R_____
10.3	V3A gate	Construct or repair foundations, plinths, rails, drainage, paving and service crossings	R_____
10.4	V3A gate	Supply, erect, align and protect the replacement gate structure	R_____
10.5	V3A gate	Install wheels, shafts, bearings, guides and anti-tipping/restraint equipment	R_____
10.6	V3A gate	Install enclosed/protected chain drive, sprockets, tensioners, lubrication and guards	R_____
10.7	V3A gate	Install motor, gearbox, brake, coupling and drive-disengagement equipment	R_____
10.8	V3A gate	Install manual/semi-manual emergency-operation equipment and instructions	R_____
10.9	V3A gate	Install normal, essential and backup-power distribution, isolation, earthing and protection	R_____
10.10	V3A gate	Install robust UPS, bypass, batteries and monitored supplies for controls and sensors	R_____
10.11	V3A gate	Install power, control, instrumentation and network cabling, containment and terminations	R_____
10.12	V3A gate	Install latest supported Allen-Bradley safety PLC, PowerFlex VFD, HMI, safety I/O and panel	R_____
10.13	V3A gate	Install diverse obstruction/presence sensors, limits, emergency stops and redundant voting inputs	R_____
10.14	V3A gate	Install sirens, beacons, traffic lights, interlocks and local operating controls	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
10.15	V3A gate	Complete PLC/HMI/VFD software configuration, calibration and point-to-point testing	R_____
10.16	V3A gate	Complete mechanical run, brake, emergency-operation and wind/restraint inspections	R_____
10.17	V3A gate	Complete electrical, power-failure, backup-supply and UPS commissioning tests	R_____
10.18	V3A gate	Complete safety-function, sensor-diversity, voting and site acceptance tests	R_____
10.19	V3A gate	Complete operational trial, reinstate the work area and return the gate to service	R_____
11. FIDPM Stage 5 – V3B gate (50 m; dual gate; wheel axle)			
11.1	V3B gate	Set out, isolate and decommission the existing gate and affected services	R_____
11.2	V3B gate	Dismantle and remove affected gate structure, drives, controls, cables and sensors	R_____
11.3	V3B gate	Construct or repair foundations, plinths, rails, drainage, paving and service crossings	R_____
11.4	V3B gate	Supply, erect, align and protect the replacement gate structure	R_____
11.5	V3B gate	Install wheels, shafts, bearings, guides and anti-tipping/restraint equipment	R_____
11.6	V3B gate	Install enclosed/protected chain drive, sprockets, tensioners, lubrication and guards	R_____
11.7	V3B gate	Install motor, gearbox, brake, coupling and drive-disengagement equipment	R_____
11.8	V3B gate	Install manual/semi-manual emergency-operation equipment and instructions	R_____
11.9	V3B gate	Install normal, essential and backup-power distribution, isolation, earthing and protection	R_____
11.10	V3B gate	Install robust UPS, bypass, batteries and monitored supplies for controls and sensors	R_____
11.11	V3B gate	Install power, control, instrumentation and network cabling, containment and terminations	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
11.12	V3B gate	Install latest supported Allen-Bradley safety PLC, PowerFlex VFD, HMI, safety I/O and panel	R_____
11.13	V3B gate	Install diverse obstruction/presence sensors, limits, emergency stops and redundant voting inputs	R_____
11.14	V3B gate	Install sirens, beacons, traffic lights, interlocks and local operating controls	R_____
11.15	V3B gate	Complete PLC/HMI/VFD software configuration, calibration and point-to-point testing	R_____
11.16	V3B gate	Complete mechanical run, brake, emergency-operation and wind/restraint inspections	R_____
11.17	V3B gate	Complete electrical, power-failure, backup-supply and UPS commissioning tests	R_____
11.18	V3B gate	Complete safety-function, sensor-diversity, voting and site acceptance tests	R_____
11.19	V3B gate	Complete operational trial, reinstate the work area and return the gate to service	R_____
12. FIDPM Stage 5 – V4 gate (60 m; dual gate; wheel axle)			
12.1	V4 gate	Set out, isolate and decommission the existing gate and affected services	R_____
12.2	V4 gate	Dismantle and remove affected gate structure, drives, controls, cables and sensors	R_____
12.3	V4 gate	Construct or repair foundations, plinths, rails, drainage, paving and service crossings	R_____
12.4	V4 gate	Supply, erect, align and protect the replacement gate structure	R_____
12.5	V4 gate	Install wheels, shafts, bearings, guides and anti-tipping/restraint equipment	R_____
12.6	V4 gate	Install enclosed/protected chain drive, sprockets, tensioners, lubrication and guards	R_____
12.7	V4 gate	Install motor, gearbox, brake, coupling and drive-disengagement equipment	R_____
12.8	V4 gate	Install manual/semi-manual emergency-operation equipment and instructions	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
12.9	V4 gate	Install normal, essential and backup-power distribution, isolation, earthing and protection	R_____
12.10	V4 gate	Install robust UPS, bypass, batteries and monitored supplies for controls and sensors	R_____
12.11	V4 gate	Install power, control, instrumentation and network cabling, containment and terminations	R_____
12.12	V4 gate	Install latest supported Allen-Bradley safety PLC, PowerFlex VFD, HMI, safety I/O and panel	R_____
12.13	V4 gate	Install diverse obstruction/presence sensors, limits, emergency stops and redundant voting inputs	R_____
12.14	V4 gate	Install sirens, beacons, traffic lights, interlocks and local operating controls	R_____
12.15	V4 gate	Complete PLC/HMI/VFD software configuration, calibration and point-to-point testing	R_____
12.16	V4 gate	Complete mechanical run, brake, emergency-operation and wind/restraint inspections	R_____
12.17	V4 gate	Complete electrical, power-failure, backup-supply and UPS commissioning tests	R_____
12.18	V4 gate	Complete safety-function, sensor-diversity, voting and site acceptance tests	R_____
12.19	V4 gate	Complete operational trial, reinstate the work area and return the gate to service	R_____
13. FIDPM Stage 5 – V5 gate (60 m; dual gate; wheel axle)			
13.1	V5 gate	Set out, isolate and decommission the existing gate and affected services	R_____
13.2	V5 gate	Dismantle and remove affected gate structure, drives, controls, cables and sensors	R_____
13.3	V5 gate	Construct or repair foundations, plinths, rails, drainage, paving and service crossings	R_____
13.4	V5 gate	Supply, erect, align and protect the replacement gate structure	R_____
13.5	V5 gate	Install wheels, shafts, bearings, guides and anti-tipping/restraint equipment	R_____

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
13.6	V5 gate	Install enclosed/protected chain drive, sprockets, tensioners, lubrication and guards	R_____
13.7	V5 gate	Install motor, gearbox, brake, coupling and drive-disengagement equipment	R_____
13.8	V5 gate	Install manual/semi-manual emergency-operation equipment and instructions	R_____
13.9	V5 gate	Install normal, essential and backup-power distribution, isolation, earthing and protection	R_____
13.10	V5 gate	Install robust UPS, bypass, batteries and monitored supplies for controls and sensors	R_____
13.11	V5 gate	Install power, control, instrumentation and network cabling, containment and terminations	R_____
13.12	V5 gate	Install latest supported Allen-Bradley safety PLC, PowerFlex VFD, HMI, safety I/O and panel	R_____
13.13	V5 gate	Install diverse obstruction/presence sensors, limits, emergency stops and redundant voting inputs	R_____
13.14	V5 gate	Install sirens, beacons, traffic lights, interlocks and local operating controls	R_____
13.15	V5 gate	Complete PLC/HMI/VFD software configuration, calibration and point-to-point testing	R_____
13.16	V5 gate	Complete mechanical run, brake, emergency-operation and wind/restraint inspections	R_____
13.17	V5 gate	Complete electrical, power-failure, backup-supply and UPS commissioning tests	R_____
13.18	V5 gate	Complete safety-function, sensor-diversity, voting and site acceptance tests	R_____
13.19	V5 gate	Complete operational trial, reinstate the work area and return the gate to service	R_____
14. FIDPM Stage 5 – Android and iOS mobile application (distributed digital-platform allowance)			
14.1	Mobile application	Kotlin Multiplatform project, shared modules, repositories and ViewModels	R 150 000

