

280 Pretoria Street, Silverton, Pretoria  
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**Council for Geoscience**

## **TENDER RULES AND CHECK LIST**

1. All the documents accompanying this invitation to bid must be completed in detail, be **sealed in an envelope** and be deposited in the tender box before the closing date and time. The tender box is situated at the reception of the Council for Geoscience, 280 Pretoria Street, Silverton, Pretoria. Tenders must only be submitted on the tender documentation issued. The retyping of the tender document is not permitted.

2. Duly completed and signed original bid document should be sealed in an envelope marked:

**Description: Appointment of a service provider for the replacement and installation of four new lifts at the CGS head office.**

Tender No	: CGS-2021-013S
Closing date	: 13 July 2022
Closing time	: 11:00am

### **3. Compulsory Briefing Session will be held as follows:**

Date: 28 June 2022  
Venue: 280 Pretoria Street, Silverton, Pretoria  
Time: 11:00am

## **4. POPIA**

### **CGS POPIA COMPLIANCE POLICY STATEMENT**

*The Council for Geoscience is committed to securing the integrity and confidentiality of your Personal Information that is in our possession and will guard against the unlawful access and use. The processing of your personal information by the Council for Geoscience will be done in accordance with the POPIA Act 4 of 2013 as well as our processing notice that can be accessed from our website [www.geoscience.org.za](http://www.geoscience.org.za)*

## 5. CHECK LIST

ALL THE RELEVANT FORMS ATTACHED TO THIS BID DOCUMENTS MUST BE COMPLETED AND SIGNED BACK IN BLACK INK WHERE APPLICABLE BY A DULY AUTHORISED OFFICIAL. FAILURE TO PROVIDE ANY OF THE BELOW MENTIONED DOCUMENTS MAY LEAD TO DISQUALIFICATION.

RETURNABLE DOCUMENTS THE FOLLOWING IS INCLUDED IN THE TENDER DOCUMENT	YES	NO
SBD 1. Invitation to Bid		
The Council for Geoscience will verify your tax compliance status in terms of practice note 9 of 2017/2018		
Tender specification		
SBD 3.3 Pricing		
SBD 4. Declaration of interest		
Central Supplier Database		
Government procurement General conditions of contract		
Certified copies of identity documents of the directors, trustees, main shareholders and members of the company		
Latest Original Certified copies of all share certificates (i.e. copy with original stamp), in case of a company		
Shareholding breakdown per race, gender and percentage shareholding with shareholders of the bidding company who are not individuals.		
CGS will only award BBEE points to companies that submit an originally certified BBEE rating certificate <b>(Copy of certified BBEE certificate will not be considered).</b> <b>Certificates issued by IRBA and Accounting Officers have been discontinued, BBEE points will be awarded to companies with a valid SANAS or DTI accredited certificate.</b>		
List of references of past and present clients (Company name, department, branch, contact person with office telephone number		
The Council's document must be kept as supplied and submitted with all Schedules/Forms fully completed.		
Any other documents, certificates etc. must be attached as annexure to the official Council document		
Where the Council's official document is taken apart and		

not submitted as supplied, the bid will be rejected		
No bid forwarded by telegram, telex, facsimile or similar apparatus will be considered.		
Company registration documents		
Proposal In case of Joint venture, trust or consortiums please submit joint venture agreement.		

## 6. BIDDING STRUCTURE

Indicate the type of Bidding structure by marking with an 'X':	
Individual Bidder	
Joint venture	
Consortium	
Subcontractors	
Other	

If Joint Venture or Consortium, indicate the following for <u>Prime Bidder</u> :	
Name of Prime Contractor	
Registration number	
VAT registration number	
Contact person	
Telephone number	
Fax number	
E-mail address	
Postal address	
Physical address	

If Joint Venture or Consortium, indicate the following for <u>all</u> partners other than Prime Bidder:	

Name of partners	
Registration number	
VAT registration number	
Contact person	
Telephone number	
Fax number	
E-mail address	
Postal address	
Physical address	

<b>If using other contractors:</b>	
Name of Prime Contractor	
Registration number	
VAT registration number	
Contact person	
Telephone number	
Fax number	
E-mail address	
Postal address	
Physical address	

<b>If using Subcontractors, indicate the following for <u>all</u> Subcontractors:</b>	
Name of Subcontractor(s)	
Registration number	
VAT registration number	
Percentage of work subcontracted	
Value of work sub contracted in rands	R
Contact person	
Telephone number	
Fax number	
E-mail address	
Postal address	

Physical address	
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## 7. RESPONSE FORMAT

Bidders must respond using the following response format:

Schedule	Description
<b>Schedule 1</b>	<p>Executive Summary</p> <p>The executive summary must cover the following:</p> <ul style="list-style-type: none"> <li>• <b>Paragraph 1</b> The Bidder must indicate in their bid response to the Council for Geoscience whether they are responding as a Prime bidder, joint venture, consortium or partnership and list the parties and explain their roles.</li> <li>• <b>Paragraph 2</b> The Bidder must indicate that the signatory of the company/consortium is duly designated to sign the bid response on our behalf of the consortium or joint venture.</li> <li>• <b>Paragraph 3</b> Summary of similar work done in the past</li> <li>• <b>Paragraph 4</b> High level summary of their response</li> </ul>
<b>Schedule 2</b>	SBD 1
<b>Schedule 3</b>	<ul style="list-style-type: none"> <li>• Bidders must provide proof of Tax Compliance Status Pin from SARS, The Council for Geoscience will verify your tax compliance proof in terms of practice note 9 of 2017/2018</li> <li>• Originally Certified BBBEE certificate (For consortium or joint venture a consolidated BBBEE Certificate must be submitted)</li> </ul>
<b>Schedule 4</b>	Functional response
<b>Schedule 5</b>	Price Breakdown (Indicate cost drivers) where applicable
<b>Schedule 6</b>	SBD 4
<b>Schedule 7</b>	SBD 6.1
<b>Schedule 8</b>	Central Supplier Database
<b>Schedule 9</b>	General Conditions of Contract 2010

**NB:** The response must have an index and the document must be neatly divided using the above mentioned format in sequence.

## PART A INVITATION TO BID

<b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)</b>					
BID NUMBER:	CGS-2021-013S	CLOSING DATE:	13 JULY 2022	CLOSING TIME:	11:00AM
DESCRIPTION	APPOINTMENT OF A SERVICE PROVIDER FOR THE REPLACEMENT AND INSTALLATION OF FOUR NEW LIFTS AT THE CGS HEAD OFFICE.				
<b>BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)</b>					
COUNCIL FOR GEOSCIENCE					
280 PRETORIA STREET					
SILVERTON PTERORIA					
0001					
<b>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO</b>			<b>TECHNICAL ENQUIRIES MAY BE DIRECTED TO:</b>		
CONTACT PERSON	SASAVONA CHAUKE		CONTACT PERSON	SASAVONA CHAUKE	
TELEPHONE NUMBER	012 841 1059		TELEPHONE NUMBER	012 841 1059	
FACSIMILE NUMBER	N/A		FACSIMILE NUMBER	N/A	
E-MAIL ADDRESS	schauke@geoscience.org.za		E-MAIL ADDRESS	schauke@geoscience.org.za	
<b>SUPPLIER INFORMATION</b>					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX]  <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		[TICK APPLICABLE BOX]  <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES &amp; QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]</b>					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?		<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER PART B:3 ]
<b>QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A BRANCH IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?				<input type="checkbox"/> YES <input type="checkbox"/> NO	
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.					

PART B

TERMS AND CONDITIONS FOR BIDDING

<b>1. BID SUBMISSION:</b>
1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).
<b>2. TAX COMPLIANCE REQUIREMENTS</b>
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

BID AMOUNT INCLUSIVE OF VAT:.....

SIGNATURE OF BIDDER: .....

CAPACITY UNDER WHICH THIS BID IS SIGNED: .....

(Proof of authority must be submitted e.g. company resolution)

DATE: .....

APPOINTMENT OF A SERVICE PROVIDER FOR THE REPLACEMENT AND INSTALLATION OF FOUR NEW LIFTS  
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**website:** [www.geoscience.org.za](http://www.geoscience.org.za)



**Council for Geoscience**

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**APPOINTMENT OF A SERVICE PROVIDER FOR THE REPLACEMENT AND INSTALLATION  
OF FOUR NEW LIFTS AT THE CGS HEAD OFFICE.**

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**Tender No: CGS-2021-013S**

**Date Issued: 07 June 2022**

**Closing date and time: 13 July 2022 at 11:00am**

**Bid Validity Period: 120 Calendar days**

**Compulsory Briefing Session: 28 June 2022 @11:00am**

**TENDER BOX ADDRESS:**

280 Pretoria Road  
Silverton  
Pretoria  
0001



## 1. INTRODUCTION

The Council for Geoscience (CGS) is a schedule 3A public entity organization as defined by the Public Finance Management Act (Act 1 of 1999). The CGS derives its mandate from the Geoscience Act 100 of 1993. The objectives of the CGS under the Act, is to produce world-class geoscience knowledge products and to render geoscience-related services to the South African public and industry. The strategic position of the CGS is to ensure that its activities contribute to the national imperatives, namely to free the potential of individuals by improving the quality of life of all citizens, assisting in the growth and wealth of the country and eradicating poverty especially in the rural areas of South Africa. It does this through the mandate of the Geoscience Act, which includes the following activities:

- 1.1. To systematically document and compile the geology of the earth's surface and continental crust, including offshore areas within the territorial boundaries of South Africa.
- 1.2. To compile geoscience data, especially geological, geophysical, metallogenic and engineering geological information in the form of maps and accompanying explanations and to make this information available to the public.
- 1.3. To do basic geoscience research into the nature and origin of rocks, ores, minerals and the history and evolution of life and to understand the geological evolution of the earth. These findings are published in peer reviewed geoscience publications nationally and internationally.
- 1.4. To collect and curate all geoscience knowledge for the country into the National Geoscience Repository and to make such information available to the public as far as it is possible.
- 1.5. To render geoscience knowledge services and advice to the State to enable informed and scientifically based decisions on the use of the earth's surface and its resources within the territory of South Africa.
- 1.6. To manage several national geoscience facilities on behalf of the country such as the National Seismograph Network, the National Borehole-Core Repository, the National Geoscience Heritage Collections (Geoscience Museum) and the National Geoscience Library.
- 1.7. To render commercial geoscience services and products to national and international clients.

## **2. PURPOSE OF THIS REQUEST FOR PROPOSAL (RFP)**

The purpose of this RFP is to appoint a suitably qualified elevator/lift specialist service provider for the design to specification, supply, and installation of the lifts at the CGS head office. The services constitute the following categories:

- Replacement of four lifts to the specification of this tender, for the CGS head office.

## **3. LEGISLATIVE FRAMEWORK OF THE BID**

### **3.1. Tax Legislation**

- 3.1.1. Bidders must be compliant when submitting a proposal to CGS and remain compliant for the entire contract term with all applicable tax legislation, including but not limited to the Income Tax Act, 1962 (Act No. 58 of 1962) and Value Added Tax Act, 1991 (Act No. 89 of 1991).
- 3.1.2. It is a condition of this bid that the tax matters of the successful bidder be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.
- 3.1.3. The Tax Compliance status requirements are also applicable to foreign bidders / individuals who wish to submit bids.
- 3.1.4. It is a requirement that bidders grant a written confirmation when submitting this bid that SARS may on an ongoing basis during the tenure of the contract disclose the bidder's tax compliance status and by submitting this bid such confirmation is deemed to have been granted.
- 3.1.5. Bidders are required to be registered on the Central Supplier Database and the National Treasury shall verify the bidder's tax compliance status through the Central Supplier Database.
- 3.1.6. Where Consortia / Joint Ventures / Sub-contractors are involved, each party must be registered on the Central Supplier Database and their tax compliance status will be verified through the Central Supplier Database.

### **3.2. Procurement Legislation**

CGS has a detailed evaluation methodology premised on Treasury Regulation 16A3 promulgated under Section 76 of the Public Finance Management Act, 1999 (Act, No. 1 of 1999), the Preferential Procurement Policy Framework Act 2000 (Act, No.5 of 2000) and the

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Broad-Based Black Economic Empowerment Act, 2003 (Act, No. 53 of 2003), Practise Note 04 of 2017/18.

### 3.3. Technical Legislation and/or Standards

Bidders should be cognisant of the legislation and/or standards specifically applicable to the services.

## 4. COMPULSORY BRIEFING SESSION

Briefing session will be held on 28 June 2022 at 11:00am at Silverton:

(Council for Geoscience) 280 Pretoria Street, Silverton

## 5. TIMELINE OF THE BID PROCESS

The period of validity of tender and the withdrawal of offers, after the closing date and time is 120 calendar days. The project timeframes of this bid are set out below:

Activity	Due Date
Advertisement of bid on Government e-tender portal / print media / Tender Bulletin	07 June 2022
Closing date of questions relating to bid from bid	06 July 2022
Bid closing date	13 July 2022 at 11:00am
Notice to bidders	CGS will endeavour to inform bidders of the progress until conclusion of the tender.
Compulsory Briefing session	28 June 2022 at 11:00am

All dates and times in this bid are South African standard time.

Any time or date in this bid is subject to change at CGS' discretion. The establishment of a time or date in this bid does not create an obligation on the part of CGS to take any action, or create any

APPOINTMENT OF A SERVICE PROVIDER FOR THE REPLACEMENT AND INSTALLATION OF FOUR NEW LIFTS  
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right in any way for any bidder to demand that any action be taken on the date established. The bidder accepts that, if CGS extends the deadline for bid submission (the Closing Date) for any reason, the requirements of this bid otherwise apply equally to the extended deadline.

## 6. CONTACT AND COMMUNICATION

- 6.1. A nominated official of the bidders can make enquiries in writing, to the specified person, Sasavona Chauke via email **[schauke@geoscience.org.za](mailto:schauke@geoscience.org.za)** and/or **012 841 1059**. Bidders must reduce all telephonic enquiries to writing and send to the above email address.
- 6.2. The delegated office of CGS may communicate with Bidders where clarity is sought in the bid proposal.
- 6.3. Any communication to an official or a person acting in an advisory capacity for CGS in respect of the bid between the closing date and the award of the bid by the Bidders is discouraged.
- 6.4. All communication between the Bidders and CGS must be done in writing.
- 6.5. Whilst all due care has been taken in connection with the preparation of this bid, CGS makes no representations or warranties that the content of the bid or any information communicated to or provided to Bidders during the bidding process is, or will be, accurate, current or complete. CGS and its employees and advisors will not be liable with respect to any information communicated which may not accurate, current or complete.
- 6.6. If Bidders finds or reasonably believes it has found any discrepancy, ambiguity, error or inconsistency in this bid or any other information provided by CGS (other than minor clerical matters), the Bidders must promptly notify CGS in writing of such discrepancy, ambiguity, error or inconsistency in order to afford CGS an opportunity to consider what corrective action is necessary (if any).
- 6.7. Any actual discrepancy, ambiguity, error or inconsistency in the bid or any other information provided by CGS will, if possible, be corrected and provided to all Bidders without attribution to the Bidders who provided the written notice.
- 6.8. All persons (including Bidders) obtaining or receiving the bid and any other information in connection with the Bid or the Tendering process must keep the contents of the Bid and other such information confidential, and not disclose or use the information except as required for the purpose of developing a proposal in response to this Bid.

**7. LATE BIDS**

Bids received after the closing date and time, at the address indicated in the bid documents, will not be accepted for consideration and where practicable, be returned unopened to the Bidders.

**8. COUNTER CONDITIONS**

Bidders' attention is drawn to the fact that amendments to any of the Bid Conditions or setting of counter conditions by Bidders or qualifying any Bid Conditions will result in the invalidation of such bids.

**9. FRONTING**

- 9.1. Government supports the spirit of broad based black economic empowerment and recognizes that real empowerment can only be achieved through individuals and businesses conducting themselves in accordance with the Constitution and in an honest, fair, equitable, transparent and legally compliant manner. Against this background the Government condemn any form of fronting.
- 9.2. The Government, in ensuring that Bidders conduct themselves in an honest manner will, as part of the bid evaluation processes, conduct or initiate the necessary enquiries/investigations to determine the accuracy of the representation made in bid documents. Should any of the fronting indicators as contained in the Guidelines on Complex Structures and Transactions and Fronting, issued by the Department of Trade and Industry, be established during such enquiry / investigation, the onus will be on the Bidder / contractor to prove that fronting does not exist. Failure to do so within a period of 14 days from date of notification may invalidate the bid / contract and may also result in the restriction of the Bidder /contractor to conduct business with the public sector for a period not exceeding ten years, in addition to any other remedies CGS may have against the Bidder / contractor concerned.

**10. SUPPLIER DUE DILIGENCE**

The Council for Geoscience reserves the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include site visits and requests for additional information. Bidders whose information could not be confirmed or authenticated and found to have misrepresentation of information during the bidding process will be disqualified and restricted with the National Treasury.

**11. SCOPE OF WORK**

Refer to (Annexure A) attached

**12. SUBMISSION OF PROPOSALS**

- 12.1. Bid documents may either be posted to 280 Pretoria Road, Silverton, Pretoria 0001 (preferably registered mail) OR placed in the tender box OR couriered to the aforesaid address on or before the closing date and time.
- 12.2. Bid documents will only be considered if received by CGS before the closing date and time, regardless of the method used to send or deliver such documents to CGS.
- 12.3. The bidders are required to submit three (3) copies of each file one (1) original and two copies (2) by Closing date 13 July 2022 at 11:00am.

FILE 1 (TECHNICAL FILE)	FILE 2 (PRICE & BBBEE)
<b>Exhibit 1:</b> Administration evaluation	<b>Exhibit 1:</b> Pricing Schedule
<b>Exhibit 2:</b> <ul style="list-style-type: none"> <li>Technical Responses and Bidder Compliance SBD's Checklist for Technical Evaluation</li> <li>Supporting documents for technical responses.</li> </ul>	
<b>Exhibit 3:</b> <ul style="list-style-type: none"> <li>General Conditions of Contract (GCC)</li> </ul>	
<b>Exhibit 4:</b> <ul style="list-style-type: none"> <li>Any other supplementary information</li> </ul>	

- 12.4. Bidders are requested to initial each page of the tender document on the top right hand corner.



