

CONDITIONS OF THE CONSTRUCTION CONTRACT FOR THE PLANNING, DESIGN, SUPPLY, CONSTRUCTION, INSTALLATION, TESTING, COMMISSIONING AND MAINTENANCE OF A NEW FULLY INTEGRATED, FUNCTIONAL, COMPLETE AND FUTURE-PROOFED PRASA TRAIN CONTROL SYSTEM (“PTCS”) IN PRASA’S KWAZULU-NATAL (“KZN”) SERVICE REGION (“THE PROJECT”)

ENTERED INTO BETWEEN:

PRASA (“THE EMPLOYER”)

AND

(“THE CONTRACTOR”)

PREAMBLE AND RECITALS:

WHEREAS the Employer appoints the Contractor as the suitable service provider and enters into this written Contract to plan, design, supply, construct, install, test, commission and maintain a new fully integrated, functional, complete and future-proofed PRASA Train Control System (“PTCS”) in PRASA’S Kwazulu-Natal (“KZN”) service region (“the Project”) that the Contractor shall meet and deliver at the Contractor’s cost therefore within the Initial Contract Price (“ICP”), according to the Approved Baseline Contract Programme/Approved Programme and at the Contractor’s risk, subject to specific terms and conditions;

NOW THEREFORE, the parties hereby reduce their agreement in writing, and record the terms and conditions of the Contract as follows:

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DEFINITIONS

In the Contract the following words and expressions shall have the meanings stated, except where the context requires otherwise.

- 1.1.1 **"Accepted Contract Amount"** means the Initial Contract Price ("ICP") accepted in the Letter of Acceptance for the execution of the Works in accordance with the Contract after negotiations between the parties. This includes the moneys payable by the Employer to the Contractor for completion of the Work in accordance with the Contract Documents as defined in clause 1.1.15 of the Agreement.
- 1.1.2 **"Advance Payment Certificate"** means a Payment Certificate issued by the Engineer for advance payment under Sub-Clause
- 1.1.3 **"Advance Payment Guarantee"** means the guarantee under Sub-Clause 14.2.11
- 1.1.4 **"Base Date"** means the date 28 calendar days before the latest date for submission of the Tender.
- 1.1.5 **"Claim"** means a request or assertion by one Party to the other Party for an entitlement or relief under any Clause of these Conditions or otherwise in connection with, or arising out of, the Contract or the execution of the Works. A demand for money or services by a third party is not a Claim.
- 1.1.6 **"Commencement Date"** means the date as stated in the Engineer's Notice issued under Sub-Clause 8.1 [Commencement of Works], or a Notice given by the Engineer to Contractor fixing the date on which the Contract Times will commence to run and on which the Contractor shall start to perform the Work under the Contract Documents.
- 1.1.7 **"Compliance Verification System"** means the compliance verification system to be prepared and implemented by the Contractor for the Works in accordance with Sub-Clause 4.9.2 [Compliance Verification System].

- 1.1.8 **"Conditions of Contract"** or "these Conditions" means these General Conditions as amended by the Particular Conditions.
- 1.1.9 **"Consortium Undertaking"** means the Consortium Agreement (duly notarised), provided to the Employer as part of the Contractor's Proposal setting out the legal undertaking between the two or more entities constituting the Contractor as a Consortium. This Consortium Agreement shall be signed by all the entities (by their duly authorised representatives) who are members of the Consortium, shall be addressed to the Employer and shall include:
- 1.1.9.1 each such entity's board resolutions (fully signed and notarised) confirming authority to enter into the Consortium Agreement;
 - 1.1.9.2 each such entity's undertaking to be jointly and severally liable to the Employer for the performance of the Contractor's obligations under the Contract;
 - 1.1.9.3 Identification and authorization of the leader of the Consortium;
 - 1.1.9.4 identification and authorisation of the management committee of the Consortium;
 - 1.1.9.5 Shareholder certificates for each entity constituting the Consortium;
 - 1.1.9.6 Breakdown of the shareholding of each entity constituting the Consortium; and
 - 1.1.9.7 Breakdown of ICP allocation to each entity constituting the Consortium.
- 1.1.10 **"Contract"** means the Contract Agreement, the Letter of Acceptance, the RFP (including all annexures), the Particular Conditions of Contract, the Special Provisions of Contract, the General Conditions of Contract, the Employer's Requirements, the Schedules, the Contractor's Proposal (including the Letter of

Tender), the JV Undertaking (if the Contractor is a JV), and any other documents forming part of the Contract.

- 1.1.11 **"Contract Agreement"** means the agreement entered into by both Parties in accordance with Sub-Clause 1.7 [Contract Agreement]. This signed Contract.
- 1.1.12 **"Contract Data"** means the pages of this contract data which constitutes the entire Contract and all the RFP documents.
- 1.1.13 **"Contract Price"** means the Initial Contract Price consisting of the lump sum Accepted Contract Amount for the execution of the Works in accordance with the contract after negotiations between the parties.
- 1.1.14 **"Contractor"** means an entity named as the Contractor in the Contractor's Proposal (including the Letter of Tender) whose proposal has been accepted by the Employer and the legal successors in title of such person(s), with whom the Employer has entered into the Contract.
- 1.1.15 **"Contracts Documents"** means the documents prepared by the Contractor as described in Sub-Clause 5.2 [Contractor's Documents], including calculations, digital files, computer programs and other software, drawings, manuals, models, specifications and other documents of a technical nature. Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 1.1.16 **"Contractor's Equipment"** means all apparatus, equipment, machinery, construction plant, vehicles and other items required by the Contractor for the execution of the Works. Contractor's Equipment excludes Temporary Works, Plant, Materials and any other things intended to form or forming part of the Permanent Works.
- 1.1.17 **"Contractor's Personnel"** means the Contractor's Representative and all personnel whom the Contractor utilizes on Site(s) or other places where the Works

are being carried out, including the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.

- 1.1.18 **"Contractor's Proposal"** means the part of the Tender stated or implied as being the Contractor's proposal for execution of the Works, as included in the Contract. Such documents may include the Contractor's preliminary design.
- 1.1.19 **"Contractor's Representative"** means the natural person named by the Contractor in the Contract or appointed by the Contractor under Sub-Clause 4.3 [Contractor's Representative], who acts on behalf of the Contractor.
- 1.1.20 **"Cost"** means all expenditure reasonably incurred (or to be incurred) by the Contractor in performing the Contract, whether on or off the Site(s), including taxes, overheads and similar charges, but does not include profit. Where the Contractor is entitled under a Sub-Clause of these Conditions to payment of Cost, it shall be added to the Contract Price.
- 1.1.21 **"Cost plus Profit"** means Cost plus the applicable percentage for profit stated in the Contract (if not stated, five percent (5%)). Such percentage shall only be added to Cost, and Cost Plus Profit shall only be added to the Contract Price, where the Contractor is entitled under a Sub-Clause of these Conditions to payment of Cost Plus Profit.
- 1.1.22 **"Country"** means South Africa in which the Site(s) (or most of it) is located, where the Permanent Works are to be executed.
- 1.1.23 **"DAAB"** or "Dispute Avoidance/Adjudication Board" means the sole member or three members (as the case may be) so named in the Contract, or appointed under Sub-Clause 21.1 [Constitution of the DAAB] or Sub-Clause.
- 1.1.24 **"DAAB Agreement"** means the agreement signed or deemed to have been signed by both Parties and the sole member or each of the three members (as the case may be) of the DAAB in accordance with Sub-Clause 21.1[Constitution of the DAAB] or Sub-Clause 21.2 [Failure to Appoint DAAB Member(s)], incorporating by reference the General Conditions of Dispute Avoidance/Adjudication Agreement

contained in the Appendix to these General Conditions with such amendments as are agreed.

- 1.1.25 **"Date of Completion"** means the date stated in the Taking-Over Certificate issued by the Engineer; or, if the last paragraph of Sub-Clause 10.1 [Taking Over the Works and Sections] applies, the date on which the Works or Section are deemed to have been completed in accordance with the Contract; or, if Sub-Clause 10.2 [Taking Over Parts] or Sub-Clause 10.3 [Interference with Tests on Completion] applies, the date on which the Works or Section or Part are deemed to have been taken over by the Employer.
- 1.1.26 **"Day"** means a calendar day of 24 hours measured from midnight to the next midnight.
- 1.1.27 **"Day work Schedule"** means the document entitled day work schedule (if any) included in the Contract, showing the amounts and manner of payments to be made to the Contractor for labour, Materials and equipment used for day work under Sub-Clause 13.5 [Day work].
- 1.1.28 **"Defects Liability Period" or "DLP"** means the period for 'notifying defects and/or damage in the Works or a Section or a Part (as the case may be) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], as stated in the Contract referred to in this Contract (if not stated, one year), and as may be extended under Sub-Clause 11.3 [Extension of Defects Liability Period]. This period is calculated from the Date of Completion of the Works or Section or Part.
- 1.1.29 **"Delay Damages"** means the damages for which the Contractor shall be liable under Sub-Clause 8.8 [Delay Damages] for failure to comply with Sub-Clause 8.2 [Time for Completion].
- 1.1.30 **"Dispute"** means any situation where:
- 1.1.30.1 one Party makes a Claim against the other Party (which may be a Claim, as defined in these Conditions, or a matter to be determined by the Engineer under these Conditions, or otherwise);

- 1.1.30.2 The other Party (or the Engineer under Sub-Clause 3.7.3 [Engineer's Determination]) rejects the Claim in whole or in part; and
- 1.1.30.3 the first Party does not acquiesce (by giving a NOD under Sub-Clause 3.7.5 [Dissatisfaction with Engineer's determination] or otherwise), provided however that a failure by the other Party (or the Engineer) to oppose or respond to the Claim, in whole or in part, may constitute a rejection if, in the circumstances, the DAAB or the arbitrator(s), as the case may be, deem it reasonable for it to do so.
- 1.1.31 **"Employer"** means PRASA, the entity named as the Employer in the Contract and the legal successors in title to this entity.
- 1.1.32 **"Employer's Equipment"** means the apparatus, equipment, machinery, construction plant and/or vehicles (if any) to be made available by the Employer for the use of the Contractor under Sub-Clause ~~2.6~~ 2.4 [Employer- Supplied Materials and Employer's Equipment]; but does not include Plant which has not been taken over under Clause 10 [Employer's Taking Over].
- 1.1.33 **"Employer's Personnel"** means the Engineer, the Engineer's Representative (if appointed), the assistants described in Sub-Clause 3.4 [Delegation by the Engineer] and all other staff, labour and other employees of the Engineer and of the Employer engaged in fulfilling the Employer's obligations under the Contract; and any other personnel identified as Employer's Personnel, by a Notice from the Employer or the Engineer to the Contractor.
- 1.1.34 **"Employer's Requirements"** means any documents, provided by the Employer and/or Engineer, which stipulate requirements and/or conditions, written instructions and requests for statements of compliance in line with the RFP, this Contract and for the entire duration of this Contract. Any additions and modifications to such documents and/or written instructions by the Employer and/or Engineer, for the entire duration of this Contract, shall be deemed to be part of the Employer's Requirements. Such documents include, but are not limited to, General Technical Requirements ("GTRs"), Particular Technical Requirements ("PTRs") and Commercial and Financial Requirements ("CFRs").

- 1.1.35 **"Employer-Supplied Materials"** means the Materials (if any) to be supplied by the Employer to the Contractor under Sub-Clause 2.4 [Employer-Supplied Materials and Employer's Equipment].
- 1.1.36 **"Engineer"** means PRASA or any other juristic person appointed by the Employer to act as the Engineer for the purposes of the Contract, or any replacement appointed under Sub-Clause 3.6 [Replacement of the Engineer].
- 1.1.37 **"Engineer's Representative"** means the natural person who may be appointed by the Engineer under Sub-Clause 3.3 [Engineer's Representative].
- 1.1.38 **"Exceptional Event"** means an event or circumstance as defined in Sub-Clause 18.1 [Exceptional Events].
- 1.1.39 **"Extension of Time"** or "EOT" means an extension of the Time for Completion under Sub-Clause 8.5 [Extension of Time for Completion].
- 1.1.40 **"FIDIC"** means the Federation International des Ingenieurs-Conseils, the International Federation of Consulting Engineers.
- 1.1.41 **"Final Payment Certificate"** or "FPC" means the payment certificate issued by the Engineer under Sub-Clause 14.12 Issue of FPC].
- 1.1.42 **"Final Statement"** means the Statement defined in Sub-Clause 14.10.1.2 [Agreed Final Statement].
- 1.1.43 **"Foreign Currency"** means a currency in which part or all of the Contract Price is payable, but not the Local Currency.
- 1.1.44 **"General Conditions"** means this document entitled "Conditions of Contract for Plant and Design-Build for Electrical & Mechanical Plant, and for Building and Engineering Works, designed by the Contractor", as published by FIDIC.
- 1.1.45 **"Goods"** means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.

- 1.1.46 **"Initial Contract Price ("ICP")"** means the Contractor's Bid Price, as may be amended through negotiations, thereafter shall be the Accepted Contract Amount.
- 1.1.47 **"Infringement"** means an infringement (or alleged infringement) of any patent, registered design, copyright, trademark, trade name, trade secret or other intellectual or industrial property right relating to the Works;
- 1.1.48 **"Infringement Claim"** means a third-party Claim (or proceedings pursuing a third-party Claim) alleging an infringement of any patent, registered design, copyright, trademark, trade name, trade secret or other intellectual or industrial property right relating to the Works;
- 1.1.49 **"Interim Payment Certificate"** or "IPC" means a Payment Certificate issued by the Engineer for an interim payment under Sub-Clause 14.6 [Issue of IPC].
- 1.1.50 **"Joint Venture"** or "JV" means a joint venture, association, consortium or other unincorporated grouping of two or more persons, whether in the form of a partnership or otherwise.
- 1.1.51 **"JV Undertaking"** means the JV Agreement (duly notarised), provided to the Employer as part of the Contractor's Proposal setting out the legal undertaking between the two or more entities constituting the Contractor as a JV. This JV Agreement shall be signed by all the entities (by their duly authorised representatives) who are members of the JV, shall be addressed to the Employer and shall include:
- 1.1.51.1 each such entity's board resolutions (fully signed and notarised) confirming authority to enter into the JV Agreement;
 - 1.1.51.2 each such entity's undertaking to be jointly and severally liable to the Employer for the performance of the Contractor's obligations under the Contract;
 - 1.1.51.3 Identification and authorization of the leader of the JV (if unincorporated);

- 1.1.51.4 identification and authorisation of the board of the JV (if incorporated);
 - 1.1.51.5 Shareholder certificates for each entity constituting the JV;
 - 1.1.51.6 Breakdown of the shareholding of each entity constituting the JV; and
 - 1.1.51.7 Breakdown of ICP allocation to each entity constituting the JV.
- 1.1.52 **"Key Personnel"** means the positions (if any) of the Contractor's Personnel, other than the Contractor's Representative, that are stated in the Specification Conditions of Contract for Plant and Design "Build.
- 1.1.53 **"Laws"** means all national (or state or provincial) legislation, statutes, acts, decrees, rules, ordinances, orders, treaties, international law and other laws, and regulations and by-laws of any legally constituted public authority, and courts having jurisdiction.
- 1.1.54 **"Letter of Acceptance"** means the letter of formal acceptance, signed by the Employer, of the Contractor's Proposal (including the Letter of Tender), including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression "Letter of Acceptance" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.
- 1.1.55 **"Letter of Tender"** means the Contractor's Proposal (including the letter of tender), signed by the Contractor, stating the Contractor's offer to the Employer for the execution of the Works.
- 1.1.56 **"Local Currency"** means the currency of the Republic of South Africa, which is the Rand.
- 1.1.57 **"Materials"** means things of all kinds (other than Plant), whether on the Site(s) or otherwise allocated to the Contract and intended to form or forming part of the

Permanent Works, including the supply-only Materials (if any) to be supplied by the Contractor under the Contract.

- 1.1.58 **"Month"** means a calendar month (according to the Gregorian calendar).
- 1.1.59 **"No-objection"** means that the Employer and/or Engineer has no objection to the Contractor's Documents, or other documents submitted by the Contractor under these Conditions, and such Contractor's Documents or other documents may be used for the Works.
- 1.1.60 **"Notice"** means a written communication identified as a Notice and issued in accordance with Sub-Clause 1.3 [Notices and Other Communications].
- 1.1.61 **"NOC"** means Notice of Claim.
- 1.1.62 **"Notice of Dissatisfaction"** or "NOD" means the Notice one Party may give to the other Party if it is dissatisfied, either with an Engineer's determination under Sub-Clause ~~3.7~~ 3.7 [Agreement or Determination] or with a DAAB's decision under Sub-Clause ~~21.4~~ 21.3 [Obtaining DAAB's Decision].
- 1.1.63 **"O&M"** means operation and maintenance.
- 1.1.64 **"OEM"** means Original Equipment Manufacturer.
- 1.1.65 **"Part"** means a part of the Works or part of a Section (as the case may be) which is used by the Employer and deemed to have been taken over under Sub-Clause 10.2 [Taking over Parts].
- 1.1.66 **"Particular Conditions"** means the document entitled particular conditions of Contract included in the Contract.
- 1.1.67 **"Party"** means the Employer or the Contractor, as the context requires. **"Parties"** means both the Employer and the Contractor.
- 1.1.68 **"Payment Certificate"** means a payment certificate issued by the Engineer under Clause 14 [Contract Price and Payment].

- 1.1.69 **"Performance Certificate"** means the certificate issued by the Engineer (or deemed to be issued) under Sub-Clause 11.8 [Performance Certificate].
- 1.1.70 **"Performance Damages"** means the damages to be paid by the Contractor to the Employer, for the failure to achieve the guaranteed performance of the Plant and/or the Works or any part of the Works (as the case may be), as set out in the Schedule of Performance Guarantees.
- 1.1.71 **"Performance Security"** means the security under Sub-Clause 4.2.2 [Performance Security].
- 1.1.72 **"Permanent Works"** means the works of a permanent nature which are to be executed by the Contractor under the Contract.
- 1.1.73 **"Personnel"** means any natural person involved in the Project on behalf of the Employer, Engineer, Contractor or any other party.
- 1.1.74 **"Plant and Materials"** means All Plant and Materials (which by definition shall include, but not be limited to, all Plant, Materials, Furniture, Equipment, Tools, Spares, Software, Technology and Component, Apparatus, Machinery and Vehicles) to be provided by the Contractor to successfully deliver the Project.
- 1.1.75 **"Programme"** means a detailed time Programme including, but not limited to, the Contractor's Approved Baseline Contract Programme/Approved Programme and any other Programme prepared and submitted by the Contractor which the Engineer has approved.
- 1.1.76 **"Promptly"** means a period of 7 (seven) calendar days or any period as instructed and/or determined by the Employer and/or Engineer.
- 1.1.77 **"Provisional Sum"** means a sum (if any) which is specified in the Contract by the Employer as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.4 [Provisional Sums].

- 1.1.78 "**QM System**" means the Contractor's quality management system (as may be updated and/or revised from time to time) in accordance with Sub-Clause 4.9.1 [Quality Management System].
- 1.1.79 "**Retention Money**" means the accumulated retention moneys which the Employer retains under Sub-Clause 14.3 [Application for Interim Payment] and pays under Sub-Clause 14.8 [Release of Retention Money].
- 1.1.80 "**Review**" means examination and consideration by the Engineer of the Contractor's submission in order to assess whether (and to what extent) it complies with the Contract and/or with the Contractor's obligations under or in connection with the Contract.
- 1.1.81 "**Schedules**" means the document(s) entitled schedules prepared by the Employer and completed by the Contractor, as attached to the Contractor's Proposal (including the Letter of Tender) and included in the Contract. Such document(s) may include but not limited to data, lists and schedules of payments and/or rates and prices, guarantees, and insurance.
- 1.1.82 "**Schedule of Payments**" means the document(s) entitled schedule of payments (if any) in the Schedules showing the amounts and manner of payments to be made to the Contractor.
- 1.1.83 "**Schedule of Performance Guarantees**" means the document(s) entitled schedule of performance guarantees (if any) in the Schedules showing the guarantees required by the Employer for performance of the Works and/ or the Plant or any part of the Works (as the case may be), and stating the applicable Performance Damages payable in the event of failure to attain any of the guaranteed performance(s).
- 1.1.84 "**Schedule of Rates and Prices**" means the document(s) entitled schedule of rates and prices (if any) in the Schedules.
- 1.1.85 "**Section**" means a part of the Works specified in the Contract (if any).

- 1.1.86 **"Site(s)"** means the places where the Permanent Works are to be executed and to which Plant and Materials are to be delivered, and any other places specified in the Contract as forming part of the Site(s), which is in Gauteng and the Western Cape Provinces.
- 1.1.87 **"Special Provisions"** means the document (if any), entitled special provisions which constitutes Part B of the Particular Conditions.
- 1.1.88 **"Statement"** means a statement submitted by the Contractor as part of an application for a Payment Certificate under Sub-Clause 14.3 [Application for Interim Payment], Sub-Clause 14.9 [Statement at Completion] or Sub-Clause 14.10 [Final Statement].
- 1.1.89 **"Subcontractor"** means any person named in the Contract as a subcontractor, or any person appointed by the Contractor as a subcontractor or designer, for a part of the Works; and the legal successors in title to each of these persons.
- 1.1.90 **"Taking-Over Certificate"** means a certificate issued (or deemed to be issued) by the Engineer in accordance with Clause 10 [Employer's Taking Over].
- 1.1.91 **"Temporary Works"** means all temporary works of every kind (other than Contractor's Equipment) required on Site(s) for the execution of the Works.
- 1.1.92 **"Tender"** means the Letter of Tender, the Contractor's Proposal, the JV Undertaking (if applicable), and all other documents which the Contractor submitted with the Letter of Tender, as included in the Contract.
- 1.1.93 **"Tests after Completion"** means the tests (if any) which are stated in the Specification and which are carried out in accordance with the Special Provisions after the Works or a Section (as the case may be) are taken over under Clause 10 [Employer's Taking Over].

- 1.1.94 **"Tests on Completion"** means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over under Clause 10 [Employer's Taking Over].
- 1.1.94 **"Time for Completion"** means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [Time for Completion], as stated in the Contract as may be extended under Sub-Clause 8.5 [Extension of Time for Completion], calculated from the Commencement Date.
- 1.1.95 **"Unforeseeable"** means not reasonably foreseeable by an experienced contractor by the Base Date.
- 1.1.96 **"Variation"** means any change to the Works, which is instructed as a variation under Clause 13 [Variations and Adjustments].
- 1.1.97 **"Works"** mean the Permanent Works and the Temporary Works, or either of them as appropriate.
- 1.1.98 **"Year"** means a calendar year consisting of 365 calendar days.

1.1.99 MINIMUM APPLICABLE ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AC	Alternating Current
APCL	Approved Programme Change Log
ATR	Automatic Train Routing
AZ	Axle Counter
B-BBEE	Broad-Based Black Economic Empowerment
BMS	Building Management System
CEMP	Construction Environmental Management Plan
CFR	Commercial and Financial Requirements
CIDB	Construction Industry Development Board
COTS	Commercial of the shelf
CPI	Consumer Price Index
CSD	Central Supplier Database
CTCC	Centralised Traffic Control Centre
DAS	Driver Advisory System
dtic	Department of Trade ,Industry and Competition
DMI	Driver Machine Interface
DMOC	Durban Metrorail Operations Centre
DPSA	Department of Public Service and Administration
ECSA	Engineering Council of South Africa
EI	Electronic Interlocking
ELD	Earth Leakage Detectors
EMC	Electromagnetic Compatibility
EME	Exempted Micro Enterprise
EMS	ETCS Level 2 Maintenance server
EoT	Extension of Time
ERA	European Union Agency for Railways
ETCS	European Train Control System
FAT	Factory Acceptance Testing
FMP	Financial Management Plan
FOREX	Foreign Exchange
FPC	Final Payment Certificate

ABBREVIATION	DESCRIPTION
FRS	Functional Requirement Specification
FS	Full Supervision Mode
GNC	Gauteng Nerve Centre
GBCSA	Green Building Council of South Africa
GP	Gauteng
GSM-R	Global System for Mobile Communication – Railway
GTR	General Technical Requirements
ICP	Initial Contract Price or Accepted Contract Amount
IL	Interlocking
IPC	Interim Payment Certificate
IPS	Industrial Participation Secretariat
JRU	Juridical Recorder Unit
KMAC	Key Message Authentication Code
KMC	Key Management Centre
KZN	KwaZulu-Natal
LAN	Local Area Network
LCC	Life Cycle Cost
LED	Light Emitting Diode
LEU	Lineside Electronic Unit
LRT	Local RBC Maintenance Terminal
LX	Level Crossing
MMI	Man-Machine Interfaces
MSC	Mobile Switching Centre
MTR	Main Technical References
NIP	National Industrial Participation
NoBo	Notified Body
NOC	Notice of Claim
OBT	Occupation Between Trains
OEM	Original Equipment Manufacturer
OFC	Optic Fibre Cable
OHS	Occupational Health, Safety and Security
OCS/OHLE	Overhead Catenary System/Overhead Line Equipment

ABBREVIATION	DESCRIPTION
PB	Push Buttons
PES	Project Engineering Services
PoE	Power over Ethernet
Plant and Materials	Includes, but shall not be limited to, all Plant, Materials, Furniture, Equipment, Tools, Spares, Software, Technology and Components to be provided by the Contractor to deliver the Project
PPE	Personal Protection Equipment
PRASA	Passenger Rail Agency of South Africa
PSS	Power Supply System
PTCS	THE EMPLOYER Train Control System
PTR	Particular Technical Requirements
QMP	Quality Management Plan
QMS	Quality Management System
QSE	Qualifying Small Enterprises
R&D	Research and Development
RBC	Radio Block Centre
RCA	Root Cause Analyses
RFP	Request for Proposal
ROC	Required Operational Capability
RSS	Railway Signaling System
S&D	Service and Diagnostic System
SA	South Africa or South African
SAICA	South African Institute of Chartered Accountants
SANAS	South African National Accreditation System
SARS	South African Revenue Service
SAT	Site Acceptance Testing
SATO	Semi-Automatic Train Operation
SAWS	South African Weather Service
SBD	Standard Bidding Document
SCADA	Supervisory Control and Data Acquisition
SES	System Engineering Services
SIL	Safety Integrity Level
SMP	Safety Management Plan

ABBREVIATION	DESCRIPTION
SOE	State Owned Enterprise
SPM	Schedule of Payment Milestones
SRS	Specific Application System Requirements
SyID	System Interface Description
TCO	Train Control Officer
TCP	Total Contract Price or the Contract Value
TCS	Train Control System
TFR	Transnet Freight Rail
TTMS	Train Traffic Management System
TVD	Track Vacancy Detection
TWR	Train Working Rules
UPS	Uninterrupted Power Supply
URS	User Requirement Specification
VAT	Value Added Tax
VDU	Visual Display Unit
WAN	Wide Area Network
WBS	Work Breakdown Structure
WC	Western Cape

1.2 **INTERPRETATION**

1.2.1 In this Contract, unless where the context requires otherwise:

1.2.1.1 Words indicating one gender include all genders; and "he", "his" and "himself" shall be read as "he/she", "his/her" and "himself/herself" respectively;

1.2.1.2 Words indicating the singular also include the plural and words indicating the plural also include the singular;

- 1.2.1.3 provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;
- 1.2.1.4 "Written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- 1.2.1.5 "May" means that the Party or person referred to has the choice of whether to act or not in the matter referred to;
- 1.2.1.6 "Shall" means that the Party or person referred to has an obligation under the Contract to perform the duty referred to;
- 1.2.1.7 "Approval" means that the Employer, the Contractor or the Engineer (As the case may be) agrees to, or gives permission for, the requested matter;
- 1.2.1.8 "Including", "include" and "includes" shall be interpreted as not being limited to, or qualified by, the stated items that follow;
- 1.2.1.9 words indicating persons or parties shall be interpreted as referring to natural and legal persons (including corporations and other legal entities); and receives such Notice.
- 1.2.1.10 "Execute the Works" or "execution of the Works" means the design, construction and completion of the Works and the remedying of any defects.
- 1.2.1.11 In any list in these Conditions, where the second-last item of the list is followed by "and" or "or" or "and/or" then all of the list items going before

this item shall also be read as if they are followed by "and" or "or" or "and/or" (as the case may be).

1.3 **Notices and Other Communications**

1.3.1 Wherever these Conditions provide for the giving of a Notice (including a Notice of Dissatisfaction) or the issuing, providing, sending, submitting or transmitting of another type of communication (including acceptance, acknowledgement, advising, agreement, approval, certificate, Claim, decision, determination, discharge, instruction, No-objection, record(s) of meeting, permission, proposal, record, reply, report, request, review, statement, submission or any other similar type of communication), the Notice or other communication shall be in writing and:

1.3.1.1 Shall be:

1.3.1.1.1 A paper-original signed by the Contractor's Representative, the Engineer, or the authorised representative of the Employer (as the case may be); or

1.3.1.1.2 an electronic original generated from any of the systems of electronic transmission stated in the Contract (if not stated, system(s) acceptable to the Employer and the Engineer), where the electronic original is transmitted by the electronic address uniquely assigned to each of such authorised representatives, or both, as stated in these Conditions; and

1.3.1.2 If it is a Notice, it shall be identified as a Notice and reference the relevant clause(s) of the Contract in terms of which the Notice is issued. If it is another form of communication, it shall be identified as such and include reference to the provision(s) of the Contract under which it is issued;

- 1.3.1.2.1 delivered by hand (against receipt), or sent by mail or courier (against receipt), or transmitted using any of the systems of electronic transmission under sub-paragraph 1.3.1.1.2 above; and
- 1.3.1.2.2 delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract or as otherwise instructed by the Engineer. However, if the recipient gives a Notice of another address, all Notices and other communications shall be delivered accordingly after the sender. Where these Conditions state that a Notice or NOD or other communication is to be delivered, given, issued, provided, sent, submitted or transmitted, it shall have effect when it is received (or deemed to have been received) at the recipient's current address under sub-paragraph (d) above. An electronically transmitted Notice or other communication is deemed to have been received on the day after transmission, provided no non-delivery notification was received by the sender. All Notices, and all other types of communication as referred to above, shall not be unreasonably withheld or delayed.
- 1.3.1.3 When a Notice or NOD or certificate is issued by a Party or the Engineer, the paper and/or electronic original shall be sent to the intended recipient and a copy shall be sent to the Engineer and the other Party, as the case may be. All other communications shall be copied to the Parties and/or the Engineer as stated under these Conditions or elsewhere in the Contract.
- 1.3.1.4 Any Notice or NOD delivered between the period of 15 December and 15 January of the immediate following calendar year (both days inclusive) will be deemed to be delivered on 16 January of that immediate following calendar year.

- 1.3.1.5 Any Notice or NOD delivered between the period of 7 calendar days prior to Good Friday and 7 calendar days after Family Day (both days inclusive) will be deemed to have been delivered on the 8th calendar day after the same Family Day.
- 1.3.1.6 Any Notice or NOD delivered after 12H00 on a Friday or on a calendar day immediately prior to a South African Public Holiday will be deemed to have been delivered at 12H00 on the immediate next Working day.

1.4 Law and Language

The Contract shall be governed by the law of South Africa as stated in the Contract. The ruling language of the Contract shall be that stated in the Contract (if not stated, the language of these Conditions, which is English). If there are versions of any part of the Contract which are written in more than one language, the version which is in the ruling language shall prevail. The language for all communications relating to the Project and the Contract shall be English.

1.5 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. If there is any conflict, ambiguity or discrepancy, the priority of the documents shall be in accordance with the following sequence:

- 1.5.1 The Contract Agreement;
- 1.5.2 The Letter of Acceptance;
- 1.5.3 The RFP (including all annexures);

- 1.5.4 The Particular Conditions of Contract;
- 1.5.5 The Special Provisions of Contract;
- 1.5.6 The General Conditions of Contract;
- 1.5.7 The Employer's Requirements;
- 1.5.8 The Schedules;
- 1.5.9 The Contractor's Proposal (including the Letter of Tender);
- 1.5.10 The JV Undertaking (if the Contractor is a JV);
- 1.5.11 And any other documents forming part of the Contract.

1.6 **Discrepancy and Ambiguity**

If a Party finds an ambiguity or discrepancy in the documents, that Party shall Promptly give a Notice to the Engineer, describing the ambiguity or discrepancy. After receiving such Notice, or if the Engineer finds an ambiguity or discrepancy in the documents, the Engineer shall issue the necessary clarification or instruction.

1.7 **CONTRACT AGREEMENT**

- 1.7.1 Notwithstanding the date of signature of this Contract, the Commencement Date shall be as per the Engineer's Notice to the Contractor stating the Commencement date, not less than 14 calendar days before the Commencement Date

- 1.7.2 If the Contractor comprises a JV or a Consortium, the authorised representative of each member of the JV or the Consortium shall sign the Contract Agreement.

1.8 **ASSIGNMENT**

- 1.8.1 The Contractor shall not be entitled to cede, transfer or make over any rights and/or duties in terms of this agreement to any third party.

1.8.2 The Contractor:

1.8.2.1 Shall not assign the whole or any part of the Contract without prior approval of the Employer, at the sole discretion of the Employer; and

1.8.2.2 Shall not, as security in favour of a bank or financial institution, or its financier assign its right to any moneys due, or to become due, under the Contract without prior approval of the Employer.

1.9 **CARE AND SUPPLY OF DOCUMENTS**

- 1.9.1 Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until submitted to the Engineer (after which the custody and care of these documents shall be in both the Contractor and the Engineer).

- 1.9.2 The Contractor shall strictly adhere to document management procedure and requirements prescribed by the Employer or the Engineer as prescribed below or as it would be prescribed by the Employer or the Engineer from time to time, in particular as follows:

- 1.9.2.1 The Contractor shall, or unless otherwise instructed in writing by the Employer or the Engineer, only use full Microsoft Office suite and Adobe (PDF) Software to produce and issue/submit all Project documentation, other than the Project Programme and drawings;
- 1.9.2.2 All Project Programmes shall be issued in Microsoft Project together with corresponding Adobe (PDF) formats; and
- 1.9.2.3 All Project drawings shall be issued in DGN, DWG together with corresponding Adobe (PDF) formats.
- 1.9.3 All project documentation shall follow strict certification, date stamping and version control and shall be issued with transmittal notes clearly identifying the sender, receiver, contents and purpose of the submission.
- 1.9.4 The Contractor shall implement proper Software configuration management, including version control and CRC numbers for all software data and configuration files. The Contractor shall submit the relevant configuration management records to the Engineer with every submission of Software data or configuration files.
- 1.9.5 All formats of all Project documentation, as prepared by any Project team member, shall first be approved by the Engineer prior to transmission to the rest of the Project team and stakeholders.
- 1.9.6 The Contractor shall, unless otherwise instructed in writing by the Engineer, submit all Project documentation to the Employer and the Engineer as follows:
 - 1.9.6.1 One (1) Electronic copy by email for each and every version submitted; and

- 1.9.6.2 Two (2) Bound paper copies by hand (to any physical address as instructed by the Engineer) for each and every version submitted; and
- 1.9.6.3 Two (2) Electronic copies on compact disc/memory disc for each and every version submitted.
- 1.9.7 All Project documentation shall bear the logo of the Employer either at the extreme top right of, or above, any other logos (depending on the positioning in the headers or drawing blocks. Other logos which are not of the Employer may be added to the documentation, subject to approval by the Engineer.
- 1.9.8 The following Project documentation naming convention shall always be followed and adhered to by the Project team:
- 1.9.8.1 With regard to Project Documentation:
- 1.9.8.1.1 All General Project Documentation: “yyyymmdd-PRASA-KZN PTCS D&C-[Insert Document Title]-(Version Control)”. This will translate to the following examples: “20210101-PRASA-KZN PTCS D&C-Project Naming Conventions-(Rev00) in which case the next version of the same document shall for instance read: “20210202-PRASA-KZN PTCS D&C-Project Naming Conventions-(Rev01) and so forth until a final version is reached, which shall for instance read “20210303-PRASA-KZN PTCS D&C-Project Naming Conventions-(Final)” ; and
- 1.9.8.1.2 To avoid a negative effect on chronological e-filing sequence, there shall be no spaces between the dashes.
- 1.9.8.2 With regard to Emails and Other Correspondence, the following shall apply:

1.9.8.2.1 All General Titles shall be: “PRASA-KZN PTCS D&C-[Insert Subject Tile]”. This shall translate to the following example: “PRASA-KZN PTCS D&C-Project Naming Convention”; and

1.9.8.2.2 To avoid a negative effect on chronological e-filing sequence, there shall be no spaces between the dashes; and

1.9.8.2.3 If a party for instance, is attaching a document in an email for discussion, then the Email Title should be the Document Title of the attached document, which shall be in accordance with Project Documentation naming convention, for example; “20210101-PRASA-KZN PTCS D&C-Project Naming Conventions-(Rev00)”.

1.9.9 The Parties shall ensure that all contract documentation and other important documents containing signatures of the parties, shall be held in hard copy by the Employer, the Engineer and the Contractor respectively.

1.9.10 The Project Team members shall ensure that they hold and/or file all Project documents in accordance with the Employer’s document management systems, to which the Engineer shall induct the Project Team.

1.9.11 The Contractor shall keep at all times, on the Site(s), a copy of:

1.9.11.1 The Contract;

1.9.11.2 The records under Sub-Clause 6.10 [Contractor's Records] and Sub-Clause 20.2.3 4 [Contemporary records];

1.9.11.3 The publications (if any) named in the Employer's Requirements;

1.9.11.4 The Contractor's Documents; and

1.9.11.5 Variations, Notices and other communications given under the Contract.

1.9.12 The Employer's Personnel and the Engineer's Personnel shall have right of access to all these documents during all normal working hours, or as otherwise instructed to the Contractor.

1.10 **ERRORS IN THE EMPLOYER'S REQUIREMENTS**

1.10.1 If the Employer or the Engineer becomes aware of an error or defect (whether of a technical nature or otherwise) in a document which was prepared by or on behalf of the Contractor for use in the execution of the Works, the Party (or the Engineer) shall Promptly give a Notice of such error or defect to the other Party (or to the Parties). The Contractor shall then rectify the error or defect at the Contractor's risk and cost within the period stipulated by the Engineer.

1.11 **EMPLOYER'S USE OF CONTRACTORS DOCUMENTS (INTELLECTUAL AND INDUSTRIAL PROPERTY)**

1.11.1 The Contractor's Intellectual and Industrial Property shall, at a minimum, refer to all of the bidding documents, designs, procedures, manuals, training Material, reports, patents, registered designs, copyrights, trade names, trade secrets, technology, software and other intellectual or industrial property rights relating to the RFP, this Contract and the Contractor's Proposal.

1.11.2 The Contractor shall be deemed, by signing the Contract, to transparently transfer ownership of the Contractor's Intellectual and Industrial Property rights to the Employer.

1.11.3 The Contractor shall be deemed, by signing the Contract, to transparently give the Employer full non-terminable transferable non-exclusive royalty-free ownership to copy, use and communicate the Contractor's Intellectual and Industrial Property including making and using modifications of them as required by the Employer. The ownership shall, at a minimum:

1.11.3.1 Apply throughout the duration of the contract or the actual or the intended useful and/or working life, whichever is longer, of the relevant Sections of the Works and/or the whole of the Works (regardless of the Works being of a temporary or permanent nature);

1.11.3.2 Entitle the Employer and any of the Employer's approved entity(s) or person(s) in proper possession of the relevant Section of the Works or the whole of the Works (regardless of the Works being of a temporary or permanent nature) to copy, use and communicate the Contractor's Intellectual and Industrial Property for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing Sections of the Works and/or the whole of the Works (regardless of the Works being of a temporary or permanent nature).

1.11.3.3 In the case of the Contractor's Intellectual Property and data, entitle the Employer and any of the Employer's approved entity(s) or person(s) to use the Contractor's Intellectual and Industrial Property on any computer on and off the Site(s) and other places as envisaged by the Employer, including replacements of any computers supplied by the Contractor.

1.11.4 It is hereby recorded that all Contract and Project documentation and data, including but not limited to; Designs, procedures, manuals, training Material, reports and other documents produced as part of the Works under the Contract, shall immediately become the intellectual property of the Employer on submission of the document by the Contractor, to be used, modified or distributed by the Employer or the Engineer in any way that the Employer or the Engineer deems fit, simultaneously therewith ensuring that it does not compromise the intellectual property rights of the Project.

1.11.5 It is agreed further that all software configuration files shall immediately become the intellectual property of the Employer on the date of commissioning or the date of payment, whichever comes first, of such software, to be used, modified or distributed by the Employer in any way the Employer deems fit.

1.11.6 The parties agree further that the Contractor's Intellectual and Industrial Property made by or on behalf of the Employer, shall, at the Employer's sole discretion, be used, copied or communicated to the Employer's approved third party by, or on behalf of the Employer for purposes deemed necessary by the Employer.

1.11.7 In the event of termination of the Contract:

1.11.7.1 under Sub-Clause 15.2 [*Termination for Contractor's Default*], entitle the Employer or any of the Employer's approved entity(s) or person(s) to copy, use and communicate the Contractor's Documents and the other design documents made by or for the Contractor for any other purpose deemed necessary by the Employer; or

1.11.7.2 under Sub-Clause 15.5 [*Termination for Employer's Convenience*], Sub-Clause 16.2 [*Termination by Contractor*] or Sub-Clause 18.5 [*Optional Termination*], entitle the Employer or any of the Employer's approved entity(s) or person(s) to copy, use and communicate the Contractor's Documents for the purpose of completing the Works and/or arranging for any other entities to do so and/or for any other purpose deemed necessary by the Employer.

1.12. **Contractor's Use of Employer's Documents**

1.12.1 As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Employer's Requirements and other documents made by (or on behalf of) the Employer. The Contractor may, at the Contractor's cost, copy, use and communicate these documents for the purposes of the execution of the Works prescribed in this Contract only.

1.12.2 These documents (in whole or in part) shall not, without the Employer's prior approval, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

1.13 **Confidentiality**

1.13.1 The Contractor shall disclose all such confidential and other information, in unredacted formats and any other format, as the Employer or Engineer may require in order to verify the Contractor's compliance with the Contract.

1.13.2 The Contractor shall treat all privileged information and documents forming the Contract and as part of the Project as confidential, except to the extent necessary to carry out the Contractor's obligations under the Contract. The Contractor shall not publish, permit to be published, or disclose any particulars of the Contract and the Project or any of the Employer's information in any trade or technical paper or elsewhere without the Employer's prior approval.

1.13.3 The Employer and the Engineer shall treat all information provided by the Contractor and marked "confidential", as confidential. The Employer and the Engineer shall not unreasonably disclose or permit to be disclosed any such information to third parties, except as may be necessary when exercising the Employer's rights under Sub-Clause 15.2 [Termination for Contractor's Default] and any other purpose as deemed necessary by the Employer.

1.13.4 A Party's obligation of confidentiality under this Sub-Clause shall not apply where the information:

1.13.4.1 was already in that Party's possession without an obligation of confidentiality before receipt from the other Party;

1.13.4.2 becomes generally available to the public through no breach of these Conditions; or

1.13.4.3 Is lawfully obtained by the Party from a third party which is not bound by an obligation of confidentiality.

1.14 **COMPLIANCE WITH LAWS**

1.14.1 The Employer, the Engineer and the Contractor shall, in performing the Contract, comply with all applicable Laws.

1.14.2 Unless otherwise stated in the Employer's Requirements:

1.14.2.1 the Contractor shall have obtained (or shall obtain) the planning, zoning or building permit or similar permits, permissions, licences and/or approvals for the temporary and Permanent Works, and any other permits, permissions, licenses and/or approvals described in the Employer's Requirements and as required to successfully deliver the Project as having been (or being) obtained by the Contractor. The Contractor shall indemnify and hold the Employer harmless against and from the consequences of any delay or failure to do so.

1.14.2.2 the Contractor shall give all Notices, pay all taxes, duties and fees, and obtain all other permits, permissions, licences and/or approvals, as required by the Laws in relation to the execution of the Works. The Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.

1.14.2.3 within the time(s) stated in the Employer's Requirements, or sooner, the Contractor shall provide such assistance and all documentation, as described in the Employer's Requirements or otherwise required by

the Contractor, so as to allow the Contractor to obtain any permit, permission, licence or approval under sub-paragraph 1.14.2.1 above; and

1.14.2.4 the Contractor shall comply with all permits, permissions, licences and/or approvals obtained by the Contractor under sub-paragraph 1.14.2.1 above.

1.14.3 If, having complied with sub-paragraph 1.14.2.3 above, the Employer suffers delay and/or incurs Cost as a result of the Contractor's delay or failure to obtain any permit, permission, licence or approval under sub-paragraph 1.14.2.1 above, the Employer shall be entitled to Claim Delay Damages, Penalties and any other damages.

1.15 **JOINT AND SEVERAL LIABILITY**

1.15.1 If the Contractor is a Joint Venture:

1.15.1.1 the members of the JV shall be jointly and severally liable to the Employer for the performance of the Contractor's obligations under the Contract;

1.15.1.2 the JV leader shall have authority to bind the Contractor and each member of the JV; and

1.15.1.3 neither the members nor (if known) the scope and parts of the Works to be carried out by each member nor the legal status of the JV shall be altered without the prior approval of the Employer (but such approval shall not relieve the altered JV from any liability under sub-paragraph 1.15.1.1 above.

1.15.2 If the Contractor is a Consortium:

- 1.15.2.1 the members of the Consortium shall be jointly and severally liable to the Employer for the performance of the Contractor's obligations under the Contract;
- 1.15.2.2 the Consortium leader shall have authority to bind the Contractor and each member of the Consortium; and
- 1.15.2.3 neither the members nor (if known) the scope and parts of the Works to be carried out by each member nor the legal status of the Consortium shall be altered without the prior approval of the Employer (but such approval shall not relieve the altered Consortium from any liability under sub-paragraph 1.14.1.1 above.

1.16 **LIMITATION OF LIABILITY**

1.16.1 Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, other than under:

- 1.16.1.1 Sub-Clause 8.8 *[Delay Damages]*;
- 1.16.1.2 Sub-Clause 15.7 *[Payment after Termination for Employer's Convenience]*;
- 1.16.1.3 Sub-Clause 16.4 *[Payment after Termination by Contractor]*;
- 1.16.1.4 Sub-Clause 17.3 *[Intellectual and Industrial Property Rights]*; and
- 1.16.1.5 the first paragraph of Sub-Clause 17.4 *[Indemnities by Contractor]*.

1.16.2 The total liability of the Contractor to the Employer under or in connection with the Contract, other than:

- 1.16.2.1 under Sub-Clause 2.6 4 [Employer-Supplied Materials and Employer's Equipment]
- 1.16.2.2 under Sub-Clause 4.19 [Temporary Utilities]
- 1.16.2.3 under Sub-Clause 17.3 [Intellectual and Industrial Property Rights] and under the first paragraph of Sub-Clause 17.4 [Indemnities by Contractor] and may exceed the sum stated in the Contract or (if a sum is not so stated) the Accepted Contract Amount. This Sub-Clause shall not limit liability in any case of fraud, gross negligence, deliberate default or reckless misconduct by the Contractor.

1.17 **CONTRACT TERMINATION**

Subject to any mandatory requirements under the governing law of the Contract, termination of the Contract under any Sub-Clause of these Conditions shall require no action of whatsoever kind by either Party other than as stated in the Sub-Clause.

2. **THE EMPLOYER**

2.1 **RIGHT OF ACCESS TO THE SITE(S)**

- 2.1.1 The Employer through the Engineer shall, at the Employer's discretion, give the Contractor right of access to, and possession of, all parts of the Site(s) within the time (or times) stated in the Contract or as otherwise determined by the Engineer. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Employer's Requirements or as otherwise determined by the Engineer. However, the Employer may withhold any such right or possession until the Performance Security, and any other documents or submissions requested from the Contractor, has been received.

- 2.1.2 If no such time is stated in the Contract, the Employer shall give the Contractor right of access to, and possession of, those parts of the Site(s) within such times as may be determined by the Engineer.
- 2.1.3 If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall not be entitled to make any Claims (including, but not limited to, Claims for Extension of Time or Claims for Payment or any Damages and/or Penalties).
- 2.1.4 if, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance the Contractor's Documents, the Contractor shall submit such Contractor's Documents to the Engineer in the time and manner stated in the Employer's Requirements or in the time and manner stipulated by the Engineer.
- 2.1.5 The Contractor shall be deemed to have obtained all necessary information as to the risks, contingencies and other circumstances, which may influence or affect the works and the Contractor's pricing. To the same extent, the contractor shall be deemed to have inspected and examined the Site(s) and the surroundings, and other available information, and to have been satisfied before bidding and signing this contract, as to all relevant matters, including without limitation to the following:
- 2.1.5.1 The form and nature of the Site(s), including sub-surface conditions.
- 2.1.5.2 The hydrological. Climatic, heritage and environmental conditions and requirements.
- 2.1.5.3 The extent and nature of all the Works including, but not limited to, all necessary requirements and solutions that the Contractor shall have to meet, and respectively provide, for the Contractor's achievement of

successful execution and completion of the Works, the Project and the Contract (including remedying of any Defects).

- 2.1.5.4 The Laws, procedures and labour practices of South Africa.
 - 2.1.5.5 The Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.
 - 2.1.5.6 The Contractor's requirements for capturing the required geographic map data ("Geodata"), including all resources, Material and equipment.
 - 2.1.5.7 The extent and nature of all Works including, but not limited to, all necessary requirements and solutions that the Contractor shall have to meet to protect the Site(s) and the Works by preventing theft, vandalism, illegal encroachment and/or illegal occupation, and respectively provide, for the Contractor's achievement of successful execution and completion of the Works, the Project and the Contract (including remedying of any defects).
- 2.1.6 Once the Employer has handed over the Site(s) to the Contractor, the Contractor shall at its own cost and regardless of the extent of this requirement, be responsible for removing and keeping all unauthorised persons, illegal encroachers and illegal occupants of the Site(s), if any, for the duration of the Contract. The Contractor shall use any legal means, including legal processes, necessary to meet this requirement by further making all the necessary allowances for the resolution of all related issues in all the Contractor's Programmes.
- 2.1.7 The Contractor shall at its own cost and regardless of the extent of this requirement, be responsible for the protection of the Site(s) and the whole of the Works for the duration of the Contract. The Contractor shall use any legal means necessary to

meet this requirement by further making all necessary allowances for resolution of all related issues in all the Contractor's Programmes.

- 2.1.8 Authorised persons on the Site(s) shall be limited to the Contractor's personnel, the Employer's personnel and the Engineer's personnel and to any other personnel notified to the Contractor, by the Employer or the Engineer, as the authorised personnel of the Contractor's other contractors on the Site(s).
- 2.1.9 The parties agree that as the Site(s) of the Employer shall be under the control and possession of the Contractor, the Contractor shall at its own cost and regardless of the extent of this requirement, be responsible for preventing all theft and vandalism of the whole the Works for the duration of the Contract, including the full maintenance, Warranty and defects liability period.
- 2.1.10 The Contractor shall use any legal means necessary to meet this requirement and shall, at a minimum, implement all requisite measures to detect, defer, delay and prevent any attempted theft and vandalism on the Site(s).
- 2.1.11 The Contractor shall take full responsibility and accept all liability in respect of any vandalised Employer or Engineer or Project assets that form part of the Contract and/or Project and/or Works.
- 2.1.12 The Contractor shall further ensure that any stolen or vandalised assets are reinstated to standards approved by the Employer or the Engineer within the timeframes stipulated by the Employer or Engineer and at the Contractor's cost regardless of the number of incidents that may occur throughout the duration of the Contract and for each and every incident that occurs.
- 2.1.13 The Contractor shall, at the minimum, implement measures described throughout this Contract and the RFP for which such implementation shall not, in any manner whatsoever, relieve the Contractor of the Contractor's responsibility to implement

additional measures to prevent theft and vandalism of the whole of the Works for the duration of the Contract.

- 2.1.14 The Contractor acknowledges that during bidding stage, submitted a detailed method statement describing all the measures, techniques, and installation rules it intends to implement addressing all theft and vandalism matters that could affect delivery of the Works and the Project in its entirety. That being the case, the Contractor hereby undertakes that it will protect the Site(s) from any form of theft and/or vandalism.
- 2.1.15 The Contractor hereby acknowledges that it has, during bidding stage, submitted an Environmental and Heritage Management, which at a minimum, comply with all standards, specifications, regulations and procedures as defined through the RFP and all legislation, regulations, and by-laws of South Africa. In the circumstances, the Contractor hereby undertaking that it shall be responsible for all Environmental and Heritage matters on the Project and on the Site(s).
- 2.1.16 The Contractor hereby acknowledges that the Employer has during bidding stage, disclosed to all Contractors, that in some instances access to the Site(s) is through third party property(s). Therefore, in order for the Contractor to access these Site(s), the Contractor shall obtain letter of introduction (being a letter that introduces the Contractor to a third party) from the Engineer as may be required to enter any third-party property for purposes of delivering the Works.
- 2.1.17 The Contractor shall ensure that no third-party property shall be entered, nor any Works executed prior to granting of the required approval and/or way-leaves.
- 2.1.18 The Contractor shall be responsible to apply and pay for all required permits and/or wayleaves.

- 2.1.19 The Contractor shall ensure that steps are taken to ensure that unauthorised persons or livestock do not obtain passage through fences temporarily damaged when executing the Works.
- 2.1.20 The Contractor shall, at its own cost, make good any damage to third party property, resultant from the execution of the Works.
- 2.1.21 The Contractor shall proactively keep third-party property owners informed about any changes to the scheduling of the Works should they be affected.

2.2 EMPLOYER-SUPPLIED PLANT AND MATERIALS AND EMPLOYER'S EQUIPMENT

- 2.2.1 If Employer-Supplied Plant and Materials and/or Employer's Equipment are listed in the Employer's Requirements for the Contractor's use in the execution of the Works, the Employer shall make such Materials and/or equipment available to the Contractor in accordance with the details, times, arrangements, rates and prices stated in the Employer's Requirements or as determined by the Engineer.
- 2.2.2 The Contractor shall be responsible for each item of the Employer's Plant and Materials and/or Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it, using it, or in control of it.
- 2.2.3 The Employer may have certain Plant and Materials available in storage that shall be used by the Contractor. The Contractor shall use as much existing, Plant and Materials as possible and if not possible, then motivate to the Engineer why it cannot be used.

- 2.2.4 Notwithstanding the aforesaid requirement, the Contractor shall ensure that its complete offered solution remains compliant with the RFP and the Employer's Requirements and the Contractor has satisfied itself that such Plant and Materials are suitable for use by the Contractor, therefore the Contractor shall accept all risk related to the use of such Plant and Materials.
- 2.2.5 Should the Contractor wish not to use any existing Plant and Materials or to replace any existing Plant and Materials with new Plant and Materials, the Contractor shall first, through the Engineer, make the Employer a fair market value offer to pay the Employer for such existing Plant and Materials for which such offer shall first be accepted by the Employer.
- 2.2.6 The Employer's acceptance or rejection of the Contractor's offer shall not prejudice the Employer's rights in terms of the RFP and this Contract in any manner whatsoever and shall not relieve the Contractor of its obligations and/or liabilities in terms of the RFP and this Contract and shall not affect the Contractor's Proposal or Contract Programme in any manner whatsoever.
- 2.2.7 The Contractor's disposal of existing Plant and Materials can only be implemented once a final decision has been made by the Employer, through the Engineer, in respect of acceptance or rejection of the Contractor's disposal proposal, and the timeline for the Employer, through the Engineer, making a decision in this regard shall be absorbed in all the Contractor's Programme(s) so that there is no impact on achievement of the contracted Completion Date.

3. THE ENGINEER

3.1 APPOINTMENT OF THE ENGINEER

The Employer shall act as the Engineer, or may appoint the Engineer (any juristic person), who shall carry out the duties assigned to the Engineer in the Contract.

3.2 ENGINEER'S DUTIES AND AUTHORITY

3.2.1 The Engineer shall be vested with all the authority necessary to act as the Engineer under the Contract. If the Engineer is a juristic person, a natural person employed by the Engineer shall be appointed and authorised to act on behalf of the Engineer under the Contract.

3.2.2 The Engineer (or, if a juristic person, the natural person appointed to act on its behalf) shall:

3.2.2.1 have suitable qualifications, experience and competencies, as determined by the Employer, to act as the Engineer under this Contract; and

3.2.2.2 be fluent in the ruling language of the Contract.

3.2.3 Where the Engineer is a juristic person, the Engineer shall give a Notice, within 28 (twenty-eight) calendar days of first becoming aware or ought to have become aware, to the Parties of the natural person (or any replacement) appointed and authorised to act on its behalf. The authority shall not take effect until this Notice has been received by both Parties. The Engineer shall similarly give a Notice, within 28 (twenty-eight) calendar days of first becoming aware or ought to have become aware, of any revocation of such authority.

3.2.4 The Engineer shall have no authority to amend the Contract or, except as otherwise stated in these Conditions and approved in writing by the Employer, to relieve either Party of any duty, obligation or responsibility under or in connection with the Contract.

- 3.2.5 The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract and approved in writing by the Employer. There shall always be a requirement for the Engineer to obtain the Employer's written approval before the Engineer exercises any of his/her authority under the Contract.
- 3.2.6 Any acceptance, agreement, approval, check, certificate, comment, disapproval, examination, Inspection, instruction, Notice, No-objection, record(s) of meeting, permission, proposal, record, reply, report, request, Review, test, valuation, or similar act (including the absence of any such act) by the Employer and/or Engineer, the Employer's and/or Engineer's Representative or any assistant shall not relieve the Contractor from any duty, obligation or responsibility the Contractor has under or in connection with the Contract.

3.3 ENGINEER'S REPRESENTATIVE

- 3.3.1 The Engineer may appoint an Engineer's Representative (who shall have suitable qualifications, experience and competencies, as determined by the Employer, to act as the Engineer under this Contract; and be fluent in the ruling language of the Contract) and delegate to him/her in accordance with Sub-Clause 3.4 [Delegation by the Engineer] the authority necessary to act on the Engineer's behalf at the Site(s), except to replace the Engineer's Representative.
- 3.3.2 The Engineer's Representative (if appointed) shall comply with sub-paragraphs (a) 3.2.2.1 and (b) 3.2.2.2 of Sub-Clause 3.4 2 [The Engineer's Duties and Authority] and shall be based at the Site(s) for the whole time that the Works are being executed at the Site(s). If the Engineer's Representative is to be temporarily absent from the Site(s) during the execution of the Works, an equivalently qualified, experienced and competent replacement shall be appointed by the Engineer, and the Contractor shall be given a Notice of such replacement.

3.4 DELEGATION BY THE ENGINEER

3.4.1 The Engineer may from time to time, subject to sub-clause 3.2.3 above, assign duties and delegate authority to assistants, and may also revoke such assignment or delegation, by giving a Notice to the Parties, describing the assigned duties and the delegated authority of each assistant. The assignment, delegation or revocation shall not take effect until this Notice has been received by both Parties. However, the Engineer shall not delegate the authority to:

3.4.1.1 act under sub-clause 3.7 [*Agreement or Determination*]; and/or

3.4.1.2 issue a Notice to Correct under sub-clause 15.1 [*Notice to Correct*].

3.4.2 Assistants shall be suitably qualified natural persons, who are experienced and competent to carry out these duties and exercise this authority, and who are fluent in the language of the Contract. Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorised to issue instructions to the Contractor to the extent defined by the Engineer's Notice of delegation under this Sub-Clause, subject to the written approval of the Employer.

3.4.3 Any act by an assistant, in accordance with the Engineer's Notice of delegation, shall have the same effect as though the act had been an act of the Engineer. However, if the Contractor questions any instruction or Notice given by an assistant, the Contractor may by giving a Notice refer the matter to the Engineer for a response.

3.5 ENGINEER'S INSTRUCTIONS

3.5.1 The Engineer may issue to the Contractor (at any time) instructions which may be necessary for the execution of the Works, all in accordance with the Contract. The

Contractor shall only take instructions from the Employer and/or the Engineer, or from the Employer's Representative and/or the Engineer's Representative (if appointed) or an assistant to whom the appropriate authority to give instruction has been delegated under Sub-Clause 3.4 [Delegation by the Engineer].

- 3.5.2 The Contractor shall comply with the instructions given by the Employer and/or the Engineer or the Employer's Representative and/or the Engineer's Representative (if appointed) or delegated assistant, on any matter related to the Contract.
- 3.5.3 If an instruction given by the Employer and/or the Engineer or the Employer's Representative and/or the Engineer's Representative (if appointed) or delegated assistant does not constitute a Variation, and the Contractor considers that the instruction does not comply with applicable Laws or will reduce the safety of the Works or is technically impossible, the Contractor shall immediately, and before commencing any work related to the instruction, give a Notice to the Engineer with reasons. The Engineer shall respond, within a period determined by the Engineer, after receiving this Notice, by giving a Notice confirming, reversing or varying the instruction and the Contractor shall comply with and be bound by the terms of the Engineer's response.

