



TENDER REFERENCE NUMBER: CTIA7674/2024/RFP

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

TITLE OF PROJECT: THE PROVISION OF SERVICE AND REPAIRS OF ELECTRICAL CONTROL SYSTEMS INCLUDING REFURBISHMENT PROJECTS IN THE BAGGAGE HANDLING SYSTEM FOR A PERIOD OF 5 YEARS (60 MONTHS) AT CAPE TOWN INTERNATIONAL AIRPORT

NEC 3: TERM SERVICE CONTRACT (TSC)

Between

AIRPORTS COMPANY SOUTH AFRICA SOC LIMITED

Applicable at CAPE TOWN INTERNATIONAL AIRPORT

(Registration Number: 1993/004149/30)

and

.....

(Registration Number:)

for

THE PROVISION OF SERVICE AND REPAIRS OF ELECTRICAL CONTROL SYSTEMS INCLUDING REFURBISHMENT PROJECTS IN THE BAGGAGE HANDLING SYSTEM FOR A PERIOD OF 5 YEARS (60 MONTHS) AT CAPE TOWN INTERNATIONAL AIRPORT

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PART C1: AGREEMENT AND CONTRACT DATA

C1.1 Form of Offer and Acceptance

Offer

The employer, identified in the acceptance signature block, wishes to enter into a contract for **THE PROVISION OF SERVICE AND REPAIRS OF ELECTRICAL CONTROL SYSTEMS INCLUDING REFURBISHMENT PROJECTS IN THE BAGGAGE HANDLING SYSTEM FOR A PERIOD OF 5 YEARS (60 MONTHS) AT CAPE TOWN INTERNATIONAL AIRPORT**

The contractor, identified in the offer signature block, has examined this document and addenda hereto as listed in the schedules, and by submitting this offer has accepted the conditions thereof.

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

The offered total of the prices (**INCLUSIVE OF VAT**) is:

..... (in words);

R (in figures)

(The above amount should be calculated as per the guide provided in the Activity Schedule. In the event of any conflict between the amount above and the Activity Schedule, the latter shall prevail.)

for the contractor

Signature Date

Name Capacity

(Name and address of organisation)
.....

Name and signature of witness
.....

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 to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.

Acceptance

By signing this part of this form of offer and acceptance, the employer identified below accepts the contractor'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 contractor's offer shall form an agreement between the employer and the contractor 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 agreement)
- Part C2: Pricing data and Price List
- Part C3 : Service information.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the tender 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 agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The contractor shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), contact the Service manager (to be confirmed) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

for the Employer

Signature Date

Name Capacity

Airports Company South Africa,
Cape Town International Airport
Southern Office Block, Administration Building
7525

Name and
signature
of witness

Schedule of Deviations

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

By the duly authorised representatives signing this agreement, the employer and the contractor agree to and accept the foregoing schedule of deviations as the only deviations from and amendments to the documents listed in the tender data and addenda thereto as listed in the 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 Agreement shall have any meaning or effect in the contract between the parties arising from this agreement.

For the Employer

For the Contractor



AIRPORTS COMPANY
SOUTH AFRICA

Signature (s)

Name (s)

Capacity

Name and Address Airports Company South Africa (ACSA) SOC,
Cape Town International Airport,
Private Bag X9002,
Cape Town,
7525

Name &
Signature of
witness

Date

C1.2 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 price list
	dispute resolution Option:	W1: Dispute resolution procedure
	and secondary Options:	
		X1 Price Adjustment for inflation
		X2 Changes in the law
		X17 Low service damages
		X18: Limitation of Liability (as amended in Option Z)
		X19 Task order
		X20 Key performance indicators
		Z: Additional conditions of contract
	of the NEC3 Term Service Contract (April 2013)	
10.1	The <i>Employer</i> is (Name):	Airports Company South Africa SOC Limited
	Address	Cape Town International Airport Southern Office Block, Administration Building 7525
10.1	The <i>Service Manager</i> is:	Karabo Thebe
11.2(1)	The <i>Accepted Plan</i> is	Included in Part C3 of this document, including Annexes thereto as submitted by the Contractor and accepted by the Service Manager.
11.2(2)	The <i>Affected Property</i> is	Cape Town International Airport
11.2(13)	The <i>Service</i> is	Service and Repairs of Control Systems including refurbishment projects in the Baggage Handling system and all its related components, as set out in part C3 <i>service information</i>.
11.2(14)	The following matters will be included in the Risk Register	OHS Act and New Construction Regulation compliance.

11.2(15)	The <i>Service Information</i> is in	The section titled Service Information included as Part C3 of this document.
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	7 calendar days
21.1	The period within which the Contractor provides the Contractor's Plan	30 calendar days from Contract Date
2	The Contractor's responsibilities	Detailed in Part C3 (Service Information)
3	Time	
30.1	The <i>starting date</i> is	Upon the date of signature of the contract by ACSA
30.2	The <i>Service Period</i> is	Sixty (60) months from the <i>starting date</i>
4	Testing and Defects	No data is required for this section of the <i>conditions of contract</i>
5	Payment	
50.1	The <i>assessment interval</i> is on the	Two (2) weeks
51.1	The <i>currency of this contract</i> is the	South African Rand (ZAR)
51.2	The period within which payments are made is	30 days
51.4	The <i>interest rate</i> is	The prime lending rate of the Nedbank Bank, as determined from time to time.
6	Compensation events	No data is required for this section of the <i>conditions of contract</i>.
7	Title	No data is required for this section of the <i>conditions of contract</i>.
8	Risks and insurance	Refer to Part C1.4

83.2	The minimum amounts of cover or minimum limits of indemnity required for the insurance table	Refer to Part C1.4
9	Termination	No data is required for this section of the <i>conditions of contract</i> .
10	Data for main Option clause	
A	Priced contract with price list	Refer to Part C2
11	Data for Option W1	
W1.1	The Adjudicator is	The person appointed jointly by the parties from the list of adjudicators contained below
W1.2	The Adjudicator nominating body is	The current Chairman of Johannesburg Advocate's Bar Council
W1.4	The tribunal is	Arbitration
W1.4	If the tribunal is arbitration, the arbitration procedure is	The arbitration procedure is set out in The Rules for the Conduct of Arbitrations 2013 Edition, 7th Edition, published by The Association of Arbitrators, (Southern Africa)
W1.4	The place where arbitration is to be held is	Johannesburg, South Africa.
W1.4	The person or organisation who will choose an arbitrator	The Arbitrator is the person selected by the Parties as and when a dispute arises in terms of the relevant Z Clause, from the Panel of Arbitrators provided under the relevant Z clause if the arbitration procedure does not state who selects an arbitrator. The Arbitrator nominating body is the Chairman of the Johannesburg Advocates Bar Council.
12	Data for secondary Option	
X1	Price Adjustment for inflation	The index referred to in this clause shall be deemed to refer to the CPI index on the <i>starting date</i> as stated under Section 80.1. Price adjustment for inflation shall only take place on contract anniversary
X2	Changes in the law	No data is required for this secondary option.
X17	Low service damages	As per the Service Information (C3) – Annex I section 6
X17.1	The <i>service level table</i> is in	The Service Information, section 7
X18	Limitation of liability	



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X18.1	The Contractor's liability to the Employer for indirect or consequential loss is limited to	Nil - Neither Party is liable to the other for any consequential or indirect loss, including but not limited to loss of profit, loss of income or loss of revenue
X18.2	For any one event, the Contractor's liability to the Employer for loss of or damage to the Employer's property is limited to	The total of the Incurred Losses and/or Damages caused to the Property
X18.3	The Contractor's total liability to the Employer for defects due to his design which are not listed on the Defects Certificate is limited to	The total of the Incurred Losses and/or Damages caused to the Property
X18.4	The Contractor's total liability to the Employer for all matters arising under or in connection with this contract, other than excluded matters, is limited to	<p>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 the total of the incurred Losses and/or Damages caused to the property and applies in contract, tort or delict and otherwise to the extent allowed under the law of the contract.</p> <p>The excluded matters are amounts payable by the Contractor as stated in this contract for:</p> <ul style="list-style-type: none"> - 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
X18.5	The <i>end of liability date</i> is	52 weeks after the end of the service period.
X19	Task Order	X19
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	5 days of receiving the Task Order
X 20.1 The incentive schedule for Key Performance Indicators is in - As per the Service Information (C3) – section 7.		
Z	The <i>Additional conditions of</i> Z1 – Z19 contract are	
	Amendments to the Core Clauses	
Z1	Interpretation of the law	
Z1.1	<p>Add to core clause 12.3:</p> <p>Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the <i>Service Manager</i>, the <i>Supervisor</i>, or the <i>Adjudicator</i> does not constitute a waiver of rights and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.</p>	
Z2	Providing the Service:	

Z2.1	Delete core clause 20.1 and replace with the following: The <i>Contractor</i> provides the Service in accordance with the Service Information and warrants that the results of the Service, when complete, shall be fit for their intended purpose.
Z5	Termination
Z5.1	Add the following to core clause 91.1, at the second main bullet, fifth sub-bullet point, after the words “assets or”: “business rescue proceedings are initiated or steps are taken to initiate business rescue proceedings”.
	Amendment to the Secondary Option Clauses
Z7	Limitation of liability:
Z7.1	Insert the following new clause as Option X18.6: The <i>Employer's</i> liability to the <i>Contractor</i> for the <i>Contractor's</i> indirect or consequential loss is limited to R0.00
Z7.2	Notwithstanding any other clause in this contract, any proceeds received from any insurances or any proceeds which would have been received from any insurances but for the conduct of the <i>Contractor</i> shall be excluded from the calculation of the limitations of liability listed in the contract
	Additional Z Clauses
Z8	Cession, delegation and assignment
Z8.1	The <i>Contractor</i> shall not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> , which consent shall not be unreasonably withheld. This clause shall be binding on the liquidator/business rescue practitioner /trustee (whether provisional or not) of the <i>Contractor</i>
Z8.2	The <i>Employer</i> may cede and delegate its rights and obligations under this contract to any person or entity
Z9	Joint and several liability
Z9.1	If the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons, these persons are deemed to be jointly and severally liable to the <i>Employer</i> for the performance of the Contract.
Z9.2	The <i>Contractor</i> shall, within 1 week of the Contract Date, notify the <i>Service Manager</i> and the <i>Employer</i> of the key person who has the authority to bind the <i>Contractor</i> on their behalf.
Z9.3	The <i>Contractor</i> does not materially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without prior written consent of the <i>Employer</i> .
Z10	Ethics
Z10.1	The <i>Contractor</i> undertakes:
Z10.1.1	not to give any offer, payment, consideration, or benefit of any kind, which constitutes or could be construed as an illegal or corrupt practice, either directly or indirectly, as an inducement or reward for the award or in execution of this contract;
Z10.1.2	to comply with all laws, regulations or policies relating to the prevention and combating of bribery, corruption and money laundering to which it or the <i>Employer</i> is subject, including but not limited to the Prevention and Combating of Corrupt Activities Act, 12 of 2004.
Z10.2	The <i>Contractor's</i> breach of this clause constitutes grounds for terminating the <i>Contractor's</i> obligation to Provide the Works or taking any other action as appropriate against the <i>Contractor</i> (including civil or criminal action). However, lawful inducements and rewards shall not constitute grounds for termination.



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- Z10.3** If the *Contractor* is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices, including but not limited to the making of offers (directly or indirectly), payments, gifts, gratuity, commission or benefits of any kind, which are in any way whatsoever in connection with the contract with the *Employer*, the *Employer* shall be entitled to terminate the contract in accordance with the procedures stated in core clause 92.2. the amount due on termination is A1.

Z11 Confidentiality

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

Z12 Employer's Step-in rights

- Z12.1** If the *Contractor* defaults by failing to comply with his obligations and fails to remedy such default within 2 weeks of the notification of the default by the *Service Manager*, the *Employer*, without prejudice to his other rights, powers and remedies under the contract, may remedy the default either himself or procure a third party (including any subcontractor or supplier of the *Contractor*) to do so on his behalf. The reasonable costs of such remedial works shall be borne by the *Contractor*
- Z12.2** The *Contractor* co-operates with the *Employer* and facilitates and permits the use of all required information, materials and other matter (including but not limited to documents and all other drawings, CAD materials, data, software, models, plans, designs, programs, diagrams, evaluations, materials, specifications, schedules, reports, calculations, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the *Contractor* under the contract or otherwise for and/or in connection with the *works*) and generally does all things required by the *Service Manager* to achieve this end.

Z13 Liens and Encumbrances



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

Z14 Intellectual Property

Z14.1 Intellectual Property ("IP") rights means all rights in and to any patent, design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works.

Z14.2 IP rights remain vested in the originator and shall not be used for any reason whatsoever other than carrying out the *works*.

Z14.3 The *Contractor* gives the *Employer* an irrevocable, transferrable, non-exclusive, royalty free licence to use and copy all IP related to the *works* for the purposes of constructing, repairing, demolishing, operating and maintaining the works

Z14.4 The written approval of the *Contractor* is to be obtained before the *Contractor's* IP made available to any third party which approval will not be unreasonably withheld or delayed. Prior to making any *Contractor's* IP available to any third party the *Employer* shall obtain a written confidentiality undertaking from any such third party on terms no less onerous than the terms the *Employer* would use to protect its IP

Z14.5 The *Contractor* shall indemnify and hold the *Employer* harmless against and from any claim alleging an infringement of IP rights ("**the claim**"), which arises out of or in relation to:

Z14.5.1 the *Contractor's* design, manufacture, construction or execution of the Works

Z14.5.2 the use of the *Contractor's* Equipment, or

Z14.5.3 the proper use of the Works.

Z14.6 The *Employer* shall, at the request and cost of the *Contractor*, assist in contesting the claim and the *Contractor* may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it.

Z15 Dispute resolution:

Z15.1 Appointment of the Adjudicator



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

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

Panel of Adjudicators

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

Z15.2 Appointment of the Arbitrator

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

Panel of Arbitrators

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

Z16 Notification of a compensation event

- Z16.1** Delete "eight weeks" in clause 61.3 and replace with "four weeks". Delete the words "unless the event arises from the Service Manager or the Supervisor giving an instruction, issuing a certificate, changing an earlier decision or correcting an assumption."

Z17 BBEE and Tax Clearance Certificates



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Z17.1 The *Contractor* shall be expected to annually present a compliant BEE Certificate and a Tax clearance Certificate. Failure to do adhere to these requirements shall be considered a material breach of the conditions of this Contract, the sanction for which may be a cancellation of this Contract.

Z18 Communication

Z18.1 **Add a new Core Clause** 14.5 and 14.6 to read as follows:
The *Service Manager* requires the written consent of the Employer if an action will result in a change to the design, scope, and Service information that is 5% or more

Z18.2 The *Service Manager* requires the written consent of the Employer if an action will result in the Completion Date being extended by more than 30 days.

Z19 Delegation

As stipulated by Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993 as amended the *Contractor* agrees to the following:

Z19.1 As part of this contract the *Contractor* acknowledge that it (mandatory) is an employer in its own right with duties as prescribed in the Occupational Health and Safety Act No 85 of 1993 as amended and agree to ensure that all work being performed, or Equipment, Plant and Materials being used, are in accordance with the provisions of the said Act, and in particular with regard to the Construction Regulations.

PART C1.2b CONTRACT DATA

PART TWO – DATA PROVIDED BY THE *CONTRACTOR*

Clause	Statement	Data
10.1	The Contractor is (Name): Address: Telephone No. Fax No.	
11.2	The <i>working areas</i> are	See C3 'Service Information'
24.1	The <i>Contractor's Key people</i> are:	CV's to be appended to Tender Schedule
	Name:	
	Job:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job:	
	Responsibility:	
	Qualifications:	
	Experience:	
	Name:	
	Job:	
	Responsibility:	
	Qualifications:	
	Experience:	

Name:

Job:

Responsibility:

Qualifications:

Experience:

11.2	The following matters will be included in the Risk Register	<ul style="list-style-type: none">• Existing Services• Access to Site• Delay in supply of material and/or equipment• Use of tools and attaining permits for hot works and unplanned maintenance work• Travelling public and ACSA stakeholders
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PART C1: AGREEMENTS AND CONTRACT DATA

C1.3: OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

OCCUPATIONAL HEALTH AND SAFETY MANDATARY AGREEMENT

1 AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH & SAFETY ACT (ACT 85 OF 1993), AS AMENDED & 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), as amended and its regulations and
2. The Compensation for Occupational Injuries & Diseases Act (Act 130 of 1993) also known as the (COID Act).
3. Construction Regulations 2014

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

The parties to this Agreement are:

Name of Organisation: AIRPORTS COMPANY SOUTH AFRICA" ACSA"
Physical Address: Airport Company South Africa The Maples, Riverwoods, 24 Johnson Road, Bedfordview, Gauteng, South Africa, 2008 P O Box 75480, Gardenview, Gauteng, South Africa, 2047

Hereinafter referred to as "Client"

Name of organisation:
Physical Address

Hereinafter referred to as "the Mandatary/ Principal Contractor"

MANDATORY'S MAIN SCOPE OF WORK

1. Definitions

- 1.1 "Mandatar" is defined as an agent, a principal contractor or a contractor for work, or service provider appointed by the Client to execute a scope of work on its behalf, but WITHOUT DEROGATING FROM HIS/HER STATUS IN HIS/HER RIGHT AS AN EMPLOYER or user of the plant.
- 1.2 "Client" refers to ACSA;
- 1.3 "Parties" means ACSA and the Contractor, and "Party" shall mean either one of them, as the context indicates;
- 1.4 "Services" means the services provided by the Contractor or Stakeholder to ACSA;
- 1.5 "Stakeholder" refers to companies conducting business at ACSA premises or within close proximity where there is an interface with ACSA operations;
- 1.6 "The OHS Act" refers to Occupational Health and Safety Act 85 of 1993, as amended;
- "The COIDA Act" refers to Compensation for Occupational Injuries and Diseases Act 61 of 1997, as amended; and
- 1.7 "SHE" means Safety, Health and Environment.

GENERAL INFORMATION FORMING PART OF THIS AGREEMENT

- a) 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.
- b) "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
- c) 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.
- d) All documents attached or refer to in the above Agreement form an integral part of the Agreement.
- e) 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.
- f) Mandatories who utilise the services of their own Mandatories (contractors) must conclude a similar Written Agreement with them.
- g) Be advised that this Agreement places the onus on the Mandatory to contact the CLIENT in the event of inability to perform as per this Agreement.
- h) This Agreement shall be binding for all work the Mandatory undertakes for the client.
- i) 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:

2. REPORTING

The Mandatary and/or his / her designated person shall report to the Client prior to commencing any work at the airports as well as when the activities change from the original scope of work.

3. WARRANTY OF COMPLIANCE

- 3.1 In terms of this agreement the Mandatary warrants that he / she agrees to the arrangements and procedures as prescribed by the Client and as provided for in terms of Section 37(2) of the OHS Act for the purposes of compliance with the Act.
- 3.2 The Mandatary further warrants that he / she and / or his / her employees undertake to maintain such compliance with the OHS Act. Without derogating from the generality of the above, or from the provisions of the said agreement, the Mandatary shall ensure that the clauses as hereunder described are at all times adhered to by himself / herself and his / her employees.
- 3.3 The Mandatary hereby undertakes to ensure that the health and safety of any other person on the premises is not endangered by the conduct of his / her activities and that of his / her employees.

4. SHE Risk Management

- 4.1 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.
- 4.2 The Mandatary shall review the risk registers as and when the scope of work changes and keep the latest version on the SHE File.

5. MEDICAL EMERGENCY RESPONSE

The Mandatary shall submit a detailed emergency response procedure to the Client OHS Department as part of the SHE File prior to start of work. The procedure shall stipulate how the Mandatary intends to attend to medical emergencies. In the sites where the Client has onsite clinic services, the medical staff can provide first line response and stabilise the patient however the Mandatary shall then activate its own medical response procedure and transport the patient to the medical facilities for further medical attention.

6. APPOINTMENTS AND TRAINING

- 6.1 The Mandatary shall appoint competent persons as per Section 16(2) of the OHS Act. Any such appointed person shall be trained on any occupational health and safety matter and the OHS Act provisions pertinent to the work that is to be performed under his / her responsibility. Copies of any appointments and certificates made by the Mandatary shall immediately be provided to the Client.

- 6.2 The Mandatary shall at the beginning of the project or activities where there are 5 people and more people working appoint a full time dedicated Health and Safety resource whom will be dedicated to the project to ensure that Safety, Health and Environmental Requirements are met at all times. The allocated resource shall be based where the project is undertaken for the duration of the project or scope of work execution. The resource shall be trained and qualified on Occupational Health and Safety matters and the OHS Act provisions pertinent to the work that is to be carried out.
- 6.3 The Mandatary shall further ensure that all his / her employees are trained on the health and safety aspects relating to the work and that they understand the hazards associated with such work being carried out on the airports. Without derogating from the foregoing, the Mandatary shall, in particular, ensure that all his / her users or operators of any materials, machinery or equipment are properly trained in the use of such materials, machinery or equipment.
- 6.4 Notwithstanding the provisions of the above, the Mandatary shall ensure that he / she, his / her appointed responsible persons and his / her employees are at all times familiar with the provisions of the OHS Act, and that they comply with the provisions of the Act.
- 6.5 The Mandatary shall at all material times be responsible for all costs associated with the performance of its own obligations and compliance with the terms of this Agreement, unless otherwise expressly agreed by the Parties in writing.