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AT THE CGS HEAD OFFICE.**

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### **13. PRESENTATION / DEMONSTRATION**

CGS reserves the right to request presentations/demonstrations from the short-listed Bidders as part of the bid evaluation process.

#### **13.1. All tender applications will be evaluated according to the following process**

Administrative evaluation (to determine whether the documentation has been completed correctly).

1. Administration Evaluation Criteria
2. Functional Evaluation Criteria
3. Price evaluation & BBEE

### **14. EVALUATION AND SELECTION CRITERIA**

CGS has set minimum standards (Gates) that a bidder needs to meet in order to be evaluated and selected as a successful bidder. The minimum standards consist of the following:

<b>Administrative Evaluation Criteria (Gate 0)</b>	<b>Functional Evaluation Criteria (Gate 1)</b>	<b>Price and B- BBEE Evaluation (Gate 2)</b>
Only bidders that attended the compulsory briefing session will proceed to Gate 1 and bidders who complied with administrative requirements.	Bidders must meet a minimum threshold of 80 points to be evaluated on Price and BBEE.	Price and BBEE evaluation

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### 15. FUNCTIONAL EVALUATION CRITERIA

The evaluation of the functional/ technical detail of the proposal will be based on the following criteria:

Item No	Evaluation Criteria	Description	Weight
1.	<b>Number of years providing elevator/lift services.</b>	<p>At least five (05) years' experience in providing all the following services: complete installation and specification of lift services including the electrical work.</p> <p>Submit a company profile clearly indicating the number of years in business providing elevator/lift services.</p> <ul style="list-style-type: none"> <li>The bidder did not submit a company profile or submitted not indicating a minimum of 5 years' experience supplying and installing elevators/lifts. = 0</li> <li>The bidder submitted a company profile indicating a minimum of 5 years' experience in supplying and installing elevators/lifts. = 15</li> </ul>	15
2.	<b>Client References</b>	<p>The service provider must provide three (3) verifiable reference letters from their clients where similar services were rendered. The reference letters must not be for work completed more than seven (7) years ago.</p> <p>The reference letters from the clients of a bidder must include:</p> <ul style="list-style-type: none"> <li>Company name</li> <li>Company letterhead</li> <li>Contact person and contact telephone numbers.</li> <li>The letter must be signed by a duly authorised person.</li> <li>Description of service rendered</li> </ul> <p><b>Bidders Reference Letters</b>            0 Reference Letters = 0 Points            1 Reference Letter = 5 Points            2 Reference Letters = 15 Points            3 Reference Letters = 25 Points</p>	25



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3.	<b>Qualifications of personnel</b>	<p>Bidder must provide detailed proof of qualification. <b>The resources required below must be filled by a minimum of two separate personnel.</b> The personnel must have the following qualifications:</p> <ol style="list-style-type: none"> <li>1. Project Manager <ul style="list-style-type: none"> <li>• SAQA Accredited Degree in Mechanical or Electrical, and project management as a module/project management certificate / diploma / degree (5 Points)</li> <li>• SAQA Accredited Trade Test Lift Mechanic or Diploma in Mechanical or Electrical, and project management as a module/project management certificate/diploma/ degree (3 Points)</li> <li>• If any of the above not submitted (0 Points)</li> </ul> </li> <li>2. Site Foreman <ul style="list-style-type: none"> <li>• SAQA Accredited Mechanical or Electrical Degree/Diploma (NQF 6) (5 Points)</li> <li>• SAQA Accredited Trade Tested - Lift Mechanic Certificate or Mechanical or Electrical Certificate (NQF 5) (3 Points)</li> <li>• If any of the above not submitted (0 Points)</li> </ul> </li> <li>3. Lift Inspector <ul style="list-style-type: none"> <li>• ECSA Registered Lift Inspector Certificate (5 points)</li> <li>• Not submitted (0 points)</li> </ul> </li> </ol>	<b>15</b>
4.	<b>Years of Experience of the Resource Proposed</b>	<p>The bidder is required to indicate the years of experience of the resources proposed in item 3 above in supplying and installation of lifts/elevators (Proof of experience should be included in the resources' s CV). As per the organogram structure provided.</p> <ol style="list-style-type: none"> <li>1. Project Manager <ul style="list-style-type: none"> <li>• Less than 3 years = (0)</li> <li>• 3 years but less than 5 = (3)</li> <li>• 5 years or more = (5)</li> </ul> </li> <li>2. Site Foreman <ul style="list-style-type: none"> <li>• Less than 5 years = (0)</li> <li>• 5 years but less than 8 = (3)</li> <li>• 8 years or more = (5)</li> </ul> </li> </ol>	<b>15</b>

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		<p>3. Lift Inspector</p> <ul style="list-style-type: none"> <li>• Less than 3 years = (0)</li> <li>• 3 years but less than 5 = (3)</li> <li>• 5 years or more = (5)</li> </ul>	
5.	<b>Detailed Project Plan</b>	<p>The Bidder must provide an actionable project plan not exceeding a period of 12 months that demonstrates an understanding of the project scope of work.</p> <p>The Project Plan should clearly indicate the following:</p> <ol style="list-style-type: none"> <li>1. A staffing schedule containing an organogram that fully describes the roles of each human resource to be deployed in the contract.</li> <li>2. A staffing schedule showing how human resources will be deployed to achieve the proposed project plan timelines.</li> <li>3. A detailed plan for the procurement of all required materials.</li> <li>4. A detailed project plan indicating the sequence of activities, start and finish dates.</li> <li>5. A logical Method Statement.</li> <li>6. Project risks are identified and proposed mitigation measures.</li> <li>7. How interruptions to operations at CGS will be minimized.</li> </ol> <p><b>Scoring</b></p> <ul style="list-style-type: none"> <li>• Covered all the above seven (7) aspects mentioned on plan. (25)</li> <li>• No project plan or submitted a plan not covering all the requirements. (0)</li> </ul>	<b>25</b>

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6.	<b>Technical Specification Proposal</b>	<ul style="list-style-type: none"> <li>Bidder has submitted a technical specification proposal addressing CGS requirements. [See guideline in Annexure A.] (5 points)</li> <li>Bidder has not submitted a technical specification proposal addressing CGS requirements. [See guideline in Annexure A.] (0 points)</li> </ul>	5
	<b>Total Points</b>		<b>100</b>

The cut-off mark is 80 points and bidders who score less than this will not be evaluated further on price and BBBEE.

#### 16. PRICING SCHEDULE

Refer to the attached Annexure A

**Table 1: Documents that must be submitted for Administration**

Document that must be submitted	Non-submission may result in disqualification?	
Invitation to Bid – SBD 1	YES	Complete and sign the supplied SBD1 form
Tax Status	YES	i. Written confirmation that SARS may on an on-going basis during the tenure of the contract disclose the bidder's tax compliance status. ii. Proof of Registration on the Central Supplier Database iii. The bidder must submit a Tax Compliance Status pin or CSD for verification of the tax status.

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<b>Declaration of Interest – SBD 4</b>	<b>YES</b>	Complete and sign the supplied SBD4 form.
<b>Preference Point Claim Form – SBD 6.1</b>	<b>YES</b>	Non-submission of an originally certified BBBEE certificate will lead to a zero (0) score on BBBEE scoring
<b>Registration on Central Supplier Database (CSD)</b>	<b>YES</b>	The companies must be registered as a service provider on the Central Supplier Database (CSD). If you are not registered proceed to complete the registration of your company prior to submitting your proposal. Visit <a href="https://secure.csd.gov.za/">https://secure.csd.gov.za/</a> to obtain your vendor number. Submit proof of registration.
<b>Pricing Schedule</b>	<b>YES</b>	Submit full details of the pricing proposal

**APPENDIX A****14.1.1.1. Stage 1 – Price Evaluation (80 Points)**

Criteria	Points
Price Evaluation	
$P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$	20

The

following formula will be used to calculate the points for price:

Where

$P_s$  = Points scored for comparative price of bid under consideration

$P_t$  = Comparative price of bid under consideration

$P_{\min}$  = Comparative price of lowest acceptable bid

**14.1.1.2. Stage 2 – BBBEE Evaluation (20 Points)****a. BBBEE Points allocation**

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A maximum of 20 points may be allocated to a bidder for attaining their B-BBEE status level of contributor in accordance with the table below:

<b>B-BBEE Status Level of Contributor</b>	<b>Number of Points</b>
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

B-BBEE points may be allocated to bidders on submission of the following documentation or evidence:

- A duly completed Preference Point Claim Form: Standard Bidding Document (SBD 6.1); and
- B-BBEE Certificate

**b. Joint Ventures, Consortiums and Trusts**

A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.

A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid.

Bidders must submit concrete proof of the existence of joint ventures and/or consortium arrangements. **CGS** will accept signed agreements as acceptable proof of the existence of a joint venture and/or consortium arrangement.

The joint venture and/or consortium agreements must clearly set out the roles and responsibilities of the Lead Partner and the joint venture and/or consortium party. The agreement must also clearly

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identify the Lead Partner, who shall be given the power of attorney to bind the other party/parties in respect of matters pertaining to the joint venture and/or consortium arrangement.

**c. Sub-contracting**

Bidders/ tenderers who want to claim Preference points will have to comply fully with regulations 11(8) and 11(9) of the PPPFA Act with regard to sub-contracting.

The following is an extract from the PPPFA Act:

11(8) "A person must not be awarded points for B-BBEE status level if it is indicated in the tender documents that such a tenderer intends sub- contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a tenderer qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract."

11(9) "A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract."

**14.1.1.3. Stage 3 (80 + 20 = 100 points)**

The Price and BBBEE points will be consolidated.

**19. GENERAL CONDITIONS OF CONTRACT**

Any award made to a bidder under this bid is conditional, amongst others, upon –

- a. The bidders accepting the terms and conditions contained in the General Conditions of Contract as the minimum terms and conditions upon which CGS is prepared to enter into a contract with the successful Bidders.
- b. The bidder submitting the General Conditions of Contract to CGS together with its bid, duly signed by an authorised representative of the bidder.

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## 20. CONTRACT PRICE ADJUSTMENT

Contract price adjustments will be done annually on the anniversary of the contract start date. The price adjustment will be based on the Consumer Price Index Headline Inflation

STATS SA P0141 (CPI), Table E	Table E - All Items
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## 21. SERVICE LEVEL AGREEMENT

- 21.1 Upon award **CGS** and the successful bidder will conclude a Service Level Agreement regulating the specific terms and conditions applicable to the services being procured by **CGS** more or less in the format of the draft Service Level Indicators included in this tender pack.
- 21.2 **CGS** reserves the right to vary the proposed draft Service Level Indicators during the course of negotiations with a bidder by amending or adding thereto.
- 21.3 Bidders are requested to:
- Comment on draft Service Level Indicators and where necessary, make proposals to the indicators;
  - Explain each comment and/or amendment; and
  - Use an easily identifiable colour font or “track changes” for all changes and/or amendments to the Service Level Indicators for ease of reference.
- 21.4 **CGS** reserves the right to accept or reject any or all amendments or additions proposed by a bidder if such amendments or additions are unacceptable to **CGS** or pose a risk to the organisation.

## 22. SPECIAL CONDITIONS OF THIS BID

**CGS** reserves the right:

- 22.1. To award this tender to a bidder that did not score the highest total number of points, only in accordance with section 2(1)(f) of the PPPFA (Act 5 of 2000)
- 22.2 To negotiate with one or more preferred bidders identified in the evaluation process, regarding any terms and conditions, including price without offering the same opportunity to any other bidders who has not been awarded the status of the preferred bidders.



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- 22.3 To accept part of a tender rather than the whole tender.
- 22.4 To carry out site inspections, product evaluations or explanatory meetings in order to verify the nature and quality of the services offered by the bidders, whether before or after adjudication of the Bid.
- 22.5 To correct any mistakes at any stage of the tender that may have been in the Bid documents or occurred at any stage of the tender process.
- 22.6 To cancel and/or terminate the tender process at any stage, including after the Closing Date and/or after presentations have been made, and/or after tenders have been evaluated and/or after the preferred bidders have been notified of their status as such.
- 22.7 Award to multiple bidders based either on size or geographic considerations.

### 23. CGS REQUIRES BIDDERS TO DECLARE

In the Bidder's Technical response, bidders are required to declare the following:

22.1 Confirm that the bidders are to: –

- a. Act honestly, fairly, and with due skill, care and diligence, in the interests of **Council for Geoscience**
- b. Have and employ effectively the resources, procedures and appropriate technological systems for the proper performance of the services;
- c. Act with circumspection and treat **CGS** fairly in a situation of conflicting interests;
- d. Comply with all applicable statutory or common law requirements applicable to the conduct of business;
- e. Make adequate disclosures of relevant material information including disclosures of actual or potential own interests, in relation to dealings with **CGS**
- f. Avoidance of fraudulent and misleading advertising, canvassing and marketing;
- g. To conduct their business activities with transparency and consistently uphold the interests and needs of **CGS** as a client before any other consideration; and
- h. To ensure that any information acquired by the bidders from **CGS** will not be used or disclosed unless the written consent of the client has been obtained to do so.



**24. CONFLICT OF INTEREST, CORRUPTION AND FRAUD**

**CGS** reserves its right to disqualify any bidder who either itself or any of whose members (save for such members who hold a minority interest in the bidder through shares listed on any recognised stock exchange), indirect members (being any person or entity who indirectly holds at least a 15% interest in the bidder other than in the context of shares listed on a recognised stock exchange), directors or members of senior management, whether in respect of [Institution name] or any other government organ or entity and whether from the Republic of South Africa or otherwise ("Government Entity")

- 1.1. engages in any collusive tendering, anti-competitive conduct, or any other similar conduct, including but not limited to any collusion with any other bidder in respect of the subject matter of this bid;
- 1.2. seeks any assistance, other than assistance officially provided by a Government Entity, from any employee, advisor or other representative of a Government Entity in order to obtain any unlawful advantage in relation to procurement or services provided or to be provided to a Government Entity;
- 1.3. makes or offers any gift, gratuity, anything of value or other inducement, whether lawful or unlawful, to any of **CGS** officers, directors, employees, advisors or other representatives;
- 1.4. makes or offers any gift, gratuity, anything of any value or other inducement, to any Government Entity's officers, directors, employees, advisors or other representatives in order to obtain any unlawful advantage in relation to procurement or services provided or to be provided to a Government Entity;
- 1.5. accepts anything of value or an inducement that would or may provide financial gain, advantage or benefit in relation to procurement or services provided or to be provided to a Government Entity;
- 1.6. pays or agrees to pay to any person any fee, commission, percentage, brokerage fee, gift or any other consideration, that is contingent upon or results from, the award of any tender, contract, right or entitlement which is in any way related to procurement or the rendering of any services to a Government Entity;
- 1.7. has in the past engaged in any matter referred to above; or
- 1.8. has been found guilty in a court of law on charges of fraud and/or forgery, regardless of whether or not a prison term was imposed and despite such bidder, member or

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director's name not specifically appearing on the List of Tender Defaulters kept at National Treasury.

## **25. MISREPRESENTATION DURING THE LIFECYCLE OF THE CONTRACT**

25.1 The bidder should note that the terms of its Tender will be incorporated in the proposed contract by reference and that **CGS** relies upon the bidder's Tender as a material representation in making an award to a successful bidder and in concluding an agreement with the bidder.

25.2 It follows therefore that misrepresentations in a Tender may give rise to service termination and a claim by **CGS** against the bidder notwithstanding the conclusion of the Service Level Agreement between **CGS** and the bidder for the provision of the Service in question. In the event of a conflict between the bidder's proposal and the Service Level Agreement concluded between the parties, the Service Level Agreement will prevail.

## **26. PREPARATION COSTS**

The Bidder will bear all its costs in preparing, submitting and presenting any response or Tender to this bid and all other costs incurred by it throughout the bid process. Furthermore, no statement in this bid will be construed as placing **CGS** its employees or agents under any obligation whatsoever, including in respect of costs, expenses or losses incurred by the bidders in the preparation of their response to this bid.

## **27. INDEMNITY**

If a bidder breaches the conditions of this bid and, as a result of that breach, **CGS** incurs costs or damages (including, without limitation, the cost of any investigations, procedural impairment, repetition of all or part of the bid process and/or enforcement of intellectual property rights or confidentiality obligations), then the bidder indemnifies and holds **CGS** harmless from any and all such costs which **CGS** may incur and for any damages or losses **CGS** may suffer.

## **28. PRECEDENCE**

This document will prevail over any information provided during any briefing session whether oral or written, unless such written information provided, expressly amends this document by reference.

**29. LIMITATION OF LIABILITY**

A bidder participates in this bid process entirely at its own risk and cost. **CGS** shall not be liable to compensate a bidder on any grounds whatsoever for any costs incurred or any damages suffered as a result of the Bidder's participation in this Bid process.

**30. TAX COMPLIANCE**

No tender shall be awarded to a bidder who is not tax compliant. **CGS** reserves the right to withdraw an award made, or cancel a contract concluded with a successful bidder in the event that it is established that such bidder was in fact not tax compliant at the time of the award, or has submitted a fraudulent Tax Clearance Certificate to **CGS** or whose verification against the Central Supplier Database (CSD) proves non-compliant. **CGS** further reserves the right to cancel a contract with a successful bidder in the event that such bidder does not remain tax compliant for the full term of the contract.

**31. TENDER DEFAULTERS AND RESTRICTED SUPPLIERS**

No tender shall be awarded to a bidder whose name (or any of its members, directors, partners or trustees) appears on the Register of Tender Defaulters kept by National Treasury, or who have been placed on National Treasury's List of Restricted Suppliers. **CGS** reserves the right to withdraw an award, or cancel a contract concluded with a Bidder should it be established, at any time, that a bidder has been blacklisted with National Treasury by another government institution.