3.6 REPLACEMENT OF THE ENGINEER

- 3.6.1 If the Employer intends to replace the Engineer, the Employer shall, before the intended date of replacement, inform the Contractor of the name, address and relevant experience of the intended replacement Engineer.
- 3.6.2 If the Engineer is unable to act as a result of death, illness, disability or resignation (or, in the case of an entity, the Engineer becomes unable or unwilling to carry out any of its duties, other than for a cause attributable to the Employer) the Employer shall be entitled to immediately appoint a replacement by informing the Contractor with reasons and the name, address and relevant experience of the replacement.

This appointment shall be treated as a temporary appointment unless otherwise determined by the Employer.

3.7 AGREEMENT OR DETERMINATION

3.7.1 When carrying out his/her duties under this Sub-Clause, the Engineer shall be deemed to act for the Employer.

3.7.2 Whenever these Conditions provide that the Engineer shall proceed under this Sub-Clause to agree or determine any matter or Claim, the following procedure shall apply:

3.7.2.1 Consultation to reach agreement

3.7.2.1.1 The Engineer shall consult with both Parties jointly and/or separately, and shall encourage discussion between the Parties in an endeavour to reach agreement. The Engineer shall commence such consultation Promptly to allow adequate time to endeavour to comply with the time limit for agreement under Sub-Clause 3.7.4 [Time limits]. Unless otherwise proposed by the Engineer and agreed by both Parties, the Engineer shall provide both Parties with a record of the consultation.

3.7.2.1.2 If agreement is achieved within the time limit for agreement under Sub-Clause 3.7.4 [Time limits] the Engineer shall give a Notice to both Parties of the agreement, which agreement shall be signed by both Parties. This Notice shall, without prejudice to the Employer, state that it is a "Notice of the Parties' Agreement" and shall include a copy of agreement.

3.7.2.1.3 If:

3.7.2.1.3.1 no agreement is achieved within the time limit for agreement under Sub-Clause 3.7.4 [Time limits]; or

3.7.2.1.3.2 both Parties advise the Engineer that no agreement can be achieved within this time limit whichever is the earlier, the Engineer shall give a Notice to the Parties accordingly and shall immediately proceed under Sub-Clause 3.7.2 (Engineer's Determination).

3.7.3 Engineer's Determination

3.7.3.1 The Engineer shall make a fair determination of the matter or Claim, in accordance with the Contract, taking due regard of all relevant circumstances.

3.7.3.2 In endeavouring to be within the time limit for determination under Sub-Clause 3.7.4 [Time limits], the Engineer shall give a Notice to both Parties of his/her determination. This Notice shall state that it is a "Notice of the Engineer's Determination", and shall describe the determination in detail with reasons and detailed supporting particulars.

3.7.4 Time limits

3.7.4.1 The Engineer shall give the Notice of agreement, if agreement is achieved, within 42 (forty-two) calendar days or within such other time limit as may be determined by the Engineer (the "time limit for agreement" in these Conditions), after:

- 3.7.4.1.1 in the case of a matter to be agreed or determined (not a Claim), the date of commencement of the time limit for agreement as stated in the applicable Sub-Clause of these Conditions;
- 3.7.4.1.2 in the case of a Claim under sub-paragraph ~~(e)~~ 20.1.1.3 of Sub-Clause 20.1[Claims], the date the Engineer receives a Notice under Sub-Clause 20.1 from the claiming Party; or
- 3.6.4.1.3 in the case of a Claim under sub-paragraph 20.1.1.1 or 20.1.1.2 of Sub-Clause 20.1 [Claims], the date the Engineer receives:
- 3.7.4.1.4 a fully detailed Claim under Sub-Clause 4 20.2.5 [Fully Detailed Claim]; or 20.2.6.1.2 in the case of a Claim under Sub-Clause 20.2.6 [Claims of continuing effect], an interim or final fully detailed Claim (as the case may be).
- 3.7.4.2 The Engineer shall give the Notice of his/her determination within 42 calendar days or within such other time limit as may be determined by the Engineer (the "time limit for determination" in these Conditions), after the date corresponding to his/her obligation to proceed under the last paragraph of Sub-Clause 3.7.2.1 [Consultation to reach agreement].
- 3.7.4.3 If the Engineer does not give the Notice of agreement or determination within the relevant time limit:
 - 3.7.4.3.1 in the case of a Claim, the Engineer shall be deemed to have given a determination rejecting the Claim; or
 - 3.7.4.3.2 in the case of a matter to be agreed or determined, the matter shall be deemed to be a Dispute which may be referred by either Party to the

DAAB for its decision under Sub-Clause 21.3 Obtaining DAAB's Decision] subject to filing of a NOD (and Sub-Clause 3.7.6 [Dissatisfaction with Engineer's determination]).

3.7.5 Effect of the agreement or determination

- 3.7.5.1 Each agreement or determination shall be binding on both Parties (and shall be complied with by the Engineer) unless and until corrected under this Sub-Clause or, in the case of a determination, it is revised under Clause 21 [Disputes and Arbitration].
- 3.7.5.2 An agreement or determination concerns the payment of an amount from one Party to the other Party, the Employer shall include deduction of such an amount in a Payment Certificate to be determined by the Engineer.
- 3.7.5.3 An agreement or determination concerns the payment of an amount from one Party to the other Party, the Contractor shall include such an amount in a Payment Certificate to be determined by the Engineer.
- 3.7.5.4 If, within 14 calendar days after giving or receiving the Engineer's Notice of agreement or determination, error of a typographical or clerical or arithmetical nature is found:
 - 3.7.5.4.1 by the Engineer: then he/she shall immediately advise the Parties accordingly; or
 - 3.7.5.4.2 by a Party: then that Party shall give a Notice to the Engineer, stating that it is given under this Sub-Clause 3.7.4 and clearly identifying the error. If the Engineer does not agree there was an error, he/she shall within 14 calendar days advise the Parties accordingly.

3.7.5.5 The Engineer shall within 14 calendar days of finding the error or receiving a Notice under sub-paragraph 3.7.5.2.2 above (as the case may be), give a Notice to both Parties of the corrected agreement or determination. Thereafter, the corrected agreement or determination shall be treated as the agreement or determination for the purpose of these Conditions.

3.7.6 **Dissatisfaction with Engineer's determination**

3.7.6.1 If either Party is dissatisfied with a determination of the Engineer:

3.7.6.1.1 the dissatisfied Party shall give a NOD to the other Party, with a copy to the Engineer;

3.7.6.1.2 this NOD shall state that it is a "Notice of Dissatisfaction with the Engineer's Determination" and shall set out the reason(s) for dissatisfaction;

3.7.6.1.3 this NOD shall be given within 28 calendar days after receiving the Engineer's Notice of the determination under Sub-Clause 3.7.3 [Engineer's Determination] or, if applicable, his/her Notice of the corrected determination under Sub-Clause 3.7.5 [Effect of the agreement or determination] (or, in the case of a deemed determination rejecting the Claim, within 28 calendar days after the time limit for determination under Sub-Clause 3.7.4 [Time limits] has expired); and

3.7.6.1.4 thereafter, either Party may proceed under Sub-Clause 21.3 [Obtaining DAAB's Decision].

3.7.6.2 If no NOD is given by either Party within the period of 28 calendar days stated in sub-paragraph 3.7.6.1.3 above, the determination of the Engineer shall be

deemed to have been accepted by both Parties and shall be final and binding on them.

3.7.6.3 If the dissatisfied Party is dissatisfied with only part(s) of the Engineer's determination:

3.7.6.3.1 this part(s) shall be clearly identified in the NOD;

3.7.6.3.2 this part(s), and any other parts of the determination that are affected by such part(s) or rely on such part(s) for completeness, shall be deemed to be severable from the remainder of the determination;
and

3.7.6.3.3 the remainder of the determination shall become final and binding on both Parties as if the NOD had not been given.

3.7.5.4 In the event that a Party fails to comply with an agreement of the Parties under this Sub-Clause 3.7 or a final and binding determination of the Engineer, the other Party may, without prejudice to any other rights it may have, refer the failure itself directly to arbitration under Sub-Clause 21.5 [Arbitration] in which case the first and the third paragraphs of Sub-Clause 21.6 [Failure to Comply with DAAB's Decision] shall apply to such reference in the same manner as these paragraphs apply to a final and binding decision of the DAAB.

3.8 MEETINGS

3.8.1 The Employer and/or the Engineer or the Contractor's Representative may require the other to attend meetings to discuss arrangements for future work and/or other matters in connection with execution of the Works. The Employer's other contractors, the personnel of legally constituted public authorities and/or private utility companies, and/or Subcontractors may attend any such meeting, if requested by the Employer and/or the Engineer or the Contractor's Representative.

- 3.8.2 The Engineer (or the Contractor as instructed by the Employer and/or Engineer) shall keep a record of each meeting and supply copies of the record to those attending and to the Employer and/or Engineer for approval (as the case may be). At any such meeting, and in the record, responsibilities for any actions to be taken shall be in accordance with the Contract.

4. THE CONTRACTOR

4.1 CONTRACTOR'S GENERAL OBLIGATIONS

- 4.1.1 The Contractor shall execute the Works in accordance with the Contract. When completed, the Works (or Section or Part or major item of Plant, if any) shall be fit for the purpose(s) for which they are intended, as defined and described in the Employer's Requirements (or, where no purpose(s) are so defined and described, fit for their ordinary purpose(s) as determined by the Employer and/or Engineer.
- 4.1.2 The Contractor shall provide the Plant and Materials (and spare parts, if any) and Contractor's Documents specified in the Employer's Requirements, and all Contractor's Personnel, Goods, Plant and Materials, consumables and other things and services, whether of a temporary or permanent nature, required to fulfil the Contractor's obligations under the Contract.
- 4.1.3 The Works shall include any work which is necessary to satisfy the Employer's Requirements, Contractor's Proposal and Schedules, or is implied by the Contract and the RFP, and all works which (although not mentioned in the Contract) are necessary for stability or for the completion, or safe and proper operation, of the Works.

- 4.1.4 The Contractor shall be responsible for the adequacy, stability and safety of all the Contractor's operations and activities, of all methods of construction and of all the Works.
- 4.1.5 The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this alteration having been submitted to the Engineer for approval.
- 4.1.6 The Contractor shall successfully implement the Project on time and within the Accepted Contract Amount and TCP with precise coordination of all tasks to achieve a high standard of quality that is approved and acceptable by the Employer and/or Engineer.
- 4.1.7 The Contractor shall plan all Works in a manner that ensures minimal interruption to normal train services and any other services rendered by the Employer.
- 4.1.8 The Works shall be executed as per prioritization of sequencing of the delivery Works as stipulated in the PTR (Particular Technical Requirements), as contained in the RFP, for each Region unless otherwise agreed to in writing with the Employer and/or the Engineer.

4.2 SECURITY

4.2.1 BID BOND / SECURITY

- 4.2.1.1 The Contractor shall, maintain irrevocable and unconditional payment on-demand Bid Bond/Security to the value of R80,000,000.00 (Eighty Million Rand) which was

submitted with the Contractor's Proposal. This Bid Bond/Security shall remain valid for 365 calendar days after the submission of the Contractor's Proposal.

4.2.1.2 The Employer shall, at the Employer's discretion and without substantiation, call upon the Bid Bond/Security if:

4.2.1.2.1 The Contractor, without the Employer and/or Engineer's written agreement, withdraws the Contractor's Proposal after the latest time specified for the submission of the Contractor's Proposal and before the expiry of the validity of the Proposal; and/or

4.2.1.2.2 The Contractor refuses to accept any correction of errors in the Contractor's Proposal in accordance with any Conditions of Invitation and/or Instructions to the Contractor; and/or

4.2.1.2.3 The Employer awards the Contract to the Contractor and the Contractor fails to comply with any Conditions of Contract; and/or

4.2.1.2.4 The Employer awards the Contract to the Contractor and the Contractor fails to perform any obligations and/or liabilities and/or comply with the Contract; and/or

4.2.1.2.5 The Employer, in the Employer's opinion, is entitled to amounts recoverable from the Contractor for any reason whatsoever.

4.2.1.3 The Employer's calling upon of the Bid Bond/Security shall not, in any manner whatsoever, prejudice the Employer's rights nor limits in respect of the Employer claiming Damages or any other costs from the Contractor.

4.2.1.4 The Bid Bond/Security shall be provided by a South African Bank whose primary place of business operations is South Africa.

4.2.1.5 The Bid Bond/Security template with which the Contractor shall comply is as annexed to this Contract.

4.2.2 PERFORMANCE BOND/SECURITY

4.2.2.1 The Contractor shall obtain and maintain (at the Contractor's cost) an irrevocable and unconditional original payment-on-demand Performance Bond/Security equal to 10% of the Contract Price and which shall remain valid for 365 (three hundred and sixty-five) calendar days after the Contractor's planned date of receipt of the Performance Certificate (for the whole of the Works) from the Employer. If the terms of the Performance Bond/Security specify an expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 60 (sixty) calendar days before the expiry date, the Contractor shall extend the validity of the Performance Bond/Security until the issue of the Performance Certificate by the Employer and/or Engineer.

4.2.2.2 The Contractor shall, within 14 calendar days of receiving a notification of award of the Contract, submit an irrevocable and unconditional original payment-on-demand Performance Bond/Security equal to 10% of the ICP and which shall remain valid for 365 calendar days after the Contractor's planned date of receipt of the Performance Certificate (for the whole of the Works) from the Employer and/or Engineer.

4.2.2.3 The Performance Bond/Security that is equal to 10% of the ICP shall, immediately upon compliant submission of the original by the Contractor to the Employer, replace the Performance Bond/Security that is equal to 10% of the Contractor's Proposal Price.

4.2.2.4 The Contractor shall thereafter ensure that the Performance Bond/Security is always equal to 10% of the TCP and that the Performance Bond/Security remains valid for 365 calendar days after the planned date of issuance of the Performance Certificate by the Employer or for 365 calendar days after the actual date of issuance of the Performance Certificate by the Employer (the later of the 2 days).

4.2.2.5 In order to facilitate and ensure that the Performance Bond/Security is always equal to 10% of the TCP, the Contractor shall at a minimum, submit an original update Performance Bond/Security to the Employer every 300 calendar days from the commencement date. The Contractor shall use the TCP as reflected in the latest Payment Certificate issued by the Employer, at the time that an updated Performance Bond/Security is due, to calculate the value of the updated Performance Bond/Security that shall be provided.

4.2.2.6 The Employer shall, at its own discretion and without substantiation, call upon the Performance Bond/Security if:

4.2.2.6.1 The Employer after having awarded the Contract to the Contractor, the Contractor fails to achieve completion of Validation to the absolute satisfaction of the Employer for which the Key Date is fixed as the 548th calendar day after the Commencement Date; and/or

4.2.2.6.2 The Contractor, in the Employer's opinion, fails to comply with any Condition(s) of the Contract; and/or

4.2.2.6.3 The Contractor, in the Employer's opinion, fails to perform any obligation(s), and/or liabilities and/or comply with the Contract; and/or

4.2.2.6.4 In the Employer's opinion, is entitled to amounts recoverable from the Contractor for any reason whatsoever.

4.2.2.7 The Employer's calling upon of the Performance Bond/Security shall not, in any manner whatsoever, prejudice the Employer's rights nor limit in respect of claiming penalties, delay Damages and/or any other Damages and/or any other costs regardless of the limits set for such penalties and Damages, regardless of the reason for the Employer's calling upon the Performance Bond/Security.

4.2.2.8 The Performance Bond/Security shall be provided by a South African Bank whose primary place of business operations is South Africa. The Performance Bond/Security template is as annexed to the Contract.

4.2.2.9 Whenever Variations and/or adjustments under Clause 13 [Variations and Adjustments] result in an accumulative increase or decrease of the Contract Price by more than 10% percent of the TCP:

4.2.2.9.1 in the case of such an increase, at the Employer's and/or Engineer's instruction the Contractor shall Promptly increase the amount of the Performance Bond/Security in that currency by a percentage equal to the accumulative increase.

4.2.3 ADVANCE PAYMENT BOND/SECURITY

4.2.3.1 The Contractor shall obtain and maintain (at the Contractor's cost) an irrevocable and unconditional original payment-on-demand Advance Payment Bond/Security equal to the total amount of the Advance Payment made and which shall remain valid for 365 calendar days after the Contractor's planned date of receipt of the Performance Certificate (for the whole of the Works) from the Employer. If the terms of the Advance Payment Bond/Security specify an expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 60 (sixty) calendar days before the expiry date, the Contractor shall extend the validity of the

Advance Payment Bond/Security until the issue of the Performance Certificate by the Employer and/or Engineer.

4.2.3.2 The Contractor shall, within 14 calendar days of the Commencement Date, submit an irrevocable and unconditional original payment-on-demand Advance Payment Bond/Security equal to the Mobilisation Allowance to be certified under Payment Milestone 1.

4.2.3.3 The Employer shall, at its own discretion and without substantiation, call upon the Advance Payment Bond/Security if:

4.2.3.3.1 The Employer after having awarded the Contract to the Contractor, the Contractor fails to achieve completion of Validation to the absolute satisfaction of the Employer for which the Key Date is fixed as the 548th calendar day after the Commencement Date; and/or

4.2.3.3.2 The Contractor, in the Employer's opinion, fails to comply with any Condition(s) of the Contract; and/or

4.2.3.3.3 The Contractor, in the Employer's opinion, fails to perform any obligation(s), and/or liabilities and/or comply with the Contract; and/or

4.2.3.3.4 In the Employer's opinion, is entitled to amounts recoverable from the Contractor for any reason whatsoever.

4.2.2.4 The Employer's calling upon of the Advance Payment Bond/Security shall not, in any manner whatsoever, prejudice the Employer's rights nor limit in respect of claiming penalties, delay Damages and/or any other Damages and/or any other costs regardless of the limits set for such penalties and Damages, regardless of the reason for the Employer's calling upon the Advance Payment Bond/Security.

4.2.2.7 The Advance Payment Bond/Security shall be provided by a South African Bank whose primary place of business operations is South Africa. The Advance Payment Bond/Security template is as annexed to the Contract.

4.2.4 RETENTION

4.2.4.1 The Employer and/or Engineer shall, throughout the duration of the Contract and in addition to the Performance Bond/Security and Advance Payment Bond/Security, withhold 10% of all amounts certified due and payable in all Payment Certificates in Retention.

4.2.4.2 Retention shall, at the Employer's and/or Engineer's discretion, be placed in an interest-bearing bank account held by a South African bank whose primary place of business operations is South Africa. Bank charges and other administrative charges shall be offset against interest earned in the bank account.

4.2.4.3 Retention shall be held for the purposes stipulated in the Contract and the release of Retention, by the Employer and/or Engineer, shall be as follows:

4.2.4.3.1 An amount equal to 50% of the total Retention held after issuance of the Employer's signed Taking-Over Certificate (for the whole of the Works) whereby the Contractor shall issue a Statement (once the amount including interest is approved by the Employer and/or Engineer); and

4.2.4.3.2 An amount equal to the balance of the Retention held after issuance of the Employer's signed Performance Certificate (for the whole of the Works) for which the Contractor shall issue a Statement (once the amount including interest is approved by the Employer and/or Engineer).

4.3 CONTRACTOR'S REPRESENTATIVE

- 4.3.1 The Contractor shall, subject to the approval of the Employer and/or Engineer appoint the Contractor's Representative and shall give him/her all authority necessary to act on the Contractor's behalf under the Contract, except to replace the Contractor's Representative.
- 4.3.2 The Contractor's Representative shall be qualified, experienced and competent in the main engineering discipline, to be approved by the Employer or the Engineer, applicable to the Works and fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language].
- 4.3.3 Unless the Contractor's Representative is named in the Contract, the Contractor shall, before the Commencement Date, submit to the Employer and/or Engineer for approval the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If approval is withheld or subsequently revoked by the Employer and/or Engineer, or if the appointed person fails to act as the Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable replacement for such appointment to the Employer and/or Engineer for approval.
- 4.3.4 The Contractor shall not, without the Employer and/or Engineer's prior approval, revoke the appointment of the Contractor's Representative or appoint a replacement (unless the Contractor's Representative is unable to act as a result of death, illness, disability or resignation, in which case his/her appointment shall be deemed to have been revoked with immediate effect and the appointment of a replacement shall be treated as a temporary appointment until the Employer and/or Engineer gives his/her approval to this replacement, or another replacement is appointed, under this Contract).
- 4.3.5 The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. The Contractor's Representative shall act

for and on behalf of the Contractor at all times during the performance of the Contract, including but not limited to issuing and receiving all Notices and other communications under Sub-Clause 1.3 [Notices and Other Communications] and for receiving instructions under Sub-Clause 3.5 [Engineer's Instructions].

4.3.6 The Contractor's Representative shall be based at the Site(s) for the whole time that the Works are being executed at the Site(s). If the Contractor's Representative is to be temporarily absent from the Site(s) during the execution of the Works, a suitable replacement shall be temporarily appointed, subject to the Employer and/or Engineer's prior approval.

4.3.7 The Contractor's Representative may delegate any powers, functions and authority except:

4.3.7.1 the authority to issue and receive Notices and other communications under Sub-Clause 1.3 [Notices and Other Communications]; and

4.3.7.2 the authority to receive instructions under Sub-Clause 3.5 [Engineer's Instructions]), to any suitably competent and experienced person and may at any time revoke the delegation.

4.3.8 Any delegation or revocation shall not take effect until the Employer and/or Engineer has received a Request for Approval from the Contractor's Representative, naming the person, specifying the powers, functions and authority being delegated or revoked, and stating the timing of the delegation or revocation for approval by the Employer and/or Engineer.

4.3.9 All these persons shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language].

4.4 SUBCONTRACTORS

4.4.1 The Contractor shall not subcontract:

4.4.1.2 any part of the Works for which subcontracting and/or the choice of subcontractor is not approved by the Employer and/or Engineer.

4.4.2 The Contractor shall be responsible for the work of all Subcontractors, for managing and coordinating all the Subcontractors' works, and for the acts or defaults of any Subcontractor, any Subcontractor's agents or employees, as if they were the acts or defaults of the Contractor.

4.4.3 The Contractor shall obtain the Employer and/or Engineer's prior approval to all proposed Subcontractors, except a subcontract for which the Subcontractor is named in the Contract.

4.4.4 The Contractor is required to obtain the Employer and/or Engineer's approval for all proposed Subcontractors. The Contractor shall submit the name, address, detailed particulars (including but not limited to shareholding certificate, audited financial statements, contact details, tax compliance status pin, BBBEE Certificate issued by as SANAS approved agency) and relevant experience of such Subcontractor and the work intended to be subcontracted to the Employer and/or Engineer and further information which the Employer and/or Engineer may require to approve or reject such subcontractor.

4.4.5 The Contractor shall give a Notice, in writing, to the Employer and/or Engineer not less than 28 calendar days before the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site(s).

4.4.6 Unless otherwise approved and/or instructed in writing by the Employer and/or Engineer (acting on the written instruction from the Employer), the Contractor shall

only use Subcontractors from the Employer Approved list of Signalling and Telecommunication Contractors to do any installation and maintenance works.

4.5 NOMINATED SUBCONTRACTORS

In this Sub-Clause, "nominated Subcontractor" means a Subcontractor named as such in the Employer's Requirements or whom the Employer and/or Engineer, under this contract and by written instruction, instructs and approves the Contractor to employ as a Subcontractor.

4.5.1 Objection to Nomination

4.5.1.1 The Contractor shall not be under any obligation to employ a nominated Subcontractor whom the Employer and/or Engineer instructs and against whom the Contractor raises reasonable objection by giving a Notice, in writing, to the Employer and/or Engineer, with detailed supporting particulars, no later than 14 calendar days after receiving the Employer and/or Engineer's instruction. An objection shall be deemed reasonable if it arises from, among other things, any of the following matters, unless the Employer and/or Engineer agrees to indemnify the Contractor against and from the consequences of the matter:

4.5.1.1.1 there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength;

4.5.1.1.2 the subcontract does not specify that the nominated Subcontractor shall indemnify the Contractor against and from any negligence or misuse of Goods, Plant and Materials by the nominated Subcontractor, the nominated Subcontractor's agents and employees; or

4.5.1.1.3 the subcontract does not specify that the nominated Subcontractor shall indemnify the Contractor against and from any negligence or misuse of Goods, Plant and Materials by the nominated Subcontractor, the nominated Subcontractor's agents and employees; or the subcontract does not specify that, for the subcontracted work (including design, if any), the nominated Subcontractor shall:

4.5.1.1.3.1 undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge the Contractor's corresponding obligations and liabilities under the Contract; and

4.5.1.1.3.2 Indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfil these liabilities.

4.5.2 Payments to nominated Sub-Contractors

The Contractor shall pay to the nominated Subcontractor the amounts due in accordance with the subcontract. These amounts plus other charges shall be included in the ICP and TCP.

4.5.3 Evidence of Payments

4.5.3.1 Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Employer and/or Engineer may request the Contractor to supply all unredacted evidence that the nominated Subcontractor

has received all amounts due in accordance with previous Payment Certificates, less applicable deductions as approved by the Employer and/or Engineer.

4.5.3.2 Failure by the Contractor to pay the nominated Subcontractor any amounts due to the nominated Subcontractor as described above, shall entitle the Employer (at the Employer's sole discretion) to pay, directly to the nominated Subcontractor, part or all such amounts previously certified (less applicable deductions) as are due to the nominated Subcontractor.

4.5.3.3 Thereafter, the Engineer shall give a Notice, in writing, to the Contractor stating the amount paid directly to the nominated Subcontractor by the Employer and, in the next IPC after this Notice, shall include this amount as a deduction.

4.5.4 PPPF-2017 Compliance Requirements

4.5.4.1 In terms of the New Preferential Procurement Regulations (PPPF-2017), it is compulsory for the Contractor to subcontract, in terms of PPPF-2017 Compliance Requirements, the Employer's Requirements, this Contract and the RFP.

4.5.4.2 The Contractor shall, at no additional cost to the Employer, adhere to all related legislation (as amended from time to time) and any further instructions and targets that the Employer and/or Engineer may instruct the Contractor to comply with (on behalf of the Employer or on behalf of any other organ of the South African Government) throughout the duration of the Contract.

4.5.4.3 The Contractor shall follow the link <http://www.thedtic.gov.za> (*mutatis mutandis*) and go to the section titled "Sectors and Service" for more information on all minimum requirements related to B-BBEE and New Preferential Procurement laws and regulations that will apply for this Project. The Employer and/or Engineer does not accept any liability for provision of this link since the Contractor shall satisfy itself that all information is attained from the DTIC and any other relevant

organ of the South African Government when preparing the Contractor's Proposal.

4.5.4.4 The Contractor shall, on an uninterrupted basis, comply with all Preferential Procurement laws, regulations and compliance requirements stated in the Employer's Requirements, this Contract and the RFP. The Contractor shall further provide any proof and unredacted supporting documents proving compliance as specified in the Employer's Requirements, this Contract and the RFP or immediately upon receipt of a request from the Employer and/or Engineer for the Contractor to do so. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced until the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall mean:

4.5.4.4.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

4.5.4.4.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the as

reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.5.4.5 The Contractor shall, on an uninterrupted basis, do all legal things necessary and comply with all Local Community Involvement compliance requirements stated in the Employer's Requirements, this Contract and the RFP. This shall include taking full responsibility of ensuring all necessary Local Community Involvement initiatives are fulfilled, and targets met, to ensure successful delivery of the Project and the whole of the Works for the entire duration of the Contract. The Contractor shall further provide any proof and unredacted supporting documents proving compliance as specified in the Employer's Requirements, this Contract and the RFP or immediately upon receipt of a request from the Employer and/or Engineer for the Contractor to do so. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced until the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall mean:

4.5.4.5.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

4.5.4.5.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.6 NIP COMPLIANCE REQUIREMENTS

- 4.6.1 In terms of the National Industrial Participation (“NIP”) Programme, it is compulsory for the Contractor to meet the additional NIP Compliance Requirements in the Employer’s Requirements, this Contract and the RFP.
- 4.6.2 The Contractor shall, at no additional cost to the Employer and/or Engineer, adhere to all related legislation (as amended from time to time) and any further instructions and targets that the Employer and/or Engineer may instruct the Contractor to comply with (on behalf of the Employer or on behalf of any other organ of the South African Government) throughout the duration of the Contract.
- 4.6.3 The Contractor shall follow the link <http://www.thedtic.gov.za> (*mutatis mutandis*) and go to the section titled “Sectors and Service” for more information on all minimum requirements related to NIP that will apply for this Project. The Employer and/or Engineer does not accept any liability for provision of this link since the Contractor shall satisfy itself that all information is attained from the DTIC and any other relevant organ of the South African Government when preparing the Contractor’s Proposal.
- 4.6.4 The Contractor shall, on an uninterrupted basis, comply with all National Industrial Participation (“NIP”) Programme and compliance requirements stated in the Employer’s Requirements, this Contract and the RFP. The Contractor shall further provide any proof and unredacted supporting documents proving

compliance as specified in the Employer's Requirements, this Contract and the RFP or immediately upon receipt of a request from the Employer and/or Engineer for the Contractor to do so. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced until the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Failure in this regard shall mean:

- 4.6.4.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.
- 4.6.4.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.7 LOCAL PRODUCTION AND CONTENT COMPLIANCE REQUIREMENTS

- 4.7.1 It is Compulsory for the Contractor to meet the Local Production and Content, required for this Project as per of the Employer's Requirements, this Contract and the RFP.
- 4.7.2 The DTI has designated and determined the stipulated minimum threshold for the permanent way, rail signalling systems and associated Components, steel products and Components for construction, electrical cable products, transformer and rail electrification sector for Local Production and Content.
- 4.7.3 The stipulated minimum threshold percentages for Local Production and Content for the different classes of this Project are as follows:
- 4.7.3.1 Rail Signalling Systems and associated Components – 65% local content;
 - 4.7.3.2 Steel products and Components for construction – 100% local content;
 - 4.7.3.3 Electrical cable products – 90% local content;
 - 4.7.3.4 Permanent way – 90% local content;
 - 4.7.3.5 Rail electrification sector (OHTE) – 100% local content (as self-designated by the Employer to protect local capacity);
 - 4.7.3.6 Transformers – depending on the class and envisaged replacement of any transformer; and
 - 4.7.3.7 Two-way Radio Terminals – National Treasury Designated Sectors Instruction Number 1 of 2016-2017.
- 4.7.4 The Contractor shall, at no additional cost to the Employer and/or Engineer, adhere to all related legislation (as amended from time to time) and any further instructions and targets that the Employer and/or Engineer may instruct the

Contractor to comply with (on behalf of the Employer and/or Engineer or on behalf of any other organ of the South African Government) throughout the duration of the Contract.

4.7.5 In addition to the above, the Contractor shall follow the link <http://www.thedtic.gov.za> (*mutatis mutandis*) and go to the section titled “Sectors and Service” for all minimum requirements and copies of all instruction notes related to Local Production and Content that will apply for this Project. The Employer and/or Engineer does not accept any liability for provision of this link since the Contractor shall satisfy itself that all information is attained from the DTIC and any other relevant organ of the South African Government when preparing the Contractor’s Proposal.

4.7.6 The Contractor shall, on an uninterrupted basis, comply with all Local Production and Content laws, regulations and compliance requirements stated in the Employer’s Requirements, this Contract and the RFP. The Contractor shall further provide any proof and unredacted supporting documents proving compliance as specified in the Employer’s Requirements, this Contract and the RFP or immediately upon receipt of a request from the Employer and/or Engineer for the Contractor to do so. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer’s Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced until the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall mean:

4.7.6.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the

Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

4.7.6.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.7.7 The Contractor shall, on an uninterrupted basis, do all legal things necessary and comply with all Local Community Involvement compliance requirements stated in the Employer's Requirements, this Contract and the RFP. This shall include taking full responsibility of ensuring all necessary Local Community Involvement initiatives are fulfilled, and targets met, to ensure successful delivery of the Project and the whole of the Works for the entire duration of the Contract. The Contractor shall further provide any proof and unredacted supporting documents proving compliance as specified in the Employer's Requirements, this Contract and the RFP or immediately upon receipt of a request from the Employer and/or Engineer for the Contractor to do so. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced until the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall mean:

- 4.7.7.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.
- 4.7.7.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.8 CO-OPERATION

- 4.8.1 The Contractor shall, as specified in the Employer's Requirements or as instructed by the Employer and/or Engineer, co-operate with and allow appropriate opportunities for carrying out work by:
- 4.8.1.2 the Employer's and/or Engineer's Personnel;
 - 4.8.1.3 any other contractors employed by the Employer and/or Engineer; and
 - 4.8.1.4 the personnel of any legally constituted public authorities and private utility companies, who may be employed in the carrying out, on or near the Site(s), of any work not included in the Contract. Such appropriate

opportunities may include the use of Contractor's Equipment, Temporary Works, access arrangements which are the responsibility of the Contractor, and/or other Contractor's facilities or services on the Site(s).

- 4.8.2 The Contractor shall be responsible for the Contractor's construction activities on the Site(s), and shall use all reasonable endeavours to co-ordinate these activities with those of other contractors to the extent (if any) specified in the Employer's Requirements or as instructed by the Engineer.

4.9 SETTING OUT

- 4.9.1 The Contractor shall set out the Works in relation to the Employer's Requirements, the RFP, as stated elsewhere under this Contract or as otherwise instructed by the Employer and/or Engineer to achieve successful completion of the Works to the satisfaction of the Employer.

4.9.2 Accuracy

- 4.9.2.1 The Contractor shall, at the Contractor's risk:

- 4.9.2.1.1 verify the accuracy of all these items of reference before they are used for the Works;
- 4.9.2.1.2 Promptly deliver the results of each verification to the Engineer;
- 4.9.2.1.3 rectify any error in the positions, levels, dimensions or alignment of the Works; and
- 4.9.2.1.4 be responsible for the correct positioning of all parts of the Works.

4.9.3 **Errors**

- 4.9.3.1 If the Contractor finds an error in any items of reference, the Contractor shall, within 28 calendar days of becoming aware or ought to have become aware, give a written Notice to the Engineer describing the error in detail for Agreement or Determination by the Engineer.

4.9.4 **Agreement or Determination of rectification measures, delay and/or Cost**

- 4.9.4.1 After receiving a Notice, in writing, from the Contractor under this Contract, the Engineer shall proceed to agree or determine:

4.9.4.1.1 whether or not there is an error in the items of reference;

4.9.4.1.2 whether or not (taking account of cost and time) an experienced contractor exercising due care would have discovered such error.

4.9.4.1.2.1 when examining the Site(s) and the Employer's Requirements; or

4.9.4.1.2.2 when scrutinizing the Employer's Requirements under Sub-Clause 5.1 [General Design Obligations], if the items of reference are specified in the Employer's Requirements and the Contractor's Notice is given after the expiry of the period stated in the Contract; and

4.9.4.1.3 what measures (if any) the Contractor is required to take to rectify the error including the time within which the Contractor shall rectify the error.

4.10 HEALTH AND SAFETY OBLIGATIONS

4.10.1 The Contractor shall:

- 4.10.1.1 comply with all applicable health and safety regulations and Laws, and the Employer's safety rules, regulations and guidelines entirely at the Contractor's own cost;
- 4.10.1.2 comply with all applicable health and safety obligations specified in the Contract;
- 4.10.1.3 comply with all directives issued by the Contractor's health and safety officer (appointed under this Contract).
- 4.10.1.4 take care of the health and safety of all persons entitled to be on the Site(s) and other places (if any) where the Works are being executed;
- 4.10.1.5 keep the Site(s), Works (and the other places (if any) where the Works are being executed) clear of unnecessary obstruction so as to avoid danger to these persons;
- 4.10.1.6 provide fencing, lighting, safe access, guarding, and watching of:
 - 4.10.1.6.1 the Works, until the Works are taken over by the Employer under this contract; and
 - 4.10.1.6.2 any part of the Works where the Contractor is executing outstanding works or remedying any defects during the DLP; and
- 4.10.1.7 provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the executions of

the Works, for the use and protection of the public and of owners and occupiers of adjacent land and property.

4.10.2 Within 21 calendar days of the Commencement Date and before commencing any construction on the Site(s), the Contractor shall submit to the Engineer for information a health and safety manual which has been specifically prepared for the Works, the Site(s) and other places (if any), where the Contractor intends to execute the Works. This manual shall be in addition to any other similar document required under applicable health and safety regulations and Laws.

4.10.3 The health and safety manual shall set out all the health and safety requirements:

4.10.3.1 specified in the Employer's Requirements;

4.10.3.2 that comply with all the Contractor's health and safety obligations under the Contract; and

4.10.3.3 that are necessary to effect and maintain a healthy and safe working environment for all persons entitled to be on the Site(s) and other places (if any including, but not limited to the Project office and Site(s) offices) where the Works are being executed.

4.10.4 This manual shall be revised as necessary by the Contractor or the Contractor's health and safety officer, or at the request of the Engineer. Each revision of the manual shall within 21 calendar days of the Engineer's request, be submitted to the Engineer.

4.10.5 In addition to the reporting requirement of this Contract, the Contractor shall submit to the Engineer details of any accident as soon as practicable after its

occurrence and, in the case of an accident-causing serious injury or death, shall inform the Engineer immediately.

- 4.10.6 The Contractor shall, as specified in the Employer's Requirements and as the Engineer may require, maintain unredacted records and make reports (in compliance with the applicable health and safety regulations and Laws) concerning the health and safety of persons and any damage to property.
- 4.10.7 The Contractor shall be responsible for all Occupational Health and Safety matters on the Project for the entire duration of the Contract, including Maintenance, Warranty and Defects Liability period.
- 4.10.8 The Contractor shall implement an OHS Management Plan ("OHS Plan") that complies with the Health and Safety specifications as prescribed in the RFP.
- 4.10.9 The Contractor shall ensure that anyone working on the Project are at all times, without exception, wearing Personal Protective Equipment ("PPE"). This shall include, but not be limited to, on or near railway lines and/or service roads and/or servitudes and/or any other areas related to the delivery of the Works.
- 4.10.10 The PPE requirements for anyone working on the Project shall always, at a minimum be as follows:

- 4.10.10.1 Reflective vests;

- 4.10.10.2 Safety boots;

- 4.10.10.3 Hard hats;

4.10.10.4 Overalls;

4.10.10.5 Face masks; and

4.10.10.6 Other requirements prescribed by law.

4.10.11 Use of vehicles:

4.10.11.1 The Contractor shall always comply with the relevant legislation and ordinances including, but not limited to, all the traffic signs and speed limits; and

4.10.11.2 Vehicles' main head lights and taillights are always switched on.

4.10.12 High voltage Electrical Equipment:

4.10.12.1 It is recorded that the Site(s) may have "live" Electrical overhead wires or underground cables and there is danger of contact with such wires or piercing underground Electrical cable during excavation, as such the Contractor and its personnel must exercise absolute care when working on the Site(s);

4.10.12.2 The Contractor shall ensure that when doing installations or working in the vicinity of high voltage Equipment, it takes all the necessary precautionary measures to safeguard all personnel against injury;

4.10.12.3 The Contractor and its Personnel shall always, as precautionary measures, consider all Equipment as "live", notwithstanding any

safety measures in the System to reduce induced stray voltages to a safe level; and

- 4.10.12.4 Before work commences, the Contractor shall make all personnel aware of the danger of “live” Electrical wires and cables as well as induced stray voltages from AC electrification into Signalling cables and Equipment.

4.10.13 **Trackside Works:**

- 4.10.13.1 When arriving at any Site(s), including Equipment Rooms and substations, the Contractor shall inform the Train Control Operator (“TCO”) of his presence in a manner determined by the Engineer. The Contractor shall also accurately record the date, time and his activities daily in the Equipment Maintenance book;
- 4.10.13.2 When the Contractor enters a CTCC or train control office, the Contractor shall identify all applicable personnel to the Section Manager in charge and state the purpose of his visit and enter the details of and reason for the Contractor’s visit in the CTCC or train control office logbook and signs the entry;
- 4.10.13.3 Before the Contractor leaves the Site(s) or CTCC or train control office, the Contractor shall report all intended movements to the Section Manager in charge and record all movements in the office logbook and signs the exit.

4.11 PROTECTION OF THE PUBLIC

The Contractor shall ensure that restricted access is in place at all Construction Site(s) and Site(s) Camps to ensure that the general public is safe.

4.12 SECURITY

- 4.12.1 The Contractor shall provide security guards on Site(s) for all personnel, Equipment, Plant and Materials, and the Employer's representatives and Engineer's representatives performing their duties for the duration of the Contract.
- 4.12.2 The deployment of security personnel shall be arranged in consultation with the Employer, and subject to the Employer's regulations.
- 4.12.3 The Contractor shall liaise with the Contractor's security personnel so that they are always aware of the Contractor's security arrangements on Site(s) and supply all personnel with clearly identifiable clothing clearly marked with Project and Contractor details.
- 4.12.4 The Contractor shall supply all personnel with identification card containing the personnel's photo and identity number and statement of employment with the Contractor. All personnel shall always carry this document whenever they are on Site(s). The Contractor shall ensure that persons no longer in the Contractor's employ, do not have those identification cards in their possession.
- 4.12.5 The Contractor shall ensure that no persons with criminal record is employed on Site(s).
- 4.12.6 The Contractor shall not hire personnel nor pay them on Site(s).

- 4.12.7 All vehicles on Site(s) shall have the Contractor's name clearly marked in a conspicuous position.
- 4.12.8 All Contractor's personnel shall undergo a security briefing before they are allowed on Site(s).
- 4.12.9 The Contractor's OHS Plan shall include a detailed method statement on how security matters shall be managed on the Site(s).
- 4.12.10 The Contractor shall comply with all applicable legislation, regulations issued in terms the Employer's Requirements, this contract and the RFP and the Employer's safety rules, regulations and guidelines entirely at the Contractor's own cost.
- 4.12.11 The Site(s) shall be deemed to be under the Contractor's control for the duration of the Contract, for the purposes of the Occupational Health and Safety Act, 1993, and the Contractor shall be responsible for all Occupational Health and Safety ("OHS") matters on the Project for the entire duration of the Contract, including execution of the Works during the Maintenance, Warranty and Defects Liability period and including subsequent defects correction periods during which work is taking place. The Employer may, at its sole discretion, and for the sole purpose of the OHS, regard the Contractor as the Employer and the Contractor shall in that case, be responsible for ensuring that the requirements of the Act and the regulations are implemented in the working areas.
- 4.12.12 The Contractor shall ensure that all its personnel attend the Employer's and /or TFR's safety induction courses before commencement of any Works on any Site(s). It is anticipated that the duration of each course will be a maximum of 8 (eight) hours during normal working hours.

4.12.13 No blasting is allowed on the Site(s)

4.12.14 General

4.12.14.1 The Contractor shall at a minimum, comply with the following Acts:

4.12.14.2 The Compensation for Occupational Injuries and Diseases Act (Act 130 of 1993). The Contractor must produce proof of its registration and good standing with the Compensation Commissioner in terms of the Act from the bidding stage until take-over of the Project by the Employer;

4.12.14.3 The Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended and Regulations issued in terms thereof or un-repealed regulations issued in terms of the former Act no 6 of 1983, in its entirety;

4.12.14.4 The Explosives Act No. 26 of 1956 (as amended). The Contractor must, where applicable, furnish the Project Manager with copies of the permits authorising the Contractor to establish an explosives magazine on or near the Site(s);

4.12.14.5 Act 85 of 1993 registration of the Site(s) on behalf of the Employer shall be done by the Contractor in consultation with the Employer;

4.12.14.6 It is agreed that the Employer's and/or Engineer's safety representative may attend all Site(s) safety meetings called in terms of Act 85 of 1993. The Contractor shall, within 3 (three) working days, submit copies of the minutes of these meetings to the Employer and Engineer. The safety meetings shall be

monitored by the Contractor to identify any action required to rectify problems or corrective actions;

- 4.12.14.7 The Contractor shall ensure that all flammable Materials are properly stored and managed.
- 4.12.14.8 The Contractor shall ensure that it takes extra ordinary care when welding, flame-cutting or other fire-hazard operations occur, and the Contractor shall provide suitable firefighting Equipment at close hand to those operations.
- 4.12.14.9 The Contractor shall report all accidents in writing to the Employer. The Contractor shall report within 24 hours of occurrence, all accidents resulting in the death of or injury to any person in the working areas. Any other accident shall be reported within 48 hours of its occurrence.
- 4.12.14.10 The Contractor shall ensure that telephone numbers of emergency services, including the local firefighting service, shall be posted conspicuously in the Contractor's Site(s) office near the telephone.
- 4.12.14.11 The Contractor shall provide suitable shoring for cable tranches.
- 4.12.14.12 The Contractor shall provide the required services to clean and sanitise the Site(s) from hazards, including raw sewerage, litter, hinderances, obstructions, as and when required for the purpose of performing the Works.
- 4.12.14.13 The Contractor shall provide additional protection Equipment and clothing for all personnel required for working in areas where environmental and health issues exist.

4.13 ENVIRONMENTAL AND HERITAGE MANAGEMENT

- 4.13.1 The Contractor is responsible for all Environmental and Heritage matters on the Project.
- 4.13.2 The Contractor's Environmental and Heritage Management shall, at a minimum, comply with all standards, specifications, regulations and procedures as defined throughout the Employer's requirements, this Contract, the RFP and all legislation, regulations, and by-laws of South Africa.

4.14 QUALITY MANAGEMENT AND COMPLIANCE VERIFICATION SYSTEMS

4.14.1 Quality Management System (QMS)

- 4.14.1.1 The Contractor's Quality Management System (QMS) shall at a minimum, comply with all standards, specifications, regulations and procedures as defined in the Employer's Requirements, this Contract and the RFP.
- 4.14.1.2 The Contractor shall submit QMS documents to the Employer for acceptance as part of the Programme. The documents shall include details of the:
 - 4.14.1.2.1 Quality Plan for the Works;
 - 4.14.1.2.2 Quality policy;
 - 4.14.1.2.3 Index of procedures to be used;
 - 4.14.1.2.4 Document register; and
 - 4.14.1.2.5 Schedule of internal and external audits for the Works.

- 4.14.1.3 The Contractor shall develop and maintain a comprehensive register of documents that are generated on the Contract including all quality related documents. The Contractor in consultation with the Engineer, shall indicate those documents to be submitted for information, review and Approval and the Contractor shall indicate such requirements in this register of documents. The register shall further indicate the dates of issue of the documents by the Contractor to the Engineer for review or Approval including the Contractor's requested period for reply. All documents shall first be approved by the Engineer prior to such documents being used by the Contractor.
- 4.14.1.4 The Contractor shall submit a detailed Test and Inspection plan to the Engineer for approval before Manufacturing and installation start. The Contractor's Test and Inspection plan shall include detailed trenching records, witness points and hold points for critical activities.
- 4.14.1.5 The Quality Plan means the Contractor's statement, which outlines strategy, methodology, resources allocation, quality assurance and quality control co-ordination activities to ensure that the works meet the standards stated in the Employer's Requirements, this Contract and the RFP. This shall include a description of the Contractor's Test and Inspection activities, and check/Test sheets.
- 4.14.1.6 The Contractor shall prepare and implement a QM System to demonstrate compliance with the requirements of the Contract including but not limited to the Employer's Requirements and the RFP and any other instruction issued by the Employer and/or Engineer and for which such QM System shall be approved by the Engineer. The QM System shall be specifically prepared for the Works and submitted to the Engineer within 28 calendar days of the Commencement Date. Thereafter, whenever the QM System is updated or revised, a copy shall, within 7 (seven) calendar days, be submitted to the Engineer for approval within a period determined by the Engineer.

- 4.14.1.7 The QM System shall be in accordance with the details stated in the Employer's Requirements and the RFP and any other instruction issued by the Employer and/or the Engineer (if any) and shall include the Contractor's procedures:
- 4.14.1.7.1 to ensure that all Notices and other communications under Sub-Clause 1.3 [Notices and Other; Communications], Contractor's Documents, as-built records, Q&M Manuals, and contemporary records can be traced, with full certainty, to the Works, Goods, Plant and Materials, work, workmanship or test to which they relate; to ensure proper coordination and management of interfaces between the stages of execution of the Works, and between Subcontractors; and for the submission of the Contractor's Documents to the Engineer for Review;
 - 4.14.1.7.2 Quality Plan for the Works;
 - 4.14.1.7.3 Quality policy;
 - 4.14.1.7.4 Index of procedure to be used; and
 - 4.14.1.7.5 Document register.
- 4.14.1.8 The Engineer may Review the QM System and may give a Notice, in writing, to the Contractor stating the extent to which it does not comply with the Contract. Within 14 calendar days after receiving this Notice, the Contractor shall revise the QM System to rectify such non-compliance.
- 4.14.1.9 The Engineer may, at any time, give a Notice, in writing, to the Contractor stating the extent to which the Contractor is failing to correctly implement the QM System to the Contractor's activities under the Contract. After receiving this Notice, the Contractor shall immediately remedy such failure.

- 4.14.1.10 The Contractor shall carry out internal audits of the QM System regularly, and at least once every 3 (three) months from the Commencement Date. The Contractor shall submit to the Engineer a report listing the results of each internal audit within 7 (seven) calendar days of completion. Each report shall include, where appropriate, the proposed measures to improve and/or rectify the QM System and/or its implementation for approval by the Engineer.
- 4.14.1.11 If the Contractor is required by the Contractor's quality assurance certification to be subject to external audit, the Contractor shall immediately give a Notice, in writing, to the Engineer describing any failing(s) identified in any external audit. If the Contractor is a JV or a Consortium, this obligation shall apply to each member of the JV or the Consortium.

4.14.2 Compliance Verification System

- 4.14.2.1 The Contractor shall prepare and implement a Compliance Verification System to demonstrate that the design, Plant and Materials, the Employer-Supplied Plant and Materials (if any), work and workmanship comply in all respects with the Contract. The Compliance Verification System shall be in accordance with the details stated in the Employer's Requirements and the RFP at the minimum and shall include, but not limited to, a method for reporting the results of all Inspections and tests carried out by the Contractor. In the event that any Inspection or test identifies a non-compliance with the Contract, the Defects and Rejection Provision in this Contract shall apply.
- 4.14.2.2 The Contractor shall prepare and submit to the Engineer a complete set of compliance verification documentation for the Works or Section (as the case may be), fully compiled and collated in the manner described in the Employer's Requirements or, if not so described, in a manner to be determined by the Engineer.

4.14.3 General provision

Compliance with the QM System and/or Compliance Verification System shall not relieve the Contractor from any duty, obligation or responsibility under or in connection with the Contract, the Employer's Requirements and the RFP.

4.15 USE OF SITE(S) DATA

4.15.1 The Contractor shall be responsible for interpreting all data referred to under this Contract.

4.15.2 The Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Works. In addition, as part of the Contractor's Proposal and the delivery of the Works}, the Contractor shall be deemed to have inspected and examined the Site(s) (including access to the Site(s) and the Site(s) surroundings), the above data, other available information, and to have been satisfied before submitting the Contractor's Proposal as to all matters relevant to the execution of the Works, including (without limitation):

4.15.2.1 the form and nature of the Site(s), including sub-surface conditions;

4.15.2.2 the hydrological and climatic conditions, and the effects of climatic conditions at the Site(s);

4.15.2.3 the extent and nature of the Works and Plant and Materials necessary for the execution of the Works;

4.15.2.4 the Laws, procedures and labour practices of the Country; and

- 4.15.2.5 the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and any other utilities or services.
- 4.15.2.6 The Contractor's requirements for capturing the required geographic map data ("Geodata"), including all resources, Material and Equipment.
- 4.15.2.7 The extent and nature of all Works including, but not limited to, all necessary requirements and solutions that the Contractor shall have to meet to protect the Site(s) and the Works by preventing theft, vandalism, illegal encroachment and/or illegal occupation, and respectively provide, for the Contractor's achievement of successful execution and completion of the Works, the Project and the Contract (including remedying of any defects).
- 4.15.3 The Contractor shall, at the Contractor's cost and regardless of the extent of this requirement, be responsible for removing and keeping all unauthorised persons, illegal encroachers and illegal occupants off the Site(s) for the duration of the Contract. The Contractor shall use any legal means necessary to meet this requirement further making all necessary allowances for resolution of all related issues in all the Contractor's Programmes.
- 4.15.4 The Contractor shall, at the Contractor's cost and regardless of the extent of this requirement, be responsible for protection the Site(s) and the whole of the Works for the duration of the Contract. The Contractor shall use any legal means necessary to meet this requirement further making all necessary allowances for resolution of all related issues in all the Contractor's Programmes.
- 4.15.5 Authorised persons shall be limited to the Contractor's personnel, the Employer's personnel and/or the Engineer's personnel and to any other personnel notified to

the Contractor, by the Employer and/or Engineer, as authorised personnel of the Employer and/or Engineer other contractors on the Site(s).

4.16 SUFFICIENCY OF THE ACCEPTED CONTRACT AMOUNT

4.16.1 The Contractor shall be deemed to:

4.16.1.1 have satisfied itself (himself or herself) as to the correctness and sufficiency of the Accepted Contract Amount which, at the minimum, is fixed and includes the following:

4.16.1.1.1 The price for the whole of the Works (regardless whether of a temporary or permanent nature) including additional Works (regardless whether of a temporary or permanent nature) which the Contractor shall require to achieve successful completion of the whole of the Works, the Project and this Contract;

4.16.1.1.2 All funding costs which the Contractor shall require to manage the Contractor's cash flow for the entire duration of this Contract (to be transparently and separately shown for every cost item included in the Accepted Contract Amount and the TCP);

4.16.1.1.3 All South African and international Taxes for the entire duration of this Contract (to be transparently and separately shown for every cost item included in the Accepted Contract Amount and the TCP);

4.16.1.1.4 All Foreign Currency and Exchange ("FOREX") costs for the entire duration of this Contract (to be transparently

and separately shown for every cost item included in the Accepted Contract Amount and the TCP);

4.16.1.1.5 All escalation for the entire duration of the Contract (to be transparently and separately shown for every cost item included in the Accepted Contract Amount and the TCP).

4.16.1.1.6 The Contractor being an expert in the Planning, Design, Supply, Construction, Installation, Testing, Commissioning and Maintenance of the Project / Works and has, as part of the Accepted Contract Amount and TCP, made provision for all costs required to achieve successful completion of the Works, the Project and this Contract.

4.16.1.1.7 The Contractor has complied with the Employer's Requirements for the Contract not excluding or qualifying the Employer's Requirements and/or Conditions of Invitation and/or Instruction to the Contractor as stated throughout the RFP.

4.16.1.1.8 The Contractor has made provision for any additional Works and related costs, that the Contractor (being an expert) shall be required to achieve successful completion of the whole of the Works, the Project and the Contract, as part of the Accepted Contract Amount and TCP.

4.16.2 The Accepted Contract Amount shall be deemed to cover all the Contractor's obligations under the Contract and all things necessary for the proper execution of the Works in accordance with the Contract, the Employer's Requirements and the RFP.

4.17 UNFORESEEABLE PHYSICAL CONDITIONS

4.17.1 In this Sub-Clause, "physical conditions" means natural physical conditions and physical obstructions (natural or man-made) and pollutants, which the Contractor encounters at the Site(s) during execution of the Works, including sub-surface and hydrological conditions but excluding climatic conditions at the Site(s) and the effects of those climatic conditions.

4.17.2 If the Contractor encounters physical conditions which the Contractor considers to have been Unforeseeable and that will have an adverse effect on the progress and/or increase the Cost of the execution of the Works, the following procedure shall apply.

4.17.3 Contractor's Notice:

4.17.3.1 After discovery of such physical conditions, the Contractor shall give a Notice, in writing, to the Engineer, which shall:

4.17.3.1.1 be given as soon as practicable and in good time to give the Engineer opportunity to inspect and investigate the physical conditions Promptly and before they are disturbed;

4.17.3.1.2 describe the physical conditions, so that they can be inspected and/or investigated Promptly by the Engineer;

4.17.3.1.3 set out the reasons why the Contractor considers the physical conditions to be Unforeseeable; and

4.17.3.1.4 describe the manner in which the physical conditions will have an adverse effect on the progress and/or increase the Cost of the execution of the Works.

4.17.4 Engineer's Inspection and Investigation

- 4.17.4.1 The Engineer shall inspect and investigate the physical conditions within 21 (twenty-one) calendar days, or longer period determined by the Engineer, after receiving the Contractor's Notice.
- 4.17.4.2 The Contractor shall continue execution of the Works, using such proper and reasonable measures as are appropriate for the physical conditions and to enable the Engineer to inspect and investigate them.

4.17.5 Engineer's instructions

The Contractor shall comply with any instructions which the Engineer may give for dealing with the physical conditions.

4.17.6 Delay

If and to the extent that the Contractor suffers delay(s) due to these physical conditions the Contractor shall, having complied the provisions of this Contract (Sub-Clauses 4.17.3 to 4.17.5 above), be entitled subject to the Provisions of this Contract (Sub-Clause 20.2 [Claims EOT]) to EOT only.

4.17.7 AGREEMENT OR DETERMINATION OF DELAY

- 4.17.7.1 The agreement or determination, under this Contract (Sub-Clause 20.2.5 [Agreement or determination of the Claim]), of any Claim under this Contract (Sub-Clause 4.17.6 [Delay]) shall include consideration of whether and (if so) to what extent the physical conditions were Unforeseeable.

4.17.7.2 The Engineer may also review whether other physical conditions in similar parts of the Works (if any) were more favourable than could reasonably have been foreseen.

4.17.7.3 The Engineer may take account of any evidence of the physical conditions foreseen by the Contractor, which the Contractor may include in the supporting particulars for the EOT Claim under this Contract (Sub-Clause 20.2) but the Engineer shall not be bound by any such evidence.

4.18 RIGHTS OF WAY AND FACILITIES

4.18.1 The Contractor shall bear all costs, and charges for special and/or temporary rights-of-way which may be required for the purposes of the Works, including those for access to the Site(s).

4.18.2 The Contractor shall also obtain, at the Contractor's risk and cost, any additional facilities outside the Site(s) which may be required for the purposes of the Works.

4.19 AVOIDANCE OF INTERFERENCE

4.19.1 The Contractor shall not interfere unnecessarily or improperly with:

4.19.1.1 the convenience of the public; or

4.19.1.2 the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.

- 4.19.2 The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses, Penalties and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

4.20 ACCESS ROUTE

- 4.20.1 The Contractor shall be deemed to have been satisfied, at the Base Date, as to the suitability and availability of the access routes to the Site(s). The Contractor shall take all necessary measures to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These measures shall include the proper use of appropriate vehicles (conforming to legal load and width limits (if any) and any other restrictions) and routes.

- 4.20.2 Except as otherwise stated in these Conditions:

4.20.2.1 the Contractor shall (as between the Parties) be responsible for repair of any damage caused to, and any maintenance which may be required for the Contractor's use of, access routes;

4.20.2.2 the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permissions or permits which may be required from the relevant authorities, for the Contractor's use of routes, signs and directions;

4.20.2.3 the Employer and the Engineer shall not be responsible for any third-party claims which may arise from the Contractor's use or otherwise of any access route;

4.20.2.4 the Employer and the Engineer do not guarantee the suitability or availability of particular access routes; and

4.20.2.5 all Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

4.21 TRANSPORT OF GOODS

4.21.1. The Contractor shall:

- 4.21.1.1 give a Notice, in writing, to the Engineer not less than 21 (twenty-one) calendar days before the date on which any Plant and Materials, or a major item of other Goods (as specified in the Employer's Requirements), will be delivered to the Site(s);
- 4.21.1.2 be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods, Plant and Materials and other things required for the Works;
- 4.21.1.3 be responsible for customs clearance, permits, fees and charges related to the import, transport and handling of all Plant and Materials and other Goods, including all obligations necessary for their delivery to the Site(s); and
- 4.21.1.4 indemnify and hold the Employer harmless against and from all damages, Penalties, losses and expenses (including legal fees and expenses) resulting from the import, transport and handling of all Plant and Materials and other Goods and shall negotiate and pay all third party claims arising from their import, transport and handling.

4.22 CONTRACTOR'S EQUIPMENT

- 4.22.1 The Contractor shall be responsible for all the Contractor's Equipment. When brought on to the Site(s), the Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works. The Contractor shall not remove from the Site(s) any major items of the Contractor's Equipment without the

Engineer's written approval. However, approval shall not be required for vehicles transporting the Contractor's Personnel on and off Site(s).

- 4.22.2 In addition to any Notice given under this Contract (Sub-Clause 4.21 [Transport of Goods]), the Contractor shall give a Notice, in writing, to the Engineer of the date on which any major item of the Contractor's Equipment has been delivered to the Site(s). This Notice shall be given within 7 (seven) calendar days of the delivery date, shall identify whether the item of the Contractor's Equipment is owned by the Contractor or a Subcontractor or another person and, if rented or leased, shall identify the rental or leasing entity.