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
14.2	Mobile application	Android and iOS interfaces using Jetpack Compose navigation and nested navigation	R 400 000
14.3	Mobile application	Ktor API client, Koin dependency injection and SQLDelight local database	R 350 000
14.4	Mobile application	Firebase Authentication, Firebase Storage and Firestore database configuration	R 200 000
14.5	Mobile application	Repositories, ViewModels, core routines, validation, logging and exception handling	R 300 000
14.6	Mobile application	Gate status, alarms, sensor trends, event history, access logs and notifications	R 350 000
14.7	Mobile application	Application security, integration, performance and user-acceptance testing	R 300 000
14.8	Mobile application	Signed releases, source code, build scripts, CI/CD and controlled deployment	R 150 000
15. FIDPM Stage 5 – cloud platform, IoT and data services (distributed digital-platform allowance)			
15.1	Cloud / IoT	Supply suitable industrial IoT devices, gateways and communications equipment	R 250 000
15.2	Cloud / IoT	IoT onboarding, secure telemetry ingestion, device health and remote configuration	R 150 000
15.3	Cloud / IoT	Configure a suitable continuous/time-series database, retention, backup and recovery	R 250 000
15.4	Cloud / IoT	Create operational, maintenance and management dashboards	R 200 000
15.5	Cloud / IoT	Configure availability, fault, alarm, trend and predictive-maintenance analytics	R 200 000
15.6	Cloud / IoT	Create, secure, document and test the REST API	R 250 000
15.7	Cloud / IoT	Identity/role management, cybersecurity, audit logging, monitoring and alerting	R 150 000
15.8	Cloud / IoT	Platform performance, failover, backup, recovery and end-to-end acceptance testing	R 100 000
15.9	Cloud / IoT	All mobile, cloud, database, API, Firebase, monitoring, analytics, distribution and IoT licences/subscriptions for 24 months	R 250 000

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
16. Systems integration, ancillary and reinstatement works			
16.1	Integration / ancillary	BMS/IMC interface development, point mapping, graphics, alarms, trends, testing and commissioning	R 650 000
16.2	Integration / ancillary	Integrate PLC, IoT, cloud, REST API, mobile application and BMS/IMC data paths	R_____
16.3	Integration / ancillary	Guardhouse modifications and reinstatement associated with affected gate locations	R_____
16.4	Integration / ancillary	Make good finishes, roads/paving, drainage, fencing and disturbed services	R_____
16.5	Integration / ancillary	Remove temporary works and demobilise from completed work areas	R_____
17. FIDPM Stage 6 – integrated testing, handover and NEC3 Completion			
17.1	FIDPM Stage 6	Integrated end-to-end functional test of all nine gates and digital systems	R_____
17.2	FIDPM Stage 6	Normal-power loss, essential/backup transition, reduced-load and UPS autonomy tests	R_____
17.3	FIDPM Stage 6	Manual/semi-manual emergency-operation tests for every gate	R_____
17.4	FIDPM Stage 6	Sensor coverage, dual-technology/dual-OEM voting and common-mode failure tests	R_____
17.5	FIDPM Stage 6	SIL 2 safety-function validation and functional-safety assessment	R_____
17.6	FIDPM Stage 6	Gate endurance, reliability, availability, braking and operational-performance demonstration	R_____
17.7	FIDPM Stage 6	Mobile, cloud, database, REST API, dashboard, analytics and BMS/IMC UAT	R_____
17.8	FIDPM Stage 6	Cybersecurity, role, audit, backup, restore and disaster-recovery verification	R_____
17.9	FIDPM Stage 6	Independent performance testing of gates, sensors, digital platform and interfaces	R 50 000
17.10	FIDPM Stage 6	Statutory inspections, approvals and certification for the complete Works	R 50 000

Activity no.	Section / programme reference	Detailed activity / completed deliverable	Price (ZAR excl. VAT)
17.11	FIDPM Stage 6	Operations, maintenance, engineering, safety and system-administration training	R_____
17.12	FIDPM Stage 6	Operating, maintenance, emergency and software-administration manuals	R_____
17.13	FIDPM Stage 6	As-built drawings, asset register, cable schedules, certificates and test records	R_____
17.14	FIDPM Stage 6	PLC/HMI/VFD files, mobile/cloud source code, database schema, API documentation and backups	R_____
17.15	FIDPM Stage 6	Secure transfer of credentials, licence records, warranties, spares and support information	R_____
17.16	FIDPM Stage 6	Disposal of redundant equipment, disposal certificates and revenue reconciliation to ACSA	R_____
17.17	FIDPM Stage 6	Operations-readiness review and FIDPM Stage 6 gateway submission	R_____
17.18	FIDPM Stage 6	Correction of notified defects and closure of commissioning punch lists	R_____
17.19	FIDPM Stage 6	Final inspection, demobilisation and achievement of NEC3 ECC Completion	R_____
Grand Total A (Excluding VAT)			R_____

1. Description of the Works

1.1 Employer's objective

- 1.1.1 The Employer requires a complete design-and-build solution for the survey, design development, detailed design, replacement, manufacture, supply, installation, integration, testing, commissioning and handover of nine automated aircraft access gates at O.R. Tambo International Airport. The Works restore safe, reliable, secure and maintainable gate operation without unacceptable interruption to airport, tenant, road or security operations.
- 1.1.2 The gates control access for aircraft and aircraft tugs or tow tractors. They are not passenger gates. The design, temporary arrangements, traffic controls, safety systems and operating procedures are developed for aircraft, aircraft tugs or tow tractors, authorised operational vehicles and authorised security and maintenance personnel.
- 1.1.3 The Contractor commences at FIDPM Stage 3 and completes FIDPM Stages 3, 4, 5 and 6. Stage 2 reports, drawings and meeting records are reference information only and do not relieve the Contractor from verifying dimensions, condition, loads, interfaces, hazards, quantities, performance requirements or fitness for purpose.

1.2 Gate locations and indicative configuration

Gate	Indicative configuration	Minimum post-award verification
Airlink	80 m; single gate; dual track	Measured survey, condition, operational and interface verification
SAA Technical	120 m; single gate; dual track	Measured survey, condition, operational and interface verification
Denel Aviation	80 m; single gate; dual track	Measured survey, condition, operational and interface verification
V1	60 m; single gate; wheel axle	Measured survey, condition, operational and interface verification
V2	60 m; single gate; wheel axle	Measured survey, condition, operational and interface verification
V3A	50 m; dual gate; wheel axle	Measured survey, condition, operational and interface verification
V3B	50 m; dual gate; wheel axle	Measured survey, condition, operational and interface verification
V4	60 m; dual gate; wheel axle	Measured survey, condition, operational and interface verification
V5	60 m; dual gate; wheel axle	Measured survey, condition, operational and interface verification

1.3 Interpretation and completeness

- 1.3.1 The gate dimensions and configurations are indicative and are not a warranty of completeness or accuracy. The Contractor verifies every gate, track, foundation, service, electrical supply, control interface, safety device and operating constraint before design and procurement.
- 1.3.2 The Scope states minimum requirements and performance outcomes. The Contractor provides all design, manufacture, supply, delivery, off-loading, storage, preservation, temporary works, installation, programming, configuration, testing, certification, documentation, training, making good, accessories and ancillary work required for complete working systems.
- 1.3.3 Where requirements conflict, legislation and statutory requirements take precedence, followed by the Contract Data, this Scope, accepted Contractor design and manufacturer requirements. The Contractor notifies the Project Manager and does not adopt a lower requirement without acceptance.
- 1.3.4 Acceptance of a design, programme, sample, method statement, inspection or test does not transfer design responsibility to the Employer or relieve the Contractor of an obligation.

2. Contractor's design and professional services

2.1 Design responsibility

- 2.1.1 The Contractor is responsible for all multidisciplinary design required to Provide the Works from FIDPM Stage 3 to Stage 6. The coordinated design is fit for purpose, compliant, constructible within airport constraints, safe through its lifecycle and maintainable by locally available resources.
- 2.1.2 Confirm the Employer's requirements, operating philosophy, performance criteria, hazards, interfaces, maintainability targets and acceptance criteria before detailed design.
- 2.1.3 Undertake measured and condition surveys, dimensional verification, utility detection, structural investigations, material testing, drive and load assessments, electrical load and fault-level studies, network surveys, safety-risk assessments and operational observations required for design.
- 2.1.4 Prepare coordinated design bases, calculations, drawings, specifications, schedules, equipment data sheets, bills of materials, control philosophy, cause-and-effect matrices, I/O lists, network architecture, design-risk assessments, test plans and commissioning plans.
- 2.1.5 Resolve clashes and discipline interfaces before manufacture or construction. Rework resulting from an incomplete, incorrect or uncoordinated Contractor design is at the Contractor's cost.
- 2.1.6 Use suitably qualified, actively registered and competent professionals. The responsible professional signs and takes responsibility for each discipline design, certificate and as-built submission.