7. SUPERVISION, DISCIPLINE AND REPORTING

- 7.1 The Mandatary shall ensure that all work performed on the Clients premises is done under strict supervision and that no unsafe or unhealthy work practices are permitted. Discipline regarding health and safety matters shall be strictly enforced against any of his / her employees regarding non- compliance by such employee with any health and safety matters.
- 7.2 The Mandatary shall further ensure that his / her employees report to him / her all unsafe or unhealthy work situations immediately after they become aware of the same and that he / she in turn immediately reports these to the Client within 48 hours with the action taken to mitigate the risk.
- 7.3 Where the hazard or risk identified is the responsibility of the Client to action, the Mandatary shall notify the Client OHS and Safety Department within 24 hours of becoming aware of the hazard or risk for prompt action to mitigate.

8. COOPERATION

- 8.1 The Mandatary and his/her employees shall provide full co-operation and information if and when the Client or his / her representative enquires into occupational health and safety issues concerning the Mandatary. It is hereby recorded that the Client and his / her representative shall at all times be entitled to make such an inquiry.
- 8.2 Without derogating from the generality of the above, the Mandatary and his/ her responsible persons shall make available to the Client and his / her representative, on request, all and any checklists and inspection registers required to be kept by him / her in respect of any of his / her materials, machinery or equipment and facilities.

9. WORK PROCEDURES

- 9.1 The Mandatary shall, after having established the dangers associated with the work performed, develop and implement mitigation measures to minimize or eliminate such dangers for the purpose of ensuring a healthy and safe working environment.
- 9.2 The Mandatary shall then ensure that his / her responsible persons and employees are familiar with such mitigation measures. This includes the lock out tag out processes relating to the use of machinery.
- 9.3 The Mandatary shall implement any other safe work practices as prescribed by the Employer and shall ensure that his / her responsible persons and employees are made conversant with and adhere to such safe work practices.
- 9.4 The Mandatary shall ensure that work for which a permit is required by the Employer, or any statute is not performed by his / her employees prior to the obtaining of such a permit.

10. HEALTH AND SAFETY MEETINGS

- 10.1 OHS Act requires that Health and Safety Committees be established in case where employee count exceeds 20 onsite, however due to the duration and the nature of the scope of work executed by the contractors and stakeholders enforces that regardless of employees at the airports. The Mandatary shall establish his / her own health and safety committee(s) and ensure that his / her employees, being the committee members, hold health and safety representatives to attend the Employer's health and safety committee meetings on monthly basis.
- 10.2 The Mandatary Section 16(2) appointed and SHE resource shall attend the Client SHE meetings as per the schedule communicated. In cases where the Mandatary delegated resources are not able to attend the meeting, an apology shall be submitted to the Client OHS Manager 24 hours before the meeting. An alternative representative shall be deployed to attend the meeting on the half of the Mandatary.
- 10.3 The Mandatary appointed Section 16(2) and SHE resource shall not skip more than three SHE Committee meetings a year.

11. COMPENSATION REGISTRATION/INSURANCE

- 11.1 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 or stakeholder is in good standing with the Compensation Fund or Licensed Insurer.
- 11.2 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.
- 11.3 The Mandatary shall provide the Client with Public Liability Insurance Cover as required by the Main Contract

11.4 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.

11.5 The Mandatary shall send updated Letter of Good Standing to the Client as and when the Mandatary receives it to ensure that the most valid version is available.

12. MEDICAL EXAMINATIONS

12.1 The Mandatary shall ensure that all his / her employees undergo routine medical examinations and that they are medically fit for the purposes of the work they are to perform.

12.2 Copies of such medical fitness certificates shall be made available to Client as part of the SHE file for review to ensure that they have been conducted by a reputable Occupational Health Practitioner registered with Health Professions Council of South Africa (HPCSA) as a doctor and specialist Occupational Medical Practitioner. Any other additional medical assessment shall be conducted in line with risk exposures.

12.3 Standard (Basic) medical tests shall constitute the following assessments as minimum:

- Individual's history of general and previous occupational health
- Comprehensive physical examination for evaluation of systemic function
- Blood Pressure Measurement
- Weight, Height and Body Mass Index
- Urine screening
- Drug screening
- Audio screening
- Lung Function Test
- Keystone eye test
- Work at Height Questionnaire
- Muscular skeletal questionnaire

13. INCIDENT REPORTING AND INVESTIGATION

13.1 All Safety, Health and Environmental Incidents shall be reported to the Client OHS and Safety Department within two hours from the time of occurrence via a phone call, sms or email or before end of shift. This shall be followed by a formal report in a form of a preliminary report within forty-eight (48) hours.

13.2 All incidents referred to in Section 24 of the OHS Act shall be reported by the Mandatary to the Department of Labour and copies of such reporting to be sent to the Client. The Mandatary shall further be providing with copies of any written documentation and medical reports relating to any incident.

13.3 The Client retains an interest in the reporting of any incident as described above as well as in any formal investigation and/or inquiry conducted in terms of section 32 of the OHS-Act into such incident.

- 13.4 The Client reserves a right to hold its own investigation into any incident where it deems it is not satisfied with the incident investigation or where the severity of the incident is fatal or damage beyond a value of 1 million and above.

14. SUB CONTRACTORS

- 14.1 The Mandatary shall notify the Client of any subcontractor he / she may wish to source to perform work on his / her behalf on the Client premises. It is hereby recorded that all the terms and provisions contained in this clause shall be equally binding upon the subcontractor prior to the subcontractor commencing with the work. Without derogating from the generality of this paragraph:
- 14.2 The Mandatary shall ensure that the sub-contractor meets all the requirements and is competent for the scope of work contracted for. This includes that approval of the SHE file, SHE Plans associated with the work.

15. SECURITY AND ACCESS

The Mandatary shall request and familiarise its employees with the Client security rules which is not included in this agreement.

16. FIRE PRECAUTIONS AND FACILITIES

- 16.1 The Mandatary shall ensure that all his / her employees are familiar with fire precautions at the site(s), which includes fire-alarm signals and emergency exits, and that such precautions are adhered to.
- 16.2 This includes participating on planned and unplanned emergency drills organised the Client.

17. FACILITIES

The Mandatary shall have a program to upkeep and maintain the facilities leased out to it /shared with/ by the Client as stipulated on lease agreement.

18. HYGIENE AND CLEANLINESS

The Mandatary shall ensure that the work site, ablution, offices and surround area is at all times maintained to the reasonably practicable level of hygiene and cleanliness. In this regard, no loose materials shall be left lying about unnecessarily and the work site shall be cleared of waste material regularly and on completion of the work.

19. INTOXICATION AND SUBSTANCE ABUSE

- 19.1 Entry to the airside is subjected to Aviation Safety Requirements in line with Client Substance Abuse Policy. No intoxicating substance of anyform shall be allowed on site where airside or land side. Any person suspected of being intoxicated shall not be allowed on the site. Any person

required to take medication shall notify the relevant responsible person thereof, as well as the potential side effects of the medication.

19.2 The Client reserves a right to do substance abuse testing and main entry points for the Mandatory employees.

19.3 Intoxication limits shall be adhered to as stipulated on Client Substance Abuse Policy.

19.4 Records of substance abuse testing shall be filed on the SHE File and made available to the Employer on request.

20. PERSONAL PROTECTIVE EQUIPMENT

20.1 The Mandatory shall ensure that his / her responsible persons and employees are provided with adequate personal protective equipment (PPE) for the work they may perform and in accordance with the requirements of General Safety Regulation 2 (1) of the OHS Act. The Mandatory shall further ensure that his / her responsible persons and employees wear the PPE issued to them at all times.

20.2 The Mandatory shall be monitoring compliance to PPE of his/her own employees at all times, The Client can at its discretion conduct random PPE compliance inspections and these can be recorded officially on the Client nonconformance reporting tool.

20.3 The Mandatory shall keep records PPE Control cards of each employee those shall be kept on SHE File.

21. PLANT, MACHINERY AND EQUIPMENT

21.1 The Mandatory shall ensure that all the plant, machinery, equipment and/or vehicles he / she may wish to utilize on the Client premises is/are at all times of sound order and fit for the purpose for which it/they is/are attended to, and that it/they complies/comply with the requirements of Section 10 of the OHS Act.

21.2 Where the Mandatory equipment's interface to the Client's equipment's, a joint risk assessment shall be conducted by the Mandatory and the Client OHS department in order for the risks to be mitigated prior to the use of such equipment's. It is the responsibility of the Mandatory to notify the Client OHS department of such equipment's and machinery.

21.3 In accordance with the provisions of Section 10(4) of the OHS Act, the Mandatory hereby assumes the liability for taking the necessary steps to ensure that any article or substance that it erects or installs at the sites, or manufactures, sells or supplies to or for the Client, complies with all the prescribed requirements and will be safe and without risks to health and safety when properly used.

22. USAGE OF THE CLIENT'S EQUIPMENT

22.1 The Mandatory hereby acknowledge that his / her employees are not permitted to use any materials, machinery or equipment of the Employer unless the prior written consent of the Client has been obtained, in which case the Mandatory shall ensure that only those persons authorized to make use of same, have access thereto.

22.2 The Client shall ensure that it isolates and apply LOTO on any equipment's and machinery where there is an unexpected start up or flow of energy. The Mandatary has a responsibility to apply its own LOTO procedures before starting with work and post the use of the equipment and machinery.

23. PERMIT MANAGEMENT

23.1 The Mandatary shall ensure that work for which the issuing of permit to work is required shall not be performed prior to the obtaining of a duty completed approved permit by the Client or relevant Authority.

23.2 The Mandatary shall notify the Client of any work to be undertaken on site in order for the Permit to Work to be issued.

24. TRANSPORTATION

24.1 The Mandatary shall ensure that all road vehicles used on the sites are in a roadworthy condition and are licensed and insured. All drivers shall have relevant and valid driving licenses and vehicle shall carry passengers unless it is specifically designed to do so. All drivers shall adhere to the speed limits and road signs on the premises at all times.

24.2 No employees on premises permitted in back of LDV (bakkie) and in front of LDV each driver and passenger must have a separate seat belt.

24.3 In the event that any hazardous substances are to be transported on the premises, the Mandatary shall ensure that the requirements of the Hazardous Substances Act 15 of 1973 are complied with fully all times.

25. CLARIFICATION

In the event that the Mandatary requires clarification of any of the terms or provisions of this agreement, he / she should contact the Client OHS Department.

26. DURATION OF AGREEMENT

This agreement shall remain in force for the duration of the work to be performed by the Mandatary and/or while any of the Mandatary's employees are present on the Client site.

27. NON-COMPLIANCE WITH THE AGREEMENT

If Mandatary fails to comply with any provisions of this agreement, the Client shall be entitled to give the Fourteen (14) days' notice in writing to remedy such noncompliance and if the Mandatary fails to comply with such notice, then the Client shall forthwith be entitled but not obliged, without prejudice to any other rights or remedies which the Mandatary may have in law,

- ❖ Apply penalties as stipulated on the main contract between Mandatory and the Client.
- ❖ To claim immediate performance and/or payment of such obligations.
- ❖ Should Mandatory continue to breach the contract on three occasions for the same deviation, then the Client is authorised to suspend the main contract without complying with the condition stated in clause above.

INDEMNITY

The Mandatary hereby indemnifies the Client against any liability, loss, claims or proceedings whatsoever, whether arising in Common Law or by Statute; consequent personal injuries or the death of any person whomsoever (including claims by employees of the Mandatary and their dependents); or consequent loss of or damage to any moveable or immovable property arising out of or caused by or in connection with the execution of the Mandatary's contract with the Client, unless such liabilities, losses, claims or proceedings whatsoever are attributable to the Client's faults. The Mandatary or his/her employees is liable to prove without reasonable doubt that the loss is due to the Client's fault or negligence.

COMPLIANCE WITH THE OCCUPATIONAL HEALTH & SAFETY ACT 85 OF 1993
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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 OHS Act 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

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. A copy of this letter must be made available to the Client.

The Contract/Project Manager shall sign this agreement as the Client's representative.

3 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.

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

Expiry date

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

DATE

5 SIGNATURE ON BEHALF OF THE CLIENT
AIRPORT COMPANY SOUTH AFRICA

DATE

PART C1: AGREEMENTS AND CONTRACT DATA

C1.4: ACSA INSURANCE CLAUSES

C1.4 Forms of Securities

Summary of Terms and other Matters Applicable to Employer Provided Insurance

Part 1:

Notes to Schedule:

- The provision of insurance by the *Employer* does not limit the obligations, liabilities or responsibilities of the *Contractor* under this contract in any way whatsoever (including but not limited to any requirement for the provision by the *Contractor* of any other insurances).
- Unless specifically otherwise stated, capitalised terms in this schedule (other than *Employer*, *Contractor* and *works* where written in italics) have the meaning assigned to them in the relevant policy of insurance.
- This Insurance Schedule is a generic term sheet generally applicable to the *Employer's* projects. In the circumstances:
 - If this Insurance Schedule reflects the amount of any cover provided by the *Employer* to be higher than the amount required in the Contract Data, the *Employer's* obligation under this Contract is limited to the lower amount; and
 - If this Insurance Schedule provides for any cover which is not stated to be provided by the *Employer* in the Contract Data, the *Employer's* obligation under this Contract is limited to the cover stated in the Contract Data.
- [The terms governing the Employer provided policies of insurance are the terms detailed in the policies themselves. This schedule is merely a summary of the key terms. It is the responsibility of the tenderer to obtain copies of the policies and satisfy itself of the actual terms as required by the tenderer.]

Part 2:

ACSA Maintenance Contracts Insurance Clause. Insurance Affected by the Employer.

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

- (a) **PUBLIC LIABILITY Insurance** – which will provide indemnity against the insured parties legal liability in the event of accidental death of or injury to third party persons and/or accidental loss of or damage to third party property arising directly from the execution of the contract with a limit of indemnity of **R 100 million** in respect of all claims arising from any one occurrence or series of occurrences consequent on or attributable to one source or original cause. The policy will be subject to a Deductible of **R25 000** for Property Damage claims only but **R250 000** where Loss or Damage involves Aircraft.

- (i) The Employer shall pay any premium due in connection with the insurance affected by the Employer.
- (ii) The Contractor shall not include any premium charges for this insurance except to the extent that 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.
- (iii) Any further clarification of the scope of cover provided by the Policies arranged by the Employer should be obtained from the Employer ..
- (iv) In the event of any occurrence which is likely to or could give rise to a claim under the insurances 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's Insurance Broker or the Insurers by telephone or telefax giving the circumstances nature and an estimate of the loss or damage or liability
 - (B) complete a Claims Advice Form available from the Insurance Brokers to whom the form must be returned without delay.
 - (C) negotiate the settlement of claims with the Insurers through the Employer's Insurance Brokers and shall when required to do so obtain the Employer's approval of such settlement.

The Employer and Insurers shall have the right to make all and any enquiries to the site of the Works or elsewhere as to the cause and results of any such occurrence and the Contractor shall co-operate in the carrying out of such enquiries.

- (v) The Contractor will be liable for the amount of the Deductible (First Amount Payable in respect of any claim made by or against the Contractor or Sub-Contractors under the insurances effected by the Employer.
Where more than one Contractor is involved in the same claim the Deductible will be borne in pro-rata amounts by each Contractor in proportion to the extent of each Contractor's admitted claim.
- (vi) Any amount which becomes payable to the Contractor or any of his Sub-Contractors as a result of a claim under the Contract Works Insurance shall if required by the Employer be paid net of the Deductible to the Employer who shall pay the Contractor from the proceeds of such payment upon rectification repair or reinstatement of the loss or damage but this provision shall not in any way affect the Contractor's obligations liabilities or responsibilities in terms of the Contract.

In respect of any amount which becomes payable as a result of a claim under any Public Liability Insurance the Contractor, or his Sub-Contractors shall be required to pay the amount of the Deductible to the Insurer to facilitate settlement of such claim.

Insurance Affected by the Contractor.

Without in any way detracting from any requirements contained elsewhere in this contract the Contractor and Sub-Contractors shall where applicable, provide as a minimum the following:

- (a) INSURANCE OF CONTRACTORS 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.
- (b) Insurance in terms of the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 as may be amended or in terms of any similar Workers Compensation and Unemployment Insurance enactment's in the Suppliers' or Sub Supplier's operational, manufacturing or assembly locations.
- (c) Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability indemnity.
- (d) Public Liability Insurance for an amount sufficient to cover the Contractors obligations in terms of the Deductible of **R25 000** or **R250 000** as stated above.
 - (i) The insurances to be provided by the Contractor and his Sub-Contractors shall:
 - (A) be affected with Insurers and on terms approved by the Employer.
 - (B) be maintained in force for whatever period the perils to be insured by the Contractor are at risk (including any defects liability period during which the Contractor is responsible for the care of the Works)
 - (C) submit to the Employer the relevant Policy or Policies of Insurance or evidence acceptable to the Employer that such insurances have been affected.
 - (ii) 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.

Sub-Contractors

The Contractor shall:

- (a) ensure that all potential and appointed Sub-Contractors are aware of the whole contents of this clause, and
- (b) enforce the compliance by Sub-Contractors with this clause where applicable."

C2.1 Pricing assumptions: Option A

The *conditions of contract*

How work is priced and assessed for payment

Clause 11 in NEC3 Term Service Contract, April 2013 (TSC3) core clauses and Option A states:

- | | | |
|--|--------------------|---|
| <p>Identified and defined terms</p> | <p>11
11.2</p> | <p>(12) The Price List is the <i>price list</i> unless later changed in accordance with contract.</p> <p>(17) The Price for Services Provided to Date is the total of</p> <ul style="list-style-type: none"> • the Price for each lump sum item in the Price List which the <i>Contractor</i> completed and • where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the <i>Contractor</i> has completed by the rate. <p>(19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.</p> |
|--|--------------------|---|

This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both. Where it is contemplated that the Price List represents the type of work, quantity and cost thereof which may or not be selected by the Employer, it is important to ensure that service items listed do not create liability on a daily basis if that is not the intention. For example, if the service is maintenance of an installation on an ad hoc or call-off basis which may require the Contractor to be on standby but not permanently on the Affected Property, avoid listing service items which may be treated as preliminary and general (P&Gs) items, whether fixed or time-related such as contractual requirements, establishing on site, offices, storage, ablutions, water supplies, power supply, telecommunications. The Price List should align with the intention of the contract and selection of Option X 19 should be considered. If the Contractor is required to price P&G items ensure that the tender, contract and Price List provides clearly that daily charges are applicable only as necessitated by the specific activity and authorised by the Service Manager. Particular care should be taken when utilising SANS 1200 as a guide for tenderers or for preparing templates for Price Lists in tenders. Avoid referring to the Price List as the Activity Schedule.

Function of the Price List

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

Link to the *Contractor's* plan

Clause 21.4 states "The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each plan which he submits for acceptance". Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 plan in such a way that operations shown on it can be priced in the *price list* and result in a satisfactory cash flow in terms of clause 11.2(17).

Preparing the *price list*

It will be assumed that the tendering contractor has read Pages 14, 15 and 76 of the TSC3 Guidance

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

Notes before preparing the *price list*. Items in the *price list* may have been inserted by the *Employer* and the tendering contractor should insert any additional items which he considers necessary. Whichever party provides the items in the *price list* the total of the Prices is assumed to be fully inclusive of everything necessary to Provide the Service as described at the time of entering into this contract.

1 As the *Contractor* has an obligation to correct Defects (core clause 42.1) and there is no compensation event for this unless the Defect was due to an *Employer's* risk, the lump sum Prices and rates must also include for the correction of Defects.

2 If the *Contractor* has decided not to identify a particular item in the *price list* at the time of tender the cost to the *Contractor* of doing the work must be included in, or spread across, the other Prices and rates in the *price list* in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.

3 There is no adjustment to lump sum prices in the *price list* if the amount, or quantity, of work within that lump sum item of service 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.

4 Hence the Prices and rates tendered by the *Contractor* in the *price list* are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk.

5 The Contractor does not have to allow in his Prices and rates 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.

Format of the *price list*

(From page 76 of the TSC3 Guidance Notes)

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for an item of work which is the rate for the work multiplied by the quantity completed, the tendering contractor enters the rate which is then multiplied by the Expected Quantity to produce the Price, which is also entered.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity column.

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

C2.2 The Price List

The following Activity Schedule is provided “as-is” for the benefit of the Bidder. ACSA (the Employer) cannot guarantee that it is complete in all respects. The Bidder is responsible for providing an Activity Schedule which is accurate, complete and in accordance with their proposal. Also, refer to C3 (Service information) for activities that need to be priced. Only items listed in this Activity Schedule may be billed to the Employer. The bidder should include the price for all Ps and Gs in their maintenance and inspections rates.

ACSA reserves the right to vary all the activities according to the rates given in this contract.