4.23 PROTECTION OF THE ENVIRONMENT

- 4.23.1 The Contractor shall take all necessary measures to:

4.23.1.1 protect the environment (both on and off the Site(s));

4.23.1.2 comply with the environmental impact statement for the Works (if any);
and

4.23.1.3 limit damage and nuisance to people and property resulting from pollution, noise and other results of the Contractor's operations and/or activities.

- 4.23.2 The Contractor shall ensure that emissions, surface discharges, effluent and any other pollutants from the Contractor's activities shall exceed neither the values indicated in the Employer's Requirements nor those prescribed by applicable Laws.

4.24 TEMPORARY UTILITIES

- 4.24.1 The Contractor shall be responsible for the provision of all temporary utilities, including electricity, gas, telecommunications, water and any other services the Contractor may require for the execution of the Works.

4.25 PROGRESS REPORTS

- 4.25.1 The Contractor shall collect and distribute performance information, including status reports, progress measurements and forecasts. The performance reporting process shall involve the periodic collection and analysis of baseline versus actual data to understand and communicate the Project progress and performance as well to forecast the Project results.
- 4.25.2 The Contractor shall, without contest, provide any and all reports and unredacted detailed supporting information as may be requested from the Employer throughout the duration of the Contract. All reporting shall therefore continue until the Performance Certificate has been issued by the Employer or until otherwise instructed by the Employer.
- 4.25.3 Unless otherwise stated throughout the RFP, all Final and/or Close-out Reports shall be issued 75 (seventy-five) calendar days prior to the Completion Date for the whole of the Works.
- 4.25.4 The minimum reporting requirements are:

4.25.4.1 Project Initiation Report:

- 4.25.4.1.1 The Contractor shall prepare and submit a Project Initiation Report no later than 15 (fifteen) working days after the Commencement Date;
- 4.25.4.1.2 This report shall include the main activities performed since the Commencement Date, the main observations regarding the current situation, identified most critical problems and proposals for the main measures that should be undertaken in joint actions between the Contractor and the Employer;
- 4.25.4.1.3 In this regard, if the Contractor fails to submit a suitable Project Initiation Report in compliance with the Employer's Requirements, this Contract and the RFP:
- 4.25.4.1.3.1 The Penalty shall be payable for each elapsed calendar day calculated from the date on which the report is due to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor.
- 4.25.4.1.3.2 The Penalty payable shall be calculated at 0.050% of the TCP multiplied by the number of elapsed calendar days but shall not exceed 5.000% of the TCP. The TCP that will be used for the calculation of the Penalty, for each incident, will be the as reflected in the latest

Payment Certificate issued by the Employer,
at the time that the Penalty is to be calculated
for each incident

4.25.4.2 Weekly Dashboard Reports:

4.25.4.2.1 The Contractor shall prepare high-level Weekly Dashboard Reports and submit same to the Employer;

4.25.4.2.2 The 1st Dashboard Report shall be issued on the 1st Thursday of the calendar month after the calendar month in which the Commencement Date falls thereafter every Thursday. In this regard, if the Contractor fails to submit suitable Weekly Dashboard Reports in compliance with the Employer's Requirements, this Contract and the RFP:

4.25.4.2.2.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date on which a report is due to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor;

4.25.4.2.2.2 The Penalty payable shall be calculated at 0.050% of the TCP multiplied by the number of elapsed calendar days, per incident, but

shall not exceed 5.000% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.25.4.2.3 The Weekly Dashboard Report shall, at a minimum, contain the following information:

- 4.25.4.2.3.1 Level 4 Project Programme review showing two separate bars for each task i.e. the primary bar reflects the current forecast dates and the secondary bar the latest Accepted/Approved Programme;
- 4.25.4.2.3.2 4-Week Look-ahead Programme showing two separate bars for each task i.e. the primary bar reflects the current forecast dates and the secondary bar the latest Accepted/Approved Programme;
- 4.25.4.2.3.3 A Manpower Histogram reflecting actual, forecasted and planned activities;
- 4.25.4.2.3.4 S-curves - reflecting the actual percentage complete versus the planned percentage for the overall Contract;
- 4.25.4.2.3.5 Financial status;
- 4.25.4.2.3.6 Charts and descriptions of progress, including each stage of Design, documents, procurement, manufacture,

delivery to Site(s), Construction, erection, Testing and Commissioning;

- 4.25.4.2.3.7 Records of personnel and Equipment utilised for the past week;
- 4.25.4.2.3.8 Quality assurance documents, Test results and certificates of Materials;
- 4.25.4.2.3.9 Notices (The Employer's Claims, Notices (Contractor's Claims) and Variations;
- 4.25.4.2.3.10 Safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- 4.25.4.2.3.11 Risks and Issues with details of any events or circumstances which may jeopardise the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.

4.25.4.3 Monthly Progress Reports:

4.25.4.3.1 The Contractor shall prepare detailed Monthly Progress Reports and submit same to the Employer on the 2nd Thursday of each calendar month;

4.25.4.3.2 The 1st Monthly Progress Report shall be issued on the 2nd Thursday of the calendar month after the calendar month in which the Commencement Date falls. In this regard, if the Contractor fails to submit suitable Monthly Progress

Reports in compliance with the Employer's Requirements, this Contract and the RFP:

4.25.4.3.2.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date on which a report is due to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor; and

4.25.4.3.2.2 The Penalty payable shall be calculated at 0.050% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 5.000% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.25.4.3.3 The Monthly Progress Report shall, at a minimum, contain the following information:

4.25.4.3.3.1 Executive Summary:

- Introduction;
- Purpose of this Document;
- Issue Status of this Document ; and
- Validation of this Document.

4.25.4.3.3.2 Project Data:

- Project Description;
- Project Location; and
- Project Team.

4.25.4.3.3.3 Executive Progress:

- Overall Project Health Chart;
- Table of Approved Project Change Requests and Variation Orders;
- Incident Reports (Environmental / Heritage / Occupational Health and Safety);
- Table of Claims and/or Notices Issued by the Contractor and the Employer;
- Approved Programme Summary and Chart Analysis (Major Milestones, Deliverables and Key Dates);
- Earned Value Analysis;
- Quality Assurance and Management Summary;
- Community Liaison and Participation Summary;

- B-BBEE, Localisation, and Training Target Compliance;
- Critical Risks, Issues and Lessons Learnt Review; and
- Key Decisions and/or Approvals Required from the Employer.

4.25.4.3.3.4 Comprehensive Progress:

- Detailed Project Health Status;
- Detailed Approved Programme Progress Review (Major Milestones, Deliverables and Key Dates, Tasks, Activities, Interdependencies and Critical Path Analysis);
- Detailed Financial Cost Report (Bid Price versus current approved Contract Price, Payment Milestones Claimed vs Payment Milestones Approved, Invoices Issued versus Payments Received etc.);
- Detailed Quality Assurance and Management Report;
- Detailed Community Liaison and Participation Feedback;
- Detailed B-BBEE, Localisation, and Training Target Compliance Report;
- Detailed Risks, Issues and Lessons Learnt Review; and
- Detailed Schedule of Claims and Notices issued by Contractor and the Employer.

4.25.4.3.3.5 Annexures:

- Annexure A – Updated Approved Programme;
- Annexure B – Copies of Project Change Requests and Variation Orders submitted in the current reporting period;
- Annexure C – Copy of Environmental Control Officer (“ECO”) Agent Monthly Audit Report;
- Annexure D – Copy of OHS Agent Monthly Audit Report;
- Annexure E – Copies of Claims and/or Notices issued by the Contractor and the Employer in the current reporting period;
- Annexure F – Copy of Community Liaison Officer (“CLO”) Monthly Report;
- Annexure G – Copy of Community Participation Consultant (“CPC”) Monthly Report; and
- Annexure H – Updated Versions of Risks, Issues and Lessons Learnt Registers.

4.25.4.3.4 Notwithstanding the above, each Monthly Progress Report shall further include:

4.25.4.3.4.1 Charts and detailed descriptions of progress, including each stage of Design, the Contractor's documents, procurement, manufacture, delivery to Site(s), Construction, erection, Testing and Commissioning;

4.25.4.3.4.2 Photographs showing the status of manufacture and of progress on the Site(s);

4.25.4.3.4.3 For the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of; commencement of manufacture, the Contractor Inspections and factory acceptance tests, shipment and arrival on Site(s);

4.25.4.3.4.4 Detailed records of the Contractor's Personnel, Plant, Plant and Materials deployed on the Project including detailed Site(s) diaries; and

4.25.4.3.4.5 Copies of all quality assurance documents, Test results and certificates of Materials.

4.25.4.4 Annual Progress Reports:

4.25.4.4.1 The Contractor shall prepare detailed Annual Progress Reports and submit same to the Employer. The 1st Annual Progress Report shall be issued on the 365th (three hundred and sixty fifth) calendar day from the Commencement Date thereafter every 365 (three hundred and sixty-five) calendar days. In this regard, if the Contractor fails to submit suitable Annual Progress Reports in compliance with the Employer's Requirements, this Contract and the RFP:

4.25.4.4.1.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date on which a report is due to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is

completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor;

4.25.4.4.1.2 The Penalty payable shall be calculated at 0.050% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 5.000% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident; and

4.25.4.4.2 The Annual Progress Report shall, at a minimum, contain an abstract of work performed during the previous year.

4.25.4.5 B-BBEE and New Preferential Procurement Compliance Reports:

4.25.4.5.1 The Contractor shall prepare and submit detailed B-BBEE Compliance Reports to the Employer further attaching full copies of all unredacted subcontracts, employment contracts and purchase contracts (including unredacted invoices and corresponding proofs of payment etc.) proving actual B-BBEE and Preferential Procurement achievements measured against the B-BBEE and Preferential Procurement Targets and Performance Scorecard. These reports shall further provide

substantiating reasons as to why such achievement failed to meet the B-BBEE and Preferential Procurement Targets;

4.25.4.5.2 B-BBEE and Preferential Procurement Compliance Reports shall be audited by an Independent Auditor registered with the South African Institute of Chartered Accountants (“SAICA”). The Independent Auditor shall issue an Independent B-BBEE and Preferential Procurement Audit Report which shall include a clear statement as to whether “the Contractor failed to meet the B-BBEE and Preferential Procurement Targets” or “the Contractor has met the B-BBEE and Preferential Procurement Targets”. Cost of Independent Auditor’s services shall be borne by the Contractor;

4.25.4.5.3 The 1st B-BBEE Compliance Reports shall be issued 150 (one hundred and fifty) calendar days after the Commencement Date thereafter every 150 (one hundred and fifty) calendar days. In this regard, if the Contractor fails to submit suitable B-BBEE and Preferential Procurement Compliance Reports in compliance with the Employer’s Requirements, this Contract and the RFP:

4.25.4.5.3.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date on which a report is due to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor;

4.25.4.5.3.2 The Penalty payable shall be calculated at 0.075% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 7.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident;

4.25.4.5.4 B-BBEE and Preferential Procurement Targets and Performance Measurement shall be finalised and agreed between Employer and the Contractor during Contract negotiations thereafter or any other time as instructed by the Employer and/or Engineer thereby included in this Contract as the B-BBEE and Preferential Procurement Targets and Performance Measurement Scorecard.

4.25.4.6 NIP Programme Compliance Reports:

4.25.4.6.1 The Contractor shall prepare detailed National Industrial Participation (“NIP”) Programme Compliance Reports and submit same to the Employer and/or Engineer.

4.25.4.6.2 The 1st National Industrial Participation (“NIP”) Programme Compliance Report shall be issued 150 calendar days after the Commencement Date thereafter every 150 calendar days from the date on which the 1st report is due. In this regard, if the Contractor fails to submit suitable National Industrial Participation (“NIP”) Programme Compliance Reports in compliance with the RFP and this Contract:

4.25.4.6.2.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date on which

a report is due to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor; and

- 4.25.4.6.2.2 The Penalty payable shall be calculated at 0.075% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 7.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer, at the time that the Penalty is to be calculated for each incident.

4.25.4.7 Localisation Compliance Reports:

- 4.25.4.7.1 The Contractor shall submit detailed Localisation Compliance Reports to the Employer further attaching full copies of all unredacted subcontracts, employment contracts and purchase contracts (including unredacted invoices and corresponding proofs of payment etc.) proving actual Localisation achievements measured against the Localisation Targets and Performance Scorecard. These reports shall further provide substantiating reasons as to why such achievement failed to meet the Localisation Targets.
- 4.25.4.7.2 The Localisation Compliance Reports shall be audited by an Independent Auditor who is registered with the South African Institute of Chartered Accountants ("SAICA"). The Independent

Auditor shall issue an Independent Localisation Audit Report which shall include a clear statement as to whether “the Contractor failed to meet the Localisation Targets” or “the Contractor has met the Localisation Targets”. The cost of the Independent Auditor’s services shall be borne by the Contractor.

4.25.4.7.3 The 1st Localisation Compliance Reports shall be issued 150 (one hundred and fifty) calendar days after the Commencement Date thereafter every 150 (one hundred and fifty) calendar days. In this regard, if the Contractor fails to submit suitable Local Production and Content Compliance Reports in compliance with the Employer’s Requirements, this Contract and the RFP:

4.25.4.7.3.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date on which a report is due to the date on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor.

4.25.4.7.3.2 The Penalty payable shall be calculated at 0.075% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 7.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued

by the Employer, at the time that the Penalty is to be calculated for each Incident.

4.25.4.7.4 Localisation Targets and Performance Measurement shall be finalised and agreed between Employer and the Contractor during Contract negotiations thereafter or any other time as instructed by the Employer and/or Engineer thereby included in this Contract by reference as the Localisation Targets and Performance Measurement Scorecard.

4.25.4.8 Training Compliance Reports:

4.25.4.8.1 The Contractor shall submit detailed Training Compliance Reports to the Employer further attaching full copies of all unredacted subcontracts, employment contracts and purchase contracts (including unredacted invoices and corresponding proofs of payment etc.) proving actual Training achievements measured against the Training Targets and Performance Scorecard. These reports shall further provide substantiating reasons as to why such achievement failed to meet the Training Targets.

4.25.4.8.2 The Training Compliance Reports shall be audited by an Independent Auditor who is registered with the South African Institute of Chartered Accountants ("SAICA"). The Independent Auditor shall issue an Independent Training Audit Report which shall include a clear statement as to whether "the Contractor failed to meet the Training Targets" or "the Contractor has met the Training Targets". The cost of the Independent Auditor's services shall be borne by the Contractor.

4.25.4.8.3 The 1st Training Compliance Reports shall be issued 150 (one hundred and fifty) calendar days after the Commencement Date thereafter every 150 (one hundred and fifty) calendar days. In

this regard, if the Contractor fails to submit suitable Training Compliance Reports in compliance with the RFP and Contract:

4.25.4.8.3.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date on which a report is due to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

4.25.4.8.3.2 The Penalty payable shall be calculated at 0.075% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 7.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.25.4.8.4 Training Targets and Performance Measurement shall be finalised and agreed between Employer and the Contractor during Contract negotiations thereafter or any other time as instructed by the Employer and/or Engineer thereby included in this Contract, by reference, as the Training Targets and Performance Measurement Scorecard.

4.25.4.9 Local Production and Content Compliance Reports:

4.25.4.9.1 The Contractor shall prepare detailed Local Production and Content Compliance Reports and submit same to the Employer and or Engineer. The 1st (first) Local Production and Content Compliance Report shall be issued 150 (one hundred and fifty) calendar days after the Commencement Date thereafter every 150 (one hundred and fifty) calendar days from the date on which the 1st report is due. In this regard, if the Contractor fails to submit suitable Local Production and Content Compliance Reports in compliance with the Employer's requirements, this contract and the RFP:

4.25.4.9.1.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date on which a report is due to the date on which the Employer and or Engineer confirms, in writing, that the Employer and or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer and or Engineer confirms, in writing, that the Employer and or Engineer is completely satisfied that the incident is completely resolved by the Contractor;

4.25.4.9.1.2 The Penalty payable shall be calculated at 0.075% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 7.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and or Engineer, at the time that the Penalty is to be calculated for each incident.

4.25.4.10 Spares, Maintenance and Life Cycle Cost (“LCC”) Replacement Reports:

4.25.4.10.1 The Contractor shall submit detailed Spares, Maintenance and Life Cycle Cost (“LCC”) Replacement Reports to the Employer. The Contractor shall further attach full copies of all unredacted subcontracts, employment contracts and purchase contracts (including unredacted invoices and corresponding proofs of payment etc.) proving actual Spares, Maintenance and Life Cycle Replacements measured against the Employer approved Spares, Maintenance and Life Cycle Cost Replacement Plan and Financial Model. These reports shall further provide substantiating reasons as to why such achievement failed to meet the Spares, Maintenance and Life Cycle Cost Replacement Plan and Financial Model Targets;

4.25.4.10.2 The 1st Spares, Maintenance and Life Cycle Cost (“LCC”) Replacement Report shall be issued 150 (one hundred and fifty) calendar days after the first Section that has been tested, commissioned and handed over to the Employer thereafter every 150 (one hundred and fifty) calendar days until completion of the full Maintenance, Warranty and Defects Liability responsibility period.

4.25.4.10.3 The final Spares, Maintenance and Life Cycle Cost (“LCC”) Replacement Report shall be issued 75 (seventy-five) calendar days prior to completion of the full Maintenance, Warranty and Defects Liability responsibility period. In this regard, if the Contractor fails to submit suitable Spares, Maintenance and Life Cycle Cost (“LCC”) Replacement Reports in compliance with the Employer’s Requirements, this Contract and the RFP:

4.25.4.10.3.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date on which a report is due to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day the report is due to the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

4.25.4.10.3.2 The Penalty payable shall be calculated at 0.075% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 7.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.26.4.11 COMPLIANCE TARGETS

4.26.4.11.1 B-BBEE and New Preferential Procurement Targets:

4.26.4.11.1.1 The minimum Penalty(s) for the Contractor failing to transparently meet BBBEE and New Preferential Procurement Targets in compliance with the RFP and Contract, is as follows:

4.26.4.11.1.1.1 If the Contractor fails to ensure and transparently prove that 5% (five percent) of the total B-BBEE and New Preferential Procurement Target is met and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 300 (three hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred) of the total shortfall value. The total shortfall value shall be calculated as 5% (five percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 300 (three hundred) calendar days from the Commencement Date;

4.26.4.11.1.1.2 If the Contractor fails to ensure and transparently prove that 10% (ten percent) of the total B-BBEE and New Preferential Procurement Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 600 (six hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 10% (ten percent) of the total target minus total actual money paid to the relevant

subcontractors, employees and suppliers as at 600 (six hundred) calendar days from the Commencement Date;

4.26.4.11.1.1.3 If the Contractor fails to ensure and transparently prove that 20% (twenty percent) of the total B-BBEE and New Preferential Procurement Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 900 (nine hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 20% (twenty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 900 (nine hundred) calendar days from the Commencement Date;

4.26.4.11.1.1.4 If the Contractor fails to ensure and transparently prove that 40% (forty percent) of the total B-BBEE and New Preferential Procurement Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 1200 (one thousand two hundred) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 40% (forty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 1200 (one thousand two hundred) calendar days from the Commencement Date;

4.26.4.11.1.1.5 If the Contractor fails to ensure and transparently prove that 60% (sixty percent) of the total B-BBEE and New Preferential Procurement Target is met, cumulatively, and paid to

relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 1500 (one thousand five hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% of the total shortfall value. The total shortfall value shall be calculated as 60% (sixty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 1500 (one thousand five hundred) calendar days from the Commencement Date; and

4.26.4.11.1.1.6 If the Contractor fails to ensure and transparently prove that 80% (eighty percent) of the total B-BBEE and New Preferential Procurement Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 1800 (one thousand eight hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 80% (eighty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 1800 (one thousand eight hundred) calendar days from the Commencement Date.

4.26.4.11.1.1.7 If the Contractor fails to ensure and transparently prove that 90% (ninety percent) of the total B-BBEE and New Preferential Procurement Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 2100 (two thousand one hundred) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to

100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 90% (ninety percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 2100 (two thousand one hundred) calendar days from the Commencement Date.

4.26.4.11.1.1.8 If the Contractor fails to ensure and transparently prove that 95% (ninety five percent) of the total B-BBEE and New Preferential Procurement Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 2400 (two thousand four hundred) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 95% (ninety five percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 2400 (two thousand four hundred) calendar days from the Commencement Date.

4.26.4.11.1.1.9 If the Contractor fails to ensure and transparently prove that 100% (one hundred percent) of the total B-BBEE and New Preferential Procurement Target is met, cumulatively, and paid to relevant Joint Venture partners, Consortium members, subcontractors, employees and suppliers as at 2550 (two thousand five hundred and fifty) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 100% (one hundred percent) of the total target minus total actual money paid to the relevant subcontractors, employees

and suppliers as at 2550 (two thousand five hundred and fifty) calendar days from the Commencement Date.

4.26.4.11.2 National Industrial Participation (“NIP”) Programme Targets:

4.26.4.11.2.1 The minimum Penalty(s) for the Contractor failing to transparently meet National Industrial Participation (“NIP”) Programme Targets in compliance with the RFP and Contract, is as follows:

4.26.4.11.2.1.1 If the Contractor fails to ensure and transparently prove that 5% of the total National Industrial Participation (“NIP”) Programme Target is met and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 300 (three hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 5% (five percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 300 (three hundred) calendar days from the Commencement Date.

4.26.4.11.2.1.2 If the Contractor fails to ensure and transparently prove that 10% (ten percent) of the total National Industrial Participation (“NIP”) Programme Target is met, cumulatively, and paid to relevant Joint Venture partners, Consortium members, subcontractors, employees and suppliers as at 600 (six hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 10% (ten percent) of the

total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 600 (six hundred) calendar days from the Commencement Date.

4.26.4.11.2.1.3 If the Contractor fails to ensure and transparently prove that 20% (twenty percent) of the total National Industrial Participation (“NIP”) Programme Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 900 (nine hundred) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 20% (twenty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 900 (nine hundred) calendar days from the Commencement Date.

4.26.4.11.2.1.4 If the Contractor fails to ensure and transparently prove that 40% (forty percent) of the total National Industrial Participation (“NIP”) Programme Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 1200 (one thousand two hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 40% (forty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 1200 (one thousand two hundred) calendar days from the Commencement Date.

- 4.26.4.11.2.1.5 If the Contractor fails to ensure and transparently prove that 60% (sixty percent) of the total National Industrial Participation (“NIP”) Programme Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 1500 (one thousand five hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 60% (sixty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 1500 (one thousand five hundred) calendar days from the Commencement Date.
- 4.26.4.11.2.1.6 If the Contractor fails to ensure and transparently prove that 80% (eighty percent) of the total National Industrial Participation (“NIP”) Programme Target is met, cumulatively, and paid to relevant Joint Venture partners, consortium members, subcontractors, employees and suppliers as at 1800 (one thousand eight hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 80% (eighty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 1800 (one thousand eight hundred) calendar days from the Commencement Date.
- 4.26.4.11.2.1.7 If the Contractor fails to ensure and transparently prove that 90% (ninety percent) of the total National Industrial Participation (“NIP”) Programme Target is met, cumulatively, and paid to relevant Joint Venture partners, Consortium

members, subcontractors, employees and suppliers as at 2100 (two thousand one hundred) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 90% (ninety percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 2100 (two thousand one hundred) calendar days from the Commencement Date.

4.26.4.11.2.1.8 If the Contractor fails to ensure and transparently prove that 95% (ninety five percent) of the total National Industrial Participation (“NIP”) Programme Target is met, cumulatively, and paid to relevant Joint Venture partners, Consortium members, subcontractors, employees and suppliers as at 2400 (two thousand four hundred) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 95% (ninety five percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 2400 (two thousand four hundred) calendar days from the Commencement Date.

4.26.4.11.2.1.9 If the Contractor fails to ensure and transparently prove that 100% (one hundred percent) of the total National Industrial Participation (“NIP”) Programme Target is met, cumulatively, and paid to relevant Joint Venture partners, Consortium members, subcontractors, employees and suppliers as at 2550 (two thousand five hundred and fifty) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a

Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 100% (one hundred percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 2550 (two thousand five hundred and fifty) calendar days from the Commencement Date.

4.26.4.11.3 Local Production and Content Targets:

4.26.4.11.3.1 The minimum Penalty(s) for the Contractor failing to transparently meet Local Production and Content Targets in compliance with the RFP and Contract, is as follows:

4.26.4.11.3.1.1 If the Contractor fails to ensure and transparently prove that 5% (five percent) of the total Local Production and Content Target is met and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 300 (three hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 5% (five percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 300 (three hundred) calendar days from the Commencement Date;

4.26.4.11.3.1.2 If the Contractor fails to ensure and transparently prove that 10% (ten percent) of the total Local Production and Content Target is met, cumulatively, and paid to relevant Joint Venture partners, Consortium members, subcontractors, employees and suppliers as at 600 (six hundred) calendar days from the Commencement Date, the Employer shall,

unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 10% (ten percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 600 (six hundred) calendar days from the Commencement Date.

4.26.4.11.3.1.3 If the Contractor fails to ensure and transparently prove that 20% (twenty percent) of the total Local Production and Content Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 900 (nine hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 20% (twenty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 900 (nine hundred) calendar days from the Commencement Date.

4.26.4.11.3.1.4 If the Contractor fails to ensure and transparently prove that 40% (forty percent) of the total Local Production and Content Target is met, cumulatively, and paid to relevant Joint Venture partners, Consortium members, subcontractors, employees and suppliers as at 1200 (one thousand two hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 40% (forty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 1200 (one

thousand two hundred) calendar days from the Commencement Date.

4.26.4.11.3.1.5 If the Contractor fails to ensure and transparently prove that 60% (sixty percent) of the total Local Production and Content Target is met, cumulatively, and paid to relevant Joint Venture partners, consortium members, subcontractors, employees and suppliers as at 1500 (one thousand five hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 60% (sixty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 1500 (one thousand five hundred) calendar days from the Commencement Date.

4.26.4.11.3.1.6 If the Contractor fails to ensure and transparently prove that 80% (one hundred percent) of the total Local Production and Content Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 1800 (one thousand eight hundred) calendar days from the Commencement Date, the Employer and/or Engineer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 80% (eighty percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 1800 (one thousand eight hundred) calendar days from the Commencement Date.

- 4.26.4.11.3.1.7 If the Contractor fails to ensure and transparently prove that 90% (ninety percent) of the total Local Production and Content Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 2100 (two thousand one hundred) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 90% (ninety percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 2100 (two thousand one hundred) calendar days from the Commencement Date.
- 4.26.4.11.3.1.8 If the Contractor fails to ensure and transparently prove that 95% (ninety five percent) of the total Local Production and Content Target is met, cumulatively, and paid to relevant joint venture partners, consortium members, subcontractors, employees and suppliers as at 2400 (two thousand four hundred) calendar days from the Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred) of the total shortfall value. The total shortfall value shall be calculated as 95% (ninety-five) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 2400 (two thousand four hundred) calendar days from the Commencement Date.
- 4.26.4.11.3.1.9 If the Contractor fails to ensure and transparently prove that 100% (one hundred percent) of the total Local Production and Content Target is met, cumulatively, and paid to relevant Joint Venture partners, Consortium members, subcontractors, employees and suppliers as at 2550 (two thousand five hundred) calendar days from the

Commencement Date, the Employer shall, unilaterally and without notice to the Contractor, apply a Penalty equal to 100% (one hundred percent) of the total shortfall value. The total shortfall value shall be calculated as 100% (one hundred percent) of the total target minus total actual money paid to the relevant subcontractors, employees and suppliers as at 2550 (two thousand five hundred and fifty) calendar days from the Commencement Date.

4.27 PROJECT MEETINGS

4.27.1 The Contractor shall attend Project meetings as instructed by the Employer and/or Engineer or convened by the Employer and/or Engineer.

4.27.2 Meeting venues, agendas and attendees shall first be approved by the Employer and/or Engineer prior to issuance.

4.27.3 Secretariat requirements for each meeting shall be as instructed by the Employer and/or Engineer for each type of meeting and minutes of each meeting shall be approved by the Employer and/or Engineer prior to issuance to the list of attendees.

4.27.4 Monthly Project Management:

4.27.4.1 Monthly Project Management Meetings shall be held between the Contractor, the Employer and/or Engineer and other Project Stakeholders. The primary purpose of these meetings shall be the Contractor's provision of detailed Project progress and Contract performance updates to the Employer and/or Engineer as well as to raise key matters which require direction and/or approval from the Employer's and/or Engineer' Project leadership and management

team(s). Such meetings may therefore include discussions on all aspects included under Monthly Progress Reports and all other contractual matters.

4.27.5 Monthly Technical Management and Coordination:

4.27.5.1 Monthly Technical Management and Coordination Meetings shall be held between the Contractor, the Employer and/or Engineer and other Project Stakeholders. The primary purpose of these meetings shall be to coordinate and address technical matters which require the Employer and/or Engineer direction and or approval at the Monthly Progress Meetings.

4.27.6 Ad-hoc/Other:

4.27.6.1 Ad-hoc and/or Other Meetings shall be held between the Contractor, the Employer and/or Engineer and other Project Stakeholders on an as and when required basis.

4.27.6.2 Such meetings may address specific issues or problems relating to the delivery of the Works. Meetings of a specialist nature shall be convened at times and locations upon approval by the Employer and/or Engineer. Records of these meetings shall be submitted to the Employer and/or Engineer, by the Employer and/or Engineer approved chairperson of a meeting, within 10 (ten) working days of the meeting or as otherwise instructed by the Employer and/or Engineer.

4.28 SECURITY OF THE SITE(S)

4.28.1 The Contractor shall be deemed to have obtained all necessary information as to the risks, contingencies and other circumstances, which may influence or affect the works and the Contractor's pricing. To the same extent, the contractor shall be deemed to have inspected and examined the Site(s) and the surroundings, and other available information, and to have been satisfied before bidding and signing this contract, as to all relevant matters, including without limitation to the following:

4.28.1.1 The form and nature of the Site(s), including sub-surface conditions.

4.28.1.2 The hydrological, climatic, heritage and environmental conditions and requirements.

4.28.1.3 The extent and nature of the Works including, but not limited to, all necessary requirements and solutions that the Contractor shall have to meet, and respectively provide, for the Contractor's achievement of successful execution and completion of the Works, the Project and the Contract (including remedying of any defects).

4.28.1.4 The Laws, procedures and labour practices of South Africa.

4.28.1.5 The Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

4.28.1.6 The Contractor's requirements for capturing the required geographic map data ("Geodata"), including all resources, Material and Equipment.

- 4.28.1.7 The extent and nature of all Works including, but not limited to, all necessary requirements and solutions that the Contractor shall have to meet to protect the Site(s) and the Works by preventing theft, vandalism, illegal encroachment and/or illegal occupation, and respectively provide, for the Contractor's achievement of successful execution and completion of the Works, the Project and the Contract (including remedying of any defects).
- 4.28.2 Once the Employer has handed over the Site(s) to the Contractor, the Contractor shall at its own cost and regardless of the extent of this requirement, be responsible for removing and keeping all unauthorised persons, illegal encroachers and illegal occupants of the Site(s), if any, for the duration of the Contract. The Contractor shall use any legal means necessary to meet this requirement by further making all the necessary allowances for the resolution of all related issues in all the Contractor's Programmes.
- 4.28.3 The Contractor shall at its own cost and regardless of the extent of this requirement, be responsible for the protection of the Site(s) and the whole of the Works for the duration of the Contract. The Contractor shall use any legal means necessary to meet this requirement by further making all necessary allowances for resolution of all related issues in all the Contractor's Programmes.
- 4.28.4 Authorised persons on the Site(s) shall be limited to the Contractor's personnel, the Employer's personnel and/or Engineer's personnel and to any other personnel notified to the Contractor, by the Employer, as well as the authorised personnel of the Contractor's sub-contractors on the Site(s).

4.29 THEFT AND VANDALISM

- 4.29.1 The parties agree that as the Site(s) of the Employer shall be under the control and possession of the Contractor, the Contractor shall at its own cost and

regardless of the extent of this requirement, be responsible for preventing all theft and vandalism of the whole the Works for the duration of the Contract, including the full Maintenance, Warranty and Defects Liability Period.

- 4.29.2 The Contractor shall use any legal means necessary to meet this requirement and shall, at a minimum, implement all requisite measures to detect, defer, delay and prevent any attempted theft and vandalism on the Site(s).
- 4.29.3 The Contractor shall take full responsibility and accept all liability in respect of any vandalised Employer and Engineer ~~or~~ and Project assets that form part of the Contract and Project and/or Works.
- 4.29.4 The Contractor shall further ensure that any stolen or vandalised assets are reinstated to standards approved by the Employer within timeframes stipulated by the Employer and at the Contractor's cost regardless of the number of incidents that may occur throughout the duration of the Contract and for each and every incident that occurs.
- 4.29.5 The Contractor shall, at the minimum, implement measures described throughout the Employer's Requirements, this Contract and the RFP for which such implementation shall not, in any manner whatsoever, relieve the Contractor of the Contractor's responsibility to implement additional measures to prevent theft and vandalism of the whole of the Works for the duration of the Contract.
- 4.29.6 The Contractor acknowledges that during bidding stage, submitted a detailed method statement describing all the measures, techniques, and installation rules it intends to implement addressing all theft and vandalism matters that could affect delivery of the Works and the Project in its entirety. That being the case, the Contractor hereby undertakes that it will protect the Site(s) from any form of theft and/or vandalism.

4.30 **CONTRACTOR'S OPERATIONS ON SITE(S)**

- 4.30.1 The Contractor shall confine the Contractor's operations to the Site(s), and to any additional areas which may be obtained by the Contractor and acknowledged by the Employer and/or Engineer as working areas.
- 4.30.2 The Contractor shall take all necessary precautions to keep the Contractor's Equipment and the Contractor's Personnel within the Site(s) and these additional areas, and to keep them off adjacent land.
- 4.30.3 At all times, the Contractor shall keep the Site(s) free from all unnecessary obstruction, and shall properly store or remove from the Site(s) any Contractor's Equipment under this Contract (subject to 4.17 [Contractor's Equipment]) and/or surplus Materials. The Contractor shall Promptly clear away and remove from the Site(s) any wreckage, rubbish, hazardous waste and Temporary Works which are no longer required.
- 4.30.4 Promptly after the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site(s) and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus Material, wreckage, rubbish, hazardous waste and Temporary Works. The Contractor shall leave that part of the Site(s) and the Works in a clean and safe condition. However, the Contractor may retain at locations on the Site(s) agreed with the Engineer, during the DLP, such Goods , Plant and Materials as are required for the Contractor to fulfil obligations under this Contract.

4.31 **ARCHAEOLOGICAL AND GEOLOGICAL FINDINGS**

- 4.31.1 All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site(s) shall be placed under the care and authority of the Employer and/or Engineer. The Contractor shall

take all reasonable precautions to prevent the Contractor's Personnel or other persons from removing or damaging any of these findings.

4.31.2 The Contractor shall, as soon as practicable after discovery of any such finding, give a Notice, in writing, to the Employer and/or Engineer in good time to give the Employer and/or Engineer opportunity to Promptly inspect and/or investigate the finding before it is disturbed. This Notice shall describe the finding and the Employer and/or Engineer shall issue instructions for dealing with it.

4.31.3 If the Contractor suffers delay and/or incurs Cost from complying with the Employer and/or Engineer's instructions, the Contractor shall be entitled, subject to this Contract (Sub-Clause 20.2 [Claims for EOT]), to EOT.

4.32 TEMPORARY WORKS, SITE(S) SERVICES AND CONSTRUCTION CONSTRAINTS

4.32.1 The Employer's Site(s) entry and security control, permits, Site(s) regulations and restrictions on Site(s) use are that:

4.32.1.1 The Employer and/or Engineer may allow access to Site(s), on request, after:

4.32.1.1.1 The Contractor has requested access from the Employer and/or Engineer;

4.32.1.1.2 The Contractor has made all safety, health, environment, quality and any other appointments required to proceed with Site(s) activities;

4.32.1.1.3 The Contractor has provided the safety case as accepted by the relevant Parties; and

4.32.1.1.4 The Employer and/or Engineer has issued a Site(s) Access Certificate.

4.32.1.2 The Contractor shall be given access to the various Sites at the Employer's and/or Engineer's discretion therefore as considered necessary by the Employer and/or Engineer;

4.32.1.3 The Contractor shall comply with the following requirements of the Employer and/or Engineer:

4.32.1.3.1 Accurate and transparent reporting of faults and failures;

4.32.1.3.2 Adherence to Occupation requirements;

4.32.1.3.3 Proactive and effective Safety risk management; and

4.32.1.3.4 Suitable environmental and heritage constraints compliance, control and Management.

4.32.2 Access to any third-party property:

4.32.2.1 The Contractor shall obtain a letter of introduction from the Employer as may be required to enter any third-party property required to deliver the Works;

4.32.2.2 The Contractor shall ensure that no third-party property is entered, nor any Works executed prior to granting of the required permits and/or wayleaves;

- 4.32.2.3 The Contractor shall be responsible to apply and pay for all required permits and/or wayleaves;
- 4.32.2.4 The Contractor shall ensure steps taken to ensure that unauthorised persons or livestock do not obtain passage through fences temporarily damaged when executing the Works;
- 4.32.2.5 The Contractor shall, at the cost of the Contractor, make good any damage to third party property, resultant from the execution of the Works; and
- 4.32.2.6 Third party property owners shall be kept informed, proactively by the Contractor, about any changes to the scheduling of the Works should they be affected.

4.32.3 People restrictions on Site(s), hours of work, conduct and records:

- 4.32.3.1 The Contractor shall comply with the following hours of work on the Site(s):
 - 4.32.3.1.1 Normal working hours on Site(s) means the hours of work, as determined by a wage regulating measure or statutory enactment for any trade or activity, in respect of which the basic minimum rate of pay is applicable and excludes all time for which a higher rate of pay is obligatory. Where no wage regulating measure is in force, the normal hours shall be 07h00 to 17h00 Mondays to Fridays, including statutory meal breaks etc; and
 - 4.32.3.1.2 The Contractor shall confine his work to normal working hours except when work outside these hours is

specifically provided for in the Contract Permitted by the Employer at the Contractor's request Instructed in writing by the Employer and/or Engineer.

4.32.3.2 Acceptance Testing and Commissioning may occur during undefined hours, and may include weekends, public holidays and night work, solely at the discretion of the Employer and/or Engineer and in accordance with the Employer's Requirements, this Contract and the RFP; and

4.32.3.3 When the Contractor proposes to work outside normal working hours, the Contractor shall apply to the Employer at least 21 working days in advance. The Employer may, at the Employer 's discretion, not unnecessarily withhold permission however such permission is subject to such conditions as the Employer may impose on the Contractor to protect the Employer's interests. Such permission may be withdrawn by the Employer at any time and without consequence and liability to the Employer. The Contractor is not entitled to any Claim for additional payment or time arising from either the Employer refusal to permit such work or the granting of such permission or withdrawal of permission by the Employer.

4.32.4 Cooperating with, obtaining acceptance of and checking the work of others:

4.32.4.1 The Contractor shall inspect the work of others with which the Works interfaces, with support from the Employer, to ensure compliance with the Employer's Requirements, this Contract and the RFP.

4.32.5 Contractor's Equipment:

4.32.5.1 The Contractor shall Supply all Equipment necessary to provide the Works; and

4.32.5.2 The Contractor shall Promptly replace or repair any faulty Equipment to ensure delivery of the Works.

4.32.6 Existing services, including cable and pipe trenches:

4.32.6.1 The Contractor shall verify the boundaries of the Rail servitude;

4.32.6.2 The Contractor shall locate existing services before commencing work on Site(s);

4.32.6.3 Where the Contractor encounters existing services, he shall take extreme care not to damage them. The Contractor shall, at the cost of the Contractor, repair any such damage caused through the delivery of the Works; and

4.32.6.4 The Contractor shall contact all relevant stakeholders and authorities, with assistance from the Employer and/or engineer, to co-ordinate all Site(s) activities.

4.32.7 Hook ups to existing Installations:

4.32.7.1 The Contractor shall Promptly notify the Employer in writing if any suspected discrepancies with as-built information are noted;

4.32.7.2 The Contractor shall only implement changes as per red and yellow working drawings accepted by the Employer;

- 4.32.7.3 The Contractor shall, in accordance with timeframes specified in writing by the Employer, submit proper Occupation plans for the Employer to arrange Occupations for Work;
- 4.32.7.4 The Contractor shall ensure prevention of faults as far as possible; and
- 4.32.7.5 The Contractor shall Promptly and transparently notify the Employer of any faults and failures immediately upon becoming aware of such faults and failures further providing the rectification plan to correct the faults and failures.

4.32.8 Construction Trains:

- 4.32.8.1 Should the Contractor use Construction trains (e.g. for the Installation of new sleepers), the Contractor shall apply the relevant RSR guidance Notice “Construction Train Safety Permits” regarding Construction train safety permits.

4.32.9 Temporary Construction Level-Crossings:

- 4.32.9.1 The Contractor shall obtain all necessary approvals from the RSR for all temporary Construction level crossings required for the Project, as per South African National Standard (“SANS”) 3000-2-2-1.

4.33 REPORTING OF FAULTS AND FAILURES

- 4.33.1 The Contractor shall keep the Duty Manager in the CTCC informed of all Site(s) activities so that each may be contacted without delay in case of an emergency.

4.33.2 The Contractor shall keep the Employer and/or Engineer and the Duty Manager in the CTCC informed of the names of all personnel who are available to receive calls during specific periods.

4.34 OCCUPATIONS

4.34.1 Before the Contractor undertakes work involving Track crossings, the Occupation of the Track, dead orders or other interruption of the Employer and/or TFR service, the Contractor shall submit a request for an Occupation in writing to the Employer and/or Engineer.

4.34.2 The Contractor shall contact the Employer and/or Engineer the calendar day before the date of an Occupation to ascertain whether the Occupation is going ahead and whether the Occupation details have changed. The Employer and/or Engineer is at liberty to cancel or postpone any Occupation at any time and at sole the Employer's and/or Engineer's discretion for which the Employer shall not accept any liability therefore that Contractor shall accept all liability and consequence for such cancelation or postponement further absorbing any loss of time within the Approved/Contract Programme.

4.34.3 The Contractor shall provide the Employer and/or Engineer with a detailed Occupation plan for acceptance, showing details of:

- a) All decommissioning activities;
- b) All disciplines involved;
- c) Hours of work;
- d) All Equipment, personnel, Plant and Materials and other resources the Contractor plans to use on the Occupation;
- e) Activities that have already been completed in preparation for the Occupation;
- f) Activities that still needs to be completed in preparation for the Occupation;

- g) Programme of work for the Occupation; and
 - h) All portions of existing Installations that shall be affected by the Works, including a detailed method statement on what measures the Contractor shall implement to minimise the Occupation duration and how the existing Installations shall be protected/isolated from safety risks and disruption.
- 4.34.4 Submission of the Occupation plan serves as confirmation that the Contractor shall use the Occupation subject to approval in writing by the Employer and/or Engineer. Failure to submit an Occupation plan puts the Occupation at risk of being cancelled.
- 4.34.5 The Contractor shall provide qualified flagmen with detonators, radios and all other Equipment to protect trains where the Works affect safety of trains.
- 4.34.6 The Contractor shall provide protection to all personnel from the danger of passing trains.
- 4.34.7 Before disconnecting or working on any Equipment connected to a working System/System, the Contractor shall take a local Occupation. Cooperation with the operating staff is essential for safe working and for the efficient completion of work.
- 4.34.8 When an Occupation for work on an existing Installation takes longer than expected, the Contractor Promptly notifies the Employer and/or Engineer who applies for an extended Occupation.
- 4.34.9 All safety precautions in the Employer's and/or TFR's Train Working Rules ("TWR") shall apply.

- 4.34.10 The Contractor shall provide all points clamps complete with padlocks, and signal crosses and blanking plates for the protection of trains.

4.35 OPERATIONAL READINESS

- 4.35.1 The Contractor shall conduct an operational readiness assessment before the Commissioning of each Section and implement required action to ensure operational readiness by time of Commissioning.

- 4.35.2 The Contractor shall ensure operational readiness before Commissioning starts for each Section through at least the following activities:

- a) Change management;
- b) Operating procedure development;
- c) Maintenance strategy and procedure development; and
- d) Training and Technology transfer.

- 4.35.3 The Contractor shall conduct change management sessions for the Employer Corporate, the Employer Rail, the Employer Tech, the Employer's KZN Region Management, Traffic Control personnel, Train driver personnel, Technical personnel and all other effected parties, including third parties such as TFR and the RSR.

- 4.35.3.1 Various change management session shall be held to accommodate shift working and operational restrictions and requirements;

- 4.35.3.2 Change management shall be conducted in the form of a presentation, covering at least the following topics:

- a) Background on Project;
- b) The benefits of the new System;
- c) Key changes; and
- d) Project status and timelines.

4.35.3.3 The Contractor shall submit the change management plan and relevant presentations and documentation to the Employer and/or Engineer for approval prior to implementation.

4.35.3.4 The Contractor shall update and resubmit the change management plan and relevant presentations and documentation as and when necessary and submit it to the Employer and/or Engineer for approval.

4.35.4 The Contractor shall review the Train Working Rules ("TWS"), all relevant operating procedures and local instructions and identify required changes.

4.35.4.1 Identified required changes are submitted to the Employer and/or Engineer for approval and updating of the TWS, relevant operating procedures and local instructions;

4.35.4.2 The TWS, relevant operating procedures and local instructions are updated prior to Commissioning of the first Section or prior to the Commissioning of specific Section that the changes are relevant to; and

4.35.4.3 Where it is not practical to update the TWS and/or operating procedures prior to Commissioning, the change can be addressed by means of a local instruction with prior approval from the Employer and/or Engineer.

- 4.35.5 The Contractor shall review all relevant Maintenance strategies and Maintenance procedures and identify required changes and develop new Maintenance strategies and Maintenance procedures where required for new Technology implemented as part of the Project.
- 4.35.5.1 Identified required changes are submitted to the Employer and/or Engineer for approval and updating of the required Maintenance strategies and procedures;
- 4.35.5.2 The relevant Maintenance strategies and procedures are updated prior to Commissioning of the first Section or specific Sections where the changes are relevant; and
- 4.35.5.3 The Maintenance strategies and procedures are updated in accordance to the approved by the Employer and/or Engineer format.
- 4.35.6 For each type of Equipment to be installed as part of the Project, the Contractor shall produce Installation procedures document(s) containing:
- 4.35.6.1 Detailed Installation methods; and
- 4.35.6.2 Detailed Testing procedures.
- 4.35.7 The Contractor shall for all Systems, sub-Systems and Equipment installed as part of the Project define nomenclature and asset Componentization structures according to the Employer and/or Engineer's standards.

4.36 TRAINING AND TECHNOLOGY TRANSFER

- 4.36.1 The Contractor shall, for all the Employer's representatives and/or Engineer's representative (minimum 8 personnel or at any given instance as instructed by the Employer) and at the Contractor's cost, arrange detailed ERTMS Project management training by an accredited training facility to be delivered within 6 (six) calendar months from the Completion Date.
- 4.36.2 The Contractor shall be responsible for the cost of the course, travel, accommodation and any other cost related to the attendance of the training.
- 4.36.3 The Contractor shall, for all the Employer's representatives and/or Engineer's representative (minimum 8 personnel or at any given instance as instructed by the Employer) and at the Contractor's cost, arrange detailed ERTMS and RSS(Technology offered in the Contractor's Proposal at a minimum) technical training by an accredited training facility to be delivered within 6 (six) calendar months from the Completion Date.
- 4.36.4 The Contractor shall be responsible for the cost of the course, travel, accommodation and any other cost related to the attendance of the training.
- 4.36.5 The Contractor shall, at a minimum, provide all necessary Training (Theoretical, Practical, Technical and Operational), as instructed by the Employer and/or Engineer, for all the Employer's TCOs, Section Managers and Duty Managers in KZN as follows:
- 4.36.5.1 Various Training sessions conducted to accommodate shift working;
- 4.36.5.2 Traffic Control personnel working specific Sections are not trained more than 2 months prior Commissioning of that Section;
- 4.36.5.3 Traffic Control personnel Training consists of an operating procedure module and an Equipment module. The operating procedure module include all changes to the operating procedures and rules. The

Equipment module provides Training on how to operate the newly installed PTCS and associated Systems;

4.36.5.4 The Training includes a theoretical session as well as a practical session on the Training simulator; and

4.36.5.5 Any other Training as instructed in writing by the Employer and/or Engineer.

4.36.6 The Contractor shall, at a minimum, provide all necessary Training (Theoretical, Practical, Technical and Operational), as instructed by the Employer, for all the Employer's and TFR's Train Drivers, Section Managers, Track Masters and other relevant train driver personnel in KZN as follows:

4.36.6.1 Various Training sessions for the different Training modules are conducted to accommodate the Employer's operational constraints and requirements;

4.36.6.2 Maintenance personnel working specific Sections are not trained more than 2 (two) months prior to the Installation work for the specific discipline commencing in that Section;

4.36.6.3 Training is provided for all and any proprietary Plant and Materials or new Technology installed as part of the Project;

4.36.6.4 Different Training modules are provided for different level maintainers as per the developed Maintenance strategy;

4.36.6.5 Training is focused on installation, maintenance, condition monitoring, fault finding and fault correction at the appropriate level as per the developed Maintenance strategy;

4.36.6.6 Training is conducted for each individual Equipment type and new Technology installed as part of the Project, as well as all sub-Systems and the PTCS as a whole, including all interfaces;

- 4.36.6.7 The Training includes a theoretical session, a practical session on the Training simulator or an actual Installation, as well as on the job Training during Construction, Testing and Commissioning;
 - 4.36.6.8 Courses include practical exposure to the actual Installations involved as well as the use of any Test Equipment supplied; and
 - 4.36.6.9 Any other Training as instructed in writing by the Employer and/or Engineer.
- 4.36.7 The Contractor shall, at a minimum, provide Technical Refresher Training for all the Employer's Maintenance personnel and all associated managers in KZN as specified in the Employer's Requirements, this Contract and the RFP:
- 4.36.7.1 Various Training sessions for the different Training modules shall be conducted to accommodate the Employer's operational constraints and requirements;
 - 4.36.7.2 Refresher training shall be provided 8 (eight) months prior to the end of the Maintenance, Warranty and Defects Liability period;
 - 4.36.7.3 Training shall be provided for all and any proprietary Plant and Materials or new Technology installed as part of the Project;
 - 4.36.7.4 Different Training modules shall be provided for different level maintainers as per the developed Maintenance strategy;
 - 4.36.7.5 Training shall be focused on installation, maintenance, condition monitoring, fault finding and fault correction at the appropriate level as per the developed Maintenance strategy;
 - 4.36.7.6 Training shall be conducted for each individual Equipment type and new Technology installed as part of the Project, as well as all sub-Systems and the PTCS in its entirety including all interfaces;

- 4.36.7.7 The Training shall include a theoretical session, a practical session on the Training simulator or an actual Installation, as well as at least 6 (six) months on the job Training during the Maintenance, Warranty and Defects Liability period;
 - 4.36.7.8 Courses shall include practical exposure to the actual Installations involved as well as the use of any Test Equipment supplied; and
 - 4.36.7.9 Any other Training as instructed in writing by the Employer.
- 4.36.8 The Contractor shall train all relevant Employer and TFR technical and operational trainers and provide the trainers with Training Material to continue Training activities after the Completion Date. The Contractor shall certify the trainer competent to conduct Training for a specified module. The Contractor shall repeat trainer Training up to 3 times for each module where required to ensure trainer competence.
- 4.36.9 The Contractor shall train at least 15 members of the Employer's Project staff on the Installation, operation, Maintenance and fault finding of any proprietary Plant and Materials and new Technology including, but not limited to:
 - 4.36.9.1 Design checking staff before acceptance checking of plans;
 - 4.36.9.2 The Employer's Site(s) representatives before Installation starts; and
 - 4.36.9.3 5 Persons doing acceptance Testing and Commissioning before Commissioning starts.
- 4.36.10 The Contractor shall provide Training to at least 10 members of the Employer's staff to do data Engineering and configuration changes including, but not limited to:
 - 4.36.10.1 Trainee competence are evaluated through a formal assessment; and

- 4.36.10.2 Competent trainees are certified as competent to do data Engineering and configuration changes.
- 4.36.11 All Training and courses shall be presented in English. Comprehensive student notes are prepared in English and issued to all course attendants.
- 4.36.12 The Contractor shall submit the Training concept, Training plan and Training Material to the Employer and/or Engineer for approval before the commencement of Training.
- 4.36.13 The Contractor shall arrange for Technology transfer to the Employer. The Contractor shall provide comprehensive Installation manuals, Maintenance manuals, operating manuals and Spares catalogues for all Plant and Materials, and for Test Equipment installed or used as part of the Contract and Project.
- 4.36.14 The Contractor shall submit at least 5 (five) copies of complete sets of draft manuals in English to the Employer and/or Engineer for approval.
- 4.36.15 The Contractor shall submit at least 20 (twenty) copies of complete sets of manuals in English to the Employer and/or Engineer in compliance with the approved Project Programme. In addition, the Contractor shall submit at least 20 (twenty) copies stored on DVD's for all approved Manuals.
- 4.36.16 All Printouts shall be bound with hard covers and of detachable design. Convenience of detaching pages within the manuals shall be put into consideration. All Manuals shall adopt A4 size with double side printed pages except reference drawings that shall use A3 size with single side printed pages.
- 4.36.17 The Manuals shall be consistent in format, layout, identifiers and revisions approved in writing by the Employer. A master index covering all individual manuals' versions shall be provided. The master index shall bear a unique number which shall be revised when an individual manual is updated.

4.37 INSPECTIONS, INTERIM TESTS, TESTS ON COMPLETION, COMMISSIONING, COMPLETION, TAKING OVER AND DEFECTS AFTER TAKING OVER

4.37.1 Materials, samples, facilities, logistics and amenities required for; inspections, interim tests, Tests on Completion, Commissioning, Completion and Taking Over shall be as follows:

4.37.1.1 The Contractor shall, for all the Employer representatives (minimum 15 personnel or at any given instance as instructed by the Employer) and at the Contractor's cost, uncompromisingly provide all unlimited; Materials, facilities, samples, Equipment, travel (air and rail and road), accommodation, meals, incidentals, unfettered access and any other means required for the Employer to attend and/or perform any local and international; inspections, Validation, Factory Acceptance Testing ("FAT"), Site Acceptance Testing ("SAT"), Tests on Completion, Commissioning, Completion and Taking Over of the Works by the Employer (in Sections thereafter the whole of the Works).

4.37.2 Commissioning and Taking Over procedures:

4.37.2.1 Tests on Completion, Commissioning and Taking Over shall be done according to the procedures described in the GTRs and MTR or as otherwise instructed in writing by the Employer and/or Engineer throughout the duration of the Contract;

4.37.2.2 After (Sectional) Completion, the Contractor shall, at a minimum, arrange a Taking Over inspection to allow the Employer and/or Engineer certification of (Sectional) Completion subject to a Defects list or as otherwise instructed in writing by the Employer and/or Engineer;

4.37.2.3 The Contractor shall, without hesitation, ensure that the Employer and/or Engineer has a full, accurate and unredacted dossier of all

Project information (including but not limited to as-built documents and drawings) that represent the status of the completed Works, in all formats requested by the Employer and/or Engineer.

4.37.3 Work to be done by the Completion Date:

4.37.3.1 On or before the date of completion of a Section of the Works and then the Completion Date of the whole of the Works, the Contractor shall do all thing necessary to ensure that the Section of the Works and the whole of the Works respectively is delivered to the absolute satisfaction of the Employer and/or Engineer, including the work listed below shall be done by completion of each Sectional thereafter comprehensively combined by the Completion Date; and

4.37.3.2 the Employer and/or Engineer shall not certify Completion until the whole of the Works, including all the work listed below, is completed to the absolute satisfaction of the Employer and/or Engineer and free of all Defects which shall, in the Employer's and/or Engineer's opinion, prevent the Employer and other Project beneficiaries from using the Works:

NO	ITEM OF WORK	TO BE COMPLETED WHEN
1	As-built drawings, quality records, and other documentation as requested by the Employer	By the date of completion of each Section thereafter a combined submission by the Completion Date
2	Spares and Test Equipment	Before the first Commissioning Occupation
3	Final Testing and Commissioning	See Testing and Commissioning requirements and programming constraints in the GTRs and MTR
4	Correction of all Defects notified by the end of the Contractor's post Commissioning performance Testing	Within 30 days from the end of the Contractor's post Commissioning performance Testing and holistically by the Completion date

4.37.4 Use of the Works before Completion has been certified:

4.37.4.1 the Employer and/or Engineer may use the following Sections of the Works before Completion is certified which does not constitute Taking Over by the Employer and/or Engineer:

4.37.4.1.1 After each Section is commissioned and is handed back to the Employer and/or Engineer to continue their train operations in the interim until issuance of Performance Certificate;

4.37.4.1.2 Any inspections done to allow the Employer's and/or Engineer's use of commissioned Sections of the Works are done to aid prompt correction of Defects and should not be confused with Taking Over procedures.

4.37.5 Performance tests:

4.37.5.1 Directly after Commissioning a Section and before Performance can be certified, the Contractor shall monitor and provide records to prove fault-free performance of the System for a continuous period of at least 48 (forty-eight) hours;

4.37.5.2 Reliability, availability and safety performance tests shall be required for the duration of the Contract.

4.37.6 The Contractor shall have permanent technical representation, on a 24/7 hour basis, in the CTCCs during the Construction period from the first Commissioning until the end of the Maintenance, Warranty and Defects Liability period. The function of the technical representative(s) shall, at a minimum, be to:

4.37.6.1 Assist the Employer's operating personnel with operating of the new System(s), providing ad hoc on-the-job Training and support when needed;

4.37.6.2 Perform System Maintenance, fault finding and System support;

4.37.6.3 Assist the Employer's CTCC based and field based technical personnel with System Maintenance, fault finding and System support, providing ad hoc on-the job Training and support when needed. Field based technical personnel may be assisted telephonically if possible; and

4.37.6.4 Monitor System performance, recommending corrective actions to the Employer Maintenance personnel or the Contractor to correct System non-performance.

4.37.7 Access given by the Employer and/or Engineer for correction of Defects:

4.37.7.1 The Contractor shall comply with all constraints and procedures stated as requested in the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer and/or Engineer and where the Employer and/or Engineer arranges access for the Contractor after Completion.

4.38 DECOMMISSIONING

4.38.1 The Contractor shall decommission and dismantle all old Plant and Material within 40 (forty) working days after Commissioning of the new Plant and Material, as requested in the Employer's Requirements, this Contract and RFP or as otherwise instructed in writing by the Employer and/or Engineer.

4.38.2 The Contractor shall take care to not damage useable Plant and Material during the dismantling and transportation process.

- 4.38.3 The Contractor shall capture all decommissioned Plant and Material and associated information on the standard Employer's Asset Disposal form.
- 4.38.4 Decommissioned Plant and Material shall be grouped into 4 (four) groups as per instruction of the Employer and/or Engineer:
- 4.38.4.1 Plant and Material useful to the Employer's KZN region;
 - 4.38.4.2 Plant and Material useful to another region of the Employer;
 - 4.38.4.3 Plant and Material useful to TFR; and
 - 4.38.4.4 Scrap Plant and Material to be disposed of.
- 4.38.5 The Contractor shall deliver all Plant and Material, deemed useful to the Employer's KZN region, to the Employer's storage facility within 100 km of the Site(s) as instructed by the Employer and/or Engineer.
- 4.38.6 The Contractor shall deliver all Plant and Material, deemed useful to any other Employer's region, either to the Employer's storage facility within 100 km of the Site(s) or to the Employer's facility in either Pretoria, Johannesburg or Cape Town as instructed by the Employer and/or Engineer.
- 4.38.7 The Contractor shall deliver all Plant and Material, deemed useful to TFR to either the Employer's storage facility within 100 km of the Site(s) or a TFR storage facility within 100 km of the Site(s) as instructed by the Employer and/or Engineer.
- 4.38.8 The Contractor shall either deliver all scrap Plant and Material to the Employer's storage facility within 100 km of the Site(s) or dispose of all scrap Material in an environmentally friendly way as per instruction of the Employer and/or Engineer. The Contractor shall submit a method statement for the disposal of Material to the Employer and/or Engineer for acceptance prior to starting the disposal process.