2.2 FIDPM deliverables and discipline responsibilities

Stage	Mechanical / structural / civil	Electrical / C&I / functional safety	Digital / project controls / CHSA
Stage 3 – Design development	Verified surveys; condition and option assessment; Safair benchmark; gate mechanisms; protected	Load and fault-level assessment; essential and backup-power strategy; UPS concept; latest supported	Mobile, cloud, IoT and BMS/IMC architecture; cybersecurity concept; phasing; design-risk review;

Stage	Mechanical / structural / civil	Electrical / C&I / functional safety	Digital / project controls / CHSA
	chain drive; emergency/manual operation; material comparison; wind, fatigue and anti-tipping concept; foundation and drainage development.	Allen-Bradley architecture; preliminary I/O and cause-and-effect; SIL 2 justification; diverse sensing and voting study.	cost plan; programme and gateway package.
Stage 4 – Design documentation	Signed calculations; IFC mechanical, structural and civil drawings; material/coating schedules; drive and emergency-operation details; construction specifications and ITPs.	Electrical single lines, cable and panel schedules; protection and earthing; UPS design; PLC/HMI/VFD design; safety requirements specification; voting logic; software functional design; FAT/SAT/V&V protocols.	Detailed app/cloud/API/database design; interface control documents; security design; method statements; procurement schedule; CHSA design review and Stage 4 gateway package.
Stage 5 – Works	Manufacture, FAT, delivery, installation, civil works, structural erection, mechanical alignment and commissioning.	Panel manufacture, software, cabling, sensors, power, UPS, controls, integration, FAT, SAT and safety validation.	App/cloud/IoT development, BMS/IMC integration, cybersecurity testing, training, quality and construction records.
Stage 6 – Close-out	As-builts, certificates, O&M data, spares, warranties, defects close-out and gate performance records.	Final software/configuration, validation, test and certification records; backup and restoration packages.	Source code, licences, manuals, asset data, training, H&S and quality files, operational readiness and handover report.

2.3 Design submissions and review

- 2.3.1 Submit a design-submission register within 10 working days after the Starting Date. The register identifies each discipline, document, responsible professional, planned submission date, Employer review period, status and dependent procurement or construction activity.
- 2.3.2 Each submission is complete, internally checked, signed, coordinated and accompanied by a Scope compliance matrix, design-risk register, interface list, departures schedule and evidence of interdisciplinary review.
- 2.3.3 Allow 10 working days for Employer review of each complete submission unless the accepted programme states another period. Incomplete submissions may be returned without technical review.
- 2.3.4 Include reasonable review cycles and correction of non-compliance in the programme and Prices. A comment requiring compliance with the Scope, law, standard or accepted interface is not a change to the Scope.

- 2.3.5 Do not procure, manufacture or construct affected permanent works before the relevant design is accepted, except at the Contractor's own risk.

3. Technical requirements

3.1 Design life, availability and maintainability

- 3.1.1 Design all structural, mechanical, electrical, control and digital permanent works for a minimum 10-year design life, subject to the specified planned maintenance. Select equipment from current, supported product families with a stated lifecycle and migration path.
- 3.1.2 Design for safe failure, low mean time to repair, modular replacement and access for inspection, lubrication, adjustment and component removal without dismantling unrelated equipment.
- 3.1.3 Standardise equipment across gates where practicable to reduce spares, software, training and maintenance complexity. Variations are documented and justified.
- 3.1.4 Provide duty, load, speed, cycle, travel, stopping-distance, braking and thermal margins suitable for the verified gate mass, geometry, wind exposure, operating frequency and airport environment.

3.2 Gate structures, materials and corrosion protection

- 3.2.1 Survey and assess each gate frame, leaf, joint, bracing, weld, bolted connection, guide, stop, support, wheel assembly and interface for deformation, fatigue, corrosion, wear, cracking and loss of alignment.
- 3.2.2 Prepare a gate-by-gate replacement design and implementation recommendation. Each replacement gate shall achieve the required design life, structural capacity, alignment, safety and maintainability.
- 3.2.3 Compare steel, aluminium and other suitable lightweight alternatives on strength, stiffness, fatigue, mass, wind response, corrosion, galvanic compatibility, repairability, lifecycle support and whole-life cost. Aluminium is not prescribed as the sole material.
- 3.2.4 Protect steelwork using a coating or galvanising system suitable for exposed airport conditions. Prepare surfaces, repair damaged coatings and provide compatible fasteners and isolation between dissimilar metals.
- 3.2.5 Welding procedures, welders, consumables and inspections comply with the accepted structural design and applicable standards. Submit material certificates, welding records and nondestructive examination results.

3.3 Historical design information requiring Stage 3 verification

- 3.3.1 The 2016 detailed design report KI-T45-DDR-001 Revision 02 records the following legacy conditions and design parameters. They are reference information only. The Contractor verifies the current gate configuration, dimensions, mass, condition, aircraft and tug loading, operating performance and interfaces before adopting any value.

Design item	Historical information	Current Contract requirement
Environmental basis	6°C to 40°C; 15% to 60% RH; basic wind speed 28 m/s; altitude approximately 1 680 m	Verify and use the governing current site and statutory design values
V3A, V3B, V4 and V5	Legacy dual sliding single-track gates; impact damage, bus-bar failures and wind instability; historical proposal for standardised single gates on double tracks	Verify current configuration and develop a gate-specific solution eliminating the recorded failure mechanisms
Denel Aviation	Legacy single gate on double track; chain and sprocket drive; scraping caused by uneven grade; historical extension and 0.8–1.2 m/s speed objective	Verify length, clearance, grade, mass, speed and operational requirements before design
SAA Technical	Legacy 120 m single gate on double track; drive and controls previously removed for use elsewhere	Verify completeness and design the required supported drive, controls and safety systems
Operating parameters	Historical nominal speed 0.8 m/s; acceleration/deceleration 7.5 s; target clearance 75 mm	Confirm safe speed, stopping distance, cycle time, clearance and acceleration for each gate
Aircraft pavement/track basis	Historical Code D for V gates, Code E for Denel and Code F confirmation for SAA Technical	Confirm governing aircraft, aircraft tug/tow tractor wheel loads and route classification for each location
Legacy drives	Historical 11 kW, 15 kW and 30 kW geared motors; 400 V, three-phase, 50 Hz; chain-and-sprocket and electromagnetic clutch/brake arrangements	Select final motors, gearboxes, brakes, VFDs, chains and sprockets from verified calculations and current operating requirements
Emergency recovery	Historical geared winch basis with 66 kN rated pulling force and gate-specific rope lengths	Verify emergency force, rope, anchorage, brake, storage, safe operation and proof-load requirements

3.3.2 Eliminate exposed electrical bus-bars and other arrangements that caused repeated bus-bar failure or high repair turnaround time. Use protected flexible cabling, cable reels, festoons, energy chains or another accepted solution suitable for the verified travel and environment.

3.3.3 Prevent damaging impact at the meeting point, end stop or closing position through a single-gate arrangement where justified, controlled acceleration/deceleration, position feedback, soft stopping, braking and resilient mechanical stops.

3.3.4 Standardise V3A, V3B, V4 and V5 structures and components where verified geometry and operational requirements permit, without forcing unsuitable commonality.

- 3.3.5 Provide weatherproof housing or enclosures for geared motors, brakes, control panels and local equipment. The final ingress rating is determined from the environment and is not less than the requirement stated elsewhere in this Scope.

3.4 Tracks, wheels, axles, bearings and restraints

- 3.4.1 Verify rail or track line, level, gauge, straightness, joints, anchorage, foundation support and drainage. Repair or replace defective sections and provide smooth transitions without impact loading.
- 3.4.2 Size wheels, axles, shafts, bearings, guides and supports for verified static, dynamic, wind and starting loads with adequate fatigue and service factors.
- 3.4.3 Provide sealed, maintainable bearings, accessible lubrication points and replaceable wear components. Prevent water and debris retention around running surfaces.
- 3.4.4 Provide positive end stops, derailment prevention, anti-lift and anti-tipping restraints. Restraints remain effective under the governing wind and accidental load combinations.
- 3.4.5 Align the complete gate and drive system so that operating force, vibration, noise, wheel loading and current remain within the accepted design and manufacturer limits.

3.5 Drive transmission and protected chain system

- 3.5.1 Assess the comparable Safair chain-drive arrangement and document its suitability, limitations and required adaptations for each gate.
- 3.5.2 Provide an enclosed or protected chain, rack, cable or equivalent positive-drive arrangement selected through the accepted design. Exposed chains are not accepted where practical protection can prevent weather, debris, impact and entanglement.
- 3.5.3 Size chains, sprockets, shafts, keys, couplings, tensioners and guards for starting, running, braking, wind and jam loads. Provide adjustment, inspection and lubrication access without removing permanent structural members.
- 3.5.4 Guards prevent access to pinch, nip, shear and entanglement points while allowing inspection. Guard removal requires tools and does not defeat required interlocks.
- 3.5.5 Demonstrate chain alignment, tension, lubrication, backlash, travel and operation across the full gate stroke under loaded conditions.

3.6 Motors, gearboxes, brakes and local mechanisms

- 3.6.1 Provide industrial motors, gearboxes, couplings and brakes suitable for outdoor duty, frequent reversing, verified cycles, starting torque and environmental exposure. Motors and gearboxes are minimum IP65 unless the accepted environment requires a higher rating.
- 3.6.2 Provide a fail-safe holding brake or accepted equivalent that prevents unintended movement at rest and under the governing wind load.
- 3.6.3 Provide torque, overcurrent, thermal and stall protection coordinated with obstruction detection and the functional-safety design.
- 3.6.4 Provide local mechanical isolation, safe drive disengagement and means to prevent uncontrolled gate movement during maintenance or emergency operation.