Table A: Activity Schedule Part 1: Baggage handling system Electronic Controls

Item no.	Activity Description	Frequency		Amount (per single item)	Total (per 60 months)
Preliminary and General					
1	Airport personnel access permits	Yearly	5	R410,00	
2	General Awareness Security Training	2 Years	3	R960,00	
3	Airside Induction	2 Years	3	R2100,00	
4	Airside driving permit (AVOP)	2 Years	3	R271,00	
6	Parking Permits	Monthly	60		
Total Preliminary & General					R
Maintenance & Inspections					
7	Daily/weekly Inspections & Maintenance	Monthly	60		
8	Quarterly Inspections & Maintenance	Quarterly	20		
9	Semi-Annual Inspections & Maintenance	Six Monthly	10		
10	Annual Inspections & Maintenance	Yearly	5		
*Other					
10	Other1 specify:				
11	Other 2 specify:				
12	Other 3 specify:				
Total Maintenance & Inspections					
13	Incentives: see section on incentives (Consistent availability of 99.5% - 100.00% over six consecutively months. Contractor to be payed only 10% of one month's worth total of fixed cost billed	Yearly	5	10% of One Month's maintenance & inspection costs	
Total	Sub-total A (Total Preliminary & General + Total Maintenance & Inspections + Incentives)				R

*The above activity schedule is minimum work required and the contractor as the subject expect matter on these services they are bidding for **shall fill in any other** activity with prices for “other” activities which they deem necessary to achieve the set out comes on availability ,reliability, maintainability, MTTR, MTBF, legislative and all other targets set in this contract. **Should an alternative not be presented, the offer will be deemed as the contractor’s optimal proposal for which they will be liable for.**

****All rates for all activities including diagnostic and repair shall include all required tools, software, hardware and consumables (including all applicable specialized tools and software, hardware and consumables) Onus is on the contractor to price correctly).**

*****It is noted that the required labour resources and skills for this contract is not prescribed in detail. The contractor is fully responsible to ensure that labour resources remain adequate and competent in order to maintain required service levels, system performance levels and according to all applicable laws and regulations. The Tenderer shall also ensure that all required maintenance is catered for as per the Original Equipment Manufacturer in the pricing above.**

******Incentives and Low service damages will be applicable as per the Low service damages table and Incentive table in this contract**

Labour rates and Mark-up

Any work not included under part 1 shall be deemed additional work or non-scheduled items and will be charged at the following rates:

Activity Schedule – part 2 (Labour rates and Mark-up - Breakdowns)

Any work not included under part 1 shall be deemed additional work or non-scheduled items and will be charged at the following rates:

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

*All rates to exclude vat. Subject to mutual agreement between ACSA and the Contractor, the number of staff allocated to the contract may be increased/decreased to cater for special needs that may arise from time to time.

Labour rates shall include all personnel insurance, holidays with pay, incentive bonuses.

Note: No labour shall be charged for travel or travelling. Labour time shall be calculated for the time spent on site.

Call out rate must include all required travelling and the **first hour on site**.

i) **LABOUR RATES: (to be filled in)**

Item	Description	Normal hours(R/hour)	After hours (R/hour)	
			Saturday	Sunday/public holiday
1	Site Manager			
2	Commissioning Engineer			
3	IT network Specialist			
4	Technician			
5	Other specify:			

NB: CPI variation will be considered on contract anniversary.

Detail requirements regarding staff

The Contractor shall continuously ensure that all staff is suitable, able and competent for the duties required of them. Staff must have experience and applicable competencies as per OEM and all legislations in the maintenance of Baggage handling system electrical controls. The Contractor shall continuously ensure that all staff is knowledgeable on all equipment relating to the Baggage handling system electrical controls.

Note the following minimum: The resources below are indicative of all the resources (Commission Engineer and IT network specialist) that might be needed as and when required during the duration of the contract. However, for the purposes of functionality evaluation, the minimum required resources specified in the RFP will take precedence over those listed below.

Site Supervisor	• Min SAQA Accredited Trade test (Millwright/Electrical/Instrument and control)	• Min 2 Yrs experience in management of an airport Baggage Handling System • 5 Yrs Experience in managing a site with a multi-disciplinary maintenance team
Commissioning Engineer	• IT Related degree/Diploma; or • Electronics Engineering degree/Diploma	• 3 yrs Experience in installing, commissioning and maintaining airport Baggage Handling Systems • 3 Yrs Experience in PLC maintenance and installations
IT Network Specialist	• IT Degree/Diploma	• 3 yrs Experience in maintenance of IT Networks
Technician (s)	• Min SAQA accredited Trade Test Certificate (Millwright/Electrician); or • N5 Control and Instrumentation	• Min 2 yrs experience in maintenance of airport Baggage Handling System Sorters and controls

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

ii) CALL OUT FEE + DIAGNOSTIC AND REPAIR RATES

NOTE:

- a) All rates for all activities including diagnostic and repair shall include all required tools, software, hardware and consumables (including all applicable specialized tools and software, hardware and consumables) Onus is on the contractor to price correctly).
- b) All *call out* shall include all applicable travelling, all personnel insurance, holidays with pay, incentive bonuses etc. Labour laws and all applicable laws shall be followed by the contractor.
- c) Call outs are not chargeable during hours technician/artisan/assistants or any applicable resource are on site.
- d) Call outs are not chargeable during working hours' technician/ assistants are on site and these will be determined by the service manager during risk register meetings.
- e) The contractor will be compensated according to the contractor's repair rate provided in the below table B and it is subject to discussion with the service manager due to proven factors that are beyond the contractor's control (some of the internal and external factors are listed in Annex T) .
- f) Call-out remuneration is applicable to activities falling out of preventative maintenance activities that were supposed to be done by the contractor, thus ACSA will not pay for breakdown which are due to preventative maintenance negligence by the contractor.

Table B: Call outs + Labour

Description		Quantity	Call out fee-	Total/ 60 months		
Call Out			(Contractor to fill in)	- (Contractor to fill in)		
*Call out Fee which includes first hour on site and travelling fee (after hours, weekends and holidays)						
Technician		100	R	R		
Assistant/semi-skilled labor		100	R	R		
Labor Sub-Total B						
Total call out fee			R			
Diagnostic with repairs table:						
(time below includes the total time to do diagnostics and repairs for each failure mode and completely resolve the issues leaving the infrastructure totally correctly functional. Note the rates must include all required tools, special tools, software and hardware require to completely resolve the failure)						
Item #	Call description	Estimated time to repair/reset (hrs.) as logged in the ACSA system	Budgeted Quantity	Contractor time to repair: (Contractor to fill in)	Rate per hour (after hours): (Contractor to fill in)	Total: qty X contractor time to repair X rate (Contractor to fill in)
1	Faulty sensors belts	0.5	50			
2	Faulty sensors carousels	0.5	50			
3	Faulty sensors Sorter	0.5	50			
4	Faulty switches	2	20			
5	Faulty manual coding station, carousel and chutes	2	50			
6	Faulty PLC	5	15			

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7	Belt at sortation area lost tracking	1	10			
8	Damaged/loose communication cables	0.5	10			
9	Faulty siren beacon at check in island	0.5	10			
10	Operation panel at check-in area faulty	1	15			
11	Passenger panel at check-in area faulty	1	20			
12	Faulty motor control box (sivacon/LMS)	1	15			
13	Roller shutter door sensors faulty	0.5	15			
14	Power Related faults	2	25			
15	Inverter fault	2	15			
16	Sorter control field devices faulty	2	50			
17	Other: Unforeseen breakdown		1			
18	Other: Unforeseen breakdown		1			
19	Other: Unforeseen breakdown		1			
**Total Diagnostic and repairs					R	
Sub-total B (*Call out fee + **Diagnostic and repair)					R	

iii) SPARES and MARK -UP

*Spares will be managed by the contractor using ACSA's manual inventory management system.

The manual inventory management system will include but not limited to;

- Conducting and submission of monthly and quarterly stock count to the Service Manager by the contractor,
- Keeping up-to-date inventory cards by the contractor,
- Management of spares movement by the contractor,
- Keeping an up-to-date inventory file (purchase order and request, work order, delivery note, stock count records, etc.).
- Ensure safety and security of the storeroom by the contractor as per space given to them.
- The space for spare storage shall be allocated by ACSA to the contractor and can be a shared space as per space availability.
- Management of inventory by the contractor as per ACSA inventory procedure

Spares:

Description	Total (excluding VAT)
Subtotal C- provisional sum for spares	R 10 000 000-00

Mark-up (third party procured items/services)

Bidder to complete.

Value of Item or Services	**Mark-up (Contractor to fill in)
R0 - R2,000	%
R2,001 - R5,000	%
R5,001 - R10,000	%
R10,001 - R50,000	%

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^bCost shall be net cost (excluding VAT) of parts delivered to site with all discounts deducted.

**The inserted amount *Z* are for budgeting purposes. The Total mark -up amount in the table is not guaranteed, but the mark-up will be applicable on third party quotations as per requirements of the system. Thus, the contractor will be held accountable to the mark-up filled in this table.*

***The mark-up will be applicable to the total of the third-party quotation not on a single line items in a quotation.*

The refurbishment projects which will be covered under this contract are as per below and should also be quoted and the value be stipulated, the timelines for project commencement and relevant programs will be discuss once the contract has commenced.

Table D: Refurbishment projects for BHS controls.

Description of the project	Value
Refurbishment projects for BHS controls.	R 7 000 000,00
Sub-total D value	R 7 000 000,00

The contract will require refurbishment as and when required, which will include but not limited to the projects below:

- Sorter Speed Tracking x 2 Boxes (4 x Sensors)
- Assessment to address single point of failure and allowance for redundancy for the main substation 9 in the baggage hall.

Contract value

Below, the guide that must be used in estimating the contract value. This amount must be reported as the Contract Value in the corresponding schedules. Tenderers are reminded that this amount is for illustrative purposes only and that ACSA will not be under any obligation to expend the full or any portion of this amount. Monthly contract expenditure will be strictly calculated according to the Activity Schedule as provided above.

*** N.B. Spares and Ad hoc repair costs not payable upfront but will be drawn off this amount as and when required as per Part C2.1 Price Instructions. This amount covers the full contract duration (60 months)**

**Part 4 Activity Schedule: 5 Year Total Fixed Cost- Repairs and Maintenance of Baggage Handling System Electrical Controls.
[escalated Consumer Price Index Escalation (CPI)]**

Description	1 year Total (excluding VAT)
Sub-Total A: Administrative and Fixed Preventative maintenance	R
Sub-total B (*Call out fee + **Diagnostic and repair)	R
Subtotal C- provisional sum for spares	R
Subtotal D- Refurbishment projects for BHS controls.	R7 000 000
TOTAL Excl VAT for Year 1	R

Fixed cost in the maintenance fees for the Period	Annual escalation	Rand value (excl. VAT)
Year 1	0%	R
Year 2	Year 1 plus 6%	R
Year 3	Years 2 plus 6%	R
Year 4	Years 3 plus 6%	R

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Year 5	Years 4 plus 6%	R
Total fixed cost for 5-year contract		R

NB: It should be noted that the contract will be subjected to CPI increase on its anniversary as per current index stipulated in Statistic SA Consumer Price Indices. Therefore 6% escalation should be used for illustrative purposes

NB: All Amounts should exclude VAT, the total estimated contract value should be carried over to Form of Offer

ADHOC COSTS – VARIABLE

The Adhoc costs will not form part of the fixed contract costs and will be as per the schedule shown in the table below. For planned work, a quotation will be required and a PR (Purchase Requisition) created before work commences. Thereafter, invoices will be required to process payment.

For emergency work, permission to carry out work outside the scope of the fixed contract service has to be obtained from the Service Manager or his authorised representative or the IAM Manager. PR and Orders for work done will be issued by the employer as soon as possible.

PART C3: EMPLOYER’S SERVICE INFORMATION

Document reference	Title	No of pages
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	<i>Employer's Service Information</i>	9-45
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6 Description of the service

6.1 Executive overview

Purpose of Commodity

The purposes of this initiative are to source service provider to Service and Repairs of Electrical Control Systems Including Refurbishment Projects in the Baggage Handling System for a Period of 5 Years (60 Months) at Cape Town International Airport. The Baggage handling system includes hardware servers and software for Bagstage (SAC) operating system, SCADA, conveyance driven machinery (Conveyor belts) and carousels units and check in counters.

Criticality of Commodity

This initiative is of a high criticality to ACSA, as a failure in ensuring ineffective operation, maintenance and repairs for the BHS Electrical Controls could result in loss of customer luggage and flights delays. Poor/defective functioning of the equipment will endanger/injure staff onsite.

Complexity of Commodity

Service and repairs of control systems for BHS Electrical Controls is of high complexity, it requires qualified technicians or artisans. These should be knowledgeable of the following:

- automated systems,
- acumen in siemens PLC and SCADA,
- IT Hardware Servers, switches and routers
- electronics/electrical light current,
- Proximity Switches
- electrical geared motor units.

Service and repairs of Controls Systems should be conducted according to applicable OHS Act Standard, Driven Machinery Regulations and Engineering Standards. The Contractor will be responsible for providing staff that is sufficiently skilled and qualified for successful execution of the works during breakdowns in the Baggage Handling System and associated equipment.

The Contractor shall ensure compliance to general safety regulations and standards such as OHS Act Administration regulations of 2003, General Health & Safety Regulations of 2005, Electrical installation Regulation of 2009, General Machinery Regulation, Driven Machinery Regulations and Applicable Engineering Standards. The following SANS Standards should be adhered to during installation and maintenance of equipment within the baggage hall, SANS10142, SANS1173, SANS968, SANS971, SANS1669, SANS1257 & SANS1313.

6.2 Detailed Scope of Works

Employer's Objective

The contractor will be responsible for the service and repairs of Electrical Control Systems in the Baggage Handling System infrastructure and associated components at Cape Town International Airport that is mainly located in the Central Terminal Building at CTIA.

The appointed service provider will be fully responsible for meeting all requirements regarding the Works. For each piece of equipment, all work will be carried out to standards as required by the Original Equipment Manufacturer (OEM) as well as any applicable governing law and/or regulations. The Contractor will be fully responsible for obtaining (and keeping up to date with) latest technology for improving the service and functionality of Baggage Handling System infrastructure and its components.

Overview Description of Works

In brief, the Contractor will be responsible for service and repairs of control systems in the Baggage Handling System at Cape Town International Airport which (amongst other) comprises of:

1. CTB departure declines, Queue and Plough Baggage conveyors
 - 1- 8 declines belts conveyor control system with its associated components
 - Substation 1-10 Baggage conveyors
 - Automatic Tag Readers (ATR)

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- Siemens Sivacon and Sick Control Panels
 - Proximity Switches
 - Photocells (PEC)
 - Encoders
 - Air Blowers and reflectors
 - Inverters
 - Hand Scanners, PC board and monitors
 - Siemens Sivacon MCU
 - Emergency stop buttons
2. The CTB departure sorter, its associate conveying systems and the baggage chutes
- MCC- Electrical Panel Switch Gear
 - Bus bars sortation track/power rail and feed line Systems
 - Linear induction motors
 - Master and slave Cassette trays and associated components
 - 1- 68 chutes, Level 4 chute, Laterals Proximity switches
 - Inverters
 - PC board and monitors
 - Siemens Sivacon MCU and Sick Control Panels
3. The departure carousels in the Baggage Hall, International and Domestic
- Photocells (PEC)
 - Siemens Sivacon MCU
 - Emergency stop buttons
 - Ethernet Communication Network and PLC's
 - Service all UPS batteries associated with BHS Control Systems
 - PC board and monitors
4. The Out of Gauge conveyor system, Inductions and MCS
- Photocells (PEC)
 - Siemens Sivacon MCU and Sick Control Panels
 - Hand Scanners, PC board and monitors
 - Emergency stop buttons
 - Sorter, Induction ATR's and Hoop Sensor Array
5. Computer Server, Operating Programme, and Substation Panels
- Hardware and Software Servers including Switches and Routers for SAC system
 - Master, Slaves and Back -up computer /processor serves
 - Reporting Interface hardware and software -SAC, Bag stage, SICK RDT, Data logic ATR system, BRS and SCADA for both check in counters and Baggage
 - Substation 1-10 and including all electrical panels and interconnecting power and earthing cables
 - Ethernet Communication Network and PLC's
 - Service all UPS batteries associated with BHS Control Systems
6. Check in counters
- Control Panels- Electrical Switch Gears and interconnecting power and earthing cables
 - Proximity Switches
 - Photocells (PEC)
 - Encoders
 - PC board and monitors
 - Scales and dispatch belts associated equipment's
 - Emergency stop buttons
7. Security Check Points Counter- Roller Beds used for Trays
- Control switches and panels

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- Emergency stops

8 . Hand Scanners and Monitors.

9. Support and provide first line response to the SAC software OEM on site by attending to minor SAC faults and escalate to OEM where resolution cannot be reached.

10. Support and Maintain BHS local network infrastructure which includes network switches, etc.

INFRASTRUCTURE	FREQUENCY	MAINTENANCE ACTIVITIES
Baggage Handling Sortation System	As per Manufacturer's Specifications and Maintenance & Engineering procedures.	<p>Executed in line with:</p> <ul style="list-style-type: none"> - As per Manufacturer's Maintenance Manual and Maintenance & Engineering working procedures. - Must comply with OHS Act Administration regulations of 2003, General Health & Safety Regulations of 2005, Electrical installation Regulation of 2009, General Machinery Regulation, Driven Machinery Regulations and Applicable Engineering Standards. The following SANS Standards should be adhered to during installation and maintenance of equipment within the baggage hall, SANS10142, SANS1173, SANS968, SANS971, SANS1669, SANS1257 & SANS1313.

Baggage Handling System (BHS- Service and repairs of control systems)

Service and repairs of control systems has electronic components and most importantly, the upkeep of the automated PLC- IT infrastructure and controls that keep the system running. Various proprietary OEM (Original Equipment Manufacturer) technologies are built into the system to allow efficient transportation of bags from check-in to flight loading positions via bag X-Ray screening, early bag storage and automatic baggage sortation.

Frequency/Periodic Suggested Schedules

The contractor will provide service maintenance plan/chart and inspection sheet will be provided by the Service Manger which shall be conducted in line with the applicable regulations and engineering standards. The periodic schedule activities will be daily, weekly, monthly, quarterly, 6 monthly and yearly inspection as per Manufacture's prescribed maintenance schedules and frequencies. Furthermore, test and inspection are prescribed under Section 10.11 of the NEC Contract. There will be a need to review the maintenance regime due to equipment age, model and technical installation specification, where additional work may be necessary.

Manufacturer's prescribed maintenance schedule and frequencies:

Column Heading	Meaning
Asset Group	Baggage Handling Systems asset groups as defined above.
Activity	A short description of the maintenance activity to be performed.
Frequency	The code used to reflect the intervals between which maintenance activities will be performed. The convention used is: D = Daily, W = Weekly, M = Monthly, Y = Yearly

Asset Group	Activity	Frequency
Table - Ball Container	Daily Inspection	D
	Monthly Maintenance	M
Chute - Baggage	Daily Inspection	D

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Asset Group	Activity	Frequency
	Monthly Maintenance	M
Conveyor - Belt	Daily Inspection	D
	Weekly Maintenance	W
	Three Monthly Maintenance	3M
	Yearly Maintenance	Y
Conveyor - Carousel	Daily Inspection	D
	Weekly Maintenance	W
	Three Monthly Maintenance	3M
	Yearly Maintenance	Y
Conveyor - Deflector / Plough	Daily Inspection	D
	Weekly Maintenance	W
	Monthly Maintenance	M
	Three Monthly Maintenance	3M
Conveyor - Roller	Daily Inspection	D
	Weekly Maintenance	W
	Monthly Maintenance	M
	Three Monthly Maintenance	3M
Conveyor - Sorter	Daily Inspection	D
	Weekly Maintenance	W
	Monthly Maintenance	M
	Three Monthly Maintenance	3M
Elevator - Baggage	Daily Inspection	D
	Weekly Maintenance	W
	Monthly Maintenance	M
	Three Monthly Maintenance	3M
Scanner - Label	Daily Inspection	D
	Monthly Maintenance	M
Scale	Daily Inspection	D
	Six Monthly Inspection	6M
	Yearly Verification/calibration	Y

The contractor shall maintain a record of services carried out and make it available to the Service Manager as and when it is required. The supply of tools and equipment necessary for carrying out the scope of work shall meet OEM and contract requirements.

All work shall be carried out by qualified technicians or artisans. The artisans and supervisory personnel shall be specifically trained and have extensive experience in the electrical control of Baggage Handling Systems as detailed in the scope of work.

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Safety Related Provisions and guidelines that are required by law or imparted during routine training must be observed. The contractor personnel must comply with the requirements and responsibilities according to OHS Act Administration regulations of 2003, General Health & Safety Regulations of 2005, Electrical installation Regulation of 2009, General Machinery Regulation, Driven Machinery Regulations and Applicable Engineering Standards. The following SANS Standards should be adhered to during installation and maintenance of equipment within the baggage hall, SANS10142, SANS1173, SANS968, SANS971, SANS1669, SANS1257 & SANS1313. Before commencing or starting maintenance repairs, the relevant stakeholders i.e. ACSA Baggage Technician and Service Manager must be notified.

Access to site

- ❖ Airside training and permit should be completed and issued before accessing airside and commencement of work.
- ❖ AVOP training and permit should be completed and issued before the commencement of work for personnel driving required to drive on airside.
- ❖ Permission must be obtained from ACSA operations and IMC before an equipment can handed over to the contractor for works and such arrangements must be done prior and timeously.

Site Restrictions

- ❖ Airside training and permit should be completed and issued before accessing airside and commencement of work.
- ❖ AVOP training and permit should be completed and issued before the commencement of work for personnel driving required to drive on airside.
- ❖ The safety file should be completed and approved by the safety department before commencement of work. The safety file is a living document and must be continuously updated with all requirements as specified by law. Also, will be auditable from time to time.
- ❖ Personal Protective Equipment should be issued before the commencement of work.

Risk

The are some of the risks identified but not limited to the below and to **Annex E** list.