**32. GOVERNING LAW**

South African law governs this bid and the bid response process. The bidder agrees to submit to the exclusive jurisdiction of the South African courts in any dispute of any kind that may arise out of or in connection with the subject matter of this bid, the bid itself and all processes associated with the bid.

**33. RESPONSIBILITY FOR SUB-CONTRACTORS AND BIDDER'S PERSONNEL**

A bidder is responsible for ensuring that its personnel (including agents, officers, directors, employees, advisors and other representatives), its sub-contractors (if any) and personnel of its sub-contractors comply with all terms and conditions of this bid. In the event that CGS allows a bidder to make use of sub-contractors, such sub-contractors will at all times remain the responsibility of the bidder and CGS will not under any circumstances be liable for any losses or damages incurred by or caused by such sub-contractors.

### **34. CONFIDENTIALITY**

Except as may be required by operation of law, by a court or by a regulatory authority having appropriate jurisdiction, no information contained in or relating to this bid or a bidder's tender(s) will be disclosed by any bidder or other person not officially involved with Council for Geoscience's examination and evaluation of a Tender.

No part of the bid may be distributed, reproduced, stored or transmitted, in any form or by any means, electronic, photocopying, recording or otherwise, in whole or in part except for the purpose of preparing a Tender. This bid and any other documents supplied by CGS remain proprietary to CGS and must be promptly returned to CGS upon request together with all copies, electronic versions, excerpts or summaries thereof or work derived there from.

Throughout this bid process and thereafter, bidders must secure Council for Geoscience's written approval prior to the release of any information that pertains to (i) the potential work or activities to which this bid relates; or (ii) the process which follows this bid. Failure to adhere to this requirement may result in disqualification from the bid process and civil action.

### **35. CGS PROPRIETARY INFORMATION**

Bidder will on their bid cover letter make declaration that they did not have access to any CGS proprietary information or any other matter that may have unfairly placed that bidder in a preferential position in relation to any of the other bidders.

### **36. AVAILABILITY OF FUNDS**

Should funds no longer be available to pay for the execution of the responsibilities of this bid RFP **CGS-2021-013S**, the CGS may terminate the Agreement at its own discretion or temporarily suspend all or part of the services by notice to the successful bidder who shall immediately make arrangements to stop the performance of the services and minimize further expenditure: Provided that the successful bidder shall thereupon be entitled to payment in full for the services delivered, up to the date of cancellation or suspension.

## ANNEXURE A

### 1. BACKGROUND

The Council for Geoscience (CGS) has embarked on a project to upgrade its lifts at its Head Office at 280 Pretoria Road, Silverton, Pretoria. The CGS Head Office was constructed in 1985. The elevators in Block B of the building were installed during this period and have been in operation to the present day. The elevators have reached the end of its intended effective design life (>20 years) and require replacement and not modernisation, based on the outcome of technical surveys.

### 2. SCOPE OF WORK

Considering the above background, the CGS requests proposals of a suitable elevator/lift specialist service provider for the design and replacement to specification of four lifts. The prospective service provider should demonstrate strong experience in carrying out work of a similar nature. Furthermore, the selected service provider will be expected to provide the following services:

#### 2.1. INTENT

The main objective of the Project Specification is to provide a “lift” service capable of meeting long-term (>20-year operational life-span) reliability, operation, safety and performance levels expected for a modern prestige “equipment” installation. It shall be accepted that the Lift- Contractor locally and/or internationally, shall fully support all apparatus / components of the “equipment” supplied and installed In terms of the Project Specification with particular reference to, the elimination and/or prevention of pre-mature “end-of-life” “equipment” and “obsolete” apparatus / components.

#### 2.2. MAINTENANCE AND SUPPORT

It is intended that after “equipment works completion”, the Lift-Contractor shall be capable of maintaining the “equipment” under the Employer’s full comprehensive performance based “maintenance agreement” for the expected operational life span of a new “lift” (>20-year operational life-span) without any of the apparatus / components of the “equipment” becoming obsolete or redundant in terms of the non-availability of spare or replacement components.

The Lift-Contractor shall undertake to maintain the units without charge to the Customer for a period of twelve months **plus an additional 36 months** commencing from the date that each of the units are handed-over. Any additional costs applicable to this maintenance are provided for herein. This maintenance obligation shall include standard **callouts** to be performed between 0800- and 1700-hours Monday to Sunday excluding any public holidays. The maintenance service will consist of programmed inspections and any necessary adjustment and lubrication of the equipment by the Lift-

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Contractor. All parts reasonably required for such maintenance will be supplied without cost to CGS by the Lift-Contractor.

### **2.3. HIGH REQUIREMENT**

In cases where the Lift-Contractor's standard product range of "equipment" design and application is not intended for "high requirement" or prestige developments (offices, hotels, retail etc.) and cannot meet the performance, operation, safety or duty rates specified; then it shall be the Lift-Contractor's sole responsibility and duty to customise the standard product range of "equipment" with improved components capable of achieving and meeting the specified requirement.

These improved components may include the following:

- Door operators (critical item):
- Door panel design.
- Car and landing signals.
- Car and landing control stations.
- Load measuring.
- "Lift" car design.
- Car enclosure internal clear dimensions.
- Duty rates, operation and performance

### **2.4. SITE DIMENSIONS, TOLERANCES AND CONDITIONS**

Without exception, it shall remain the Lift-Contractor's responsibility to check and verify all on- site dimensions and on-site conditions prior to tender and/or placing the order for the "equipment". The Lift-Contractor assumes full responsibility to ensure that the "equipment" offered and supplied is compatible with the existing shaft structure.

The Lift-Contractor shall make allowances in the design and material supplied for building tolerances as existing. The Lift-Contractor shall clearly understand that all material including shaft steel work shall be pre-manufactured, and on site modifying of components / elements (welding, cutting, or grinding) shall only be accepted upon approval by the Engineer.

### **2.5. NUMBER OF UNITS**

The project requires the replacement of the four (4) 11-person lifts situated in Block B of the CGS Head Office building.

	Lift A	Lift B	Lift C	Lift D
Type	Passenger (Stretcher)	Passenger (Stretcher)	Passenger	Passenger
Capacity (kg/pers)	1000 / 13	1000 / 13	1000 / 13	1000 / 13



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Speed (m/s)	~1.5	~1.5	~1.5	~1.5
Travel Height (m)	~25	~25	~25	~25
Stops	9	9	9	9
Shaft Size (WxD, mm)	2140 x 2500	2140 x 2500	2140 x 2040	2140 x 2040

## **2.6. DESIGN REQUIREMENTS**

### **2.6.1. ENERGY EFFICIENCY**

The Employer has placed a high priority on “high requirement” environmental friendly and energy saving “equipment”. Therefore, the design and manufacture of the “equipment” provided shall substantially consider the National and International targets and objectives pertaining to environmental friendly / energy saving “equipment”. It shall be accepted that the “manufacturers” of the “equipment” to be provided have already established a line of environmental friendly and/or energy saving “equipment”. Points that need to be considered shall include but shall not be limited to:

- Fully regulated and efficient “high requirement” Inverter / VVVF drive systems with regenerative capabilities as specified.
- Optimum Power Factor.
- High performance and efficient “high requirement” “lift” control systems.
- Reduced oil lubrication dependency.
- Lift Monitoring System (The building is not equipped with global BMS and will require local monitoring for the lifts) compatible / prepared “lift” controllers.
- Maintenance manuals and operating instructions

### **2.6.2. LIFT MONITORING SYSTEM**

The “equipment” shall be supplied prepared for the monitoring of at least four (4) control status monitoring points. The following control status points to be monitored are:

- Power status for each “unit” (normal or emergency power).
- Operation / control status for each “unit”.
- Maintenance operation status for each “unit” (inspection or emergency control).
- General fault condition for each “unit” (“unit” not operational).

### **2.6.3. LIFT EQUIPMENT AND SYSTEMS**

#### **“Lift” Drive System:**

Provide “high requirement” fully regulated and efficient Inverter drive control system capable of meeting and/or delivering the following for the “lifts” as specified under Section-5 (general description of the lift system / particular requirements):

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Optimum power factor.

- Low energy consumption with regenerative capabilities.
- Low starting currents resulting in low-rated power supply and electrical installation material.
- Reduced (minimum) heat dissipation due to regeneration – brake resistor not permitted.

**Lift Machine:**

Provide “high requirement” gearless machines capable of meeting and/or delivering the following for the “lifts” as specified under Section-5 (general description of the lift system / particular requirements):

- Compact design smaller than the footprint of the shaft.
- Smooth operation with a dynamically balanced traction sheave.
- Large diameter traction sheave to ensure maximum operation life of the traction sheave and hoisting ropes.

**Door Operator Drive & Control:**

The door operator control is to be replaced with a fully regulated control capable of meeting the performance, reliability, operation, safety, and duty rate as specified.

**“Lift” Door Operator:**

Without restricting the Lift-Contractor’s duty to provide “high requirement” car and landing door components / apparatus in terms of the Project Specification, the door operator to be provided shall without question be capable of accommodating the door configuration with specific consideration to the door clear opening and the door height, the “lift” speed, the door panel construction, door panel cladding if specified, and the total moving mass of not less than 240 kg. IMPORTANT: Door operators operating at their maximum design capacity shall not be accepted and in this case, door operators with higher duty rates shall be provided i.e. total moving mass = 420 kg.

Car and landing door suspension rollers running in a “U” track shall not be accepted.

As a standard and without limiting the requirements pertaining to door operators operating at maximum design capacity, door operators for all the “lifts” covered under the Project Specification shall be designed to accommodate a total moving mass 240 kg.

**Door Operator Mechanical:**

The existing door operator and associated car and landing door elements shall be replaced.



**Car Interior:**

The rating of the “lift” machines and associated elements shall allow for “high requirement” custom designed car interiors as specified.

**Retained Shaft Steelwork:** As a minimum retained shaft steelwork (guides, trimmers & beams) and their fixings shall be inspected and modified as required to meet the Project Specification and the approved new “manufacturer’s” design and installation requirements. Lift-Contractors who intend retaining the shaft steelwork (guides, trimmers & beams) shall clearly understand that the lifts require extensive examination and remedial work to meet the requirements of the Project Specification.

**Car Door Panels:**

Replace the car door panels as specified.

**Car Fronts / Slam-posts:**

Replace the car fronts / slam-posts as specified with due consideration to the heavy duty requirements of the new door operator and new door panels as specified.

**Landing Door Panels:**

Replace the landing door panels and associated elements as specified if the existing cannot be overhauled and/or adjusted to meet the requirements of the Project Specification at “equipment works completion”. Points to consider include but are not limited to:

- Safety in terms of SANS 50081-20 (safety clearances / gaps)
- Fire integrity in terms of SANS 10400 (National Building Regulations).
- A door operation of the highest standard by providing suitably constructed door panels.
- Ensure that the door panel construction and weight is fully compatible with the new or modernised door operator as well as the traffic and usage factor associated with Passenger Lifts.

**Landing Frames:**

Landing frames should be retained if possible. The “builder’s work” and associated disruption of the tenants will in all probability not allow the replacement Option to be considered.

**Buttons and Signals:**

Provide “high requirement” buttons and signals for conventional controls as specified. Control station and signal fixings will be approved on presentation of detailed drawings.

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**Strain Gauge:**

As a minimum, provide intelligent strain gauge load measuring devices capable of accurately measuring the number of persons in the “lift”.

**Builder’s Work:**

“Builder’s work” electrical, mechanical, and structural must be included.

Removal of Apparatus / Components: Components / elements of the “equipment” not retained and no longer used shall be completely dismantled and removed from site.

**Machine Removal:**

The Lift-Contractor shall consider and shall be responsible for all work to remove the old machines and position the new machines.

**Lift Standard Product Range:**

In cases where the Lift-Contractor’s standard product range (MR) “equipment” or (MRL) “equipment” whose design and application is not intended for “high requirement” prestige office building and cannot meet the performance, operation, safety or duty rates specified; then it shall be the Lift-Contractor’s sole responsibility and duty to customise the standard product range of “equipment” with improved components capable of achieving and meeting the specified requirement. These improved components may include the following:

- Door operators (critical item):
- Door panel design.
- Buttons, signals and indicators.
- Load measuring.
- “Lift” car design including robust car-fronts / slam-post.
- Car enclosure internal clear dimensions.
- High requirement custom designed car enclosure finishes.
- Duty rates, operation and performance.

**Software Updates and/or Upgrades:**

Provide all software, print and “equipment” changes or revisions, which may become necessary to ensure an operation that conforms to the original design and performance specification or a subsequent, documented and approved revised specification, without expense to the Client for the intended operational life span of twenty (20) years as specified.

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**Sound/ vibration Isolation:**

Ensure the noise transmission from the “lift” is reduced to a minimum and consequently all specified requirements pertaining to sound and vibration isolation in the machine room, shaft, car, doors and over-head steel-work / sheaves shall not be compromised in any way.

**Passenger Goods Lifts:**

The requirements as specified for passenger Goods Lifts must be considered including but not limited to a heavy duty reinforced door panel and door slipper support system as specified.

**2.7. SANS 50081-20 SAFETY ITEMS**

The safety of the existing “lifts” must be improved in accordance with current SANS 50081-20 requirements. SANS 50081-80 (EN81-80) (improvement of safety of existing passenger and goods lifts) shall be used as the national recommended code of practice to identify existing areas of high, medium and low risk.

It is anticipated that the “equipment” shall be in full compliance with SANS 50081-20 at “equipment works completion”.

### 3. PROJECT EQUIPMENT SPECIFICATIONS

The Block B elevators in the CGS building will be upgraded to a level in line with the currently available standards, technology, and safety features. The CGS holds the following requirements in highest regard when considering the successful delivery of the project.

#### 3.1. STANDARDS AND CODES OF PRACTICE

All works shall be provided in accordance with the requirements of the particular South African National Standard (SANS), the Occupational Health and Safety Act 85 of 1993 as revised as well as all other relevant published SANS Standards and current regulations of all other codes applicable to the work. Standards to be applied shall include but shall not be limited to:

SANS Code	Description
SANS 204	Energy efficiency in buildings
SANS 1545-1	Safety rules for the construction and installation of lifts — Part 1: Electric lifts
SANS 1545-9	Safety rules for the construction and installation of lifts — Part 9: Lift landing doors — Fire resistance testing
SANS 4344	Steel wire ropes for lifts — Minimum requirements
SANS 10142-1	The wiring of premises — Part 1: Low-voltage installations
SANS 10400-A*	The application of the National Building Regulations — Part A: General principles and requirements
SANS 10400-D	The application of the National Building Regulations — Part D: Public safety
SANS 10400-O	The application of the National Building Regulations — Part O: Lighting and ventilation
SANS 10400-S	The application of the National Building Regulations — Part S: Facilities for persons with disabilities
SANS 10400-T	The application of the National Building Regulations — Part T: Fire protection
SANS 10400-XA	The application of the National Building Regulations — Part X: Environmental sustainability — Part XA: Energy usage in buildings
SANS 14798	Lifts (elevators), escalators and passenger conveyors — Risk analysis methodology

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SANS 50081-1	Safety rules for the construction and installation of lifts — Part 1: Electric lifts
SANS 50081-21	Safety rules for the construction and installation of lifts — Lifts for the transport of persons and goods — Part 21: New passenger and goods passenger lifts in existing building
SANS 50081-70	Safety rules for the construction and installation of lifts — Particular applications for passenger and goods lifts — Part 70: Accessibility to lifts for persons including persons with disability
SANS 50081-20	Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods - Part 20: Passenger and goods passenger lifts
SANS Code	Description
SANS 50081-50	Safety rules for the construction and installation of lifts - Examinations and tests - Part 50: Design rules, calculations, examinations and tests of lift components
SANS 50081-80	Safety rules for the construction and installation of lifts — Existing lifts — Part 80: Rules for the improvement of safety of existing passenger and goods lifts
SANS 53015	Maintenance for lifts and escalators — Rules for maintenance instructions

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### 3.2. EQUIPMENT AND LOCATION

"Lifts" with machines located directly over or in the "lift" shaft shall be mounted on steel beams on steel or concrete up-stands. Machine room less (MRL) "lift" machines shall be mounted on steel beams at the top of the shaft and outside the projection of the car.

Provide any additional structural members required for the installations of the "equipment", such as shelf angles and steel beam supports for sheaves, governors, motor generator sets, controllers and dead-end hitch beams

Provide all required templates, inserts and signal boxes in walls or floors.

Clearance around the apparatus / components of the "equipment" located in each machine room shall comply with the applicable provisions of the relevant codes.

Arranged that rotating elements, sheaves, etc., so that they can be removed for repairs or replacement, either by trolley hoist and dolly, or other conventional means, without dismantling or removing other apparatus / components of the "equipment" in the same machine room.

"Lift" controllers shall be located near the driving machines they control and the driving machine shall be clearly visible when standing in front of the controller. Alternatively for machine room less "lifts", the emergency operation control shall be mounted in such a position so that the machine is clearly visible when in use.

Trolley beams shall not be utilised as the normal support of diverter sheaves.

Mechanical floor selectors comprising of a rope driving a selector wheel with switches shall not be accepted.

The location of the machine selected shall be as shown under Section-5 (general description of the lift system).

Sheaves Situated in the Shaft: The Lift-Contractor shall provide all "equipment" necessary to meet the requirements of SANS 50081-20 with regards to diverter sheaves situated in the shaft and positioned directly above the lift enclosure including but not limited to:

Installation of working platforms to create separate sheave rooms if the existing head-room permits including sheave guards, lights and emergency stop switches.

Supply and installation of remote activate / release governors if not accessible from outside the shaft.

### 3.3. HOISTING MACHINE

#### Traction Drives:

**Main Brake:** The main brake shall be spring applied and electrically released by direct current. The main brake shall have sufficient power to hold the car at any landing with the normal amount of counterbalancing and with at least 150% of contract load.