- 3.6.5 Noise at one metre does not exceed 85 dBA unless a more stringent applicable limit applies.
Provide attenuation where required.

3.7 Manual and semi-manual emergency operation

- 3.7.1 Each gate can be moved to a safe or secure position following loss of normal power, failure of the motor, VFD, PLC or transmission, or a controlled emergency requiring manual intervention.
- 3.7.2 Provide a safe drive-disengagement arrangement and a manual or semi-manual system, including geared hand operation, winch or portable powered assistance where justified by the verified operating force.
- 3.7.3 The emergency system includes positive control against runaway movement, safe attachment points, storage for tools, clear labels and a gate-specific operating instruction.
- 3.7.4 Determine the number of trained persons, maximum operating force, time to secure the opening and environmental limits. Demonstrate the arrangement under simulated failure at every gate.
- 3.7.5 Emergency operation does not bypass required physical restraints, security controls or safe-area confirmation. Restore automatic operation only through an authorised reset and inspection sequence.

3.8 Civil works, foundations, drainage and paving

- 3.8.1 Verify existing foundations, anchors, plinths, rails, service crossings, paving, roads, drainage and surrounding levels. Investigate hidden conditions needed to complete the design.
- 3.8.2 Design foundations, anchors and supports for governing static, dynamic, cyclic wind, fatigue, braking, accidental and erection loads, including soil and existing-structure capacity.
- 3.8.3 Maintain positive drainage and prevent ponding, undermining, corrosion, debris accumulation and water entry into electrical or mechanical equipment.
- 3.8.4 Reinstate paving, roads, kerbs, markings, fencing, guardhouse interfaces and disturbed services to equal or better condition and maintain safe operational routes throughout construction.

3.9 Wind, fatigue and anti-tipping performance

- 3.9.1 Determine site wind actions and load combinations using the applicable structural standards, verified gate geometry, permeability, shielding, operational position and dynamic response.
- 3.9.2 Assess open, closed, partially open and fault positions, including loss of drive or brake. Provide anti-tipping, anti-lift, end-stop and restraint systems for credible cases.
- 3.9.3 Complete fatigue assessment for structural members, welds, connections, rails, wheels, axles, chain drives and anchors based on the design life and expected operating cycles.
- 3.9.4 State permitted operating wind speeds and automatic or procedural restrictions. Display limits at the local control point and include them in the operating manual and training.

3.10 Electrical power, cabling and earthing

- 3.10.1 Survey existing normal and essential supplies, distribution boards, spare capacity, fault levels, protection, cable routes, earthing, lightning and surge exposure and isolation points.

- 3.10.2 Provide all distribution, isolators, protection, control transformers or power supplies, PLC and sensor supplies, I/O modules, power, control and network cabling, containment, glands, labels, earthing, surge protection and certificates of compliance.
- 3.10.3 Coordinate protection and verify discrimination, fault withstand, voltage drop, motor starting and load capacity. Do not connect, isolate or energise without an accepted switching plan, permit and coordination with ACSA Electrical Maintenance.
- 3.10.4 Use segregated routes and terminations for power, safety, control and network circuits. Provide UV, weather, oil and mechanical protection appropriate to each route.
- 3.10.5 Provide permanent cable and terminal identification matching drawings and software I/O references. Submit complete test sheets and updated schedules.
- 3.11 Essential supply, backup power and UPS
 - 3.11.1 Prepare a gate-by-gate backup-power strategy for loss of normal power and airport load-reduction conditions. Identify which functions remain operational, the safe state, transfer sequence, autonomy and recovery sequence.
 - 3.11.2 Connect controls and safety systems to accepted essential supplies where available and provide robust online UPS systems for safety PLCs, HMI, sensors, network equipment, warnings and controlled shutdown or emergency operation.
 - 3.11.3 Size UPS equipment using verified loads, battery ageing, temperature, future margin and required autonomy. Provide bypass, isolation, battery monitoring, alarms, replaceable batteries and safe maintenance access.
 - 3.11.4 A central new standby generator or airport-wide UPS is excluded unless instructed. Gate-specific power interfaces, local UPS equipment and all design, cabling, testing and integration are included.
 - 3.11.5 Demonstrate loss of normal power, transfer, reduced-load operation, UPS autonomy, alarm reporting, restoration and safe gate response at every gate.
- 3.12 Control, instrumentation and automation
 - 3.12.1 Replace obsolete or lifecycle-limited equipment with the latest supported Allen-Bradley safety-rated platform compatible with the airport architecture, including Compact GuardLogix or accepted successor controllers, compatible PowerFlex drives, HMI and safety I/O.
 - 3.12.2 Submit a lifecycle-support statement confirming current production status, local support, spares availability, firmware and software compatibility and the proposed migration path.
 - 3.12.3 Provide local automatic, manual, maintenance and emergency modes with controlled access. Display gate position, movement, permissives, interlocks, alarms, faults, drive status, UPS status, sensor status and communications health.
 - 3.12.4 Prepare PLC, HMI and VFD functional design specifications, cause-and-effect matrix, I/O list, alarm list, setpoint register, network diagram, IP schedule, software version register and backup/restore procedure.
 - 3.12.5 Use deterministic, fail-safe logic. Loss of a required signal, safety device, communications path or power source results in the defined safe response and a clear alarm.

- 3.12.6 Provide controlled source files, commented code, reusable function blocks, change records, access levels and complete editable backups. Passwords and administrative credentials are handed to the Employer securely.
- 3.13 Functional safety, obstruction and presence sensing
- 3.13.1 Complete a hazard and risk assessment covering crushing, shearing, drawing-in, impact, entrapment, aircraft conflict, aircraft tug or tow tractor conflict, authorised operational vehicle conflict, unexpected movement and security-related operating conditions.
- 3.13.2 Provide a detailed auditable justification for SIL 2 or the higher integrity required by the risk assessment. SIL 2 is not automatically accepted merely because it was proposed at Stage 2.
- 3.13.3 Prepare and maintain the functional-safety plan, safety requirements specification, SIL calculations, architecture constraints, verification records, proof-test requirements and validation plan.
- 3.13.4 Use redundant, diverse obstruction and presence sensing technologies and, where practicable, different OEMs. Document independence, diagnostic coverage, voting logic, common-cause failure controls and degraded-mode response.
- 3.13.5 Confirm sensor type, number, location, mounting, field of view, environmental suitability and coverage for each gate through a documented coverage study and field validation.
- 3.13.6 A single credible sensor fault does not permit unsafe movement. Bypass or muting is controlled, time-limited, alarmed, logged and available only where justified in the accepted safety design.
- 3.13.7 Provide safety-rated emergency stops, final limits, travel limits, guard or access interlocks and monitored outputs. Reset does not initiate movement and is possible only after the hazard zone is confirmed clear.
- 3.14 Warnings, traffic control, security and access records
- 3.14.1 Provide audible sirens and visual beacons that operate before and during gate movement, with distinct fault and emergency indications where required by the accepted cause-and-effect design.
- 3.14.2 Provide traffic lights, signs, markings and interlocks to control aircraft, aircraft tugs or tow tractors and authorised operational vehicles on both sides of each gate.
- 3.14.3 Provide secure operator authentication, role-based permissions and records of opening, closing, stops, alarms, bypasses, acknowledgements, maintenance modes and administrative changes.
- 3.14.4 Coordinate gate operation with affected guardhouses, security procedures, access-control systems and operational stakeholders. Replace or reinstate affected guardhouse finishes, controls, power and communication interfaces.
- 3.15 Mobile application and cloud platform
- 3.15.1 Design, develop, test, deploy and commission native Android and iOS applications using Kotlin Multiplatform. A responsive website or web-page wrapper is not accepted as the mobile application.
- 3.15.2 Use Jetpack Compose or Compose Multiplatform navigation with nested navigation; Ktor for REST API calls; Koin for dependency injection; and SQLDelight for encrypted local storage and offline persistence.