Current Guarantees and warranties to be maintained:

- ❖ Annex W - N/A

Extent of the works

The Contractor will be fully responsible for meeting all requirements in this document regarding the Works.

For each piece of equipment, all work will be carried out to standards as required by the Original Equipment Manufacturer (OEM) as well as any applicable governing law and/or regulations. Where OEM standards differ from those required by this document the more stringent requirement shall apply. The Contractor will be fully responsible for obtaining (and keeping up to date with) said requirements.

Where, such a need is mutually agreed between the Contractor and the Employer, the Employer shall put in place a "Hotline" (i.e. 24-hour telephonic support by product specialist) agreement with the relevant OEM. In this event the Contractor shall be responsible that such Hotline services are always operational and available, but all costs in this regard shall be carried by the Employer. The Contractor shall NOT add any mark-up to any Hotline related expenses. A "Hotline" agreement shall typically ensure that problems relating to system controls are promptly rectified. It is intended that Hotline agreements will be in place with OEMs for PLC related controls and computerised control systems.

The Contractor will be responsible for providing staff which are sufficiently skilled and qualified for successful execution of the works. The Contractor shall comply with the Minimum Staffing Schedule always – as stipulated in the Annexes. This may be amended by mutual arrangement between the Employer and the Contractor from time to time.

The Contractor shall always remain responsible to ensure that the on-site staff compliment and maintenance regime is sufficient to maintain the service levels and system performance indicators as stipulated in the Annexes. Should the Contractor not be able to maintain adequate system performance indicators due to constraints caused by the Employer, it shall be timeously reported, in writing, to the Contract Manager. Refer to the Annexes for the required system performance indicators.

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The Contractor will ensure that his/her staff compliment is of a sufficient quantity to allow for uninterrupted supply of labour in the event of his/her staff taking sick leave, paid leave and will allow for all staff related eventualities.

The Contractor shall continuously ensure that all staff is suitable, able and competent for the duties required of them. The Contractor shall continuously ensure that all staff is knowledgeable and dependable in Baggage handling conveyors and carousels maintenance activities/procedures in the area. The Contractor shall further ensure that any staff member reasonably suspected of partaking in criminal activities is immediately removed from site and his permit returned to and/or cancelled at the ACSA Permit Office.

All work shall be performed within the required Response Times – as stipulated in the Annexes. Any breakdown impacting on operations shall be attended-to until restored to good reliable condition. No breakdown may be left unattended or incomplete for the next day or shift. All repair work shall carry a defect free be guaranteed for a period of 3 months after completion of work.

All work shall be charged according to the Activity Schedule. However, no labour shall be charged for any non-scheduled work, repair work or other work when carried out by a scheduled maintenance shift.

The Contractor will be responsible for keeping spares levels up to a sufficient quantity and standard as to comply with the requirements of this contract and will charge the Employer accordingly. All spares will be charged according to the Activity Schedule. The Contractor shall arrange for the spares room. The Contractor shall keep the spares room in a neat and clean state and an updated spares list will always be available on-site. Spares will be neatly arranged and easily locatable via an appropriate index on the spares list. Wherever practicable, a notice will be placed on the rack, next to the spare part, as to where the part is used in the installation. A resource will be dedicated to ensuring that spares are effectively managed and scrapped parts and waste removed from site. The space for spare storage shall be allocated by ACSA to the contractor and can be a shared space as per space availability.

The Contractor will be responsible for holding all tools and/or special equipment that might be required for the execution of the works, either on site or on their premises in order to comply with the Response Time requirements of this contract. Any exclusion to the above should be clearly communicated in the returnable schedules when submitting the tender.

The Contractor shall ensure that, unless a special arrangement is made with the Service Manager, all senior staff members and on-site support staff is always immediately reachable via cell phone.

The Contractor shall ensure that all maintenance staff are issued with uniforms that will comply with a minimum requirement as agreed with the Service Manager from time to time. Current airport requirements are safety shoes, track suit and a uniquely numbered reflective jacket (for easy identification via CCTV).

Location of the works

The Works are located at Cape Town International Airport at various locations – mostly in controlled areas. It is crucial for the Contractor to note that Cape Town International Airport is a National Key Point and governed as such.

Spare Parts Requirements

The contractor shall provide spare parts list for repairs of each unit and ensures the supply of replacement parts are manufactured by the original equipment manufacturers (OEM) or parts are substantiated as equal by the Contractor and shall be approved by ACSA representative. The contractor shall have readily sufficient available spares for delivery and installation/repairs for BHS Electrical Control Systems. Maintenance under this contract shall provide a constant, high quality service to properly protect all equipment from deterioration and to provide constant peak performance of BHS resulting in a minimum of down time to the system.

A list of attainable replacements parts by part number shall be furnished when requested by Service Manager and the contractor will be responsible to maintain an up-to-date inventory and charged ACSA accordingly. The parts shall be kept on stock if not the contractor must source the required spares and be available within 24 Hours. The contractor will be responsible for providing all the critical spares foreseeable for the use in the Baggage Hall.

Employer's requirements for the service

The contractor will provide complete service and repairs of control systems for BHS and shall provide all necessary qualified labour, supervision required to carry out inspection, preventative maintenance activity, and keep maintenance records of repair work performed and spare parts utilised. The contractor shall ensure the defects identified and reported during inspection or intervals shall be corrected within the service level agreement stipulated in the contract.

For each piece of equipment, all work will be carried out to standards as required by the Original Equipment Manufacturer (OEM) as well as any applicable governing law and/or regulations. Where OEM standards differ from those required by this document the more stringent requirement shall apply. The Contractor will be fully responsible for obtaining (and keeping up to date with) said requirements.

Where, such a need is mutually agreed between the Contractor and ACSA, Contractor shall put in place a "Hotline" (i.e. 24-hour telephonic support by product specialist) agreement with the relevant OEM. In this event the Contractor shall be responsible that such Hotline services are always operational and available, but all costs in this regard shall be carried by ACSA. The contractor shall NOT add any mark-up to any Hotline related expenses. A "Hotline" agreement shall typically ensure that problems relating to Electrical Control Systems are promptly rectified. It is intended that Hotline agreements will be in place with OEMs for Baggage Sortation System, Check in Counters and all its associated components.

The Contractor will be responsible for providing staff which are sufficiently skilled and qualified for successful execution of the works. The Contractor shall at all times remain responsible to ensure that the on-site staff complement is sufficient to maintain the service levels and system performance indicators as stipulated in the contract section 7. The Contractor shall comply with the Minimum Staffing Schedule at all times – as stipulated in the in the Section 7.3 of the NEC contract. This may be amended by mutual arrangement between ACSA and the Contractor from time to time.

Should the Contractor not be able to maintain adequate system performance indicators due to constraints caused by the Employer, it shall be timeously reported, in writing, to the Contract Manager. Refer to the contract Section 7 of the NEC contract for the required system performance indicators.

The Contractor will ensure that his/her staff complement is of a sufficient quantity to allow for uninterrupted supply of labour in the event of his/her staff taking sick leave, paid leave and will allow for all staff related eventualities to avoid penalties.

The Contractor shall continuously ensure that all staff is suitable, able and competent for the duties required of them. The Contractor shall continuously ensure that all staff is knowledgeable and trustworthy of the Baggage Sortation System activities/procedures in the area. The Contractor shall further ensure that any staff member partaking in baggage pilferage or other criminal activities is immediately removed from site and his permit returned and/or cancelled at the ACSA Permit Office.

All work shall be performed within the required Response Times – as stipulated in under Section 7.1 of the NEC Contract. Any breakdown impacting on operations shall be attended-to until restored to good reliable condition. No breakdown may be left unattended or incomplete for the next day or shift. All repair work shall carry a defect free liability and be guaranteed for a period of 3 months after completion of work. Bagstage(SAC) and all other related systems availability and performance requirements as per OEM shall be met at all times as stipulated per the contract agreement in order to avoid penalties.

All work shall be charged according to the Price Activity Schedule. However, no labour shall be charged for any non-scheduled work, repair work or other work when carried out by a scheduled maintenance shift. Maintenance teams will attend to all scheduled maintenance as well as emergency breakdowns. As a result, night work will be unavoidable, and the contractor should price accordingly.

Upon completion of the service/maintenance, the Contractor shall complete a comprehensive written service report in respect of Baggage Handling System, listing all activities undertaken, additional work performed and consumables used and submit this report to the Employer's representative for approval and endorsement before leaving the premises. The report pro-forma shall be to the Employer's approval. Detailed maintenance

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sheets shall be completed for Employer after service. All job-related certificates are to be handed to Maintenance and Engineering department e.g. calibration certificate for scanners.

All consumables such as cleaning materials will be supplied by the Contractor at his/her own cost. The costs are limited to the provision made in the cost breakdown. It should be noted that the preventive maintenance amount should include all standby fees, cell phone support and normal maintenance.

The Contractor will be responsible for keeping spares levels up to a sufficient quantity and standard as to comply with the requirements of this contract and will charge ACSA accordingly. All spares will be charged according to the ad-hoc Price Activity Schedule. ACSA shall provide an on-site spares room to the contractor free of charge. The Contractor shall keep the spares room in a neat and clean state and an updated spares list will always be available on-site. Spares will be neatly arranged and easily locatable via an appropriate index on the spares list. Wherever practicable, a notice will be placed on the rack, next to the spare part, as to where the part is used in the installation and for all spares used monthly inventory should indicate reference number for the replacement of the spare as logged in IMC to keep track of spares usage. A resource from the contractor preferable technical personnel will be dedicated to ensure that spares are effectively managed and scrapped parts and waste is removed from the site.

The Contractor will be responsible for holding all tools and/or special equipment that might be required for the execution of the works, either on site or on their premises in order to comply with the Response Time requirements of this contract. Any exclusions to the above should be clearly communicated in the returnable schedules when submitting the tender.

The Contractor shall ensure that all building areas in proximity to conveyors, carousels and chutes as well as building areas mostly dedicated to the Baggage Sortation System are maintained in a broom-swept state. The Contractor shall ensure that, unless a special arrangement is made with the Service Manager, all senior staff members and on-site support staff is always immediately reachable via cell phone.

The Contractor shall ensure that all maintenance staff are issued with uniforms that will comply with a minimum requirement as agreed with the Service Manager from time to time. Current airport requirements are: safety shoes, correct PPE and a uniquely numbered reflective jacket (for easy identification via CCTV).

Furthermore, Contractor will be expected to be present for essential power simulation and testing during predetermined intervals that will be communicated to the contractor. It should be noted that ACSA will not compensate the service provider for being present for Essential Power Simulation.

6.3 Interpretation and terminology

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
ACSA	Airports Company South Africa
CTIA	Cape Town International Airport
OEM	Original Equipment Manufacturer
PPE	Personal Protective Equipment
CCTV	Closed Circuit Television
RCA	Root Cause Analysis
OHSACT	Occupational Health and Safety Act No. 85 of 1993
SANS	South African National Standard
SABS	South African Bureau of Standards
SHE-File	Safety and Health File

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CTB	Central Terminal Building
SOB	Southern Office Building
ATR	Automatic Tag Readers
BHS	Baggage Handling System
IST	In-System-Time
MCS	Manual Coding Station
OOG	Out of Gauge
PLC	Programmable Logic Controller
SAC	Sort Allocation Computer
SCADA	Supervisory Control and Data Acquisition
GH	Ground Handlers
LIM	Linear Induction Motor

7 Management strategy and start up.

7.1 The Contractor's plan for the service

The Contractor's plan for the service will inform both the employer and service manager the contractor's detailed intention on how the contractor will provide the service. The plan shall consist of working methods as well as details of the resources, including the Equipment the contractor intends to use. This will enable the Service Manager to monitor the contractor performance and to access the adherence to KPI table.

The contractor plan should cover the following which should be submitted and attached on the NEC contract as **Annexure. The contract plan should be submitted for acceptance as per contract data requirements**

- The starting date and the end of the service period
- The order and timing of the work of the Employer and Others as last agreed with then by the Contractor or , if not agreed as stated in the service information
- Provision
 - Time risk allowances
 - Health and safety requirements and
 - The procedures set out in the contract
- The dates when, in order to provide the service in accordance with his plan, the contractor will need
 - Access to the Affected Property as stated in the service information
 - Acceptances
 - Plan and maintenance , equipment and other things to be provided by the employer and
 - Information from Others
- For each Operational and Resources Plan Proposal, a statement of how the contractor plans to do the work identifying the principal Equipment and other resources which he plans to use i.e The tenderer must submit a comprehensive proposal that shows **Operation Plan and Resource Plan Proposal** in the form of organogram
 - Resources to conduct both plan and corrective maintenance on the SLA and achieve the KPI in maintaining the BHS system i.e sortation system, chutes, conveyor belts and carousels and check in counters.
 - The proposal should not be limited to manpower only it should cover equipment -instruments and tools
 - The tender must submit organogram for all resources identified under the operation plan to enable the service provider to achieve the KPI and SLA.
- Other information which the service information requires the contractor to show on a plan submitted for acceptance

The service provider should consider below on their service plan for reporting and ensuring to meet the KPI requirements

Operational hours

Normal airport operational hours shall be **from 04:00 to 00:20** for every day of the year but will be confirmed/amended by the Service Manager from time to time. Down-time for BHS system for routine maintenance shall be arranged with the Operations Manager/ Service Manager and relevant stakeholders to suit airport operations. The Contractor must allow for sufficient after-hours work in order for scheduled work not to interfere with airport operations. For any scheduled work/plan maintenance that is carried outside the normal working hours will not be charged against ACSA as it falls under price activity schedule.

Response Times

The Contractor must at all times comply with the following:

Response time shall be calculated as the time taken from the fault being reported (via IMC, 3rd party, or other) to the time the fault is cleared, the relevant device becomes available for use.

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100% of all after hour breakdowns shall be responded to within 10 minutes. Response time shall be measured as the time taken from reporting the call, to the technician arriving at the relevant piece of equipment.

Any breakdown impacting on operations shall be attended-to until restored to good reliable condition. This implies that no breakdown may be left unattended or incomplete for the next day or shift.

ACSA will hold the Contractor liable for any costs incurred by any party as a result of negligence or unreasonable poor performance by the Contractor including excessive time taken to effect repairs.

Closure Duration

Closure duration is defined as the time elapsed since the maintenance call was logged at the IMC to the time the contractor reports to the IMC that the problem has been resolved.

95% of all breakdowns will be restored to good working condition within 1.5 Hours, unless a special agreement exists with the employer's agent. Include escalation procedure. The contractor must report any defect immediately to ACSA.

In the event of BHS system or its related component being unavailable, it will be the sole responsibility of the Contractor to advise the Infrastructure Monitoring Control (IMC) as well as Contract Manager immediately.

Defect free liability period

Defect free liability period – preventative maintenance	The defect free period will be no less than the interval between preventative maintenance intervals.
Defect free liability period – corrective or breakdown maintenance	The defect free period will be no less than 90 days.
Defect free liability period – project work	The defect free period will be no less than 12 months or as per OEM specifications.

Maintenance Management

Contractor is expected to adhere to a 90/10 planned vs. unplanned maintenance split on monthly basis.

On arrival to site (airport) to attend to a callout, a contractor need to notify IMC (ACSA Helpdesk at CIAHELPDESK@airports.co.za or +27 (0) 21 937 1257) and also notify IMC (ACSA Helpdesk) on completion of the repair work before leaving the site (airport).

Checklists and Logbooks

- Technical checklists and logbooks to be kept and verified by ACSA personnel as per OEM or SANS standard.
- Audits will be performed on ad hoc basis to assess quality of checklists and logbooks.

DAR (Data Analysis and Reporting)

- Weekly and Monthly feedback report to be compiled and submitted to ACSA mechanical maintenance department stipulating per area cost breakdown, findings and recommendations. This report should state number of failures, availability and reliability of the particular equipment. Daily reports to be available on request.
- If an incident or deviation occurs, an RCA (Root Cause Analysis) investigation to be carried out along with ACSA mechanical maintenance personnel to determine the root cause and corrective actions required to bring the physical asset back on line.
- A technical investigation report of any incident should be submitted within 24 hours to ACSA Mechanical Maintenance Department.
- Inventory control audits reports to be submitted on monthly basis.

A management report that consists of a task list should be submitted for all repairs and replacements and not just an invoice.

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Evaluation**Contractors will be evaluated on the following:**

Safety & Housekeeping	Safety warning sign in place
	Isolation/ cordon/ Barricading off area
	Apology sign in place
	Store room
	Control Room
Security	ID card always clearly visible
	Clear sign of the name of company
	Low worker turn over
Reliability	No repeat incident on equipment
	Adherence to SLAs
	Availability of equipment as per contract
	Keep agreed spares available
	Staff complete as per contract schedule
	Competency of staff
Finance	Quotes must submitted within specific timeframe and assessment as per contract data will apply
	Invoices submitted to finance department on time and with correct order numbers
	Cost control and efficiency improvements
	Attach third party quotation/invoice for any third party financial transaction
	Submit financial statements on monthly basis
Uniforms	To be properly dressed in overalls with company name on the back for identification. Must be clearly visible and neat.
Quality of workmanship	Work to be done according to correct engineering practices and standards.
	Workmanship to be of a good quality
Submission of safety documents to ACSA safety department on monthly basis	Adhering to OHS Act
	No safety incidents

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Identification of Contractors On-Site

It is expected that contractors wear visible company uniform when entering the premises as a form of identification.

Continuous Improvement Program and the Computerised Maintenance Management System

It is hereby required that the Contractor ensures that a continuous improvement program is in place. For example, the criteria below may be used but not only limited to the items mentioned below. Contract to provide a detailed annual proposal to the employer and the implementation thereof will be at employer's discretion.

1. An improvement in the availability of systems
2. An improvement on the maximum number of short ships attained
3. An improvement on the in-system time
4. An improvement on the minimization of spares holding (for example by increasing Mean Time to Failure of components) Etc.

As mentioned above this list is not comprehensive and it is only used for illustrative purposes. Upon implementation of the contract the Employer and the Contractor shall agree targets for the continuous improvement program.

It is important to note that continuous improvement will only apply to those items that meet minimum benchmarks. Continuous improvement initiatives shall be reviewed every quarter or when deemed necessary by the Employer or the Contractor.

ACSA has implemented a Computerised Maintenance Management System (CMMS). The Contractor shall take all reasonable actions to ensure that they facilitate successful implementation and execution of the CMMS work orders. The Contractor shall before each anniversary date of the Contract investigate available CMMS data and report if savings can be achieved on the Contract for the next year. This may also include savings on the Contract monthly maintenance amount.

Improvement Initiatives

ACSA, CTIA, encourages a practice of continual improvement and will welcome any proposal that will reduce the incidence of specific problems or occurrences improve work methodologies and also are of financial benefit to the organisation.

A contractor is required/ expected to present at least one (1) improvement initiatives twice a year.

7.2 Management meetings

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

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Safety audit	Monthly on last Thursday of every month at 10H00	SOB ACSA Admin offices	ACSA Safety Dept. and Contractor.
Risk register and compensation events	Monthly on last Thursday of every month at 10H00	SOB ACSA Admin offices	Employer and Contractor.
Overall contract progress and feedback	Monthly on last Thursday of every month at 10H00	SOB ACSA Admin offices	Employer and Contractor

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

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

7.3 Contractor's management, supervision and key people

Human resources

The following minimum standards shall apply to resourcing:

- Regarding a first line response to any breakdown of the BHS. Taking into account current airport access control infrastructure and security arrangements and taking into account the physical layout of the plants, the Contractor shall ensure a sufficient quantity of staff in order to meet or exceed the Service Level Agreement as per **Annex I**
- The rostered maintenance staff compliment shall be sufficient to perform all required preventative and reactive/breakdown maintenance for each month. Cost incurred by the contract should be covered by maintenance fees unless outside OEM maintenance specification or unless ad-hoc.
- During operational hours, the Contractor must have sufficient personnel to successfully attend to at least two simultaneous breakdowns as per contract requirements.
- During operational hours, the Contractor must have Site Manager who:
 - Is suitably qualified and experienced to resolve breakdowns and system stoppages of a nature that would require a person with BHS knowledge, Electronics and Mechanical training.
 - Is suitably qualified and experienced to work on any electrical panels and mechanical components.
 - Is able to successfully interact with Fire Protection Service Provider and OEM "hotline" personnel.
 - Is of a level of seniority to successfully direct and manage Contractor staff and possible sub-contractors when there is a breakdown and can successfully interact with airport operational staff and airport management.

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5. The Contractor shall assume responsibility for resolving any issue that might be experienced from time to time with the BHS system. This will relate to any problem that might be experienced with the BHS System and its components.
6. As part of his duties the Contractor:
 - a) Shall ensure that (at his cost) back-ups are current and available on site (including all required spares that might be necessary to effect restores).
 - b) Shall ensure that other faults/issues outside the scope of this contract but impacting on the BHS System are expedited with the relevant persons.
 - c) Shall submit preliminary incidents reports to the ACSA Service Manager regarding the cause and resolution of faults within 24 hrs of each eventuality.
 - d) Shall submit full incidents reports to the ACSA Service Manager regarding the cause and resolution of faults within 48 hrs of each eventuality after the incident has been resolved.
 - e) Shall maintain an up to date BHS controls configuration drawing and keep it readily available on site.
 - f) Shall, within reason, remain up to date with changes to the ACSA- BHS System and build professional work relationships with all relevant parties, whether it be OEM or ACSA contractors or other.