4.39 SPARES, MAINTENANCE AND LIFE CYCLE COST (“LCC”) REPLACEMENT PLAN AND FINANCIAL MODEL

- 4.39.1 The Contractor shall prepare and submit the estimated detailed, all-inclusive; Planned and Preventative Maintenance and LCC Replacement Plan and Financial Model for the whole of the Works and the PTCS including all requirements for Spares for approval by the Employer.
- 4.39.2 The Planned and Preventative Maintenance and LCC Replacement Plan and Financial Model shall adhere to OEM requirements and specifications, proven local best practice and proven international best practice.
- 4.39.3 The Financial Model shall be based on a useable life of 20 years for all Plant and Materials further transparently showing all detailed calculations and assumptions.
- 4.39.4 The Financial Model shall include Equipment price increases based on the Consumer Price Index (“CPI”) estimations for the next 20 years, also taking into consideration any foreign exchange factors.
- 4.39.5 The strategy shall include resource, Plant and Material requirements for maintaining the Works. Resource requirements shall show number of technical workers, Engineering technicians and technologists needed to carry out effective; planned Maintenance, preventative Maintenance and Life Cycle replacements whilst minimising disruption to the Employer operations.
- 4.39.6 The Contractor shall include the following minimum provision for Plant and Material Spares, subject to final approval from the Employer:

- 4.39.6.1 Item 1 – Replacement due to Theft and Vandalism for each year up to a maximum of 730 calendar days from the Completion Date for the whole of the Works;
 - 4.39.6.2 Item 2 – Indoor and outdoor most likely to be required for each year up to a maximum of 730 calendar days from the Completion Date for the whole of the Works; and
 - 4.39.6.3 Item 3 – 5% of the total value of Plant and Equipment for each year up to a maximum of 730 calendar days from the Completion Date for the whole of the Works.
- 4.39.7 The Contractor shall implement the Employer approved Planned and Preventative Maintenance and LCC Replacement Plan and Financial Model which shall include, but not be limited to, provision of all maintenance Systems, Plant and Materials and Tools required to maintain the PTCS in its entirety.
- 4.39.8 The Contractor shall provide the Employer with all maintenance Systems, Plant and Materials and Tools 6 (six) calendar months prior to the end of the Maintenance, Warranty and Defects Liability period (for the whole of the Works) and ensure the Employer can take over Maintenance of the PTCS in its entirety upon expiry of the Contractor's Maintenance, Warranty and Defects Liability period.
- 4.39.9 The Contractor shall for each Commercial Off the Shelf ("COTS") product, indicate the lifecycle management including:
- 4.39.9.1 Procurement process;
 - 4.39.9.2 Quality Management;

4.39.9.3 Obsolescence monitoring; and

4.39.9.4 RAMSS aspects of COTS in the proposed architecture.

4.40 MAINTENANCE, WARRANTY AND DEFECTS LIABILITY PERIOD

4.40.1 The Contractor will maintain the PTCS in its entirety as per the Planned and Preventative Maintenance and LCC Replacement Plan and Financial Model developed by the Contractor and approved by the Employer.

4.40.2 All maintenance work will, at a minimum, comply with all standards, specifications, regulations and procedures as defined in the Employer's Requirements, this Contract and the RFP.

4.40.3 The Contractor's duties will, at a minimum, be to perform:

4.40.3.1 Routine preventive maintenance;

4.40.3.2 Corrective preventive maintenance;

4.40.3.3 System breakdown repairs; and

4.40.3.4 Any other works, activities and resources required to maintain the PTCS in its entirety and meet any other requirements and specifications as requested in the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer and/or Engineer.

4.40.4 The Contractor shall submit to the Employer and/or Engineer for approval, a detailed process for the initiation, execution, capturing and reporting of System maintenance.

- 4.40.5 The Contractor will not sign out the System or any subsystem thereof without the approval of the Employer and/or Engineer.
- 4.40.6 The Contractor will not change any password without the approval of the Employer and/or Engineer.
- 4.40.7 When necessary to perform work under total occupation conditions the Contractor will apply for and take occupation on the System or any subsystem thereof before work execution start.
- 4.40.8 The Contractor will be subpoenaed to testify as a witness at inquiries should the need arise.
- 4.40.9 The Contractor will be requested to attend Regional safety meetings and production meetings.
- 4.40.10 Under no circumstances will any alteration(s) to the System be allowed without the necessary approval to do so.
- 4.40.11 The Contractor will fully comply with the maintenance requirements as described in the Maintenance procedure. The Contractor shall submit an annual routine maintenance strategy.
- 4.40.12 The Contractor shall keep record of all maintenance performed and shall submit such records to the Employer and/or Engineer monthly.
- 4.40.13 The Contractor will at all-time work safe and ensure that a safe System is available for train operations during the execution of the work.
- 4.40.14 The Contractor will perform all the necessary functional tests on completion of the work. On completion of such a task, a test certificate will be submitted to the Employer and/or Engineer.
- 4.40.15 Corrective maintenance will be initiated by the possibility of a potential failure or damage to the assets. The desired function of the Equipment is not yet affected, and corrective actions will be prioritised and scheduled accordingly.

- 4.40.16 The Contractor shall report any potential failures and damage(s) to the Employer and/or Engineer with a schedule for the corrective maintenance to be completed.
- 4.40.17 The Contractor shall provide a monthly report regarding corrective maintenance cost.
- 4.40.18 The Contractor shall provide a yearly accumulative report regarding corrective maintenance cost.
- 4.40.19 With a functional failure, the desired function of the Equipment is affected. The Equipment might still be available but at a lower performance standard or, it might have suffered a total loss of function and is no longer available for use.
- 4.40.20 All functional System breakdowns will be repaired within 2 (two) hours.
- 4.40.21 Repairing of functional System breakdowns take preference over construction activities. The Employer shall not be held liable for any Project delays caused by System breakdown repairs.
- 4.40.22 Failures that cannot be corrected in the time specified must be escalated to the Employer Signal Manager.
- 4.40.23 The Contractor will provide the Signal Manager with a weekly standby list
- 4.40.24 The Contractor will provide the Signal Manager with a 24-hour report for incidents that had an impact on the train service (Delays and Cancellations) as and when requested by the Signal Manager. A template for the format of the 24-hour report should be obtained from the Signal Manager
- 4.40.25 The Contractor will provide a weekly report to the Employer and/or Engineer indicating the root cause of all failures, the failure mode that occurred as a result, repair action and replacement part(s) to rectify.
- 4.40.26 The Contractor shall provide a monthly report containing the following information:
 - 4.40.26.1 Reliability for the month and year to date;

- 4.40.26.2 Availability for the month and year to date;
 - 4.40.26.3 The Mean Time to Repair (MTTR) for the month and year to date;
 - 4.40.26.4 The Mean Time Between Failures (MTBF) for the month and year to date; and
 - 4.40.26.5 Average Response Time for the month and year to date.
- 4.40.27 The Contractor will attend routine maintenance activities performed by other disciplines, for example replacement of sleepers, tamping of ballast, etc., should it be required. The Contractor's function will be to remove and/or safeguard the System and rail side Equipment whilst the other discipline is performing its work.
- 4.40.28 These activities are time based and include for example the replacement of sleepers, tamping of ballast, replacement of rails or switchblades, ballast screening, etc.

4.41 Incidents/ Accidents caused by rail vehicles

- 4.41.1 the Employer's representative and/or engineer's representative shall attend to all incidents or accidents.
- 4.41.2 The Contractor will execute the necessary repair work to restore the Site(s) to its full operation after Incidents/Accidents caused by rail vehicles. The Contractor will test and sign off the System for safe passage of trains.
- 4.41.3 The Contractor will guarantee an availability of 98% of the overall System, at each individual crossing place.
- 4.41.4 The penalty will be levied on a quarterly basis average over 3 (three) months, not on an annual, or contract basis.

- 4.41.5 The onus shall rest on the Contractor to submit the necessary motivation to the Employer and/or Engineer for its consideration and decision for downtime periods, which the Contractor considers to have been caused by factors outside his control, and which should not be included in the calculations.
- 4.41.6 Actual damaged or faulty Equipment shall be presented by the Contractor as proof to the Employer and/or Engineer.
- 4.41.7 Should emergency repairs have to extend past normal working hours, the Contractor will remove or repair the Equipment and submit the faulty Equipment, to the Employer and/or Engineer.
- 4.41.8 Where breakages or faults are caused by factors outside the Contractor's control, he will immediately report the incident to the Employer and/or Engineer, in writing, giving a full list of the details/persons involved.
- 4.41.9 The Contractor will not commission a new section if the previous section(s) are not stable and performing according to the specified requirements.

4.42 FINANCIAL PERFORMANCE MANAGEMENT

4.42.1 Additional Penalties

- 4.42.1.1 The Employer and/or Engineer shall recover the Penalty(s) applied, for each incident, from the Contractor through the Recovery Statement(s) which shall be included in a Payment Certificate(s) that is forthcoming from the date of the Employer's and/or Engineer's decision to apply the Penalty or by any other means deemed necessary by the Employer and/or Engineer.
- 4.42.1.2 The Employer's and/or Engineer's application of any Penalty(s) shall not relieve the Contractor of the Contractor's obligations and/or liabilities in terms of the Employer's Requirements, this Contract and the RFP.

4.42.2 Works Specification:

4.42.2.1 The Contractor shall unequivocally commit to comprehensive and uncompromised execution of the Works through strict adherence to the Works Specification, the Employer's Requirements, this Contract and the RFP, and achievement of all Key Dates, within the specified Time for Completion for the whole of the Works. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced discretionary right to immediately terminate the Contract, without allowing the Contractor any period of rectification, and all costs, Damages, Delay Damages and a Penalty(s) related to such termination shall be borne by the Contractor.

4.42.3 The Employer's Acceptance of the Contractor's Project Documentation, Reports and Designs:

4.42.3.1 Failure of the Contractor to meet any document management, reporting and Design procedures and requirements at any time throughout the duration of the Contract, shall give the Employer an unprejudiced right to immediately apply penalties (as specified in the Employer's requirements, this Contract and the RFP) for each incident (from the date that the Employer decides is the date on which the incident commenced to the date on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor).

4.42.3.2 The Contractor shall uncompromisingly submit all reports, Designs and/or other Project documentation, for all Works (as stated in the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer and/or Engineer), to the Employer and/or Engineer for acceptance and approval by the Employer and/or Engineer before any procurement and Installation of the Works.

- 4.42.3.3 The Contractor shall uncompromisingly correct, re-check and re-submit any portions of the Contractor's reports, Designs and/or other Project documentation that do not comply with the Employer's Requirements, this Contract and the RFP (and instructions issued in writing by the Employer and/or the Engineer) until unequivocal compliance is achieved to the absolute satisfaction of the Employer and/or Engineer. The Employer and/or Engineer need not give any exhaustive details as to why the Employer does not accept the Contractor's reports, Designs and/or other Project documentation or portions thereof.
- 4.42.3.4 Despite any checks done by the Employer and/or Engineer, it remains the Contractor's responsibility to check the Contractor's reports, Designs and/or other Project documentation and ensure unequivocal compliance with the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer and/or Engineer. For all the Designs, the Contractor shall provide proof of certification by a professional in terms of the South African Engineering Act and any other South African professional body as required in terms of South African legislation, regulations and by-laws.
- 4.42.3.5 The Employer and/or Engineer shall have the right to reject any and/or all of the Contractor's reports, Designs and/or other Project documentation should such reports, Designs and/or other Project documentation not uncompromisingly and unequivocally comply with the Employer's Requirements, this Contract and the RFP (and instructions issued in writing by the Employer and/or Engineer) to the absolute satisfaction of the Employer and/or Engineer. The Employer and/or Engineer shall not, under any circumstance nor in any manner whatsoever, be held liable for any costs, delays or any other impacts (Material or otherwise) resulting from such rejection(s).
- 4.42.3.6 Failure in this regard shall further mean:
- 4.42.3.6.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer decides is the date on which the incident commenced to the date on

which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor; and

- 4.42.3.6.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the employer, at the time that the Penalty is to be calculated for each incident.

4.43 PROFESSIONAL PERSONNEL REGISTRATIONS

- 4.43.1 All personnel deployed on this Project, by the Contractor (including, but not limited to, personnel deployed by; the main Contractor, joint venture partners and/or consortium members and/or subcontractors and/or direct contractors and/or similar), shall be appropriately skilled and experienced (list to be attached for the main functions: Senior Project Manager, Senior Commercial Manager, Senior Controls Manager, Senior Quantity Surveyor, Senior Programmer/Scheduler, Senior Occupational Health and Safety Manager, Senior Environmental and Heritage Manager, Senior Quality Manager, Senior BEE and Localisation Manager, Senior Public Participation and Community Liaison Manager, Senior Skills Development and Training Manager, Senior Security and Vandalism Manager, Engineers Designers, Checkers, Testers, etc.) and shall have the requisite mandatory and professional; qualifications, certifications and registrations as required by all applicable legislation, regulations, bylaws and industry best practice. This was an absolute requirement at the time of bidding and validity of such qualifications, certifications and registrations shall be

maintained, on an uninterrupted basis, for the entire duration of the Contract. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer decides is the date on which the incident commenced to the date on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall further mean:

4.43.1.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer decides is the date on which the incident commenced to the date on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor.

4.43.1.2 The Penalty, per incident, payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer, at the time that the Penalty is to be calculated for each incident.

4.43.2 The Employer may, solely at the Employer's discretion and without consequence or liability to the Employer, instruct the Contractor to remove any of the Contractor's personnel deployed throughout the duration of the Contract for any reason deemed appropriate by the Employer. The Contractor shall immediately comply with this instruction and appoint suitable replacement personnel within 60 (sixty) calendar days of receiving such an instruction for which such replacement

personnel shall first be approved in writing by the Employer. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this contract and the RFP) for each incident (from the date that the Employer decides is the date on which the incident commenced to the date on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall further mean:

4.43.2.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer decides is the date on which the incident commenced to the date on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor.

4.43.2.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer, at the time that the Penalty is to be calculated for each incident.

4.44 PROFESSIONAL COMPANY REGISTRATIONS

4.44.1 All companies deployed on this Project, by the Contractor (including, but not limited to; the main Contractor, Joint Venture partners and/or Consortium members and/or subcontractors and/or direct contractors and/or similar), shall be appropriately skilled and experienced and shall have the requisite mandatory and professional; qualifications, certifications and registrations as required by all

applicable legislation, regulations, bylaws and industry best practice. This was an absolute requirement at the time of bidding and validity of such qualifications, certifications and registrations shall be maintained, on an uninterrupted basis, for the entire duration of the Contract. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employers Requirements, this Contract and the RFP) for each incident (from the date that the Employer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall further mean:

4.44.1.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor;

4.44.1.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.44.2 The Employer and/or Engineer may, solely at the Employer's and/or Engineer's discretion and without consequence or liability to the Employer and/or Engineer, instruct the Contractor to remove any of the Contractor's companies deployed

throughout the duration of the Contract for any reason deemed appropriate by the Employer and/or Engineer. The Contractor shall immediately comply with this instruction and appoint suitable replacement companies within 60 (sixty) calendar days of receiving such an instruction for which such replacement companies shall first be approved in writing by the Employer and/or Engineer. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall further mean:

4.44.2.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

4.44.2.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.45 TAX COMPLIANCE

- 4.45.1 The Contractor shall always have a valid Tax compliant status and pin from the South African Revenue Service.
- 4.45.2 Where the Contractor is VAT registered, the VAT number shall be provided prior to the issuance of the Contractor's first invoice or if agreed to in writing by the Employer and/or Engineer, the VAT number shall be provided, at the latest prior, to issuance of the Contractor's fourth invoice.
- 4.45.3 Where the Contractor is a Joint Venture (incorporated or unincorporated) or a Consortium, the VAT number shall be provided prior to the issuance of the Contractor's first invoice or if agreed to in writing by the Employer and/or Engineer, the VAT number shall be provided, at the latest prior, to issuance of the Contractor's fourth invoice.
- 4.45.4 The Contractor shall, on an uninterrupted basis, maintain a compliant Tax Status and Clearance for the duration of the Contract. The Contractor shall further provide any proof and supporting documents of compliant Tax Clearance immediately upon receipt of a request from the Employer and/or Engineer. Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced until the date on which the Employer and/or Engineer confirms, in writing, that it is completely satisfied that the incident is completely resolved by the Contractor).
- 4.45.5 The Contractor shall, on an uninterrupted basis, comply with all South African and International Tax laws, regulations and compliance requirements stated in the Employer's Requirements, this contract and the RFP. The Contractor shall further provide any proof and unredacted supporting documents proving compliance as specified in the Employer's Requirements, this Contract and the

RFP or immediately upon receipt of a request from the Employer. Failure of the Contractor to meet any of these Tax Compliance Requirements at any time throughout the duration of the Contract shall give the Employer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this contract and the RFP) for each incident (from the date that the Employer decides is the date on which the incident commenced to the date on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall further mean:

4.45.5.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

4.45.5.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.46 B-BBEE COMPLIANCE

4.46.1 The Contractor shall, on an uninterrupted basis, maintain the Contractor's compliant B-BBEE Certification Level as was submitted as part of the Contractor's Proposal for the duration of the Contract. The Contractor shall further

provide any proof and supporting documents of the B-BBEE Certification Level immediately upon receipt of a request from the Employer for the Contractor to do so. Failure of the Contractor to meet any of these B-BBEE Compliance Requirements at any time throughout the duration of the Contract shall give the Employer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor).

4.46.2 The Contractor shall further, on an uninterrupted basis, comply with all B-BBEE laws, regulations and compliance requirements stated in the Employer's Requirements, this Contract and the RFP. The Contractor shall further provide any proof and unredacted supporting documents proving compliance as specified in the Employer's Requirements, this Contract and the RFP or immediately upon receipt of a request from the Employer and/or Engineer. Failure of the Contractor to meet any of these B-BBEE Compliance Requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall further mean:

4.46.2.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day

on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

4.46.2.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.47 CSD COMPLIANCE

4.47.1 The Contractor shall, on an uninterrupted basis and for the duration of the Contract, maintain a compliant CSD Registration Status as was submitted as part of the Contractor's Proposal. The Contractor shall further provide any proof and supporting documents of compliant CSD Registration immediately upon receipt of a request from the Employer and/or Engineer. Failure of the Contractor to meet any of these CSD Compliance Requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer decides is the date on which the incident commenced to the date on which the Employer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall further mean:

4.47.1.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is

completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

- 4.47.1.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.48 CIDB COMPLIANCE

- 4.48.1 The Contractor shall always acquaint itself with the following acts, regulations and standards referred to in the Employer's Requirements, this Contract and the RFP, together with any gazetted amendments thereto, as they are essential for acquiring basics of Construction and management requirements:

- 4.48.1.1 The Construction Industry Development Board ("CIDB") Act No. 38 of 2000 and the regulations in terms of the CIDB Act 38 of 2000, Government Notice No. 692 of 9 June 2004, as amended.

- 4.48.2 The Contractor shall always maintain registration with the CIDB, in a grading Designation equal to or higher than a grading Designation of 9EP. The Contractor shall, at the request of the Employer and/or Engineer, provide proof of a valid grading Designation of 9EP as issued by the CIDB. Where the Contractor is a Joint Venture (incorporated or unincorporated) or a Consortium:

- 4.48.2.1 Every member of the Joint Venture/Consortium shall, for the duration of the Contract, have a valid registration with the CIDB and the lead

Joint Venture partner/Consortium member shall, for the duration of the Contract, have a valid grading Designation of 9EP as issued by the CIDB;

4.48.2.2 The combined grading Designation calculated in accordance with the Construction Industry Development laws and regulations shall, for the duration of the Contract, equal to or be higher than a grading Designation determined in accordance with the Contract Price for a 9EP class of Construction work determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development laws and regulations.

4.48.3 The Contractor shall, on an uninterrupted basis, maintain a compliant CIDB grading Designation as was submitted as part of the Contractor's Proposal, and ensure that all of the Contractor's sub-contractors are compliant with their requisite CIDB grading Designations for their respective value of Works to be delivered, for the duration of the Contract. The Contractor shall further provide any proof and supporting documents of the CIDB grading Designation immediately upon receipt of a request from the Employer and/or Engineer. Failure of the Contractor to meet any of these CIDB Compliance Requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor). Failure in this regard shall further mean:

4.48.3.1 The Penalty, per incident, shall be payable for each elapsed calendar day calculated from the date that the Employer and/or Engineer decides is the date on which the incident commenced to the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is

completely resolved by the Contractor. Elapsed calendar days shall include the calendar day on which the incident commenced and the calendar day on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor.

- 4.48.3.2 The Penalty payable shall be calculated at 0.025% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 2.500% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

4.49 GAINSHARE AND PAINSHARE MECHANISM

- 4.49.1 The Contractor shall have a shared interest in the overall success of the Project.
- 4.49.2 The Employer may (at the Employer's discretion), subject to absolute transparency and provision of unredacted comprehensive information and proven costs from the Contractor, introduce sharing any savings relating to any cost items included in the TCP, on an equal basis with the Contractor (50% to the Employer and 50% to Contractor).
- 4.49.3 The Employer may (at the Employer's discretion), subject to absolute transparency and provision of unredacted comprehensive information and proven costs from the Contractor, introduce sharing any proven cost overruns relating to variations included in the TCP, on an equal basis with the Contractor (50% to the Employer and 50% to Contractor).
- 4.49.4 This mechanism, if introduced by the Employer, shall not apply to Suspension and/or Termination and/or similar of Sections of the Works and/or the whole of the Works and/or the Contract.

- 4.49.5 The Gainshare and Painshare mechanism having been discussed, finalised and agreed between the Employer and the Contractor during Contract negotiations (if at all) is included in this Contract and the Employer reserves the right to further introduce this mechanism throughout the duration of the Contract (if at all) at the Employer's discretion.
- 4.49.6 Mention of this mechanism in the RFP and this contract does not relieve the Contractor of the Contractor's obligation to successfully deliver the Works as stipulated in the Employer's Requirements, this Contract and the RFP to the complete satisfaction of the Employer.

4.50 PROJECT EXIT STRATEGY

- 4.50.1 The Contractor shall, as part of the Contract, provide a comprehensive and transparent Project Exit Strategy including all indicators and how the indicators shall be measured.

5. DESIGN

5.1 GENERAL DESIGN OBLIGATIONS

- 5.1.1 The Contractor shall carry out and be responsible for the design of the Works. The Contractor shall uncompromisingly design the whole of the Works, unless the use of Designs issued by the Employer is expressly permitted or required as requested throughout the Employer Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer and/or Engineer.
- 5.1.2 All Designs shall be done locally in South Africa by the Contractor, unless special approval is obtained from the Employer to do special Designs elsewhere.

- 5.1.3 The Contractor shall submit requests to do specific Designs elsewhere to the Employer and/or Engineer for review and approval by the Employer and/or Engineer prior to such Designs being done elsewhere. The request shall contain a detailed description of the type of Designs anticipated to be done elsewhere and apparent reasons as to why such Design cannot be done locally. The Employer and/or Engineer shall have the right to refuse such requests and shall not, under any circumstances nor in any manner whatsoever, be held liable for any costs, delays or any other impacts, Material or otherwise, resulting from such refusal(s).
- 5.1.4 All Designs shall comply with all relevant Standards, Specifications, Regulations and Procedures as specified through the Employer's Requirements, this Contract and the RFP.
- 5.1.5 The Contractor shall, among others, be responsible for the design of the Employer's Train Control System, as stated below, in terms of the Employer's Requirements, this Contract and the RFP, including but not limited to:
- 5.1.5.1 train control, remote control and interlocking System that complies with the Required Operational Capability ("ROC") for the Employer's interlocking System;
 - 5.1.5.2 Train Traffic Management System ("TTMS") that complies with the Employer's requirements;
 - 5.1.5.3 trackside Signalling Equipment such as point machines, signals, Track Vacancy Detection ("TVD"), etc. that is compatible with the new interlocking System and which complies with the Employer's requirements and specification;

- 5.1.5.4 Resignal all the Employer's railway lines with the new interlocking and wayside Equipment according to stated headways and flexibility;
 - 5.1.5.5 a Level Crossing ("LX") controller that complies with the Employer's requirements and specifications and upgrade the required Level Crossings in accordance to the latest standards;
 - 5.1.5.6 all required resources to deliver and maintain the Signalling Works; and
 - 5.1.5.7 Any other Signalling Works, activities and resources required to achieve a fully integrated, functional, complete and future-proofed Train Control System and meet any other requirements and specifications as requested in the Employer's Requirements, this Contract and the RFP, or as otherwise instructed in writing by the Employer and/or Engineer.
- 5.1.6 The design of the Railway Signalling System ("RSS") shall, at a minimum, comply with all relevant Standards, Specifications, Regulations and Procedures as specified in the Employer's Requirements, this Contract and the RFP.
- 5.1.7 The Contractor shall design the RSS to have very limited exposure to theft and vandalism and shall have no or very limited copper.
- 5.1.8 The RSS shall, at a minimum, consist of the following elements as specified in the Employer's Requirements, this Contract and the RFP:
- 5.1.8.1 Train Control System ("TCS");
 - 5.1.8.2 Train Traffic Management System ("TTMS");

- 5.1.8.3 Electronic Interlocking System (“EI”);
- 5.1.8.4 Multi-aspect line side Signalling with flashing aspects;
- 5.1.8.5 Track Vacancy Detection (“TVD”);
- 5.1.8.6 Points Machines;
- 5.1.8.7 Power Supply System (“PSS”);
- 5.1.8.8 Communication with and power to Equipment;
- 5.1.8.9 Level Crossing (“LX”) Controllers;
- 5.1.8.10 Service and Diagnostic System (“S&D”);
- 5.1.8.11 Train Control Officer (“TCO”) training simulator;
- 5.1.8.12 Technical Training simulator;
- 5.1.8.13 Driver Advisory System (“DAS”); and
- 5.1.8.14 Data File Management Tool.

5.1.9 Validation:

- 5.1.9.1 All the RSS sub-Systems and Equipment shall undergo the following Validation:

5.1.9.1.1 Level 1: Generic Product Validation:

5.1.9.1.1.1 A generic product Validation by an Authorised Institute recognised by a Main Railway Organisation;

5.1.9.1.1.2 The Contractor shall, at the Contractor's cost, submit all the necessary Validation certificates with detailed relevant documentation (Safety and Performance standards, etc.) to the Employer for review and approval by the Employer's Independent Safety Assessor.

5.1.9.1.2 Level 2: Functional Product Validation:

5.1.9.1.2.1 All RSS sub-Systems and Equipment shall have been, or shall be required to be, validated by the Employer's Independent Safety Assessor for compliance to the specified safety and functional requirements; and

5.1.9.1.2.2 The Contractor shall submit all relevant System/Equipment designs, specifications and reports to the Employer and/or Engineer for review and final acceptance by the Employer's and/or Engineer's Independent Safety Assessor.

- 5.1.10 The Contractor shall Design and implement a Validation model(s) at the Contractor's Project office, able to simulate all specified functional requirements for the purpose of Validation.
- 5.1.11 The Employer's and/or Engineer's Independent Safety Assessor shall validate and approve all Signalling sub- Systems and Equipment prior to implementation.
- 5.1.12 The Contractor shall submit the following designs and reports to the Employer and/or Engineer for review and final approval by the Employer and/or Engineer, in line with the Employer's Requirements, before implementation:
- 5.1.12.1 Signal Line plan;
 - 5.1.12.2 Headway simulation report;
 - 5.1.12.3 Cable plan and Cable Route plan;
 - 5.1.12.4 Control sheet;
 - 5.1.12.5 Typical Wiring diagrams;
 - 5.1.12.6 Book of Circuits for temporary and permanent interfaces to foreign interlockings; and
 - 5.1.12.7 Train Control Diagram and MMI layout.

5.1.13 The ETCS Level 2 Component of the Works shall, at a minimum, and as specified in the Employer's Requirements, this Contract and the RFP, consist of the following:

5.1.13.1 Provision for an ETCS Level 2 that complies with the Employer's and/or Engineer's ETCS Level 2 User Requirement Specification ("URS");

5.1.13.2 Testing and validating of the interfaces of the ETCS Level 2 Equipment with the Employer and/or Engineer and TFR infrastructure and ETCS Level 2 equipped rolling stock;

5.1.13.3 Provision for all Equipment required for the implementation of the ETCS Level 2 in accordance with the Employer's specifications;

5.1.13.4 Implement the ETCS Level 2 in KZN;

5.1.13.5 Provision for all the required resources to deliver and maintain the ETCS Level 2 Works; and

5.1.13.6 Any other ETCS Level 2 Works, activities and resources required to achieve a fully integrated, functional, complete and future-proofed PTCS and meet any other requirements and specifications as requested in the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer and/or Engineer.

5.1.14 The CTCC Component of the Works shall, at a minimum, and as specified in the Employer's Requirements, this Contract and the RFP, consist of the following:

- 5.1.14.1 The Design, Supply and implementation of refurbishments of the building and the terrain;
 - 5.1.14.2 The Design, Supply and implementation of required Systems for Traffic Control and associated support functions in the new CTCC building;
 - 5.1.14.3 Migration of Traffic Control and associated support functions to the new CTCC building;
 - 5.1.14.4 Any other CTCC Works, activities and resources required to achieve a fully integrated, functional, complete and future-proofed PTCS and meet any other requirements and specifications as requested at a minimum, and as specified in the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer and/or Engineer.
- 5.1.15 The Telecommunications Component of the Works shall, at a minimum, and as specified in the Employer's Requirements, this Contract and the RFP, consist of the following:
- 5.1.15.1 Provide an Optical Transmission Network ("OTN") to be used for at least interlocking Signalling remote monitoring and controls, tractions substations remote control and monitoring, telephone Systems, security surveillance System, access control and passenger information Systems;
 - 5.1.15.2 Provide an Electrical Remote Monitoring and Control System ("Telecontrol") that complies with the Employer's Requirements, this Contract and the RFP;

- 5.1.15.3 Provide a Telephone System for Operational Applications that complies with the Employer's Requirements, this Contract and the RFP;
 - 5.1.15.4 Provide a GPS time distribution System that complies with the Employers' Requirements, this Contract and the RFP;
 - 5.1.15.5 Provide an Asset Protection System that complies with the Employers' Requirements, this Contract and the RFP;
 - 5.1.15.6 Provide Telecommunication Equipment Rooms that complies with the Employers' Requirements, this Contract and the RFP;
 - 5.1.15.7 Provide all necessary telecommunications requirements at the Central Train Control Center ("CTCC");
 - 5.1.15.8 Any other Signalling Works, activities and resources required to achieve a fully integrated, functional, complete and future-proofed PTCS and meet any other requirements and specifications as requested in the Employers' Requirements, this Contract and the RFP; or as otherwise instructed in writing by the Employer and/or Engineer.
- 5.1.16 The design for the Optical Transmission Network ("OTN") shall be as follows:
- 5.1.16.1 The Contractor shall, in conjunction with the Employer and/or Engineer, conduct cable trench surveys for the Detailed Design of the cable routes;

- 5.1.16.2 The Detailed Design shall be approved by the Employer and/or Engineer prior to any Site(s) implementation is executed by the Contractor;
- 5.1.16.3 The Contractor shall be responsible for the OTN cable design, and such design shall be drawn using AutoCAD with Google Earth background to indicate the cable routes;
- 5.1.16.4 The Manhole coordinates shall be indicated on the Google Earth Drawing with 4 meters accuracy or better;
- 5.1.16.5 The Employer's Rail Engineering Services has adopted the V-Model Design methodology as a basis for managing System Design Process. The Contractor shall, therefore, also embrace this methodology when designing;
- 5.1.16.6 The Contractor shall follow the Design process with outputs in alignment to the V-Model as shown in the Employer's Requirements, that is, Figure 3.2.1 of Annexure 1.4: General Technical Requirements: Telecommunications to the RFP;
- 5.1.16.7 The Contractor shall adopt processes in the Employer's Requirements as shown in Figure 3.2.2 to Figure 3.2.6 [Annexure 1.4: General Technical Requirements: Telecommunication to the RFP];
- 5.1.16.8 The Contractor and the Employer and/or Engineer shall conduct Site(s) survey for detail Design; and
- 5.1.16.9 The Contractor shall during the Design and Installation process, review and revise the requirements and proposed solution with the

Employer and/or Engineer to ensure that the delivery System achieves its aims and objectives.

5.1.17 Civils and Track Component of the Works shall, at a minimum, and as specified in the Employer's Requirements, this Contract and the RFP, consist of the following:

5.1.17.1 Earthworks and drainage;

5.1.17.2 Permanent Way ("Perway") associated with the Signalling Works;

5.1.17.3 Perway associated with elimination of temporary and permanent speed restrictions as defined in the Employer's Requirements, this Contract and the RFP;

5.1.17.4 Electrification associated with the Signalling Works;

5.1.17.5 Temporary changes to existing Signalling for interim work;

5.1.17.6 Railway platforms;

5.1.17.8 Civil Engineering structures and drainage;

5.1.17.9 Provide Perway changes and upgrades in line with the resignalling requirements or as specifically specified in the Employer's Requirements, this Contract and the RFP;

- 5.1.17.10 Provide Equipment Rooms required for the Installation of the Railway Signalling System (“RSS”) with Train Control System (“ETCS Level 2”);
- 5.1.17.11 Upgrade Level Crossings (“LX”) according to the specified standards;
- 5.1.17.12 Provide drainage solutions to address wash-aways and flooding of trackside Equipment;
- 5.1.17.13 Provide platform alterations as specified in the Employer’s Requirements, this Contract and the RFP;
- 5.1.17.14 Provide new fully functional platforms;
- 5.1.17.15 Provide access roads to Equipment Rooms; and
- 5.1.17.16 Provide all required resources to deliver and maintain the Civil Structures and Track Works.
- 5.1.18 Notwithstanding any other requirements in the Employers’ Requirements, this Contract and the RFP; or as otherwise instructed in writing by the Employer and/or Engineer, the Contractor shall uncompromisingly deliver the whole of the Works required to achieve successful delivery of the Project.
- 5.1.19 The conceptual Design studies shall be used to produce a detailed Design that forms the basis of the Contractor’s work.
- 5.1.20 The Contractor shall develop the detailed Design that meets the requirements, at minimum cost.

- 5.1.21 The detailed Design proposed by the Contractor shall recognise the requirements of the Local Safety Rules and shall be constructed in such a manner that plant and equipment can be operated and maintained safely. As far as is possible, this shall be achieved without the need for site specific operating procedures to be written. If they are required, however, they shall be written by the Contractor and approved by the Employer and/or Engineer.
- 5.1.22 Where an interface exists with a Third Party, the Contractor shall coordinate the Design and Works to ensure a fully functional system in accordance with the Employer and/or Engineer requirements and good industry practice.
- 5.1.23 The Contractor and the Employer and/or Engineer shall conduct Site(s) survey for detail Design.
- 5.1.24 The Contractor shall during the Design and Installation process, review and revise the requirements and proposed solution with the Employer and/or Engineer to ensure that the delivery System achieves its aims and objectives.
- 5.1.25 All Designs shall comply with all relevant Standards, Specifications, Regulations and Procedures as specified through the Employer's Requirements, this Contract and the RFP.
- 5.1.26 Should the Contractor fail to meet any document management, reporting and Design procedures and requirements at any time throughout the duration of the Contract, it shall give the Employer an unprejudiced right to immediately apply penalties (as specified throughout the Employer's Requirements and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced until the date on which the Employer and or Engineer confirms, in writing, that it is completely satisfied that the incident is completely resolved by the Contractor).

- 5.1.27 The Contractor shall uncompromisingly submit all reports, Designs and/or other Project documentation, for all Works (as stated throughout the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer), to the Employer and/or Engineer for acceptance and approval by the Employer and/or Engineer before any procurement and Installation of the Works.
- 5.1.28 The Contractor shall uncompromisingly correct, re-check and re-submit any portions of the Contractor's reports, Designs and/or other Project documentation that do not comply with the Employer's Requirements, this Contract and the RFP (and instructions issued in writing by the Employer and/or Engineer) until unequivocal compliance is achieved to the absolute satisfaction of the Employer and/or Engineer. The Employer and/or Engineer need not give any exhaustive details as to why it does not accept the Contractor's reports, Designs and/or other Project documentation or portions thereof.
- 5.1.29 Despite any checks done by the Employer and/or Engineer, it remains the Contractor's responsibility to check its reports, Designs and/or other Project documentation and ensure unequivocal compliance with the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer and/or Engineer. For all the Designs, the Contractor shall provide proof of certification by a professional in terms of the South African Engineering Act and any other South African professional body as required in terms of South African legislation, regulations and by-laws.
- 5.1.30 The Employer and/or Engineer shall have the right to reject any and/or all of the Contractor's reports, Designs and/or other Project documentation should such reports, Designs and/or other Project documentation not uncompromisingly and unequivocally comply with the Employer's Requirements and the RFP (and instructions issued in writing by the Employer and/or Engineer) to the absolute satisfaction of the Employer and/or Engineer. The Employer shall not, under any

circumstance nor in any manner whatsoever, be held liable for any costs, delays or any other impacts (Material or otherwise) resulting from such rejection(s).

5.1.31 The Design shall, as a minimum, be prepared by:

5.1.31.1 2 (two) Senior Signalling Designers with experience exceeding 5 (five) years on similar Projects;

5.1.31.2 7 (seven) Signalling Designers with experience exceeding 3 (three) years on similar Projects;

5.1.31.3 1 (one) Signalling Checker with experience exceeding 7 (seven) years on similar Projects; and

5.1.31.4 1 (one) External Signalling Checker with experience exceeding 7 (seven) years on similar Projects.

5.1.32 Unless otherwise stated in the Employer's Requirements, this Contract and the RFP, the Contractor shall submit to the Employer and/or Engineer for approval the name, address, detailed particulars and relevant experience of each proposed designer/design Subcontractor.

5.1.33 The Contractor warrants that the Contractor, the Contractor's designers and design Subcontractors have the experience, capability and competence necessary for the design.

5.1.34 The Contractor undertakes that the designers and design Subcontractors shall be available to attend discussions with the Engineer and/or the Employer at all reasonable times (on or off the Site(s)), until the issuing of the Performance Certificate. Promptly after receiving a Notice under Sub-Clause 8.1

[Commencement of Works], the Contractor shall scrutinize the Employer's Requirements (including design criteria and calculations).

5.2 CONTRACTOR'S DOCUMENTS

5.2.1 The Contractor's Documents shall comprise of the documents:

- 5.2.1.1 specified in the Employer's Requirements, including but not limited to the RFP;
- 5.2.1.2 required to satisfy all permits, permissions, licenses and other regulatory approvals which are the Contractor's responsibility under this Contract and specifically Sub-Clause 1.14 [Compliance with Laws]; and
- 5.2.1.3 described under this Contract and specifically in Sub-Clause 5.6 (As-Built Records) and Sub-Clause 5.7 [Operation and Maintenance Manuals].

5.2.2 Preparation by Contractor

- 5.2.2.1 Unless otherwise stated in the Employer's Requirements, this Contract and the RFP, the Contractor's Documents shall be written in the language for communications defined in this Contract (Sub-Clause 1.4 [Law and Language]).
- 5.2.2.2 The Contractor shall prepare all Contractor's Documents, and any other documents necessary to complete and implement the design during execution of the Works and to instruct the Contractor's Personnel. The Employer's Personnel and/or the Engineer's Personnel shall have the right to inspect the preparation of all these

documents (including any investigation, modelling and testing), wherever they are being prepared.

5.2.3 **Review by Engineer**

5.2.3.1 In this Sub-Clause 5.2.3:

5.2.3.1.1 "Review Period" means the period generally not exceeding 21 calendar days, or as otherwise stated in the Employer's Requirements, this Contract and the RFP, or within a period defined at the discretion of the Employer and/or Engineer, calculated from the date on which the Employer and/or Engineer receives a Contractor's Document and a Contractor's Notice;

5.2.3.1.2 "Contractor's Document" excludes any of the Contractor's Documents which are not specified in the Employer's Requirements, this Contract and the RFP as being required to be submitted for Review, but includes all documents on which a specified Contractor's Document relies for completeness; and

5.2.3.1.3 "Contractor's Notice" means the written Notice which shall state that the relevant Contractor's Document is considered by the Contractor to be ready for Review under this Sub-Clause 5.2.3 and for use, and that it complies with the Employer's Requirements, this Contract and the RFP, or the extent to which it does not do so.

5.2.3.2 If the Employer's Requirements in this Contract and the RFP specify that the Contractor's Document is to be submitted to the Employer

and/or Engineer for Review, it shall be submitted accordingly, together with the Contractor's Notice.

5.2.3.3 The Employer and/or Engineer shall, within the Review Period, give a Notice, in writing, to the Contractor:

5.2.3.3.1 of No-objection (which may include comments concerning minor matters which will not substantially affect the Works); or

5.2.3.3.2 that the Contractor's document(s) fail(s) (to the extent stated) to comply with the Employer's Requirements, this Contract and/or the RFP, with reasons.

5.2.3.4 If the Employer and/or Engineer instructs that further Contractor's Documents are reasonably required to demonstrate that the Contractor's design complies with the Employer's Requirements, this Contract and the RFP, the Contractor shall prepare and submit them Promptly to the Employer and/or Engineer at the Contractor's cost.

5.2.3.5 If the Employer and/or Engineer gives a Notice, in writing, under subparagraph 5.2.3.3.2 above, the Contractor shall:

5.2.3.5.1 revise the Contractor's Document;

5.2.3.5.2 resubmit it to the Employer and/or Engineer for Review in accordance with this Sub-Clause 5.2.3, and the Review Period shall be calculated from the date that the Engineer receives it; and

5.2.3.5.3 not be entitled to EOT for any delay caused by any such revision and resubmission and/or by subsequent Review by the Employer and/or Engineer.

5.2.3.6 If the Employer incurs additional costs as a result of such resubmission and subsequent Review, the Employer shall be entitled subject to Sub-Clause 20.2[Claims for Payment and/or EOT] to payment by the Contractor of the costs reasonably incurred.

5.2.4 **Construction**

5.2.4.1 Except for the Contractor's Documents under Sub-Clause 5.6 [As-Built Records] and Sub-Clause 5.7 [Operation and Maintenance Manuals], for each part of the Works requiring the Contractor's Documents to be submitted for Review:

5.2.4.1.1 construction of such a part shall not commence until a Notice of No-objection is given by the Employer and/or Engineer for all the Contractor's Documents which are relevant to its design and execution;

5.2.4.1.2 construction of such a part shall be in accordance with these Contractor's Documents; and

5.2.4.1.3 the Contractor may modify any design or the Contractor's Documents which have previously been submitted for Review, by giving a Notice, in writing, to the Employer and/or Engineer with reasons. If the Contractor has commenced construction of the part of the Works to which such design or the Contractor's documents are relevant:

5.2.4.1.3.1 work on this part shall be suspended;

5.2.4.1.3.2 the provisions of Sub-Clause 5.2.3 [Review by Engineer] shall apply as if the Employer and/or Engineer had given a Notice, in writing, in respect of the Contractor's Documents under subparagraph 5.2.3.3.2 of Sub-Clause 5.2.3; and

5.2.4.1.3.3 work on this part shall not resume until a Notice of No-objection is given by the Employer and/or Engineer for the revised documents.

5.3 CONTRACTOR'S UNDERTAKING

5.3.1 The Contractor undertakes that the design, the Contractor's Documents, the execution of the Works and the completed Works will be in accordance with:

5.3.1.1 the Laws of the Country;

5.3.1.2 the Employer's Requirements; and

5.3.1.3 the documents forming the Contract, as altered or modified by instructions issued in writing by the Employer and/or the Engineer (acting on the written instructions of the Employer) and/or Variations approved by the Employer and/or the Engineer (acting on the written instructions of the Employer) in accordance with this Contract.

5.4 TECHNICAL STANDARDS AND REGULATIONS

- 5.4.1 The Contractor's Documents, the execution of the Works and the completed Works (including defects remedied by the Contractor) shall comply with the Country's technical standards, building, construction and environmental Laws, Laws applicable to the product being produced from the Works, and other standards specified in the Employer's Requirements, this Contract and the RFP, applicable to the Works, or defined by applicable Laws.
- 5.4.2 All these technical or other standards and Laws shall, in respect of the Works, and each Section and Part, be those in force when the Works or Section or Part are taken over under Clause 10 [Employer's Taking Over].
- 5.4.3 References in the Contract to published standards shall be understood to be references to the edition applicable on the Base Date, unless stated otherwise. If changed or new applicable standards come into force in the Country after the Base Date, the Contractor shall Promptly give a Notice, in writing, to the Employer and/or Engineer and (if appropriate or requested by the Engineer) submit proposals for compliance. To the extent that:
- 5.4.3.1 the Employer and/or Engineer considers that compliance is required and such compliance requires change(s) to the execution of the Works; and
- 5.4.3.2 the Contractor's proposals for compliance constitute a Variation; then the Employer and/or Engineer shall initiate a Variation in accordance with this Contract (Clause 13 [Variations and Adjustments]).

5.5 TRAINING

- 5.5.1 The Contractor shall carry out training of employees of the Employer and/or employees of the Engineer (and/or other personnel identified in the Employer's Requirements) in the operation and maintenance of the Works, and any other aspect of the Works, to the extent specified in the Employer's Requirements, this Contract and the RFP.
- 5.5.2 If the Employer's Requirements, this Contract and the RFP specify training which is to be carried out before taking over, the Works shall not be considered to be completed for the purposes of taking over under this Contract (Sub-Clause 10.1 [Taking Over the Works and Sections]) until this training has been completed in accordance with the Employer's Requirements, this Contract and the RFP.
- 5.5.3 The timing of the training shall be as stated in the Employer's Requirements, this Contract and the RFP (if not stated, as acceptable to the Employer). The Contractor shall provide qualified and experienced training staff, training facilities and all training Materials as necessary and/or as stated in the Employer's Requirements, this Contract and the RFP.
- 5.5.4 The Contractor shall, at the Contractor's cost, arrange a detailed ERTMS Project management training for all the Employer's representatives (consisting of a minimum of 8 personnel or at any given instance as instructed by the Employer and/or Engineer). The Project management training shall be conducted at an accredited training facility, and such training shall be delivered within 6 (six) calendar months from the Completion Date.
- 5.5.5 The Contractor shall be responsible for the cost of the course, travel, accommodation and any other cost related to the attendance of the implementation Project management training.

- 5.5.6 The Contractor shall, at the Contractor's cost, arrange detailed ERTMS and RSS (Technology offered in the Contractor's Proposal at a minimum) technical training for all the Employer's representatives (consisting of a minimum of 8 personnel or at any given instance as instructed by the Employer and/or Engineer). The detailed ERTMS and RSS technical training shall be conducted at an accredited training facility and such training shall be delivered within 6 (six) calendar months from the Completion Date.
- 5.5.7 The Contractor shall be responsible for the cost of the course, travel, accommodation and any other cost related to the attendance of the technical training.
- 5.5.8 The Contractor shall, at the contractor's cost, at a minimum, provide all necessary Training (Theoretical, Practical, Technical and Operational), as instructed by the Employer and /or Engineer, for all the Employer's TCOs, Section Managers and Duty Managers as specified in the Employer's Requirements, this Contract and the RFP, as follows:
- 5.5.8.1 Various Training sessions conducted to accommodate shift working;
 - 5.5.8.2 Traffic Control personnel working specific Sections are not trained more than 2 (two) months prior Commissioning of that Section;
 - 5.5.8.3 Traffic Control personnel Training consists of an operating procedure module and an Equipment module. The operating procedure module include all changes to the operating procedures and rules. The Equipment module provides Training on how to operate the newly installed PTCS and associated Systems;
 - 5.5.8.4 The Training includes a theoretical session as well as a practical session on the Training simulator;

- 5.5.8.5 Any other Training as instructed in writing by the Employer.
- 5.5.9 The Contractor shall, at a minimum, provide all necessary Training (Theoretical, Practical, Technical and Operational), as instructed by the Employer, for all the Employer and TFR Train Drivers, Section managers, Track Masters and other relevant train driver personnel in the KZN as specified in the Employer's Requirements, this Contract and the RFP, as follows:
- 5.5.9.1 Various Training sessions conducted to accommodate shift working;
- 5.5.9.2 Train driver personnel working specific Sections are not trained more than 2 (two) months prior Commissioning of that Section;
- 5.5.9.3 Train Driver personnel Training consists of an operating procedure module including all changes to the operating procedures and rules;
- 5.5.9.4 The Training includes a theoretical session as well as a practical session on the Training simulator; and
- 5.5.9.5 Any other Training as instructed in writing by the Employer and/or Engineer.
- 5.5.10 The Contractor shall, at a minimum, provide all necessary Training (Theoretical, Practical, Technical and Operational), as instructed by the Employer, for all the Employer's Maintenance personnel and associated managers in the KZN as specified in the Employer's Requirements, this Contract and the RFP, as follows:

- 5.5.10.1 Various Training sessions for the different Training modules are conducted to accommodate the Employer's operational constraints and requirements;
- 5.5.10.2 Maintenance personnel working specific Sections are not trained more than 2 (two) months prior to the Installation work for the specific discipline commencing in that Section;
- 5.5.10.3 Training is provided for all and any proprietary Plant and Materials or new Technology installed as part of the Project.
- 5.5.10.4 Different Training modules are provided for different level maintainers as per the developed Maintenance strategy.
- 5.5.10.5 Training is focused on installation, maintenance, condition monitoring, fault finding and fault correction at the appropriate level as per the developed Maintenance strategy.
- 5.5.10.6 Training is conducted for each individual Equipment type and new Technology installed as part of the Project, as well as all sub-Systems and the PTCS in its entirety, including all interfaces.
- 5.5.10.7 The Training includes a theoretical session, a practical session on the Training simulator or an actual Installation, as well as on the job Training during Construction, Testing and Commissioning.
- 5.5.10.8 Courses include practical exposure to the actual Installations involved as well as the use of any Test Equipment supplied.

5.5.10.9 Any other Training as instructed in writing by the Employer and/or Engineer.

5.5.11 The Contractor shall, at the Contractor's cost, at a minimum, provide Technical Refresher Training for all the Employer's Maintenance personnel and all associated managers as specified in the Employer's Requirements, this Contract and the RFP, as follows:

5.5.11.1 Various Training sessions for the different Training modules are conducted to accommodate the Employer's operational constraints and requirements.

5.5.11.2 Refresher training is provided 8 months prior to the end of the Maintenance, Warranty and Defects Liability period.

5.5.11.3 Training is provided for all and any proprietary Plant and Materials or new Technology installed as part of the Project.

5.5.11.4 Different Training modules are provided for different level maintainers as per the developed Maintenance strategy.

5.5.11.5 Training is focused on installation, maintenance, condition monitoring, fault finding and fault correction at the appropriate level as per the developed Maintenance strategy.

5.5.11.6 Training is conducted for each individual Equipment type and new Technology installed as part of the Project, as well as all sub-Systems and the PTCS in its entirety (including all interfaces).

- 5.5.11.7 The Training includes a theoretical session, a practical session on the Training simulator or an actual Installation, as well as at least 6 (six) months on the job Training during the Maintenance, Warranty and Defects Liability period.
 - 5.5.11.8 Courses include practical exposure to the actual Installations involved as well as the use of any Test Equipment supplied.
 - 5.5.11.9 Any other Training as instructed in writing by the Employer and/or Engineer.
- 5.5.12 The Contractor shall, at the Contractor's cost, train all relevant Employer and TFR technical and operational trainers and provide the trainers with Training Material to continue Training activities after the Completion Date. The Contractor shall certify the trainer competent to conduct Training for a specified module. The Contractor shall repeat trainer Training up to 3 (three) times for each module where required to ensure trainer competence.
- 5.5.13 The Contractor shall, at the contractor's cost, train at least 15 (fifteen) members of the Employer's and/or Engineer's Project staff on the Installation, operation, Maintenance and fault finding of any proprietary Plant and Materials and new Technology including, but not limited to:
- 5.5.13.1 Design checking staff before acceptance checking of plans.
 - 5.5.13.2 The Employer's and/or Engineer Site(s) representatives before Installation starts.
 - 5.5.13.3 Five (5) Persons doing acceptance Testing and Commissioning before Commissioning starts.

5.5.14 The Contractor shall provide Training to at least 10 members of the Employer's staff to do data Engineering and configuration changes including, but not limited to:

5.5.14.1 Trainee competence are evaluated through a formal assessment; and

5.5.14.2 Competent trainees are certified as competent to do data Engineering and configuration changes.

5.5.15 All Training and courses shall be presented in English. Comprehensive student notes shall be prepared in English and issued to all course attendants.

5.5.16 The Contractor shall submit the Training concept, Training plan and Training Material to the Employer and/or Engineer for approval before the commencement of Training.

5.5.17 The Contractor shall, at the Contractor's cost, arrange for Technology transfer to the Employer. The Contractor shall provide comprehensive Installation manuals, Maintenance manuals, operating manuals and Spares catalogues for all proprietary Plant and Materials, and for Test Equipment installed or used as part of the Contract and Project.

5.5.18 The Contractor shall submit at least 5 (five) copies of complete sets of draft manuals in English, and in a corresponding Adobe (PDF) format, to the Employer and/or Engineer for approval.

5.5.19 The Contractor shall submit at least 20 copies of complete sets of manuals in English, and in a corresponding Adobe (PDF) format, to the Employer in compliance with the approved Project Programme.

5.5.20 In addition, the Contractor shall submit at least 20 copies stored on DVD's for all approved Manuals.

5.5.21 All Printouts shall, at the Contractor's cost, be bound with hard covers and of detachable design. Convenience of detaching pages within the manuals shall be put into consideration. All Manuals shall adopt A4 size with double side printed pages except reference drawings that shall use A3 size with single side printed pages.

5.5.22 The Manuals shall be consistent in format, layout, identifiers and revisions approved in writing by the Employer. A master index covering all individual manuals' versions shall be provided. The master index shall bear a unique number which shall be revised when an individual manual is updated.

5.6 As-Built Records

5.6.1 The Contractor shall prepare, and keep up-to-date, a complete set of "as-built" records of the execution of the Works, showing the exact as-built locations, sizes and details of the work as executed by the Contractor.

5.6.2 The format, referencing system, system of electronic storage and other relevant details of the as-built records shall be as stated in the Employer's Requirements, this Contract and the RFP.

5.6.3 These records shall be kept on the Site(s) and shall be used exclusively for the purposes of this Sub-Clause. The Contractor shall submit to the Employer and/or Engineer under this Contract (Sub-Clause 5.2.3 [Review by Engineer]):

5.6.3.1 the as-built records for the Works or Section (as the case may be) before the commencement of the Tests on Completion; and

5.6.3.2 updated as-built records to the extent that any work is executed by the Contractor:

5.6.3.2.1 during and/or after the Tests on Completion, before the issue of any Taking-Over Certificate under this Contract (Sub-Clause 10.1 [Taking Over the Works and Sections]); and

5.6.3.2.2 after taking over under this Contract (Sub-Clause 10.1 [Taking Over the Works and Sections]), before the issue of the Performance Certificate.

5.6.4 The number of copies of as-built records to be submitted by the Contractor under this Sub-Clause shall be as required under Sub-Clause 1.8 [Care and Supply of Documents].

5.7 Operation and Maintenance Manuals

5.7.1 The Contractor shall prepare, and keep up-to-date, a complete set of operation and maintenance manuals for the Works (the "O&M Manuals" in these Conditions).

5.7.2 The format and other relevant details of the O&M Manuals shall be as stated in the Employer's Requirements, this Contract and the RFP and, in any case, these manuals shall:

5.7.2.1 be in sufficient detail for the Employer and/or Engineer to:

5.7.2.1.1 operate, maintain and adjust the Works to ensure that the performance of the Works, Section and/or Plant (as the case may be) continues to comply with the performance

criteria specified in the Employer's Requirements, this Contract, the RFP and the Schedule of Performance Guarantees; and

5.7.2.1.2 operate, maintain, dismantle, reassemble, adjust and repair the Plant; and

5.7.2.2 include an inventory of spare parts required for the Employer's future operation and maintenance of the Plant.

5.7.3 Before commencement of the Tests on Completion, the Contractor shall submit provisional O&M Manuals for the Works or Section (as the case may be) to the Employer and/or Engineer under this Contract (Sub-Clause 5.2.3 [Review by Engineer]).

5.7.4 If during the Tests on Completion any error or defect is found in the provisional O&M Manuals, the Contractor shall Promptly rectify the error or defect at the Contractor's risk and cost.

5.7.5 Before the issue of any Taking-Over Certificate under Sub-Clause 10.1 [Taking Over the Works and Sections], the final O&M Manuals shall be submitted to the Employer and/or Engineer under Sub-Clause 5.2.3 [Review by Engineer].

5.7.6 If errors, omissions, ambiguities, inconsistencies, inadequacies or other defects are found in the Contractor's design and/or the Contractor's Documents, they and the Works shall be corrected in accordance with Sub-Clause 7.5 [Defects and Rejection].

5.7.7 If such Contractor's Documents were previously the subject of a Notice of No-objection given (or deemed to be given) by the Engineer under Sub-Clause 5.2.3

[Review by Engineer], the provisions of Sub-Clause 5.2.3 shall apply as if the Employer and/or Engineer had given a Notice, in writing, in respect of the Contractor's Documents under sub-paragraph 5.2.3.3.2 of Sub-Clause 5.2.3.

- 5.7.8 All corrections and resubmissions under this Sub-Clause shall be at the Contractor's risk and cost.

6. STAFF AND LABOUR

6.1 STAFF AND LABOUR ENGAGEMENT OF CONTRACTOR SPECIFICATION AND LABOUR

- 6.1.1 Except as otherwise stated in the Employer's Requirements, this Contract and the RFP the Contractor shall make arrangements for the engagement of all the Contractor's Personnel, and for their payment, accommodation, feeding, transport and welfare.
- 6.1.2 The Employer may, solely at the Employer's discretion and without consequence or liability to the Employer, instruct the Contractor to remove any of the Contractor's personnel deployed throughout the duration of the Contract for any reason deemed appropriate by the Employer.
- 6.1.3 The Contractor shall immediately comply with this instruction and appoint suitable replacement personnel within 60 calendar days of receiving such an instruction for which such replacement personnel shall first be approved in writing by the Employer and/or Engineer.
- 6.1.4 Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer an unprejudiced right to immediately apply penalties (as specified throughout the Employer's Requirements,

this contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced until the date on which the Employer confirms, in writing, that the Employer is completely satisfied that the incident is completely resolved by the Contractor).

6.2 RATES OF WAGES AND CONDITIONS OF LABOUR

- 6.2.1 The Contractor shall pay rates of wages, and observe conditions of labour, which comply with all applicable Laws of the Republic of South Africa and are not lower than those established for the trade or industry where the work is carried out.
- 6.2.2 If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

6.3 RECRUITMENT OF PERSONS

- 6.3.1 The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst the Employer's Personnel. Neither the Employer nor the Engineer shall recruit, or attempt to recruit, staff and labour from amongst the Contractor's Personnel.
- 6.3.2 The Contractor shall further, as part of the contract, provide a detailed list of personnel envisaged to be utilised on the Project together with each person's function/roles/responsibilities and the hours of utilisation for each resource, further providing Hourly Rates for each person linked to each function/role/responsibility and the hours of utilisation for each resource. Such Hourly Rates shall be as at the base date of submission of the Contractor's Proposal and transparently demonstrate the calculation of each Hourly Rate (i.e. proven cost plus overhead plus profit) using the Department of Public Service and Administration ("DPSA") method.

6.4 LABOUR LAWS

- 6.4.1 The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment (including wages and working hours), health, safety, welfare, immigration and emigration, and shall allow them all their legal rights. The Contractor shall require the Contractor's Personnel to obey all applicable Laws, including those concerning health and safety at work.
- 6.4.2 The Contractor shall give all Notices, in writing, required by and shall comply with all Laws and Regulations applicable to the performance of the Works. Except where otherwise expressly required by applicable Laws and Regulations, neither the Employer nor the Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- 6.4.3 If the Contractor performs any Work(s) knowing or having reason to know that is contrary to the Laws or Regulations, the Contractor shall bear all Claims, costs, losses, Penalties and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work(s).
- 6.4.4 Changes in Laws or Regulations not known at the time of opening Bids having an effect on the cost or time of performance of the Work may be the subject of an adjustment in Contract Price or Contract Times. Should this event occur, the Contractor shall submit a detailed impact statement and motivation (including, but not limited to, detailed substantiation of the causes and effects and proof of actions taken by the Contractor to mitigate and/or minimise any loss) together with a detailed cost for consideration by the Employer and/or Engineer and for which the outcome of the consideration shall be at the sole discretion of the Employer and /or Engineer.

6.4.5 The Contractor shall, at no additional cost to the Employer, adhere to all related legislation (as amended from time to time) and any further instructions and targets that the Employer and/or Engineer may instruct the Contractor to comply with (on behalf of the Employer or on behalf of any other organ of the South African Government) throughout the duration of the Contract.

6.5 WORKING HOURS

6.5.1 No work shall be carried out on the Site(s) on locally recognised days of rest, or outside the normal working hours stated in the Employer's Requirements, Contract and any other stipulations of the RFP, unless:

6.5.1.1 otherwise stated in the Employer's Requirements, this Contract and the RFP, the Engineer's approval; or

6.5.1.2 the work is unavoidable for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately give a Notice, in writing, to the Employer and/or Engineer with reasons and describing why the work is required, what work is required and how the work will be undertaken for approval by the Engineer.