- 3.15.3 Use Firebase Authentication for identity, Firebase Storage for managed files and Cloud Firestore for application data requiring document storage. Implement repository and ViewModel architecture, Kotlin coroutines, core routines, centralised exception handling, structured logging and consistent loading, success and error states.
- 3.15.4 Provide suitable industrial IoT gateways and secure telemetry ingestion. Configure a suitable continuously available or time-series database with retention, indexing, backup, restoration, scalability and audit controls.
- 3.15.5 Create secure documented REST APIs, operational and maintenance dashboards and analytics for availability, movement cycles, alarms, faults, sensor health, UPS status, drive status, gate position, trends and predictive-maintenance indicators.
- 3.15.6 Provide role-based access, multi-factor authentication, least privilege, encrypted data in transit and at rest, secure sessions, audit trails, vulnerability and dependency management, penetration testing, secrets management and closure of critical and high-risk findings.
- 3.15.7 Loss of the mobile application, cloud platform or external network does not impair local safety or gate operation. Buffer records locally and synchronise when communications return, with stale data clearly identified.
- 3.15.8 Provide source code, build instructions, CI/CD configuration, database schema, API and architecture documents, test evidence, software bill of materials, signing arrangements, administrative credentials and reproducible deployment packages.
- 3.15.9 Provide all mobile, cloud, database, API, Firebase, monitoring, analytics, app-distribution and IoT licences, subscriptions, certificates, hosting and support required for 24 months from operational acceptance without additional recurring charge.
- 3.16 BMS/IMC and airport systems integration
 - 3.16.1 Integrate the gates, PLCs, IoT platform and digital application with the Airport BMS/Integrated Monitoring Centre through the ACSA-approved network and cybersecurity architecture.
 - 3.16.2 Provide the interface-control document, complete point list, alarm priorities, engineering units, graphics, trends, timestamps, quality indicators, update rates, command permissions and test procedures.
 - 3.16.3 Use open published interfaces such as BACnet/IP, Modbus TCP, OPC UA or an accepted airport standard. Proprietary lock-in is not accepted unless expressly approved.
 - 3.16.4 Coordinate the ACSA-appointed integration specialist and include all Contractor engineering, configuration, test support, attendance and retesting required for end-to-end acceptance.
- 3.17 Equipment, workmanship and labelling
 - 3.17.1 Equipment is new, unused, current production, supported in South Africa, suitable for the verified environment and accompanied by manufacturer documentation and certificates.
 - 3.17.2 Provide outdoor equipment with suitable ingress, corrosion, UV, temperature, vibration and impact protection. Enclosures are lockable, ventilated or cooled where required and arranged to prevent condensation.
 - 3.17.3 Provide permanent engraved labels, asset numbers, danger notices, flow or movement arrows, cable and terminal identification and durable operating schematics.

3.17.4 Protect existing assets and finishes. Repair Contractor-caused damage and reinstate affected areas at no additional cost.

4. Applicable legislation and standards

4.1 Compliance requirements

4.1.1 Comply with the editions applicable at the Contract Date, including amendments, statutory notices, manufacturer requirements and ACSA standards. Where an edition is not stated, the current adopted edition at the Contract Date applies. The following list is not exhaustive.

Reference	Application
Occupational Health and Safety Act 85 of 1993 and Construction Regulations 2014	Design, construction, machinery, electrical work, lifting, appointments and health and safety file
SANS 310	Powered gate safety requirements
EN 12453 and EN 12445	Safety in use, obstacle detection, force limitation and test methods for powered gates
SANS 10142-1	Low-voltage electrical installations and certificates of compliance
SANS 10292 and SANS 10313	Earthing and lightning protection
SANS/IEC 60529, IEC 60947 and IEC 60204-1	Enclosures, switchgear, controlgear and electrical equipment of machines
IEC 61131-3	PLC programming languages and software structure
IEC 61508 and IEC 61511	Functional-safety lifecycle and safety instrumented functions
IEC 62443	Industrial automation and control-system cybersecurity
IEC 61784	Industrial communication profiles
ISA 101	Human-machine-interface design
SANS 10160 series	Structural actions, including wind and imposed loads
SANS 2001 and applicable structural fabrication standards	Civil, structural, welding and construction workmanship
SANS 1186	Safety signs and warning labels
Protection of Personal Information Act 4 of 2013	Personal information, user accounts, logs and cloud data

5. Execution constraints and business continuity

5.1 Live operational environment

5.1.1 The airport, tenant operations, security routes and aircraft-support activities remain operational. Plan gate outages and temporary arrangements so that access, emergency routes and airport security are maintained.

5.1.2 No gate, road, service, security interface or power supply is interrupted without an accepted method statement, isolation or switching plan, stakeholder notification, contingency and rollback plan.

5.1.3 Allow for phased and night work, restricted access, escorts, permits, security, inductions, tool controls, delivery bookings and reduced productivity associated with airport operations.

5.1.4 The Employer may reasonably resequence accepted work windows for operational or safety reasons. The Contractor mitigates and resequences within the stated access regime where the Completion Date and contractual access are not changed.

5.1.5 Hot work, lifting, excavation, work at height, electrical isolation and testing of moving gates require task-specific permits and accepted method statements.

5.2 Access, logistics and temporary security

5.2.1 Obtain and pay for personnel, vehicle, tool, laptop, camera, hot-work, airside and work permits required by the Contractor's methods.

5.2.2 Provide secure storage, transport, lifting, off-loading, preservation, housekeeping, waste removal, temporary lighting, communications, offices, welfare and reinstatement.

5.2.3 Provide temporary fencing, barriers, traffic management, security controls, signs, lighting, banksmen and safe pedestrian routes. Temporary arrangements are inspected daily and remain effective outside working hours.

5.2.4 Do not assume free storage, parking, power, water, network connections or welfare facilities unless expressly confirmed by the Project Manager.

5.2.5 Control foreign-object debris, tools, loose materials, dust, noise, water and waste. Keep emergency and operational routes clear at all times.

6. Temporary works, Site services and construction controls

6.1 Construction controls

6.1.1 Design, provide, inspect and remove all temporary works, restraints, lifting frames, supports, hoarding, access equipment, temporary power and temporary security required for the Works.

6.1.2 Temporary restraints prevent gate movement, collapse, derailment or wind-driven movement during dismantling, construction and testing. A competent person approves and inspects restraints before use.

6.1.3 Locate and prove existing services before drilling, excavation, cutting, isolation or connection. Repair service damage promptly with competent persons and provide incident and test records.

6.1.4 Set out permanent equipment positions for acceptance before installation. Give reasonable notice before covering foundations, anchors, cables, drainage and other work requiring inspection.

6.1.5 Maintain a register of Contractor's Equipment and materials on Site, including serial or registration numbers, ownership or rental status and preservation condition.

7. Programme and planning

7.1 Programme requirements

7.1.1 Submit the first detailed programme within two weeks after the Contract Date and revise it at the intervals stated in the Contract Data.

7.1.2 The programme includes FIDPM gateways, design submissions, Employer review periods, surveys, approvals, permits, procurement, manufacturing, FAT, deliveries, gate-by-gate outages, temporary arrangements, installation, integration, SAT, endurance testing, training, handover, float, time-risk allowances and Completion within 78 weeks.

- 7.1.3 Show separate logic and measurable activities for Airlink, SAA Technical, Denel Aviation, V1, V2, V3A, V3B, V4 and V5 gates.
- 7.1.4 Include procurement schedules and evidence of orders for long-lead structures, drives, PLCs, VFDs, sensors, UPS, panels, IoT equipment and licences.
- 7.1.5 Failure to submit or maintain an accepted programme does not relieve the Contractor from Completion or create entitlement to additional time or payment.

8. Health, safety, environment and quality

8.1 Management requirements

- 8.1.1 Comply with the Employer's health and safety specification and submit statutory appointments, construction work permit support, baseline and task risk assessments, plans and the health and safety file before access.
- 8.1.2 The Construction Health and Safety Agent completes design-risk reviews and SACPCMP-aligned reports for FIDPM Stages 3 to 6.
- 8.1.3 Prepare a project quality plan, manufacturing plan, inspection and test plans, hold and witness-point schedule, material submittal register, calibration register, nonconformance procedure and turnover-dossier index.
- 8.1.4 Immediately report gate movement incidents, service strikes, spills, injuries, security breaches, equipment damage and unsafe conditions. Correct Contractor-caused conditions at the Contractor's cost.
- 8.1.5 Manage waste, coatings, oils, batteries, electronic equipment and demolition materials in accordance with legislation and ACSA environmental requirements. Maintain disposal and recycling records.

9. Testing, commissioning and acceptance

9.1 Factory acceptance testing

- 9.1.1 Conduct FAT for control and electrical panels, PLC, HMI, VFD, safety logic, simulated I/O, sensor voting, alarm logic, communications, mobile services and reporting before delivery.
- 9.1.2 Submit FAT procedures at least 15 working days before testing and provide at least five working days' notice of the confirmed test date.
- 9.1.3 Record equipment identification, software and firmware versions, calibrated instruments, results, deviations and punch items. Correct failures and repeat affected tests at no additional cost.

9.2 Installation inspection and pre-commissioning

- 9.2.1 Inspect foundations, anchors, rails, alignment, coatings, mechanical fasteners, chain tension, guards, lubrication, cabling, terminations, earthing, labels and panel construction before energisation.
- 9.2.2 Complete electrical insulation, continuity, earth-loop, protection, phase rotation, I/O, network, sensor calibration and point-to-point tests using calibrated instruments.
- 9.2.3 Verify software backups, approved setpoints, access roles, cause-and-effect logic, safety checks and restoration procedures before live movement.