All the information to the above breakdowns and stoppages exceeding agreed response times shall be logged with the ACSA IMC (Infrastructure Monitoring and Control department) at (021) 937 1257 or email CIAHELPDESK@airports.co.za

Conversely once the problem has been resolved the contractor will advise the IMC (Infrastructure Monitoring and Control department) at (021) 937 1257

7.4 Provision of bonds and guarantees

The form in which a bond or guarantee required by the *conditions of contract* is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.4, Sureties.

7.5 Documentation control

All contractual communications will be in the form of properly compiled letters or forms attached to e-mails and not as a message in the e mail itself.

The contractor will submit maintenance and inspection reports after each service in report format agreed between the service manager and the contractor.

A list of attainable replacements parts, by part number shall be furnished when requested by Service Manager and the contractor will be responsible to maintain an up-to-date inventory of commonly replaced spare parts by parts number.

7.6 Invoicing and payment

The contractor will submit financial statement on monthly basis. On the last day of each month, the Service Provider shall deliver original invoices to the Company in respect of the Services. The invoice must contain the following minimum information and/or be substantiated by the following documentation:

- amount due in respect of VAT;
- the Service Provider's VAT registration number;
- such additional information and/or documentation as the Company may reasonably require from time to time;

Payment will take place within 30 (Thirty) Business Days after receipt by the Company of a duly prepared original invoice.

All payments shall be made by electronic transfer into the Service Provider's bank account, initially being the account set out in (Contract Data) hereto.

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The Company may set off any amounts due and payable from the Service Provider pursuant to the terms of this Agreement as per **Annex I** – Low service damages against any amounts payable by the Company to the Service Provider on any invoice. If the amounts payable by the Service Provider to the Company exceed the amounts payable by the Company to the Service Provider pursuant to an outstanding invoice under this Agreement, then, at the Company's option, the Service Provider shall either issue a credit note for the net amount which the Company may set off against any other invoices rendered by the Service Provider, or promptly pay the amount to the Company.

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

The Contractor shall address the tax invoice to
ACSA Employee Name: _____
and include on each invoice the following information:

Name and address of the Contractor and the Service Manager;
The contract number and title;
Contractor's VAT registration number;
The Employer's VAT registration number **4930138393**;
Description of service provided for each item invoiced based on the Price List;
Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
(add other as required)

Electronic payments

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

7.7 Contract change management**Use of standard forms****Management of the works**

It is noted that:

- a) The required labour resources and skills for this contract is prescribed in detail and will be a measure in calculating the monthly contract fee. The contractor is fully responsible to ensure that labour resources remain adequate in order to maintain required service levels and system performance levels as prescribed in Section 6 and 7.1 "The contractor's plan for the service". Only in the event where ACSA prescribes certain additions to the labour force (over and above to what is already prescribed), will that particular labour resource be included as a measurable item in the Activity Schedule.
- b) The prices per activity are based on the total "package" and should one activity be removed from the contract scope the other prices will be reviewed by the Contractor as well.
- c) Personal computers will be purchased by the contractor for administration of the contract.
- d) Provisional parking fees will be made, if the contractor's staff are utilising the ACSA public parking.
- e) The contractor to pay telephone costs, if utilising any telephone linked to ACSA telephone network.
- f) The contract to provide own computers and administration material required to operate during the duration of this contract.
- g) The contractor to pay for own office rental fees, if the contractor's staff are utilising the ACSA office areas.

Format of communications

Work instructions, daily check sheets, monthly maintenance reports, inventory reports, breakdown reports, exception reports, etc. will all be in a format as agreed with the Service Manager.

Incidents and Events Reports

The contractor shall conduct RCA (root cause analysis) for incidents and events encountered on the infrastructure and submit a detail technical incident report within 48hrs.

7.8 Records of Defined Cost to be kept by the *Contractor*

Daily records

The Contractor shall keep accurate daily records of staff attendance, maintenance work, safety inspections and exception reports. Records shall be kept on site and will be available for scrutiny by the Service Manager at any time. All records shall be in a format as agreed with the Service Manager.

The Contractor shall keep in a safe place every statutory certification record book detailing inspection and test, maintenance, examination and any related incidents. These record sheets must be stored for the duration of the contract and should be available for inspection at any time. **The lack of complete history file will result in immediate cancellation of the contract**

Monthly reports

When invoicing, the Contractor shall ensure that all required reports for the corresponding month are attached to the monthly invoice. This will include monthly reports on but not limited to:

1. System availability (averaged per week)
2. COP of each chiller compared to design
3. **ENERGY Consumption of the BHS plant compared to previous year in same period.**
4. Energy optimisation activities conducted
5. Maintenance work (including % of scheduled maintenance work completed)
6. Daily checks performed
7. Maintenance plan for the next month
8. The latest spares inventory
9. Assets register up to date including equipment data
10. Root cause analysis records
11. Safety/Environmental or legislative issues and compliance
12. Outstanding maintenance/contractual issues

The contractor shall keep copies of all reports for at least 3 years. All reports shall be in a format as agreed with the Service Manager from time to time. **Further if the information provided is deemed insufficient Service Manager/Contract manager has the right to withhold the monthly fee until the sufficient information is provided.**

7.9 Insurance provided by the *Employer*

It is important that the Contractor recognises that his risks include those shown in C1.4. Consequently, even if such insurance are effected by the Employer, the Contractor should satisfy himself as to the adequacy of the policy and cover.

The Contractor should inform the Service Manager of any discrepancy between the Employer-provided insurances as stated in the Contract Data.

7.10 Training workshops and technology transfer

The contractor will perform on job training workshops when required, as well as any obligation for technology transfer being included as part of the service or at the end of the service period.

Training of ACSA staff and/or other stakeholders on BHS system, and their Components and its operation

- Providing of system data and/or statistics to ACSA
- Recommending improvements on maintenance procedures
- Recommending improvements on operational procedures

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- Co-operating with ACSA Security relating to security issues

The ACSA Service Manager may instruct operational and works procedures to the Contractor as might be required from time to time. The Contractor will instruct his/her staff accordingly and implement measures to ensure that these procedures are strictly adhered to.

7.11 Design and supply of Equipment

The Contractor shall ensure that the design is fit for the purpose intended. As far as applicable to maintenance and operations, the design will be in accordance with the mutually agreed specifications.

The *Contractor* is still liable if, after having made the equipment to details have been accepted, it fails because it did not comply with the Service Information. Failure to comply gives the Service Manager the right, but not the obligation, to reject the design.

7.12 Things provided at the end of the *service period* for the *Employer's* use

7.12.1 Equipment

The clause requires the Contractor to return to the Employer at the end of the service period things which have been provided by the Employer for the Contractor's use i.e. The inventory materials and spares that were purchased by the Employer during the tenure of the contract should be returned provided the contractor still holds some in stock and any other equipment that was purchased by the Employer.

7.12.2 Information and other things

The Contractor grants to the Employer, with effect from the starting date or, in the case of documents or other matters not yet in existence, with effect from the creation thereof (and notwithstanding the Completion or termination of this contract),

- An irrevocable royalty-free non-exclusive license to use all of the documents provided to Provide the Services (including, but not limited to calculations, computer programmes and other software, drawings, manuals, models and other documents of a technical nature), for any purpose whatsoever, including for the purpose of operating, repairing, maintaining, dismantling, re-assembling and making adjustments to all parts of the Services. The Contractor procures that each Subcontractor executes all and any further documents and takes all and any other actions as may be required in order to give effect to this license.
- After the term service, the contractor shall return all valid permits to the Service Manager including the permits of all contractor staff that had service terminated.

8 Health and safety, the environment and quality assurance

8.1 Health and safety risk management

The Contractor shall comply with the health and safety requirements contained under C1.3: Occupational Health and Safety Agreement of this Service Information.

Addition to the above the **Annexes J and U** will be applicable

8.2 Environmental constraints and management

The Contractor shall comply with the environmental criteria and constraints stated in below including **Annex L**:

The Contractor will keep noise and dust levels to a minimum. At no time shall his/her work result in nuisance, interference or danger to the public or any other person working at the Airport.

At no time shall the Contractor:

- Allow any pollutive or toxic substance to be released into the air or storm water systems

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- Interfere with, or put at risk, the functionality of any system or service
- Cause a fire or safety hazard

8.3 Quality assurance requirements

Quality plans and control

All work must be executed in accordance with prevailing industry norms and standards relating to quality. In this regard, the Contractor will be expected to draft quality plans for the Service Manager from time to time. Emphasis must be on improving system reliability and on ensuring that rostered maintenance work is indeed performed as and when required.

9 Procurement

Preferential procurement procedures Requirements

The Contractor will respect OEM warranties to the Employer always when procuring spare parts, products or 3rd party services. It will be the Contractor's sole responsibility to ensure that OEM warranty requirements are adhered to always.

Where Contractors use or quote on spare parts of a lower quality than recommended by the OEM, or parts not recommended by the OEM, this shall be clearly indicated to the Service Manager on the quotation. This also implies that the Contractor must build relationships with the various key OEM's.

The Contractor must adhere to all airport requirements regarding fire, health and safety when procuring replacement conveyor belts and/or other equipment or spares.

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

Spare Parts Requirements

The contractor shall provide spare parts list for repairs of each unit and ensures the supply of replacement parts are manufactured by the original equipment manufacturers(OEM) or parts are substantiated as equal by the Contractor and shall be approved by ACSA representative. The contractor shall have readily sufficient available spares for delivery and installation/repairs for BHS. Maintenance under this contract shall provide a constant, high-quality service to properly protect all equipment from deterioration and to provide constant peak performance of BHS resulting in a minimum of down time to the system.

A list of attainable replacements parts by part number shall be furnished every month and when requested by Service Manager and the contractor will be responsible to maintain an up-to-date inventory and charged ACSA accordingly. It should be noted the failure from the contractor to keep an up-to-date inventory it will be the responsibility of the service provider to source the required spares and be available within 24 Hours in case of breakdown or need for the spares. The contractor will be responsible for providing all the critical spares foreseeable for the use in the BHS Controls Systems.

9.1 People

9.1.1 Minimum requirements of people employed

Refer to **Annex I**

9.1.2 BBBEE and preferencing scheme

- 1) In terms of the PPPFA Regulation 4, an organ of state can apply pre- qualifying criteria to advance certain designated groups
- 2) Only tenderers meeting the following criteria may submit proposals:

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- a tenderer having a stipulated minimum B-BBEE status level of contributor 1 or 2; and
 - an EME or QSE; and
 - a tenderer subcontracting a minimum of 30% to-
 - (i) an EME or QSE which is at least 51% owned by black people; or
 - (ii) an EME or QSE which is at least 51% owned by black people who are youth;
or
 - (iii) an EME or QSE which is at least 51% owned by black people who are women; or
 - (iv) an EME or QSE which is at least 51% owned by black people with disabilities; or
 - (v) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships; or
 - (vii) an EME or QSE which is at least 51% owned by black people who are military veterans;
- 3) By submitting a Proposal, the bidder certifies that the information and documents provided are true, correct and devoid of any fraudulent misrepresentations. ACSA reserves its right to seek further legal action in the event that the bidder fails to comply with this paragraph.
- 4) A bidder that fails to meet the above- mentioned pre-qualification criteria, will be disqualified.

9.2 Subcontracting

9.2.1 Preferred subcontractors

No part of this Contract may be subcontracted unless with written approval from the Employer. The Employer shall be under no obligation to grant such approval. Should any part of this Contract be subcontracted, the Contractor will be responsible for all Works (or failure to affect the Works) as if it was done so by the Contractor.

9.2.2 Subcontract documentation, and assessment of subcontract tenders

Refer to point 9.2.1

9.2.3 Limitations on subcontracting

Refer to point 9.2.1

9.2.4 Attendance on subcontractors

The contractor shall at his own cost provide the following general attendance on the subcontractors

- Access to the site and places where the subcontractor work is to be carried out, including the reasonable related requirements which belongs to the contractor
- Provision of water and lighting and all other requirements
- To be part of the monthly arranged meeting with the service manager

9.3 Plant and Materials

9.3.1 Specifications

Plant and Materials are defined as items intended to be included in the Affected Property. This refers to replacement of worn or defective parts, routine replacement as part of regular preventative maintenance and supply of spare parts. Therefore, it will be prerogative of the Service provider in consultation with Service Manager how repairs are carried out - can the item be fixed up or must it be replaced by a new one. All new parts should be replaced with original OEM prescribed parts and the quality should be in accordance with SABS, SANS, ANSI standards.

9.3.2 Correction of defects

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Service provider in consultation with Service Manager will decide how repairs are carried out - can the item be fixed up or must it be replaced by a new one. The repairs or replacement must be in line with the service level agreement as stated in the service information **Annex I** to avoid low service damages. Further the defect free liability period will be applicable for any work that has been executed.

9.3.3 **Contractor's procurement of Plant and Materials**

It will be the contractor's responsibility to make sure is to order, codify, expedite, freight, import, transport to the Affected Property and deliver and store procured parts and materials in the correct manner before installation. The Employer may require warranties from suppliers to be in favour of the Employer and not just to the Contractor. The Employer may also need schedules of vendor data for his own use after the end of the service period.

The Contractor will respect OEM warranties to ACSA at all times when procuring spare parts, products or 3rd party services. It will be the Contractor's sole responsibility to ensure that OEM warranty requirements are adhered to at all times.

Where Contractors use or quote on spare parts of a lower quality than recommended by the OEM, or parts not recommended by the OEM, this shall be clearly indicated to the Service Manager on the quotation. This also implies that the Contractor will have to build relationships with the various key OEM's.

The Contractor must adhere to all airport requirements regarding fire, health and safety when procuring replacement parts and/or other equipment or spares.

9.3.4 **Tests and inspections**

The test and inspection will be applicable as per Annex K and including when inspections and tests are to be carried out by agents of the Employer for the new installation, reports and/or certificates must be submitted.

10 Working on the Affected Property

The Contractor must accept and respect the fact that the Airport is continuously undergoing construction and improvement and that a variety of stakeholders are involved in ACSA's business. Therefore, within reason and with prior arrangement with the Contractor, ACSA might require the following from time to time:

- Assisting with emergency repairs on equipment excluded from this Contract
- Assisting with operations relating to breakdowns on equipment excluded from this Contract
- **Re-scheduling of work to accommodate other contractors or operational requirements**
- Allowing access and providing assistance to OEM suppliers to correct defects on equipment and/or systems
- Checking on other contractors in order to reduce risk to BHS System
- Providing access to other contractors
- Attending co-ordination and planning meetings
- Removing rubble and/or equipment from site
- Training of ACSA staff and/or other stakeholders
- Co-operating with ACSA Security relating to security issues
- Use of guards and hoarding is priority to prevent accident on public patrons and stakeholders when working is taking place.
- Notification of works and hot works permits must be acquired from time to time if such works require the need.

The ACSA Service Manager may instruct operational and works procedures to the Contractor as might be required from time to time. The Contractor will instruct his/her staff accordingly and implement measures to ensure that these procedures are strictly adhered to.

10.1 **Employer's site entry and security control, permits, and site regulations**

ACSA CTIA site is regarded as a National Key Point of Entry

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The following National Key Point Requirements shall be adhered to:

- Criminal clearance check
- Zero alcohol tolerance
- Access to site through valid Permits
- Medical Clearance Certification

Service provider staff are not allowed to operate without valid permits at any time and Service Manager has a right to instruct the individuals contravening permit rules to leave the site and the service provider will be held accountable and this may lead to contract termination.

Cell phones and two-way radios

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

The Contractor will not be allowed to use two-way radios at the Airport unless these radios are of the type, model and frequency range as approved by the ACSA IT department.

Protection of the public

The Contractor shall take special care in order not to harm or endanger the public in any way. Work shall be sufficiently hoarded and guarded in order to safeguard children and the general public from injury relating to machinery, work or other.

Barricades and lighting

Where hoarding, barricades or lighting is required in the execution of the Works, the Contractor shall provide same at his/her own expense. Hoarding, barricades and lighting shall comply with industry accepted norms and standards and may not be used for purposes of advertising or any other purpose than safeguarding the Works

10.2 People restrictions, hours of work, conduct and records

ACSA reserves the right to verify all personnel employed under this contract. Furthermore, ACSA reserves the right to order that personnel that are not adequately qualified or suited for this contract are removed from the site. **It is very important that the Contractor to note some restrictions and hours of work may apply to this contract to avoid operation interruption as a result, night work will be unavoidable and the Contractor should price accordingly**

10.3 Health and safety facilities on the Affected Property

Annex J and this part is in C1.3 in this contract

10.4 Environmental controls, fauna & flora

This matter has been dealt with in the general environmental requirements referred to **Annex L**

10.5 Cooperating with and obtaining acceptance of Others

The Contractor's duty is to co-operate with Others as expressed under the service information.

Where the Contractor's work may affect or interfere with the activities of the Employer or Others, it is important that interfaces in respect of physical location and timing are agreed by all parties and shown on the contractor's plan.

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The exchange of information on health and safety matters is particularly important in order to comply with the law as well as with the contract.

10.6 Records of *Contractor's* Equipment

The Contractor shall have all Tools and Special Equipment, necessary for the execution of the works, either on site or readily available at his/her premises and shall be recorded and certified as stipulated per table below. This cover owned or hired equipment's as long it will be used on site i.e Scaffolding, cherry pickers, Ladders, Gas testing equipment

Tool Description	QTY	Date Acquired	Date Return

10.7 Equipment provided by the *Employer*

The Contractor must keep record of all the Tools and Special Equipment including OEM Manuals provided by the employer and be returned in good working condition/ replaced if misplaced after the contract duration has expired.

10.8 Site services and facilities

10.8.1 Provided by the *Employer*

The Contractor shall provide everything else necessary for Providing the Service. The Employer will provide in the way of power, water, telecoms, ablutions, fire protection and lighting (etc)

10.8.2 Provided by the *Contractor*

The Contractor is to provide in the way of accommodation, storage, vehicles and office equipment for its employees and these are not regarded as any restrictions or minimum requirements concerning the Contractor's and shall provide everything else necessary for providing the Service. The facilities upon the expiry of the contract shall be left in conducive/clean state.

10.9 Control of noise, dust, water and waste

Refer to Annex L

10.10 Hook ups to existing works

NONE

10.11 Tests and inspections

Refer to Annex K

11 List of drawings

11.1 Drawings issued by the *Employer*

None of the drawings issued by the *Employer* however OEM manuals with drawings are available for referencing.

Task Order form for use when work within the *service* is instructed to be carried out within a stated period of time on a Task-by-Task basis

Task Order No. [●] service [●]
 To: [●].....
 (Contractor)

(For *Employer*)

(For Contractor)

(For *Employer*)

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ANNEXES to C3 (Service information)

Title	Annex number	Applicable or N/A
Schedule of Equipment	Annex A	Applicable
Equipment commissioning dates	Annex B	Applicable
Equipment life span	Annex C	Applicable
Site information	Annex D	Applicable
Risk assessment	Annex E	Applicable
Previous completed PMs	Annex F	Applicable
Root cause analysis	Annex G	Applicable
Estimated times for breakdowns/faults	Annex H	Applicable
Service Level Agreement	Annex I	Applicable
OHS Act Appointment by Contractor	Annex J	Applicable
Minimum Maintenance Programme	Annex K	Applicable
Environmental Terms and Conditions	Annex L	Applicable
Maintenance of Baggage handling systems Spares List	Annex M	Applicable
ACSA maintenance procedure for Baggage handling systems - D080 008M	Annex N	Applicable
Baggage handling systems – standard operating procedure	Annex O	Applicable
Maintenance of Baggage handling systems – Electrical lockout procedure	Annex P	Applicable
Cape Town International Airport – operating instruction for PLBs	Annex Q	Applicable
Baggage handling systems - Fire Emergency procedure	Annex R	Applicable
IMCC procedure	Annex S	Applicable
Internal and external factors outside the contractor's control	Annex T	Applicable
ACSA Mechanical Standardised Minimum: legal requirements and minimum competency requirements	Annex U	Applicable
ACSA Inventory management procedure	Annex V	Applicable
Guarantees and warranties to be maintained	Annex W	N/A
Contract exclusion	Annex W	Applicable

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ANNEX A**SCHEDULE OF EQUIPMENT**

Item			
	Manufacturer	Make Model	Location
Baggage handling systems			
Check-in counters and conveyors controls	Van de lander and other local suppliers	Can be verified upon contract commencement.	Central Terminal Building
Baggage sortation controls	Daifuku logan and other local suppliers	Can be verified upon contract commencement	Airside Baggage hall
Baggage handling system conveyor controls	SIVACON and various local supplies	Can be verified upon contract commencement	Airside Baggage hall
Chute screens and controls	Engie Equans	Can be verified upon contract commencement	Airside Baggage hall
PLCs	Siemens	Can be verified upon contract commencement	Airside Baggage hall

ANNEX B

Equipment Commissioning Dates

	Check-in counters mechanical conveyors	Baggage sortation mechanical conveyors	Departure carousels	Domestic Arrival Carousels	International Arrival Carousels
2010	17-Mar				
2010					
2010		22-May			
2010			03-Jul		

ANNEX C**Equipment Life Span**

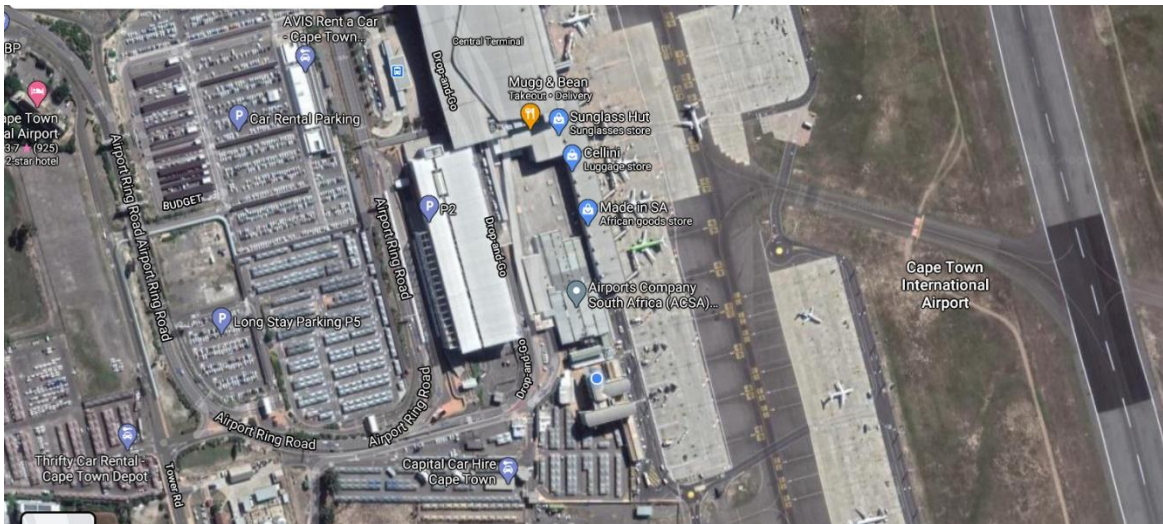
Item	Location	Life Span
Baggage handling systems		
Check-in counters mechanical conveyors	Central Terminal Building	10
Baggage sortation mechanical conveyors	Airside Baggage hall	10
Departure carousels	Airside Baggage hall	24
Domestic Arrival Carousels	Airside domestic arrivals	24
International Arrival Carousels	Airside International arrivals	24

ANNEX D**Site Information****Description**

The *services* are situated on the airside of Cape Town International Airport the services taking place on the aprons within the boundary limits of the Cape Town International Airport.