**Vibration Isolation:** Provide "high requirement" effective sound reducing material / vibration isolation shall be installed between the bed-plate or supporting steelwork of an overhead, basement or machine room less driving machine and the beams, the structural concrete slab, shaft structure or the up-stands.

**Duty Rate:** Provide "high requirement" driving machines, motors and drive controls with sufficient capacity to operate the "lift" continuously at 100% of contract speed in both directions without overheating or hunting during normal operation and levelling. Hoisting machines and associated control elements shall meet heavy usage requirements not less than the duty rates specified below:

- Medium to high requirement "lifts" - 240 trips per hour (Duty Rate).

**Noise and Vibration Levels for Conventional Machines:** Overhead and basement driving machinery situated in a machine room shall operate silently, without vibration and shall constantly maintain the noise levels specified under Section 4.47 (ride quality and performance criteria). The machine noise level shall at all times remain at an acceptable level, shall be inaudible from the landings or the car enclosure and shall maintain the performance levels as specified herein.

Provision shall be made for a safe method of moving the machine by hand in the event of a power failure. All the necessary safety apparatus / components and signage required to carry out this task in terms of SANS 50081-20, shall be mounted neatly in the machine room / space and shall remain on site at all times.

When the machines replaced, overhead machine bed-plate isolation pads shall not rest directly on the machine room floor or concrete up-stands. If the isolation pads are not positioned between the bed-plate or machine steel beams, provide a metal plate at least 6.0-mm thick between the machine room floor or concrete up-stands and the machine isolation pads. The metal plate shall be sized so that all the isolation pads on one side of the machine will rest on a common plate.

For protection against entanglement, a positive action emergency stop switch shall be supplied and installed in close proximity to the main driving sheave it controls.



**Main Brake:**

“Lifts” shall be provided with an electro-mechanical (friction type) braking system, which operates automatically in the event of loss of the main power supply and the loss of the supply to the control circuits and furthermore:

The main brake shall be spring applied and electrically released by direct current. The main brake shall have sufficient power to hold the car at any landing with the normal amount of counterbalancing and with at least 150% of contract load

The brake on its own shall be capable of stopping the machine when the lift is travelling downward at rated speed with the rated load plus 25%.

Double Brake: The mechanical components of the brake which take part in the application of the braking action on the drum or disk shall be installed in two (2) sets. If one of the components is not working a sufficient braking effort to slow down the lift, travelling downwards at rated speed and with rated load shall continue to be exercised. Any solenoid plunger is considered to be a mechanical part, any solenoid coil is not.

The component on which the brake operates shall be coupled to the traction sheave or drum by direct and positive mechanical means.

Holding the brake open in normal operation, shall require a continuous flow of current and the braking shall become effective without supplementary delay after opening of the brake release circuit.

The brake shoe or pad pressure shall be exerted by guided compression springs or weights. Band brakes shall not be used and brake linings shall be incombustible.

**Machine and Suspension Elements:**

The design of the driving and suspension elements shall take into account the actual rating of the driving motor and the possibility of the lift, the counterweight weight resting on its buffers or being stopped along its travel path. This has particular importance when over-rated machines are provided.

**Emergency / Manual Operation:**

Provision shall be made for a safe method of moving the machine by hand in the event of a power failure. All the necessary safety apparatus / components and signage required to carry out this task, shall be mounted neatly in the machine room / space and shall remain on site at all times.



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For protection against entanglement, a positive action emergency stop switch shall be supplied and installed in close proximity to the main driving sheave it controls.

Traction drive lift machines positioned in the headroom of the shaft (MRL) "lift", and where the maintenance of the machinery is from the top of the car roof, the design, manufacture and installation of the machine and associated control elements shall comply with the SANS 50081- 20 and as specified in this regard.

**Main Drive Sheave:**

Provide "high requirement" main drive sheaves. The ratio between the pitch diameter of sheaves, pulleys or drums and the nominal diameter of the suspension ropes shall be at least forty (40), regardless of the number of strands. Rope keeper bolts shall be provided for all diverter sheave or pulleys.

**Hoisting Ropes:**

As a minimum, the following requirements shall apply to hoisting / suspension ropes (chains are not permitted):

- The ratio between the minimum breaking load in Newton, of one suspension rope/chain and the maximum force, in Newton, in this rope/chain, when the lift is stationary at the lowest landing with its rated load, shall be:
  - 12 in the case of traction drive with three ropes or more.
  - 16 in the case of traction drive with two ropes.
  - 12 in the case of drum drive.
- The tensile strength of the wires shall be:
  - 1570-N/mm<sup>2</sup> or 1770-N/mm<sup>2</sup> for ropes of single tensile, or
  - 1370-N/mm<sup>2</sup> for the outer wires and 1770-N/mm<sup>2</sup> for the inner wires of ropes of dual tensile.

**Suspension Rope Fixing:**

The rope termination shall be able to resist at least 80% of the minimum breaking load of the rope and:

- The ends of each rope shall be fixed to the lift or counterweight, or suspension points of the dead parts of reeved ropes by means of suitable terminations metal or resin filled sockets, self-tightening wedge type sockets, heart shaped thimbles with at least three suitable rope grips, hand spliced eyes, ferrule secured eyes, or any other system with equivalent safety.
- An automatic device shall be provided for equalizing the tension of suspension ropes at least at one of their ends (mechanical equalizers are not permitted). If springs are used to equalize the tension they shall work in compression.
- An electric safety device shall cause the lift to stop in case of abnormal relative extension of one rope.
- The devices for adjusting the length of ropes shall be made in such a way that

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these devices cannot work themselves loose after adjustment.

**Relationship between Load and Area:**

In terms of this Specification, the relationship between the rated load and available area shall not be less than that required for Goods Passenger Lifts (SANS 50081-81) with particular consideration given to:

- The intended use of the "lift" and its limits;
- The weight of mechanical loading apparatus and number of operating personnel entering the platform during loading.

**3.4. CONTROLLERS**

Provide re-programmable solid-state operation and motion controller to control the operation, the starting, the stopping, the speed of the "lift" motor and to apply the brake automatically if any of the safety devices operate or the power fails. Three-phase protection shall be provided to the motor-generator set, driving motor or the solid state motion controller by the use of simultaneous tripping devices.

Provide solid state controllers enclosed in ventilated sheet metal cabinets with integral blowers. In order to maintain an acceptable control panel internal temperature, all power resistors and heat generating transformers shall be mounted in separate enclosures.

Each controller or the section of the controller supporting the main control contactors shall be vibration isolated from the machine room floor slab and building structure.

Provide only generic manufactured, assembled and supplied controllers and associated components.

Provide and install a main switch for each "lift" in a position where it is easily and rapidly accessible from the entrance to the machine room.

**Main Switch:**

The main switch shall have a dual application namely:

- Motors connected directly to the mains shall be protected against short circuit. (Not required if motor protection is provided in the control panel).
- The main switch shall be capable of breaking the supply to the "lift" by interrupting all the live conductors.
- The main circuit breaker (MCB) or isolator provided in the machine room electrical distribution board (DB) shall not be regarded as the Main Switch covered under this section.
- The main switch shall not cut off the supply to the circuits feeding the car light, car ventilation and car, shaft, pit and machine room 230-volt supply.

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Control panels and machines of multi-"lifts" situated in a common area shall be clearly marked with numerical or alphabetical number at least 100-mm high.

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### 3.5. CONTROL SYSTEM

Provide "high requirement" control system shall be capable of constantly producing the performance criteria specified herein.

Provide drive control system capable of decelerating the "lift" to stand still without a levelling-in or creeping-in phase. Only "lifts" with direct floor approach capabilities shall be accepted.

Provide motor drive control units capable of providing a smooth acceleration, steady velocity, and deceleration plus levelling to various floors within the time allowance and levelling tolerances as specified herein. This performance shall be consistent under all conditions of loading and in either direction of travel.

The motor drive unit control shall be equipped with all necessary monitoring circuits to maintain a safe and reliable operation. These shall include but are not limited to the monitoring of the load, direction of rotation, speed, supply voltage, and operating currents.

The hoist motor shall be provided with a thermostatically controlled blower if necessary, to dissipate the heat so as to not exceed the maximum operating temperature rise specified by the "manufacturer".

The control system shall provide a consistent operation with the levelling accuracy at all landings from no load to full rated load in the "lift". The specified operation shall be maintained for all "lifts" under stable conditions at maximum car start to car stop and floor approach times as specified.

A maximum of 0.5 second shall be allowed from door close to car start.

The control system and associated elements shall be designed to operate at plus or minus 10% of normal feeder voltage and plus or minus 5% of feeder frequency without interruption and protective devices to prevent damage to the "equipment" on over or under-voltage shall be provided.

The control system shall be designed to operate the "equipment" continuously at 100% of contract speed and at 100% of contract load in both directions without overheating or hunting.

"Lifts" shall be adjusted as required to meet the performance requirements as specified within 10% tolerance.

### **3.6. MACHINE ROOM INDICATORS/ROPE MARKERS AND TEST TOOLS**

#### **Monitors / Test Tools:**

Monitor and key board or hand held testing instruments for commissioning, re-commissioning and fault analysis of the “lift” control systems shall be provided and shall remain on site at all times. If monitors are provided, each “group” of “lifts” shall be supplied with its own monitor.

#### **1.1.1.1 Emergency Floor Level Indicator:**

As each “lift” travels through the “lift” shaft, its floor level position shall be indicated by a battery operated LED indicator mounted in a position clearly visible from the machine. This indicator shall operate independently to the “lift” control and shall not be dependent on the “lift” supply for its operation.

#### **1.1.1.2 Error logs:**

The “lift” control system shall incorporate “high requirement” control components necessary to generate error logs and fault reports. Error logs for each “lift” shall generate a history of at least

twenty (20) of the most recent faults indicating the type of fault, "lift" number, date and time the fault occurred.

### **3.7. AUTOMATIC SELF-LEVELLING**

Provide "lifts" with "high requirement" self-levelling and a re-levelling controls to automatically bring the "lift" to the floor landings within a tolerance of 3.0-mm under no load to full rated load conditions without hunting. Self-levelling shall within its zone, be entirely automatic and independent of the operating device and shall correct for over-travel and rope stretch. The "lift" shall be maintained approximately level with the landing, irrespective of load and while loading and unloading.

### **3.8. STOPPING DEVICES**

Provide normal terminal stopping devices enclosed in dust-proof enclosures for each "lift". These devices through operation shall bring the "lift" automatically to a smooth stop at the terminal landing.

#### **End of Shaft Final Limits:**

Provide final terminal stopping device at the top and at the bottom of each "lift" shaft. A fixed cam securely attached to the "lift" shall operate these final limit switches. These limit switches shall be independent of any other stopping devices and shall positively open without the use of springs to cut off all power from the driving machine motor and brake and shall prevent the "lift" operation in either direction. Limit switches shall be so located that they operate before "lift" or the counterweight engages the buffer.

### **3.9. ROPE GUARDS**

Rope guards shall be provided on machine sheaves, secondary or deflector sheaves and governor sheaves to cover moving sheaves and ropes. Provide guards on rope hole openings in machine room and secondary level floors to prevent objects from falling into the "lift" shaft. Provide guards in secondary level where ropes and tapes or selector drives pass through to prevent accidental contact.

Rope guards shall be fitted to the top of main diverter and governor sheaves mounted in the shaft, pit or under-slung sheaves protruding past the projection of the car.

### **3.10. CAR AND LANDING DOOR OPERATOR**

**NOTE:** For this Specification the door operator shall be interpreted as the entire door operator including all associated components on the car and landing excluding the door panels and car or landing door panels shall mean the panels excluding the associated door operator components fixed to the panels.

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**IMPORTANT:** Under rated door operators or standard product range door operators not capable of meeting the duty rate and design requirements specified, shall not be accepted. The Lift-Contractor shall be fully accountable and responsible to select and provide the correct "high requirement" door operator for the intended application as specified under this Section 4.10.

Section 4.10 shall apply if the existing apparatus / components of the "equipment" covered under these sections do not comply with the requirements of the Project Specification or if replaced.

The door operator is regarded as a CRITICAL ITEM and it shall be the Lift-Contractor's responsibility to select and supply "high requirement" low maintenance door operator components capable of meeting the highest operation, duty rates and performance levels. Only door operator considered by the "manufacturer" as "high requirement" and heavy-duty with continuous operation capabilities and a redundancy factor of at least 1.5 shall be accepted.

Design Criteria: Selection of the door operator type shall consider the following design criteria:

- Door clear opening width,
- Door panel width,
- Door panel height,
- Door panel weight,
- Number of door panels,
- Door panel material,
- Door application (Freight, Passenger Goods or Passenger),
- Duty Rate as specified herein.

**Duty Cycle:**

Passenger Lifts: "High requirement" Door operators with heavy duty guide rails / tracks and a duty cycle of not less than 800,000 cycles per year shall be provided for the Passenger Lifts.

Incorrectly supplied or suspect door apparatus / components with regards to clearly meeting the requirements of Section 4.10 shall be replaced with suitable apparatus / components at no additional cost to the Employer.

Appointment for the Contract shall not be considered as acceptance of the "equipment" offered and it shall remain the Lift-Contractor's responsibility to select, supply and install the correct "equipment" in terms of the Project Specification.

Doors on the "lift" car and at each landing opening shall be opened and closed quietly and smoothly by a fully regulated electric motor and driving mechanism.



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Car doors shall be mechanically locked when fully closed under power. It shall not be possible to force the car doors open from within the car and interrupt the safety contact when the doors are fully closed under power.

Provide mechanical car door locks where the free distance from the car sill to the shaft front wall exceeds 120 mm.

The motion of the door operator shall be accomplished with arms and appropriate linkages to the approximate centre of gravity of the driven door panel.

Each landing door shall be equipped with electro-mechanical interlocks so that the "lift" can operate only when the interlock circuit is established.

Each landing door panel shall be closed by an independent auxiliary self-closing device (door closer weight) whenever the door is not in the closed position and it is not restrained by hold open components of the car and landing door system.

An electric contact for the "lift" car door shall be provided which shall prevent the "lift" moving away from a landing, unless the door is in the closed position.

An electrical contact shall be fitted to the non-driving car door if its linkage is dependent on a steel rope, belt or chain.

Emergency Triangle access key mechanisms shall be provided on each entrance.

The opening time and closing time for "lift" doors shall be within 10% of the values specified herein.

### **3.11. PASSENGER LIFT DOOR HANGERS**

"High requirement" hangers shall be equipped with ball bearing adjustable rollers to take the up-thrust of the doors. The hangers and rollers shall be designed to accommodate the size and weight of the doors operated with a high-speed door operator. Either the running surfaces of the tracks or the sheaves shall be non-metallic.

### **3.12. CAR DOOR CONTROL**

#### **Door Motion Control:**

Provide "high requirement" door motion controllers.

NOTE: Car door motion controllers dependent on resistors, rheostats or switches to control the opening and closing motion shall not be accepted. The car door motion controller shall be capable of controlling the position, motion and closing torque / pressure of the doors at any given moment and shall constantly produce a smooth, accurate, efficient and safe operation. The door closing torque / pressure shall be electronically limited to a safe value and controlling the torque by means of switches, clutches or knuckles shall not

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be accepted. Only door operators with a fully regulated VVVF or DC motion controller shall be accepted.

**Door Open and Close Times:**

The door operator design and control shall constantly meet the following maximum door open and closing times. Door opening and closing times shall be measured from the time the doors start to open or close to the fully open or closed position.

Duty Cycle/Yr	Door Open Width	Door Open Duration	Door Close Duration
600 000	900 mm	Max 2.3 sec	Max 2.5 sec
600 000	1100 mm	Max 2.6 sec	Max 2.8 sec
600 000	1300 mm	Max 2.9 sec	Max 3.1 sec

**Door Pre-Opening:**

The “lift” control and door control shall allow for pre-opening of the doors. However, the pre-opening control shall be adjusted to ensure that the doors do not open more than 300-mm before the “lift” is within 5-mm from floor level.

**Door Anti-Nuisance Control / Forced Closing:**

If doors are held open for an adjustable period of time by a passenger standing in the entrance or by constant pressure of the door open button, a buzzer shall sound and the doors shall start to close at a reduced speed and force level. When the doors touch an obstruction, they shall re-open. This adjustable 15 to 30-second timer shall be initially set at 20-seconds.

**Door Protection Devices:**

Leading Door Edge Protection:

Provide “high requirement” electronic infra-red/ultra-sonic car leading edge protection device. The car door protection device shall extend at least 2100-mm above the platform and its active surface/area shall project beyond the front edges of each leading car door panel. Should this device come in close proximity, or touch a person or object whilst the car doors are closing, the car and shaft doors shall return to their open position. Manual reversal of the doors while the “lift” is on automatic operation shall be accomplished by pressing a door open button in a car- operating panel.

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Metal Objects:

The door protection device shall have the capabilities of detecting metal objects / trolleys / wheel chairs.

At "equipment works completion", demonstrate that the door closing pressures comply in full with the SANS 50081-20 under normal and forced closing conditions.

**3.13. LIFT AND SHAFT PIT REQUIREMENTS**

Provide pit access ladders as required to service the pit apparatus / components. The pit ladder shall be positioned to ensure easy and safe ingress and exiting of the pit including safe and easy access to the landing door dis-locking device, and the ladder shall extend from the pit floor to 1100-mm beyond the level of the lower entrance.

Provide the necessary rope, or selector tape guards in pit areas.