6.5.2 The Contractor shall comply with the following hours of work on Site(s):

6.5.2.1 Normal working hours on Site(s) means the hours of work, as determined by a wage regulating measure or statutory enactment for any trade or activity, in respect of which the basic minimum rate of pay is applicable and excludes all time for which a higher rate of pay is obligatory. Where no wage regulating measure is in force, the normal hours of work shall be 07h00 to 17h00 Mondays to Fridays, including statutory meal breaks.

6.5.3 The Contractor shall confine his work to normal working hours except when work outside these hours is:

6.5.3.1 Specifically provided for in the Contract;

6.5.3.2 Permitted by the Employer and/or Engineer at the Contractor's request;

6.5.3.3 Instructed in writing by the Employer and/or Engineer.

6.5.4 Acceptance Testing and Commissioning may occur during undefined hours, and may include weekends, public holidays and night work, solely at the discretion of the Employer and/or Engineer and in accordance with Employer's requirements, Contract and RFP.

6.5.5 In instances where the Contractor proposes to work outside normal working hours, the Contractor shall apply to the Employer and/or Engineer at least 21 (twenty-one) working days in advance, unless in the case of the work being unavoidable for the protection of life or property or for the safety of the Works. The Employer and/or Engineer's approval is subject to such conditions as the Employer and/or Engineer may impose on the Contractor to protect the Employer's interests. Such approval may be withdrawn by the Employer and/or Engineer at any time and without consequence and liability to the Employer. The Contractor is not entitled to any Claim for additional payment or time arising from either the Employer and/or Engineer's refusal to approve such work or granting of such approval or withdrawal of the approval by the Employer and/or Engineer.

6.6 FACILITIES FOR STAFF AND LABOUR

- 6.6.1 Except as otherwise stated in the Employer's Requirements, this Contract and/or the RFP, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel.
- 6.6.2 If such accommodation and facilities are to be located on the Site(s), except where the Employer has given the Contractor prior permission, they shall be located within the areas identified in the Contract and the RFP.
- 6.6.3 If any such accommodation or facilities are found elsewhere within the Site(s), the Contractor shall immediately remove them at the Contractor's risk and cost.
- 6.6.4 The Contractor shall also provide facilities for the Employer's Personnel and Engineer's Personnel as stated in the Employer's Requirements including, but not limited to, the General Technical Requirements of the RFP. In addition, the Contractor shall, for all Employer's representatives (minimum 7 personnel or at any given instance as instructed by Employer) and at the Contractor's cost, uncompromisingly provide all unlimited; Materials, facilities, samples, Equipment, travel (air and rail and road), accommodation, meals, incidentals, unfettered access and any other means required for Employer to attend and/or perform any local and international; Inspections, Validation, Factory Acceptance Testing ("FAT"), Site Acceptance Testing ("SAT"), Tests on Completion, Commissioning, Completion and Taking Over of the Works by Employer (in Sections thereafter the whole of the Works).

6.7 HEALTH AND SAFETY OF PERSONNEL

- 6.7.1 The Contractor shall be responsible for all Occupational Health and Safety ("OHS) matters on the Project for the entire duration of the Contract including Maintenance, Warranty and Defects Liability period.

- 6.7.2 The Contractor shall provide protection to all personnel from the danger of passing trains.
- 6.7.3 The Contractor shall implement an OHS Management Plan (“OHS” Plan) that complies with the Health and Safety specifications as stated in the Employer’s Requirements, this Contract and the RFP.
- 6.7.4 The wearing of specified Personnel Protective Equipment shall be compulsory whilst on or near railways lines or service roads.
- 6.7.5 The Contractor shall, at the Contractor’s cost, provide the Employer with at least 15 full sets of Personal Protective Equipment (“PPE”), including safety boots, reflector vests, hard hats, hearing protection and gloves in the sizes as advised by the Employer and/or Engineer.
- 6.7.6 The PPE requirements for personnel working on near railway lines or services roads shall be as follows:
- 6.7.6.1 Reflective vests shall be required for all personnel in the vicinity of a railway line or service road and Equipment Room;
 - 6.7.6.2 Safety boots shall be required for all personnel on Site(s);
 - 6.7.6.3 Hard hats shall be required where there is a danger of falling objects or close to overhead work;
 - 6.7.6.4 Overalls shall be required for all Installation personnel.

- 6.7.7 The Contractor shall comply with the relevant legislation and ordinances including, but not limited to, all the traffic signs, speed limits, on service roads. Vehicles main head lights and taillights shall always be switched on when moving on service roads.
- 6.7.8 When doing installations or working in the vicinity of high voltage equipment, the Contractor shall take the necessary precautionary measures to safeguard all personnel against injury.
- 6.7.9 The Contractor shall consider all equipment as “live”, notwithstanding any safety measures in the system to reduce induces stray voltages to a safe level.
- 6.7.10 Prior work commences the Contractor shall make all personnel aware of the danger of “live” electrical wires and cables as well as induced stray voltages from AC electrification into signalling cables and equipment.
- 6.7.11 Should any of the Contractor’s personnel arriving at any Site(s), including Equipment Rooms and substations, the Contractor shall inform the Train Control Operator (“TCO”) of his presence. The Contractor shall also accurately record the date, time and his activities daily in the Equipment Maintenance book.
- 6.7.12 Should the Contractor enter a CTCC or any other train control office, the Contractor shall identify all applicable personnel to the Section Manager in charge and states the purpose of his visit and enter the details of and reason for the Contractor’s visit in the CTCC or train control office logbook and signs the entry.
- 6.7.13 Before the Contractor leaves the Site(s) or CTCC or train control office, the Contractor shall report all intended movements to the Section Manager in charge.

- 6.7.14 The Contractor shall ensure that restricted access is in place at all Construction Site(s) and Site(s) camps.
- 6.7.15 The Contractor shall provide security guards on Site(s) for all personnel, Equipment, Plant and Materials, and Employer's representatives performing their duties. Deployment of security personnel shall be arranged in consultation with Employer and/or Engineer subject to the applicable Employer's Requirements.
- 6.7.16 The Contractor shall liaise with Employer's security personnel so that they are always aware of the Contractor's security arrangements on Site(s) and Supply all personnel with clearly identifiable clothing clearly marked with Project and the Contractor's details.
- 6.7.17 The Contractor shall Supply all personnel with an ID card containing the personnel's photo and identity number and status of employment with the Contractor. All personnel shall always carry this document. The Contractor shall also ensure that persons no longer in the Contractor's employ, do not have those ID cards in their possession.
- 6.7.18 Persons with criminal convictions shall not be employed on Site(s)
- 6.7.19 The Contractor shall ensure that no person is hired or paid on Site(s)
- 6.7.20 The Contractor Shall ensure that all vehicles on Site(s) shall have the Contractors name clearly marked in a conspicuous position.
- 6.7.21 All the Contractor's personnel shall undergo a security briefing before they are allowed on Site(s)

- 6.7.22 The Contractor's OHS plan shall include a detailed method statement on how security matters shall be managed on the Site(s).
- 6.7.23 The Contractor shall comply with all the applicable legislation, regulations issued in terms thereof and Employer's safety rules, regulations and guidelines entirely at the Contractor's own cost.
- 6.7.24 The Contractor's OHS plan shall, at a minimum, comply with all standards, specifications, regulations and procedures as stated in the Employer's Requirements, this Contract and the RFP.
- 6.7.25 The Contractor shall comply with the Occupational Health and Safety Act, 1993, and the Site(s) shall be deemed to be under the Contractor's control for the duration of the Contract. The Contractor shall be responsible for all Occupational Health and Safety ("OHS") matters on the Project for the entire duration of the Contract therefore including execution of the Works during Maintenance, Warranty and Defects Liability period and including subsequent defects correction periods during which work is taking place. The Contractor may, at the discretion of Employer, be regarded as Employer and is responsible for ensuring that the requirements of the Act and the regulations are implemented in the working areas.
- 6.7.26 All the Contractor's Site(s) personnel shall attend Employer's and/or the Contractor's OHS safety induction courses before commencement of any Works on any Site(s). The duration of each course is anticipated to be a maximum of 8 hours during normal working hours.
- 6.7.27 Blasting shall not be allowed on Site(s)
- 6.7.28 The Contractor shall at a minimum comply with the following Acts:-

- 6.7.28.1 The Compensation for Occupational Injuries and Diseases Act (Act 130 of 1993). The Contractor shall produce proof of registration and good standing with Compensation Commissioner in terms of the Act.
- 6.7.28.2 The Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended and Regulations issued in terms thereof or un-repealed regulations issued in terms of the former Act no. 6 of 1983.
- 6.7.28.3 The Explosives Act No. 26 of 1956 (as amended). The Contractor, where applicable shall furnish the Project Manager with copies of the permits authorising the Contractor to establish an explosives magazine on or near the Site(s).
- 6.7.28.4 Act 85 registration of the sites(s) on behalf of Employer shall be done by the Contractor, in consultation with Employer and/or engineer.
- 6.7.29 Employer's safety representative shall attend all Site(s) safety meetings called for in terms of the Occupational Health and Safety Act 85 of 1993. The Contractor shall Promptly submit copies of the minutes of these meetings to Employer and/or Engineer. These meetings shall be monitored to identify any action required to rectify problems.
- 6.7.30 The storage of flammable Materials shall require attention and management.
- 6.7.31 Exceptional care shall be required when welding, flame cutting or other fire hazard operations occur, and the Contractor shall provide suitable firefighting Equipment at close hand to those operations.
- 6.7.32 The Contractor shall report all accidents in writing to Employer and/or Engineer. Any accident resulting in the death or injury to any person in the working areas

shall be reported within 24 hours of its occurrence, and any other accident shall be reported within 48 hours of its occurrence.

- 6.7.33 Telephone numbers of emergency services, including the local firefighting service, shall be posted conspicuously in the Contractor's Site(s) office near the telephone.
- 6.7.34 The Contractor shall provide suitable shoring of cable trenches.
- 6.7.35 The Contractor shall provide the required services to clean and sanitise the Site(s) from hazards, including raw sewage, as and when required for the purpose of performing Works.
- 6.7.36 The Contractor shall provide additional protection Equipment and clothing for all personnel required for working in areas where environmental and health issues exists.
- 6.7.37 In addition to the requirements of Sub-Clause 4.8, the Contractor shall at all times take all necessary precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that:
 - 6.7.37.1 medical staff, first aid facilities, sick bay, ambulance services and any other medical services stated in the Employer's Requirements are available at all times at the Site(s) and at any accommodation for the Contractor's and the Employer's Personnel; and
 - 6.7.37.2 suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

6.7.38 The Contractor shall appoint a health and safety officer at the Site(s), responsible for maintaining health, safety and protection against accidents. This officer shall:

6.7.38.1 be qualified, experienced and competent for this responsibility; and

6.7.38.2 be qualified, experienced and competent for this responsibility; and have the authority to issue directives for the purpose of maintaining the health and safety of all personnel authorised to enter and/or work on the Site(s) and to take protective measures to prevent accidents.

6.7.39 Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

6.8 CONTRACTOR'S SUPERINTENDENCE

6.8.1 The Contractor (who is deemed to be an expert in the Works and the Project) shall supervise, inspect, and direct the Works competently and efficiently, devoting such attention thereto and applying such skills and experience as may be necessary to the Works in accordance with the Contract Documents. The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of management, Planning, Design, Supply, Construction, Installation, Testing, Commissioning and Maintenance of a new fully integrated, functional, complete and future proofed Employer Train Control System. operations and maintenance to deliver the Works and the Project to the satisfaction of the Employer under the provisions of this Contract and the RFP.

6.8.2 At all times during the progress of the Work, the Contractor shall assign a competent resident superintendent who shall not be replaced without written Notice to Employer and/or Engineer except under extraordinary circumstances. The superintendent will be the Contractor's representative at the Site(s) and shall have

authority to act on behalf of the Contractor. All communications given to or received from the superintendent shall be binding on the Contractor.

6.8.3 From the Commencement Date until the issue of the Performance Certificate, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect, test and monitor the execution of the Works. Superintendence shall be given by a sufficient number of persons:

6.8.3.1 who are fluent in or have adequate knowledge of the language for communications (defined in Sub-Clause 1.4); and

6.8.3.2 who have adequate knowledge of the operations to be carried out (including methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

6.9 CONTRACTOR'S PERSONNEL

6.9.1 The Contractor's Personnel (including Key Personnel, if any) shall always be appropriately qualified, skilled, experienced and competent in their respective trades or occupations.

6.9.2 The Contractor shall always provide competent, suitably qualified personnel to survey and lay out the Works and perform construction as required by the Employer's Requirements, this Contract and the RFP. The Contractor shall at all times maintain good discipline and order at the Site(s).

6.9.3 The Employer and/or Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site(s) or Works, including the Contractor's Representative and Key Personnel, who:

- 6.9.3.1 persists in any misconduct or lack of care;
 - 6.9.3.2 carries out duties incompetently or negligently; fails to comply with any provision of the Contract;
 - 6.9.3.3 persists in any conduct which is prejudicial to safety, health, or the protection of the environment;
 - 6.9.3.4 is found, based on reasonable evidence, to have engaged in corrupt, fraudulent, collusive or coercive practice;
 - 6.9.3.5 has been recruited from the Employer's Personnel in breach of Sub-Clause 6.3 [Recruitment of Personnel]; or
 - 6.9.3.6 for any other reason as deemed appropriate by the Employer and/or Engineer.
- 6.9.4 If appropriate, the Contractor shall then Promptly appoint (or cause to be appointed) a suitable replacement. In the case of the replacement of the Contractor's Representative's, Sub-Clause 4.3 [Contractor's Representative] shall apply. In the case of the replacement of Key Personnel, Sub-Clause 6.12 [Key Personnel] shall apply.

6.10 CONTRACTOR'S RECORDS

- 6.10.1 The Contractor shall always maintain in a safe place at the Site(s) one record copy of all Drawings, Specifications, Addenda, change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications, and any other documents

and records stipulated in the RFP, in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will always be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Employer in formats, with details and in manners determined and approved by the Employer and/or Engineer.

6.10.2 Unless otherwise proposed by the Contractor and agreed by the Employer and/or Engineer, in each progress report under Sub-Clause 4.20, [Progress Reports] the Contractor shall further include records of:

6.10.2.1 occupations and actual working hours of each class of the Contractor's Personnel including detailed, verifiable and signed site diaries and logs;

6.10.2.2 the type and actual working hours of each of the Contractor's Equipment;

6.10.2.3 the types of Temporary Works used;

6.10.2.4 the types of Plant installed in the Permanent Works; and the quantities and types of Materials used for each work activity shown in the Programme, at each work location and for each day of work.

6.10.3 The Contractor shall keep record of all maintenance performed and shall submit such records to the Employer and/or Engineer monthly in formats, with details and in manners determined and approved by the Employer and/or Engineer.

6.11 DISORDERLY CONDUCT

The Contractor shall at all times take all necessary precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site(s).

6.12 KEY PERSONNEL

- 6.12.1 The Contractor shall appoint the natural persons named in the Contract and the RFP to the positions of Key Personnel. If not so named, or if an appointed person fails to act in the relevant position of Key Personnel, the Contractor shall submit to the Employer and/or Engineer for approval the name and particulars of another person the Contractor proposes to appoint to such position. If approval is withheld or subsequently revoked, the Contractor shall similarly submit the name and particulars of a suitable replacement for such position. Any changes in personnel shall be at the risk and cost to the Contractor.
- 6.12.2 If the Employer and/or Engineer does not respond after receiving any such submission, by giving a Notice, in writing, stating his/her objection to the appointment of such person (or replacement) with reasons, the Employer and/or Engineer shall not be deemed to have given his/her approval.
- 6.12.3 The Contractor shall not, without the Employer and/or Engineer's prior approval, revoke the (appointment of any of the Key Personnel or appoint a replacement (unless the person is unable to act as a result of death, illness, disability or resignation, in which case the appointment shall be deemed to have been revoked with immediate effect and the appointment of a replacement shall be treated as a temporary appointment until the Employer and/or Engineer gives his/her approval to this replacement, or another replacement is appointed, under this Sub-Clause).

- 6.12.4 All Key Personnel shall always be based at the Site(s) (or, where Works are being executed off the Site(s), at the location of the Works) for the whole time that the Works are being executed. If any of the Key Personnel is to be temporarily absent during execution of the Works, a suitable replacement shall always be temporarily appointed, subject to the Engineer's prior approval.
- 6.12.5 All Key Personnel shall be fluent in the language for communications defined in Sub-Clause 1.4.
- 6.12.6 The Contractor shall provide all necessary personnel required by the Contractor for the Contractor's successful delivery of the Works in accordance with the Employer's Requirements, this Contract and the RFP. All personnel to be deployed on the Project shall be detailed under relevant Sections of the Management and Implementation Methodology.
- 6.12.7 The Contractor's Project office and key personnel, all of whom shall have enough knowledge and experience on all aspects of the Works and shall be fully conversant with current railway practices in South Africa, shall be stationed in Durban, South Africa.
- 6.12.8 The Contractor shall employ full-time railway Engineer in each discipline, registered with the Engineering Council of South Africa ("ECSA") as a professional Engineer or professional technologist, all of whom shall be fully conversant with current railway practices in South Africa and always readily available for delivery of the Works when required.
- 6.12.9 The Contractor shall have suitably qualified supervision staff in charge of the Works. All such supervision staff shall be in direct full-time employment of the main Contractor and/or joint venture partners and/or consortium members and/or subcontractors.

6.12.10 Any member and/or representative of Employer and/or Engineer, whom may be associated with the Works, is responsible for Inspection and acceptance Testing/checking only shall not be required to render any other assistance to the Contractor unless otherwise instructed in writing by Employer and/or Engineer.

6.12.11 The Contractor shall, at all times have an effective and efficient organisational structure in place to deliver the Works and provide the following key resources per Region, at a minimum, further providing signed and verifiable logbooks for each resource.

6.12.12 General:

The Contractor shall provide competent, suitably qualified key personnel in relevant fields as stated below:

6.12.12.1 1 Senior Project Manager with experience exceeding 9 years on similar Projects; and

6.12.12.2 1 Senior Commercial Manager with experience exceeding 5 years on similar Projects; and

6.12.12.3 1 Senior Controls Manager with experience exceeding 5 years on similar Projects; and

6.12.12.4 1 Senior Quantity surveyor with experience exceeding 5 years on similar Projects; and

6.12.12.5 1 Senior Programmer/Scheduler with experience exceeding 5 years on similar Projects; and

- 6.12.12.6 1 Senior Occupational Health and Safety Manager with experience exceeding 5 years on similar Projects; and
- 6.12.12.7 1 Senior Environmental and Heritage Manager with experience exceeding 5 years on similar Projects; and
- 6.12.12.8 1 Senior Quality Manager with experience exceeding 5 years on similar Projects; and
- 6.12.12.9 1 Senior BEE and Localisation Manager with experience exceeding 5 years on similar Projects; and
- 6.12.12.10 1 Senior Public Participation and Community Liaison Manager with experience exceeding 5 years on similar Projects; and
- 6.12.12.11 1 Skills Development and Training Manager with experience exceeding 5 years on similar Projects.

6.12.13 Signalling:

6.12.13.1 Design:

- 6.12.13.1 2 Senior Signalling Designers with experience exceeding 5 years on similar Projects;
- 6.12.13.2 7 Signalling Designers with experience exceeding 3 years on similar Projects;

6.12.13.3 1 Signalling Checker with experience exceeding 7 years on similar Projects; and

6.12.13.4 1 External Signalling Checker with experience exceeding 7 years on similar Projects.

6.12.14 Installation:

6.12.14.1 2 Senior Project Engineers with experience exceeding 7 years on similar Projects;

6.12.14.2 2 Project Engineers with experience exceeding 5 years on similar Projects; and

6.12.14.3 17 Installers with experience exceeding 5 years on similar Projects;

6.12.15 Testing:

6.12.15.1 1 Tester in Charge with experience exceeding 9 years on similar Projects;

6.12.15.2 2 Senior Testers with experience exceeding 7 years on similar Projects; and

6.12.15.3 5 Testers with experience exceeding 5 years on similar Projects.

6.12.16 Validation:

6.12.16.1 1 Senior Signalling Engineer with overall experience exceeding 11 years, which includes Validation experience of at least 7 years, on similar Projects; and

6.12.16.3 3 Signalling Engineers with overall experience exceeding 7 years, which includes Validation experience of at least 5 years, on similar Projects.

6.12.17 All personnel and/or companies as the case may be, deployed on this Project, by the Contractor (including, but not limited to, personnel deployed by; the main Contractor, joint venture partners and/or consortium members and/or subcontractors and/or direct contractors and/or similar), shall always be appropriately skilled and experienced (list to be attached for the main functions: Project Manager, Commercial Manager, Controls Manager, Quantity Surveyor, Project Scheduler, Designers, Checkers, Testers, etc.) and shall have the requisite mandatory and professional; qualifications, certifications and registrations as required by all applicable legislation, regulations, bylaws and industry best practice. Validity of qualifications, certifications and registrations shall be maintained, on an uninterrupted basis, for the entire duration of the Contract.

6.12.18 Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer and/or Engineer an unprejudiced right to immediately apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) for each incident (from the date that the Employer and/or Engineer decides is the date on which the incident commenced until the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that the incident is completely resolved by the Contractor).

6.13 PROJECT OFFICE CO-LOCATION RESOURCING

6.13.1 The Contractor shall, at the Contractor's Project office and at the Contractor's cost, provide; safe, private, confidential, fully operational and functional offices (including all amenities, Equipment and the like) for the Employer and all other the Employer representatives to use on ongoing basis throughout the duration of the Contract. Provision of offices shall, at a minimum, include:

6.13.1.1 Unfettered but secure access to Employer and all other Employer representatives with no accessibility by the Contractor or any of the Contractor's representatives without written permission from Employer granting access as may be requested by the Contractor.

6.13.1.2 6 Lockable cellular offices (interleading to the open plan office space and meeting room) for Employer's; Project Director, Deputy Project Director, Project Leader, Project Commercial Manager, Project Finance Manager, Project Controls and Technical Manager, each with:

6.13.1.2.1 A new large desk with 2 lockable drawers or more including fully wired and operational multi-purpose power and data points;

6.13.1.2.2 3 New wheelable and ergonomic office chairs;

6.13.1.2.3 A new telephone, able to call local and international landline and cell phone numbers; and

6.13.1.2.4 A minimum of 2 new suitable lockable office cabinets to file documents, Designs, etc.;

6.13.1.2.5 A minimum of 1 new locker suitable for the storage of personal belongings;

- 6.13.1.2.6 A new 4-seater meeting table with 4 non-wheelable but ergonomic chairs;
- 6.13.1.2.7 A new bar fridge;
- 6.13.1.2.8 new small to medium sized dustbin/wastebasket which shall always and timeously be cleaned and sanitised by the Contractor;
- 6.13.1.2.9 A new small volume A3 colour printer and scanner for which paper ink shall always and timeously be replenished by the Contractor;
- 6.13.1.2.10 New comprehensive office stationery and consumables which shall always and timeously be replenished by the Contractor;
- 6.13.1.3 1 Lockable open plan office space (interleading to the cellular offices and meeting room), for Employer's other Project personnel, complete with:
 - 6.13.1.3.1 A minimum of 15 new large desks each with 2 lockable drawers or more including fully wired and operational multi-purpose power and data points;
 - 6.13.1.3.2 15 New wheelable and ergonomic office chairs;
 - 6.13.1.3.3 15 New telephones, able to call local and international landline and cell phone numbers;
 - 6.13.1.3.4 A minimum of 30 new suitable lockable office cabinets to file documents, Designs, etc.;

- 6.13.1.3.5 A minimum of 15 new lockers suitable for the storage of personal belongings
- 6.13.1.3.6 A new tall fridge/freezer combination unit
- 6.13.1.3.7 15 New small to medium sized dustbins/wastebaskets which shall always and timeously be cleaned and sanitised by the Contractor;
- 6.13.1.3.8 A medium volume cold filtered water dispenser for which water shall always and timeously be replenished by the Contractor;
- 6.13.1.3.9 A medium volume hot water dispenser for which water shall always and timeously be replenished by the Contractor;
- 6.13.1.3.10 A medium volume coffee machine for which water, coffee, milk, sugar, artificial sweeteners and other related consumables shall always and timeously be replenished by the Contractor;
- 6.13.1.3.11 A medium volume tea station for which water, tea, milk, sugar, artificial sweeteners and other related consumables shall always and timeously be replenished by the Contractor;
- 6.13.1.3.12 A new high volume/bulk A3 colour printer and scanner for which paper ink shall always and timeously be replenished by the Contractor;

- 6.13.1.3.13 A large-scale high-definition colour plotter with operators to print larger Designs and plans for which paper and ink shall always and timeously be replenished by the Contractor;
- 6.13.1.3.14 A large-scale paper shredder which shall always and timeously be cleaned (as confidential waste) by the Contractor;
- 6.13.1.3.15 A large-scale paper stapler and binding machine for which all binding Materials and consumables shall always and timeously be replenished by the Contractor; and
- 6.13.1.3.16 New comprehensive office stationery and consumables for a minimum of 15 people which shall always and timeously be replenished immediately upon request from Employer and/or Engineer.
- 6.13.1.4. A secure and private meeting room (interleading to the cellular offices and open plan office), for all Employer's personnel, complete with:
 - 6.13.1.4.1 A new 30-seater table including fully wired and operational multipurpose power and data points per seat;
 - 6.13.1.4.2 30 New wheelable and ergonomic office chairs;
 - 6.13.1.4.3 A new high-definition Project with retractable screen and connection cables etc.

6.13.1.4.4 New high-quality teleconference facilities able to call local and international landline and cell phone numbers;

6.13.1.4.5 New universally adaptable and flexible high-quality video conference facility; and

6.13.1.4.6 1 New medium to large sized dustbin/wastebasket which shall always and timeously be cleaned and sanitised by the Contractor;

6.13.1.5 Wired and wireless Networks with unrestricted and unlimited ultra-high-speed access to the internet in the cellular offices, the open plan office, and the meeting room.

6.13.1.6 Suitably sized and fully fitted male and female ablutions that shall always and timeously be cleaned, sanitised and equipped with consumables by the Contractor.

6.13.1.7 All cutlery and crockery as required to service 30 people at any one point in time.

6.13.1.8 Full-time cleaning and waste removal service including all machinery and consumables which shall always be replenished by the Contractor.

6.13.1.9 Full-time portage service including all support requirements.

6.13.1.10 Any other office Equipment and consumables as may be requested by Employer which the Contractor shall provide.

6.13.2 The Contractor shall, at the Contractor's cost, provide the Employer with 9 ultra-high specification laptops with accessories (best available at the time of

procurement) for which the final choice and instruction shall be made and granted by the Employer respectively. The Contractor shall always ensure that each laptop is always be provided with the latest available and fully licensed Software (at a minimum; Microsoft Windows Operating System, best antivirus, full Microsoft Office suite, Microsoft Project, Adobe Professional (PDF) and AutoCAD/similar and any other Software used by the Contractor and required by the Employer for the Delivery of the Works as requested).

- 6.13.3 The Contractor shall, at the Contractor's cost, provide the Employer with at least 30 full sets of Personal Protective Equipment ("PPE"), including safety boots, reflector vests, hard hats, hearing protection and gloves in the sizes as advised by the Employer.
- 6.13.4 Ownership of all laptops (including Software and accessories) and PPE shall pass to the Employer immediately upon receipt of each laptop (and accompanying accessories) and PPE by the Employer. Ownership of all other office; Furniture, Equipment, stationery and consumables shall pass to the Employer at the Completion Date or at a date of Suspension or Termination of the Contract (regardless of whether the Employer or the Contractor suspends or terminates the Contract).
- 6.13.5 The Contractor shall, at the Contractor's cost, always make, 4 double cab 4x4 bakkies (or similar) and any other vehicle(s) and other means required to travel to the local Site(s), and for any other purpose of this Project, available to the Employer.
- 6.13.6 The Contractor shall, for all the Employer representatives (minimum 7 personnel or at any given instance as instructed by the Employer) and at the Contractor's cost, uncompromisingly provide all unlimited; Materials, facilities, samples, Equipment, travel (air and rail and road), accommodation, meals, incidentals, unfettered access and any other means required for the Employer to attend and/or perform any local and international; rail-related conferences/workshops, knowledge sharing events, skills development events, Inspections, Validation, Plant and Materials reviews, Technology reviews and Training. In this regard, allowance for international events shall be made for:

6.13.6.1 All related Training;

6.13.6.2 All related Validation;

6.13.6.3 All Factory Acceptance Tests;

6.13.6.4 2 RSS related conferences in total; and

6.13.6.5 2 Trips to visit other Contractor's Clients for whom Projects and Technology have been successfully implemented by the Contractor in total.

6.13.7 The Contractor shall always make any measuring Tools and Equipment, required to perform quality Inspections, tests, Commissioning etc., and for any other purpose of this Project, available to the Employer.

7. MATERIALS AND WORKMANSHIP

7.1 Manner of Execution

The Contractor shall carry out the Planning, Design, Supply, Construction, Installation, Testing, Commissioning and Maintenance of new fully integrated, functional, complete and future-proofed Employer Train Control System in Employer's Kwa Zulu- Natal ("KZN") service region , and all other operations and activities during the execution of the Works:

7.1.1 in the manner (if any) specified in the Employer's Requirements, this Contract and the RFP;

7.1.2 in a proper workmanlike and careful manner, in accordance with recognised good practice; and

- 7.1.3 with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Employer's Requirements, this Contract and the RFP.

7.2 SAMPLES

The Contractor shall submit the following samples of Materials, and relevant information, to the Employer and/or Engineer for approval prior to using the Materials in or for the Works:

- 7.2.1 manufacturer's standard samples of Materials and samples specified in the Employer's Requirements, this Contract, the RFP and, all at the Contractor's cost; and
- 7.2.2 additional samples instructed by the Engineer at the Contractor's cost.
- 7.2.3 Each sample shall be labelled as to origin and intended use in the Works.

7.3 INSPECTION

- 7.3.1 The Contractor shall, for all Employer representatives (minimum 15 personnel or at any given instance as instructed by Employer and/or Engineer) and at the Contractor's cost uncompromisingly provide all unlimited; Materials, facilities , samples, Equipment, travel (air and rail and road), accommodation, meals, incidentals, unfettered access and any other means required for Employer and/ or Engineer to attend and /or perform any local and international Inspections, Validation, Factory Acceptance Testing ("FAT"), Site Acceptance Testing ("SAT"), tests on Completion, Commissioning, Completion and Taking Over of the Works by Employer (in Sections thereafter the whole of the Works)

- 7.3.2 The Contractor shall, within 90 (ninety) calendar days of being ready for any Inspections, give the Engineer a written Notice of readiness of the Work for all required Inspections, tests or approvals and shall cooperate with inspection and testing personnel to facilitate required Inspections or tests.
- 7.3.3 The Employer's and/or Engineer's Personnel shall, during all the normal working hours stated in the Employer's Requirements, this Contract and/or the RFP and at all other times:
- 7.3.3.1 have full access to all parts of the Site(s) and to all places from which natural Materials are being obtained;
 - 7.3.3.2 during planning, Design, and construction (at the Site(s) and elsewhere), be entitled to;
 - 7.3.3.3 examine, inspect, measure and test (to the extent stated in the Employer's Requirements) the Materials, Plant and workmanship;
 - 7.3.3.4 make records (including photographs and/or video recordings); and
 - 7.3.3.5 carry out other duties and Inspections, as specified in the Employer's Requirements, this Contract and the RFP.
- 7.3.4 The Contractor shall give the Employer's Personnel and/or Engineer's Personnel full opportunity to carry out these activities, including providing safe access, facilities, permissions and safety equipment.
- 7.3.5 The Contractor shall give a Notice, in writing, to the Employer and/or Engineer whenever any Materials, Plant or work is ready for Inspection, and before it is to be covered up, put out of sight, or packaged for storage or transport. The Employer's

Personnel and/or Engineer's Personnel shall then either carry out the examination, Inspection, measurement or testing without unreasonable delay, or the Engineer shall Promptly give a Notice, in writing, to the Contractor that the Employer's Personnel and/or Engineer's Personnel do not require to do so.

7.3.6 If the Employer and/or Engineer gives no such Notice and/or the Employer's Personnel and/or Engineer's Personnel do not attend at the time stated in the Contractor's Notice (or such time as may be agreed with the Contractor), the Contractor may not proceed with covering up, putting out of sight or packaging for storage or transport until the Employer's personnel and/or Engineer's personnel have attended and approved. The Contractor shall bear the risk and cost for the period.

7.3.7 If the Contractor fails to give a Notice in accordance with this Sub-Clause the Contractor shall, if and when required by the Employer and/or Engineer, uncover the work and thereafter reinstate and make good, all at the Contractor's risk and cost.

7.3.8 The Contractor shall submit a detailed Test and Inspection plan to the Employer and/or Engineer for approval before Construction and Implementation start. The Contractor's Test and Inspection plan includes detailed trenching records, witness points and hold points for critical activities.

7.4 TESTING BY THE CONTRACTOR

7.4.1 This Sub-Clause shall apply to all tests specified in the Employer's Requirements, this Contract and the RFP, other than the Tests after Completion (if any).

7.4.2 The Contractor shall, at the Contractor's cost, always provide all apparatus, assistance, documents and other information, temporary supplies of electricity and water, equipment, fuel, consumables, instruments, labour, Materials, and suitably

qualified, experienced and competent staff, as are necessary to carry out the specified tests efficiently and properly. All apparatus, equipment and instruments shall be calibrated in accordance with the standards specified in the Employer's Requirements, this Contract and the RFP or defined by applicable Laws and, if requested by the Employer and/or Engineer, the Contractor shall submit calibration certificates before carrying out testing.

- 7.4.3 The Contractor shall give a Notice, in writing, to the Employer and/or Engineer, stating the time and place for the specified testing of any Plant, Materials and other parts of the Works. This Notice shall be given within 90 (ninety) calendar days having regard to the location of the testing, for the Employer's Personnel and/or Engineer's Personnel to attend.
- 7.4.4 The Employer and/or Engineer may vary the location or timing or details of specified tests or instruct the Contractor to carry out additional tests at the Contractor's risk and cost.
- 7.4.5 If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Employer's Requirements, this Contract and the RFP, the Cost and any delay incurred in carrying out this varied and/or additional tests shall be borne by the Contractor.
- 7.4.6 The Employer and/or Engineer shall give a Notice, in writing, to the Contractor of not less than 24 (twenty-four) hours of his/her intention to attend the tests. If the Employer and/or Engineer does not attend at the time and place stated in the Contractor's Notice under this Sub-Clause, the Contractor shall not proceed with the tests, unless otherwise instructed by the Employer and/or Engineer.
- 7.4.7 If the Contractor causes any delay to specified tests (including varied or additional tests) and such delay causes the Employer to incur costs, the Employer shall be

entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment of these costs by the Contractor.

- 7.4.8 The Contractor shall within 7 (seven) calendar days forward to the Employer and/or Engineer duly certified reports of the tests. When the specified tests have been passed, the Employer and/or Engineer shall endorse the Contractor's test certificate, or issue a test certificate to the Contractor, to that effect.
- 7.4.9 Each completed Section of the Works shall be tested, commissioned and handed over to the Employer, as soon as possible for interim operational purposes, for which such hand over shall be signed and accepted by the Employer and/or Engineer. Notwithstanding this interim Sectional completion, final Tests on Completion, Commissioning, Completion and Taking Over of the whole of the Works by the Employer shall be done by the Completion Date.
- 7.4.10 The Contractor shall, at the Contractor's cost and regardless of the extent of this requirement, take interim Maintenance, Warranty and Defects Liability responsibility for each Section that has been tested, commissioned and handed over to the Employer from the date of interim hand over to the Completion Date for the whole of the Works.
- 7.4.11 The Contractor shall, at the Contractor's cost and regardless of the extent of this requirement, take full Maintenance, Warranty and Defects Liability responsibility for 730 (seven hundred and thirty) calendar days commencing on the Completion Date for the whole of the Works until the Employer and/or Engineer issuance of the Performance Certificate.
- 7.4.12 Directly after Commissioning a Section and before Completion can be certified, the Contractor shall monitor and provide records to prove fault-free performance of the PTCS for a continuous period of at least 48 hours. Reliability, availability and safety performance tests shall be required for the duration of the Contract.

7.5 DEFECTS AND REJECTION

- 7.5.1 The Employer and/or Engineer shall have authority to reject Works which the Employer and/or Engineer believes to be defective, or that Employer and/or Engineer believes will not produce a completed Project that conforms to the Employer's Requirements, this Contract and the RFP or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Employer's Requirements, this Contract and the RFP.
- 7.5.2 The Employer and/or Engineer shall also have authority to require special Inspection or testing of the Work to determine whether or not the Work is fabricated, installed or completed.
- 7.5.3 If, as a result of an examination, Inspection, measurement or testing, any Plant, Materials, design or workmanship is found to be defective or otherwise not in accordance with the Employer's Requirements, this Contract and the RFP, the Employer and/or Engineer shall Promptly give a Notice, in writing, to the Contractor describing the item of Plant, Materials, design, construction, operations, maintenance or workmanship that has been found to be defective. The Contractor shall then Promptly prepare and submit a proposal for necessary remedial work for approval by the Employer and/or Engineer, thereafter implement the approved necessary remedial work.
- 7.5.4 Sub-Clause 7.5 [Defects and Rejection] shall apply in the event that any Plant, Materials and other parts of the Works fails to pass a specified test. The Contractor shall state the extent to which the proposed work, if carried out, would not result in the Plant, Materials, design or workmanship complying with the Contract. After receiving such a Notice the Contractor shall within 7 (seven) calendar days submit a revised proposal to the Employer and/or Engineer for approval, thereafter implement the approved proposal.

- 7.5.5 After receipt of the Notice, the Contractor shall correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the Employer and/or Engineer, remove it from the Project and replace it with Work that is not defective. The Contractor shall pay all Claims, costs, losses, Penalties and damages (including but not limited to all fees and charges of engineer's architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).
- 7.5.6 The Contractor shall report any potential failures and damage(s) to the Employer and/or Engineer with a schedule for the corrective maintenance to be completed.
- 7.5.7 The Contractor shall comply with all constraints and procedures stated in the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by Employer and/or Engineer and where Employer arranges access for the Contractor after Completion.

7.6 REMEDIAL WORK

- 7.6.1 If the Contractor fails to Promptly submit a proposal (or revised proposal) for Work, or fails to carry out the proposed remedial work to which the Employer and/or Engineer has given) a Notice of No-objection, the Employer and/or Engineer may:
- 7.6.1.1 instruct the Contractor under sub-paragraph 7.6.1.1 and/or 7.6.1.2 of Sub-Clause 7.6 [Remedial Work]; or
- 7.6.1.2 reject the design, construction, operations, maintenance, Plant, Materials or workmanship by giving a Notice, in writing, to the Contractor, with

reasons, in which case sub-paragraph 11.3.3.1 of Sub-Clause 11.3.3 [Failure to Remedy Defects] shall apply.

7.6.2 After remedying defects in any Plant, Materials, design, construction, operations, maintenance or workmanship, if the Employer and /or Engineer requires any such items to be retested, the tests shall be repeated in accordance with Sub-Clause 7.4 [Testing by the Contractor] at the Contractor's risk and cost. If the rejection and retesting cause the Employer to incur additional costs, the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment of these costs by the Contractor.

7.6.3 In addition to any previous examination, Inspection, measurement or testing, or test certificate or Notice of No-objection by the Employer and/or Engineer, at any time before the issue of the Performance Certificate for the Works, the Employer and/or Engineer shall instruct the Contractor to:

7.6.3.1 repair or remedy (if necessary, off the Site(s)), or remove from the Site (s) and replace any Plant or Materials which are not in accordance with the Employer's Requirements, this Contract and the RFP;

7.6.3.2 repair or remedy, or remove and re-execute, any other work which is not in accordance with the Employer's Requirements, this Contract and the RFP; and

7.6.3.3 carry out any remedial work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

7.6.4 The Contractor shall comply with the instruction as soon as practicable and not later than the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph 7.6.3.3 above.

7.6.5 The Contractor shall bear the cost of all remedial work required under this Sub-Clause, except to the extent that any work under sub-paragraph 7.6.3.3 above is attributable to:

7.6.5.1 any unreasonable act by the Employer and/or Engineer or the Employer's Personnel and/or Engineer's Personnel.

7.6.6 If the Contractor fails to comply with the Employer and/or Engineer's instruction, the Employer and/or Engineer may (at the Employer's sole discretion) employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for work under this Sub-Clause, the Employer shall be entitled subject to Sub-Clause 20.2 [Claims for Payment and/or EOT] to payment by the Contractor of all costs arising from this failure. This entitlement shall be without prejudice to any other rights the Employer may have, under the Contract or otherwise.

7.7 OWNERSHIP OF PLANT AND MATERIALS

7.7.1 Each item of Plant and Materials shall, to the extent consistent with the mandatory requirements of the Laws of the Republic of South Africa, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances and the Employer and/or Engineer (acting on the written instructions of the Employer), at the Employer's sole discretion, instructs that any Plant and Materials becomes the property of the Employer or accepts ownership in writing regardless of whether such instruction and/or acceptance is pre or post termination and/or conclusion of the Contract:

7.7.1.2 when the Contractor is paid the value of the Plant and Materials under Sub-Clause 8.11 [Payment for Plant and Materials after Employer's Suspension] and the Employer accepts ownership in writing; or

- 7.7.1.3 when the Contractor is paid the amount determined for the Plant and Materials and the Employer accepts ownership in writing.
- 7.7.2 All Plant and Materials (which by definition shall include, but not be limited to, all Plant, Materials, Furniture, Equipment, Tools, Spares, Software, Technology and Components) to be provided by the Contractor to deliver the Project shall be brand new.
- 7.7.3 In the case of use of old or refurbished Equipment and Materials, such use shall first be proposed by the Contractor and expressly permitted in writing by the Employer and/or Engineer and as stated in Employer's Requirements, this contract or the RFP or as otherwise instructed in writing by the Employer and/or Engineer.
- 7.7.4 All imported Plant and Materials to be provided by the Contractor shall be brand new and of merchantable quality, to recognised South African national standards and approved by the Employer and/or Engineer, with all proprietary products installed to manufacturers' instructions.
- 7.7.5 The Contractor shall, uncompromisingly and without hesitation, replace any damaged Plant and Materials (whether on the Site(s) or not and whether part of the temporary or permanent Works) and any Plant and Materials with defects further notifying the Employer and/or Engineer each time such replacement is required and scheduled.
- 7.7.6 The Employer may have certain Equipment and Materials available in storage that may be used by the Contractor, subject to the Contractor's complete offered solution remaining compliant with the Employer's requirements, this Contract and the RFP and that the Contractor has satisfied itself that such Equipment and Materials are

suitable for use by the Contractor therefore the Contractor shall accept all risk related to the use of such Equipment and Materials.

- 7.7.7 The Contractor shall use as much existing, Equipment and Materials as possible and if not possible then motivate why not in a robust but controllable manner. Should the Contractor wish to replace any existing Equipment and Materials with new Equipment and Materials, the Contractor shall first make the Employer a fair market value offer to pay the Employer for such existing Equipment and Materials for which such offer shall first be accepted by the Employer. The Contractor's disposal of existing Equipment and Materials can thereafter be implemented.
- 7.7.8 Useful life of all Plant and Materials shall be a minimum of 20 (twenty) years from the date on which the Employer and/or Engineer issues the Performance Certificate unless otherwise specified throughout the Employer's Requirements, this Contract and the RFP.
- 7.7.9 The plans and design developed and to be provided by the Employer and/or Engineer shall at all times remain the property of the Employer.
- 7.7.10 Ownership of all other office; Furniture, Equipment, stationery and consumables shall pass to Employer at the Completion Date or at a date of Suspension or Termination of the Contract (regardless of whether the Employer or the Contractor suspends or terminates the Contract).
- 7.7.11 The Employer may have certain Equipment and Materials available in storage that may be used by the Contractor, subject to the Contractor's complete offered solution remaining compliant with the Employer's Requirements, this Contract and the RFP and that the Contractor has satisfied itself that such Equipment and Materials are suitable for use by the Contractor therefore the Contractor shall accept all risk related to the use of such Equipment and Materials.

7.7.12 The Contractor shall use as much existing, Equipment and Materials as possible and if not possible then motivate why not in a robust but controllable manner. Should the Contractor wish to replace any existing Equipment and Materials with new Equipment and Materials, the Contractor shall first make Employer fair market value offer to pay Employer for such existing Equipment and Materials for which such offer shall first be accepted by Employer. The Contractor's disposal of existing Equipment and Materials can thereafter be implemented.

7.8 ROYALTIES

7.8.1 The Contractor shall pay all license fees and royalties and assume all costs incidental to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others.

7.8.2 If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of the Contractor to contribute to its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by the Contractor in the Contract Documents.

7.8.3 To the fullest extent permitted by Laws and Regulations, the Contractor shall indemnify and hold harmless the Employer and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all Claims, costs, losses, Penalties and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out

of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.8.4 The Contractor shall pay all royalties, rents and other payments for:

7.8.4.1 natural Materials obtained from outside the Site(s); and

7.8.4.2 the disposal of Material from demolitions and excavations and of other surplus Material (whether natural or man-made), except to the extent that disposal areas within the Site(s) are specified in the Employer's Requirements, this Contract and the RFP.

8. COMMENCEMENT, DELAYS AND SUSPENSION

8.1 COMMENCEMENT OF WORKS

8.1.1 The Employer and/or Engineer shall give a Notice, in writing, to the Contractor stating the Commencement Date, not less than 14 (fourteen) calendar days before the Commencement Date. Unless it is otherwise stated in the Employer's Requirements, this Contract and the RFP, the Commencement Date shall be as instructed by the Employer and/or Engineer. No work shall be done at the Site(s) prior to the Commencement Date.

8.1.2 The Contractor shall commence the execution of the Works on, or as soon as is reasonably practicable after the Commencement Date and shall then proceed with the Works with due expedition and without delay.

8.2 TIME OF COMPLETION

- 8.2.1 Notwithstanding the date of signature of this Contract, the Time for Completion for the Whole of the Works (excluding the full Maintenance, Warranty and Defects Liability Period) is 2555 (two - thousand five hundred and fifty five) calendar days from the agreed Commencement Date (agreed Commencement Date inclusive). The Completion Date for the whole of the Works shall be the 2555th calendar day after the agreed Commencement Date.
- 8.2.2 Achievement of this timeline will require an accelerated Project Programme with possible weekend work, overtime work and work during the night. The Contractor shall allow for all activities, time and costs associated with all such requirements in the Accepted Contract Amount and TCP.
- 8.2.3 Major Milestones, Deliverables and Key Dates shall, at a minimum, include the Time for Completion, the Completion Date and Section completion dates.
- 8.2.4 Major Milestones, Deliverables and Key Dates that the Contractor shall include in the Contractor's Project Programme, at a minimum, are:
- 8.2.4.1 Achievement of the Time for Completion for the Design and Construction portion of the Works (excluding the full Maintenance, Warranty and Defects Liability period) within 2555 (two thousand five hundred and fifty-five) calendar days from the agreed Commencement Date (agreed Commencement Date inclusive)
- 8.2.4.2 Achievement of the Time for Completion for the whole of the Works (including the full Maintenance, Warranty and Defects Liability period) within 1825 (one thousand eight hundred and twenty-five) from the agreed Commencement Date (agreed Commencement Date inclusive)

8.2.4.3 Completion of each Section of the Works.

8.2.4.4 Any other Major Milestones, Deliverables and Key Dates as may be determined by the Employer and/or Engineer for the duration of this Contract.

8.2.5 The first Major Milestone and Deliverable, that the Contractor shall include in the Contractor's Proposal (the "Bid Programme"), shall be successful completion of Validation of the RSS and ETCS Level 2, and any other technologies and Equipment as specified in the Employer's Requirement, this Contract and the RFP, to the absolute satisfaction of Employer for which the Key Date is fixed as the 548th calendar day after the agreed Commencement Date.

8.2.6 Failure of the Contractor to achieve any Major Milestones, Deliverables and Key Dates shall give the Employer an unprejudiced discretionary right to immediately Terminate this Contract and Claim Delay Damages from the Contractor and/or apply penalties (as specified in the Employers Requirements, this Contract and the RFP) from the aforementioned date until the date on which the Employer confirms, in writing, that the Employer is completely satisfied that all Work is completed. The minimum costs and Delay Damages that the Contractor shall pay the Employer is the total amount of money paid to the Contractor plus any other amounts which this Contractor may have been due as at the date of each Key Date.

8.2.7 The Contractor shall complete the whole of the Works subject to paragraph 8.2.1 above, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including completion of all work which is stated in the Employer's Requirements, this Contract and the RFP as being required for the Works or Section to be considered to be completed for the purposes of taking over under Sub-Clause 10.1 [Taking Over the Works and Sections].

8.2.8 The Contractor shall, at the Contractor's cost and regardless of the extent of this requirement, take full Maintenance, Warranty and Defects Liability responsibility for 730 (Seven hundred and thirty) calendar days commencing on the Completion Date for the whole of the Works until the Employer and/or Engineer' issuance of the Performance Certificate.

8.2.9 Notwithstanding the date of signature of the Contract, the Contract Period is therefore 2555 (two thousand five hundred and fifty five) calendar days from the agreed Commencement Date (agreed Commencement Date inclusive).

8.2.10 Delay Damages – Time for Completion:

8.2.10.1 If the Contractor fails to complete the whole of the Works on the Completion Date as per the Approved Baseline Contract Programme/Approved Programme (as referenced elsewhere in the Employers Requirements, this Contract and the RFP) the Contractor shall pay Delay Damages, Penalties and other costs, to the Employer for this default.

8.2.10.2 The Delay Damages, per incident, shall be payable for each elapsed calendar day calculated from the calendar date on which the Completion Date falls as per the Approved Baseline Contract Programme/Approved Programme (as referenced in the Employer's Requirements, this contract and in the RFP) to the actual date on which completion of the whole of the Works is achieved or the planned delayed date on which completion of the whole of the Works may be achieved (the later of the 2 (two) dates).

8.2.10.3 Elapsed calendar days shall include the calendar day on which the Completion Date falls as per the Approved Baseline Contract Programme/Approved Programme (as referenced in the Employer's

Requirements, this contract and in the RFP) to the actual day on which completion of the whole of the Works is achieved or the planned delayed date on which completion of the whole of the Works may be achieved.

- 8.2.10.4 The minimum Delay Damages payable shall be calculated at 0.1% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 20.000% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

8.3 PROGRAMME

- 8.3.1 Achievement of the Programme may require acceleration by the Contractor and for which any acceleration shall be at no additional cost to the Employer.
- 8.3.2 The Contractor shall allow for all activities, time and costs associated with possible weekend work, overtime work and work during the night in the Programme subject to the approval of the Employer and/or Engineer.
- 8.3.3 The Contractor shall ensure that Major Milestones, Deliverables and Key Dates shall at a minimum include the Time for Completion, the Completion Date and Section Completion Dates.
- 8.3.4 The first Major Milestone and Deliverable, that the Contractor shall include in the Contract Project Programme (the "Contract Programme"), shall be successful completion of Validation of the RSS and ETCS Level 2, and any other technologies and Equipment as specified in the Employer's Requirements, this Contract and the RFP, to the absolute satisfaction of the Employer and/or Engineer for which the Key Date is fixed as the 548th calendar day after the agreed Commencement Date.

Failure of the Contractor to achieve this Major Milestone and Deliverable on this Key Date shall give the Employer an unprejudiced right to immediately Terminate the Contract and claim damages from the Contractor and/or apply penalties (as specified in the Employer's Requirements, this Contract and the RFP) from the aforementioned date until the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that all Validation is completed.

8.3.5 Other Major Milestones, Deliverables and Key Dates that the Contractor shall include in the Programme at a minimum, are:

- 8.3.5.1 Completion of each Section of the Works.
- 8.3.5.2 Completion of each CTCC building.
- 8.3.5.3 Completion of each CTCC System.
- 8.3.5.4 Completion of each crossing place.
- 8.3.5.5 Completion of each halt.
- 8.3.5.6 Completion of each interface to the TFR Network.
- 8.3.5.7 Completion of each substation.
- 8.3.5.8 Completion of each GSM-R site related works.
- 8.3.5.9 Completion of each LX.
- 8.3.5.10 Completion of each station and yard.
- 8.3.5.11 Completion of each line.
- 8.3.5.12 Provision of complete interlockings included RBCs, interfaces and relevant blocks.

8.3.6 If the Contractor fails to achieve any of these Major Milestones and Deliverables on these Key Dates, Employer and/or Engineer shall have an unprejudiced discretionary right to immediately Terminate the Contract and Claim damages and Penalties from the Contractor and/or apply penalties (as specified in the Employer's

Requirements, this contract and in the RFP) from the aforementioned date until the date on which Employer and/or Engineer confirms, in writing, that Employer and/or Engineer is completely satisfied that all Validation is completed. The minimum costs and damages that the Contractor shall pay the Employer shall be the total amount of money paid to the Contractor plus any other amounts which may have been due as at the date of each Key Date.

8.3.7 The Contractor shall always submit a comprehensive Microsoft Project Programme (showing durations of activities in working days) which shall, at a minimum, clearly show:

8.3.7.1 Major Milestones and Deliverables including Key Dates throughout the life of the Project that must be met for the Project to finish on time. Major Milestones, Deliverables and Key Dates shall identify intervals that shall reflect appropriate progress of the Project and whether or not the Contractor is meeting the Contractor's contractual obligations (including, but not limited to; completion of Sections, the Time for Completion of the whole of the Works, Material rate of progress of the Works, measurement of the Contractor's performance, penalty calculations and Contract termination) and establish intervals that shall reflect appropriate progress of the Project;

8.3.7.2 A detailed Work Breakdown Structure ("WBS") which shall be a description of tasks arranged and linked in layers of detail. The WBS shall further incorporate all Major Milestones, Deliverables and linked Key Dates;

8.3.7.3 A detailed Project Plan which shall list and link all activities that are needed to accomplish the tasks identified in the WBS;

- 8.3.7.4 The sequencing of the activities according to the order in which the activities are to be accomplished including a Logic Diagram that shall represent the logical sequence of the activities required to complete the Project;
- 8.3.7.5 The start and finish dates of each task and activity and the duration of each task and activity whereby some tasks and activities may have to be done sequentially and some concurrently;
- 8.3.7.6 The longest path to the completion of the Project therefore the critical path including linking of all dependencies affecting the critical path;
- 8.3.7.7 The TCP allocated to each Major Milestone, Deliverable, task and activity in detail;
- 8.3.7.8 Project Resources (overheads, human resources, Plant and Equipment allocated to each Major Milestone, Deliverable, task and activity;
- 8.3.7.9 Scheduling of activities in a manner that effectively and efficiently uses Project Resources and completes the Project in the shortest practical time;
- 8.3.7.10 Sundays as non-working calendar days;
- 8.3.7.11 All official statutory Public Holidays, as declared by the Department of Home Affairs as non-working calendar days;
- 8.3.7.12 All foreseeable statutory national, provincial or municipal Election Days as declared by the South African National Government;

- 8.3.7.13 14 (fourteen) calendar days (including Sundays, Public Holidays and Election Days) as non-working days for Easter breaks in each calendar year;
- 8.3.7.14 28 (twenty eight)calendar days (including Sundays, Public Holidays and Election Days) as non-working calendar days for mid-December to mid-January Construction industry breaks in each calendar year; and
- 8.3.7.15 Provision for adequate calendar rain days throughout the Contract duration for which such determination shall, at a minimum, be guided by reports officially published by the South African Weather Service (“SAWS”);
- 8.3.7.16 The following levels:
- 8.3.7.16.1 Level 1 Master Programme - defines the major operations and interfaces between Engineering Design, procurement, fabrication and assembly of Plant and Materials, transportation, Construction, Testing and pre-Commissioning, Commissioning, finalisation and completion;
 - 8.3.7.16.2 Level 2 Project Programme - summary Programmes 'rolled up' from Level 3 Project Programme described below;
 - 8.3.7.16.3 Level 3 Project Programme - detailed Programmes generated to demonstrate all operations identified on the Programme from the starting date to Completion;

- 8.3.7.16.4 Level 4 Project Programme - detailed discipline specific level developed and maintained by the Contractor relating to all operations identified on the Programme representing the daily activities by each discipline;
 - 8.3.7.16.5 A narrative status report, which includes precise status and performance of operations in the Working Areas, precise status and performance of operations outside the Working Areas, manpower histograms, S-curve of overall progress, critical action items (top 20) and deviations from the Accepted Programme and action plan to rectify; and
 - 8.3.7.17 All other activities of the Project and Employer, approval authorities, TFR and other interdependencies and interfaces which affect the delivery of the Works.
- 8.3.8 Scheduling constraints that the Contractor shall adequately plan and provide for in the Programme include:
 - 8.3.8.1 The lead-time for arranging Site(s) access shall at least be 60 (sixty) working days after all requirements for Site(s) access are met and at least 60 (sixty) working days after the Commencement Date;
 - 8.3.8.2 The Contractor gives Employer and/or Engineer a written Notice of at least 40 (forty) working days to source specific existing information and as-built drawings;
 - 8.3.8.3 Employer and/or Engineer shall be given at least 40 (forty) working days each to check, comment on and/or approve all of the Contractor's

Project Documentation submitted throughout the duration of the Contract (including, but not limited to, methodologies, implementation plans, reports, Designs, quality plan, safety case, safety management plan and environmental management plan);

- 8.3.8.4 Employer and/or Engineer acceptance checking of the Contractor's Designs shall take at least 40 (forty) working days per crossing place. No more than 2 (two) crossing places shall be checked for acceptance at any given time;
- 8.3.8.5 Excluding the Commissioning Occupation, ad-hoc Testing and Inspections by Employer and/or Engineer shall take on average 5 (five) working days per link which may run concurrently if 2 (two) crossing places are required at the same time;
- 8.3.8.6 The minimum lead-time for Employer and/or Engineer for arranging Occupations shall be 60 (sixty) working days after Employer and/or Engineer's acceptance of the Contractor's Occupation plan and Test copies of all relevant drawings related to an Occupation;
- 8.3.8.7 Occupations shall not take place on any non-working calendar days;
- 8.3.8.8 The Contractor shall submit the Occupation plan and Test copies of all relevant drawings for Employer and/or Engineer's acceptance of any Occupation at least 120 (one hundred and twenty) working days before each Occupation;
- 8.3.8.9 Employer and/or Engineer's acceptance Inspection (walk-through) shall take 5 (five) working days per link, which may run concurrently, if more than 1 (one) crossing place is required at the same time;

- 8.3.8.10 Employer and/or Engineer's acceptance Testing and Commissioning shall take 10 (ten) working days during each Commissioning Occupation;
- 8.3.8.11 After Commissioning each station, 40 (forty) working days are allowed for the Contractor's decommissioning and the finalisation of as-built drawings, manuals, quality records, Software data records, Technology transfer and other documentation, or as specified in the Employer's Requirements, this Contract and the RFP (including but not limited to that which is specified in the GTRs, PTRs and/or MTR); and
- 8.3.8.12 The Contractor's initial submission of all as-built documentation for a Section shall be within 10 (ten) working days after a Section is commissioned and within 40 (forty) working days after the whole of the Works is commissioned.

8.3.9 Sequence of the Works:

- 8.3.9.1 The Contractor shall plan the Works to meet the Sectional completion dates, otherwise also included under the definition of Key Dates;
- 8.3.9.2 The enabling and specified Civil, Track, OHTE, Electrical, Telecommunications and other Works, shall not precede the Signalling Works with more than 1 (one) Section;
- 8.3.9.3 The Signalling Works shall not precede the ETCS Level 2 Works with more than 1 Section; and

- 8.3.9.4 The Commissioning Occupation dates for different Sections shall not overlap.
- 8.3.10 The Programme shall be finalised and agreed between Employer and the Contractor during Contract negotiations or any other time as instructed by the Employer and/or Engineer thereby included in the Contract as the “Approved Baseline Contract Programme/Approved Programme.”
- 8.3.10 Approved Programme Change Log (“APCL”):
- 8.3.10.1 Any changes and/or updates to the Approved Programme (including, but not limited to, tracking progress or relating to Employer approved changes i.e. extensions of time Claims, variation order time impacts etc.) shall be recorded in detail in an APCL;
 - 8.3.10.2 The APCL shall state the activity number and the changes made (constraint date, logic that was changed, duration change), the reason for the change and the date of the change;
 - 8.3.10.3 The process of changing and/or updating the Approved Programme shall include the following steps:
 - 8.3.10.3.1 Collect data on actual Works completed and remaining Works to be completed;
 - 8.3.10.3.2 Update the current Approved Programme with actual progress of Works completed;
 - 8.3.10.3.3 Compare and resolve any deviations and/or anomalies;

8.3.10.3.4 Update the current Approved Programme with the Employer and/or Engineer approved changes;

8.3.10.3.5 Distribute the next version the Programme for Employer and/or Engineer's approval;

8.3.10.3.6 The next version of the Programme, that is approved by Employer and/or Engineer becomes the new "Approved Contract Programme/Approved Programme"; and

8.3.10.4 On each revised Programme, the Contractor shall show a resource histogram showing planned progress versus actual, deviations from the Accepted Programme and any remedial actions proposed by the Contractor.