General Site Conditions

Temperature (Min - Max)	6°C to 40°C
Relative Humidity	15% to 75%
Wind	Varies daily
Height above Sea Level	46 m
Slope (Existing/Modified)	N/A
Seismic	N/A



ANNEX E**Risk assessment****OHS Risks**

#	Department	Tenant / Sub-department	Activity / Task / Service	Risk Name	Risk Description	Control Measure Name	Control Measure Description
1	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	Fire hazard, fatalities	Combustion due hydraulic oil heating up	SWP	Remove all flammable material (papers, plastic etc.) around the oil tank area
2	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	Injuries, fatalities.	Oil spillage	Procedure	ARFF department on standby if required. Contractor to have a spill containment kit to contain the spill, while ARFF is contacted through the IMCC.
3	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	Occupational injury	Flying Objects	Procedure	Eye protection must be worn (Wear of Safety Glasses). Record of receiving PPE is to be kept on file,
4	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	Fire hazard, injuries, fatalities.	Hot work conducted such as grinding, welding	Procedure	Hot work permit be issued prior commencement of work. Fire equipment to be serviceable.
5	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	Occupational injury	Tripping Hazard	Procedure	Demarcate Working Area
6	Operations: M&E	Mechanical	Maintenance of PLBs and ADS	Hearing loss	Noise generated from the aircraft and dollies	Training	Ear protection must be worn. Record of receiving PPE is to be kept on file Airside Induction Training is mandatory prior to receiving a permit to work at the airport. Refresher training is provided every 2 years thereafter.
7	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	Aircraft damage, fatalities	persons and vehicle in the airside	Training	On the job training is performed after Airside Induction Training is received.
8	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	Aircraft damage, fatalities	Moving Machinery	Training, Procedure	Airside Induction Training is mandatory prior to receiving a permit to work at the airport. Refresher training is provided every 2 years thereafter.
9	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	Occupational injuries	Hand Injury	Training, Procedure	Hand protection must be worn (gloves). Record of receiving PPE is to be kept on file. Airside Induction Training is mandatory prior to receiving a permit to work at the airport. Refresher training is

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							provided every 2 years thereafter.
10	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	FOD injected by aircraft, property damage, injuries	Vehicle and tools on at Aprons	Procedure	Area Demarcation during work where applicable and All tools & demarcation to be removed after work
11	Operations: M&E	Mechanical	Maintenance of BHS & Check-in counters	Property damage, vehicle damage, injuries	Driving of vehicles at airside	SWP	AVOP training should be done by drivers with valid driver's license. Vehicles should be deemed serviceable or roadworthy by safety department.

Administrative Risks

Risk Number	Risk Description and Mitigations
1	Safety File not being 100% compliant or safety/environmental infringement could lead to the contractor being taken off site
2	Expired COIDA letter; contractor will be taken off site.
3	Insufficient resources on site to perform the work required roster; low service damages will be levied and failing rehabilitation, the contract will be terminated as specified in this contract
4	Failure to annually present a compliant Tax Clearance Certificate which is considered a material breach of the conditions of this Contract
5	Not meeting set availability target; low service damages will be levied and failing rehabilitation, the contract will be terminated as specified in this contract
6	Not meeting set MTTR target; low service damages will be levied and failing rehabilitation, the contract will be terminated as specified in this contract
7	Spares list not being updated could lead to extended equipment down times; low service damages will be levied, and failing rehabilitation, the contract will be terminated as specified in this contract
8	Root cause analysis not performed could lead to repeated equipment failures; low service damages will be levied and failing rehabilitation, the contract will be terminated as specified in this contract
10	Failure to annually present compliant BEE certificate which is considered a material breach of the conditions of this Contract
11	Contract value being expended before contract expiry date; contract will be terminated
12	Contractor not giving documentation for work assessments and payment on time; Contractor will not be paid on time

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13	Updated and compliant safety file regarding Covid 19 PPE and risk assessment, as per OHS and regulation. low service damages will be levied, and failing rehabilitation, the contract will be terminated as specified in this contract
14	Any change in the law that is reinforced as per clause X2(Changes in the law)

ANNEX F**Previously completed P. Ms**

The list of preventative maintenance previously performed with activities on the baggage handling mechanical conveyors and carousels actual work orders is available on request, ACSA Integrated maintenance centre can be contacted to issue or, the below link can also be used to access these records:

https://airports-my.sharepoint.com/:f:/r/personal/busisiwe_mthimunye_airports_co_za/Documents/Lebogang/OLD?csf=1&web=1&e=Voaky6

Root cause analysis

Root cause analysis must be done for each failure and the form is per below must be handed over after closing any works.

5 WHY	
Date:	Notification Number
<input type="text"/>	<input type="text"/>
Equipment/Machine Name	
Equipment Number/ACSA barcode	
<input type="text"/>	
1. Description of the problem / incident: (describe the end state or effect)	
<input type="text"/>	
<input type="text"/>	
<input type="text"/>	
2. What has caused this problem?	What did you See; Hear; Smell; Feel??
1	
WHY?	Evidence
2	
WHY?	Evidence
3	
WHY?	Evidence
4	
WHY?	Evidence
5	
WHY?	Evidence

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3. What was done to fix the problem or to get the process to continue.

Root Cause

4. Proposed preventative measures

Damage Code

Dirty	
Erratic Operation	
Faulty Indication	
Flow	
Jammed	
Leaks	
Loose	
Noisy	
Out of Control Limits	
Out of Position	
Physically Damaged	
Pressure	
Temperature	
Trips	
Utility/ Service Failure	
Vibrates	
Will Not Reset	
Will Not Run	
Other	

Corrective Activity

Adjusted
Aligned
Calibrated
Cleaned
Investigated
Lubricated
Temporary Mod
Removed
Repaired
Replaced
Reset
Tightened
Setup

Name:

Sign:

ANNEX H**Estimated times for breakdowns/faults**

Item #	Call description	Estimated time to repair/reset (hrs.) as logged in the ACSA system
1	Faulty sensors belts	0.5
2	Faulty sensors carousels	0.5
3	Faulty sensors Sorter	0.5
4	Faulty switches	2
5	Faulty manual coding station, carousel and chutes	2
6	Faulty PLC	5
7	Belt at sortation area lost tracking	1
8	Damaged/loose communication cables	0.5
9	Faulty siren beacon at check in island	0.5
10	Operation panel at check-in area faulty	1
11	Passenger panel at check-in area faulty	1
12	Faulty motor control box (sivacon/LMS)	1
13	Roller shutter door sensors faulty	0.5
14	Power Related faults	2
15	Inverter fault	2
16	Sorter control field devices faulty	2
17	Other: Unforeseen breakdown	
18	Other: Unforeseen breakdown	
19	Other: Unforeseen breakdown	

ANNEX I**Service Level Agreement****1. Performance objectives**

Normal airport operational hours shall be **from 04:00 to 24:00** for every day of the year but will be confirmed/amended by the Service Manager from time to time. Down-time of baggage handling mechanical conveyors and carousels for routine maintenance shall be arranged with the Airport Management Centre three months in advance to suit airport operations. The Contractor must allow for sufficient after-hours work in order for scheduled work not to interfere with airport operations

Minimum Staffing Schedule

The Contractor must maintain the following **minimum** staff available at all times and should price accordingly but not limited to the listed resources:

Skill	Days per week	Hours
Site Manager/Supervisor	Mon-Fri (08:00-17:00) and whenever deemed necessary by the Employer	Mon-Fri (08:00-17:00) and whenever deemed necessary by the Employer
Technician (s) and Assistant Technician (s)	7	Airport operation hours every day

* the service manager will/can adjust the maintenance hours requirements based on the airport operations requirements

*The Contractor must maintain at all times the above **minimum** staff and should price accordingly but not limited to the listed resources.

The Contractor must have additional resources available to attend to lengthy breakdowns or breakdowns of a specialised nature.

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

The Contractor shall schedule staff to complete the preventative maintenance schedule accordingly. The Tenderer must ensure that sufficient allowance for all these items is made for in his/her pricing in the Activity Schedule.

Availability, mean time before failure, mean time to repair and callout response times

The Contractor must comply with the following minimum system performance benchmarks:

The Period of review shall be Monthly.

ACSA has authority to give the contractor the call-out, the authority will be from both IMC and Service Manager.

Service Level table

The following service levels are the minimum acceptable service levels for this contract.

Item	Benchmark*
Baggage handling Overall System - Availability	Availability must be a minimum of 99.5% per month.
Baggage handling Overall System - MTTR	0.517 Hrs.
Baggage handling Overall System - MTBF	48 Hrs.

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% of planned maintenance completed per month	100%
Response time for call outs (after working hours, weekend and holidays)	45- 60 minutes on land side and on the airside (The response time is calculated from the time the contractor receives a call/missed call/voice mail etc. from IMC and sometimes from service manager)
Closure of Planned Maintenance (PM) Work Orders (WO) (Planned by ACSA)	All PM WO shall be closed with 6 working days from date of issuing to contractor, (Issued by ACSA either by mail or manual collection)
Closure of Corrective Maintenance (CM) Work Orders (WO)	All CM WO shall be closed with 1 working day from date of issuing to contractor (Issued by ACSA either by mail or manual collection)

**The PMs' and work Orders' are not closed until all works have been correctly completed and the correct completed documents have been sent to both the IMC and the Service Manager.*

*** Availability, MTTR and MTBF as defined in the IMC procedure.*

Emergency Response time

ACSA deems an emergency as a situation caused by unforeseen circumstance. This is only instances where:

- ❖ Delaying sourcing the required goods,
- ❖ Works or services will result in Loss of life or injury,
- ❖ Reputational harm,
- ❖ Financial losses,
- ❖ Legal consequences,
- ❖ Interruption of essential or
- ❖ Business services and
- ❖ Any other relevant consideration

Below are some of the emergencies identified but not limited to the below list and also the emergency response times:

Item Description	Response Time
In case there is a mechanical or electrical malfunction of the system (check in or BHS) malfunctions.	5 minutes during normal working hours (The response time is calculated from the time the contractor receives a call/missed call/voice mail etc. from IMC and sometimes from service manager)
In case there is a mechanical or electrical malfunction of the system (check in or BHS) malfunctions.	45-60 minutes after hours, weekend and holiday (The response time is calculated from the time the contractor receives a call/missed call/voice mail etc. from IMC and sometimes from service manager)

Guarantees

The defect free period is defined as that period following completion of the work where no defect directly associated with the Contractors workmanship is detected.

Defect free liability period – preventative maintenance	The defect free period will be no less than the interval between preventative maintenance intervals.
Defect free liability period – corrective or breakdown maintenance	The defect free period will be no less than 90 days.
Defect free liability period – project work	The defect free period will be no less than 12 months.

There are no current (the time of this bid) warranties and guarantees on the infrastructure to be maintained by the contractor.

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Assessments and Reviews

- Monthly assessment/review shall be done according to this NEC contract.
- Safety issues and file reviewed quarterly or as per Safety department frequency.
- Contract shall be Audited and Assessed the from time to time.
- The contractor will be assessed and scored quarterly also through the ACSA supplier development system or any other ACSA system.

Low service damagesNotification of Low service damages

The Service Manager will notify the contractor in writing of any Low service damages.

The Service Manager will also notify the contractor of any claims directed and incurred by ACSA as a result of the contractor failure of duties, **this will be for the account of the Contractor.**

The sources of the information shall be all reports and Audit reports which the infrastructure is subjected to(e.g. any authorised ACSA employees and any internal and external audits).

ACSA must notify the contractor in writing of its intention to claim a Low service damages within 30 days of an event or ACSA will lose its right to claim the Low service damages. Should ACSA not claim a Low service damages for an event it shall not be interpreted that the level of performance is acceptable or that ACSA shall not be entitled to claim Low service damages for similar future events. Under no circumstances shall a Low service damages be regarded as the only action ACSA may take against the Contractor or the only amount it may claim from the Contractor.

Low service damages tables

Progressive Punitive low service agreement which are entirely the contractor's fault shall be applied as below:

Item No.	Achieved Overall System Availability per Month	Low service damages amount
1	99.9%	100% Full fixed cost billed, minus any other low service damages included in this contract.
2	99.499% - 94.00%	10% reduction of monthly maintenance & inspection costs minus any other low service damages included in this contract.

****Any availability less than 99.4% for six consecutive months (which is the entirely the contractor's fault) will lead to contract termination.***

Item Description	Low service damages amount
Not meeting system MTTR of 0.517 Hrs (i.e. MTTR >0.517 Hrs).	R10 000/month
Not meet system MTBF 48 Hrs (i.e. MTBF > 48Hrs)	R10 000/month
Not maintaining the required minimum on-site staff requirements.	R2 000.00/position/day
Noncompliance to the Response time for call outs (after working hours, weekend, and holidays) as stipulated in the Service Level and this contract.	R2 000.00/event
Noncompliance of emergency response times as stipulated in the Service Level and this contract.	R2 000.00/event
Occupational health and safety act 85 of 1993 (Non-compliance with the OHS Act and its associated regulations (for example: leaving moving machinery exposed)	R2 000.00/event
Less than 100% of planned maintenance (PMs) completed per month (unless the delay in repair was agreed to by the Service Manager or his/her duly authorized representative or unless the required spares are not available to complete the work).	R4 000/month
<p><i>Note: The PMs' and Work Orders' are not closed until all works have been correctly completed and the correct completed documents have been sent to both the IMC and the Service Manage.</i></p>	

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

Not turning PO into completed works / completion certificate on agreed times lines as stated in Risk register	R4 000.00 / per PO / month
Other occupational health and safety act 85 of 1993 which are criminal offences according to the OHS act	Termination
3 Months Consecutive (monthly on contract period) occupational health and safety act 85 of 1993 of the same offence/class	Termination

Discretionary annual contractor's performance review/assessment will be performed to consider the renewal of contract. Should the contractor's performance deemed below satisfactory the contract will not be renewed upon contract anniversary, therefore the contract will be terminated.

Internal and external factors

A list of some of the internal and external factors which may affect equipment SLAs / availability and are beyond the contractor's control are listed in **Annex T**. In such an event the contractor will not pay for low services damages which were caused by factors which were proven to be beyond the contractor's control.

MAINTENANCE RECORD SHEETS

When maintenance is performed, record sheets must be completed and signed off by both the Technician and an ACSA representative.

These record sheets must be stored for the duration of the contract and should be available for inspection at any time. **The lack of complete history files will result in immediate cancellation of the contract.**

All record sheets, job cards, history reports etc. will stay the property of ACSA and should be available on request. At the end of the contract period a complete set of documentation must be handed over to ACSA.

The contractor shall further provide copies of these record sheets to the ACSA contract manager by the fifth day of every month. **No money will be paid out if record sheets are not handed in.**

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ANNEX J

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

This form is in C1.3 in this contract and must be filled in by the contractor

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ANNEX K

Minimum Maintenance Programme

The Tenderer shall include a suggested maintenance programme that must attempt to cover all requirements under this contract. The below list should be used as a minimum. The responsibility lies with the contractor in ensuring compliance to OEM instructions.

DB Earth leakage test records	Quarterly (Q)
Electrical and Control panel wiring drawings	Yearly (Y)
Sorter and conveyor Interlocks and trip sequence test	Monthly (M)
Maintenance records as per procedure	Monthly (M)/Quarterly/Six Monthly/Yearly
E-Stop System test records	Monthly (M)
Sorter and conveyor siren test records	Monthly (M)

ANNEX L (Contractor to fill in)

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 the Employer. The Employer 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 (the Employer's) Environmental Policy shall be communicated, comprehended and implemented by all appointed Contractor staff.
Storm water, Soil and Groundwater Pollution	<ul style="list-style-type: none"> 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 the Employer immediately. Contractors shall supply their own suitable clean-up materials where required. Washing, maintenance and refuelling of equipment shall only be allowed in designated service areas on the Employer 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> All reasonable measures shall be taken to minimize noise generated on site due to work operations. The Contractor shall comply with the applicable regulations regarding noise.
Waste Management	<ul style="list-style-type: none"> Waste shall be separated as general or hazardous waste. General and hazardous waste shall be disposed of appropriately at a permitted landfill site should recycling or re-use of waste not be feasible. Under no circumstances shall solid or liquid waste be dumped, buried or burnt. Contractors shall maintain a tidy, litter free environment always in their work area. Contractors must keep on file: <ol style="list-style-type: none"> The name of the contracting waste company Waste disposal site used Monthly reports on quantities – separated into general, hazardous and recycled Maintained file of all Waste Manifest Documents and Certificates of Safe Disposal Copy of waste permit for disposal site

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	This information must be available during audits and inspections.
Handling & Storage of Hazardous Chemical Substances (HCS)	<ul style="list-style-type: none"> All HCS shall be clearly labelled, stored and handled in accordance to Materials Safety Data Sheets. Materials Safety Data Sheets shall be stored with all HCS. All spillages of HCS must be cleaned-up immediately and disposed of as hazardous waste. (HCS spillages must be reported to the Employer immediately). All contractors shall be adequately informed with regards to the handling and storage of hazardous substances. Contractors shall comply with all relevant national, regional and local legislation regarding the transport, storage, use and disposal of hazardous substances.
Water and Energy Consumption	the Employer 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.

Low Service Damages

Low service damages shall be imposed by the Employer 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 low service damages to be imposed. The Contractor shall take the necessary steps (e.g. training/remediation) to prevent a recurrence of the infringement and shall advise the Employer accordingly. The Contractor is also advised that the imposition of low service damages does not replace any legal proceedings the Council, authorities, landowners and/or members of the public may institute against the Contractor.

Low service damages shall be between R 200.00 and R 20,000.00, depending upon the severity of the infringement. The decision on how much low service damages to impose will be made by ACSA's (the Employer) Airport Environmental Management Representative in consultation with the Airport Manager or his/her designate and will be final. In addition to the low service damages, the Contractor shall be required to make good any damage caused due to the infringement at his/her own expense.

I, _____ (name & surname) of _____

_____ (company) agree to the above conditions and acknowledge the Employer's right to impose low service damages 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).