**Pit Safety and Maintenance:**

The Lift-Contractor shall be full responsible and liable to provide and install whatever additional pit apparatus / components are necessary (safety apparatus / components and/or working platforms etc.) to ensure the safety of its personal maintaining or inspecting pit apparatus / components; and to ensure that normal monthly comprehensive inspection and maintenance in the pit and under the car including buffers, pit sheaves safety gear, guide rollers/shoes and load-measuring apparatus is effectively carried out without portable working platforms or portable ladders. Without limiting the Lift-Contractor's duties and responsibilities in terms of this section (pit safety & maintenance) the following shall apply:

- Working platforms provided shall be designed, manufactured and installed in terms of the applicable standard for "lift" pit working platforms and pit safety.
- As a standard it is assumed that pits with depths exceeding 2500-mm will require some additional means to achieve the safety, maintenance and inspection requirements called for under this section. These additional means may be permanently mounted platforms (fixed or hinged) and/or mechanical / moveable stops and/or electrical emergency / inspection control.
- Lighting to ensure a minimum lighting level of 100-Lux shall be provided for the working areas below the pit working platform.
- Safe access from the top of the working platform to the area below shall be provided.
- The Lift-Contractor shall consider that maintenance and inspection in the pit in general undertaken by a technician; and the implication of its maintenance policies and procedure shall be regarded as a significant consideration.
- If there is any doubt as to the safety in terms of this section (pit safety) at "equipment works completion", the Lift-Contractor shall demonstrate to the Consulting Lift Engineer, the procedure for the safe and effective maintenance and/or inspection of "lift" apparatus / components from the pit. Failing a satisfactory demonstration, the Lift- Contractor shall be fully responsible to do and/or provide whatever is necessary or required to achieve the minimum safety requirements specified.

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**Shaft Lights:**

Provide and install shaft lights in each “lift” shaft, the lower and highest light fitting shall be mounted no more than 500-mm from the pit floor and shaft top respectively. These lights shall be switched from the “lift” machine room, top of shaft and pits and shall maintain a minimum lighting level of 50-Lux measured at 1000-mm above the car roof and at all the working places within the shaft. For safety reasons and in order to provide a safe working area / environment, the aforementioned minimum lighting levels shall be provided during the installation stage.

**Shaft Requirements:**

The below requirements shall apply if the existing apparatus / components of the “equipment” covered under this section do not comply with the requirements of this Specification.

- The positioning and fixing of all shaft steelwork shall be uniform and consistent throughout the shaft.
- Check the shaft layout and make allowances for the guide supporting steelwork within the shaft. This steel work shall include:
  - Counterweight combination brackets.
  - Main guide supporting trimmers single and multi-“lift” shafts.
  - Overhead steel work.
  - “Lift” entrance trimmer fixing channels. These will be required when the entire front of multi- “lift” shafts is left open, and no fixing structure has been provided.

**3.14. CAR AND COUNTERWEIGHT GUIDE RAILS**

The entire main guide rail support steel members and brackets shall be manufactured according to the shaft dimensions and bolted in position. If it may become necessary to weld certain sections of the guide rail supporting steels on site, this shall be carried out by qualified persons and in accordance with drawings detailing the weld specifications.

Provide “high requirement” guide rails with brackets and sliding rail clips for each “lift” car and counterweight, suitably attached to the building structural members. Car guide rails and car frame shall be so located as to balance the car assembly in the guides.

**Guide fixings:**

Provide any additional car and counterweight guide rail backing, intermediate steel and brackets fixed to the shaft wall with two (2) 14 mm (minimum) bolts / Anchors per bracket as required between floors to maintain proper bracket spacing not exceeding 2400 mm.

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**Guide Bracing:**

Intermediate guide supports which use the guides of an adjacent "lift" and not the shaft wall or shaft trimmer as the supporting member, shall not be regarded as a guide fixing, as mentioned above.

**Fish Plates:**

Joints of car and counterweight rails shall be accurately machined with tongues and grooves in the ends of the rails at the centre of the railhead and base forming matched joints. Each rail joint gap, as installed, shall not exceed 1.0 mm. Each rail joint shall be fitted with machined fish-plates fastened to the back of each rail's machined surface with not less than a total of eight (8) through-bolts. Additional brackets with sliding rail clips between floor beams shall be provided as necessary to obtain proper rail rigidity and maintain the alignment for both the car and counterweight rails.

All joints shall be so located that fish-plates shall not interfere with rail clips and brackets due to building compression. Car and counterweight rails shall be thoroughly cleaned and filed smooth throughout their length and at the rail joints before cars are put in operation.

The car and counterweight guide rails shall be provided and aligned so that the faces of the rails are plumb within plus or minus 5.0 mm from top to bottom of the "lift" shaft. The maximum change in the distance between guides (DBG) shall not exceed 2.0 mm.

Shim packs shall be 20 mm maximum and shall secure rail clip alignment and shall be so designed that they shall remain in position even though the fastening bolts may become loosened.

**Building Settlement:**

Car and counterweight rails shall be cut off at the top and bottom with an allowance for building compression of 3.5 mm per typical floor and a maximum of 300 mm at "equipment works completion".

The sliding rail clips shall be designed and maintained so as to limit the maximum vertical force due to building compression at 660 kg per bracket. This condition shall not be exceeded during construction or subsequent operation.

The final location of divider beams, with respect to each floor level, shall be co-ordinated under this section. Any additional steel members required for the installation of the "equipment" and not shown on the structural drawings, including their fabrication and installation shall be provided under this section. The reinforcement of structural steel to absorb rail forces and safety application applied at pinning floors, rather than in the pit, shall be provided under this section. Car and counterweight rail backing shall be provided as required by the code.



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**Shaft Trimmer:**

Shaft trimmers shall be (I) beams of adequate strength. Formed metal sections for example; (U) channels, (T) sections or Box Channels shall only be accepted on the submittal of the "manufacturer's" design and fixing details.

The blade of car guides shall be machined.

Brick Shaft: Pad stones shall be provided where trimmer, beams, guides and door fixings are to be secured into brick shafts. Alternatively; suitable and correctly rated chemical Anchors may be used however, the use of rawl-bolts or any Anchor that places the brick work under stress when fastened shall not be permitted.

**3.15. HOIST AND GOVERNOR ROPES**

Each "lift" shall be provided with hoist ropes of sizes and numbers sufficient to comply with the requirements of the relevant code and traction requirements. The shop drawings shall indicate the number and sizes of ropes proposed, together with the name of the "manufacturer", type, ultimate strength, the proper working load and that the core is of manila fibre. All hoist ropes shall be cut in sequence from the rope reel and tagged for sequential adjacent installation.

The ends of the hoist ropes shall be properly secured to the car and counterweight cross-head or to the dead-end hitch plates on 2:1-roping, with adjustable rope shackles having approved sockets. Screw adjustment shall permit equalisation of the tension in all ropes.

A 9 mm wire rope minimum shall be threaded and clamped so as to prevent the group of shackles from turning.

**Governor Ropes:**

Governor ropes shall be in accordance with SANS 50081-20. The two ends shall be securely fastened together at the "lift" and shall be attached to the safety operating mechanism. The governor rope shall pass over the governor sheave and over an approved tensioner sheave in the pit. An electrical contact shall be fitted to the pit sheave and shall stop the "lift" if the governor rope becomes slack or breaks.

**Hoisting Rope Attachment:**

The "high requirement" "lift" car hoisting rope attachment / hitch shall be suitably vibration isolated to prevent rope noise from being transferred to the car enclosure and shall ensure a ride quality as specified.

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Rope dead-end hitching points (2:1 roping) in the machine room or sheave room shall be accomplished with up-stands of adequate construction and height floor to allow the inspection of the entire rope fixing and sockets from the machine room. Rope hitching points fixed straight onto the machine room floor slab shall not be accepted. Removable kick plates shall be provided if the kick plate inhibits the inspection of the rope fixing and socket.

Hoisting rope sockets shall be suitably vibration / noise isolated from the hitching plate and this shall be accomplished by inserting nylon sleeves into the hitching plate rope holes before inserting the sockets.

**Hoisting Rope Noise:**

The suspension rope hitch and sheaves shall be designed to limit the rope noise to a level that is not audible in the car enclosure or on the landings during travel. Sheave and rope hitch designed and manufacture shall prevent hoisting ropes from vibrating against each other during travel.

**Main Hoisting Ropes:**

The main hoisting ropes shall be replaced as part of the proposed modernisation.

**Compensating Ropes:**

The compensating ropes shall be replaced as part of the proposed modernisation.

**3.16. COUNTERWEIGHT**

Each "lift" shall be suitably counterbalanced for smooth and economical operation. Cast iron or steel sub-weights shall be contained in a guided structural steel frame. The counterweight shall be equal to the weight of complete "lift" car plus at least 40% of the contract load. The weights in the counterweight frame shall be balanced with the weight equally distributed across the width of the frame to equalise guide pressures. The sub-weights shall be welded or fastened together as necessary to prevent rattling.

**Counterweight Blocking:**

Removable blocking between the counterweight and the buffer striker plate (fixed to the counterweight) shall be provided. Blocking to be at least 300 mm per 30 meters of hoist rope between car and counterweight. If at the time of "equipment works completion" it is found that the blocking was not provided or has been removed due to rope stretch, the ropes shall be shortened and the blocking re-fitted.



### 3.17. CAR AND COUNTERWEIGHT GUIDE ROLLERS/SHOES

#### Guide Shoes:

- If permitted in terms of Section 3 (general description of the lift system) and if the speed and load nominated allows and guide rollers are not required in terms of Section '**Guide Rollers**' below, provide "high requirement" car and counterweight spring loaded shoe guides. The spring tension shall be adjusted so as to maintain the "lift" in the centre of the rails and provide continuous contact with the corresponding rail surface under all conditions of loading and operation. The shoe guides shall be lined with a durable resilient material, which shall ensure a quiet and smooth ride.
- If the speed and load allows, spring tensioned guide shoes on the counterweight may be replaced with an alternative approved system.
- The car and counterweight guide rollers / shoes shall constantly provide the ride quality as specified.
- Guide / Sliding Shoe Noise: The guide and sliding shoe arrangement in conjunction with the guide rails selected for both the car and counterweight shall be designed and manufactured to limit all guide noise to a level not audible in the car enclosure or on the landings during travel.

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**Guide Rollers:**

- In order to achieve optimum ride comfort and noise levels, car and counterweight “high requirement” guide rollers shall be provided for all “lifts” with speeds of 2.5b m/s and higher.
- Each roller guide shall consist of at least three wheels tyred with a durable resilient material, each rotating on ball bearings having sealed-in lubrication, assembled on a substantial metal base and so mounted as to provide continuous contact of all wheels with the corresponding rail surfaces under all conditions of loading and operation. The wheels shall run on three-machined rail surfaces. The roller guides shall be properly secured at top and bottom on each side of car frame and counterweight frame.
- The roller guides shall run on dry guide rails. Sheet metal guards shall be provided to protect wheels located on the top of the car and the counterweight. The roller wheels for the car shall not exceed 500 rpm and the roller wheels for the counterweights shall not exceed 1000 rpm at contract speed.

The car and counterweight guide rollers and/or shoes shall be replaced, aligned and adjusted if necessary to provide the ride quality as specified herein.

The spring tension shall be adjusted so as to maintain the “lift” car / sling in the centre of the rails and provide continuous contact with the corresponding rail surface under all conditions of loading and operation.

If steel or cast iron guide shoe liners are in use, they shall be replaced with suitable oil resistant and hard wearing synthetic liners.

Except for observation lifts, the shoe guides shall run on lubricated guide rails. The guide rails shall be lubricated by a permanently mounted lubrication reservoir on top of the car and counterweight.

**3.18. ELECTRICAL COMPENSATION**

A sufficient extra hoisting kilowatt rating in the hoist motor and machine capacity and control apparatus / components may be provided so as to effectively compensate for the weight of the hoist ropes and travelling cables as the “lift” travels throughout the shaft. However this option will be limited to “lifts” with a travel not exceeding 20 metres.

**3.19. COMPENSATION CABLES**

If Section 4.18 (Electrical Compensation) cannot be achieved the following shall apply:

Compensation shall secure in terms of the “manufacturers requirement” to the car sling and counterweight frame.

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“High requirement” compensation restraining rings / damping devices shall be provided and mounted on both the car and the counterweight buffer supports.

“High requirement” Whisper Flex or equivalent compensation shall be installed in terms of the “manufacturer’s requirements” for the “high requirement” “lifts” as specified. The Lift-Contractor shall consider the “lift” travel and speed and shall ensure that compensation shall not reduce the minimum quality of ride targets as specified.

Compensation shall be fixed to the bottom of the counterweight and car in a position which shall allow the counterweight and car to remain statically balanced in the guides and exert equal pressure on each face of the guide at the four guide locating positions.

The compensation attachment to the car shall be accomplished by a vibration isolated compensation hitch.

Only compensating chains encased in a synthetic sleeve, (whisper flex) shall be provided. Compensating chains with a threaded hemp rope shall not be accepted.

### **3.20. BUFFERS**

The “lift” (nominal) speeds and mass (large platforms and extra heavy loads) shall determine the type of buffers to be placed in the pit at the bottom of the car and counterweight. Disregarding the load implications, the following shall apply:

- “Lifts” with speeds not exceeding 1,0m/s shall be provided with buffers of the energy accumulation type,
- “Lifts” with speeds not exceeding 1,6m/s shall be provided with buffers of the energy accumulation with buffered return type, and
- “Lifts” with speeds exceeding 1,6m/s shall be provided buffered of the energy dissipation type.

Car and counterweight buffers shall be blocked up to the same level in the pit.

Provide pipe up-stands, struts, braces or other supports for the buffers.

Energy accumulation with buffered return or energy dissipation type buffers shall have an electrical contact fitted to monitor the stroke.

Hydraulic buffers shall be so constructed and shall be installed to allow for the fluid level to be checked easily during routine maintenance.

Easy access to the buffer for testing and maintenance purposes shall be possible without having to remove the counterweight pit screen or guards.

The oil in the hydraulic buffers shall be checked for moisture and replaced if necessary prior to “equipment works completion”.

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Car buffers shall be extended so that the over-travel of the "lift" past the lowest floor is mechanically blocked at the minimum distance past the floor. This distance is considered acceptable when it does not exceed the stroke of the buffer plus 300 mm.

**3.21. SAFETY GEAR AND GOVERNOR**

"High requirement" over speed governors and safety gear shall be arranged to stop the "lift" whenever excessive descending speed is attained. The safety gear shall be released by moving the "lift" in the up direction.

The governor rope system, including the governor and tension sheave, shall be arranged so that the carrier shall not release due to system dynamics when the "lift" is subjected to an emergency stop.

Car and counterweight safety gear shall be provided with a switch to cut off power from the motor and apply the brake if the safety gear applies without tripping of the governor.

The governor shall be provided with an electrical contact, which shall cut off power from the motor and apply the brake if a speed of 110% nominal speed is reached in either direction before tripping the governor.

Rope guards and an electrical contact to monitor the rope stretch shall be provided on governor rope tension sheaves.

If an accessible space exists below the car or counterweight, the counterweight shall be equipped with safety gear in terms of this section.

Safety gear supplied and installed shall comply with SANS 50081-20.

**Ascending Over-Speed Protection (Brake / Safety Gear):**

As required in terms of SANS 50081-20 the "lift" speed in the upward direction shall be controlled by a Brake fitted to the main drive sheave (gearless machines to be provided).

**3.22. PIT SAFETY STOP SWITCHES**

Each "lift" pit shall be provided with positive action pit safety switches easily accessible from the entrance to the pits without the necessity of entering. Pit switches shall comply with SANS 50081-20.

A second and if necessary, a third pit switch shall be provided if the landing pit switch is not easily assessable when standing on the pit floor or platform.

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The pit switch shall interrupt the power supply and apply the brake to hold each car so as to permit safe access to the pit.

The pit switch shall be clearly distinguished from other switches that may be mounted in the pit area and the on/off position shall be clearly marked.

### **3.23. CAR PLATFORM AND SLING**

#### **Platform:**

Provide "high requirement" "lift" platforms mounted on rubber pads supported on an auxiliary steel frame fastened to the car frame or sling. This arrangement shall accomplish sound and vibration isolation between the car complete enclosure and steel car frame or sling.

#### **Sling:**

Provide "high requirement" vibration isolated main hoisting and compensating rope hitch attached to the car and counterweight sling with sound and vibration rubber isolation between the car sling and car roof steady brackets.

#### **Static Balancing:**

- The car platform with enclosure of each "lift" shall be balanced by arranging balancing weights to equalise the guide pressure front to back and side to side so that the pressure on any guide shoe roller does not exceed 18 kg without load in the car (Statically balanced).
- It shall be accepted that the level of ride comfort is directly related to the static balancing of the car / sling. Therefore, as requested by the Consulting Lift Engineer, the Lift- Contractor shall demonstrate that the free hanging car / sling has as a minimum, been statically balanced in accordance with the requirements of this Specification.
- As required the work related to meet the requirements of this section shall include but shall not be limited to
  - Re-positioning and/or installation of balancing weights,
  - Repositioning of steady brackets,
  - Repositioning and/or adjustment of guide shoes / rollers and
  - Repositioning of the rope hitch

### **3.24. TRAVELLING CABLES**

Provide "high requirement" travelling cables between the "lift" and the fixed "lift" shaft or machine room wiring. Travelling cables shall be flexible and suitably suspended to relieve the strains in the individual conductors and all cables shall contain an approximately equal number of conductors, or shall have equal flexibility.

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As a minimum travelling cables shall contain two shielded pairs for each "lift" car to accommodate voice communication.

The travelling cables shall be positioned in such a manner so as to eliminate the possibility of interference with the shaft information, selector tape or governor rope. Provide all the necessary travelling cable protection fitted to the shaft wall and shaft trimmers to prevent damage to the outer cover during normal travel.

The travelling cables shall be neatly and adequately strapped to the side of the car enclosure and all the necessary protection shall be provided where the cables cross over metal extrusions.

Travelling cables for the counterweight shall comply with the requirements of this Section.

Provide durable and supple flat or round trailing cables with superior performance characteristics and install in accordance with the travelling cable "manufacturer's requirements".

On request by the Consulting Lift Engineer, provide the detailed supplier's installation specification.

If remote monitoring / lobby vision has been specified, travelling cables shall contain additional shielded pairs of wires or coax as specified herein.

If card access has been specified, travelling cables shall contain additional shielded pairs of wires as specified herein.