9.3 Site acceptance and performance testing

- 9.3.1 ACSA witnesses SAT. Submit gate-specific SAT and commissioning procedures at least 15 working days before testing.
- 9.3.2 Test every drive, brake, limit, interlock, emergency stop, sensor, warning device, PLC input/output, HMI function, traffic light, UPS alarm, communication point, mobile display, dashboard, trend, report and fault condition.
- 9.3.3 Measure and record opening and closing speed, operating current, stopping distance, braking, alignment, vibration, noise, manual operating force, emergency securing time and performance under the accepted wind limitations.
- 9.3.4 Demonstrate obstruction and presence coverage, diverse-sensor voting, single-sensor faults, common-cause scenarios, bypass controls, emergency stops and safe restoration.
- 9.3.5 Demonstrate loss of normal power, essential supply transfer, UPS autonomy, loss of communications, controller fault, VFD fault, sensor fault, manual/semi-manual operation and return to automatic service.
- 9.3.6 Complete functional-safety validation against the accepted safety requirements specification and SIL determination. A competent independent person signs the validation report.
- 9.3.7 Complete endurance cycling and reliability demonstration using the accepted number and pattern of cycles, with no unresolved safety or performance failure.
- 9.3.8 Complete end-to-end BMS/IMC, mobile, cloud, API, database, dashboard, analytics, cybersecurity, backup, restore, failover and user-acceptance tests.
- 9.3.9 Submit signed test sheets, calibration certificates, electrical certificates, functional-safety validation, statutory approvals, independent performance report and consolidated commissioning dossier.
- 9.3.10 Early use of a gate does not constitute Completion or acceptance of a Defect. Completion is not achieved until safety-critical defects, failed tests, statutory certificates and Category A handover documents are closed.

9.4 As-built drawings, operating manuals and maintenance schedules

- 9.4.1 Provide three controlled copies of complete operating and maintenance manuals, including every drawing, procedure, schedule and data sheet required to operate, inspect, maintain, test and repair the Works.
- 9.4.2 Provide three electronic copies containing editable native files and searchable PDF copies of the complete selection, design, manufacture, installation, commissioning, operating and maintenance information.
- 9.4.3 Maintain a complete set of drawings updated with as-built information throughout the Works. Submit the final records to the Project Manager and the ACSA CAD Office or Asset Information Management Officer within 14 working days after Completion.
- 9.4.4 Use the Employer's title block and clearly state the project name and number, drawing status, revision, date, responsible designers and Contractors, contact details and responsibilities. Bind or attach external references and use separate, switchable layers with clear attributes, line types, text and dimensions.

- 9.4.5 Submit as-built drawings in AutoCAD 2004–2016 compatible format and PDF, including gate layouts, structures, tracks, foundations, drainage, mechanical assemblies, single-line diagrams, panels, cables, networks, controls, BMS/IMC interfaces and affected services.
- 9.4.6 Provide operating instructions, emergency and manual-operation procedures, isolation procedures, preventive-maintenance tasks, frequencies, labour and skill requirements, lubrication schedules, proof-test schedules, inspection tolerances, troubleshooting and overhaul recommendations.
- 9.4.7 Provide final asset data, equipment schedules, serial numbers, software and firmware versions, warranties, licences, supplier details, recommended spares and special tools in the Employer's required upload format.

10. Training, handover, warranty and maintenance

10.1 Training

- 10.1.1 Provide practical and classroom training for Employer operations, security, maintenance, engineering and system-administration personnel. Repeat sessions as required to cover shift personnel.
- 10.1.2 Cover normal and emergency gate operation, drive disengagement, manual/semi-manual movement, isolation, inspection, lubrication, alarms, sensors, PLC/HMI/VFD, UPS, BMS/IMC, mobile/cloud administration, cybersecurity, backups, reporting, fault finding and emergency actions.
- 10.1.3 Provide approved training material, demonstrations, exercises, competency checks, attendance records and editable training presentations.

10.2 Handover documents

- 10.2.1 Accepted designs, signed calculations, specifications, design certificates, material-selection report and Stage 3 to Stage 6 gateway records.
- 10.2.2 As-built drawings in editable native format and PDF, including layouts, foundations, structures, tracks, mechanical assemblies, single-line diagrams, panels, cable schedules, network architecture and interfaces.
- 10.2.3 Final equipment and asset register with manufacturers, models, serial numbers, firmware, software, warranties, licences, supplier contacts and maintenance-critical data.
- 10.2.4 FAT, SAT, endurance, performance, electrical, coating, welding, functional-safety, independent and statutory test certificates.
- 10.2.5 Final control philosophy, cause-and-effect, I/O list, alarm list, BMS/IMC point list, network and IP schedule, setpoints and PLC/HMI/VFD/IoT configuration backups.
- 10.2.6 Mobile and cloud source code, repositories, database schema, API documents, dashboard and analytics configuration, CI/CD, signing, software bill of materials, licences and secure credentials-transfer record.
- 10.2.7 Operating, maintenance and emergency manuals; planned-maintenance schedule; troubleshooting guide; proof-test procedure; spares and special-tools schedules.
- 10.2.8 Training records, CHSA Stage 6 report, health and safety file, quality dossier, disposal certificates, defects register, operations-readiness report and close-out report.

10.3 Spares, tools, warranty and post-Completion support

10.3.1 Provide commissioning and diagnostic interface tools, manufacturer-specific test accessories, special mechanical tools and initial critical spares identified through the spares analysis.

10.3.2 Submit a priced two-year operating-spares recommendation identifying criticality, lead time, shelf life, quantity, storage and supplier details.

10.3.3 The defects correction period is 52 weeks after Completion. Correct Defects and update all affected documents, software, configuration and records.

10.3.4 Provide 12 months of planned maintenance and technical support after Completion at no additional cost, including inspections, adjustment, lubrication, safety tests, software support, reporting checks and correction of Defects.

10.3.5 Provide immediate remote response to safety-critical failures and attend as soon as airport access permits. Coordinate access, isolations and outages with the Project Manager.

10.4 Document delivery and CAD standards

10.4.1 Maintain a complete set of drawings updated with as-built information throughout the project. Submit editable AutoCAD-compatible files and PDF within 14 working days after Completion.

10.4.2 Use the Employer's title block, project name and number, drawing status, revision, dates, responsible parties and contact information. Bind or attach external references and use clear layers, line types, text and attributes.

10.4.3 Submit the asset register and structured equipment data in the Employer's required format for upload into asset-information and maintenance systems.

11. Contractor's resources

11.1 Resource requirements

11.1.1 Provide sufficient management, design, supervision, installation, testing, commissioning and administrative resources to meet the accepted programme. The following key roles remain distinct unless the Employer accepts otherwise.

Resource	Minimum responsibility
Project / Construction Manager	Overall NEC3 delivery, programme, design coordination, stakeholder, commercial and construction management
Mechanical Engineer	Gate structures and mechanisms, drives, brakes, emergency operation, maintainability and performance
Control and Instrumentation Engineer	PLC, HMI, VFD, sensors, functional-safety lifecycle, I/O, software and integration
Electrical Engineer	Power, essential/backup supplies, UPS, protection, cabling, isolation, earthing and certification
Civil / Structural Engineer	Foundations, rails, structures, anchors, drainage, paving, wind, fatigue and certification
Construction Health and Safety Agent	Design and construction risk, statutory compliance, permit support, audits and Stage 3–6 reports
Site Supervisor	Daily safety, quality, logistics, installation control and gate-by-gate records

Resource	Minimum responsibility
Digital specialists	Mobile, cloud, database, REST API, IoT, cybersecurity, deployment and support

11.1.2 Tendered key persons remain available as committed. Replacement requires prior acceptance and equivalent or better qualification, registration and relevant experience.

12. Employer-provided items and interfaces

12.1 Employer provisions and interface limits

12.1.1 The Employer provides controlled access to the nine gate locations in accordance with the Contract Data, operational requirements and airport security controls.

12.1.2 Existing drawings, reports, equipment records and Stage 2 information are provided for information only and remain subject to Contractor verification.

12.1.3 The Employer provides review comments, operational coordination and witnessing personnel in accordance with the accepted programme.

12.1.4 The Employer provides approved network and interface requirements and controlled access to BMS/IMC facilities for authorised integration testing.

12.1.5 Existing normal and essential electrical tie-in points are made available only where verified by the Contractor and accepted in the design.

13. Employer-controlled allowances

13.1 Instruction and expenditure requirements

13.1.1 An allowance is not authority to proceed and is not an entitlement to payment. Work starts only after the Project Manager's written instruction. Contractor design, coordination, attendance, access, testing support, overheads and obligations stated in this Scope remain included in the Prices.