8.3.11 The Contractor's Programme shall show the requirements of the Construction Environmental Management Plan ("CEMP"), System Engineering Services ("SES"), Project Engineering Services ("PES"), Safety Management Plan ("SMP") and the Environmental Method Statements.

8.3.12 INTERFACE MANAGEMENT

8.3.12.1 The Contractor shall be a strong power that forces the Engineers and all parties involved in the Planning, Design, Supply, Construction, Installation, Testing, Commissioning to consider problems outside of their area of responsibility.

8.3.12.2 The experience of Project of this nature and magnitude shows that only an institution equipped with high power and authority can mediate between interface

partners. Only under supervision of such institution can solutions that meet the requirements of the RFP be created.

8.3.12.3 Interface management shall be the responsibility of the Contractor and unsolved interface problems shall lead to the consumption of more work, more time and more money for an extraordinary complex Project like this.

8.3.12.4 The Contractor shall split the whole of the Works into several disciplines forming various work packages to be provided by different joint venture partners and/or consortium members and/or subcontractors. Activities to be completed by each Joint Venture partner and/or Consortium member and/or subcontractor, shall be done seamlessly to achieve successful delivery of the whole of the Works which shall further require suitable integration into existing infrastructure.

8.3.12.5 This interface work shall ensure that information and clarifications required for the integration and co-ordination of Planning, Design, Supply, Construction, Installation, Testing, Commissioning activities between all parties concerned are identified, detailed and clarified in due time.

8.3.12.6 The Contractor shall bear the responsibility for establishing an effective Interface Management procedure and take full risk for all interfaces required for successful delivery of the Works (including, but not limited to, interfaces with TFR) including all consequential and/or related delays.

8.3.12.7 The Contractor shall appoint an Interface Management director in his area of responsibility who leads an Interface Management group. The Interface Management group shall, at a minimum, consist of joint venture partners and/or consortium members and/or subcontractors. The responsibilities of the Interface Management director and his group shall be the following, at a minimum:

8.3.12.7.1 Establishment and update of the Interface Management Plan and Interface Identification Log.

8.3.12.7.2 Assisting the System Engineers and Designers in identifying the interfaces.

8.3.12.7.3 Detection of interfaces not identified by System Engineers and Designers.

8.3.12.7.4 Registration of all interfaces in an Interface Identification Log.

8.3.12.7.5 Establishment and updating of an Interface Matrix.

8.3.13 If the “Approved Baseline Contract Programme/Approved Programme” could not be finalised and agreed, between Employer and the Contractor during Contract negotiations thereafter included in the Contract as the “Approved Baseline Contract Programme/Approved Programme,” then the Contractor shall submit an initial programme for the execution of the Works to the Employer and/or Engineer within 28 (twenty-eight) calendar days after receiving the Notice under Sub-Clause 8.1[Commencement of Works]. This programme, which shall then be the “Approved Baseline Contract Programme/Approved Programme” once approved by the Employer and/or Engineer, shall be prepared using programming software stated in the Employer's Requirements, this Contract and the RFP (if not stated, the programming software acceptable to the Engineer).

8.3.14 The Contractor shall, in addition to other Programme requirements that form part of the Employer's Requirements, submit a revised Programme which accurately reflects the actual progress of the Works, whenever any Programme ceases to reflect actual progress or is otherwise inconsistent with the Contractor's obligations. The initial Programme and each revised Programme shall be submitted to the Engineer in one paper copy, one electronic copy and additional paper copies (if any) as stated in the Employer's Requirements, this Contract and the RFP, and shall further include:

- 8.3.14.1 the Commencement Date and the Time for Completion, of the Works and of each Section (if any);
- 8.3.14.2 the date right of access to and possession of (each part of the Site (s) is to be given to the Contractor in accordance with the time (or times) stated in the Employer's Requirements, this Contract and the RFP. If not so stated, the dates the Contractor requires the Employer and/or Engineer to give right of access to and possession of (each part of the Site(s));
- 8.3.14.3 the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design, preparation and submission of the Contractor's Documents, procurement, manufacture, Inspection, delivery to Site(s), construction, erection, installation, work to be undertaken by any nominated Subcontractor (as defined in Clause 4.5 [Nominated Subcontractors]), testing, commissioning and trial operation;
- 8.3.14.4 the Review periods under Sub-Clause 5.2.3 [Review by Engineer], and periods for Review for any other submissions specified in the Employer's Requirements or required under these Conditions;
- 8.3.14.5 the sequence and timing of Inspections and tests specified in, or required by, the Contract;
- 8.3.14.6 for a revised Programme: the sequence and timing of the remedial work (if any) to which the Engineer has given a Notice of No-objection under Sub-Clause 7.5 [Defects and Rejection] and/or the remedial work (if any) instructed under Sub-Clause 7.6 [Remedial Work];

- 8.3.14.7 all activities (to the level of detail specified in the Employer's Requirements, this Contract and the RFP), logically linked and showing the earliest and latest start and finish dates for each activity, the float ('if any), and the critical path(s);
- 8.3.14.8 the dates of all locally recognised days of rest and holiday periods (if any);
- 8.3.14.9 all key delivery dates of Plant and Materials;
- 8.3.14.10 for a revised Programme and for each activity: the actual progress to date, any delay to such progress and the effects of such delay on other activities (if any); and
- 8.3.14.11 a supporting report which includes:
 - 8.3.14.11.1 a description of all the major stages of the execution of the Works;
 - 8.3.14.11.2 a general description of the methods which the Contractor;
 - 8.3.14.11.3 intends to adopt in the execution of the Works;
 - 8.3.14.11.4 details showing the Contractor's reasonable estimate of the number of each class of the Contractor's Personnel, and of each type of the Contractor's Equipment, required on the Site(s), for each major stage of the execution of the Works;

8.3.14.11.5 if a revised Programme, identification of any significant change(s) to the previous Programme submitted by the Contractor; and

8.3.14.11.6 the Contractor's proposals to overcome the effects of any delay(s) on progress of the Works.

8.3.15 The Engineer shall, at the Engineer's discretion, review the Approved Baseline Contract Programme and/or any other Approved Programme and each revised Programme submitted by the Contractor and may give a written Notice to the Contractor stating the extent to which it does not comply with the Contract or ceases to reflect actual progress or is otherwise inconsistent with the Contractor's obligations. The Engineer shall, at the Engineer's discretion, further instruct the Contractor to rectify any activities in order to achieve true reflection of actual progress and consistency with the Contractor's obligations at the Contractor's cost.

8.3.16 The Contractor shall proceed in accordance with the Programme, subject to the Contractor's other obligations under the Contract. The Employer's Personnel and Engineer's Personnel shall be entitled to rely on the Programme when planning their activities. Nothing in any Programme, the Programme or any supporting report shall be taken as, or relieve the Contractor from any obligation to give, a Notice under the Contract.

8.3.17 If, at any time, the Engineer gives a Notice, in writing, to the Contractor that the Programme fails (to the extent stated) to comply with the Contract or ceases to reflect actual progress or is otherwise inconsistent with the Contractor's obligations, the Contractor shall, within 14 (fourteen) calendar days after receiving this Notice, submit a revised Programme to the Engineer in accordance with this Sub-Clause.

8.3.18 Failure of the Contractor to achieve any of these Major Milestones and Deliverables on these Key Dates shall give the Employer and/or Engineer an unprejudiced

discretionary right to immediately Terminate the Contract and Claim damages from the Contractor and/or apply penalties (as specified throughout the Employer's Requirements, this Contract and the RFP) from the aforementioned date until the date on which the Employer and/or Engineer confirms, in writing, that the Employer and/or Engineer is completely satisfied that all Validation is completed. The minimum costs and damages that the Contractor shall pay the Employer is the total amount of money paid to the Contractor plus any other amounts which the Contractor may have been due as at the date of each Key Date.

8.3.19 DELIVERY OF THE WORKS

8.3.19.1 The Contractor undertakes to deliver the Works within the budget and with a precise coordination of all tasks to achieve a high standard of Quality to be approved by the Employer and/or Engineer.

8.3.19.2 The Contractor's execution of the Project will follow a well-defined and founded methodology throughout the whole lifecycle of the Project to prevent:

8.3.19.2.1 Programme slippages;

8.3.19.2.2 Cost slippages;

8.3.19.2.3 Misunderstanding and gaps in communication within the own organisation;

8.3.19.2.4 Misunderstanding and gaps in communication with the other contractual partner;

8.3.19.2.5 Waste of capacity in respect to human recourses; and

8.3.19.2.6 Waste of plants and Material.

8.3.19.3 The Contractor shall plan all the Works in a manner that ensures minimal interruption to normal train services and any other services rendered by the Employer.

8.3.19.4 The Contractor's execution of the Works may start simultaneously for the whole of the Works (or in Sections) only after Validation of the RSS and ETCS Level 2 is completed to the absolute satisfaction of the Employer and/or Engineer (and so confirmed in writing by the Employer and/or Engineer). Should the Contractor commence any other Works prior to the completion of Validation, such works shall be deemed to have been undertaken by the Contractor at the Contractor's own peril and cost (for which such cost may not be reimbursed by the Employer and/or Engineer if the Contract is terminated).

8.3.19.5 The Works shall be executed as per prioritization of sequencing of the delivery of the Works as follows, unless otherwise agreed to in writing with the Employer and/or Engineer:

8.3.19.5.1 Section 1: Crossmoor to Havenside:

8.3.19.5.1.1 Sub-Section 1A:

8.3.19.5.1.1.1 Section 1 COT and Telecommunications (implementation of enabling and other COT and Telecommunications);

8.3.19.5.1.1.2 Electronic interlocking Validation and reliability testing (if required and/or requested by Employer and/or Engineer);

8.3.19.5.1.1.3 Validation and reliability testing non-approved technologies and Equipment; and

8.3.19.5.1.1.4 ETCS development.

8.3.19.5.2.1 Sub-Section 1B:

8.3.19.5.2.1.1 ETCS Validation and reliability testing;

8.3.19.5.2.1.2 Section 1 Resignalling; and

8.3.19.5.2.1.3 Section 2 COT and Telecommunications.

8.3.19.5.2 Section 2: KwaMashu to Bridge City:

8.3.19.5.2.1 Section 2 Resignalling;

8.3.19.5.2.2 Section 3 COT and Telecommunications; and

8.3.19.5.2.3 Section 1 ETCS implementation.

8.3.19.5.3 Section 3: Avoca to Springfield:

8.3.19.5.3.1 Section 3 Resignalling;

8.3.19.5.3.2 Section 4 COT and Telecommunications; and

8.3.19.5.3.3 Section 2 ETCS implementation.

8.3.19.5.4 Section 4: Congela to Durban:

8.3.19.5.4.1 Section 4 Resignalling;

8.3.19.5.4.2 Section 5 COT and Telecommunications; and

8.3.19.5.4.3 Section 3 ETCS implementation.

8.3.19.5.5 Section 5: Clairwood to Umlazi:

8.3.19.5.5.1 Section 5 Resignalling;

8.3.19.5.5.2 Section 6 COT and Telecommunications; and

8.3.19.5.5.3 Section 4 ETCS implementation.

8.3.19.5.6 Section 6: Isipingo to Kelso:

8.3.19.5.6.1 Section 6 Resignalling;

8.3.19.5.6.2 Section 7 COT and Telecommunications; and

8.3.19.5.6.3 Section 5 ETCS implementation.

8.3.19.5.7 Section 7: Rossburgh to Pinetown:

8.3.19.5.7.1 Section 7 Resignalling;

8.3.19.5.7.2 Section 8 COT and Telecommunications (if required); and

8.3.19.5.7.3 Section 6 ETCS implementation.

8.3.19.5.8 Section 8: Rossburgh CTCC (in parallel with other Sections):

8.3.19.5.8.1 Rossburgh CTCC delivery;

8.3.19.5.8.2 Migration to Rossburgh CTCC;

8.3.19.5.8.3 Section 8 ETCS implementation; and

8.3.19.5.8.4 All outstanding Work.

8.3.20 MANAGEMENT AND IMPLEMENTATION METHODOLOGY

8.3.20.1 The Contractor shall, at a minimum and as part of the Employer's Requirements, this Contract and the RFP, provide the following comprehensive Management and Implementation Methodology, for which detailed; organisation, strategy, policies, procedures, sequencing and Construction processes that the Contractor shall put in place, at a minimum in accordance with the Project Management Body of Knowledge ("PMBOK® Guide") for; Planning, execution, scheduling, controlling and supervision of the delivery of Works, is required:

8.3.20.1.1 Project Management:

- Organisational Chart; and

- Contract Management and Reporting Responsibilities; and
- Roles and Responsibilities Matrix; and
- Interdependency and Integration; and
- Document Management.

8.3.20.1.2 Human Resources:

- Identification and Planning; and
- In-house or Acquisition; and
- Training and Development; and
- Management and Control.

8.3.20.1.3 Procurement:

- Subcontractor(s) Procurement, Contracting and Management; and
- Plant and Materials Supplier(s) Procurement, Contracting and Management; and
- B-BBEE Target Achievement and Compliance Matrix; and
- Localisation Target Achievement and Compliance Matrix.

8.3.20.1.4 Communications and Stakeholder Engagement:

- Planning; and
- Protocols; and
- Information distribution; and
- Performance reporting; and
- Stakeholder management (identification and relationship management).

8.3.20.1.5 Project Programme:

- Identification and definition of Major Milestones, Deliverables and Key Dates; and
- Identification and definition of Work Breakdown Structure (“WBS”); and
- Identification and definition of tasks and activities including resource and duration estimation; and
- Sequencing of tasks and activities including resource and duration estimation; and
- Programme Development and Progress Reporting; and
- Programme Change/Update Control.

8.3.20.1.6 Project Cost Control:

- Resource Planning; and
- Cost Estimating, Budgeting and Control; and
- Payment Milestone Schedule linked to/extracted from the Contractor’s Proposal (Bid Programme) thereafter the Contract Programme(s).

8.3.20.1.1 Project Quality Management:

- Planning; and
- Assurance; and
- Control.

8.3.20.1.8 Occupational Health, Safety and Security (“OHS”):

- Site(s); and
- Project Team; and

- Public and Third Parties.

8.3.20.1.9 Environmental and Heritage:

- Air and Dust Control; and
- Noise Pollution Prevention; and
- Flora and Fauna Protection; and
- Sustainable Construction Practice; and
- Stormwater Management; and
- Waste Management.

8.3.20.1.10 Risks, Issues and Lessons Learnt:

- Risks management Planning and identification, analysis (qualitative and quantitative), response (action) Planning, monitoring and control; and
- Issues management Planning and identification, analysis (qualitative and quantitative), response (action) Planning, monitoring and control; and
- Lessons Learnt identification, analysis (qualitative and quantitative) and Logging.

8.3.20.1.11 Construction Technology and Methodology:

- Site(s) Hand Over to the Contractor; and
- Project Signage; and
- Site Logistics; and
- Local Authority(s) Management, Coordination and Compliance; and
- Step by Step Construction Method Statements linked to sequencing of tasks and activities in the Bid Programme; and

- Interim Inspections, Tests and Commissioning (strategy, approach, deliverables); and
- Sectional Interim hand over to the Employer; and
- Final Inspections, Tests on Completion, Commissioning, Completion (strategy, approach, deliverables); and
- Provision of As-built Information; and
- Decommissioning; and
- The Employer's Acceptance of Works; and
- Taking Over, Maintenance, Warranties and Defects Liability After the Employer Taking Over (strategy, approach, deliverables) ; and
- Project Close-out.

8.3.20.2 The above-mentioned Implementation Methodology and Management Plans shall be finalised and agreed between the Employer and/or Engineer and the Contractor during Contract negotiations or any other time as instructed by the Employer and/or Engineer thereby included in the Contract as the Approved Project Charter/Project Execution Plan/ Project Management Procedure Handbook.

8.4 ADVANCE WARNING

8.4.1 The Contractor shall advise the Employer and/or Engineer, in advance of any known or probable future events or circumstances which may:

8.4.1.1 adversely affect the work of the Contractor's Personnel, the Employer's Personnel and the Engineer's Personnel;

8.4.1.2 adversely affect the performance of the Works when completed;

8.4.1.3 increase the Contract Price; and/or

8.4.1.4 delay the execution of the Works or a Section (if any).

8.4.2 The Employer and/or Engineer, at the Employer's sole discretion, may request the Contractor to submit a proposal under Sub-Clause 13.3.1 [Variation by Request for Proposal to avoid or minimize the effects of such event(s) or circumstance(s) for consideration by the Employer and/or Engineer.

8.5 EXTENSION OF TIME FOR COMPLETION

8.5.1 The Contractor, at the discretion of the Employer and/or Engineer, may only be entitled to the Extension of Time subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over the Works and Sections] is or will be delayed by any of the following causes:

8.5.1.1 an Employer and/or Engineer approved Variation (except that there shall be no requirement to comply with Sub-Clause 20.2 [Claims for Payment and/or EOT];

8.5.1.2 an Employer and/or Engineer approved cause of delay giving an entitlement to EOT under a Sub-Clause of these Conditions;

8.5.1.3 an Employer and/or Engineer accepted exceptionally adverse climatic conditions, which for the purpose of these Conditions shall mean adverse climatic conditions at the Site(s) which are Unforeseeable having regard to climatic data made available by the Employer and/or Engineer and/or climatic data published in the Country for the geographical location of the Site(s);

- 8.5.1.4 Employer and/or Engineer accepted unforeseeable shortages in the availability of personnel or Goods, Plant and Materials (or Employer-Supplied Materials, if any) caused by epidemic or governmental actions; or
- 8.5.1.5 an Employer and/or Engineer approved delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel and Engineer's Personnel, or the Employer's other contractors on the Site(s).
- 8.5.2 When determining each EOT under Sub-Clause 20.2 [Claims for Payment and/or EOT], the Employer and/or Engineer shall review previous determinations under Sub-Clause 3.7 [Agreement or Determination] and may increase or decrease the total EOT.
- 8.5.3 If a delay caused by a matter which is the Employer and/or Engineer's responsibility is concurrent with a delay caused by a matter which is the Contractor's responsibility, the Contractor's entitlement to EOT shall be assessed in accordance with the rules and procedures stated in the Special Provisions (if not stated, then as determined by the Employer and/or Engineer taking due regard of all relevant circumstances).

8.6 DELAYS CONSTITUTED BY AUTHORITIES

8.6.1 It is agreed that if:

- 8.6.1.1 the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities or private utility entities in the Country;

8.6.1.2 these authorities or entities delay or disrupt the Contractor's work; and

8.6.1.3 only if the delay or disruption is approved as an Exceptional Event by the Employer and/or Engineer then this delay or disruption will be considered under clause 18.1.

8.7 RATE OF PROGRESS

8.7.1 If, at any time:

8.7.1.1 actual progress is too slow to complete the Works or a Section (if any) within the relevant Time for Completion; and/or

8.7.1.2 progress has fallen (or will fall) behind the Programme (or the initial Programme if it has not yet become the Programme) under Sub-Clause 8.3 [Programme], other than as a result of a cause listed in Sub-Clause 8.5 [Extension of Time for Completion], then the Employer and/or Engineer shall instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised Programme describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete the Works or a Section (if any) within the relevant Time for Completion.

8.7.2 Unless the Employer and/or Engineer gives a Notice, in writing, to the Contractor stating otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of the Contractor's Personnel and/or the Goods, Plant and Materials, at the Contractor's risk and cost. If these revised methods cause the Employer to incur additional costs, the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to

payment of these costs by the Contractor, in addition to Delay Damages (if any) and Penalties.

8.8 DELAY DAMAGES

- 8.8.1 The Contractor shall unequivocally commit to comprehensive and uncompromised execution of the Works through strict adherence to the Employer's Requirements, this Contract and the RFP, and achievement of all Major Milestones, Deliverables Key Dates, within the specified Time(s) for Completion for the; Design and Construction portion of the Works (excluding the full Maintenance, Warranty and Defects Liability period), and the Time for Completion for the whole of the Works (including the full Maintenance, Warranty and Defects Liability period).
- 8.8.2 Failure of the Contractor to meet any of these requirements at any time throughout the duration of the Contract shall give the Employer an unprejudiced discretionary right to immediately terminate the Contract, without allowing the Contractor any period of rectification, and all costs damages and penalties related to such termination shall be borne by the Contractor.
- 8.8.3 If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment of Delay Damages and Penalties by the Contractor for this default at a minimum. Delay Damages shall be the amount stated in the Employer's Requirements, this Contract and the RFP, which shall be paid for every day which shall elapse between the relevant Time for Completion and the relevant Date of Completion of the Works or Section. The total amount due under this Sub-Clause shall not exceed the maximum amount of Delay Damages (if any) stated in the Employer's Requirements, this Contract and the RFP.
- 8.8.4 These Delay Damages shall be the only damages due from the Contractor for the Contractor's failure to comply with Sub-Clause 8.2 [Time for Completion], other than

in the event of termination under Sub-Clause 15.2 [Termination for Contractor's Default] before completion of the Works. These Delay Damages shall not relieve the Contractor from the obligation to complete the Works, or from any other duties, obligations or responsibilities which the Contractor may have under or in connection with the Employer's Requirements, this Contract and the RFP

8.8.5 This Sub-Clause shall not limit the Contractor's liability for Delay Damages and Penalties in any case of fraud, gross negligence, deliberate default, abandonment or reckless misconduct by the Contractor.

8.8.6 Major Milestones, Deliverables and Key Dates:

8.8.6.1 If the Contractor fails to achieve any Major Milestone(s) and/or meet any Deliverable(s) on any Key Date(s) per the Approved Baseline Contract Programme/Approved Programme (as referenced elsewhere in the Employer's Requirements, this Contract and in the RFP) the Contractor shall pay Delay Damages, Penalties and any other costs, to the Employer for this default.

8.8.6.2 The Delay Damages, per incident, shall be payable for each elapsed calendar day calculated from the calendar date on which a Key Date falls as per the Approved Baseline Contract Programme/Approved Programme (as referenced elsewhere in the Employer's Requirements, this Contract and the RFP) to the actual date on which the related Major Milestone is achieved and Deliverables met or the planned delayed date on which the related Major Milestone may be achieved and Deliverables met (the later of the 2 dates).

8.8.6.3 Elapsed calendar days shall include the calendar day on which a Key Date falls as per the Approved Baseline Contract Programme/Approved

Programme (as referenced elsewhere in the Employer's Requirements, this Contract and the RFP) to the actual calendar day on which the related Major Milestone is achieved and Deliverables met or the planned delayed date on which the related Major Milestone may be achieved and Deliverables met.

- 8.8.6.4 The minimum Delay Damages payable shall be calculated at 0.1% of the TCP multiplied by the number of elapsed calendar days, per incident, but shall not exceed 20.000% of the TCP per incident. The TCP that will be used for the calculation of the Penalty, for each incident, will be the TCP as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that the Penalty is to be calculated for each incident.

8.9 EMPLOYERS'S SUSPENSION

- 8.9.1 The Employer and/or Engineer may at any time instruct the Contractor to suspend progress of part or all of the Works, which instruction shall state the date and cause of the suspension. During such suspension, the Contractor shall protect, store and secure such part or all of the Works (as the case may be) against any deterioration, loss or damage.
- 8.9.2 To the extent that the cause of such suspension is the responsibility of the Contractor, Sub-clause 8.10 [Consequences of Employer's Suspension] and 8.11 [Payment for Plant and Materials After Employer's Suspension] shall not apply.

8.10 CONSEQUENCES OF EMPLOYER'S SUSPENSION

- 8.10.1 The Contractor shall not be entitled to EOT, or to payment of the Cost incurred, in making good:

8.10.1.1 the consequences of the Contractor's faulty or defective design, workmanship, Plant or Materials; and/or

8.10.1.2 any deterioration, loss or damage caused by the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.9 [Employer's Suspension].

8.11 PAYMENT FOR PLANT AND MATERIALS AFTER EMPLOYER'S SUSPENSION

8.11.1 The Contractor shall, subject to the approval in writing by the Employer and/or Engineer (acting on written instruction from the Employer) be entitled to payment of the value (as at the date of suspension instructed under Sub-Clause 8.9 [Employer's Suspension]) of Plant and Materials which have been delivered to Site(s) and accepted in writing by the Employer and/or Engineer (acting on written instruction from the Employer), if:

8.11.1.1 The work on Plant, or delivery of Plant and Materials, has been suspended for more than 365 (three hundred and sixty-five) calendar days and

8.11.1.2 The Plant and Materials were proven to be scheduled, in accordance with the Programme, to have been completed and delivered to the Site(s) during the suspension period; and

8.11.1.3 The Contractor provides the Employer and/or Engineer with reasonable evidence that the Plant and Materials comply with the Contract; and

8.11.1.4 the Contractor has marked the Plant and Materials as the Employer's property in accordance with the Employer and/or Engineer's instructions.

8.12 PROLONGED SUSPENSION

8.12.1 If the suspension under Sub-Clause 8.9 [Employer's Suspension] has continued for more than 730 (seven hundred and thirty) calendar days, the Contractor shall give a Notice, in writing, to the Employer and/or Engineer requesting permission to proceed. If the Employer and/or Engineer does not give a Notice under Sub-Clause 8.13 [Resumption of Work] within 90 (ninety) calendar days after receiving the Contractor's Notice under this Sub-Clause, the Contractor shall either:

8.12.1.1 agree to a further suspension, in which case the Parties may agree the EOT and/or proven Cost excluding Profit (if the Contractor incurs Cost), and/or payment for suspended Plant and Materials, arising from the total period of the further suspension; or (and if the Parties fail to reach agreement under this sub-paragraph 8.12.1.1.

8.12.1.2 after giving a (second) Notice, in writing, to the Employer and/or Engineer, treat the suspension as an omission of the affected part of the Works with immediate effect including release from any further obligation to protect, store and secure under Sub-Clause 8.9 [Employer's Suspension].

8.12.1.3 If the suspension affects the whole of the Works, the Contractor may give a written Notice of termination under Sub-Clause 16.2 [Termination by Contractor].

8.13 RESUMPTION OF WORK

- 8.13.1 The Contractor shall resume work as soon as practicable after receiving a written Notice from the Employer and/or Engineer to proceed with the suspended work. At the time stated in this Notice (if not stated, immediately after the Contractor receives this Notice), the Contractor and the Employer and/or Engineer shall jointly examine the Works and the Plant and Materials affected by the suspension.
- 8.13.2 The Employer and/or Engineer shall record any deterioration, loss, damage or defect in the Works or Plant or Materials which has occurred during the suspension and shall provide this record to the Contractor. The Contractor shall, at the Contractor's cost, Promptly make good all such deterioration, loss, damage or defect so that the Works, when completed, shall comply with the Employer's Requirements, this Contract and the RFP.

9. TEST ON COMPLETION

9.1 Contractor's Obligations

- 9.1.1 The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing by the Contractor], after submitting the documents under Sub-Clause 5.6 [As-Built Records] and Sub-Clause 5.7 [Operation and Maintenance Manuals].
- 9.1.2 The Contractor shall submit to the Employer and/or Engineer, not less than 90 (ninety) calendar days before the date the Contractor intends to commence the Tests on Completion, a detailed test Programme showing the intended timing and resources required for these tests.

- 9.1.3 The Employer and/or Engineer may Review the proposed test Programme and may give a Notice, in writing, to the Contractor stating the extent to which it does not comply with the Contract. Within 14 (fourteen) days after receiving this Notice, the Contractor shall revise the test Programme to rectify such non-compliance.
- 9.1.4 If the Employer and/or Engineer gives no such Notice within 21 (twenty-one) calendar days after receiving the test Programme (or revised test Programme), the Employer and/or Engineer shall not be deemed to have given a Notice of No-objection. The Contractor shall not commence the Tests on Completion until a Notice of No-objection is given (by the Employer and/or Engineer).
- 9.1.5 In addition to any date(s) shown in the test Programme, the Contractor shall give a Notice, in writing, to the Employer and/or Engineer, of not less than 90 (ninety) calendar days of the date after which the Contractor will be ready to carry out each of the Tests on Completion. The Contractor shall commence the Tests on Completion within 14 (fourteen) calendar days after this date, or on such day or days as the Employer and/or Engineer shall instruct and shall proceed in accordance with the Contractor's test Programme to which the Employer and/or Engineer has given a Notice of No-objection.
- 9.1.6 Unless otherwise stated in the Employer's Requirements, this Contract and the RFP the Tests on Completion shall be carried out in stages in the following sequence:
- 9.1.6.1 pre-commissioning tests (on or off the Site(s), as appropriate), which shall include the appropriate Inspections and ("dry" or "cold") functional tests to demonstrate that each item of the Works or Section can safely undertake the next stage under sub-paragraph below;
 - 9.1.6.2 commissioning tests, which shall include the operational tests specified in the Employer's Requirements, this Contract and the RFP to demonstrate that the Works or Section can be operated safely and as

specified in the Employer's Requirements, this Contract and the RFP under all available operating conditions; and

9.1.6.3 trial operation (to the extent possible under available operating conditions), which shall all demonstrate that the Works or Section perform reliably and in accordance with the Employers Requirement, this Contract and the RFP.

9.1.7 The tests of each stage described in sub-paragraphs 9.1.6.2 and 9.1.6.3 above shall not be commenced until the Works or Section have passed the previous stage. During trial operation, when the Works or Section (as the case may be) are operating under stable conditions, the Contractor shall give a Notice, in writing, to the Employer and/or Engineer that they are ready for any other Tests on Completion, including performance tests.

9.1.8 Performance tests shall be carried out to demonstrate whether the Works or Section comply with the criteria specified in the Employer's Requirements, this Contract and the RFP and with the Schedule of Performance Guarantees.

9.1.9 Trial operation, including performance testing, shall not constitute a taking over under Clause 10 [Employer's Taking Over]. Any product produced by, and any revenue or other benefit resulting from trial operation under this Sub-Clause shall be the property of the Employer.

9.1.10 As soon as the Works or Section have, in the Contractor's opinion, passed each stage of the Tests on Completion described in sub-paragraphs 9.1.6.1 to 9.1.6.3 above, the Contractor shall submit a certified report of the results of these tests to the Employer and/or Engineer.

- 9.1.11 The Employer and/or Engineer shall Review each such report and shall give a Notice, in writing, to the Contractor stating the extent to which the results of the tests do not comply with the Contract.
- 9.1.12 In considering the results of the Tests on Completion, the Employer and/or Engineer shall make allowances for the effect of any use of (any part of the Works by the Employer and/or Engineer on the performance or other characteristics of the Works.
- 9.1.13 The Contractor shall conduct an operational readiness assessment before the Commissioning of each Section and implement required action to ensure operational readiness by time of Commissioning.
- 9.1.14 The Contractor will perform all the necessary functional tests on completion of the Works. On completion of such a task, a test certificate will be submitted to the Employer and/or Engineer.

9.2 DELAYED TESTS

- 9.2.1 If the Contractor has given a Notice under Sub-Clause 9.1 [Contractor's Obligations] that the Works or Section (as the case may be) are ready for Tests on Completion, and these tests are unduly delayed by the Employer's Personnel or by a cause for which the Employer and/or Engineer is responsible, Sub-Clause 10.3 [Interference with Tests on Completion] shall apply.
- 9.2.2 If the Tests on Completion are unduly delayed by the Contractor, the Employer and/or Engineer may by giving a Notice, in writing, to the Contractor require the Contractor to carry out the tests within 14 (fourteen) calendar days after receiving the Notice. The Contractor shall carry out the tests on such day or days within this period of 14 (fourteen) calendar days as the Contractor shall fix, for which the Contractor shall give a prior Notice, in writing, to the Employer and/or Engineer of not less than 14

(fourteen) calendar days. If the Contractor fails to carry out the Tests on Completion within this period of 14 (fourteen) calendar days:

9.2.2.1 after a second Notice is given by the Employer and/or Engineer to the Contractor, the Employer's Personnel and/or Engineer's Personnel may proceed with the tests;

9.2.2.2 the Contractor shall attend and witness these tests;

9.2.2.3 within 56 (fifty-six) calendar days of these tests being completed, the Employer and/or Engineer shall send a copy of the test results to the Contractor; and

9.2.2.4 if the Employer incurs additional costs as a result of such testing, the Employer shall be entitled subject to Sub-Clause 20.2 [Claims for Payment and/or EOT] to payment by the Contractor of the costs reasonably incurred.

9.2.3 The Tests on Completion undertaken by the Employer and/or Engineer may be carried out in the presence of the Contractor and the results of these tests shall be accepted as accurate by the Contractor.

9.3 RETESTING

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [Defects and Rejection] shall apply. The Employer and/or Engineer or the Contractor shall require these failed tests, and the Tests on Completion on any related work, to be repeated under the same terms and conditions. Such repeated tests shall be treated as Tests on Completion for the purposes of this Clause.

9.4 FAILURE TO PASS TESTS ON COMPLETION

If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Employer and/or Engineer shall be entitled to:

- 9.4.1 order further repetition of Tests on Completion under Sub-Clause 9.3 [Retesting];
- 9.4.2 reject the Works if the effect of the failure is to deprive the Employer of substantially the whole benefit of the Works, in which event the Employer shall have the same remedies as are provided in sub-paragraph 11.3.3.4 of Sub-Clause 11.3.3 [Failure to Remedy Detects];
- 9.4.3 reject the Section if the effect of the failure is that the Section cannot be used for its intended purpose(s) under the Employer's Requirements, this Contract and the RFP, in which event the Employer shall have the same remedy as is provided in sub-paragraph 11.3.3.3 of Sub-Clause 11.3.3 [Failure to Remedy Detects]; or
- 9.4.4 issue a Taking-Over Certificate, if the Employer and/or Engineer so requests.
- 9.4.5 In the event of sub-paragraph 9.4.4 above, the Contractor shall then proceed in accordance with all other obligations under the Contract, and the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment by the Contractor or a reduction in the Contract Price as described under sub-paragraphs 11.3.3.2.1 or 11.3.3.2.2 of Sub-Clause 11.3.3 [Failure to Remedy Detects], respectively. This entitlement shall be without prejudice to any other rights the Employer may have, under the Contract or otherwise.

10. EMPLOYER'S TAKE OVER

10.1 Taking Over the Works and Sections

10.1.1 Test on completion, Commissioning and Taking Over shall be done according to the procedure described in the General Technical Requirements (GTRs) and Main Technical References (MTR) or as otherwise instructed in writing by Employer and/or Engineer throughout the duration of the Contract.

10.1.2 After (Sectional) Completion, the Contractor shall, at a minimum arrange a Taking Over Inspection to allow Employer and/or Engineer certification of (Sectional) Completion subject to a Defects list or as otherwise instructed in writing by Employer and/or Engineer.

10.1.3 The Employer and/or Engineer may use the following Sections of the Works before Completion of the whole of the Works is certified which does not constitute Taking Over by the Employer:

10.1.3.1 After each Section is commissioned and is handed back to the Employer to continue their train operations in the interim until issuance of the Performance certificate;

10.1.3.2 Any Inspections done to allow the Employer's use of commissioned Sections of the Works are done to aid prompt correction of Defects and should not be confused with Taking Over procedures.

10.1.3 The Contractor shall without hesitation, ensure that Employer has a full, accurate and unredacted dossier of all Project information (including but not limited to as built

documents and drawings) that represent the status of the completed Works, in all formats requested by Employer.

10.1.4 Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], Sub-Clause 10.2 [Taking Over Parts] and Sub-Clause 10.3 [Interference with Tests on Completion], the Works may be taken over by the Employer when:

10.1.4.1 the Works have been completed in accordance with the Employer's Requirements, this Contract and the RFP, including the passing of the Tests on Completion and except as 5 (five) allowed in sub-paragraph 10.1.7.1 below;

10.1.4.2 the Employer and/or Engineer has given a Notice of No- objection to the as-built records submitted under sub-paragraph 5.6.3.1 of Sub-Clause 5.6 [As-Built Records];

10.1.4.3 the Employer and/or Engineer has given a Notice of No-objection to the provisional O&M Manuals for the Works submitted under Sub-Clause 5.7 [Operation and Maintenance Manuals];

10.1.4.4 the Contractor has carried out the training (if any) as described under Sub-Clause 5.5 [Training]; and

10.1.4.5 a Taking-Over Certificate for the Works has been issued,

10.1.5 The Contractor shall apply for a Taking-Over Certificate by giving a Notice, in writing, to the Employer and/or Engineer not more than 90 (ninety) calendar days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor shall similarly apply for a Taking-Over Certificate for each Section.

10.1.6 If any Part of the Works is taken over under Sub-Clause 10.2 [Taking Over Parts], the remaining Works or Section shall not be taken over until the conditions described in sub-paragraphs 10.1.4.1 to 10.1.4.2 above have been fulfilled.

10.1.7 The Employer and/or Engineer shall, within 90 (ninety) calendar days after receiving the Contractor's Notice, either:

10.1.7.1 issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Employer's Requirements, this Contract and the RFP, except for any minor outstanding work and defects (as listed in the Taking-Over Certificate) which will not substantially affect the safe use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or

10.1.7.2 reject the application by giving a Notice, in writing, to the Contractor, with reasons. This Notice shall specify the work required to be done, the defects required to be remedied and/or the documents required to be submitted by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work, remedy such defects and/or submit such documents before giving a further Notice under this Sub-Clause.

10.1.8 If the Employer and/or Engineer does not issue the Taking-Over Certificate or reject the Contractor's application within this period of 90 (ninety) calendar days, and if the conditions described in sub-paragraphs 10.1.4.1 to 10.1.4.4 above have been fulfilled, the Works or Section shall not be deemed to have been completed in accordance with the Employer's Requirements, this Contract and the RFP on the 90th (ninetieth) day after the Employer and/or Engineer receives the Contractor's Notice of application and the Taking-Over Certificate shall not be deemed to have been issued.

10.2 Taking over Parts

10.2.1 The Employer and/or Engineer shall at the sole discretion of the Employer and/or Engineer, issue a Taking-Over Certificate for any part of the Permanent Works.

10.2.2 The Employer shall not use any part of the Works (other than as a temporary and/or interim measure, which is either specified in the Employer's Requirements, this Contract and the RFP or with the prior agreement of the Contractor) unless and until the Employer and/or Engineer has issued a Taking-Over Certificate for this part or the Employer needs this part to fulfil the Employer's normal business operational requirements.

10.2.3 Where the Employer does use any part of the Works before the Taking-Over Certificate is issued, the Contractor shall give a Notice, in writing, to the Employer and/or Engineer identifying such part and describing such use, and:

10.2.3.1 that Part shall not be deemed to have been taken over by the Employer as from the date on which it is used;

10.2.3.2 the Contractor shall not cease to be liable for the care of such Part as from this date, when responsibility shall pass to the Employer; and

10.2.3.3 The Employer and/or Engineer shall immediately issue a Taking-Over Certificate for this Part, and any outstanding work to be completed (including Tests on Completion) and/or defects to be remedied shall be listed in this certificate.

10.2.4 After the Employer and/or Engineer has issued a Taking-Over Certificate for a Part, the Contractor shall be given the earliest opportunity to take such steps as may be

necessary to carry out the outstanding work (including Tests on Completion) and/or remedial work for any defects listed in the certificate.

- 10.2.5 The Contractor shall carry out these works as soon as practicable and, in any case, before the expiry date of the relevant Defect Liability Period.

10.3 Interference with Tests on Completion

- 10.3.1 If the Contractor is prevented, for multiple periods which total more than 90 (ninety) calendar days, from carrying out the Tests on Completion by the Employer's Personnel and/or Engineer's Personnel or by a cause for which the Employer and/or Engineer is responsible (including any performance test that is not possible due to available operating conditions during trial operation):

10.3.1.1 the Contractor shall give a Notice, in writing, to the Employer and/or Engineer describing such prevention.

10.3.1.2 the Employer and/or Engineer may consider issuing a Taking-Over Certificate for the Works or Section (as the case may be).

- 10.3.2 The Contractor shall carry out the Tests on Completion as soon as practicable and, in any case, before the expiry date of the Defect Liability Period. The Employer and/or Engineer shall give a Notice, in writing, to the Contractor of the date after which the Contractor may carry out each of the Tests on Completion. Thereafter, Sub-Clause 9.1 [Contractor's Obligations] shall apply.

10.4 SURFACES REQUIRING REINSTATEMENT

Except as otherwise stated in the Taking-Over Certificate, a certificate for a Section or Part of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

11 DEFECTS AFTER TAKING OVER

11.1 Completion of Outstanding Work and remedying Defects

- 11.1.1 Each completed Section of the Works shall be tested, commissioned and handed over to the Employer, as soon as possible for interim operational purposes, for which such interim hand over shall be signed and accepted by the Employer and/or Engineer.
- 11.1.2 Notwithstanding the interim Sectional completion referred to in 11.1.1, final Tests on Completion, Commissioning, Completion and Taking Over of the whole of the Works by the Employer shall be done by the Completion Date for the whole of the Works.
- 11.1.3 After (Sectional) Completion, the Contractor shall, at a minimum, arrange a Taking Over Inspection to allow Employer certification of (Sectional) Completion subject to a Defects list or as otherwise instructed in writing by the Employer and/or Engineer.
- 11.1.4 The Contractor shall, at its cost and regardless of the extent of the requirement in 11.1.1 – 11.1.3, take full Maintenance, Warranty and Defects Liability responsibility for the whole of the Works until the Employer and/or Engineer issues the Performance Certificate.
- 11.1.5 In addition to clause 11.1.4, the Contractor shall, at the Contractor's cost and risk, take interim Maintenance, Warranty and Defects Liability responsibility for each Section of the works that has been tested, commissioned and handed over to the Employer from the date of interim hand over to the Completion Date(s) for each Section.
- 11.1.6 The Contractor's warranties shall cover, among others, the following:

- 11.1.6.1 all Telecommunications related Works, at a minimum, be valid and cover:
 - 11.1.6.1.1 Replacement of all faulty Plant and Materials, Components and labour for all Maintenance Levels described elsewhere in this contract and bid documents;
 - 11.1.6.1.2 Tracking and tracing and correcting of any Software faults
- 11.1.6.2 Failures caused by the environmental and infrastructure conditions as specified in the Employer's Requirements, this Contract and the RFP including, but not limited to:
 - 11.1.6.2.1 Any Plant and Materials or Components damaged due to exposure to extreme direct sunlight and elevated temperatures;
 - 11.1.6.2.2 Any Plant and Materials or Components damaged due to continuous exposure to high humidity;
 - 11.1.6.2.3 Any Plant and Materials or Component failure due to corrosion.
- 11.1.7 The Contractor shall ensure that the Original Equipment Manufacturer ("OEM") contractually commits to having representation, and providing all necessary Maintenance and/or support, in South Africa for a minimum period of 240 calendar months post the Employer's issuance of the Performance Certificate.

- 11.1.8 The Works and Contractor's Documents, and each Section and/or Part, shall be in the condition required in the Employer's Requirements and this Contract (fair wear and tear excepted), by the expiry date of the relevant Defects Liability Period or as soon as practicable thereafter, the Contractor shall, at the Contractor's cost:
- 11.1.8.1 complete any work which is outstanding on the relevant Date of Completion, within the time(s) stated in the Taking-Over Certificate or such other reasonable time as is instructed by the Engineer; and
 - 11.1.8.2 execute all work required to remedy defects or damage, of which a Notice is given to the Contractor by or on behalf of the Employer on or before the expiry date of the Defect Liability Period for the Works or Section or Part, as the case may be.
- 11.1.9 During the entire contract duration, the Contractor shall, at the Contractor's cost, uncompromisingly and without hesitation, replace any damaged Plant and Materials whether on the Site(s) or not and whether part of the temporary or permanent Works and any Plant and Materials with defects, and further notify the Employer and/or Engineer each time such replacement is required and scheduled.
- 11.1.10 If a defect appears or damage occurs during the relevant Defect Liability Period, a Notice shall be given to the Contractor accordingly, by the Employer and/or Engineer, within 90 (ninety) calendar days thereafter:
- 11.1.10.1 the Contractor and the Employer's Personnel and/or the Engineer's Personnel shall jointly inspect the defect or damage;
 - 11.1.10.2 the Contractor shall then prepare and submit a proposal for necessary remedial work; and

- 11.1.10.3 the second, third and fourth paragraphs of Sub-Clause 7.5. [Defects and Rejection] shall apply.
- 11.1.11 It is recorded that all work under 11.1.4 – 11.1.8 shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:
- 11.1.11.1 the management, design, construction, operations and maintenance of the Works;
 - 11.1.11.2 Plant, Materials or workmanship not being in accordance with the Employer's Requirement, this Contract and the RFP;
 - 11.1.11.3 improper operation or maintenance which was attributable to matters for which the Contractor is responsible (under Sub-Clause 5.5 [Training], Sub-Clause 5.6 [As-Built Records] and/or Sub-Clause 5.7 [Operation and Maintenance Manuals] or otherwise); or
 - 11.1.11.4 failure by the Contractor to comply with any other obligation, under the Employer's Requirements, this Contract and the RFP, if the Contractor considers that the work is attributable to any other cause, the Contractor shall Promptly give a Notice, in writing, to the Engineer and the Engineer shall proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine the cause (and, for the purpose of Sub-Clause 3.7.4 [Time limits], the date of this Notice shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.4.
- 11.1.12 The Contractor shall, at the Contractor's cost, provide the Employer with all maintenance Systems, Plant and Materials and Tools 6 (six) calendar months prior to the end of the Maintenance, Warranty and Defects Liability period (for the whole of the Works) and ensure that the Employer can take over Maintenance of

the PTCS in its entirety upon expiry of the Contractor's Maintenance, Warranty and Defects Liability period.

- 11.1.13 The Contractor shall comply with all constraints and procedures stated in the Employer's Requirements, this Contract and the RFP or as otherwise instructed in writing by the Employer and/or Engineer, and where the Employer arranges access for the Contractor after completion for correction of defects.

11.2 Extension of Defects Liability Period

- 11.2.1 The Employer shall be entitled to an extension of the Defects Liability Period for the Works, or a Section or a Part:

11.2.1.1 if and to the extent that the Works, Section, Part or a major item of Plant (as the case may be, and after taking over) cannot be used for the intended purpose(s) by reason of a defect or damage which is attributable to any of the matters under sub-paragraphs 11.1.11.1 to 11.1.11.14 of Sub-Clause 11.1.11[Costs of Remedying Defects]; and

11.2.1.2 subject to Sub-Clause 20.2 [Claims For Payment and/or EOT]. However, a Defect Liability Period shall not be extended by more than a period of 3 (three) years after the expiry of the Defect Liability Period stated in this Contract.

- 11.2.2 If delivery and/or erection of Plant and Materials was suspended under Sub-Clause 8.9 [Employer's Suspension] other than where the cause of such suspension is the responsibility of the Contractor or Sub-Clause 16.1 [Suspension by Contractor], the Contractor's obligations under this Clause shall apply to any defects or damage occurring more than 3 (three) years after the Defects Liability Period for the Works, of which the Plant and Materials form part, would otherwise have expired.

11.3 Failure to Remedy Defects

11.3.1 If the remedying of any defect or damage under Sub-Clause 11.1 [Completion of Outstanding Works and Remedying Defects] is unduly delayed by the Contractor, a date may be fixed by the Employer and/or Engineer, on or by which the defect or damage is to be remedied.

11.3.2 A Notice of this fixed date shall be given to the Contractor by the Employer and/or Engineer, which Notice shall allow the Contractor stated time taking due regard of all relevant circumstances to remedy the defect or damage.

11.3.3 If the Contractor fails to remedy the defect or damage by the date stated in the Notice issued in line with clause 11.3.1 and where the remedial work was to be executed at the costs of the Contractor under Sub-Clause 11.1.11 [Costs of Remedying Defects], the Employer may (at the Employer's sole discretion):

11.3.3.1 carry out the work or have the work carried out by others, including any retesting, in the manner required under the Contract and at the Contractor's cost, but the Contractor shall have no responsibility for this work. In that event, the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment by the Contractor of the costs reasonably incurred by the Employer in remedying the defect or damage;

11.3.3.2 accept the damaged or defective work, in which case the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to:

- 11.3.3.2.1 payment of Performance Damages and Penalties by the Contractor in full satisfaction of this failure; or
 - 11.3.3.2.2 if there is no Schedule of Performance Guarantees under the Contract, or no applicable Performance Damages, a reduction in the TCP. The reduction shall be in full satisfaction of this failure only and shall be in the amount as shall be appropriate to cover the reduced value to the Employer as a result of this failure;
 - 11.3.3.3 require the Engineer to treat any part of the Works which cannot be used for its intended purpose(s) under the Contract by reason of this failure as an omission or
 - 11.3.3.4 terminate the Contract as a whole with immediate effect (and Sub-Clause 15.2 [Termination for Contractor's Default] shall not apply) if the defect or damage deprives the Employer of substantially the whole benefit of the Works. The Employer shall then be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to recover from the Contractor all sums paid for the Works, plus financing charges and any costs incurred in dismantling the same, clearing the Site(s) and returning Plant and Materials to the Contractor.
- 11.3.4 The exercise of discretion by the Employer under sub-paragraph 11.3.3.3 or 11.3.3.4 above shall be without prejudice to any other rights the Employer may have, under the Contract or otherwise.

11.4 Remedying of Defective Work on Site(s)

- 11.4.1 If, during the Defects Liability Period, the Contractor considers that any defect or damage in any Plant and Materials cannot be remedied expeditiously on the Site(s),

the Contractor shall, within 14 (fourteen) calendar days, give a Notice in writing, with reasons, to the Employer and/or Engineer requesting approval to remove the defective or damaged Plant and Materials off the Site(s) for the purposes of repair.

11.4.2 This Notice shall clearly identify each item of defective or damaged Plant and Materials, and shall give details of:

11.4.2.1 the defect or damage to be repaired;

11.4.2.2 the place to which defective or damaged Plant and Materials is to be taken for repair;

11.4.2.3 the transportation to be used (and insurance cover for such transportation);

11.4.2.4 the proposed Inspections and testing off the Site(s);

11.4.2.5 the planned duration required before the repaired Plant and Materials shall be returned to the Site(s); and

11.4.2.6 the planned duration for reinstallation and retesting of the repaired Plant and Materials under Sub-Clause 7.4 [Testing by the Contractor] and/or Clause 9 [Tests on Completion] if applicable.

11.4.3 The Contractor shall also provide any further details that the Employer and/or Engineer may require. When the Employer and/or Engineer give approval, which approval shall not relieve the Contractor from any obligation or responsibility under this Clause, the Contractor may remove from the Site(s) such items of Plant and Materials as are defective or damaged.

11.4.4 As a condition of this approval, the Employer and/or Engineer may require the Contractor to increase the amount of the Performance Security by the full

replacement cost of the defective or damaged Plant and Materials and further Tests shall be done after remedying the defects.

11.4.5 Within 7 (seven) calendar days of completion of the work of remedying of any defect or damage, the Contractor shall give a Notice, in writing, to the Employer and/or Engineer describing the remedied Works, Section, Part and/or Plant and Materials and the proposed repeated tests under Clause 9 [Tests on Completion] or Clause 12 [Tests after Completion], as applicable. Within 90 (ninety) calendar days after receiving this Contractor's Notice, the Employer and/or Engineer shall give a Notice, in writing, to the Contractor either:

11.4.5.1 agreeing with such proposed testing; or

11.4.5.2 instructing the repeated tests that are necessary to demonstrate that the remedied Works, Section, Part and/or Plant and Materials comply with the Contract.

11.4.6 If the Contractor fails to give such a Notice within the 7 (seven) calendar days, the Employer and/or Engineer may give a Notice, in writing, to the Contractor, within 90 (ninety) calendar days after the defect or damage is remedied, instructing the repeated tests that are necessary to demonstrate that the remedied work comply with the Contract.

11.5 Further Tests after Remedying Defects

11.5.1 All repeated tests under this Sub-Clause shall be carried out in accordance with the terms applicable to the previous tests in this Contract, except that they shall be carried out at the risk and cost of the Contractor, under Sub-Clause 11.2 [Cost of Remedying Defects], for the cost of the remedial work.

11.5.2 Until the date 28 (twenty-eight) calendar days after issue of the Performance Certificate, the Contractor shall have the right of access to all parts of the Works and to records of the operation, maintenance and performance of the Works, except as may be inconsistent with the Employer's security restrictions.

11.6 Right of Access after taking over

11.6.1 Whenever the Contractor intends to access any part of the Works or such records during the relevant Defects Liability Period, the following shall apply:

11.6.1.1 the Contractor shall request access by giving a Notice, in writing, to the Employer and/or Engineer, describing the parts of the Works and/or records to be accessed, the reasons for such access, and the Contractor's preferred date for access. This Notice shall be given within reasonable time in advance.

11.6.1.2 within 90 (ninety) calendar days after receiving the Contractor's Notice, the Employer and/or Engineer shall give a Notice, in writing, to the Contractor either:

11.6.1.2.1 stating the Employer and/or Engineer's approval to the Contractor's request; or

11.6.1.2.2 proposing reasonable alternative date(s), with reasons.

11.7 Contractor to Search

11.7.1 The Contractor shall, if instructed by the Employer and/or Engineer, search for the cause of any defect, under the direction of the Employer and/or Engineer.

- 11.7.2 The Contractor shall carry out the search on the date(s) stated in the Employer and/or Engineer's instruction or other date(s) agreed with the Employer and/or Engineer.
- 11.7.3 If the Contractor fails to carry out the search in accordance with this clause 11.7.1 – 11.7.2, the search may be carried out by the Employer's Personnel and/or Engineer's Personnel, and in that event, the Contractor shall be given a written Notice of the date when such a search will be carried out and the Contractor may attend at the Contractor's own cost.
- 11.7.4 In addition to the defect being remedied at the cost of the Contractor under Sub-Clause 11.1.11 [Cost of Remedying Defects], the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment by the Contractor of the costs of the search incurred by the Employer and the Works shall not be considered to have been completed until the Employer and/or Engineer has issued the Performance Certificate to the Contractor, stating the date on which the Contractor fulfilled the Contractor's obligations under the Contract. The Employer shall be entitled to Claim Delay Damages, Penalties and any other damages.

11.8 Performance Certificate

- 11.8.1 The Engineer shall issue the Performance Certificate to the Contractor (with a copy to the Employer and to the DAAB) within 90 (ninety) calendar days after the latest of the expiry dates of the Defects Liability Periods, or as soon thereafter as the Contractor has:
- 11.8.1.1 supplied all the Contractor's Documents, and the Engineer has given a Notice of No-objection to the as-built records under sub-paragraph 5.6.3.2 of Sub-Clause 5.6 [As-Built Records]; and

- 11.8.1.2 completed and tested all the Works (including remedying any defects) in accordance with the Employer's Requirements, this Contract and the RFP.

11.9 Unfulfilled obligations

- 11.9.1 After the issue of the Performance Certificate, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time.
- 11.9.2 For the purposes of determining the nature and extent of unperformed obligations, this Contract shall be deemed to remain in force.
- 11.9.3 However in relation to Plant and Materials, the Contractor shall not be liable for any defects or damage occurring more than 5 (five) years after expiry of the Defects Liability Period for the Plant and Materials except if prohibited by law or in any case of fraud, gross negligence, deliberate default or reckless misconduct.
- 11.9.4 This Contract shall be concluded once the Employer and/or Engineer determines that each Party has fulfilled its obligations under this Contract.

11.10 CLEARANCE OF SITE(S)

- 11.10.1 The Contractor shall Promptly do the following after the issue of the Performance Certificate:
 - 11.10.1.1 remove any remaining Contractor's Equipment, surplus Material, wreckage, rubbish and Temporary Works from the Site(s) to the satisfaction of the Employer and/or Engineer;

11.10.1.2 reinstate all parts of the Site(s) to the satisfaction of the Employer and/or Engineer which were affected by the Contractor's activities during the execution of the Works and are not occupied by the Permanent Works; and

11.10.1.3 leave the Site(s) and the Works in the condition stated in the Employer's Requirements and this Contract, and if not stated, in a clean and safe condition to the satisfaction of the Employer and/or Engineer.

11.10.2 If the Contractor fails to comply with sub-paragraphs 11.10.1.1 – 11.10.1.3 above and within 28 (twenty-eight) calendar days after the issue of the Performance Certificate, the Employer may sell (to the extent permitted by applicable Laws) or otherwise dispose of any remaining items and/or may reinstate and clean the Site(s), as may be necessary, at the Contractor's cost.

11.10.3 The Employer shall be entitled, subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment by the Contractor of the costs incurred in connection with, or attributable to, such sale or disposal and reinstating and/or cleaning the Site(s), less an amount equal to the moneys from the sale (if any).

12 TEST AFTER COMPLETION

12.1 Procedure for Tests after Completion

12.1.1 The Final Testing and Commissioning shall be done by the Employer's approved Test and Commissioning Engineer provided by the Employer.

- 12.1.2 The Contractor shall agree with the Employer and/or Engineer on a suitable date for performing a final Testing and Commissioning, at least 90 working days prior to proposed date.
- 12.1.3 The Contractor shall submit a comprehensive Final Testing and Commissioning Method Statement to the Employer and/or Engineer for approval before any Commissioning commences.
- 12.1.4 The Contractor shall be responsible to provide a complete Testing and Commissioning team as per the Method Statement, as well as all Tools and Equipment required for introducing, Testing and Commissioning of the System.
- 12.1.5 The members of the Contractor's Testing team shall have not been involved in any Design, FAT or SAT activities relating to the System, sub-System or Equipment for which that member is responsible for during the final Testing and Commissioning.
- 12.1.6 The Employer shall:
- 12.1.6.1 provide all electricity, water, sewage (if applicable), equipment, fuel, consumables, instruments, labour, Materials, and suitably qualified, experienced, and competent staff, as are necessary to carry out the Tests after Completion efficiently and properly; and
 - 12.1.6.2 carry out the Tests after Completion in accordance with:
 - 12.1.6.2.1 the Employer's Requirements,
 - 12.1.6.2.2 the Operation and Maintenance manuals to which the Engineer has given (or is deemed to have given) a Notice

of No-objection, under Sub-Clause 5.7 [Operation and Maintenance Manuals], and

12.1.6.2.3 such guidance as the Contractor may be required to give during the course of these tests; and in the presence of such Contractor's Personnel as either Party may reasonably request.

12.1.7 The timing of the Tests after Completion shall be as stated in the Employer's Requirements, this Contract and the RFP after the Works or Section (as the case may be) have been taken over under Clause 10 [Employer's Taking Over].

12.1.8 The Employer and/or Engineer shall give a Notice, in writing, to the Contractor, in line with clause 12.1.2, of not less than 7 (seven) calendar days of the date on which and place at which the Tests after Completion will be carried out. The Notice shall also include a test Programme showing the estimated timing for each of such tests. Unless otherwise agreed with the Contractor, these tests shall be carried out on this date.

12.1.9 If the Contractor does not attend at the time and place stated in the Employer and/or Engineer's Notice (or otherwise agreed with the Contractor), the Employer and/or Engineer may proceed with the Tests after Completion, which shall be deemed to have been made.

12.1.10 If, for reasons not attributable to neither the Contractor nor the Employer and/or Engineer, a Test after Completion on the Works or any Section cannot be completed during the Defects Liability Period (or any other period agreed by both Parties), then the Works or Section shall not be deemed to have passed this Test after Completion.

12.1.11 Subject to Sub-Clause 12.9 [Failure to Pass Tests after Completion], if the Works, or a Section, fail to pass the Tests after Completion:

12.1.11.1 sub-paragraph 11.1.8.2 of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall apply; and

12.1.11.2 after remedying any defect or damage, Sub-Clause 11.5 [Further Tests after Remedying Defects] shall apply 12.1.11.1,

12.1.11.3 the O&M manuals to which the Engineer has given (or is deemed to have given) a Notice of No-objection, under Sub-Clause 5.7 [Operation and Maintenance Manuals], and

12.1.11.4 such guidance as the Contractor may be required to give during the course of these tests; and in the presence of such Contractor's Personnel as either Party may reasonably request.

12.1.12 If and to the extent that this failure and retesting are attributable to any of the matters listed in sub-paragraphs 11.1.11.1 to 11.1.11.14 of Sub-Clause 11.1.11 [Costs of Remedying Defects] and cause the Employer to incur additional costs, the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment of these costs by the Contractor.

12.2 Site Acceptance Testing (“SAT”)

12.2.1 All the relevant Train Control Systems, ETCS systems, sub-Systems and Plant and Materials shall undergo and pass the Site(s) Acceptance Test before Commissioning.