### **3.25. ELECTRICAL WIRING, CONTROL AND COMMUNICATION NETWORKS**

Low voltage and control communication cables shall be run in separate ducts, conduits and trailing cables.

Electrical safety devices (switches, buttons, contacts, relays, contractors, over-loads, circuit breakers electronic control circuits etc.) shall without exception comply with the Relevant National Standards and all metal components / elements of the "equipment" shall be earthed adequately.

Machine Room and Car Rewire: A complete rewire of the machine room / space and cars shall be carried out.

Shaft Rewire: A full shaft re-wire shall be carried out for all "lift" control and landing button / signal modernisation.

### **3.26. PASSENGER LIFT CAR ENCLOSURES**

Provide car enclosures to fit the platforms as shown on the drawings and as approved by the Consulting Lift Engineer. All finished work shall be smooth, free from warps, buckles, squeaks or rattles and all joints shall be light-proof.

#### **Trolley Passenger Lift Car Enclosure:**

The requirements of this section shall be met or at the very least an equivalent standard and suitable product shall be provided.

Trolley Passenger Lift car panels shall be robust, reinforced and manufactured to substantially withstand without defect, the usage factor expected for "lifts" transporting passengers.



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The entire car assembly, including car frame and car platform shall be constructed to operate free from objectionable squeaks or metallic sounds. The bottom of the car enclosure shall be rigidly fastened to the car platform.

**Emergency Light Unit:**

Provide emergency battery operated lighting and alarm units. The alarm switch shall be connected to the emergency battery source to ring the alarm bell in the "lift" shaft when the normal and the standby power source is not available. A button for the testing of the emergency- light battery power pack shall be mounted on top of the car. The emergency light unit shall form an integral part of the normal car lighting including fluorescent lighting and down lighter. Separate emergency light units mounted within the car enclosure shall not be accepted.

**Lift Enclosure Fan:**

Provide silent running squirrel cage centrifugal flow blowers mounted in the car roof to blow / force air into the car from the shaft. The car ceiling or suspended ceiling shall be designed with slots so as not to restrict the flow of air from the shaft into the car and it is intended, that persons standing in the car will feel the downward air flow. Car fan(s) shall be capable of delivering not less than 0.3 cubic metres of free air per minute per square metre of floor area. The fan shall be switched via a toggle switch or latching push button mounted in the car-operating panel. Provide the ventilation specification to prove that the ventilation provided meets the requirements of this Specification.

Provide car top terminal boxes of ample size incorporating clearly marked car wiring terminals and a car top inspection control unit.

Attend to all squeaks and noises produced by the sling and car enclosure prior to "equipment works completion".

**3.27. LANDING ENTRANCES**

"Lift" shaft landing entrance assembly shall consist of a unit frame, door panels, fascia, sill, hanger, closer and interlock in compliance with the applicable code requirements.

Provide shop drawings showing the wall and unit frame connection for the masonry or concrete wall system.

For maintenance purposes, floor designation shall be clearly and permanently and neatly marked with at least 100 mm letters or numbers on the inside of the landing doors (shaft side).

In compliance with SANS 50081-20, provide landing door dis-locking devices on all landings.

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The type and construction of the unit landing frame shall be as specified under Section 3 of this Specification.

Landing entrances shall comply with SANS 50081-20 with regards to safety of clearances / gaps.

### **3.28. FIRE SEPARATION/STABILITY**

#### **Fire Safety Entrance Design:**

Where the building exceeds ten (10) meters in height, it shall remain the Lift-Contractor's responsibility and duty to inform and/or advise the Consulting Lift Engineer of the "lift" shaft fire separation requirements in terms of SANS 10400 (National Building Regulations).

The following table is for information purposes only and does not relieve the Lift-Contractor from its responsibility to provide the fire rated "lift" entrances as specifically required and specified under this section and Section 3 (general description of the lift system). The following gives guidance as to the most common SANS 10400 Part-T Table-5 "lift" fire separation

/stability applications.

Occupancy	Fire separation / Stability			
	Basement in any bldg.	Two storey	3-10 storey	>10 storey
Parking garage	120-min	30-min	60-min	90-min
Office	120-min	30-min	60-min	120-min
Residential / apartment				
Hotel	120-min	60-min	90-min	120-min
Museum				
Shops / retail	120-min	60-min	120-min	180-min
Moderate risk storage	180-min	60-min	90-min	120-min
Hospitals	120-min	90-min	120-min	180-min
Residential Institutional	120-min	60-min	120-min	180-min
Exhibition hall	120-min	90-min	120-min	120-min
Moderate risk commercial services				

#### **Fire Rating / Separation of the Lift Entrances:**

Irrespective of the aforementioned; provide two (2) hour fire rated landing entrance elements, including door panels and signal faceplates. Should the landing faceplate fixtures not meet the two hour fire rating, provide additional fire rating fixed on the inside of the shaft.

All "lifts" covered under this Specification shall have the same fire rating irrespective of the minimum requirements that maybe be applicable or permitted in term of SANS 10400.

**Smoke-Checked Lift Entrance:**

To meet the requirements of SANS-10400 Part-T (fire protection) with regards to “lift” shaft smoke control in buildings exceeding 10 metres; smoke-checked landing door panels and landing frame assemblies shall be provided. Smoke checked doors shall meet the requirements of Section ‘Fire Rating / Separation of the Lift Entrances’ above.

The Lift-Contractor shall ensure that all “lift” fire protection information is clearly detailed on the layout / shop drawings to be provided to the Consulting Lift Engineer. The Lift-Contractor shall be fully responsible and liable for any consequence related to incorrectly set-out and/or constructed shafts which has directly resulted from the Lift-Contractor’s failure to provide detailed and accurate information in terms of this Specification.

**3.29. DOOR PANELS**

Provide door panels for all openings manufactured from 1.5 mm minimum stainless steel. Provide continuous stiffener channels at top, bottom and edges. The bottom of each door panel shall be provided with removable laminated phenolic guides running in the sill slots and door guides shall be designed to be replaced without removing door panels. All door panels shall be reinforced and provided with key-ways as required for door hangers and operating mechanisms. All mitres, junctions or other joints shall be securely welded, ground smooth and filled.

Door panels shall be constructed to operate free from objectionable squeaks or metallic sounds and shall be acoustically designed. Metal door panels shall be treated with a sound deadening material to produce a quiet door operation under all operating conditions.

**Door Panel Leading Edge:**

Provide door panels with leading edge interlocking profiles and with rubber stoppers top and bottom to prevent the metal door panels touching when fully closed. Door leading edge rubber profiles cannot meet the specified fire rating and shall not be accepted.

Car and landing door assembly shall be designed to maintain a minimum gap between door panels when fully open. It is intended that landing door add-on or in-fill site guards shall not be required.

The doors and their surrounds shall be designed in such a way as to minimise risk of damage or injury due to jamming of a part of the persons’ clothing or other object.

To avoid the risk of shearing during operation the exterior face of the door shall not have any recesses or projections, thereby creating a smooth outer door panel finish.

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**Stainless Steel Door Panels:**

The entire door panel shall be constructed from stainless steel and shall not be a mild steel construction clad in stainless steel.

**Trolley Passenger Lift Doors:**

Trolley Lifts shall meet the following requirements or at the very least an equivalent standard and suitable product shall be provided:

- Car and landing sills will have additional angle iron supports (reinforced sills) to accommodate the applicable point loads.
- Landing and car door panels shall have reinforced sliding shoe / slipper supports.
- Door panels shall be robust reinforced and manufactured to substantially withstand without defect, the usage factor expected for "lifts" transporting trolleys and goods.

The selection of the door operator shall consider the door height, clear opening and weight of the panels.

**Door Slippers / Shoes:**

Door slippers shall be secured with bolts with lock-nuts or spring-washers or lock-plates and door slippers fixed with screws shall not be accepted. The door slipper shall be designed, reinforced and fixed to easily and efficiently accommodate the door construction / weight and the continuous operation of the door panels. The entire door slipper shall be fully engaged in the sill profile throughout the travel of the door panel. It shall not be possible to bend the slipper or dislodge slipper from the sill profile without significantly and permanently distorting or bending the door panel.

**3.30. SILLS AND DOOR SUPPORT ANGLES**

The landing sills for all openings shall be of narrow extruded aluminium or stainless steel. Grooves in sills for the door guides shall be machined with minimum clearances for the guides. The sills shall be supported on steel angles securely fastened to the building floor construction.

Steel strut angles of adequate size shall be provided to rigidly support the hanger housing and the door closers. The angles shall be continuous between the sill and building beams above and securely bolted to the header. Strut angles fastened to the guide rails or the "lift" shaft wall construction shall not be accepted.

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Hanger supports shall be 5.0 mm minimum thick steel-formed sections securely bolted to strut angles and closer support angles.

**Landing Sills:**

Worn or damaged landing door sills shall be replaced as specified to provide a door operation and maintain the door clearances / gaps as specified.

**Car Sills:**

The car door sills shall be replaced with new narrow extruded aluminium or stainless steel units to provide a door operation and maintain the door clearances / gaps as specified.

**3.31. LANDING DOOR HANGER COVERS**

Provide hanger covers constructed from 1.5 mm minimum mild steel for Goods Passenger Lifts and "lifts" installed in dusty environment, industrial sites and parking garages. The hanger covers shall extend the full width of the door hanger case. Covers shall be made in sections for convenient access when servicing the hangers and door locks. It is intended that the door tracks and door locks shall be protected from the ingress of dust or dirt falling down the shaft through the sill gap.

**3.32. TOE GUARDS**

Provide toe guards constructed from 1.5 mm minimum mild steel on all landings. Toe guards shall extend the full width of the door opening and shall be gradually bevelled and fixed to the wall. The straight vertical portion of the guards shall equal a distance of 400 mm or as in the case of the lowest landing shall equal the distance travelled by the car sill from when the car is on the fully compressed buffer.

**3.33. FASCIA PLATES**

Where the car sill to shaft front clear distance exceeds the maximum allowed in terms of SANS 50081-20, provide fascia plates constructed from 1.5 mm minimum mild steel and reinforced where necessary to ensure a ridged surface. Fascia plates shall extend the full distance between header and sill and shall extend the full width of travel of the doors.

Alternatively, if car door mechanical locks are provided, fascia plates are not required. Car door locking mechanism using an electrical solenoid shall not be accepted.

**3.34. FIXTURE FACE-PLATES AND MOUNTING**

For all "lifts" with square rectangle stainless steel face-plates, landing fixture face-plates shall be surface mounted and shall be of 3.0 mm minimum stainless steel with bevelled edges. However, alternative landing fixture faceplates may be offered if these faceplate are generic products and aesthetically acceptable to the Consulting Lift Engineer.

The fixture faceplates in the "lift" car shall be mounted with concealed security fastenings or fastenings requiring special tools to remove them. Exposed fastenings shall match the material and finish of the faceplate.



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Each fixture shall be located and sized in accordance with dimensions approved by the Consulting Lift Engineer. Fixture faceplates shall include the following "high requirement" components:

- Car operating panels (COPs),
- Car signals,
- Landing control stations,
- Landing signals,
- Fire control recall units mounted on the fire evacuation floor,
- Blanking-off faceplates.

**Blanking-off Faceplates:**

Where applicable, allowances for full blanking-off plates to cover the existing landing indicator and/or arrow and/or button unit cut-outs shall be included. Blanking-off plates for the landing signals shall be engraved with the number / designation of the "lift" and landing button blanking-off plates shall be engraved with the floor designation.

**3.35. CAR SIGNALS**

Provide "high requirement" advanced high graphics displays incorporated in each "lift" car operating panel (COP) at a height of not less than 2100 mm above the floor. As the "lift" travels through the "lift" shaft its position shall be indicated by continuous illumination of the numeral or letter corresponding to the landing at which the "lift" is stopped or passing.

Information to be displayed shall include but shall not be limited to, floor position, fire control recall information / status, independent service (goods mode) and over-load conditions.

**3.36. CAR OPERATING PANEL**

Without exception the Consulting Lift Engineer shall sign off and approve the final design of the car operating panels (COPs) before placing the order or manufacture of these components.

Provide "high requirement" full height (COPs) incorporating but not limited to:

- A series of call buttons, numbered to correspond to the active landings.
- Emergency alarm button.
- Fan switch if not automatically controlled.
- Intercom elements.
- Voice Annunciation components if specified.
- Door open and door close buttons.
- Position indicator as specified.
- Direction arrows as specified.
- Signage as specified.
- Independent / reservation control as specified.



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- Fire recall evacuation signal

Car Operating Panels (COPs) shall only incorporate the number of buttons applicable to the floors served. Exposed buttons incorporated into the (COP) for programming or buttons not in use shall not be accepted. Each (COP) shall incorporate one (1) call button for each floor served.

Car operating panels (COPs) shall be laser cut and flush mounted into the car fronts or car side panels.

Provide car call and emergency buttons with an approved, micro-push operation. Each button shall be clearly marked with its corresponding floor position or function. The demarcation shall either comprise a raised or recessed numeric or alphabetic character. Call buttons offered shall be those as regarded as top of the range call buttons by the Lift- Contractor and shall be approved in terms of Health and Safety.

#### **Universal Access Requirement:**

In accordance with SANS 50081-70:2004 (EN 81-70:2003) & SANS 10400-S, the following shall apply:

- **Tactile / Braille Buttons:** Provide contrasting light and dark colours Tactile and Braille car and landing call buttons and all emergency buttons. Braille buttons shall be provided with the Braille incorporated (engraved) into the button unit. Stick on Braille plates shall not be accepted.
- **Audible Call Registration Confirmation:** Provide audible acknowledgment (sound) confirming that the call is registered at each press of the call button.
- The car operating panels (COPs) shall be universal access friendly and shall be located so that all operating and emergency buttons are located within 1200 mm and 900 mm above the car platform. The emergency buttons and switches including the alarms, door-open button, intercom button and control key switches shall be mounted at the bottom and the call buttons shall be mounted in numerical order starting above the emergency button and numbering from left to right.
- The minimum area of the active part of the button shall be 49 mm square or an inscribed circle of 20 mm square diameter.
- The position of the symbol shall be on the active part or 10mm to 15 mm left of it.
- The minimum distance between active parts of the buttons shall be 10 mm.
- The minimum car lighting level of 100 LUX must be achieved.
- Emergency buttons shall light up when activated / pressed.
- Control operating panels (COP) shall have a lighting level of not less than 150 LUX.

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**Voice Annunciation:**

All "lifts" require voice annunciation.

Provide blind friendly full range volume controlled voice annunciation / voice synthesiser. The voice annunciation shall be software generated and shall have the capabilities of being re-programmed to enunciate special words or messages as required and approved by the Consulting Lift Engineer. Voice annunciation shall be in English and shall have a clearly understandable English accent.

Voice annunciation shall include:

- Next selected landing at which the "lift" will stop,
- The direction the "lift" is committed to travel,
- Special door safety instructions,
- Special instructions if the "lift" is held up at a landing for an extended period of time.

Car operating panels (COP's) shall be arranged so that the call buttons and the control and signal devices are substantially flush to the vertical surface. The wiring to the individual components shall permit the panel to swing open for maintenance purposes without disconnecting any of the fixed wiring.

**Signage:**

Provide all mandatory notices including, manufacturer's name, load plate, official "lift" number and emergency instructions. Signage shall be engraved into the car operating panel (COP) or alternatively, signage on removable plates laser cut and flush mounted into the (COP) may be accepted.

If only one (1) (COP) is provided it shall be mounted as shown below:

- **Centre opening doors:** On the right side when entering the "lift" if only one (1) (COP) provided.
- **Telescopic doors:** On the closing jam side
- **"Groups" of "lifts":** All (COPs) on the same side when entering if only one (1) (COP) provided.

**Button Markings:**

The button markings/engraving shall be such that it does not fade or wear with continuous operations. The markings whether engraved or raised shall be contrasting light and dark colours and shall remain clearly visible and the coloured epoxy shall remain intact throughout the operational life of the button. The colour of the button engraving shall be a colour that makes button designation clearly visible with the minimum allowable car lighting (50 lux).

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Provide car buttons with an approved, micro-push button operation. All the button elements offered shall be those regarded as “top-range” by the Lift-Contractor and shall be approved in terms of Health and Safety.

Independent / Reservation Key Switch: Independent Control key switches shall be readily accessible and shall not be mounted in a locked inspection control panel.

Key Switches: All key switches in the fixture faceplates of landing stations, car stations and supervisory control stations shall be master-keyed with removable core cylinders (KABA type or approved equivalent). Key switches shall be clearly designated and the on/off position shall be clearly marked.

Trolley Passenger Lift (COP): To allow for maximum and optimum loading, Trolley Passenger Lift's (COPs) shall be mounted in the car fronts or if no car fronts exist, as close as possible to the “lift” entrance.

### **3.37. CALL BUTTON ACKNOWLEDGEMENT LIGHTS**

Car call buttons shall be of the “high requirement” energy efficient electronic (LED or equivalent) illumination acknowledging type. The registering of a call button shall illuminate the button to acknowledge that a call has been registered. Incandescent lamp or high power electronic illumination elements shall not be accepted. Universal Access requirements as specified must be considered.

### **3.38. LANDING CONTROL STATIONS**

#### **Landing Control Stations:**

- Landing call buttons shall be of the “high requirement” energy efficient electronic (LED or equivalent) illumination acknowledging type. The registering of a call button shall illuminate the button to acknowledge that a call has been registered. Incandescent lamp or high power electronic illumination elements shall not be accepted. Universal Access requirements as specified must be considered.
- Provide “high requirement” flush-mounted or slim-surface-mounted landing control stations on all floors. Terminal floors shall contain a single button control station and intermediate floors shall contain an up and down button control station. The registration of the button in one control station shall cause the illumination of the corresponding buttons in the other landing control stations at the same landing.
- Provide landing buttons with an approved, micro-push button operation. All the button elements offered shall be those regarded as “top-range” by the Lift-Contractor and shall be approved in terms of Health and Safety.
- The location of the centreline of each landing button control station shall be located at 1050 mm above the floor.
- Each button shall be clearly marked with its corresponding direction of travel. The demarcation shall either comprise a raised or recessed approved symbol.
- **Call Button Engraving:** The button markings/engraving shall be such that it

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does not fade or wear with continuous operations. The markings whether engraved or raised shall be contrasting light and dark colours and shall remain clearly visible and the coloured epoxy shall remain intact throughout the operating life of the button. The colour of the button engraving shall be a colour that makes button designation clearly visible with minimum landing lighting in terms of the applicable code.