ANNEX MMaintenance of Baggage handling system Spares List

Part code	Part description
A447001	Bearing Rod End Assembly.rose coupler
	Nuts nylock M5
N20-4520x1000	4520x1000 Endless flat belt
922266	Bearing 2 Hole Flanged (40 Bore)
SFT40	Bearing 2 Hole Flanged (40 Bore)
40PRRP	Bearing Cap
Guide Bearing 1 917348	Bearing Guide assembly for carousels
G185142	Bearing lower holder for bends
922304	Bearing Pillow Block 40 Dia Eccentric L/C.
922923	Bearing Rose Female-M16X2 Mm LH Thread
922922	Bearing Rose Female-M16X2 Mm RH Thread
922467	Bearing Sealed Spherical Roller
922466	Bearing Self Aligning Double Row
922465	Bearing Self Aligning Double Row
922274	Bearing Self Lube Cast Iron SF40EC
TS1500/100	Grooved ball bearings for curved conveyors
YAR 205-2F	Flange Bearing 25mm
YAR 207-2F	Flange Bearing 35mm
100299	Bearing SNP 40 DEC
G185141	Bearing Upper holder for bends
922262	Bearing-Housed-Flanged-50 B- 4 Hole-Rhp
FYC 205TF	Inside radius Bearings 25mm
FYC207TF	Inside radius Bearings 35MM
922255	Bearings-Flange 25Mm X 2 Hole
924073	BELT "V"(REF: SPA 900)
924923	Belt 1TSS Fastener
FB2150	Belt Finger 2,150 Meter
FB2730	Belt Finger 2,730 Meter
FB2440	Belt Finger 2.440 Meter
FB3010	Belt Finger 3,010 Meter
FB3300	Belt Finger 3,300 Meter
FB3590	Belt Finger 3,590 Meter
FB3870	Belt Finger 3870 Meter
100219	Belt H.T.D.Plus Toothed
BELT/A/LF/1000/50,000/O	Belt Low Friction 1000w x 30,000mm(2,500mm)
BELT/A/LF/1,200/10,000/O	Belt Low Friction 1200w x 05,000mm
BELT/A/RT/1,000/50,000/O	Belt Rough Top 1000w x 25,000mm
BELT/H/RT/0,120/25,000/O	Belt Rough Top 120 x 25,000 - V

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

BELT/A/RT/1,200/60,000/O	Belt Rough Top 1200w x 56,000mm(4,000mm)
BELT/A/ST/1000/3670	Belt smooth
BELT/A/ST/1000/3108/E	Belt Smooth Top
BELT/A/ST/1000/2508 E	Belt Smooth Top
BELT/A/ST/1000/3108/E Zipper	Belt Smooth Top Zipper
BELT/A/LF/1000/5000 E	Belt Low Friction
BELT/A/LF/1000/4580 E	Belt Low Friction
BELT/A/LF/1000/4510 E	Belt Low Friction
BELT/A/LF/1000/4370 E	Belt Low Friction
BELT/A/LF/1000/4820 E	Belt Low Friction
924765	Belt Rough top 3492 LG x 350 Wide
BELT/A/ST/1,000/50,000/O	Belt Smooth Top 1000w x 43,600Mm(8,00mm)
BELT/A/ST/1,200/10,000/O	Belt Smooth Top 1200 x 10,000
BELT/A/LF/1000/04370/E	Flat Belt assy
BELT/L4510/1000	Low Friction Merge belt
924636	Belt-Flat Toothed 85 T, 1190 Lg.Htd
211-07-B01	45 degree flat KT96A (Flat curve)
211-07-B02	60 degree flat KT96A (Flat curve)
211-07-B03	90 Degree Flat KT96A (Flat curve)
	90 degree spiral curve belt KT96V6 Hight diff. =1065mm
212-07-SB01	90 degree spiral curve belt KT96V6 Hight diff. =420mm
212-07-SB02	45 degree spiral curve belt KT96V6 (OOG) =225 Diff
M8x40LG	Bolts allen M8x40LG
FKE 12.9 BOLTS	Bolts Ellen Cap
9365206	Brush Carbon Earth (Ref:Skn Ea 0254892)
9365205	Brush Carbon Phase (Ref:Skn Ph 0254890)
9365229	Brush Potted break unit (break relay)
999641	BRUSH STRIP
936030	Bus Bar Collector - Front
936032	Bus Bar Collector - Rear
928146	Bush-T/L-1610X25Mm
928152	Bush-T/L-1610X40Mm
928177	Bush-T/L-2012 X 40Mm
H748001	Carriage Cassette Flexible Mount.
A689001	Carriage Cowl (end cover assembly)
A435002	Carriage Link Assembly 1200 Pitch
	Carrousel chain links
5m.SH Chain ISO.08B1	Chain
	Master chain link
06B--1X10FT	Chain
	Chain
FR100027	Chain links moving platform carousel
140M-D8N-C16	Circuit Breaker - 16.0A

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C60HC320	Circuit Breaker 3 pole 20A
C60HB110	Circuit Breaker 1 pole 10A B Type
C60HB101	Circuit Breaker 1 pole 1A B type
C60HC120	Circuit Breaker 1 pole 20A C type
C60HC140	Circuit Breaker 1 pole 40A C type
C60HC104	Circuit Breaker 1 pole 4A C type
C60HB106	Circuit Breaker 1 pole 6A B type
C60HC106	Circuit Breaker 1 pole 6A C type
C60HC110	Circuit Breaker 1pole 10A C type
C60HC204	Circuit Breaker 2 pole 4A C type
C60HD325	Circuit Breaker 3 pole 25A D type
C60HD332	Circuit Breaker 3 pole 32A D type
C60HD340	Circuit Breaker 3 pole 40A D type
C60HC304	Circuit Breaker 3 pole 4A C type
C60HD350	Circuit Breaker 3 pole 50A D type
C60HD306	Circuit Breaker 3 pole 6A D type
30403	Circuit Breaker 3 pole Compact NS160N
140M-C2E-B25	Circuit Breaker Motor : 1.6 - 2.5A (0.75kW)
140M-C2E-B40	Circuit Breaker Motor : 2.5 - 4.0A (1.1/1.5kW)
140M-C2E-B63	Circuit Breaker Motor : 4.0 - 6.3A (2.2kW)
GV2-ME16	Circuit Breaker Motor 9.0-14.0A
254895	Guide wheels for collectors
22.F5.G0R-960A	Combivert F5-G - 55kW
ZB4-BZ102	Contact Body - 1NC
ZB4-BZ103	Contact Body - 2NO
ZB4-BZ105	Contact body 1NO/1NC
LC1-D25P7	Contacteur 11kW(25A) 230V(50/60Hz)
LP4-K0910BW3	Contacteur 4kW (9A) 24V - 1NO
100-K09DJ10	Contacteur 4kW(9A) 24VDC
LP4-K1210BW3	Contacteur 5.5kW(12A) 24VDC(LC)
LC1-D150P7	Contacteur 75kW(150A) 230V(50/60Hz)
GV-AE11	Contacteur auxiliary front GV2-ME 1NO/1NC
140M-C-AFA11	Contacteur Auxiliary Front mount - 1NO/1NC
140M-C-ASA20	Contacteur Auxiliary Side mount - 2NO
XAL-K178E	Emergency stop 1NC/1NO
946046	Encoder Strip Screen Printed 1200 P
946446	Encoder Strip Screen Printed 1200 P
9365239	Flying lead - 1200 carriage
Fuse	Fuse 1.5 A 5x20 cartridge
Fus+A184e2A	Fuse 2A Mini
13394	Fuse 500mA 10 x 38 cylindrical
254903	Guide Wheels for SKN, SWN
P13433	Chute end roller
TO-215679/I1/SVB	Isolator main switch
TO-22003006	Isolator socomec circo M2

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VBS40258818	Joint kit KSL4 Bolted joints
258754	Line feed special KNKL 4/60 (busbar power inlet)
	Mechanical Spares
9365234	Modem Power Cable
951310	Motor SEW 0.75 KW, Grd 173 rpm
951318	Motor SEW 0.75 KW, Grd 31 rpm
951200	Motor SEW 0.75 Kw,(0.5 M/S) Braked 72 rpm
951207	Motor SEW 0.75 Kw,(0.8 M/S) 119 rpm
951202	Motor SEW 0.75 Kw,(0.8 M/S) Braked 117 rpm
951203	Motor SEW 0.75 Kw,(1.0 M/S) Braked 154 rpm
951215	Motor SEW 1.1 Kw,(0.5 M/S) 72 rpm
951210	Motor SEW 1.1 Kw,(0.5 M/S) Braked 72 rpm
951217	Motor SEW 1.1 Kw,(0.8 M/S) 120 rpm
100KFA22Z	Contact Block for 100-K09 (2NO)
951237	Motor SEW 1.1 Kw,(0.8 M/S) 72 rpm
951212	Motor SEW 1.1 Kw,(0.8 M/S) Braked 120 rpm
951232	Motor SEW 1.1 Kw,(0.8 M/S) Braked 72 rpm
951213	Motor SEW 1.1 Kw,(1.0 M/S) Braked 155 rpm
951220	Motor SEW 1.5 Kw,(0.5 M/S) Braked 71 rpm
951227	Motor SEW 1.5 Kw,(0.8 M/S) 119 rpm
951222	Motor SEW 1.5 Kw,(0.8 M/S) Braked 119 rpm
GM/SEW/R47/1.5/176/004	Motor SEW 1.5 kW Grd 176 rpm
GM/SEW/R47/1.5/203/001	Motor SEW 1.5 kW Grd 203 rpm
951250	Motor SEW 2.2 Kw,(0.5 M/S) Braked 46 rpm
951257	Motor SEW 2.2 Kw,(0.8 M/S)
951252	Motor SEW 2.2 Kw,(0.8 M/S) Braked
GM/SEW/KA47/2.2/120/007	Motor SEW 2.2 kW 0.8m/s Grd 120 rpm
GM/SEW/KA47/2.2/120/008	Motor SEW 2.2 kW 0.8m/s Grd 120 rpm
951265	Motor SEW 3.0 Kw,(0.8 M/S)
SA47TDT90L4,	Motor SEW 1.5 KW Type RPM 194, Ratio 7.28, Shaft Dia 30mm
SA47TDT80N4,	Motor SEW 0.75 KW Type: RPM 190, Ratio 7.28, Shaft Dia 30mm
SA47TDT80K2,	Motor SEW 0.75 KW Type: RPM 2800/259 Ratio 10.8, Shaft Dia 30mm
SA47TDT90S4,	Motor SEW 1.1 KW Type:RPM 192, Ratio 7,28, Shaft Dia 30mm
SA57TDT90L4,	Motor SEW 1.5 KW, Type:RPM 1410/117 Ration 12, Shaft Dia 30mm
SA57TDT90L4 / BMG,	Motor SEW 1.5 KW, Type: RPM 1410/194, Ratio 7,28, Shaft Dia 30mm
SA57TDT90S4 / BMG,	Motor SEW 1,1 KW, Type:RPM 1400/130 Ratio 7,28, Shaft Dia 30mm
440R-N23126	MSR127T safety relay (3NO + 1NC)
546-3068	N-Type to SMA female adaptor
45X75X8cc	Oil seal
999818	Perspex tow plate
999480	Pivot arm rubbers / Anti Vibration Pads

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	RIVET BLIND 3mm
D866001	Idling Roller
W267002	Roller Drive Pulley
W213002	Roller Drive Pulley 124.5 D,1135 O/S,1513L
W213001	Roller Drive Pulley 124.5 D,935 O/S,1313L
W267001	Roller Drive Pulley 218 Dia,1010 O/S,1359L
A686001	Roller Drive Pulley Assembly
A554002	Roller Drive Pulley Lagged 1010 O/S,1359 L
A554005	Roller Drive Pulley Lagged 1210 O/S,1559 L
D711002	Roller Drive Pulley-Lagged 124.5 D,1225 L
A555002	Roller End 127 Dia X 153.5 O/Shaft.
A555001	Roller End 127 Dia,140 O/Shaft.
229SA57	Roller for curve conveyor
958315	Roller PULLEY BELT "V" (REF: SPA 100)
958640	Roller Pulley Htd 28 Tooth X 2012 Bore
961000	Roller Return 60 D,1010 RI,1025 Agl
961001	Roller Return 60 D,1210 RI,1225 Agl
C704003	Roller Snubber 76.1 Dia X 1025 Long
C704006	Roller Snubber 76.1 Dia X 1225 Long
D866007	Roller Stub Shaft Pulley 100 Dia,1164 Lg
D866008	Roller Stub Shaft Pulley 100 Dia,1364 Lg
D866002	Roller Stub Shaft Pulley 124.5 Dia,1355 Lg
A556001	Roller Take Up 100 Dia,130 O/Shaft.
A422001	Take Up Roller Assy 100 Dia,1025 L
A685001	Roller Take Up Pulley.
961004	Tension Roller Takeup 89 D,1010 O/B,1100 Lg
Rollers 1.2 Meter	Rollers for roller table 1.2 meter
Rollers 1.22 Meter	Rollers for roller table 1.22 meter
22205E	SKF Explorer Bearing
526-0308	SMA assembly RG174 cable (1m)
	Sprocket
938933	Stud 9 Mm Panex Recess Head / DZUS bolt
FR300259	Support travers
RE7-TP13BU	Timer On Delay DPDT
A438001	Tipper Distribution Cassette 1200 P
A436001	Tipper Master Cassette Assy 1200 P
A462001	Tipper Pivot Arm Assembly.(Rear).
A462002	Tipper Pivot Arm Assembly.(Front).
A437001	Tipper Slave Cassette Assy 1200 P
339-400-190	Panex Receptacle 9mm-riveted
A478002	Tipper Undercarriage of tray/Sorter under carriage tray
A690002	Top Cover (For 1200 Long Carriage)
100131	Transformer 10kVA - 400V/220V
100132	Transformer 2kVA 3P - 400V/220V

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999906	Tray Curved Edge-1200 Fireretardent
938934	Washer Nylon Retaining .
972437	Wheel Tyred 50 Dia,12 Bore,15 W-Red
972439	Wheel.Tyred 101.6 mm Dia
972438	Wheel.Tyred 50 mm Dia
9365237	Wires Earth for carriage
502150	Carousel Slats / Flexible Slats
H800001	Collector Cable Pick Up Anchor / Cable Tie Clamp
206226-1	Locking Nut for Elect + Comms leads of Sorter Cassette.
101648	Nylon blocks/sliding friction piece
FR101196	Caterpillar pusher dog drive chain assembly
951130	LIM motor capsule - Linear Induction motor
951102	Linear Induction Motor
91490	Pathfinda 2011 35mm bearing housing
91494	Pathfinda 2011 25mm bearing housing
91491	Pathfinda 2011 Tail shaft
91492	Pathfinda 2011 Drive shaft
91493	Pathfinda snub roller shaft
O2209	Bearing SFT40 2 Hole e .collar
O2158	Bearing self aligning 2207 2RS 35mm
O2159	Bearing self aligning 1305 25mm
73991BLUE	Rubber disc 4 "diameter 30mm square bore"
11651 / 11648	Intralox Series 400 ARB Belt overlenght 1.0m
11600	Intralox sprocket 12T Acetal 7.8 400 Series Sq Bore
11601	Intralox retainer ring 40mm
91487	Parthfinda wear finger
SA4177	Conveyor carryway assembly Roller
W4720 KTM4 - FM804	Terminal Block (SEW motor terminals)
	SEW No
	KA47/TDT80N4/BMG/HF
	KA47/TDT80N4/BMG/HF
	KA47/TDT80N4/BMG/HF
	KA47/TDT80N4/BMG/HF
	KA47/TDT80N4/BMG/HF
	KA47/TDT80N4
	KA47/TDT80N4
	KA47/TDT90S4/BMG/HF
	KA47/TDT90S4/BMG/HF
	KA47/TDT90S4/BMG/HF
	KA47/TDT190S4
	KA47/TDT90S4
	KA47/TDT90L4/BMG/HF

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	KA47/TDT90L4/BMG/HF
	KA47/TDT90L4
	KA47/TDT90S4/BMG/HF
	KA47/TDT90S4
	KA57/TDV100M4/BMG/HF
	KA47/TDTV100M4/BMG/HF
	KA47/TDV100M4
	KA57/TDV100L4
	SA47/TDT90L4
	KA47/2.2/120/007
	R27DT80N4
	R47/1.5/176/004
	R47/1.5/203/001
	R47/2.2/291/003
	SA47/TDT80N4
	SA57/TDT90S4/BMG

13 Check-in counters spares list

No.	Item Description
1	BALL BEARING - ROLLER SHUTTER DOORS
2	Carousels - Arrival - 3P Switch Enclosure ACZ1A 16 A - P/No.GAZ016
3	Check-In System - 18 Roller Door Slat -P/No. 008200-06367
4	Check-In System - Epic H-A 3 MTGVB M20 N.Gen - P/No. 19512-100
5	Check-In System - Epic H-A 3 MTGVB M20 N.Gen - P/No. 19512-900
6	Check-In System - H-A 3 Pin/Socket Insert Female - P/No. 1042-1000
7	Check-In System - Human Intervention PEC - P/No.ML100-55-5573/247209
8	Check-In System - Human Intervention Reflectors BRT-92x92c - P/no.49808
9	Check-In System - Human Intervention Reflectors MH82 - P/no.127831
10	Check-In System - Human Intervention Siemens Flashing lights P/No.8WB4 420-5EB
11	Check-In System - Long Range PEC - P/No.RL28-55-las/76A/82B/105/110
12	Check-In System - Olflex Classic 110 Cable - P/No.1119-308
13	Check-In System - Sensor Cable Plug M8 P/No.sspc3k/8004831
14	Check-In System - UPS Batteries
15	Check-in System - 18 Aluminium Hollow Bottom Slat 75 - P/No. 008200-06361
16	Check-in System - 18 Aluminum Profile - P/No. 008200-06360
17	Check-in System - 2 Channel ASI Gateway VBG PB K20 DMD - P/No. 005303-00502
18	Check-in System - 4519 Guide Rail URF 95 -P/No. 008200-06356
19	Check-in System - ASI Afsluitweerstand VAZ TERM - P/No. 005303-00517
20	Check-in System - ASI Cable Coupler VAZ-2FK-B3 - P/No. 006002-14980
21	Check-in System - ASI Power Supply 4Amp VAN 115/230AC-K17 - P/No. 005303-00512
22	Check-in System - ASI Tap-off Cable M12 L=2m st. Vaz-2t1-fk-2m-pur-v1-g - P/No. 006002-14918
23	Check-in System - ASI to M12 Tap-off Connector VAZ-G6F-V1 - P/No. 006002-14926
24	Check-in System - ASI-Bus Mod M 8 4xI/4xQ ExT24V M12 VAA-4E4A-G16-ZEJ/E2LASI2.1 - P/No. 005303-00534
25	Check-in System - ASI-Bus Module 4xI/4xQ Screw VAA-4E4A-KE-ZE/E2 - P/No. 005303-00536
26	Check-in System - Actuator Mushroom Shaped Push- 3SB3000-1HA20 - P/No. 006013-10375
27	Check-in System - Actuator Mushroom Shaped Push- 3SB3400-OC - P/No. 006013-10376
28	Check-in System - Actuator Pushbutton with Flat 3SB30000AA11 - P/No. 006013-10300
29	Check-in System - Actuator with 1 Contact 1NC 3SB34000C - P/No. 006013-10309
30	Check-in System - Actuator with 1 Contact 1NO 3SB34000B - P/No. 006013-10308
31	Check-in System - Alusolid Aluminium Slat RM0810 - P/No. R 3464-001
32	Check-in System - Aluvista End Locks Nylon Left BT1370 - P/No. R 3464-004
33	Check-in System - Aluvista End Locks Nylon Right BT1380 - P/No. R 3464-005

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

34	Check-in System - Assy 2D Chain L=1010 mm - P/No. 0L8340-00004
35	Check-in System - Assy Flat Carrier Width=1000 Clockwise/ Anti - P/No. 0L8327-00001
36	Check-in System - Assy Pressure Roll - P/No. 0L8344-00001
37	Check-in System - Assy Tension Pulley 205mm - P/No. 0L8343-00001
38	Check-in System - Assy Tilted Carrier 25deg - P/No. 0L8329-00001
39	Check-in System - Assy Wheel 90 - P/No. 0L8342-00001
40	Check-in System - Assy Wheel Pressure Unit 3 Wheels - P/No. 0L0439-00003
41	Check-in System - Aux Switch Block DIN EN 50005 3RH19211MA02 - P/No. 006011-01642
42	Check-in System - Aux Switch Mount 2S T=70 5ST3011 - P/No. 006012-05490
43	Check-in System - Auxil. Switch laterally fitt. 3RV1901 - 1B - P/No. 006011-02526
44	Check-in System - Battery Back-Up 3,6V 0,85Ah 6ES79711AA000AA0 - P/No. 005302-10190
45	Check-in System - Bearing Ball 6003/2RS-C3-17 ISI15-1981 - P/No. 004904-00404
46	Check-in System - Bearing Ball 6006/2RS-C3-30 ISO15-1981 - P/No. 004904-00407
47	Check-in System - Bearing Ball 6204/2Z-CN-20 ISO15-1981 - P/No. 004904-00705
48	Check-in System - Bearing Ball 6205/Z-C3-25 ISO15-1981 - P/No. 004904-00606
49	Check-in System - Bearing Ball 6206/2ZR-C3-30 ISO15-1981 - P/No. 004904-62061
50	Check-in System - Bearing Ball 6308/2ZR-C3-40 ISO15-1981 - P/No. 004904-63081
51	Check-in System - Bearing Block Flange Rnd PME-50 N - P/No. 004931-00850
52	Check-in System - Bearing Block Flange Sqr PCJ-35 - P/No. 004931-00335
53	Check-in System - Bearing Safety Cap DIA35 KA SK 07 B - P/No. 004931-11035
54	Check-in System - Bearing Slide Flange BP25C 16/20X16 Porous Bronze Kr.27x3 - P/No. 004901-00165
55	Check-in System - Bearing Slide Flange BP25C 22/29x18 Porous Bronze - P/No. 004901-00205
56	Check-in System - Belt Edge Holder Bottom for TS 1600 - P/No. G401564
57	Check-in System - Belt Edge Holder Top for TS 1600 - P/No. G401562
58	Check-in System - Belt Flexam 2X0281 FR W=1000 Prepared Flame Retardant - P/No. 004405-10032
59	Check-in System - Belt Flexam EX 10/2 0+A32 W =1000 Black AS FR Endless - P/No. 004406-10012
60	Check-in System - Belt Protection Drawing y-029 Alum. Right - P/No. 000470-02901
61	Check-in System - Belt Protection Drawing y-030 Alum. Left - P/No. 000470-03001
62	Check-in System - Blind Plug (for M12 Sockets) VAZ-V1-B - P/No. 006002-14972
63	Check-in System - Brush for SPO Left Side - P/No. 006881-30230
64	Check-in System - Brush for SPO Right Side - P/No. 006881-30231
65	Check-in System - Cable M12 Male 3p/M12 Female 3p/H.F./L=0,2mtr - P/No. 006002-13705