12.2.2 The Contractor shall be responsible for the Site Acceptance Testing.

- 12.2.3 The Site Acceptance Testing shall be conducted by a railway Signalling Engineer or technologist (in the case of the ETCS) or by a Telecommunications Engineer or technologist (in the case of the OTN), registered with the Engineering Council of South Africa ("ECSA") as a professional Engineer or professional technologist and who has undergone training for the specific System, sub-System or Equipment and have experience in Site Acceptance Testing.
- 12.2.4 The person(s) responsible for the Site Acceptance Testing shall not have been involved in any Design, Factory Acceptance Testing or Installation activities relating to the System, sub-System or Equipment to be tested.
- 12.2.5 The Contractor shall submit a Site Acceptance Testing Method Statement to the Employer and/or Engineer for acceptance before any SAT commence.
- 12.2.6 The Contractor undertakes that the Method Statement to be utilised shall clearly indicate:
- 12.2.6.1 All Systems, sub-Systems and Equipment shall be included in the SAT and which shall be omitted;
 - 12.2.6.2 Specification against which the SAT shall be conducted;
 - 12.2.6.3 Method of conducting the SAT for each System, sub-System and Equipment;
 - 12.2.6.4 Details, including experience reports, of people which shall be conducting the SAT; and

- 12.2.6.5 Where practical, all SAT shall be done under OBT conditions, prior to the final Testing and Commissioning Occupation.
- 12.2.7 The Contractor shall invite the Employer and/or Engineer to all SAT taking place at least 90 (ninety) calendar days prior to commencing of the SAT. Should the Employer and/or Engineer not be able to attend, it shall give the Contractor the written approval to continue or request the dates for the SAT to be changed.
- 12.2.8 The Employer shall not be held liable for any delays caused by the unavailability referred to in sub-clause 12.2.7 above.
- 12.2.9 The Contractor shall, within 14 (fourteen) calendar days, submit all duly signed SAT Test certificates and associated Test sheet to the Employer and/or Engineer for information purposes, prior to Commissioning.
- 12.2.10 The Employer accepts no accountability nor liability for any SAT conducted, despite any checks done or inputs given by any of the Employer's agents.

12.3 Factory Acceptance Testing

- 12.3.1 All Testing and Commissioning activities shall comply with all relevant Standards, Specifications, Regulations and Procedures as specified in the Employer's Requirements, this Contract and the RFP.
- 12.3.2 The Contractor shall be responsible for all the Factory Acceptance Testing.
- 12.3.3 All the Factory Acceptance Testing of each System shall be conducted at the factory(s) at which the original Plant and Materials are manufactured and assembled and by a railway Signalling Engineer or technologist (in the case of the ETCS) or by a Telecommunications Engineer or technologist (in the case of the OTN), registered

with the Engineering Council of South Africa (“ECSA”) as a professional Engineer or professional technologist and who has undergone training for the specific System, sub-System or Equipment and have experience in Factory Acceptance Testing.

12.3.4 The person(s) responsible for the Factory Acceptance Testing shall not have been involved in any Design, manufacturing or assembling activities relating to the System, sub-System or Equipment to be tested.

12.3.5 The Factory Acceptance Test for the OTN shall be conducted using an Optical Time-Domain Reflectometer (“OTDR”) prior to the delivery of the cable to the Site(s).

12.3.5 The Contractor shall submit a Factory Acceptance Testing Method Statement to the Employer and/or Engineer for approval and acceptance, before any Factory Acceptance Testing commences. The Method Statement shall clearly indicate:

12.3.5.1 All Systems, sub-Systems and Equipment that shall be included in the FAT and which shall be omitted;

12.3.5.2 Specification against which the FAT shall be conducted;

12.3.5.3 the Method of conducting the FAT for each System, sub-System and Equipment;

12.3.5.4 Details, including experience reports, of people which shall be conducting the FAT.

12.3.6 All FATS for the OTN shall include but not be limited to:

12.3.6.1 Point to point wiring check for impedance and continuity.

- 12.3.6.2 Serial numbers of all cards and modules shall be listed in an Excel spreadsheet.
 - 12.3.6.3 Confirmation of all modules from the field terminal through to the diagnostic laptop.
 - 12.3.6.4 Confirmation of control functions from the diagnostic laptop to the field terminals including exercising the dummy circuit breaker and the controls isolate switch.
 - 12.3.6.5 Confirmation of effective communications between the Systems and other devices using the specified protocols.
 - 12.3.6.6 All powered Tests shall be carried out at the specified power Supply rating of the System.
- 12.3.7 The Contractor shall invite the Employer and/or Engineer to all FAT taking place at least 90 (ninety) calendar days prior to the commencement of the FAT. Should the Employer and/or Engineer not be able to attend, it shall give the Contractor the permission to continue or request the dates for the FAT to be changed.
- 12.3.8 The Employer shall not be held liable for any delays caused by the unavailability referred to in sub-clause 12.3.7 above.
- 12.3.9 The Contractor shall, within 14 (fourteen) calendar days, submit all duly signed FAT Test certificates and associated Test sheets to the Employer and/or Engineer for information purposes, prior to Commissioning.

12.4 Failure to Pass Tests after Completion

12.4.1 If:

12.4.1.1 the Works, or a Section, fail to pass any or all of the Tests after Completion; and

12.4.1.2 applicable Performance Damages are set out in the Schedule of Performance Guarantees, the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment of these Performance Damages by the Contractor, in full satisfaction of this failure. If the Contractor pays these Performance Damages to the Employer during the Defect Liability Period, then the Works in Section shall not be deemed to have passed these Tests after Completion.

12.4.1.3 If the Works, or a Section, fail to pass a Test after Completion and, by giving a Notice to the Employer, the Contractor proposes to make adjustments or modifications to the Works or such Section (including an item of Plant):

12.4.1.3.1 the Contractor may be instructed by a written Notice given by the Employer and/or Engineer that right of access to the Works or Section cannot be given until time that is convenient to the Employer, which time shall be reasonable;

12.4.1.3.2 the Contractor shall remain liable to carry out the adjustments or modifications and to satisfy this Test, within 14 (fourteen) calendar days of receiving the Notice under sub-paragraph 12.4.1.3.1 above; and

12.4.1.3.3 if the Contractor does not receive a Notice under subparagraph 12.4.1.3.1 above during the relevant Defect Liability Period, the Contractor shall not be relieved of the obligation to make such adjustments or modifications and the Works or Section (as the case may be) shall not be deemed to have passed this Test after Completion.

13. VARIATIONS AND ADJUSTMENTS

13.1 Right to vary

13.1.1 Variations may be initiated by the Employer and/or Engineer (acting on the written instruction of the Employer) under Sub-Clause 13.3 [Variation Procedure] at any time before the issue of the Completion Certificate for the Works.

13.1.2 The Contractor shall be bound by each variation approved, and shall execute the variation with due expedition and without delay, unless the Contractor, within 7 (seven) calendar days, gives a Notice, in writing, to the Engineer stating (with detailed supporting particulars) that:

13.1.2.1 the varied work was Unforeseeable having regard to the scope and nature of the Works described in the Employer's Requirements, this Contract and the RFP;

13.1.2.2 the Contractor cannot readily obtain the Goods, Plant and Materials required for the Variation;

- 13.1.2.3 it will adversely affect the Contractor's ability to comply with Sub-Clause 4.8 [Health and Safety Obligations] and/or Sub-Clause 4.18 [Protection of the Environment];
 - 13.1.2.4 it will have an adverse impact on the achievement of the Schedule of Performance Guarantees; or
 - 13.1.2.5 it may adversely affect the Contractor's obligation to complete the Works so that they shall be fit for the purpose(s) for which they are intended under Sub-Clause 4.1 [Contractor's General Obligations].
- 13.1.3 Promptly after receiving this Notice, the Engineer shall respond by giving a Notice, in writing, to the Contractor cancelling, confirming or varying the instruction. Any instruction so confirmed or varied shall be taken as an instruction.

13.2 Value Engineering

- 13.2.1 The Contractor shall, at the request of the Employer and/or Engineer, submit to the Employer and/or Engineer a written proposal which (in the Contractor's opinion) will, if adopted:
- 13.2.1.1 accelerate completion;
 - 13.2.1.2 reduce the cost to the Employer of executing, maintaining or operating the Works;
 - 13.2.1.3 improve the efficiency or value to the Employer of the completed Works;
or
 - 13.2.1.4 otherwise be of benefit to the Employer.

13.2.2 The proposal shall be prepared at the cost of the Contractor.

13.2.3 The Employer and/or Engineer shall, within a period suitable to the Employer and/or Engineer after receiving such a proposal, respond by giving a Notice, in writing, to the contractor stating his/her approval or otherwise.

13.2.4 The Employer and/or Engineer's approval or otherwise shall be at the sole discretion of the Employer and/or Engineer, and the Contractor shall not delay any work while awaiting a response.

13.2.5 If the Employer and/or Engineer give approval to the proposal, with or without comments, the Employer and/or Engineer shall then approve a Variation. Thereafter:

13.2.5.1 the Contractor shall submit any further particulars that the Engineer may reasonably require; and

13.2.5.2 then the third paragraph of Sub-Clause 13.3.1 [Variation by Instruction] shall apply, which shall include consideration by the Employer and/or Engineer of the sharing (if any) of the benefit, costs and/or delay between the Parties stated in the Particular Conditions,

13.3 Variation Procedure

Subject to Sub-Clause 13.1 [Right to Vary], variations shall be initiated by the Employer and/or Engineer (acting on the written instruction of the Employer) in accordance with either of the following procedures:

13.3.1 Variation by Request for Proposal

- 13.3.1.1 The Employer and/or Engineer may request a proposal, before instructing a variation, by giving a written Notice (describing the proposed change(s)) to the Contractor.
- 13.3.1.2 The Contractor shall respond to this Notice, within 21 (twenty-one) calendar days, by:
 - 13.3.1.2.2 giving detailed written reasons why the contractor cannot comply (if this is the case), by reference to the matters described in subparagraphs 13.1.3.1 to 13.1.3.5 of Sub-Clause 13.1 [Right to Vary].
- 13.3.1.3 If the Contractor submits a proposal, the Employer and/or Engineer shall, within a period suitable to the Employer and/or Engineer, respond by giving a written Notice of approval or rejection of the proposal. The Contractor shall not delay any work whilst awaiting a response.
- 13.3.1.4 If the Employer and/or Engineer approves the proposal, with or without comments, the Employer and/or Engineer shall then instruct the Variation. Thereafter, the Contractor shall submit any further particulars that the Employer and/or Engineer may require.
- 13.3.1.5 The Contractor shall not be entitled to Claim any cost if the Employer and/or Engineer do not approve the proposal, with or without comments.

13.4 Provisional Sums

13.4.1 Each Provisional Sum shall only be used, in whole or in part, in accordance with the Employer and/or Engineer's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts for the work, supplies or services to which the Provisional Sum relates and is approved by the Employer and/or Engineer, as the Employer and/or Engineer shall have instructed.

13.4.2 For each Provisional Sum, the Employer and/or Engineer may instruct:

13.4.2.1 work to be executed (including Plant, Materials or services to be supplied) by the Contractor, and for which adjustments to the TCP and the Schedule of Payments (if any) shall be agreed or determined under Sub-Clause 13.3.1 [Variation by Instruction]; and/or

13.4.2.2 Plant, Materials, works or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Sub-Clause 4.5 [Nominated Subcontractors]) or otherwise, and for which there shall be included in the TCP:

13.4.2.2.1 the actual approval amounts paid (or due to be paid) by the Contractor; and

13.4.2.2.2 a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the applicable Schedule and approved by the Employer and/or Engineer. If there is no such rate, the percentage rate shall be determined by the Employer and/or Engineer and applied.

13.5 Day work

- 13.5.1 If the Employer and/or Engineer instructs the Contractor under sub-paragraph 13.4.2.1 and 13.4.2.2 above, this instruction may include a requirement for the Contractor to Day work.
- 13.5.2 If a Day work Schedule is not included in the Contract, this Sub-Clause shall not apply.
- 13.5.3 For work of a minor or incidental nature, the Employer and/or Engineer may instruct that a Variation shall be executed on a day work basis. The work shall then be valued in accordance with the Day work Schedule, and the following procedure shall apply. Before ordering Goods, Plant and Materials for such work (other than any Goods, Plant and Materials priced in the Day work Schedule), the Contractor shall submit, one or more quotations from the Contractor's suppliers and/or subcontractors, to the Employer and/or Engineer for approval. Thereafter, the Employer and/or Engineer may instruct the Contractor to accept one of these quotations (but such an instruction shall not be taken as an instruction under Sub-Clause 4.5 [Nominated Subcontractors]).
- 13.5.4 If the Employer and/or Engineer does not so instruct the Contractor, within 90 (ninety) calendar days of receiving the quotations, the Contractor shall not be entitled to accept any of these quotations at the Contractor's discretion. Except for any items for which the Day work Schedule specifies that payment is not due, the Contractor shall deliver each day to the Engineer accurate statements in duplicate (and one electronic copy), which shall include records (as described under Sub-Clause 6.10 [Contractor's Records]) of the resources used in executing the previous day's work. One copy of each statement shall, if correct and agreed, be signed by the Employer and/or Engineer and Promptly returned to the Contractor. If not correct or agreed, the Employer and/or Engineer shall proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine the resources.

13.4.5 In the next Statement, the Contractor shall then submit priced statements of the agreed or determined resources to the Employer and/or Engineer, together with all applicable invoices, vouchers and accounts or receipts in substantiation of any Goods, Plant and Materials used in the day work (other than Goods, Plant and Materials priced in the Day work Schedule).

13.4.6 Unless otherwise stated in the Day work Schedule, the rates and prices in the Day work Schedule shall be deemed to include taxes, overheads and profit which shall be approved by the Employer and/or Engineer.

13.6 Adjustment for changes in law

13.6.1 Subject to the following provisions of this Sub-Clause, the TCP shall, subject to the written approval of the Employer and/or Engineer, be adjusted to take account of any increase or decrease in Cost resulting from a change in:

13.6.1.1 the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws);

13.6.1.2 the judicial or official governmental interpretation or implementation of the Laws referred to in sub-paragraph 13.6.1.1 above;

13.6.1.3 any permit, permission, license or approval obtained by the Employer or the Contractor under sub-paragraph 1.13.1.1 or 1.13.1.2, respectively, of Sub-Clause 1.13 [Compliance with Laws]; or

13.6.1.4 the requirements for any permit, permission, licence and/or approval to be obtained by the Contractor under sub-paragraph 1.13.1.2 of Sub-Clause 1.13 [Compliance with Laws], made and/or officially published after the Commencement Date, which

affect the Contractor in the performance of obligations under the Contract. In this Sub-Clause "change in Laws" means any of the changes under sub-paragraphs 13.6.1.1, 13.6.1.2, 13.6.1.3 and/or 13.6.1.4 above.

13.6.2 If the Contractor suffers delay and/or incurs an increase in Cost as a result of any change in Laws, the Contractor may only be entitled to extension of time (EOT) without cost.

13.6.3 If there is a decrease in Cost as a result of any change in Laws, the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to a reduction in the TCP.

13.6.4 If any adjustment to the execution of the Works becomes necessary as a result of any change in Laws and is approved by the Employer and/or Engineer:

13.6.4.1 Except for any items for which the Day work Schedule specifies that payment is not due, the Contractor shall deliver each day to the Employer and/or Engineer accurate statements in duplicate (and one electronic copy), which shall include records (as described under Sub-Clause 6.10 [Contractor's Records]) of the resources used in executing the previous day's work for approval by the Employer and/or Engineer.

13.6.4.2 the Contractor shall, within 14 (fourteen) calendar days give a written Notice to the Employer and/or Engineer, or

13.6.4.3 the Employer and/or Engineer shall Promptly give a Notice, in writing, to the Contractor (with detailed supporting particulars).

13.6.5 Thereafter, the Employer and/or Engineer shall request a proposal under Sub-Clause 13.3.1 [Variation by Request for Proposal].

14. Contract Price and Payment

14.1 The Contract Price

14.1.1 Unless otherwise stated elsewhere in the Contract:

14.1.1.1 The Contract Price is the Initial Contract Price consisting of the lump sum Accepted Contract Amount, for the execution of the Works in accordance with the contract after negotiations between the parties.

14.1.1.2 The Contractor shall pay all taxes, duties and fees required to be paid by the Contractor under the Contract, and the contract price shall not be adjusted for any of these costs.

14.1.2 The Contractor's Bid Price, as may be amended through negotiations, shall be the fixed price Accepted Contract Amount or the Initial Contract Price ("ICP").

14.1.3 The Initial Contract Price may be subject to variations and Adjustments (additions or deductions) as the Contract is executed and in accordance with the provisions of the Contract for such adjustments. Such Variations and Adjustments in sub-clause 14.1.2 shall form the Total Contract Price ("TCP") or the "Contract Value" as adjusted and varied from time to time throughout the duration of the Contract.

14.1.5 Unless otherwise agreed to in writing by the Employer and/or the Engineer, the Contractor's submission of variations or adjustments relating to any of the Contractor's obligation to meet the Employer's Requirements, of the RFP and this

Contract shall not, throughout the duration of Contract, be entertained by the Employer and/or Engineer.

14.1.6 The TCP is all-inclusive, and includes the following at a minimum:

14.1.6.1 The price for the whole of the Works (regardless of whether of a temporary or permanent nature) including additional Works (regardless of whether of a Temporary or Permanent nature) which the Employer and/or Engineer deems to be required to achieve successful completion of the whole of the Works, the Project and the Contract.

14.1.6.2 All Funding costs which the Contractor will require to manage the Contractor's cash flow for the entire duration of the Contract (to be transparently and separately shown for every cost item included in the TCP).

14.1.6.3 All South African and International Taxes for the entire duration of the Contract (to be transparently and separately shown for every cost item included in the TCP).

14.1.6.4 All Foreign Currency and Exchange ("FOREX") costs for the entire duration of the Contract (to be transparently and separately shown for every cost item included in the TCP).

14.1.6.5 All Escalation for the entire duration of the Contract (to be transparently and separately shown for every cost item included in the TCP).

- 14.1.7 The Contractor shall, at a minimum and as part of the TCP, provide transparent detailed Pricing Sheets as the Employer and/or the Engineer may require for meeting all obligations under the Contract.
- 14.1.8 The Contractor shall take unequivocal responsibility for ensuring that all, formulae, arithmetical calculations and the like are correct in the detailed Pricing Sheets submitted as part of the Contractor's Proposal and the TCP.
- 14.1.9 10% of the TCP shall be deemed to be a bottom-line Contingency Allowance that shall be set aside only for use as instructed by the Employer and/or Engineer. The Contractor shall never place reliance on this Contingency Allowance as being part of any amount due to the Contractor for meeting the full requirements of the RFP, this Contract, the Project, and the Works, nor throughout the duration of the Contract, since as the Employer and/or Engineer may, at the Employer's and/or the Engineer's sole discretion, and at any point in time, remove this Contingency Allowance from the TCP for which such removal shall not relieve the Contractor of the obligations to deliver in terms of the Employer's Requirements, the Contract, and the RFP. Project, and the Works, terms in any manner whatsoever.
- 14.1.10 The Contractor shall further, as part of the Employer's Requirements and the Contract, provide a detailed list of personnel envisaged to be utilised and utilised on the Project together with each person's function/roles/responsibilities further providing Hourly Rates for each person linked to each function/role/responsibility. Such Hourly Rates shall be as at the Commencement Date and transparently demonstrate the calculation of each Hourly Rate (i.e. proven cost plus overhead plus profit) using the Department of Public Service and Administration ("DPSA") method.

14.2 Advance Payment

14.2.1 The Contractor shall ensure that the Advance Payment Guarantee is valid and enforceable until the advance payment has been repaid, but its amount may be progressively reduced by the amount repaid by the Contractor as stated in the Payment Certificates.

14.2.2 If the terms of the Advance Payment Guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 (twenty-eight) calendar days before the expiry date:

14.2.2.1 the Contractor shall extend the validity of this guarantee until the advance payment has been repaid;

14.2.2.2 the Contractor shall immediately submit evidence of this extension to the Employer, with a copy to the Engineer; and

14.2.2.3 if the Employer does not receive this evidence 7 (seven) calendar days before the expiry date of this guarantee, the Employer shall be entitled to Claim.

14.2.3 The Employer shall make an advance payment, as an interest-free loan for mobilisation and design. The amount of the advance payment and the currencies in which it is to be paid shall be as stated in the Contract.

14.2.3 Financial Management Plan (“FMP”) and Schedule of Payment Milestones (“SPM”)

14.3.5.1 The Contractor shall, as part of the Contractor’s Financial Management Plan (“FMP”) always provide a comprehensive, unambiguous and transparent

Schedule of Payment Milestones (“SPM”) within which each Payment Milestone shall be linked to Major Milestones, Deliverables and Key Dates linked to the Approved Programme(s).

- 14.3.5.2 All Financial Management Plans and Schedules of Payment Milestones shall be subject to scrutiny and approval by the Employer and/or Engineer.
- 14.3.5.3 Payment Milestone 1 shall be the “Mobilisation Allowance” for an amount equal to 5% of the ICP as/under Payment Certificate 1. The criteria to be met by the Contractor, for this Payment Milestone to be achieved shall, at a minimum, be: signature of the Contract by all parties; the Contractor’s submission of all Bonds/Securities; the Contractor’s submission of all Insurances; and the Contractor’s establishment of a fully operational Project Office and achievement of the Commencement Date.
- 14.3.5.4 Payment Milestone 2 shall be “Completion of Validation” for an amount equal to 10% of the ICP as/under Payment Certificate 2 less amounts for the Mobilisation Allowance Payment Milestone and Retention. It is agreed that the criteria to be met, for this Payment Milestone to be achieved, shall be the Contractor’s successful completion of Validation, to the absolute satisfaction of the Employer and/or Engineer for which the Key Date is fixed as the 548th calendar day after the Commencement Date.
- 14.3.5.5 Payment Milestones relating to the Employer’s and/or Engineer’s advanced payments for Plant and Materials shall not be entertained since the Employer and/or Engineer shall not make any advanced payments for Plant and Materials. It is agreed that only the following payment milestones for Plant and Materials may be permitted:
 - 14.3.5.5.1 “Installation of Plant and Materials” for an amount equal to 50% of the Plant and Materials value less amounts for Retention. The

criteria to be met by the Contractor, for this Payment Milestone to be achieved, shall be that such Plant and Materials has been installed and approved by the Employer and/or Engineer in complete compliance and adherence with the Employer's Requirements, this Contract and the RFP.

- 14.3.5.5.2 "Successful Testing and Commissioning of Plant and Materials" for an amount equal to 50% of the Plant and Materials value less amounts for Retention. It is agreed that the criteria to be met, for this Payment Milestone to be achieved, shall be that such Plant and Materials has been installed, tested, commissioned and approved by the Employer and/or Engineer in complete compliance and adherence with all requirements and specifications of the RFP and the Contract.
- 14.3.6 The Employer and/or Engineer's issuance of a Taking Over Certificate for the whole of the Works shall be a Payment Milestone. The value of this Milestone shall be equal to 50% (fifty percent) of the total Retention held as at the time of issuance of a Taking Over Certificate for the whole of the Works.
- 14.3.7 The Employer and/or Engineer's issuance of a Performance Certificate for the whole of the Works shall be the Final Payment Milestone. The value of this Milestone shall be equal to the balance of Retention held plus any other amounts that may be due to the Contractor as at the time of issuance of a Performance Certificate for the whole of the Works.
- 14.3.8 Payment Milestones relating to the Employer's potential usage of the Employer's Project Contingency Allowance shall be dealt with separately on a case by case basis in the form of written instructions to be issued by the Employer as and when such need arises.

14.4 Payment Certification, Invoicing and Payment

- 14.4.1 The Employer may pay the Contractor a Mobilisation Allowance of an amount equal to 10% of the ICP as reflected under Payment Certificate 1, which shall be subject to the Contractor's provision of an Advance Payment Bond/Security prior to the Employer's and/or Engineer's issuance of the Payment Certificate 1.
- 14.4.2 No invoice nor amount shall be due for payment by the Employer unless a signed Payment Certificate for such invoice or amount has been issued by the Employer and/or Engineer.
- 14.4.3 The Contractor shall, at most, be entitled to issue one Statement Claim for Payment Milestones achieved, on the second Friday of each calendar month, requesting the Employer's review, Valuation and issuance of a Payment Certificate and/or Interim Payment Certificate "IPC" or the Final Payment Certificate "FPC".
- 14.4.4 The Employer and/or Engineer may issue the IPCs for all Statements relating to all Payment Milestones with the exception of the Final Payment Milestone.
- 14.4.5 Only a FPC may be issued by the Employer and/or Engineer for the Statement relating to the Final Payment Milestone once all conditions of Contract have been met to the full satisfaction of the Employer and/or Engineer and the Performance Certificate has been issued by the Employer and/or Engineer.
- 14.4.6 Each Statement referred in sub-clause 14.2.9.3 shall attach all necessary unredacted supporting documentation as requested and/or instructed by the Employer and/or Engineer fully demonstrating that the requirements for the Employer's and/or Engineer's issuance of a Valuation and Payment Certificate have been met in terms of the Employer's and/or Engineer's approved FMP and SPM for each Payment Milestone claimed.

- 14.4.7 The Contractor shall further include any additions and/or deductions which may become due, at the time of issuance of a Statement, under any post Contract signature Agreement or Determination as allowed for under the Contract.
- 14.4.8 The Employer and/or Engineer may, within 60 (sixty) calendar days of receiving the Statement, revert to the Contractor either totally rejecting the Contractor's Statement providing reasons, or rejecting the Contractor's Statement requesting correction and resubmission of the Statement by the Contractor for second review by the Employer and/or Engineer, or provide the related Valuation and Payment Certificate which shall further include any deductions of amounts which the Employer and/or Engineer shall deem to be due/owed to the Employer and/or Engineer by the Contractor.
- 14.4.8 Notwithstanding any other provision under the Employer's Requirements, this Contract and the RFP, issuance of a Payment Certificate by the Employer and/or Engineer which authorises the Contractor to accordingly issue a valid Invoice and the Employer's and/or Engineer's payment of any Invoice raised shall not imply nor be deemed to imply the Employer's and/or Engineer's acceptance of any part of the Works or any Section of the Works or the whole of the Works.
- 14.4.9 It is agreed that the Employer and/or Engineer's issuance of a Payment Certificate shall never prejudice the Employer's and/or Engineer's rights to reject any part of the Works or any Section of the Works or the whole of the Works which the Employer and/or Engineer shall deem not to be in accordance with the Contract.
- 14.4.10 The Employer and/or Engineer's issuance of a Payment Certificate shall never prejudice the Employer's and/or Engineer's rights to recover any amounts paid to the Contractor in respect of any part of the Works or any Section of the Works or the whole of the Works that is rejected by the Employer and/or Engineer.

- 14.4.11 All invoicing and payments made under the Contract shall be in accordance with the Employer's and/or Engineer's approved SPM and FMP unless otherwise instructed by the Employer and/or Engineer.
- 14.4.12 The Contractor shall, within 14 calendar days of receiving a Payment Certificate, issue and deliver an original valid Invoice for the exact amount reflected on the Payment Certificate and an original Statement of Account reflecting all valid Invoices and Payments as at that date to the Employer and/or Engineer.
- 14.4.13 The Employer shall endeavour to pay any valid Invoice (duly issued, delivered, and received in accordance with the Contract) within 60 calendar days from the date of the Employer's and/or Engineer receipt of each valid Invoice from the Contractor. Failure by the Employer to pay any duly issued and delivered valid Invoice, within this 60 (sixty) calendar day period, shall attract a penalty of 0.025% of the value of each valid Invoice (excluding VAT) per delayed day (calculated on a simple and not compounded basis). The total of all penalties that may become applicable in terms of this provision, throughout the duration of the Contract, shall not exceed 1% of the ICP.
- 14.4.14 An additional penalty shall apply should the Employer and/or Engineer, for whatever reason, fail to effect payment of any valid Invoice (duly issued, delivered, and received in accordance with the Contract) within 90 calendar days from the date of the Employer and/or Engineer receipt of each valid Invoice from the Contractor. Failure by the Employer and/or Engineer to pay any duly issued and delivered valid Invoice, within this 90 (ninety) calendar day period, shall attract an additional penalty of 0.025% of the value of each valid Invoice (excluding VAT) per delayed day for the period between 60 (sixty) calendar days and 90 (ninety) calendar days (calculated on a simple and not compounded basis). The total of all penalties that may become applicable in terms of this provision, throughout the duration of the Contract, shall not exceed 1% of the ICP.

- 14.4.15 Should the Employer for whatever reason fail to effect payment of any valid Invoice (duly issued, delivered, and received in accordance with the Contract) within 180 (one hundred and eighty) calendar days from the date of the Employer's and/or Engineer receipt of each valid Invoice from the Contractor, and the amount owed of any valid Invoice exceeds 10% of the TCP, the Contractor shall, subject to adherence of Notices and Claims requirements and any other provisions of the Contract, be entitled to suspend all further work in relation to the Contract and Claim an Extension of Time ("EoT") with unredacted proven related costs as a result of such suspension. In this regard, the TCP shall be as reflected in the latest Payment Certificate issued by the Employer and/or Engineer, at the time that a valid Notice is submitted in accordance with the Contract.
- 14.4.16 An additional penalty shall apply should the Employer and/or Engineer, for whatever reason, fail to effect payment of any valid Invoice (duly issued, delivered, and received in accordance with the Contract) within 90 calendar days from the date of the Employer's and/or Engineer's receipt of each valid Invoice from the Contractor. Failure by the Employer and/or Engineer to pay any duly issued and delivered valid Invoice, within this 90 (ninety) calendar day period, shall attract an additional penalty of 0.025% of the value of each valid Invoice (excluding VAT) per delayed day for the period between 60 calendar days and 90 (ninety) calendar days (calculated on a simple and not compounded basis). The total of all penalties that may become applicable in terms of this provision, throughout the duration of the Contract, shall not exceed 1% of the ICP.

14.5 The Interim Payment Certificate

- 14.5.1 No amount will be certified or paid to the Contractor until:
- 14.5.1.1 the Employer has received all Bonds/Securities in the form, and issued by an entity, in accordance with Sub-Clause 4.2.1[Contractor's obligations]; and

14.5.1.2 the Contractor has appointed the Contractor's Representative in accordance with Sub-Clause 4.3 [*Contractor's Representative*].

14.5.2 The Engineer shall, within 28 calendar days after receiving a Statement and supporting documents, issue an IPC to the Employer, with a copy to the Contractor:

14.5.2.1 stating the amount which the Engineer fairly considers to be due; and

14.5.2.2 including any additions and/or deductions which have become due under Sub-Clause 3.7 [Agreement or Determination] or under the Contract or otherwise, with detailed supporting particulars (which shall identify any difference between a certified amount and the corresponding amount in the Statement and give the reasons for such difference).

14.5.3 Withholding (amounts in) an Interim Payment Certificate:

14.5.3.1 Before the issue of the Taking-Over Certificate for the Works, the Engineer may withhold an IPC in an amount which would (after retention and other deductions) be less than the minimum amount of IPC (if any) stated in the Contract. In this event, the Engineer shall Promptly give a Notice, in writing, to the Contractor accordingly.

14.5.3.2 An IPC shall not be withheld for any other reason, although:

14.5.3.2.1 if anything supplied or work done by the Contractor is not in accordance with the Contract, the estimated cost of rectification or replacement may be withheld until rectification or replacement has been completed;

14.5.3.2.2 if the Contractor was or is failing to perform any work, service or obligation in accordance with the Contract, the value of this work or obligation may be withheld until the work or obligation has been performed. In this event, the Engineer shall Promptly give a Notice, in writing, to the Contractor describing the failure and with detailed supporting particulars of the value withheld; and/or

14.5.3.2.3 if the Engineer finds any significant error or discrepancy in the Statement or supporting documents, the amount of the IPC may take account of the extent to which this error or discrepancy has prevented or prejudiced proper investigation of the amounts in the Statement until such error or discrepancy is corrected in a subsequent Statement.

14.5.3.3 For each amount so withheld, in the supporting particulars for the IPC the Engineer shall detail his/her calculation of the amount and state the reasons for it being withheld.

14.6 **Correction or modification**

14.6.1 The Engineer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate.

14.6.2 A Payment Certificate shall not be deemed to indicate the Engineer's acceptance, approval, or Notice of No-objection to any of the Contractor's Document or to (any part on the Works).

14.6.3 If the Contractor considers that an IPC does not include any amounts to which the Contractor is entitled, these amounts shall be identified in the next Statement (the "identified amounts" in this paragraph).

14.6.4 The Engineer shall then make any correction or modification that should properly be made in the next Payment Certificate.

14.7 Payment

14.7.1 The Employer shall pay to the Contractor:

14.7.1.1 the amount certified in each Payment Certificate within the period stated in the Contract after the Employer receives the Advance Payment Certificate;

14.7.1.2 the amount certified in each IPC issued under:

14.7.1.2.1 Sub-Clause 14.6 [issue of IPC], within the period stated in the Contract after the Engineer receives the Statement and supporting documents; or

14.7.1.2.2 Sub-Clause 14.12 [Issue of FPC], within the period stated in the Contract after the Employer receives the FPC; and

14.7.1.3 the amount certified in the FPC within the period stated in the Contract after the Employer receives the FPC.

14.7.2 Payment of all amounts shall be in South African Rand (ZAR) and shall be made into the bank account, nominated by the Contractor and for which such bank account shall be held in South Africa.

14.8 Statement at Completion

14.8.1 Within 90 (ninety) calendar days after the Completion Date for the whole of the Works, the Contractor shall submit to the Engineer a Statement at completion with supporting documents, showing:

14.8.1.1 the value of all work done in accordance with the Contract up to the Completion Date for the whole of the Works;

14.8.1.2 any further sums which the Contractor considers to be due at the Completion Date for the whole of the Works; and

14.8.1.3 an estimate of any other amounts which the Contractor considers have or will become due after the Completion Date for the whole of the Works, under the Contract. These estimated amounts shall be shown separately (to those of sub-paragraphs 14.9.1.1. to 14.9.1.2 above, and shall include estimated amounts for:

14.8.1.3.1 Claims for which the Contractor has submitted a Notice under Sub-Clause 20.2 [Claims For Payment and/or EOT];

14.8.1.3.2 any matter referred to the DAAB under Sub-Clause 21.5 [Obtaining DAAB's Decision]; and

14.8.1.3.3 any matter for which a NOD has been given under Sub-Clause 21.5 [Obtaining DAAB's Decision].

14.8.2 The Engineer shall then issue an IPC in accordance with Sub-Clause 14.6 [Issue of PC].

14.9 Final Statement

14.9.1 The submission by the Contractor of any Statement under the following provisions of this Sub-Clause shall not be delayed by reason of any referral under Sub-Clause 21.5 [Obtaining DAAB's Decision] or any arbitration under the Sub-Clause 21.7 [Arbitration].

14.9.1.1 Draft Final Statement

14.9.1.1.1 The contractor shall, within 60 (sixty) calendar days after the issue of the Performance Certificate, submit to the Engineer a draft final Statement for consideration.

14.9.1.1.2.1 This Statement shall:

14.9.1.1.2.1 be in the same form as Statements previously submitted under Sub-Clause 14.3;

14.9.1.1.2.2 be submitted in one paper-original, one electronic copy and additional paper copies (if any) as stated in the Contract; and show in detail, with supporting documents:

(i) the value of all work done in accordance with the Contract;

- (ii) any further sums which the Contractor considers to be due at the date of the issue of the Performance Certificate, under the Contract; and
- (iii) an estimate of any other amounts which the Contractor considers to have or will become due after the issue of the Performance Certificate, under the Contract, including estimated amounts by reference to the matters described in sub-paragraphs 14.9.1.1.2.2 (i) to (iii).

14.9.1.1.3 These estimated amounts shall be shown separately to those of Except for any amount under sub-paragraph (iii) above, if the Engineer disagrees with or cannot verify any part of the draft final Statement, the Engineer shall disapprove/reject such disagreed and/or unverifiable amounts.

14.9.1.2 Agreed Final Statement

14.9.1.2.1 If there are no amounts under sub-paragraph (iii) of Sub-Clause 14.5.1.1 [Draft Final Statement], the Contractor shall then prepare and submit to the Employer and/or Engineer the final Statement as agreed (the "Final Statement" in these Conditions).

14.10 Discharge

14.10.1 When submitting the Final Statement, the Contractor shall submit a discharge which confirms that the total of such Statement represents full and final settlement of all: moneys due to the Contractor under or in connection with the Contract.

14.10.2 This discharge may state that the total of the Statement is subject to any payment that may become due in respect of any Dispute for which a DAAB proceeding or

arbitration is in progress under Sub-Clause 21.7 [Arbitration] and/or that it becomes effective after the Contractor has received:

14.10.2.1 full payment of the amount certified in the FPC.

14.10.3 If the Contractor fails to submit this discharge, the discharge shall be deemed to have been submitted and to have become effective when the conditions of sub-clause 14.6.2.1 and 14.6.2.2 have been fulfilled.

14.10.4 It is agreed that, within 28 calendar days after receiving the Final Statement, and the discharge under Sub-Clause 14.6 [Discharge], the Engineer shall issue to the Employer with a copy to the Contractor, the Final Payment Certificate which shall state: sub-clause 14.6.2.1 and 14.6.2.2 above.

14.10.5 The parties agree that if the Contractor fails to submit this discharge, the discharge shall be deemed to have been submitted and to have become effective when the conditions of sub-paragraphs 14.6.2.1 and 14.6.2.2 have been fulfilled.

14.10.6 A discharge under this Sub-Clause shall not affect either Party's liability or entitlement in respect of any Dispute for which a DAAB proceeding or arbitration is in progress under Clause 21 [Disputes and Arbitration].

14.11 Issue of Final Payment Certificate

14.11.1 It is agreed that within 28 calendar days after receiving the Final Statement, and the discharge under Sub-Clause 14.6 [Discharge], the Engineer shall issue to the Employer (with a copy to the Contractor), the Final Payment Certificate which shall state:

14.11.1.1 the amount which the Engineer fairly considers is finally due, including any additions and/or deductions which have become due under Sub-Clause 3.7 [Agreement or Determination] or under the Contract or otherwise; and

14.11.1.2 after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled.

14.11.2 If the Contractor has not submitted a draft final Statement within the time specified under Sub-Clause 14.10.1.1 [Draft Final Statement], the Engineer shall request the Contractor to do so. Thereafter, if the Contractor fails to submit a draft final Statement within a period of 28 calendar days, the Engineer shall issue the FPC for such an amount as the Engineer considers to be due.

14.12 Cessation of Employer's liability

14.12.1 The Employer and/or Engineer shall not be liable to the Contractor for any matter or thing unclear or in connection with the Contract or execution of the Works.

15. TERMINATION OF CONTRACT

15.1 Notice to Correct

15.1.1 If the Contractor fails to carry out any obligation under the Employer's Requirements, this Contract and the RFP, the Employer has an unprejudiced discretionary right to immediately terminate the Contract, without allowing the Contractor any period of rectification, and all costs, damages and penalties related to such termination shall be borne by the Contractor.

15.1.2 In the event that the Employer decides to afford the Contractor the opportunity to correct the defect or failure and/or any other obligation under the Employer's Requirements, this Contract and the RFP, the Employer and/or Engineer (acting under the written instruction of the Employer) may, by giving Notice, in writing, to the Contractor, require the Contractor to make good the failure and to remedy it within a specified time ("Notice to Correct" in these Conditions).

15.1.3 The Notice to Correct shall, if deemed necessary by the Employer and/or Engineer:

15.1.3.1 describe the Contractor's failure; and/or

15.1.3.2 state the Sub-Clause and/or provisions of the Contract under which the Contractor has the obligation; and/or

15.1.3.3 specify the time within which the Contractor shall remedy the failure, taking due regard of the nature of the failure and the work and/or other action required to remedy it.

15.1.4 After receiving a written Notice to Correct the Contractor shall within 7 (seven) calendar days respond by giving a Notice, in writing, to the Employer and/or Engineer describing (in detail) the measures the Contractor will take to remedy the failure and stating the date on which such measures will be commenced in order to comply with the time specified in the Notice to Correct. The time specified in the Notice to Correct shall not imply any extension of the Time for Completion or any additional costs to the TCP.

15.2 Termination for Contractors Default

15.2.1 The parties agree that termination of the Contract under this Clause shall not prejudice any other rights of the Employer under the Contract or otherwise.

15.2.2 Notice

15.2.2.1 The Employer shall be entitled to give a Notice, in writing, which shall state that it is given under this Sub-Clause 15.2.1, to the Contractor of the Employer's intention to terminate the Contract or, in the case of sub-paragraph 15.2.2.6 below a Notice of termination, if the Contractor:

15.2.2.1.1 fails to comply with:

15.2.2.1.1.1 a Notice to Correct;

15.2.2.1.1.2 a binding agreement, or final and binding determination, under Sub-Clause 3.7 [Agreement or Determination];

15.2.2.1.1.3 a decision of the DAAB under 21.3 [Obtaining DAAB's Decision] (whether binding or final and binding);

15.2.2.1.1.4 any instruction issued by the Employer and/or Engineer;
or

15.2.2.1.1.5 any obligation under the Employer's Requirements, this Contract and the RFP

and such failure constitutes a material breach of the Contractor's obligations under the Contract;

15.2.2.2 abandons the Works or otherwise plainly demonstrates an intention not to continue performance of the Contractor's obligations under the Contract;

- 15.2.2.3 fails to proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension] or, if there is a maximum amount of Delay Damages, Penalties and/or any other Damages stated in the Contract, the Contractor's failure to comply with Sub-Clause 8.2 [Time for Completion] is such that the Employer would be entitled to Delay Damages, Penalties and/or any other Damages that exceed this maximum amount;
- 15.2.2.4 fails to comply with a Notice of rejection given by the Employer and/or Engineer under Sub-Clause 7.5 [Defects and Rejection] or the Employer and/or Engineer's instruction under Sub-Clause 7.6 [Remedial Work], within 28 (twenty-eight) calendar days after receiving it;
- 15.2.2.5 fails to comply with Sub-Clause 4.2 [Performance Security];
- 15.2.2.6 subcontracts the whole, or any part of, the Works in breach of Sub-Clause 4.4 [Subcontractors], or assigns the Contract without the required agreement under Sub-Clause 1.7 [Assignment] and/or written approval from the Employer and/or Engineer prior to such sub-contracting or assignment;
- 15.2.2.7 becomes bankrupt or insolvent; goes into liquidation, administration, reorganization, winding-up or dissolution; becomes subject to the appointment of a liquidator, receiver, administrator, manager or trustee; enters into a composition or arrangement with the Contractor's creditors; or any act is done or any event occurs which is analogous to or has a similar effect to any of these acts or events under applicable Laws;
- 15.2.2.8 or if the Contractor is a JV (incorporated or unincorporated):
- 15.2.2.8.1 any of these matters apply to a member of the JV, and

15.2.2.8.2 the other member(s) do not Promptly confirm to the Employer that, in accordance with Sub Clause 1.14.1 [Joint and Several Liability], such member's obligations under the Contract shall be fulfilled in accordance with the Contract; or is found, based on reasonable evidence, to have engaged in corrupt, fraudulent, collusive or coercive practice at any time in relation to the Works or to the Contract;

15.2.2.9 or if the Contractor is a Consortium:

15.2.2.9.1 any of these matters apply to a member of the Consortium, and

15.2.2.9.2 the other member(s) do not Promptly confirm to the Employer that, in accordance with Sub Clause 1.14.1 [Joint and Several Liability], such member's obligations under the Contract shall be fulfilled in accordance with the Contract; or is found, based on reasonable evidence, to have engaged in corrupt, fraudulent, collusive or coercive practice at any time in relation to the Works or to the Contract.

15.2.3 Termination

15.2.3.1 Unless the Contractor remedies the matter described in a Notice given under Sub-Clause 15.2 [Notice] within 14 (fourteen) calendar days of receiving the Notice, the Employer and/or Engineer may by giving a second Notice, in writing, to the Contractor immediately terminate the Contract.

15.2.3.2 The date of termination shall be the date the Contractor receives this second Notice.

15.2.3.3 However, in the event of termination in terms of clause 15.2.2.6, the Employer may by giving a Notice under Sub-Clause 15.2 immediately terminate the Contract and the date of termination shall be the date the Contractor receives this Notice.

15.2.4 After Termination

15.2.4.1 After termination of the Contract under Sub-Clause 15.2 [Termination], the Contractor shall:

15.2.4.1.1 comply immediately with any instructions included in a Notice given by the Employer and/or Engineer under this Sub-Clause:

15.2.4.1.1.1 for the assignment of any subcontract;

15.2.4.1.1.2 for the protection of life or property or for the safety of the Works; and

15.2.4.1.1.3 continue with provision of security, anti-theft, anti-vandalism and prevention of illegal occupation measures, as already effected on the Contract as well as additional measures, to protect the Works and the Site(s).

15.2.4.1.2 deliver to the Employer and/or Engineer:

15.2.4.1.2.1 any Goods, Plant and Materials required by the Employer,

15.2.4.1.2.2 all the Contractor's Documents, and all other design documents made by or for the Contractor; and

15.2.4.1.3 leave the Site(s) and, if the Contractor does not do so, the Employer shall have the right to expel the Contractor from the Site(s).

15.2.5 Completion of the Works

15.2.5.1 After termination under this Sub-Clause, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and/or these entities may then use any Goods, Plant and Materials, Contractor's Documents and other design documents made by or on behalf of the Contractor to complete the Works.

15.2.5.2 After such completion of the Works, the Employer and/or Engineer shall give another Notice, in writing, to the Contractor that the Contractor's Equipment and Temporary Works will be released to the Contractor at or near the Site(s). The Contractor shall then Promptly arrange their removal, at the risk and cost of the Contractor. However, if by this time the Contractor has failed to make a payment due to the Employer, these items may be sold (to the extent permitted by applicable Laws) by the Employer in order to recover this payment. Any balance of the proceeds shall then be paid to the Contractor.

15.3 Valuation after Termination for Contractor's Default

15.3.1 After termination of the Contract under Sub-Clause 15.2 [Termination for Contractor's Default], the Employer and/or Engineer shall proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine the value of the Permanent Works, Goods, Plant and Materials and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract, and, for the purpose of Sub-Clause 3.7.4 [Time limits], the date of termination shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.4).

15.3.2 This valuation shall include any additions and/or deductions, and the balance due (if any), by reference to the matters described in sub-paragraphs 14.7.1.1 and 14.7.1.2 of Sub-Clause 14.7 [Issue of FPC]. This valuation shall not include the value of any Contractor's Documents, Plant and Materials, and Permanent Works to the extent that they do not comply with the Contract.

15.4. Payment after Termination for Contractor's Default

15.4.1 The Employer may withhold payment to the Contractor of the amounts agreed or determined under Sub-Clause 15.3 [Valuation after Termination for Contractor's Default] until all the costs, losses, Penalties and damages (if any) described in the following provisions of this Sub-Clause have been established.

15.4.2 After termination of the Contract under Sub-Clause 15.2 [Termination for Contractor's Default], the Employer shall be entitled subject to Sub-Clause 20.2 [Claims For Payment and/or EOT] to payment by the Contractor of:

15.4.2.1 the additional costs of execution of the Works, and all other costs reasonably incurred by the Employer (including costs incurred in clearing, cleaning and reinstating the Site(s) as described under Sub-Clause 11.10 [Clearance of Site(s)]), after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation after Termination for Contractor's Default];

15.4.2.2 any losses, Penalties and damages suffered by the Employer in completing the Works; and

15.4.2.3 Delay Damages, Penalties and any other Damages, if the Works or a Section have not been taken over under Sub-Clause 10.1 [Taking Over the Works and Sections] and if the date of termination under Sub-Clause 15.2 [Termination for Contractor's Default] occurs after the date

corresponding to the Time for Completion of the Works or Section (as the case may be). Such Delay Damages, Penalties and any other Damages shall be paid for every day that has elapsed between these two dates.

15.5 Termination for Employer's Convenience

15.5.1 The Employer shall be entitled to terminate the Contract at any time for the Employer's convenience, by giving a written Notice of such termination to the Contractor (which Notice shall state that it is given under this Sub-Clause 15.4).

15.5.2 After giving a Notice to terminate under this Sub-Clause, the Employer shall immediately:

15.5.2.1 continue to have right to further use any of the Contractor's Documents;

15.5.2.2 if Sub-Clause 4.6 [Co-operation] applies, continue to have right to allow the continued use (if any) of any of the Contractor's Equipment, Temporary Works, access arrangements and/or other of the Contractor's facilities or services; and

15.5.2.3 make arrangements to return the Performance Security to the Contractor if, at the determination of the Employer and/or Engineer, the Employer is not entitled to call upon the Performance Security and/or if the Employer is not owed any amounts by the Contractor.

15.5.3 Termination under this Sub-Clause shall take effect 28 (twenty-eight) calendar days after.

15.5.4 After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Contractor's Obligations after Termination].

15.6 Valuation after Termination for Employer's Convenience

15.6.1 After termination under Sub-Clause 15.4 [Termination for Employer's Convenience] the Contractor shall, within 28 (twenty-eight) calendar days, submit detailed supporting particulars (as required by the Employer and/or Engineer) of:

15.6.1.1 the value of work done, which shall include:

15.6.1.1.1 any additions and/or deductions, and the balance due (if any), by the additional costs of execution of the Works, and all other costs reasonably incurred by the Employer (including costs incurred in clearing, cleaning and reinstating the Site(s) as described under Sub-Clause 11.11 [Clearance of Site(s)]), after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation after Termination]

15.6.1.2 The Employer and/or Engineer shall then proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine the matters described in sub-paragraphs 15.4.6.1 and 15.4.6.2 above (and, for the purpose of Sub-Clause 3.7.4 [Time limits], the date the Employer and/or Engineer receives the Contractor's particulars under this Sub-Clause shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.4).

15.6.1.3 The Employer and/or Engineer shall issue a Payment Certificate for the amount so agreed or determined, without the need for the Contractor to submit a Statement.

15.7 Payment after Termination for Employer's Convenience

- 15.7.1 The Employer shall pay the Contractor the amount certified in the Payment Certificate under Sub-Clause 15.5 [Valuation after Termination for Employer's Convenience] within 365 (three hundred and sixty-five) calendar days after the Engineer receives the Contractor's submission under that Sub-Clause.

16. Suspension and/or Termination by Contractor

16.1 Suspension by the Contractor

- 16.1.1 The Contractor may suspend this agreement if:

16.1.1.1 the Employer fails to comply with:

- 16.1.1.1.1 a binding agreement, or final and binding determination under Sub-Clause 3.7 [Agreement or Determination]; or
- 16.1.1.1.2 a decision of the DAAB under 21.3 [Obtaining DAAB's Decision] (whether binding or final and binding) and such failure constitutes a material breach of the Employer's obligations under this Contract, the Contractor may, not less than 365 (three hundred and sixty five) calendar days after giving a Notice, in writing, to the Employer and/or Engineer (which Notice shall state that it is given under this Sub-Clause 16.1), suspend work (or reduce the rate of work) unless and until the Employer has remedied such a default.

16.1.2 If the Employer subsequently remedies the default as described in the above Notice before the Contractor gives a Notice of termination under Sub-Clause 16.2 [Termination by Contractor], the Contractor shall resume normal working within 7 (seven) calendar days after the Employer remedies the default.

16.1.3 If the Contractor suffers delay as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall only be entitled to EOT without cost.

16.1.4 Termination of the Contract under this Clause shall not prejudice any other rights of the Contractor, under the Contract or otherwise.

16.2 Termination by the Contractor

16.2.1 Notice:

16.2.1.1 The Contractor shall be entitled to give a Notice, in writing, (which shall state that it is given under this Sub-Clause 16.2.1) to the Employer and/or Engineer of the Contractor's intention to terminate the Contract or, in the case of sub-clause 16.2.1.1.7.2, 16.2.1.1.8, 1.6.2.1.1.9 or 16.2.1.1.10 below, a Notice of termination, if:

16.2.1.1.1 the Employer fails to comply with:

16.2.1.1.1.1 a binding agreement, or final and binding determination under Sub-Clause 3.7 [Agreement or Determination]; or

16.2.1.1.1.2 a decision of the DAAB under 21.3 [Obtaining DAAB's Decision] (whether binding or final and binding) and such failure constitutes a material breach of the Employer's obligations under the Contract;

16.2.1.1.2 the Contractor does not receive a Notice of the Commencement Date under Sub-Clause 8.1 [Commencement of Works] within 365 (three hundred and sixty-five) calendar days after receiving the Letter of Appointment from the Employer and/or Engineer;

16.2.1.1.3 the Employer:

16.2.1.1.3.1 assigns the Contract without the required agreement under Sub-Clause 1.7 [Assignment].

16.2.2 Termination

16.2.2.1 Unless the Employer remedies the matter described in a Notice given under Sub-Clause 16.2.1 [Notice] within 365 (three hundred and sixty-five) calendar days of receiving the Notice, the Contractor may by giving a second Notice, in writing, to the Employer immediately terminate the Contract. The date of termination shall then be 180 (one hundred and eighty) calendar days from the date the Employer receives this second Notice.

16.2.2.2 Where Notice has been given in terms of sub-paragraph 16.2.1.1.7.2, 16.2.1.1.8, 16.2.1.1.9 or 16.2.1.1.10 of Sub-Clause 16.2.1 [Notice], the Contractor may terminate the Contract and the date of termination shall be 180 (one hundred and eighty) calendar days from the date the Employer receives this Notice.

16.3 Contractors Obligations after Termination

16.3.1 After termination of the Contract under Sub-Clause 15.4 [Termination for Employer's Convenience], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 18.5 [Optional Termination], the Contractor shall Promptly:

16.3.1.1 cease all further work, except for such work as may have been instructed by the Employer and/or Engineer which at a minimum shall be:

16.3.1.1.1 work required by the Employer for the assignment of any sub-contract;

16.3.1.1.2 work required by the Employer for the protection of life or property or for the safety of the Works; and

16.3.1.1.3 work required by the Employer to continue with provision of security, anti-theft, anti-vandalism and prevention of illegal occupation measures, as already effected on the Contract as well as additional measures, to protect the Works and the Site(s).

16.3.1.2 deliver to the Employer and/or Engineer: any Goods, all Contractor's Documents, Plant and Materials and other work as instructed by the Employer and/or Engineer; and

16.3.1.3 subject to written approval by the Employer and/or Engineer, remove all other Goods from the Site(s), except as necessary for safety, and leave the Site(s).

16.4 Payment after Termination of Contractor

16.4.1 After termination under Sub-Clause 16.2 [Termination by Contractor], the Employer shall within 730 (seven hundred and thirty) calendar days:

16.4.1.1 pay the Contractor in accordance with Sub-Clause 18.5 [Optional Termination].

17 Care of the Works and Indemnities

17.1 Responsibility for Care of the Works

17.1.1 Where the Contract is terminated in accordance with these Conditions or otherwise, subject to Sub-Clause 17.2 [Liability for Care of the Works] the Contractor shall always take full responsibility for the care of all the Works, the Site(s), Plant and Materials, Goods and Contractor's Documents from the Commencement Date until the Date of receipt of the signed Performance Certificate from the Employer and/or Engineer, when responsibility for the care of the Works shall pass to the Employer.

17.1.2 Where a Taking-Over Certificate is issued for any Section or Part, responsibility for the care of the Section or Part shall remain with the Contractor.

17.1.3 Where the Contract is terminated in accordance with these Conditions or otherwise, the Contractor shall cease to be responsible for the care of the Works from a date determined by the Employer and/or Engineer.

17.1.4 Where responsibility has accordingly passed to the Employer and/or Engineer, the Contractor shall take responsibility for the care of any work which is outstanding on

the Date of Completion, until the Date of receipt of the signed Performance Certificate from the Employer and/or Engineer.

- 17.1.5 If any loss or damage occurs to the Works, Plant and Materials, the Site(s), Goods or Contractor's Documents, during the period when the Contractor is responsible for their care, from any cause whatsoever, the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Plant and Materials, the Site(s), Goods, or Contractor's Documents (as the case may be) comply with the Contract.

17.2 Liability for Care of the Works

- 17.2.1 The Contractor shall be liable for any loss or damage caused by the Contractor to the Works, Plant and Materials, the Site(s), Goods or Contractor's Documents from the Commencement Date.
- 17.2.2 The Contractor shall also be liable for any loss or damage, which occurs from the Date of receipt of the signed Performance Certificate from the Employer and/or Engineer and which arose from an event which occurred before the receipt of the signed Performance Certificate, for which the Contractor was liable.
- 17.2.3 The Contractor shall have no liability whatsoever, whether by way of indemnity or otherwise, for loss or damage to the Works, Plant and Materials, the Site(s), Goods or Contractor's Documents caused by any of the following events (except to the extent that such Works, Goods, Plant and Materials or Contractor's Documents have been rejected by the Employer and/or Engineer under Sub-Clause 7.5 [Defects and Rejection] before the occurrence of any of the following events):
- 17.2.3.1 any of the events or circumstances listed under sub-clauses 18.1.2.1 to 18.1.2.6 of Sub-Clause 18.1 [Exceptional Events];

17.2.4 The Contractor shall rectify any such loss and/or damage that may arise to the extent instructed by the Employer and/or Engineer.

17.3 Intellectual and Industrial Property Rights

17.3.1 In this Sub-Clause,

17.3.1.1 "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trademark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and

17.3.1.2 "Claim" means a third-party Claim (or proceedings pursuing a third-party claim) alleging an infringement.

17.3.2 The Contractor's Intellectual and Industrial Property shall, at a minimum, mean all of the Contractor's documents, designs, procedures, manuals, training Material, reports, patents, registered designs, copyrights, trademarks, trade names, trade secrets, technology, software and other intellectual or industrial property rights relating to the RFP, the Contract and the Employer's Requirements.

17.3.3 The Contractor shall be deemed, by signing this Contract, to transparently transfer ownership of the Contractor's Intellectual and Industrial Property to the Employer.

17.3.4 The Contractor shall be deemed, by signing the Contract, to transparently give the Employer full non-terminable transferable non-exclusive royalty-free ownership to copy, use and communicate the Contractor's Intellectual and Industrial Property

including making and using modifications of them as required by the Employer. This ownership shall, at a minimum:

- 17.3.4.1 Apply throughout the duration of the Contract or the actual or the intended useful and/or working life (whichever is longer) of the relevant Sections of the Works and/or the whole of the Works (regardless of the Works being of a temporary or permanent nature);
 - 17.3.4.2 Entitle any of the Employer's approved entity or person in proper possession of the relevant Section of the Works or the whole of the Works (regardless of the Works being of a temporary or permanent nature) to copy, use and communicate the Contractor's Intellectual and Industrial Property for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing Sections of the Works and/or the whole of the Works (regardless of the Works being of a temporary or permanent nature); and
 - 17.3.4.3 In the case of the Contractor's Intellectual and Industrial Property, permit use of the Contractor's Intellectual and Industrial Property on any of the Employer's approved computer on and off the Site(s) and other places as envisaged by the Employer, including replacements of any computers supplied by the Contractor.
- 17.3.5 All Contract and Project documentation and data, including but not limited to; Designs, procedures, manuals, Training Material, reports and other documents produced as part of the Works under the Contract, shall immediately become the intellectual property of the Employer on acceptance/approval of the document by the Employer and/or Engineer, to be used, modified or distributed by the Employer in any way the Employer sees fit.

- 17.3.6 All software configuration files shall immediately become the intellectual property of the Employer on the date of Commissioning or the date of Payment (whichever comes first) of such software, to be used, modified or distributed by the Employer in any way the Employer sees fit.
- 17.3.7 The Contractor's Intellectual and Industrial Property made by (or on behalf of) the Contractor shall, at the Employer's discretion, be used, copied or communicated to the Employer's approved third Party by (or on behalf of) the Employer for purposes deemed necessary by the Employer.
- 17.3.8 Existing information, approved Designs and as-built drawings relevant to some of the Works may, at the discretion of the Employer, be supplied to the Contractor in PDF, TIFF or DWG Software format, for updating and to aid the Contractor with Planning and Design development.
- 17.3.9 The Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Works. In addition, as part of the Contractor's Proposal and the delivery of the Works}, the Contractor shall be deemed to have inspected and examined the information provided, and to have been satisfied before submitting the Contractor's Proposal as to all matters relevant to the execution of the Works.
- 17.3.10 The Contractor shall verify the accuracy of all existing as-built drawings, notify the Employer of any discrepancies and rectify all discrepancies, as part of the Works, to ensure that the version of as-built drawings to be issued by the Contractor, as part of the Works, are accurate.
- 17.3.11 Any and all plans and designs developed and to be provided by the Employer shall at all times remain the property of the Employer.