### 3.39. WAITING PASSENGER LANTERNS AND GONGS

#### Waiting Passenger Displays and Gongs for Conventional Control:

- **General:** Provide “high requirement” flush-mounted or slim-surface-mounted up and down LED illumination or equivalent display waiting passenger lanterns at each intermediate landing and an up or down single display at the terminal landings of all “lifts”. The lanterns shall be mounted above the head jamb or beside the side jamb or shall be incorporated into the landing frame on each typical entrance. Incandescent illumination indicator lamps shall not be accepted.
- **Arrival Gongs General:** Supply and fit full range volume controlled / adjustable electronic arrival gongs to each entrance. The fixture faceplate shall contain an approved pattern of perforations / slots to enable the transmitting of the sound from within the shaft to the “lift” foyer. Gongs shall be fitted in enclosures to retain and direct the annunciation to the applicable landing foyer. It is intended that arrival gongs on one landing will not be heard on another landing.
- **Pre-Announcing Displays:** As soon as a “lift” has reached a predetermined distance from a landing and is going to stop at that landing, the corresponding waiting passenger display shall display the pre-selected direction of travel and the gong shall sound whether or not a landing call has been registered. The waiting passenger displays shall remain “illuminated” until the “lift” leaves the landing or if the car becomes filled whichever occurs first.
- **Universal Access Friendly Gongs:** In order to meet the universal access friendly requirements, the tone of the gong for up and down shall differ i.e. one “gong” for up and two “gongs” down.

### 3.40. LANDING SIGNALS

#### General:

Provide “high requirement” flush-mounted or slim-surface-mounted advanced high graphics liquid crystal (LCD) displays over the architrave of each “lift”. As the “lift” travels through the “lift” shaft, its position shall be indicated continuously by the illumination of the numeral or letter corresponding to the landing at which the “lift” is stopped or passing.

Information to be displayed shall include but shall not be limited to, floor position, fire control status, independent service (goods mode), priority service, direction arrows if pre-announcing has not been specified and inspection control (maintenance).

### **3.41. LANDING DOORS AND ARCHITRAVE FINISH**

#### **Stainless Steel Landing Finish:**

The direction of the grain of stainless steel door panels, frames and headers shall be in the same direction. Unless otherwise specified by the Consulting Lift Engineer, the direction of the grain for a stainless steel finish shall be vertical / top to bottom. Stainless steel damaged by an on-site polishing and/or re-graining process shall be replaced.

#### **Spray Painting:**

Door panels and frames shall be satisfactorily repaired and prepared, if permitted, the existing landing frames may be re-clad in a suitable stainless steel cladding to match the new landing door panels. Stainless steel damaged by an on-site cleaning, polishing and/or re-graining process shall be replaced.

All stainless steel landing doors and architraves shall be cleaned and receive a coat of an approved stainless steel polish prior to "equipment works completion". Stainless steel damaged by an on-site cleaning, polishing and/or re-graining process shall be replaced.

#### **Existing Stainless Steel:**

All stainless steel landing doors and architraves shall be satisfactorily repaired, professionally re-grained ("brushed") to match existing, cleaned and receive a coat of an approved stainless steel polish prior to "equipment works completion". Alternatively, and if permitted, the existing landing frames may be re-clad in a suitable stainless steel cladding to match new or existing the landing door panels. Stainless steel damaged by an on-site cleaning, polishing and/or re-graining process shall be replaced.

### **3.42. LIFT CAR FINISHES**

Finishes as specified shall be signed off as approved by the Consulting Lift Engineer and Principal Agent before manufacture and installation.



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*Example of Finished Lift Interior (Final finish may differ from image)*

Decorative finishes in the car or floor covering shall not have a fire index of more than two (2) when tested in accordance with SANS 0177: Part-3 or Part-4, as the case may be.

The entire car internal finish including the area above the suspended ceiling shall be installed and finished off to the highest standard.

**Internal Car Panels:**

All wall panelling shall be brushed stainless steel and shall be jointed with a pliable material / silicone to prevent squeaks generated by car panel movement or deflection.

**Car Flooring:**

The car flooring shall be non-slip pvc/rubber and shall be such that it does not fade or wear with continuous operations. The flooring shall remain intact throughout the operating life of the 'lift'.

**Enclosure Finish Safety Gear Test:**

In order to verify the safety of the car interior design, the following test shall be carried out:

- The design and final fixing of the car interior wall and ceiling covering shall be tested by activating the safety gear while the "lift" is running in a down direction at nominal / contract speed.
- On completion of the safeties test, the "lift" enclosure wall and ceiling panels

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shall be inspected for distortion or damage and if necessary, the test covered under this section shall be repeated until satisfactory conclusion.

- In order to verify the design and inspect the hidden fixings of the car enclosure wall and ceiling panels, the Consulting Lift Engineer reserves the right to request the removal of the wall and ceiling covering after the safety gear test covered under this section.

**Stainless Steel Car Entrance Finish:**

The direction of the grain of stainless steel door panels, slam-posts and headers shall be in the same direction. Unless otherwise specified by the Consulting Lift Engineer, the direction of the grain for a stainless steel finish shall be vertical / top to bottom.

**Finish:**

Work relating to the finish requiring written approval prior to placing the order or manufacture from the Consulting Lift Engineer shall be understood as and shall include:

- Entire "lift" enclosure - design and finish.
- Car and landing fixture faceplates -design, finish and location.
- Buttons and signals – design and finish.
- Signage – design, finish and location.
- Car and landing entrances– design and finish.

At the instruction of the Consulting Lift Engineer; additional work incurred to redesign or remanufacture work undertaken without written approval from the Consulting Lift Engineer shall be carried out at no additional cost to the Employer.

**Car Information Display:**

Information display screens, of a minimum size of 15 inches, shall be installed in each car. The screens offer an attractive and durable display in order to open a new channel of communication with the passenger. The screens shall provide the capability to display various content, including but not limited to:

- Lift data such as location, direction, next stop
- Advertising, safety information, news, weather, etc.
- Personalised content



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*Example of Car Info Display Screen (Final screen may differ from image)*

### **Blanking Off Plates:**

Where applicable, provide full blanking-off faceplates to cover the existing car operating panels and indicator cut-outs. Blanking off plates to cover cut-outs of removed indicators above the entrance shall extend the full width of the car entrance header section.

### **3.43. LIFT INTERCOMMUNICATION SYSTEM**

Provide a “high requirement” intercom system complete with talk-back speakers with all required auxiliary elements, wiring, six (6) hour minimum back up power supply and piped music / background music capabilities.

“Lift” travelling cables on each “lift” shall contain two (2)-shielded twisted pairs of conductors for intercom usage.

Provide terminal strip boxes for all wiring.

All voice-carrying wires in the wiring system shall be shielded and run in separate low voltage cable trays / wiring ducts. Wiring among all master stations in the building shall comply with “manufacturer’s” recommended standards

The intercom system’s ability to announce, acknowledge and/or log a call from a sub-station or master station shall not be dependent or reliant on the termination of an active communication link or the manual resetting of a button or toggle switch. The intercom master stations shall remain active with regards to announcing and/or logging multiple calls irrespective of the status of operation of the intercom system.

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Any communication link created within the system shall be preceded by an announcing call tone. It shall be possible to silence / accept a call tone without responding to the call(s) and without cancelling the registered or logged call(s) on the master station.

As a minimum and without limiting the requirements to provide additional sub-stations and/or sub-master stations as called for under this Section (lift intercom system); provide one (1) hands-free sub-station in each "lift" car and one (1) sub-master-station for each machine room and one (1) sub-master-station for the good lift lobbies / landings when this has been specified and one (1) master-station for the security / control room as specified. Two-way voice communication between the "lift" car and "lift" machine room, "lift" car and control room, and "lift" machine room and control room shall be possible. The operation of a master station in the control room shall at all times allow the operator to have at least one hand free.

The voice link shall constantly produce a sound / speech quality comparable to that of the local or national telephone network. All provisions to adequately address interference in the lines shall be included. The intercom sub-master and master stations shall include an indicator / monitoring system to indicate the "lift" car or machine room initiating the emergency call and an "All Call" feature to allow for communication to all "lifts" at the same time.

The car-operating panel shall include a series of perforations as approved to accommodate the intercom speaker and microphone.

**Intercom Security / Control Room:**

The "lift" intercoms for all the "lifts" and machine rooms shall be wired back to a centrally located common security / control room.

**Master Station:**

The master station shall be capable of accommodating all the "lifts" covered under the "works information" including the shaft emergency release sub-master stations if specified. The individual lift's designation and its call code shall be clearly and neatly displayed on the control / security room intercom monitoring system.

**Shaft Emergency Release Intercom:**

In terms of SANS 50081-72 (EN 81-72), and in order to address the risk for persons working in the well being trapped and with no means of escape, either through the car, or through the well, additional intercom sub-stations shall be provided and installed at places where this risk exists. The shaft emergency release intercom sub-stations shall be an extension of the main intercom called for under this Section (lift intercom system):

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**Intercom Instruction:**

Provide a one (1) hour training sessions for the instruction of the Employer's authorised technical and security staff.

**Intercom Control Cable Wire-Ways:**

The cabling wire-ways between the "lift" machine rooms and the control room shall be provided and installed. Information and technical detail on the type, quantity and size of wire-ways as well as the termination location shall be provided and presented in writing to the Consulting Lift Engineer sufficiently in advance for field requirements.

**Intercom Control Cables/Wiring:**

All the cabling and the installation thereof for the intercom operation shall be provided. The site and relevant drawings shall be checked to determine the route and lengths of cable required.

**3.44. RIDE QUALITY AND PERFORMANCE CRITERIA****Ride Quality Objective:**

The main objective is to be able to determine a ride standard and to maintain that standard by routine measurement and adjustment as necessary. The standards nominated are for "lifts" with rated speeds shown in the tables below. Lower speed "lifts" should be able to perform better in terms of ride quality, and at worst the same parameters should be applied.

Vibration: Vibration also sometimes referred to as "quaking", is measured in three dimensions:

- Lateral quaking from front to back,
- Lateral quaking from side to side,
- Vertical vibration (ups and down).
- The vibration levels are measured as acceleration levels of the car floor using an accelerometer, and measurements are expressed in terms of mm/s<sup>2</sup>, milli-g or GAL. -

$$9.81 \text{ mm/s}^2 = 1 \text{ milli-g or GAL}$$

**Noise Levels:**

Noise levels in the car are taken during running and maximum and mean dB (A) figures are taken.

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**Accelerometer Tests:**

- Accelerometer tests may be called for to verify the ride quality:
- Recording accelerometer tests in the horizontal plane shall be conducted prior to “equipment works completion” on each “lift” travelling at contract speed the full length of the shaft between terminal landings in both up and down directions with a maximum load of 230 kg located in the centre of the platform. Recordings shall be taken on the platform in the plane of the car guide rails and perpendicular to the plane of the car guide rails. One set of recordings for each “lift” shall be included in the maintenance manuals as a permanent record.
- If these tests show that the “equipment” is in any way defective, at variance with the specified requirements, or objectionable in any operation; all work (labour and material) and the related cost for re-testing and all subsequent tests or on-site observations shall be included under this section until the “equipment” is approved at “equipment works completion”. Notice of all tests shall be given to the Consulting Lift Engineer at least 96 hours in advance.

**Ride Quality - Performance criteria:**

The “lifts” shall be adjusted as required to meet the performance requirements within a 10% variance:

**Machine Room Airborne Noise:**

Speed	<2.5-m/s	2.5-m/s	4.0-m/s	6.0-m/s
Overhead machines:	<60 dB(A)	<65 dB(A)	<70 dB(A)	<70 dB(A)
(MRL) “lift” machines:	<45 dB(A)	<45 dB(A)	N/A	N/A

**Car Airborne Noise:**

Speed	<2.5-m/s	2.5-m/s	4.0-m/s	6.0-m/s
Car noise max:	<42 dB(A)	<45 dB(A)	<50 dB(A)	<50 dB(A)

**Landing Airborne Noise:**

Speed	<2.5-m/s	2.5-m/s	4.0-m/s	6.0-m/s
Door movement max:	<48 Db(A)	<48 Db(A)	<48 Db(A)	<48 Db(A)
Pass-by noise:	<40 Db(A)	<45 Db(A)	<45 Db(A)	<48 Db(A)

**Ride quality & Stopping Accuracy:**

Stack changes:	Nil
Shooting-off or roll-back:	Nil
Levelling accuracy:	<3.0-mm

**Breakdown Rate:**

Provide guarantees that after completion of the “lift” installation, the “lift” breakdowns / interruptions shall not exceed the stop rate shown below. The fault analysis shall be compiled on a monthly basis and assessed on a “rolling year”. A defect as stated above is defined as an event, which prevents “equipment” from providing its required service and

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which was not as a consequence of an external factor or at the specific direction of the Employer. If the "lifts" do

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not deliver the specified service after “equipment works completion” and the twelve (12) months guarantee period, it shall be considered as a Latent Defect to be rectified by re-commissioning, adjusting, or replacing components of the “equipment” at no additional cost to the Employer.

- The total annual average stops per “lift” shall not exceed **four (4)**. The total annual stops per “unit” which are attributed to the “lift” drive and control systems, shall not exceed **two (2)**.

### **3.45. MACHINE AND DATA CONTROL SUBMITTALS**

#### **Machine Data:**

Provide the relevant machine data as shown below to ensure the correct Power Feeder Design well in advance of field requirements:

- “Lift” numbers:
- Capacity / load: in kg
- Speed: in m/s
- Supply Voltage: in Volts
- Supply Frequency: in Hertz
- Number of wires: 4
- Motor kW rating: in kW
- Full load UP acceleration: in Amps
- Full load UP nominal speed: in Amps
- Machine heat release per car: in BTU/hr/car
- Power Factor: in %

#### **Control Parameters and Special Features:**

Provide for approval by the Consulting Lift Engineer, a detailed list of the proposed distribution zones, free car parking floors in order of priority, main landing, fireman's floor, security floor and a detailed list of all the special operation features which are to be incorporated into the software before, placing the order for the manufacture of the “lift” control software.

### **3.46. LOW NOISE AND VIBRATION RIDE**

#### **General:**

To achieve a “lift” ride quality of the highest standard the following minimum “high requirement” requirements shall be met:

- Vibration isolated car hitch shall be installed,
- Sound isolated car platform shall be installed,
- The car and sling shall be precision static balanced,
- Vibration isolated compensating hitch shall be installed,
- Flexes and compensating rope shall be mounted centrally to the DBG,
- Noise Levels: Noise levels shall not exceed the values / levels specified under Section-



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4.44 (ride quality and performance criteria).

**Hoisting Rope Noise:**

The suspension rope hitch and sheaves arrangement shall be designed to limit the rope noise to a level that is not audible in the car enclosure or on the landings during travel. Sheave or rope hitch design and manufacture shall prevent the hoisting ropes from vibrating against each other during travel.

**Guide Noise:**

The guide and sliding shoe arrangement of both the car and counterweight shall be designed and manufactured to limit all guide noise to a level not audible in the car enclosure or on the landings during travel.

**Sound / Vibration Isolation:**

All the specified requirements pertaining to sound and vibration isolation in the machine room, shaft, car, doors and over-head steel-work / sheaves shall not be compromised in any way.

**3.47. MACHINE ROOM-LESS (MRL) LIFT INSTALLATIONS**

**Codes of Practice (MRL Lifts):**

The standards and requirements for the installation of machine room less (MRL) "lifts" will therefore, have to satisfy SANS 50081-20 as well as all other codes, practices, standards and local by-laws applicable to this type of "lift" installation.

**Standard Product Range:**

In cases where the Lift-Contractor's standard product range(s) of "equipment" or "equipment" whose design and application is not intended for "high requirement" prestige developments (office, hotels, retail etc.) and where the "equipment" cannot meet the performance, operation, safety or duty rate requirements specified; then it shall be the Lift-Contractor's sole responsibility and duty to customise the standard product range of "equipment" with improved components capable of achieving and meeting the specified requirement. These improved components may include the following:

- Door operators (critical item)
- Door panel design.
- Buttons, signals and indicators.
- Load measuring.
- "Lift" car design including robust car-fronts / slam-post.
- Car enclosure internal clear dimensions.
- Duty rates, operation and performance.



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**Noise and Vibration Levels:**

The noise generated by the control and drive on the landing shall not exceed the noise levels specified under Section 4.44 (ride quality and performance criteria). The noise and vibration levels measured in the "lift" car shall not exceed the performance levels as specified herein.

Without reducing additional included electrical requirements as specified; Machine room less (MRL) "lifts" shall be supplied as a complete package and the following items shall be provided and considered as an integral part of the "equipment":

- Electrical supply cable from the Isolator provided at the bottom of the shaft to an isolated provided by the Lift-Contractor situated in the machine room / space.
- Electrical distribution board (DB) including circuit breakers (CBs) and earth leakage for control Apparatus,
- Car lights (minimum 150 lux for Universal Access Lifts) as specified,
- Car plug sockets as specified,
- Machine room lights (minimum 300 lux) as specified,
- Pit lights (minimum 100 lux) as specified,
- Shaft lights (minimum 50 lux) as specified,
- Machine room plug socket (15 Amps) as specified,
- Pit plug socket (15 Amps) as specified.

All electrical work shall comply with the requirements of SANS 0142.

**Painting of the Machine Space:**

Paint the machine space walls and roof within the shaft white. The machine space shall be considered as the complete shaft area containing the drive and control apparatus / elements from the level of the highest landing to the top of the shaft / machine space roof.