Allowance	Amount excluding VAT	Scope boundary
Digital platform	R4 000 000	Distributed across mobile, cloud, IoT, database, API, dashboards, analytics and 24-month licences/subscriptions
BMS/IMC integration	R650 000	Integration specialist, interface configuration, graphics, points, testing and commissioning
Independent performance testing	R50 000	Independent multidisciplinary performance verification
Statutory certification	R50 000	Required statutory inspections, approvals and certificates

14. Exclusions and boundaries

14.1 Scope boundaries

14.1.1 A new central airport standby generator, central substation or central UPS plant is excluded. Local gate essential-supply interfaces, local UPS systems, cabling, controls and testing are included.

- 14.1.2 Replacement of unrelated airport access-control, road, utility, BMS/IMC or security systems is excluded, except for interface work and making good required to complete the gate Works.
- 14.1.3 Removal of verified pre-existing asbestos or other hazardous material is excluded unless instructed. Identification, protection, stopping work and notification remain included.
- 14.1.4 An exclusion does not exclude normal ancillary work, design coordination, temporary work or interface obligations required for the included Works. Notify the Project Manager before proceeding where an excluded item is considered necessary.

15. Risk allocation and change control

15.1 Risks included in the Contractor's Prices

- 15.1.1 Surveys and correction of errors, omissions, quantities, coordination or tender assumptions in the Contractor's design, Activity Schedule or programme, including normal record discrepancies discoverable by competent inquiry.
- 15.1.2 Design development required to satisfy performance outcomes, law, standards, manufacturer requirements, Stage 2 actions and accepted interfaces.
- 15.1.3 Airport permits, inductions, escorts, security, deliveries, night or phased work, temporary access and security, gate outages, temporary works, access equipment and reinstatement.
- 15.1.4 Procurement lead times, supplier and Subcontractor performance, shipping, customs, exchange-rate movement, inflation and equipment availability, except where the Contract states otherwise.
- 15.1.5 Coordination with ACSA departments, tenants, utilities, integration specialists and independent testers; correction and repeat review or testing of non-compliant work; and reasonable resequencing within stated access constraints.

15.2 Employer-retained risks and change control

- 15.2.1 Employer-retained risks are limited to events qualifying under the NEC3 ECC and completed Contract Data, including an instructed change to the Scope, failure to provide stated access, an Employer prevention event or a qualifying physical condition satisfying the contractual test.
- 15.2.2 Use the early-warning, programme and compensation-event procedures as the exclusive process for changes to the Prices, Completion Date or Key Dates.
- 15.2.3 Only a written instruction or notification issued by the Project Manager under the Contract changes the Scope or constitutes a compensation event. Minutes, site discussions, design-review comments and emails from Others do not instruct a change.
- 15.2.4 Give early warning as soon as a matter could increase cost, delay Completion or impair performance. Maintain contemporaneous records, mitigation actions and programme effects.
- 15.2.5 No compensation event arises from Contractor design error, quantity or pricing omission, procurement or Subcontractor failure, failure to obtain Contractor-controlled permits or a constraint expressly stated in the Contract.

16. Activity Schedule, invoicing and payment

16.1 Pricing and payment requirements

- 16.1.1 Submit and maintain a priced Activity Schedule aligned to the accepted programme, FIDPM stages, each gate and measurable completed deliverables.
- 16.1.2 Activities separately identify design, procurement, each gate installation, digital works, integration, testing, training, handover and close-out. Front-loading and payment for unsupported progress are not permitted.
- 16.1.3 An activity is complete only when the stated deliverable and applicable Scope requirements are fully met, required documents are submitted and associated nonconformances are closed. Review, inspection, partial use or materials on Site does not constitute completion.
- 16.1.4 The Prices include taxes, duties, transport, escalation, supervision, design, overheads, profit, risk allowances and ancillary work, excluding VAT and instructed expenditure against Employer-controlled allowances.
- 16.1.5 Within seven days after receiving the Project Manager's payment certificate under core clause 51.1, submit a valid tax invoice for the certified amount. The invoice states the contract number and title, Contractor and Employer VAT details, payment-certificate reference, amount excluding VAT, VAT and total including VAT.

17. Completion criteria

17.1 Conditions for Completion

- 17.1.1 Completion is achieved only when all nine gates and associated systems are safe, operational, compliant, integrated and available for their intended use and all of the following are complete:
- 17.1.2 Accepted designs and permanent Works are complete at all gate locations.
- 17.1.3 FAT, SAT, endurance, power-failure, emergency-operation, functional-safety, digital, independent and statutory tests have passed and certificates are submitted.
- 17.1.4 Defects affecting safety, security, operation, monitoring, maintenance, integration or reporting are corrected.
- 17.1.5 Training and handover are complete, including documents, source code, software and configuration backups, licences, spares, tools and secure credentials transfer.
- 17.1.6 FIDPM Stage 6, operational-readiness, H&S, quality, disposal and asset-information requirements are accepted.
- 17.1.7 Sites are clean and reinstated, temporary works and waste are removed and affected operational areas are returned to the Employer.

17.2 Scope acceptance schedule

Deliverable or condition	Minimum acceptance record
FIDPM Stage 3	Accepted coordinated design-development and gateway package
FIDPM Stage 4	Accepted signed IFC design, safety, software and test package
Manufacture and FAT	Accepted inspections, material records and FAT reports

Deliverable or condition	Minimum acceptance record
Each gate installation	Gate-specific construction, test, SAT and return-to-service records
Digital and BMS/IMC integration	End-to-end UAT, cybersecurity, backup/restore and interface acceptance
Independent and statutory testing	Accepted independent report and all required statutory certificates
Training and handover	Accepted manuals, as-builts, source/configuration, licences, training and asset data
Completion	All Completion criteria met and NEC3 ECC Completion certified

ANNEXES to C3 (Works information)

Title	Annex number	Applicable or N/A
Detailed technical specification	Annexure A	Applicable
Gate equipment and data schedule	Annexure B	Applicable
Environmental Terms and Conditions	Annexure C	Applicable
Occupational Health and Safety Agreement	Annexure D	Applicable

ANNEXURE A – Detailed technical specification

System	Minimum technical requirement	Contractor submission
Gate structure	Verified 10-year structural design; wind, fatigue, corrosion and anti-tipping compliance	Calculations, drawings, material and coating schedules
Running gear	Aligned rails/tracks, wheels, axles, bearings, guides, stops and restraints	Load calculations, alignment tolerances and inspection plan
Drive system	Protected positive drive, motor, gearbox, brake, coupling, guards and disengagement	Selection calculations, data sheets, maintenance and guarding details
Emergency operation	Safe manual/semi-manual movement and securing after power or drive failure	Operating-force study, method, tools and demonstration protocol
Electrical	Normal/essential supply, local UPS, protection, cabling, isolation, earthing and CoC	Load study, single lines, cable/protection schedules and UPS autonomy
Automation	Latest supported Allen-Bradley safety PLC, compatible PowerFlex, HMI and safety I/O	Lifecycle statement, FDS, software, I/O, alarms and backups
Safety sensing	Diverse, redundant sensing, voting, E-stops, limits and fail-safe response	Hazard study, SIL justification, SRS, coverage and validation plan
Warnings/security	Sirens, beacons, traffic lights, signs, access roles and event records	Cause-and-effect, layouts and access matrix
Mobile platform	Native Android/iOS Kotlin Multiplatform application with specified architecture	Architecture, source, builds, tests and deployment package
Cloud/IoT	IoT gateways, continuous database, REST API, dashboards, analytics and security	Architecture, data model, API, dashboards, tests and recovery plan
BMS/IMC	Approved open interface, points, graphics, alarms, trends and end-to-end tests	Interface document, point list, graphics and test results

ANNEXURE B – Gate equipment and data schedule

Gate	Structure / track	Drive and motor	PLC / VFD / HMI	Sensors and safety	UPS / power
Airlink	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete
SAA Technical	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete
Denel Aviation	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete
V1	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete
V2	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete
V3A	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete
V3B	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete
V4	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete
V5	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete	Contractor to complete

ANNEXURE C

**ACSA Service & Maintenance Contractors
Environmental Terms and Conditions to Commence Work - EMS 048**

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

ISSUE	REQUIREMENT
Environmental Policy	ACSA's Environmental Policy shall be communicated, comprehended and implemented by all ACSA appointed contractor staff.
Storm water, Soil and Groundwater Pollution	- No solid or liquid material may be permitted to contaminate or potentially contaminate storm water, soil or groundwater resources. - Any pollution that risks contamination of these resources must be cleaned-up immediately. Spills must be reported to ACSA immediately. Contractors shall supply their own suitable clean-up materials where required. - Washing, maintenance and refueling of equipment shall only be allowed in designated service areas on ACSA property. It is the contractor's responsibility to determine the location of these areas. - No leaking equipment or vehicles shall be permitted on the airport.
Air Pollution	- Dust: Dust resulting from work activities that could cause a nuisance to employees or the public shall be kept to a minimum. - Odours and emissions: All practical measures shall be taken to reduce unpleasant odours and emissions generated from work related activities. - Fires: No open fires shall be permitted on site.
Noise Pollution	- All reasonable measures shall be taken to minimise noise generated on site as a result of work operations. - The Contractor shall comply with the applicable regulations with regard to noise.
Waste Management	- Waste shall be separated as general or hazardous waste. - General and hazardous waste shall be disposed of appropriately at a permitted landfill site should recycling or re-use of waste not be feasible. - Under no circumstances shall solid or liquid waste be dumped, buried or burnt. - Contractors shall maintain a tidy, litter free environment at all times in their work area.