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

66	Check-in System - Cable M12 Male 4p/M12 Female 4p/H.F./L= 3mtr - P/No. 006002-13684
67	Check-in System - Cable M12 Male 4p/M12 Female 4p/H.F./L= 5mtr - P/No. 006002-13682
68	Check-in System - Cable M12 Male 4p/M8 Female 4p H.F./L 1mtr - P/No. 006002-13672
69	Check-in System - Cable M12 Male 4p/M8 Female 4p H.F./L= 2mtr - P/No. 006002-13670
70	Check-in System - Cable M12 Male 4p/M8 Female 4p H.F./L= 3m - P/No. 006002-13668
71	Check-in System - Cable M12 Male 4p/M8 Female 4p H.F./L= 7mtr - P/No. 006002-13671
72	Check-in System - Cable M12 Male 4p/M8 Female 4p H.F./L=10mtr - P/No. 006002-13663
73	Check-in System - Cable M8 3p Male/M8 4p Female H.F./L=2mtr - P/No. 006002-13930
74	Check-in System - Central Processor Unit CPU319 - P/No. 005302-10130
75	Check-in System - Chain Conn Sim DIN8187-08B-1 Type 26 1/2x5/16 - P/No. 004821-03102
76	Check-in System - Chain Conn Sim DIN8187-12B-1 Type 26 3/4x7/16 - P/No. 004821-03104
77	Check-in System - Chain Guide 54x16 - P/No. 006881-10000
78	Check-in System - Chain Sim DIN8187-08B-1 1/2x5/16 for Take Up - P/No. 004821-10102
79	Check-in System - Channel Connection TF - P/No. 006881-00204
80	Check-in System - Circuit Breaker 2Amp 5SY4402-7 - P/No. 006012-07585
81	Check-in System - Circuit Breaker 10Amp 5SY4210-8 - P/No. 006012-07604
82	Check-in System - Circuit Breaker 25A 4 P 5SY4425-6 - P/No. 006012-07456
83	Check-in System - Circuit Breaker 3P/2A/C 5SY4302-7 - P/No. 006012-07565
84	Check-in System - Circuit Breaker VL 160N Stand 3VL27161EE430AB1 - P/No. 006013-10421
85	Check-in System - Circuit breaker 10KA 3POL B6 5SY44306-6 - P/No. 006012-07433
86	Check-in System - Circuit breaker 4,5,6,3A 3RV10211GA10 - P/No. 006011-02517
87	Check-in System - Cladding Connection TF/TT PE48DB/Perfo/Adh - P/No. 006881-00141
88	Check-in System - Complete Control Cabinet - P/No. R004560-010
89	Check-in System - Complete Unit Rnd Ind Light W 3SB3244-6AA60 - P/No. 006013-10324
90	Check-in System - Complete Unit Rnd Ind Light W 3SB32446AA40 - P/No. 006013-10322
91	Check-in System - Complete Unit Rnd Light Blue 3SB32446AA50 - P/No. 006013-10323
92	Check-in System - Contactor 4p-230V-11kW 3RT13261AP00 - P/No. 006011-01780
93	Check-in System - Control Box 180x110x165mm PK 9516.000 - P/No. 006003-02956
94	Check-in System - Current Transformer 400/1A RM60-E3A 4M2418N - P/No. 006002-03052
95	Check-in System - DIA60 Gravity Roller with Spring st/hex11 EL=1080 - P/No. 001090-11080

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

96	Check-in System - DIA60 Roller AGL= 453mm Axle=DIA17 - P/No. 001093-00453
97	Check-in System - DIA71 Driven Roller - P/No. 059005-123-01191
98	Check-in System - Digital Input Module 32x24VDC 6ES73211BL000AA0 - P/No. 005302-10270
99	Check-in System - Digital Output Module 32x24VDC 6ES73221BL000AA0 - P/No. 005302-10271
100	Check-in System - Drive Pulley Conical for TS 1600-105 FH Inside Drive RN=1000 mm BN=1100 mm DWAN=30 mm - P/No. U1008659-V009
101	Check-in System - Drive Pulley Conical for TS 1600-105 FH Outside Drive RN=1000 mm BN=1100 mm DWAN=30 mm - P/No. U1005030-V0001
102	Check-in System - Drive Pulley DIA100 - P/No. 0L0789-01318
103	Check-in System - Drive Pulley DIA150 Crowned SA57/KAZ47 - P/No. 011507-481-51430
104	Check-in System - Drive Pulley V-Belt STC 205mm Type TB-12-PL - P/No. 004868-00100
105	Check-in System - Electrical Fan 230V 230m? SK3325.107 RAL7035 - P/No. 006003-02003
106	Check-in System - Emergency Cover Plate - P/No. 006881-00218
107	Check-in System - Emergency Relay 3TK28211CB30 - P/No. 006002-00150
108	Check-in System - Emergency Relay 3TK28301CB30 - P/No. 006002-00152
109	Check-in System - Emergency Stop in Enclosure with key - P/No. 0E1025-00002
110	Check-in System - Emergency Stop in Enclosure without Key - P/No. 0E1025-00001
111	Check-in System - Flange Bearing DIA40 2 Hole - P/No. N400063
112	Check-in System - Flat Cable Entry Bushing RA-C1-DF - P/No. 006010-00216
113	Check-in System - Flexam EX 8/2 0+A20 Black AS FR W=550 Endless - P/No. 004412-05512
114	Check-in System - Frontplate Alum. 1 Pos XAP-E301 - P/No. 006001-10474
115	Check-in System - H-A 3 Pin/Socket Insert Male - P/No. 1042-0000
116	Check-in System - Housing for XAP-E301 XAP-E901 - P/No. 006001-10475
117	Check-in System - JP 70 415/420V Electric Operator - P/No. R 3464-007
118	Check-in System - JP 70 Roller Shutter door Motor 380V - P/No. R3463-007
119	Check-in System - LMS DOL-1D/HanQ5/230Vac Brake RA-MO-005400-50006 - P/No. 005400-50006
120	Check-in System - LMS DOL-2D Con.Q5 Brk.230 RA-MO2.1-W4(230)/C3A-061 V2.4 - P/No. 005400-50016
121	Check-in System - Loadcell Cable LCC - P/No. R 3298-006
122	Check-in System - Loadcell OIML 65023-500kg - P/No. R 3298-001
123	Check-in System - Locking Part for Belt Edge Holder TS 1600 Grey - P/No. G1009427-V0001
124	Check-in System - Loctite 243 Nut Lock 50ml - P/No. 007232-00242
125	Check-in System - Logic module LOGOI 6ED1-052-1MI - P/No. 005303-00070
126	Check-in System - Main Control Switch 4P IU=32 3LD2203-1TL51 - P/No. 006013-10400
127	Check-in System - Miniature Circuit Breaker 2 400V 5SY61066 - P/No. 006012-05401
128	Check-in System - Miniature Circuit Breaker 400V 5SY4206-6 - P/No. 006012-07421

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

129	Check-in System - Miniature Circuit Breaker 400V 5SY4210-6 - P/No. 006012-07422
130	Check-in System - Miniature Circuit Breaker 400V 5SY4216-6 - P/No. 006012-07424
131	Check-in System - Monitoring Relay 3UG4512-1BR20 - P/No. 006011-01762
132	Check-in System - Motor Cable Local DOL Halogen Free L=10m - P/No. 006010-00168
133	Check-in System - Motordrive - P/No. R004560-009
134	Check-in System - Motordrum 00TL135 D=30 F=20 0,37KW /EURO/0,63 RL=554+ Cable - P/No. 000108-25563
135	Check-in System - Motordrum 99TL113 D=30 F=20 0,18KW /EURO/0,35 RL=570+ Cable - P/No. 000106-25735
136	Check-in System - O-ring 43, 4x3,6 NBR 70 Sh A - P/No. 006881-03825
137	Check-in System - Operator Panel-ABS950 OP950 - P/No. R 3298-003
138	Check-in System - PA End Lock - P/No. 008200-06366
139	Check-in System - PDC Cable - P/No. R 3298-005
140	Check-in System - PPI Sensor Assy - P/No. 0L9196-00001
141	Check-in System - PPI Sensor Wheel - P/No. 006881-00123
142	Check-in System - Panel PC P1515 Panel PC VI Config - P/No. 005302-20800
143	Check-in System - Passenger Panel-ABS950 PP950 - P/No. R 3298-004
144	Check-in System - Pedestal Bearing DIA35 - P/No. N1004192-V0001
145	Check-in System - Photoswitch Incl Reflector E3Z-KIT-42-VI= E3Z-R86+E39-R42 - P/No. 006002-14450
146	Check-in System - Power Cable LMS Halogen Free Cable L= 5000mm - P/No. 006010-00192
147	Check-in System - Power Supply 120/230V - 24V20A 6EP13362BA00 - P/No. 005510-00463
148	Check-in System - Power Supply PS950 - P/No. R 3298-007
149	Check-in System - Printboard AS-130 - P/No. R004560-008
150	Check-in System - RJ45 Mounting Frame 1689433 - P/No. 005301-00496
151	Check-in System - RJ45 Socket Insert 1653155 - P/No. 005301-00495
152	Check-in System - RU 5 x 400 mm Left BT0720 - P/No. R 3464-006
153	Check-in System - Relay Terminal PLC-RSC-24DC/21 No:2966171 - P/No. 006005-00900
154	Check-in System - Return Idler - P/No. G1009600
155	Check-in System - Ring Ret Shaft A20, DIN471 Ck 75 - P/No. 002746-00020
156	Check-in System - Ring Ret Tlock 2513-75 - P/No. 004840-90035
157	Check-in System - Rosta Tension Element SE-18 Conform - P/No. 004785-00018
158	Check-in System - Rubber Insert Bottom -P/No. 008200-06392
159	Check-in System - S 67 DV100M 4/ 2/ 2,20/ 41/ M6A/ 0/ EURO/ - P/No. 000081-00406
160	Check-in System - SK02050AZ D B H-80L4 Bre 10 HL 0,75/193/H3A/0 DEG - P/No. K1003847-V0024
161	Check-in System - SK02050AZ D B H-80L4 Bre 10 HL 0,75/193/H3B/0 DEG - P/No. K1003847-V0026
162	Check-in System - SK02050AZ D B H-90S4 Bre 20 HL 1,10/196,H3B/ 0 DEG - P/No. K1003847-V0025
163	Check-in System - SK02050AZB-80S4 / 0,55/ 146 / H3A/ 4/EURO/B/ Axle=DIA30 - P/No. 000704-11463

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

164	Check-in System - SK12063AZB-90L4 / 1,5/ 91 / H3A/ 4/EURO/B/ Axle= DIA35 - P/No. 000707-10913
165	Check-in System - SK12080-31-REP165 - P/No. P918-11071992056
166	Check-in System - Side Slat CW 470x155 T300NZ - P/No. 006881-00221
167	Check-in System - Signal Column Connect Element 8WD44080AA - P/No. 006013-10284
168	Check-in System - Signalling Column Siren Element 8WD44200EA - P/No. 006013-10271
169	Check-in System - Signalling Light Yellow 24V 8WD44200CD - P/No. 006013-10254
170	Check-in System - Sirius starter size S00, 9A, 3RW3016-1CB04 - P/No. 005400-10220
171	Check-in System - Slat TF SBR-6-B1 W=1000CW/CCW with Flex NOK - P/No. 006881-00233
172	Check-in System - Slat TT SBR-6-B1 W=1200CW - P/No. 006881-00229
173	Check-in System - Spare Belt for Belt Curve Conveyor TS 1600-105 YG=KT 96 RN=1000mm BN=1100mm wN=30DEG - P/No. U1009423-V0031
174	Check-in System - Spare Belt for Belt Curve Conveyor TS 1600-105 YG=KT 96 RN=1000mm BN=1100mm wN=90DEG - P/No. U1009423-V0001
175	Check-in System - Special Chain for Take Up - P/No. 059005-024-02413
176	Check-in System - Special Chain for Take Up - P/No. 059005-024-02425
177	Check-in System - Spring Carrier Bolt 2-D Chain Triplaner - P/No. 001693-41011
178	Check-in System - Spring Torsion DIA2,8mm 50668 - P/No. 001690-01025
179	Check-in System - Stabilized Power Supply Input 6EP1333-2AA01 - P/No. 005510-00461
180	Check-in System - Standard Aluminium Guide Plain RM2030 - P/No. R 3464-002
181	Check-in System - Subcon-Plus-Profib/PG/SC Profibus Art.2708245 - P/No. 005302-30021
182	Check-in System - T-Bar Aluminium + WStrIP DA0060 - P/No. R 3464-003
183	Check-in System - Tail Pulley Conical for TS 1600-105 FH RN=1000 mm BN=1100 mm - P/No. U1005044-V0001
184	Check-in System - Take Up Pulley DIA100 Cylinder - P/No. 059005-135-01180
185	Check-in System - Take Up Pulley DIA55 Crowned A =620 - P/No. 0L4400-40550
186	Check-in System - Take Up Pulley DIA55 Crowned A =620 - P/No. 0L4400-90550
187	Check-in System - Take-up Pulley DIA103 Crowned A=1027mm Axle=DIA40 - P/No. 011507-605-11027
188	Check-in System - Take-up Pulley DIA103 Crowned A=1060mm Axle=DIA40 - P/No. 011507-605-01060
189	Check-in System - Take-up Pulley DIA71 - P/No. 011507-611-01170
190	Check-in System - Temperature Regulator SK3110 - P/No. 006003-02498
191	Check-in System - Tension Roll 50mm - P/No. 0P9794-00001
192	Check-in System - Time-Counter for Distribution Board 7KT5801 - P/No. 006011-01765
193	Check-in System - Trimmer Box LC550 - P/No. R 3298-002
194	Check-in System - Triplanar Wheel 55 6004-2Z TP Low Noise - P/No. 0K4508-00002
195	Check-in System - UPS-APC SUA1500I - P/No. 006002-20000

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

196	Check-in System - V-Belt 3492-PL-12 Rippen Type: HUTCHISO - P/No. 004888-34923
197	Check-in System - Varistor AC127.240V DC150 250V 3RT19261BD00 - P/No. 006011-01628
198	Check-in System - Varistor AC24 48V, DC 24 70V 3RT1916-1BB00 - P/No. 006011-01626
199	Check-in System - Vertical Chain Pin - P/No. 0P9754-00001
200	Check-in System - Wheel Nylon PL80/30/112 (80x30x12) - P/No. 000760-10080
201	Check-in System-Ball bearing-P/No. 008200-62713
202	Checklin System - M20 Glands - P/No.53111-020
203	Lovato Foot Pedals
204	Main Panel Filter Material
205	RECEIVER -TRANSMITTER
206	RUN-IN ROLLER SET LEFT
207	RUN-IN ROLLER SET RIGHT
208	Roller Shutter Door Limit Units
209	Roller Shutter Door Motors
210	Security Check Point Carrier Bearing
211	Security Check Point Geared Pully
212	Security Check Point Plastic Chain
213	Security Check Point Shaft
214	Security Check Point Single Phase Motor 0.18kW

ANNEX N

ACSA maintenance procedure for Baggage handling system - D080 029M

- Available upon request from the ACSA service manager

ANNEX O

Baggage handling system – standard operating procedure

Available upon Request from the ACSA service manager

ANNEX P

Maintenance of Baggage handling system – Electrical lockout procedure

Available upon Request from the ACSA service manager

ANNEX Q

Cape Town International Airport – operating instruction for Baggage handling system

Available upon Request from the ACSA service manager

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

ANNEX R

Baggage handling system - Fire Emergency procedure

Available upon Request from the ACSA service manager

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

ANNEX S

ACSA IMC procedure for call out and work orders

Available upon Request from the ACSA service manager

ANNEX TInternal and external factors

Below is a list of internal and external factors which may affect equipment availability and are beyond the contractor's control:

	Type	Comment
External resources	Utilities •Water •Electricity •Gas •IT Support and other interfaces outside the contractor battery limit	-No impact to reliability/Maintainability. -It Impact on availability from operations view
External causes	•Outside Operating conditions/parameters •Operator fault/incorrect operation, consider shifting the risk to the Service provider by giving him responsibility to support Operations/Operators •Damage by others (users and Third parties) i.e. ground handlers, check in agents •Incorrect use •Foreign material is system as a result of other people	-No impact to reliability/Maintainability. -Impact on availability from operations view This are some of the occurrences that may not be considered the Normal Operating conditions
Other	•Lack of information/Drawings •Lack of access due to no fault of the contractor after they have requested access timeously •Equipment's under Projects •Other factors that can be proven that was beyond the contractor's fault	
Spares	Availability of spares (if the spares are not under the control of the Service provider to the limit of the budget) Typically: It is the responsibility of the Client to ensure adequate administration and re-order spares timely, It is the responsibility of the service provider to ensure that the stores administration is done and minimum stock levels are adhered to, the request to buy spare are replenished are done on time intime	-Affect Maintainability No impact on service provider. The Risk is not sitting with a single owner

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

ANNEX U

ACSA Electronics/Electrical Controls Standardised Minimum: legal requirements and minimum competency requirements

Site Supervisor	<ul style="list-style-type: none"> • Min SAQA Accredited Trade test (Millwright/Electrical/Instrument and control) 	<ul style="list-style-type: none"> • Min 2 Yrs experience in management of an airport Baggage Handling System • 5 Yrs Experience in managing a site with a multi-disciplinary maintenance team
Commissioning Engineer	<ul style="list-style-type: none"> • IT Related degree/Diploma; or • Electronics Engineering degree/Diploma 	<ul style="list-style-type: none"> • 3 yrs Experience in installing, commissioning and maintaining airport Baggage Handling Systems • 3 Yrs Experience in PLC maintenance and installations
IT Network Specialist	<ul style="list-style-type: none"> • IT Degree/Diploma 	<ul style="list-style-type: none"> • 3 yrs Experience in maintenance of IT Networks
Technician (s)	<ul style="list-style-type: none"> • Min SAQA accredited Trade Test Certificate (Millwright/Electrician); or • N5 Control and Instrumentation 	<ul style="list-style-type: none"> • Min 2 yrs experience in maintenance of airport Baggage Handling System Sorters and controls

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

ANNEX VACSA Inventory procedure

Available upon Request from the ACSA service manager

NNEX WCurrent Guarantee and Warrantee

N/A

Annexure XContract Exclusions BHS Operations, Electrical and Mechanical maintenanceBHS Contract maintenance scope details

Electrical Controls
Baggage Hall & Check in Counters
<p>Conveyor Belts Line 1 -8 - including OOG</p> <ul style="list-style-type: none"> • PLC Substation 1 – 10 & Controls components i.e. i/o modules, Contactors, Circuit Breakers, Relays & Safety Relays, key switches, Push buttons, LED's, UPS, etc • Sivacon Units and its components i.e KEB Invertors, I/O modules • PEC sensors and reflectors • ART Tag readers/Barcode Scanners including control panels • E stops and panels • Encoders, Tracking devices, Limit and Proximity switches • Monitors and Handheld Scanners
<p>Induction lines & MCS</p> <ul style="list-style-type: none"> • Monitor and Handheld Scanners • Sivacon Units, • PEC sensors and reflectors • ART Tag readers including control panels • E stops and panels • Encoders and Proximity switches

SERVICE AND REPAIRS OF CONTROL SYSTEMS IN THE BAGGAGE HANDLING SYSTEM AT CTIA

SORTER

- Encoders and Proximity switches
- Master, Distributor and Slaves Carriages- I/O modules
- VSD /inverters
- Sivacon units
- Radio Modem and leak feeder Aerials
- Profibus Cables
- Local Junction box for LIM
- LIM laser micro switches and limit switches
- LIM inverters
- HMI Controls
- Hoop sensors and reflective beams
- Encoder strips
- Tray Commutation cables
- Safety interlock switches
- Profibus Repeaters
- UPS battery

BHS- Domestic and International Carousel

- Local junction box- stop and start (key switches)
- PEC sensors and reflectors
- E stops and relays
- Limit, Transmitter and Proximity switches
- Monitors including 1st and last bag SAC monitors
- Sivacon unit
- VSD
- Asi Modules
- PLC's
- Profibus and ethernet cables
- UPS batteries.

CHUTES & LATAREL CHUTES

- Chutes Monitor Screens
- PEC Sensors and reflectors
- I/O modules
- Contactors
- Sivacon units
- Siren Indicators- beacon lights

CHECK IN COUNTERS & SECURITY CHECK POINTS

- LMS- local motor starter- similar to Sivacon
- Asi Modules
- Motor switch and Keys witches
- PPI – Plus Position Indicators
- Motor isolator switch
- Limit switches
- Proximity switches and Sensors
- Emergency stops
- Controls Cabinet- Connection box
- Profibus and ethernet cables
- Dispatch Control box
- Baggage Scales
- Siren Indicators-beacon lights
- UPS batteries
- SCADA

COMPUTER SERVER & OPERATING PROGRAMME – BHS AND CHECK IN COUNTERS

- SAC servers
- Router for SAC
- SAC Network Switches
- SAC processor servers -hardware and software
- SCADA – Check in Counters & BHS (including hardware)
- System interface i.e SAC bag stage, SICK RDT
- PLC's, Profibus cabling & Ethernet Communication for both Check in counters and BHS