**Existing Electrical Feeder / Supply Cable & Distribution Board (DB):**

- Provide all material and work required to extend or transfer the lift supply cable(s) from the existing electrical distribution board (DB) to the new (DB) mounted in the shaft.
- Provide all material, work and signage necessary to make the existing (DB) safe after relocating of the electrical supply and (DB) into the lift shaft.

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### **3.48. GENERAL REQUIREMENTS**

#### **Car-Top Working Platform:**

Securely fitted working platforms of adequate strength and at least angle shall be provided on the top of the car roof to create a level and safe working area. The platform shall be considered level if the surface is free of any electrical cabling and other "lift" components. The car roof shall not be regarded as a working platform.

#### **Car-Top Guard Rails:**

In terms of SANS 50081-20, the car roof shall be provided with a balustrade (guard-rail) where the free distance in the horizontal plane beyond and perpendicular to its outer edge exceeds 300 mm. The balustrade shall fulfil the following requirements:

- It shall consist of a toe guard of 100 mm height and an intermediate bar at half the height of the balustrade,
- Considering the free distance in a horizontal plane beyond the outer edge of the hand-rail of the balustrade, its height shall be at least:
  - 700 mm where the free distance is up to 850 mm and
  - 1100 mm where the free distance exceeds 850 mm
- The guard-rail shall be of adequate strength and shall be manufactured from at least a 40 mm by 40 mm angle or equivalent strength material.

#### **Machine room Electrical Wiring:**

As a standard only machine room floor ducting will be accepted and to this end, an 80 mm floor screed shall be considered in the machine room design. All floor-ducting covers will be 4.0 mm minimum chequer-plate.

All the "lift" apparatus / components in the machine room and shaft shall be thoroughly cleaned prior to "equipment works completion".

All load switches / sensors which influence the control and the drive in achieving an optimum operation shall be adjusted, and their operating loads documented for future reference on the data sheet or certificate of compliance. These load contacts may include but are not limited to the over-load, minimum load and the landing call by-pass functions.

#### **Existing Power Feeder System:**

Inspect and verify that the existing power feeder system is compatible with the "equipment" offered and any changes or upgrading of the electrical supply shall be brought to the attention of the Consulting Lift Engineer at tender stage. Any work to the power feeder system necessary to produce a reliable "equipment" operation and which was not brought to the Consulting Lift Engineer attention, shall be undertaken by the Lift-Contractor at no additional cost to the Employer.

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All apparatus / components and their respective adjustment which do not form part of the "equipment" change yet influence the optimum operation of the modernised elements, shall be included in the Lift-Contractor's scope of works.

All apparatus / components of the machine room / space, shaft, car and pit not covered under this Section (existing power feeder system) and which do not form part of the modernised elements and yet require repair, replacement or adjustment shall be repaired, replaced or adjusted as the case may be prior to "equipment works completion". At "equipment works completion" the "equipment" in its entirety shall perform in accordance with the original design parameters and to this end, the modernisation work shall cover general maintenance items not forming part of the modernised "equipment".

### **3.49. PROGRAMMABLE LOGIC CONTROLLERS (PLC)**

NOTE: (PLC) "lift" and "group" control systems shall not be accepted.

### **3.50. PROTECTION FOR TRACTION SHEAVES, PULLEYS AND SPROCKETS**

Provide all guarding and protection in terms of SANS 50081-20.

For traction sheaves, pulleys and sprockets, provisions shall be made according to the following table to avoid:

- Bodily injury;
- The ropes/chains leaving the pulleys/sprockets, if slack;
- The introduction of objects between ropes/chains and pulleys/sprockets.

NB - Where overhung pulleys or sprockets are used, devices according to the following table shall be provided.

Depending on the intended environmental conditions attention shall be paid to avoid the accumulation of dust and debris in the guards.

**APPOINTMENT OF A SUITABLE ELEVATOR/LIFT SPECIALIST SERVICE PROVIDER FOR THE  
REPLACEMENT TO SPECIFICATION OF FOUR LIFTS AT THE CGS HEAD OFFICE.**

Location of protections			(a) bodily injury	(b) ropes leaving pulleys if slack	(c) introduction of objects
“Lift” platform / enclosure		On the roof	X	X	X
		Under floor		X	X
On the counterweight				X	X
In the machine space			X(a)	X	X(b)
In the pulley space			X(a)	X	
Shaft	Headroom	Above “lift”	X	X	
		Beside “lift”		X	
	Between pit and headroom			X	X(b)
	Pit		X	X	X
At the rope of over-speed detection device and tensioning pulley				X	X(b)
Jack	Extending upwards		X(a)	X	
	Extending downwards			X	X(b)
	With mechanical synchronizing means		X	X	X

**X** = Risk must be taken into account  
(a)Protection shall be nip guards as a minimum  
(b)Required only if the ropes/chains are entering the traction sheave or the pulley/sprocket horizontally or at any angle above the horizontal up to a maximum of 90°

The devices used shall be constructed so that the rotating parts are visible, and do not hinder examination and maintenance operation. If they are perforated the gaps shall comply with **EN 294, Table 4**. The dismantling shall be necessary only in the following cases:

- Replacement of a rope/chain;
- Replacement of a pulley/sprocket;
- Re-cutting of the grooves.

### Guarding of Machinery:

Effective protection shall be provided for accessible rotating parts, which may be dangerous, in particular:

- Keys and screws in the shafts;
- Tapes, chains, belts;
- Gears, sprockets;
- Projecting motor shafts;
- Fly-ball type over-speed detection devices.

Exception is made for traction sheaves, hand winding wheels, brake drums and any similar smooth, round parts. Such parts shall be painted yellow, at least in part.

### 3.51. EMERGENCY DOORS AND TRAP DOORS

#### Rescue and Evacuation:

In terms of SANS 50081-20, assistance to passengers in the car shall always come from outside and consequently; emergency trap doors or emergency doors

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shall be provided in the car to permit the rescue and evacuation of trapped passengers. Emergency trap doors shall be provided in the car roof.

**Emergency Trap Doors in the Car:**

As a minimum, emergency trap doors shall satisfy all the following requirements:

- Measure at least 500 mm x 500 mm for general Passenger Lifts and 500 mm x 700 mm for Fireman's Lifts,
- Be constructed of material that meets the mechanical strength of that required for the car enclosure (roof),
- Have a means of manual locking,
- Open from inside the car with a key (tri-angle key) and from outside the car without a key,
- Not open towards the inside of the car (open outwards),
- Prevent the "lift" from operating if not in the locked position (electric safety device),
- In the open position, the door shall not project beyond the edge of the car.

APPOINTMENT OF A SUITABLE ELEVATOR/LIFT SPECIALIST SERVICE PROVIDER FOR THE  
REPLACEMENT TO SPECIFICATION OF FOUR LIFTS AT THE CGS HEAD OFFICE.

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## 24 IMPLEMENTATION PLAN

The preliminary Project Programme has been updated to reflect the current progress of the project.

### Projected Key Dates:

Stage	Completion Date
Stage 3 – Procurement	28/02/2022
Stage 4 – Contractor Measurement and Finalisation	31/05/2022
Stage 5 – Construction	28/02/2023
Stage 6 – Close-out	31/03/2023

The duration of this project is estimated to be 12 months.

**APPOINTMENT OF A SUITABLE ELEVATOR/LIFT SPECIALIST SERVICE PROVIDER FOR THE  
REPLACEMENT TO SPECIFICATION OF FOUR LIFTS AT THE CGS HEAD OFFICE.**

## **ANNEXURE B: PRICING SCHEDULE**

Below is the guide that must be used in estimating the bidding 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 CGS will not be under any obligation to expend the full or any portion of this amount.

<b>CGS Four Elevators Replacement - Pricing Schedule</b>		
<b>Item</b>	<b>Description</b>	<b>Amount (excl. VAT)</b>
<b>1. Site Establishment</b>		
1.1	Health, Safety and Environmental	
1.2	Site establishment	
1.3	Permitting Allowance	
1.4	Other (please specify)	
<b>Sub-Total A - P&amp;Gs</b>		
<b>2. Works - Complete Replacement of Elevators: Cost including all Mechanical, Civil and Electrical works</b>		
2.1	Lift A	
2.2	Lift B	
2.3	Lift C	
2.4	Lift D	
2.5	Extension of the comprehensive maintenance and support contract for an additional 3 (three) years including all spare parts and sundries for all four lifts. (Over and above the 12-month free maintenance period)	
<b>Sub-Total B - Replacement of Elevators</b>		

<b>Contract Value for Replacement of Elevators</b>	
Sub-Total A+B (excl. VAT)	
VAT @ 15%	
<b>Grand Total: Contract Value (incl. VAT)</b>	

Prices to be firm for duration of project.



**PRICING SCHEDULE**  
(Professional Services)

NAME OF BIDDER: ..... BID NO.: CGS-2021-013S

CLOSING TIME 11:00

CLOSING DATE: 2022/07/13

OFFER TO BE VALID FOR 120 DAYS FROM THE CLOSING DATE OF BID.

ITEM NO	DESCRIPTION	BID PRICE IN RSA CURRENCY **(ALL APPLICABLE TAXES INCLUDED)	
1.	The accompanying information must be used for the formulation of proposals.		
2.	Bidders are required to indicate a ceiling price based on the total estimated time for completion of all phases and including all expenses inclusive of all applicable taxes for the project.	R.....	
3.	PERSONS WHO WILL BE INVOLVED IN THE PROJECT AND RATES APPLICABLE (CERTIFIED INVOICES MUST BE RENDERED IN TERMS HEREOF)		
4.	PERSON AND POSITION	HOURLY RATE	DAILY RATE
	.....	R.....	.....
	.....	R.....	.....
	.....	R.....	.....
	.....	R.....	.....
	.....	R.....	.....
5.	PHASES ACCORDING TO WHICH THE PROJECT WILL BE COMPLETED, COST PER PHASE AND MAN-DAYS TO BE SPENT		
	.....	R.....	..... days
	.....	R.....	..... days
	.....	R.....	..... days
	.....	R.....	..... days
5.1	Travel expenses (specify, for example rate/km and total km, class of airtravel, etc). Only actual costs are recoverable. Proof of the expenses incurred must accompany certified invoices.		
	DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY AMOUNT
	.....	.....	R.....
	.....	.....	R.....
	.....	.....	R.....
	.....	.....	R.....
		TOTAL: R.....	

\*\* "all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance contributions and skills development levies.

Name of Bidder: .....

- 5.2 Other expenses, for example accommodation (specify, eg. Three star hotel, bed and breakfast, telephone cost, reproduction cost, etc.). On basis of these particulars, certified invoices will be checked for correctness. Proof of the expenses must accompany invoices.

DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY	AMOUNT
.....	.....	.....	R.....
.....	.....	.....	R.....
.....	.....	.....	R.....
.....	.....	.....	R.....
TOTAL: R.....			

6. Period required for commencement with project after acceptance of bid .....  
 7. Estimated man-days for completion of project .....  
 8. Are the rates quoted firm for the full period of contract? \*YES/NO  
 9. If not firm for the full period, provide details of the basis on which adjustments will be applied for, for example consumer price index. ....  
 .....  
 .....  
 .....

Any enquiries regarding bidding procedures may be directed to:

Sasavona Chauke  
 Supply Chain Management  
 280 Pretoria Street  
 Silverton  
 Pretoria  
 0001

Tel: 012 841 1059

## BIDDER'S DISCLOSURE

### 1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

### 2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest<sup>1</sup> in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship

---

<sup>1</sup> the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....  
 .....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

.....  
 .....

### 3 DECLARATION

I, \_\_\_\_\_ the \_\_\_\_\_ undersigned,  
 (name)..... in  
 submitting the accompanying bid, do hereby make the following  
 statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>2</sup> will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring

---

<sup>2</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of bidder

## PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

**NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.**

### 1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and

1.2

- a) The value of this bid is estimated not to exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

## 2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
  - 1) B-BBEE Status level certificate issued by an authorized body or person;
  - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
  - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

### 3. POINTS AWARDED FOR PRICE

### 3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

80/20

or

90/10

$$P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \quad \text{or} \quad P_s = 90 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

Where

Ps = Points scored for price of bid under consideration

Pt = Price of bid under consideration

$P_{min}$  = Price of lowest acceptable bid

#### 4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:



B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

## 5. BID DECLARATION

- 5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

## 6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

- 6.1 B-BBEE Status Level of Contributor:..... = .....(maximum of 10 or 20 points)  
(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.)

## 7. SUB-CONTRACTING

- 7.1 Will any portion of the contract be sub-contracted?

(**Tick applicable box**)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

- 7.1.1 If yes, indicate:

- What percentage of the contract will be subcontracted.....%
- The name of the sub-contractor.....
- The B-BBEE status level of the sub-contractor.....
- Whether the sub-contractor is an EME or QSE

(**Tick applicable box**)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

- v) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations, 2017:

Designated Group: An EME or QSE which is at least 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		

Black people who are military veterans		
<b>OR</b>		
Any EME		
Any QSE		

**8. DECLARATION WITH REGARD TO COMPANY/FIRM**

8.1 Name \_\_\_\_\_ of  
company/firm:.....

8.2 VAT \_\_\_\_\_ registration  
number:.....

8.3 Company \_\_\_\_\_ registration  
number:.....

**8.4 TYPE OF COMPANY/ FIRM**

Partnership/Joint Venture / Consortium

One person business/sole propriety

Close corporation

Company

(Pty) Limited

[TICK APPLICABLE BOX]

**8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES**

.....  
.....  
.....  
.....  
.....

**8.6 COMPANY CLASSIFICATION**

Manufacturer

Supplier

Professional service provider

Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

8.7 Total number of years the company/firm has been in business:.....

8.8 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a

fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –

- (a) disqualify the person from the bidding process;
- (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
- (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
- (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution.

WITNESSES

1. ....

2. ....

.....  
SIGNATURE(S) OF BIDDERS(S)

DATE: .....

ADDRESS .....

.....

.....

# **THE NATIONAL TREASURY**

**Republic of South Africa**



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## **GOVERNMENT PROCUREMENT: GENERAL CONDITIONS OF CONTRACT**

**July 2010**

**GOVERNMENT PROCUREMENT**  
**GENERAL CONDITIONS OF CONTRACT**  
**July 2010**

**NOTES**

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid, should be compiled separately for every bid (if applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

## TABLE OF CLAUSES

1. Definitions
2. Application
3. General
4. Standards
5. Use of contract documents and information; inspection
6. Patent rights
7. Performance security
8. Inspections, tests and analysis
9. Packing
10. Delivery and documents
11. Insurance
12. Transportation
13. Incidental services
14. Spare parts
15. Warranty
16. Payment
17. Prices
18. Contract amendments
19. Assignment
20. Subcontracts
21. Delays in the supplier's performance
22. Penalties
23. Termination for default
24. Dumping and countervailing duties
25. Force Majeure
26. Termination for insolvency
27. Settlement of disputes
28. Limitation of liability
29. Governing language
30. Applicable law
31. Notices
32. Taxes and duties
33. National Industrial Participation Programme (NIPP)
34. Prohibition of restrictive practices

## **General Conditions of Contract**

### **1. Definitions**

1. The following terms shall be interpreted as indicated:
  - 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
  - 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
  - 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
  - 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
  - 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
  - 1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
  - 1.7 "Day" means calendar day.
  - 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
  - 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
  - 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
  - 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the



RSA.

- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such

obligations of the supplier covered under the contract.

- 1.25 “Written” or “in writing” means handwritten in ink or any form of electronic or mechanical writing.

## **2. Application**

- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

## **3. General**

- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from [www.treasury.gov.za](http://www.treasury.gov.za)

## **4. Standards**

- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

## **5. Use of contract documents and information; inspection.**

- 5.1 The supplier shall not, without the purchaser’s prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser’s prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier’s performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier’s records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

## **6. Patent rights**

- 6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

**7. Performance security**

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
  - (b) a cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

**8. Inspections, tests and analyses**

- 8.1 All pre-bidding testing will be for the account of the bidder.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or

analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.

- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

## **9. Packing**

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

## **10. Delivery and documents**

- 10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
- 10.2 Documents to be submitted by the supplier are specified in SCC.

## **11. Insurance**

- 11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

## **12. Transportation**

- 12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

## **13. Incidental services**

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
  - (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
  - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;

- (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

#### **14. Spare parts**

14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) in the event of termination of production of the spare parts:
  - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
  - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

#### **15. Warranty**

15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.

15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.

15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take

such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

**16. Payment**

- 16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
- 16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4 Payment will be made in Rand unless otherwise stipulated in SCC.

**17. Prices**

- 17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.

**18. Contract amendments**

- 18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.

**19. Assignment**

- 19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

**20. Subcontracts**

- 20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

**21. Delays in the supplier's performance**

- 21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the

supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.

21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.

21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without canceling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

## **22. Penalties**

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

## **23. Termination for default**

23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
- (b) if the Supplier fails to perform any other obligation(s) under the contract; or
- (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

23.4 If a purchaser intends imposing a restriction on a supplier or any



person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.

- 23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.
- 23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:
- (i) the name and address of the supplier and / or person restricted by the purchaser;
  - (ii) the date of commencement of the restriction
  - (iii) the period of restriction; and
  - (iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

- 23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

#### **24. Anti-dumping and countervailing duties and rights**

- 24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which

may be due to him

**25. Force Majeure**

- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

**26. Termination for insolvency**

- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

**27. Settlement of Disputes**

- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
  - (b) the purchaser shall pay the supplier any monies due the supplier.

**28. Limitation of liability**

- 28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and

		(b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
<b>29. Governing language</b>	29.1	The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
<b>30. Applicable law</b>	30.1	The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
<b>31. Notices</b>	31.1	Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice
	31.2	The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
<b>32. Taxes and duties</b>	32.1	A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
	32.2	A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
	32.3	No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.
<b>33. National Industrial Participation Programme (NIP)</b>	33.1	The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.
<b>34 Prohibition of Restrictive practices</b>	34.1	In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).
	34.2	If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.

- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.