	6. Contractors must keep on file: 1. The name of the contracting waste company 2. Waste disposal site used 3. Monthly reports on quantities – separated into general, hazardous and recycled 4. Maintained file of all Waste Manifest Documents and Certificates of Safe Disposal 5. Copy of waste permit for disposal site This information must be available during audits and inspections.
Handling & Storage of Hazardous Chemical Substances (HCS)	1. All HCS shall be clearly labeled, stored and handled in accordance to Materials Safety Data Sheets. 2. Materials Safety Data Sheets shall be stored with all HCS. 3. All spillages of HCS must be cleaned-up immediately and disposed of as hazardous waste. (HCS spillages must be reported to ACSA immediately). 4. All contractors shall be adequately informed with regards to the handling and storage of hazardous substances. 5. Contractors shall comply with all relevant national, regional and local legislation with regard to the transport, storage, use and disposal of hazardous substances.
Water and Energy Consumption	ACSA promotes the conservation of water and energy resources. The contractor shall identify and manage those work activities that may result in water and energy wastage.
Training & Awareness	The conditions outlined in this permit shall be communicated to all contractors and their employees prior to commencing works at the airport.

Penalties

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

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

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

I, _____ (name & surname) of _____

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

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

at: _____ (airport name).

ANNEXURE D

OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

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

OBJECTIVES

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

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

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

The parties to this Agreement are:

Name of Organization: AIRPORTS COMPANY SOUTH AFRICA O R Tambo INTERNATIONAL AIRPORT
Physical Address: Airport Company South Africa OR Tambo International Airport ACSA Building, 4th Floor

Hereinafter referred to as “Client”

Name of organisation:
Physical Address:

Hereinafter referred to as “the Mandatary/ Principal Contractor”

MANDATARY'S MAIN SCOPE OF WORK

Design, development, manufacture, supply, installation, integration, testing, commissioning and handover of replacement aircraft gates serving aircraft and aircraft tugs or tow tractors at O.R. Tambo International Airport, including associated civil, structural, mechanical, electrical, control, safety, cloud and IMCS/BMS works.

GENERAL INFORMATION FORMING PART OF THIS AGREEMENT

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

THE UNDERTAKING

The Mandatary undertakes to comply with:

INSURANCE

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

COMPLIANCE WITH THE OCCUPATIONAL HEALTH & SAFETY ACT 85 OF 1993

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

1. All work performed by the Mandatary on the Client's premises must be performed under the close supervision of the Mandatary's employees who are to be trained to understand the hazards associated with any work that the Mandatary performs on the Client's premises.
2. The Mandatary shall be assigned the responsibility in terms of Section 16(1) of the OHSAct 85 of 1993, if the Mandatary assigns any duty in terms of Section 16(2), a copy of such written assignment shall immediately be forwarded to the Client.
3. The Mandatary shall ensure that he/she familiarise himself/herself with the requirements of the OHS Act 85 of 1993 and that s/he and his/her employees and any of his subcontractors comply with the requirements.
4. The Mandatary shall ensure that a baseline risk assessment is performed by a competent person before commencement of any work in the Client's premises. A baseline risk assessment document will

include identification of hazards and risk, analysis and evaluation of the risks and hazards identified, a documented plan and safe work procedures to mitigate, reduce or control the risks identified, and a monitoring and review plan of the risks and hazards.

5. The Mandatary shall appoint competent persons who shall be trained on any Occupational Health & Safety aspect pertaining to them or to the work that is to be performed.
6. The Mandatary shall ensure that discipline regarding Occupational Health & Safety shall be strictly enforced.
7. Any personal protective equipment required shall be issued by the Mandatary to his/her employees and shall be worn at all times.
8. Written safe working practices/procedures and precautionary measures shall be made available and enforced and all employees shall be made conversant with the contents of these practises.
9. No unsafe equipment/machinery and/or articles shall be used by the Mandatary or contractor on the Client's premises.
10. All incidents/accidents referred to in OHS Act shall be reported by the Mandatary to the Provincial Director: Department of Labour as well as to the Client.
11. No use shall be made by the Mandatary and/or their employees and or their subcontractors of any of the Client's machinery/article/substance/plant/personal protective equipment without prior written approval.
12. The Mandatary shall ensure that work for which the issuing of permit is required shall not be performed prior to the obtaining of a duly completed approved permit.
13. The Mandatary shall ensure that no alcohol or any other intoxicating substance shall be allowed on the Client's premises. Anyone suspected to be under the influence of alcohol or any other intoxicating substance shall not be allowed on the premises. Anyone found on the premises suspected to be under the influence of alcohol or any other intoxicating substance shall be escorted off the said premises immediately.
14. Full participation by the Mandatary shall be given to the employees of the Client if and when they inquire into Occupational Health & Safety.

FURTHER UNDERTAKING

1. Only a duly authorised representative appointed in terms of Section 16.2 of the OHS Act is eligible to sign this agreement on behalf of the Mandatary. The signing power of this representative must be designated in writing by the Chief Executive Officer of the Mandatary. A copy of this letter must be made available to the Client.

2. The Mandatary confirms that he has been informed that he must report to the Client's management, in writing anything he/she deems to be unhealthy and /or unsafe. He has versed his employees in this regard.
3. The Mandatary warrants that he/she shall not endanger the health & safety of the Client's employees and other persons in any way whilst performing work on the Client's premises.
4. The Mandatary understands that no work may commence on the Client's premises until this procedure is duly completed, signed and received by the Client.
5. Non-compliance with any of the above clauses may lead to an immediate cancellation of the contract.

ACCEPTANCE BY MANDATARY

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

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

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

Expiry date

SIGNATURE ON BEHALF OF MANDATARY

(Warrant his authority to sign)

DATE

SIGNATURE ON BEHALF OF THE CLIENT

AIRPORT COMPANY SOUTH AFRICA

DATE

C4: Site Information

C4.1 Site and operational environment

The Site comprises the nine gate locations and associated guardhouses, tracks, roads, services, electrical and control interfaces at O.R. Tambo International Airport. It is a live, security-controlled aviation environment with continuous vehicle, personnel and operational movements.

Information supplied by the Employer is reference information. The Contractor inspects and measures each location, confirms gate geometry and condition, identifies services and interfaces, verifies safe access and working space and allows for all reasonably foreseeable site constraints.

C4.2 Access and permits

Access is subject to ACSA security permits, inductions, vehicle permits, escorts, work permits, approved method statements, stakeholder coordination and permitted work windows. Personnel and vehicles comply with airport security, safety, traffic and foreign-object-debris controls. Tenderers allow for restricted access and phased or night work.

C4.3 Existing services and information

Existing drawings and records may be incomplete. Before excavation, drilling, isolation or connection, the Contractor locates and proves affected electrical, communication, drainage, security and other services using accepted methods. Damage caused by failure to verify services is corrected at the Contractor's cost.

C4.4 Site hazards and constraints

Hazard or constraint	Minimum control
Live road and gate operations	Accepted phasing, traffic management, barriers, banksmen and stakeholder coordination
Moving gates and stored mechanical energy	Isolation, lockout, mechanical restraint and controlled testing
Electrical and control systems	Proven isolation, competent persons, permits and test-before-touch
Excavations, lifting and work at height	Approved temporary works, lift plans, inspections and statutory appointments
Airport security and FOD	Access control, tool/material accountability, housekeeping and daily FOD inspections
Unknown condition and services	Measured surveys, detection, trial holes and interdisciplinary verification
Weather and exposed work	Wind and rain controls, protection of open works and accepted lifting limits

C4.5 Working areas and facilities

Working areas, storage, laydown, welfare, temporary power, temporary water and waste arrangements are subject to Employer acceptance and may be limited. The Contractor keeps routes and emergency access clear, protects materials and equipment and restores every area used for the Works.

C4.6 Employer-provided information

The Demand Requisition dated 25 May 2026 is the controlling scope source. The Project Brief revision 1 dated 16 August 2022 and Project Charter revision 1 dated 16 September 2022 corroborate gate configurations, lifecycle objectives, training, disposal, reporting, risk and close-out requirements. Where information conflicts, the Contract Data and this Scope prevail.