17.4 Indemnities by Contractor

17.4.1 The Contractor shall indemnify and hold harmless the Employer and/or Engineer, the Employer's and/or Engineer's Personnel, and their respective agents, against and from all third-party Claims, damages, Penalties, losses and expenses (including legal fees and expenses) in respect of:

17.4.1.1 bodily injury, sickness, disease or death of any person whatsoever arising out of or in the course of or by reason of the Contractor's execution of the Works, unless attributable to any negligence, wilful act or breach of the Contract by the Employer and/or Engineer, the Employer's and/or Engineer's Personnel, or any of their respective agents; and

17.4.1.2 damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss:

17.4.1.2.1 arises out of or in the course of or by reason of the Contractor's execution of the Works, and

17.4.1.2.2 is attributable to any negligence, wilful act or breach of the Contract by the Contractor, the Contractor's Personnel, their respective agents, or anyone directly or indirectly employed by any of them.

17.4.2 The Contractor shall also indemnify and hold harmless the Employer and/or Engineer against all acts, errors or omissions by the Contractor in carrying out the Contractor's design obligations that result in the Works (or Section or Part or major item of Plant, if any), when completed, not being fit for the purpose(s) for which they are intended under Sub-Clause 4.1 [Contractor's General Obligations].

18 Exceptional Events

18.1 Exceptional Events

18.1.1 "Exceptional Event" means an event or circumstance which:

18.1.1.1 is beyond a Party's control;

18.1.1.2 having arisen, such Party could not reasonably have avoided or overcome; and

18.1.1.3 is not substantially attributable to the other Party.

18.1.2 An Exceptional Event shall comprise of any of the following events or circumstances provided that all conditions in 18.1.1.1 to 18.1.1.3 above are simultaneously satisfied:

18.1.2.1 war, hostilities (whether war be declared or not), invasion, act of foreign enemies;

18.1.2.2 rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war;

18.1.2.3 riot, commotion or disorder by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors;

- 18.1.2.4 strike or lockout not solely involving the Contractor's Personnel and other employees of the Contractor and Sub-contractors;
- 18.1.2.5 encountering munitions of war, explosive Materials, poisoning radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity; or
- 18.1.2.6 natural catastrophes such as earthquake, tsunami, volcanic activity hurricane or typhoon.

18.2 Notice of an Exceptional Event

- 18.2.1 If a Party is or will be prevented from performing any obligations under the Contract due to an Exceptional Event (the "affected Party" in this Clause), then the affected Party shall give a Notice, in writing, to the other Party of such an Exceptional Event, and shall specify the obligations, the performance of which is or will be prevented (the "prevented obligations" in this Clause).
- 18.2.2 The Notice shall be given within 14 (fourteen) calendar days after the affected Party became aware, or should have become aware, of the Exceptional Event, and the affected party shall then be excused performance of the prevented obligations from the date such performance is prevented by the Exceptional Event.
- 18.2.3 If this Notice is received by the other Party after this period of 14 (fourteen) calendar days, the affected Party shall be excused performance of the prevented obligations only from the date on which this Notice is received by the other Party.

- 18.2.4 After the period in 18.2.3 above, the affected Party shall be excused from the performance of the prevented obligations for so long as such Exceptional Event prevents the affected Party from performing them.
- 18.2.5 The affected party shall only be excused from the performance of the prevented obligations and shall not be excused performance of all other obligations under the Contract.
- 18.2.6 The obligations of either Party to make payments due to the other Party under the Contract shall not be excused by an Exceptional Event, unless the Exceptional Event prevents payment to be made in which case payment will be made within 60 (sixty) calendar days after the Exceptional Event.
- 18.2.7 The duration of the Exceptional Event shall be determined by the Employer and/or Engineer upon receipt of the Notice of Exceptional Event and evidence from the affected party of when the Exceptional Event ended.

18.3 Duty to minimize delay

- 18.3.1 Each Party shall at all times use all reasonable endeavours to minimize any delay in the performance of the Contract as a result of an Exceptional Event.
- 18.3.2 Where the Exceptional Event has a continuing effect, the affected Party shall give further Notices describing the effect every 28 (twenty-eight) calendar days after giving the first Notice under Sub-Clause 18.2 [Notice of an Exceptional Event].
- 18.3.3 The affected Party shall immediately give a Notice, in writing, to the other Party when the affected Party ceases to be affected by the Exceptional Event.

18.3.4 Where the affected Party fails to do so, the other Party may give a Notice, in writing, to the affected party stating that the other Party considers that the affected Party's performance is no longer prevented by the Exceptional Event, with reasons and subject to approval by the Employer and/or Engineer.

18.4 Consequences of an Exceptional Event

18.4.1 Where the Contractor is the affected Party and suffers delay by reason of the Exceptional Event of which he/she gave a Notice under Sub-Clause 18.2 [Notice of an Exceptional Event], the Contractor shall be entitled, subject to Sub-Clause 20.2 [Claim For EOT].

18.5 Optional Termination

18.5.1 Where the execution of substantially all the Works in progress is prevented for a continuous period of 180 (one hundred and eighty) calendar days by reason of an Exceptional Event of which Notice has been given under Sub-Clause 18.2 [Notice of an Exceptional Event], or for multiple periods which cumulatively total more than 365 (three hundred and sixty five) calendar days due to the same Exceptional Event, then either Party may give to the other Party a written Notice of termination of the Contract.

18.5.2 Where Notice is given in terms of 18.5.1 above, the date of termination shall be the date 90 (ninety) calendar days after the Notice is received by the other Party, and the Contractor shall proceed in accordance with Sub-Clause 16.3 [Contractor's Obligations After Termination].

18.5.3 After the date of termination the Contractor shall, within 28 (twenty- eight) calendar days, submit detailed supporting particulars (as required by the Employer and/or Engineer) of:

18.5.3.1 the value of work done, which shall include:

18.5.3.1.1 any additions and/or deductions, and the balance due (if any), by the additional costs of execution of the Works, and all other costs reasonably incurred by the Employer (including costs incurred in clearing, cleaning and reinstating the Site(s) as described under Sub-Clause 11.11 [Clearance of Site(s)]), after allowing for any sum due to the Contractor under Sub-Clause 15.3 [Valuation after Termination,

18.5.3.1.2 The Employer and/or Engineer shall then proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine the matters described in sub-paragraphs 15.4.6.1 and 15.4.6.2 above (and, for the purpose of Sub-Clause 3.7.4 [Time limits], the date the Employer and/or Engineer receives the Contractor's particulars under this Sub-Clause shall be the date of commencement of the time limit for agreement under Sub-Clause 3.7.4).

18.5.3.1.3 The Employer and/or Engineer shall issue a Payment Certificate for the amount so agreed or determined, without the need for the Contractor to submit a Statement.

18.6 Release from Performance under the Law

18.6.1 In addition to any other provision of this clause, if any event arises outside the control of the Parties (including, but not limited to, an Exceptional Event) which:

18.6.1.1 makes it unlawful for either Party or both Parties to fulfil their contractual obligations; or

18.6.1.2 under the law governing the Contract, entitles the Parties to be released from further performance of the Contract,

and if the Parties are unable to agree on an amendment to the Contract that would permit the continued performance of the Contract, then after either Party gives a Notice, in writing, to the other Party of such event:

18.6.1.2.1 the parties shall be discharged from further performance, and without prejudice to the rights of either Party in respect of any previous breach of the Contract; and

18.6.1.2.2 the amount payable by the Employer to the Contractor shall be the same as would have been payable under Sub-Clause 18.5 [Optional Termination], and such amount shall be certified by the Employer and/or Engineer, as if the Contract had been terminated under that Sub-Clause.

19. INSURANCE

19.1 General Requirements

19.1.1 The Contractor shall, at a minimum, always effect and maintain all insurances for which the Contractor is responsible with insurers and in terms, both of which shall be subject to the consent of the Employer and/or Engineer. These terms shall be consistent with the terms agreed to by both Parties before the Commencement Date.

- 19.1.2 The insurances required to be provided under this clause are the minimum required by the Employer and/or Engineer, and the Contractor shall always, at the Contractor's own cost, add all other insurances that the Contractor requires to adequately insure all risks relating to the Works and any other insurance as instructed by the Employer and/or Engineer.
- 19.1.3 Whenever required by the Employer and/or Engineer, the Contractor shall, within 7 (seven) calendar days, produce insurance policies which the Contractor is required to effect under the Employer's Requirements, this Contract and the RFP. As each premium is paid, the Contractor shall, within 7 (seven) calendar days, submit either a copy of each receipt of payment to the Employer and/or Engineer, or confirmation from the insurers that the premium has been paid.
- 19.1.4 If the Contractor fails to effect and keep in force any of the insurances required under Sub-clause 19.2 [Insurance to be Provided by the Contractor] then, in any such case, the Employer may effect and keep in force such insurance and pay any premiums as may be necessary and recover same from the Contractor from time to time by deducting the amount(s) so paid from any money due to the Contractor or otherwise recover same as a debt from the Contractor. The provisions of clause 20 [Employer's and Contractor's Claims] shall not apply to this Sub-clause.
- 19.1.5 If the Contractor fails to comply with any condition of the insurances effected under the Employer's Requirements, this Contract and the RFP, the Contractor shall indemnify the Employer and the Engineer against all direct losses and Claims (including legal fees and expenses) arising from such failure.
- 19.1.6 The Contractor shall also be responsible for the following:
- 19.1.6.1 notifying the insurers of any changes in the nature, extent or Programme for the execution of the Works; and

19.1.6.2 the adequacy of the insurance in accordance with the Employer's requirements, this Contract and the RFP.

19.1.7 The permitted deductible limits allowed in any policy shall not exceed the amounts stated in the Contract Data (if not stated, the amounts agreed with the Employer and/or Engineer).

19.2 Insurance to be provided by the Contractor

The Contractor shall always provide the following insurances, at a minimum:

19.2.1 Works

19.2.1.1 The Contractor shall ensure and keep in the joint names of the Contractor and the Employer from the Commencement Date until the date of the issue of the Performance Certificate for the Works:

19.2.1.1.1 the Works and Contractor's Documents, together with Plant and Materials and Goods for incorporation in the Works, for their full replacement value. The insurance cover shall extend to include loss and damage of any part of the Works as a consequence of failure of elements effectively designed or constructed with defective Material or workmanship; and

19.2.1.1.2 an additional amount of fifteen percent (15%) of such replacement value (or such other amount as may be specified in the Contract) to cover any additional costs incidental to the rectification of loss or damage, including

professional fees and the cost of demolition and removal of debris.

- 19.2.1.2 The insurance cover shall cover the Employer the Engineer and the Contractor against all loss or damage from whatever cause arising until the issue of the Performance Certificate for the Works and for any loss or damage occasional by the Contractor in the course of any operation carried out by the Contractor for the purpose of complying with the Contractor's obligations under Clause 11 [Defects after Taking Over] and Clause 12 [Tests after Completion]

19.2.2 Plant and Materials and Goods

- 19.2.2.1 The Contractor shall insure, in the joint names of the Contractor and the Employer, the Plant and Materials and Goods and other things brought to the Site(s) by the Contractor to the extent specified and/or amount stated in the Contract (if not specified or stated, for their full replacement value including delivery to Site(s)).
- 19.2.2.2 The Contractor shall maintain this insurance from the time the Plant and Materials and Goods are delivered to the Site(s) until they are no longer required for the Works.

19.2.3 Liability for breach of professional duty

- 19.2.3.1 To the extent that the Contractor is responsible for the design of part of the Temporary and Permanent Works under Sub-Clause 4.1 [Contractor's General Obligations], and/or any other design under the Contract, and consistent with the indemnities specified in Clause 17 [Care of the Works and Indemnities]:

19.2.3.1.1 the Contractor shall effect and maintain professional indemnity insurance against liability arising out of any act, error or omission by the Contractor in carrying out the Contractor's design obligations in an amount not less than that stated in the Contract (if not stated, the amount approved by the Employer and/or Engineer); and

19.2.3.1.2 such professional indemnity insurance shall also indemnify the Contractor against liability arising out of any act, error or omission by the Contractor in carrying out the Contractor's design obligations under the Contract that results in the Works (or Section or Part of major item of Plant, if any), when completed, not being fit for the purpose(s) for which they are intended under Sub-Clause 4.1 [Contractor's General Obligations].

19.2.3.2 The Contractor shall maintain this insurance from the Commencement Date to the date of issuance of the Performance Certificate or any later date as may be instructed by the Employer and/or Engineer.

19.2.4 Injury to persons and damage to property

19.2.4.1 The Contractor shall always insure, in the joint names of the Contractor and the Employer, against liabilities for death or injury to any person, or loss of and/or damage to any property (other than the Works) arising out of the performance of the Contract and occurring before the issue of the Performance Certificate.

19.2.4.3 The insurance shall be effected before the Commencement Date and shall remain in force until the issue of the Performance Certificate and

shall be for not less than the amount stated in the Contract (if not stated, the amount approved by the Employer and/or Engineer).

19.2.5 Injury to Employees

- 19.2.5.1 The Contractor shall always effect and maintain insurance against liability for Claims, damages, Penalties, losses and expenses (including legal fees and expenses) arising out of the execution of the Works in respect of injury, sickness, disease or death of any person employed by the Contractor or any of the Contractor's other Personnel, any of the Employer's Personnel, any of the Engineer's Personnel and any other Personnel working and involved on the Project.
- 19.2.5.2 The Employer and the Engineer shall also be indemnified under the policy of insurance.
- 19.2.5.3 The insurance shall be maintained in full force and effect during the whole time that any Personnel on the Project are assisting in the execution of the Works.
- 19.2.5.4 For any person employed by a Subcontractor, the insurance shall be effected by the Contractor.

19.2.6 Other insurances required by Laws and by local practice

- 19.2.6.1 The Contractor shall always provide all other insurances required by the local Laws and practice for where (any part of) the Works are being carried out, at the Contractor's own cost.

20. Employer's and Contractor's Claims

20.1 Claims

20.1.1 A Claim may arise:

20.1.1.1 if the Employer and/or Engineer considers that the Employer is entitled to any additional payment from the Contractor (or reduction in the TCP) and/ or to an extension of the DLP;

20.1.1.2 if the Contractor considers that the Contractor is entitled to any additional EOT from the Employer; or

20.1.1.3 if the Employer considers that he/she is entitled to another entitlement or relief against the Contractor. Such other entitlement or relief may be of any kind whatsoever;

20.1.1.4 if the Contractor considers that he/she is entitled to another EOT. Such other EOT shall be, limited to determination, instruction, Notice, opinion or valuation of the Employer and/or Engineer} except to the extent that it involves any entitlement referred to in sub-clause 20.1.1.1 and/or 20.1.1.2 above.

20.1.2 In the case of a Claim under sub-clause 20.1.1.1 and/or 20.1.1.2 and/or 20.1.1.4 above, Sub-Clause 20.2 [Claims For EOT] shall apply.

20.1.3 In the case of a Claim under sub-clause 20.1.1.3 and/or 20.1.1.4 above, the Claim shall be referred to the Engineer for determination in terms of Sub-Clause 3.7 [Agreement or Determination].

20.2 Claims for Payment of and/or EOT

20.2.1 If the Employer considers that he/she is entitled to any additional payment from the Contractor, a reduction in the TCP ~~for~~ the Contractor considers that he/she is entitled to (EOT) or an extension of the (DLP) (in the case of the Employer) under any Clause of these Conditions or otherwise in connection with the Contract, the following Claim procedure shall apply:

20.2.2 Notice of Claim

20.2.2.1 The claiming Party shall give a Notice, in writing, to the Engineer, describing the event or circumstance giving rise to the cost, loss, delay or extension of DLP for which the Claim is made as soon as practicable, and no later than 28 (twenty-eight) calendar days after the claiming Party became aware, or should have become aware, of the event or circumstance (the "Notice of Claim" in these Conditions).

20.2.2.2 If the Contractor fails to give a Notice of Claim within this period of 28 (twenty-eight) calendar days, the Contractor shall not be entitled to any EOT or additional payment, the Time for Completion shall not be extended, and the Employer shall be discharged from any liability in connection with the event or circumstance giving rise to the Claim.

20.2.3 Engineer's initial response

20.2.3.1 If the Engineer considers that the claiming Party has failed to give the written Notice of Claim within the period of 28 (twenty-eight) calendar days under Sub-Clause 20.2.2 [Notice of Claim] the Engineer may ~~shall~~, within 44 90 (ninety) calendar days after receiving the Notice of Claim,

give a Notice, in writing, to the claiming Party accordingly (with reasons).

20.2.4 Contemporary records

- 20.2.4.1 In this Sub-Clause 20.2, "contemporary records" means records that are prepared or generated at the same time, or immediately after, the event or circumstance giving rise to the Claim.
- 20.2.4.2 The claiming Party shall keep such contemporary records as may be necessary to substantiate the Claim.
- 20.2.4.3 Without admitting the Employer's liability, the Employer and/or Engineer may, at their discretion, monitor the Contractor's contemporary records and the Contractor shall always keep all unredacted contemporary records.
- 20.2.4.4 The Contractor shall always allow the Employer and/or Engineer to inspect all these records at any time as required by the Employer and/or Engineer and shall, if instructed, submit copies to the Employer and/or Engineer within 7 (seven) calendar days of receiving the instruction.
- 20.2.4.5 Such monitoring, Inspection or instruction (if any) by the Employer and/or Engineer shall not imply acceptance of the accuracy or completeness of the Contractor's contemporary records.

20.2.5 Fully detailed Claim

- 20.2.5.1 In this Sub-Clause 20.2, "fully detailed Claim" means a submission which includes:

- 20.2.5.1.1 a detailed description of the event or circumstance giving rise to the Claim;
 - 20.2.5.1.2 a statement of the contractual and/or other legal basis of the Claim;
 - 20.2.5.1.3 all contemporary records on which the claiming Party relies; and
 - 20.2.5.1.4 detailed supporting particulars of the amount of additional payment claimed (or amount of reduction of the TCP in the case of the Employer as the claiming Party), and/or EOT claimed (in the case of the Contractor) or extension of the DLP claimed (in the case of the Employer).
- 20.2.5.2 Within a period of 28 (twenty-eight) calendar days after the claiming Party became aware, or should have become aware, of the event or circumstance giving rise to the Claim, the claiming Party shall submit to the Engineer a fully detailed Claim.
- 20.2.5.3 If within this time limit the Contractor fails to submit the statement under sub-clause 20.2.5.1. above, the Notice of Claim shall be deemed to have lapsed, it shall no longer be considered as a valid Notice.
- 20.2.5.4 If the event or circumstance giving rise to the Claim has a continuing effect, Sub-Clause 20.2.6 [Claims of Continuing Effect] shall apply.

20.2.6 Agreement or Determination of the Claim

20.2.6.1 After receiving a Fully Detailed Claim under Sub-Clause 20.2.4 [Fully Detailed Claim], or an interim or final Fully Detailed Claim (as the case may be) under Sub-Clause 20.2.6 [Claims of Continuing Effect], the Engineer shall proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine:

20.2.6.1.1 the additional payment (if any) to which the Employer is entitled or the reduction of the TCP; and/or

20.2.6.1.2 the extension (if any) of the Time for Completion (before or after its expiry) under Sub-Clause 8.5 [Extension of Time for Completion] (in the case of the Contractor as the claiming Party), or the extension (if any) of the DLP (before its expiry) under Sub-Clause 11.2 [Extension of Defects Liability Period] (in the case of the Employer as the claiming Party), to which the claiming Party is entitled under the Contract.

20.2.6.2 If the Engineer has given a Notice under Sub-Clause 20.2.2 [Engineer's initial response] and/or under Sub-Clause 20.2.4 [Fully detailed Claim], the Claim shall nevertheless be agreed or determined in accordance with this Sub-Clause 20.2.5.

20.2.6.3 The agreement or determination of the Claim shall include whether or not the Notice of Claim shall be treated as a valid Notice.

20.2.6.4 The circumstances which may be taken into account (but shall not be binding) may include:

- 20.2.6.4.1 in the case of the time limit under Sub-Clause 20.2.1 [Notice of Claim], any evidence of the other Party's prior knowledge of the event or circumstance giving rise to the Claim, which the claiming Party may include its supporting particulars; and/or
 - 20.2.6.4.2 in the case of the time limit under Sub-Clause 20.2.4 [Fully detailed Claim], any evidence of the other Party's prior knowledge of the contractual and/or other legal basis of the Claim, which the claiming Party may include in its supporting particulars.
- 20.2.6.5 If, after having received the fully detailed Claim under Sub-Clause 20.2.4 [Fully detailed Claim], or in the case of a Claim under Sub-Clause 20.2.6 [Claims of continuing effect] an interim or final fully detailed Claim (as the case may be), the Engineer requires necessary additional particulars:
- 20.2.6.5.1 he/she shall give a Notice, in writing, to the claiming Party, describing the additional particulars and the reasons for requiring them;
 - 20.2.6.5.2 he/she shall nevertheless give his/her response on the contractual or other legal basis of the Claim, by giving a Notice, in writing, to the claiming Party;
 - 20.2.6.5.3 within 28 (twenty-eight) calendar days after receiving the Notice under sub-paragraph (i) above, the claiming Party shall submit the additional particulars; and

20.2.6.5.4 the Engineer shall then proceed under Sub-Clause 3.7 [Agreement or Determination] to agree or determine the matters under sub-clauses 20.2.5.5.1 and/or 20.2.5.5.2 above.

20.2.7 Claims of Continuing Effect

20.2.7.1 If the event or circumstance giving rise to a Claim under this Sub-Clause 20.2 has a continuing effect:

20.2.7.1.1 the fully detailed Claim submitted under Sub-Clause 20.2.4 [Fully detailed Claim] shall be considered as interim;

20.2.7.1.2 in respect of this first interim fully detailed Claim, the Engineer shall give his/her response on the contractual or other legal basis of the Claim, by giving a Notice, in writing, to the claiming Party;

20.2.7.1.3 after submitting the first interim fully detailed Claim the claiming Party shall submit further interim fully detailed Claims within 28 (twenty-eight) calendar days intervals, giving the accumulated amount of additional payment claimed (or the reduction of the TCP, in the case of the Employer as the claiming Party), and/or extension of time claimed (in the case of the Contractor as the claiming Party) or extension of the DLP (in the case of the Employer as the claiming Party); and

20.2.7.1.4 the claiming Party shall submit a final fully detailed Claim within 28 calendar days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the claiming Party and agreed by the Engineer. This final fully detailed claim shall give the total amount of additional

payment claimed (or the reduction of the TCP, in the case of the Employer as the claiming Party) and/or extension of time claimed (in the case of the Contractor as the claiming Party) or extension of the DLP (in the case of the Employer as the claiming Party).

20.2.8 General Requirements

20.2.8.1 After receiving the Notice of Claim, and until the Claim is agreed or determined under Sub-Clause 20.2.5 [Agreement or Determination of the Claim], in each Payment Certificate the Engineer shall not include such amounts for any Claim as have been reasonably substantiated as due to the claiming Party under the relevant provision of the Contract. However, the Employer shall be entitled to Claim any payment from the Contractor and/or to extend the DLP or set off against or make any deduction from any amount due to the Contractor.

20.2.8.2 The requirements of this Sub-Clause 20.2 are in addition to those of any other Sub-Clause which may apply to the Claim.

20.2.8.3 If the claiming Party fails to comply with this or any other Sub-Clause in relation to the Claim any EOT (in the case of the Contractor as the claiming Party) or extension of the DLP (in the case of the Employer as the claiming Party), shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the Claim by the Engineer.

21. Disputes and Arbitration

21.1 Constitution of the Dispute Avoidance / Adjudication Board (DAAB)

21.1.1 Disputes shall be decided by a DAAB in accordance with Sub-Clause 21.3 [Obtaining DAAB's Decision].

- 21.1.2 The Parties shall jointly appoint the member(s) of the DAAB on an ad hoc basis as and when a Dispute requires the DAAB. [Our addition]
- 21.1.3 The DAAB shall comprise, either one suitably qualified member (the "sole member") or three suitably qualified members (the "members").
- 21.1.4 If the parties do not agree on a sole, then the DAAB shall automatically comprise three members.
- 21.1.5 The sole member or three members (as the case may be) shall be proposed by the Parties, other than anyone who is unable or unwilling to accept appointment to the DAAB.
- 21.1.6 If the DAAB is to comprise three members, each Party shall select one member for the agreement of the other Party.
- 21.1.7 The Parties shall consult both these members and these members shall agree on the third member, who shall be appointed to act as chairperson.
- 21.1.8 The DAAB shall be deemed to be constituted on the date that the Parties and the sole member or the three members (as the case may be) of the DAAB have all signed a DAAB Agreement.
- 21.1.9 The terms of the remuneration of either the sole member or each of the three members, including the remuneration of any expert whom the DAAB consults, shall be mutually agreed by the Parties when agreeing to the terms of the DAAB Agreement.

- 21.1.10 The Contractor shall be responsible for paying the total remuneration of the sole member or each of the three members (as the case may be) and the remuneration of any expert whom the DAAB consults.
- 21.1.11 If at any time the Employer and/or Engineer instructs, the Parties shall appoint a suitably qualified person or persons to replace any one or more members of the DAAB.
- 21.1.12 A replacement DAAB member shall be appointed where a member declines to act or is unable to act as a result of death, illness, disability, resignation or termination of appointment.
- 21.1.13 The replacement member shall be appointed in the same manner as the replaced member was required to have been selected or agreed, as described in this Sub-Clause.
- 21.1.14 The appointment of any member may be terminated by instruction of the Employer and/or Engineer.
- 21.1.15 Subject to approval of the Employer and/or Engineer, the term of the DAAB (including the appointment of each member) shall expire either:
- 21.1.15.1 on the date the discharge shall have become, or deemed to have become, effective under Sub-Clause 14.11 [Discharge]; or
- 21.1.15.2 28 calendar days after the DAAB has given its decision on all Disputes, referred to it under Sub-Clause 21.3 [Obtaining DAAB's Decision] before such discharge has become effective, whichever is later.

21.1.16 Where the Contract is terminated under any Sub-Clause of the Employer's Requirements, this Contract and the RFP, the term of the DAAB (including the appointment of each member) shall expire 28 calendar days after:

21.1.16.1 the DAAB has given its decision on all Disputes, which were referred to it (under Sub-Clause 21.5 [Obtaining DAAB's Decision]) within 180 (one hundred and eighty) calendar days after the date of termination.

21.2 Failure to Appoint DAAB Member(s)

21.2.1 If any of the following apply, namely:

21.2.1.1 If the DAAB is to comprise a sole member, the Parties fail to agree to the appointment of this member by the date stated in the first paragraph of Sub-clause 21.1 [Constitution of the DAAB]; or

21.2.1.2 If the DAAB is to comprise of three members, and if by the date stated in the first paragraph of Sub-clause 21.1 [Constitution of the DAAB]:

21.2.1.2.1 either Party fails to select a member (for agreement by the other Party);

21.2.1.2.2 either Party fails to agree to a member selected by the other Party; and/or

21.2.1.2.3 the Parties fail to agree to the appointment of the third member (to act as chairperson) of the DAAB;

21.2.1.3 The Parties fail to agree to the appointment of a replacement within 42 (forty-two) calendar days after the date on which the sole member or

one of the three members declines to act or is unable to act as a result of death, illness, disability, resignation, or termination; or

- 21.2.1.4 If, after the Parties have agreed on the appointment of the member(s) or replacement, such appointment cannot be effected because one Party refuses or fails to sign a DAAB Agreement with any such member or replacement (as the case may be) within 14 calendar days of the other Party's request to do so, then the Employer and/or Engineer shall, appoint the member(s) of the DAAB (who, in the case of sub-paragraph 21.1.14 above, shall be the agreed member(s) or replacement). This appointment shall be final and conclusive.
- 21.2.2 Thereafter, the Parties and the member(s) so appointed shall be deemed to have signed and be bound by a DAAB Agreement under which:
- 21.2.2.1 the fees shall be as stated in the terms of the appointment; and
- 21.2.2.2 the law governing the DAAB Agreement shall be the governing law of the Contract defined in Sub-Clause 1.4 [Law and Language].
- 21.2.3 The Contractor shall be responsible for paying the full remuneration of the appointing entity or official.
- 21.2.4 Where the Employer pays the remuneration in full, the Employer and/or Engineer shall include the total amount of such remuneration as a deduction under sub-paragraph 14.6.1.2 of Sub-Clause 14.6.1 [The IPC]

21.3 Obtaining DAAB's Decision

21.3.1 Where a Dispute arises between the Parties then either Party may refer the Dispute to the DAAB for its decision or the following provisions shall apply.

21.3.2 The referral of a Dispute to the DAAB (the "referral" in this Sub-Clause 21.5) shall:

21.3.2.1 state that it is given under this Sub-Clause;

21.3.2.2 set out the referring Party's case relating to the Dispute;

21.3.2.3 be in writing, with copies to the other Party and the Engineer; and

21.3.2.4 for a DAAB of three persons, be deemed to have been received by the DAAB on the date it is received by the chairperson of the DAAB.

21.3.2.5 Where Sub-Clause 3.7 [Agreement or Determination] applied to the subject matter of the Dispute, be made within 42 (forty-two) calendar days or within such other time limit as may be determined by the Engineer of giving or receiving (as the case may be) a NOD under Sub-Clause 3.7.5 [Dissatisfaction with Engineer's determination];

21.3.2.6 Where the Dispute is not referred to the DAAB within this period of 42 (forty-two) calendar days or within such other time limit as may be determined by the Engineer, such NOD (if given by the Contractor) shall be deemed to have lapsed and no longer be valid;

21.3.3 The referral of a Dispute to the DAAB by the Contractor shall not, be deemed to interrupt the running of any applicable statute of limitation or prescription period.

21.3.4 Where the Dispute has been referred to the DAAB, both Parties shall Promptly make available to the DAAB all information, access to the Site(s), and appropriate facilities, as the DAAB may require for the purposes of making a decision on the Dispute.

21.3.5 Unless the Contract has already been abandoned or terminated, the Parties shall continue to perform their obligations in accordance with the Contract.

21.3.6 The DAAB shall complete and give its decision within:

21.3.6.1 90 (ninety) calendar days after receiving the referral; or

21.3.6.2 such period as may be proposed by the DAAB and agreed to by the Employer.

21.3.7 Where at the end of the period in 21.3.6 above, the due date(s) for payment of any DAAB member's invoice(s) has passed but such invoice(s) remains unpaid, the DAAB shall not be obliged to give its decision until such outstanding invoice(s) have been paid in full, in which case the DAAB shall give its decision as soon as practicable after payment has been received.

21.3.8 The decision of the DAAB shall:

21.3.8.1 be given in writing to both Parties with a copy to the Engineer;

21.3.8.2 contain proper reasons;

21.3.8.3 state that it is given under this Sub-Clause; and

21.3.8.4 shall be binding on both Parties, who shall Promptly comply with it, unless the Employer gives a NOD with respect to such decision under this Sub-Clause.

21.3.9 The Employer shall be responsible for the Engineer's compliance with the DAAB decision.

21.3.10 Where the decision of the DAAB requires a payment of an amount by one Party to the other Party;

21.3.10.1 subject to sub-paragraph 21.3.10.2 below, this amount shall be immediately due and payable without any certification or Notice in the case of the Contractor having to pay the Employer or this amount shall be due and payable with certification and Notice in the case of the Employer having to pay the Contractor; and

21.3.10.2 the DAAB shall (as part of the decision), only at the request of the Employer, require the Contractor to, within 7 (seven) calendar days after the DAAB decision, provide an appropriate security (to the satisfaction of the Employer in respect of such amount.

21.3.11 The DAAB proceeding shall not be deemed to be an arbitration and the DAAB shall not act as arbitrator(s).

21.3.12 Where either Party is dissatisfied with the DAAB's decision:

21.3.12.1 such Party may give a NOD to the other Party, with a copy to the DAAB and to the Engineer;

21.3.12.2 this NOD shall state that it is a "Notice of Dissatisfaction with the DAAB's Decision" and shall set out the matter in Dispute and the reason(s) for dissatisfaction; and

21.3.12.3 this NOD shall be given within 28 (twenty-eight) calendar days after receiving the DAAB's decision.

21.3.13 If the DAAB fails to give its decision within the period stated in Sub-Clause 21.5.8 [The DAAB's decision], then either Party may, within 28 (twenty-eight) calendar days after this period has expired, give a NOD to the other Party in accordance with subparagraphs 21.3.12.1 and 21.3.12.2 above.

21.3.14 Except as stated in the last paragraph of Sub-Clause 3.7.5 [Dissatisfaction with Engineer's determination], in Sub-Clause 21.6 [Failure to Comply with DAAB's Decision] and in Sub-Clause 21.7 [No DAAB In Place], only the Employer shall be entitled to commence arbitration of a Dispute unless a NOD in respect of that has been given in accordance with this Sub-Clause 21.3.12.

21.3.15 Where the DAAB has given its decision as to a matter in Dispute to both Parties, and no NOD under this Sub-Clause 21.3.12 has been given by the Contractor within 28 (twenty-eight) calendar days after receiving the DAAB's decision, then the decision shall become final and binding on both Parties.

21.3.16 If the dissatisfied Party is dissatisfied with only part(s) of the DAAB's decision:

21.3.16.1 this part(s) shall be clearly identified in the NOD;

21.3.16.2 this part(s), and any other parts of the decision that are affected by such part(s) or rely on such part(s) for completeness, shall be deemed to be severable from the remainder of the decision; and

21.3.16.3 the remainder of the decision shall become final and binding on both Parties as if the NOD had not been given.

21.4 Amicable Settlement

21.4.1 Where a NOD has been given under Sub-Clause 21.3 [Obtaining DAAB's Decision], both Parties shall attempt to settle the Dispute amicably before the commencement of arbitration.

21.4.2 Unless both Parties agree otherwise, arbitration may be commenced on or after the 28th (twenty-eighth) calendar day after the day on which this NOD was given, even if no attempt at amicable settlement has been made.

21.5 Arbitration

21.5.1 Unless otherwise agreed by both Parties:

21.5.1.1 the Dispute shall be finally settled under the Commercial Rules for Arbitration of the Arbitration Foundation of Southern Africa (AFSA);

21.5.1.2 the Dispute shall be settled by one or three arbitrators appointed in accordance with the Commercial Rules for Arbitration of the Arbitration Foundation of Southern Africa; and

- 21.5.1.3 the arbitration shall be conducted in the ruling language defined in Sub-Clause 1.4 [Law and Language].
- 21.5.2 The arbitrator(s) shall, subject to the approval by the Employer, have full power to open up, review and revise any certificate, determination (other than a final and binding determination), instruction, opinion or valuation of the Employer and/or Engineer, and any decision of the DAAB (other than a final and binding decision) relevant to the Dispute.
- 21.5.3 The Engineer may, subject to the approval of the Employer, be called as a witness and give evidence before the arbitrator(s) on any matter whatsoever relevant to the Dispute.
- 21.5.4 In any award dealing with costs of the arbitration, the arbitrator(s) may take account of the extent (if any) to which a Party failed to cooperate with the other Party in constituting a DAAB under Sub-Clause 21.1 [Constitution of the DAAB] and/or Sub-Clause 21.2 [Failure to Appoint DAAB Member(s)].
- 21.5.5 The Contractor shall be limited in the proceedings before the arbitrator(s) to the evidence or arguments previously put before the DAAB to obtain its decision, and to the reasons for dissatisfaction given in the Party's NOD under Sub-Clause 21.3 [Obtaining DAAB's Decision]. Any decision of the DAAB shall, subject to approval of the Employer, be admissible in evidence in the arbitration.
- 21.5.6 Arbitration may be commenced before or after completion of the Works.
- 21.5.7 The obligations of the Parties, the Engineer and the DAAB shall not be altered by reason of any arbitration being conducted during the progress of the Works.
- 21.5.8 If an award requires a payment of an amount by one Party to the other Party;

- 21.5.8.1 this amount shall be immediately due and payable without any certification or Notice in the case of the Contractor having to pay the Employer or this amount shall be due and payable with certification and Notice in the case of the Employer having to pay the Contractor; and
- 21.5.8.2 the Arbitrator shall (as part of the award), only at the request of the Employer, require the Contractor to, within 7 (seven) calendar days after the Arbitrator's award, provide an appropriate security (to the satisfaction of the Employer) in respect of such amount.

21.6 Failure to Comply with DAAB's Decision

- 21.6.1 Where the Contractor fails to comply with any decision of the DAAB, whether binding or final and binding, then the Employer may, without prejudice to any other rights it may have, refer the failure itself directly to arbitration under Sub-Clause 21.5 [Arbitration] in which case Sub-Clause 21.3 [Obtaining DAAB's Decision] and Sub-Clause 21.4 [Amicable Settlement] shall not apply to this referral.
- 21.6.2 AFSA (constituted under Sub-Clause 21.5 [Arbitration]) shall have the power, by way of summary or other expedited procedure, to order, whether by an interim or provisional measure or an award (as may be appropriate under applicable law or otherwise), the enforcement of that decision.
- 21.6.3 In the case of a binding but not final decision of the DAAB, such interim or provisional measure or award shall be subject to the express reservation that the rights of the Parties as to the merits of the Dispute are reserved until they are resolved by an award.

21.6.4 Any interim or provisional measure or award enforcing a decision of the DAAB which has not been complied with, whether such decision is binding or final and binding, may also include an order or award of damages or other relief.

21.7 No DAAB in place

21.7.1 Where a Dispute arises between the Parties in connection with, or arising out of, the Contract or the execution of the Works and there is no DAAB in place (or no DAAB is being constituted), whether by reason of the expiry of the DAAB's appointment or otherwise:

21.7.1.1 Sub-Clause 21.3 [Obtaining DAAB's Decision] and Sub-Clause 21.4 [Amicable Settlement] shall not apply; and

21.7.1.2 the Dispute may, subject to the approval by the Employer, be referred by either Party directly to arbitration under Sub-Clause 21.5 [Arbitration] without prejudice to any other rights the Party may have.

22. SEVERABILITY

22.1 If any one or more of the provisions of this Contract is declared or adjudged by competent authority to be illegal, invalid or unenforceable under the South African law:

22.1.1 that provision shall be deemed for all purposes to be severable from all the other provisions of this Contract, which provisions shall continue in force unaffected; and

22.1.2 the Contract thus containing shall (subject and without prejudice to any appeal to higher authority as to the status of that provision) exclude the offending provision but, if such deletion substantially affects or alters the commercial basis of this Contract, the Contract, including such provision,

shall be amended in such a manner as the Parties in good faith agree which will, while not being void or unenforceable, most nearly achieve the object of the allegedly void or unenforceable provisions.

23. DOMICILIA CITANDI

23.1 The Parties appoint the following addresses as their respective nominated addresses for giving Notice or service of Court Process, Notices or other documents or communications of whatsoever nature under this Contract, provided that service of court process must take place at a Party's chosen *domicilium citandi et executandi* ("domicilium"):

23.1.1 the Employer:

Address:

Tel:

Fax:

Email:

23.1.2 the Contractor:

Address:

Tel:

Fax:

Email:

23.2 Any Notice or communication required or permitted to be given in terms of this Contract shall be valid and effective only if in writing, but it shall be competent to give notice by telefax and/or e-mail.

23.3 Any Notice to a Party:

23.3.1 sent by prepaid courier in a correctly addressed envelope to it at its chosen postal or physical address shall be deemed to have been received on the 7th (seventh) normal Working day after posting (unless the contrary is proved);

23.3.2 delivered by hand to a responsible person during ordinary business hours at its chosen physical address, shall be deemed to have been received on the day of delivery;

23.3.3 sent by telefax to its chosen telefax number stipulated in clause 23.1, shall be deemed to have been received on the date of despatch if transmitted during the hours of 08h30 - 16h30 on a Working Day, or if sent outside such hours, then on the following Working Day; or

23.3.4 sent by way of e-mail to its chosen e-mail address stipulated under clause 23.1, shall be deemed to have been received on the date of successful transmission if transmitted during the hours of 08h30 – 16h30 on a Working Day, or if sent outside such hours, then on the next following Working Day, which successful transmission shall be proved by way of an electronically generated delivery report and/or read receipt, indicating that such message has been successfully delivered to and/or read by the addressee.

23.4 Notwithstanding anything to the contrary herein contained a written Notice or communication actually received by a Party shall be an adequate written Notice or communication to it notwithstanding that it was not sent to or delivered at its chosen address.

24. GENERAL AND MISCELLANEOUS

24.1 The Employer's Requirements, this Contract and the RFP constitute the whole Contract between the Parties relating to the subject matter hereof.

- 24.2 No addition to, variation, amendment or consensual cancellation of this Contract or any provision or term thereof and no settlement of any disputes arising under this Contract and no EOT, waiver or relaxation or suspension of any of the provisions or terms of this Contract shall be binding unless recorded in a written document signed by the Parties. Any such EOT, waiver or relaxation or suspension which is so given or made shall be strictly construed as relating strictly to the matter in respect whereof it was made or given.
- 24.3 No EOT or waiver or relaxation of any of the provisions or terms of this Contract shall operate as an estoppel against any Party in respect of its rights under this Contract, nor shall it operate so as to preclude such Party thereafter from exercising its rights strictly in accordance with this Contract.
- 24.4 No Party shall be bound by any express or implied term, representation, warranty, promise or the like not recorded herein, whether it induced the Contract and/or whether it was negligent or not.
- 24.5 The Parties shall, at all times, effect their obligations and exercise their rights in terms of this Contract, with a view to ensuring compliance with the Employer's Requirements, this Contract and the RFP.

25. PROTECTION OF THE EMPLOYER'S PROPERTY AND INFORMATION

- 25.1 The Parties agree that they will at all times ensure that the necessary procedures are in place whereby the intellectual property and other rights, privileges and interest of the Employer (nothing excluded) will at all times be properly safeguarded, managed and protected by whatever appropriate means, methods and procedures may be necessary or appropriate at the relevant time.

DATED AND SIGNED AT ON2021

For and on behalf of the Employer
Full names:

1. Witness

2. Witness

For and on behalf of the Contractor
Full names:

1. Witness

2. Witness

APPENDIX I

Dispute Avoidance/Adjudication Agreement

1. Definitions

1.1 "General Conditions or Dispute Avoidance/Adjudication Agreement "or "GCs" means this document entitled "General Conditions of Dispute Avoidance/Adjudication Agreement.

1.2 In the DAA Agreement (as defined below) and in the GCs, words and expressions which are not otherwise defined shall have the meanings assigned to them in the Contract (as defined in the DAA Agreement).

1.3 "Dispute Avoidance/Adjudication Agreement" or "DAA Agreement" means a tripartite agreement by and between:

1.3.1 the Employer;

1.3.2 the Contractor; and

1.3.3 the DAAB Member who is defined in the DAA Agreement as being either:

1.3.3.1 the sole member of the DAAB, or

1.3.3.2 one of the three members (or the chairman) of the DAAB.

- 1.4 "DAAB's Activities" means the activities carried out by the DAAB in accordance with the Contract and the GCs, including all, meetings (Including meetings and/or discussions between the DAAB members in the case of a three-member DAAB), Site(s) visits, hearings and decisions.
- 1.5 "DAAB Rules" means the document entitled "DAAB Procedural Rules" which are annexed to, and form part of, the GCs.
- 1.6 "Term of the DAAB" means the period starting on the Effective Date (as defined in Sub-Clause 2.1 below) and finishing on the date that the term of the DAAB expires in accordance with Sub-Clause 21.1 [Constitution of the DAAB] of the Conditions of Contract.
- 1.7 "Notification" means a Notice in writing given under the GCs, which shall be:
- 1.7.1
- 1.7.1.1 a paper-original signed by the DAAB Member or the authorised representative of the Contractor or of the Employer (as the case may be); or
- 1.7.1.2 an electronic original generated from the system of electronic transmission agreed between the Parties and the DAAB, which electronic original is transmitted by the electronic address uniquely assigned to the DAAB Member or each such authorised representative (as the case may be);
- 1.7.2 delivered by hand (against receipt), or sent by mail or courier (against receipt), or transmitted using the system of electronic transmission under sub-clause 1.7.1.2 above; and

- 1.7.3 delivered, sent or transmitted to the address for the recipient's communications as stated in the DAA Agreement. However, if the recipient gives a Notification of another address, all Notifications shall be delivered accordingly after the sender receives such Notification.

2. Effective Date

- 2.1 The DAA Agreement shall take effect:

2.1.1 in the case of a sole-member DAAB, on the date when the Employer, the Contractor and the DAAB Member have each signed (or, under the Contract, are deemed to have signed) the DAA Agreement; or

2.1.2 in the case of a three-member DAAB, on the date when the Employer, the Contractor, the DAAB Member and the other Members have each signed (or under the Contract are deemed to have signed) a DAA Agreement.

(the "Effective Date" in the GCs).

- 2.2 Immediately after the Effective Date, either or both Parties shall give a Notification to the DAAB Member that the DAA Agreement has come into effect.
- 2.3 The employment of the DAAB Member is a personal appointment. No assignment of or subcontracting or delegation of the DAAB Member's rights and/or obligations under the DAA Agreement is permitted.

3. Warranties

- 3.1 The DAAB Member warrants and agrees that he/she is and will remain at all times during the Term of the DAAB, impartial and independent of the Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel (including in accordance with Sub-Clause 4.1 below).

- 3.2 If, after signing the DAA Agreement (or after he/she is deemed to have signed the DAA Agreement under the Contract), the DAAB Member becomes aware of any fact or circumstance which might:
 - 3.2.1 call into question his/her independence or impartiality; and/or

 - 3.2.2 be, or appear to be, inconsistent with his/her warranty and agreement under Sub-Clause 3.1 above the DAAB Member warrants and agrees that he/she shall immediately disclose this in writing to the Parties and the Other Members (if any).

- 3.3 When appointing the DAAB Member, each Party relies on the DAAB Member's representations that he/she is:
 - 3.3.1 experienced and/or knowledgeable in the type of work which the Contractor is to carry out under the Contract;

 - 3.3.2 experienced in the interpretation of construction and/or engineering contract documentation; and

 - 3.3.3 fluent in the language for communications stated in the Contract (or the language as agreed between the Parties and the DAAB).

4. Specific Obligations of the DAAB Member's

4.1 Further to Sub-Clauses 3.1 and 3.2 above, the DAAB Member shall:

4.1.1 have no financial interest in the Contract, or in the project of which the Works are part, except for payment under the DAA Agreement;

4.1.2 have no interest whatsoever (financial or otherwise) in the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel;

4.1.3 in the 3 (three) years prior to signing the DAA Agreement, not have been employed as a consultant or otherwise by the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel;

4.1.4 not previously have acted, and shall not act, in any judicial or arbitral capacity in relation to the Contract;

4.1.5 have disclosed in writing to the Employer, the Contractor and the Other Members (if any), before signing the DAA Agreement (or before he/she is deemed to have signed the DAA Agreement under the Contract) and to his/her best knowledge and recollection, any:

4.1.5.1 existing and/or past professional or personal relationships with any director, officer or employee of the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel (including as a dispute resolution practitioner on another project);

4.1.5.2 facts or circumstances which might call 'into question his/her independence or impartiality, and

- 4.1.5.3 previous involvement in the Project of which the Contract forms part;
- 4.1.6 not, while a DAAB Member and for the Term of the DAAB be employed as a consultant or otherwise by, and/or enter into discussions or make any agreement regarding future employment with the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel, except as may be agreed by the Employer, the Contractor and the Other Members (if any); and/or
- 4.1.7 not solicit, accept or receive (directly or indirectly) any gift, gratuity, commission or other thing of value from the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel, except for payment under the DAA Agreement.

5 General Obligations of the DAAB Member

5.1 The DAAB Member shall:

- 5.1.1 comply with the GCs, the DAAB Rules and the Conditions of Contract that are relevant to the DAAB's Activities;
- 5.1.2 not give advice to the Employer, the Contractor, the Employer's Personnel or the Contractor's Personnel concerning the conduct of the Contract, except as required to carry out the DAAB's Activities;
- 5.1.3 ensure his/her availability during the Term of the DAAB (except in exceptional circumstances, in which case the DAAB Member shall give a Notification without delay to the Parties and the Other Members (if any))

detailing the exceptional circumstances) for all meetings, Site(s) visits, hearings and as is necessary to comply with sub-clause 5.1.1 above;

5.1.4 become, and shall remain for the duration of the Term of the DAAB, knowledgeable about the Contract and informed about:

5.1.4.1 the Parties' performance of the Contract;

5.1.4.2 the Site(s) and its surroundings; and

5.1.4.3 progress of the Works (and of any other parts of the Project of which the Contract forms part) including by visiting the Site(s), meeting with the Parties and by studying all documents received from either Party under Rule 4.3 of the DAAB Rules (which shall be maintained in a current working file, in hard-copy or electronic format at the DAAB Member's discretion).

6. Obligation of the Parties

6.1 Each Party shall comply with the GCs, the DAAB Rules and the Conditions of Contract that are relevant to the DAAB's Activities. The Employer and the Contractor shall be responsible for compliance with this provision by the Employer's Personnel and the Contractor's Personnel, respectively.

6.2 Each Party shall cooperate with the other Party in constituting the DAAB, under Sub-Clause 21.1 [Constitution of the DAAB] and/or Sub-Clause 21.2 [Failure to Appoint DAAB Member(s)] of the Conditions of Contract, without delay.

6.3 In connection with the DAAB's Activities, each Party shall:

- 6.3.1 cooperate in good faith with the DAAB; and
- 6.3.2 fulfil its duties, and exercise any right or entitlement, Contract, the GCs and the DAAB Rules and/or otherwise under the in the manner necessary to achieve the objectives under Rule 1 of the DAAB Rules.
- 6.4 The Parties, the Employer's Personnel and the Contractor's Personnel shall not request advice from or consultation with the DAAB Member regarding the Contract, except as required for the DAAB Member to carry out the DAAB's Activities.
- 6.5 At all times when interacting with the DAAB, each Party shall not compromise the DAAB's warranty of independence and impartiality under Sub-Clause 3.1 above.
- 6.6 In addition to providing documents under Rule 4.3 of the DAAB Rules, each Party shall ensure that the DAAB Member remains informed as is necessary to enable him/her to comply with sub-clause 5.1.4 of Sub-Clause 5.1 above.

7. Confidentiality

- 7.1 Subject to Sub-Clause 7.4 below, the DAAB Member shall treat the details of the Contract, all the DAAB's Activities and the documents provided under Rule 4.3 of the DAAB Rules as private and confidential and shall not publish or disclose them without the prior written approval of the Parties and the Other Members (if any).
- 7.2 Subject to Sub-Clause 7.4 below, the Employer, the Contractor, the Employer's Personnel and the Contractor's Personnel shall treat the details of all the DAAB's Activities as private and confidential.
- 7.3 Each person's obligation of confidentiality under Sub-Clause 7.1 and Sub-Clause 7.2 above (as the case may be) shall not apply where the information:

- 7.3.1 was already in that person's possession without an obligation of confidentiality before receipt under the DAA Agreement;
 - 7.3.2 becomes generally available to the public through no breach, of the GCs; or
 - 7.3.3 is lawfully obtained by the person from a third party which is not bound by an obligation of confidentiality.
- 7.4 If a DAAB Member is replaced under the Contract, the Parties and/or the Other Members (if any) shall disclose details of the Contract, the documents provided under Rule 4.3 of the DAAB Rules and previous DAAB's Activities (including decisions, if any) to the replacement DAAB Member as is necessary in order to:
 - 7.4.1 enable the replacement DAAB Member to comply with sub-clause 5.1.4 of Sub-Clause 5.1 above; and
 - 7.4.2 ensure consistency in the manner in which the DAAB's Activities are conducted following such replacement.

8. Undertaking and indemnity

- 8.1 The Employer and the Contractor undertake to each other and to the DAAB Member that the DAAB Member shall not:
 - 8.1.1 be appointed as an arbitrator in any arbitration under the Contract;
 - 8.1.2 be called as a witness to give evidence concerning any Dispute in any arbitration under the Contract; or

8.1.3 be liable for any Claims for anything done or omitted in the discharge or purported discharge of the DAAB Member's functions, except in any case of fraud, gross negligence, deliberate default or reckless misconduct by him/her.

8.2 The Employer and the Contractor hereby jointly and severally indemnify and hold the DAAB Member harmless against and from all damages, Penalties, losses and expenses (including legal fees and expenses) resulting from any Claim from which he/she is relieved from liability under Sub-Clause 8.1 above.

9. Fees and Expenses

9.1 The DAAB Member shall be paid as follows, in the currency named in the DAA Agreement:

9.1.1 fees, which shall be agreed to by the parties and the DAAB members shall be payment in full for:

9.1.1.1 being available on 28-calendar days' Notice for all meetings, Site(s) visits and hearings under the DAAB Rules (and, in the event of a request under Rule 3.6 of the DAAB Rules, being available for an urgent meeting or Site(s) visit);

9.1.1.2 becoming and remaining knowledgeable about the Contract, informed about the progress of the Works and maintaining a current working file of documents, in accordance with sub-clause 5.1.4 of Sub-Clause 5.1 above;

9.1.1.3 all office and overhead expenses including secretarial services, photocopying and office supplies incurred in connection with his/ her duties; and

9.1.1.4 all services performed hereunder except those referred to in sub-clause 9.1.2 and 9.1.3 of this Clause.

9.1.1.5 The fees shall be paid according to an agreed payment schedule.

9.1.2 all expenses approved by the Parties, including necessary travel expenses (air fare in economy class or equivalent, three-star hotel and subsistence and other direct travel expenses, including visa charges) incurred in connection with the DAAB Member's duties, as well as the cost of telephone calls (and video conference calls, if any, and internet access), courier charges and faxes.

9.1.3 The DAAB Member shall provide the Parties with a receipt for each item of expenses;

9.2 The fees, under Sub-Clause 9.1 above, shall be as specified in the DAA Agreement signed by the Parties and the DAAB Member.

9.3 The DAAB Member shall submit invoices for payment of the fees and other expenses in accordance with the payment schedule approved by the Parties.

9.3.1 Invoices for other expenses shall be submitted following the conclusion of a meeting, Site(s) visit or hearing; and following the giving of a decision.

- 9.3.2 All invoices shall be accompanied by a detailed description of the DAAB's Activities performed during the relevant period and shall be addressed to the Contractor.
- 9.4 The Contractor shall pay each of the DAAB Member's invoices in full within 30 (thirty) calendar days after receiving each invoice.
- 9.5 Where the Contractor fails to pay to the DAAB Member the amount to which he/ she is entitled under the DAA Agreement within the period of 30 (thirty) calendar days stated at Sub-Clause 9.5 above, the DAAB Member shall inform the Employer who shall Promptly pay the amount due to the DAAB Member and any other amount which may be required to maintain the function of the DAAB.
- 9.5.1 The Employer shall thereafter, by written request, be entitled to payment from the Contractor of:
- 9.5.1.1 all sums paid of these amounts;
 - 9.5.1.2 the reasonable costs of recovering these amounts from the Contractor; and
 - 9.5.1.3 financing charges calculated at the rate specified in the Conditions of Contract.
 - 9.5.1.4 The Employer shall be entitled to such payment from the Contractor without any requirement to comply with Sub-Clause 20.2 [Claims For Payment and/ or EOT] of the Conditions of Contract, and without prejudice to any other right or remedy.

9.6 If the DAAB Member does not receive payment of the amount due within ~~56~~ 60 (sixty) calendar days after submitting a valid invoice, the DAAB Member may:

9.6.1 not less than 30 (thirty) calendar days after giving a Notification to the Parties and the Other Members (if any), suspend his/her services until the payment is received.

10. Resignation of DAAB Member(s)

10.1 The DAAB Member may resign at any time for any reason, by giving a Notification of not less than 28 (twenty-eight) calendar days (or other period as may be agreed by the Parties) to the Parties and to the Other Members (if any). During this period the Parties shall take the necessarily steps to appoint, without delay, a replacement DAAB Member in accordance with Sub-Clause 21.1 [Constitution of the DAAB) of the Conditions of Contract (and, if applicable, Sub-Clause 21.2 [Failure to Appoint DAAB Member(s)) of the Conditions of Contract).

10.2 On expiry of the period stated in Sub-Clause 10.1 above, the DAAB Member's DAA Agreement shall terminate with immediate effect. However (except if the DAAB Member is unable to act as a result of illness or disability) if, on the date of the DAAB Member's Notice under Sub-Clause 10.1 above, the DAAB is dealing with any Dispute under Sub-Clause 21.5[Obtaining DAAB's Decision] of the Conditions of Contract, the DAAB Member's resignation shall not take effect and his/her DAA Agreement shall not terminate until after the DAAB has given all the corresponding decisions in accordance with the Contract.

10.3 At any time the Parties may jointly terminate the DAA Agreement by giving a Notification of not less than 60 (sixty) calendar days to the DAAB Member.

10.4 If the DAAB Member fails, without justifiable excuse, to comply with Sub-Clause 5.1 above, the Parties may, without prejudice to their other rights or remedies, jointly

terminate his/her DAA Agreement by giving a Notification (by recorded delivery) to the DAAB Member. This Notice shall take effect when it is received by the DAAB Member.

10.5 If either Party fails, without justifiable reason, to comply with Clause 6 above, the DAAB Member may, without prejudice to his/her other rights or remedies, terminate the DAA Agreement by giving a Notification to the Parties. This Notice shall take effect when received by both Parties.

10.6 Any resignation or termination under this Clause shall be final and binding on the Parties and the DAAB Member. However, a Notice given under Sub-Clause 10.3 or 10.4 above by either the Employer or the Contractor, but not by both, shall be of no effect.

10.7 Subject to sub-clause 10.8.2 of Sub-Clause 10.8 below, in the event of resignation or termination under this Clause the DAAB Member shall nevertheless be entitled to payment of any fees and/or expenses under his/ her DAA Agreement that remain outstanding as of the date of termination of his/her DAA Agreement.

10.8 After resignation by the DAAB Member or termination of his/her DAA Agreement under this Clause, the DAAB Member shall:

10.8.1 remain bound by his/her obligation of confidentiality under Sub-Clause 7.1 above; and

10.8.2 return the original of any document in his/her possession to the Party who submitted such document in connection with the DAAB's Activities, at that Party's written request and cost.

- 10.9 Subject to any mandatory requirements under the governing law of the DAA Agreement, termination of the DAA Agreement under this Clause shall require no action of whatsoever kind by the Parties or the DAAB Member (as the case may be) other than as stated in this Clause.
- 10.10 The Contractor shall not object against the DAAB Member, except that either Party, or in the case of a time-member DAAB the Other Members jointly, shall be entitled to do so for an alleged lack of independence or impartiality or otherwise in which case Rule 10 Objection Procedure and Rule 11 Challenge Procedure of the DAAB Rules shall apply.
- 10.11 The decision issued under Rule 11 of the DAAB Rules (the "Decision on the Challenge" in the GCs) shall be final and conclusive.
- 10.12 At any time before the Decision on the Challenge is issued, the challenged DAAB Member may resign under Sub-Clause 10.1 above and, in such case, the challenging Party shall inform AFSA. However, Sub-Clause 10.2 shall not apply to such resignation and the resigning DAAB Member's DAA Agreement shall terminate with immediate effect.
- 10.13 Unless the challenged DAAB Member has resigned, or his/her DAA Agreement has been terminated under Sub-Clause 10.3 above, the DAAB Member and the Other Members (if any) shall continue with the DAAB's Activities until the Decision on the Challenge is issued.
- 10.14 If the Decision on the Challenge is that the challenge is successful:
- 10.14.1 the challenged DAAB Member's appointment, and his/her DAA Agreement, shall be deemed to have been terminated with immediate

effect on the date of the notification of the Decision on the Challenge by AFSA;

10.14.2 the challenged DAAB Member shall not be entitled to any fees or expenses under his/her DAA Agreement from the date of the notification of the Decision on the Challenge by AFSA;

10.14.3 any decision under Sub-Clause 21.5.6 of the Contract, given by the DAAB:

10.14.3.1 after the challenge was referred under Rule 11 of the DAAB Rules; and

10.14.3.2 before the resignation (if any) of the challenged DAAB Member under Sub-Clause 10.3 above, or his/her DAAB Agreement is terminated under sub-clause 10.14.12.1 above or under Sub-Clause 10.3 above shall become void and ineffective. In the case of a sole-member DAAB, all other DAAB's Activities during this period shall also become void and ineffective.

10.14.4 In the case of a three-member DAAB, all other DAAB's Activities during this period shall remain unaffected by the Decision on the Challenge except if there has been a challenge to all three members of the DAAB and such challenge is successful;

10.14.5 the successfully challenged DAAB Member shall be removed from the DAAB; and

- 10.14.6 the Parties shall, without delay, appoint a replacement DAAB Member in accordance with Sub-Clause 21.1 [Constitution of the DAAB] of the Conditions of Contract Agreement.
- 10.15 Any dispute arising out of or in connection with the DAA Agreement, or the breach, termination or invalidity thereof, shall be finally settled by arbitration under the Rules of AFSA by one arbitrator appointed in accordance with the Rules of Arbitration.

APPENDIX II

DAAB PROCEDURAL RULES

Rule 1 Objectives

1.1 The objectives of these Rules are:

1.1.1 to facilitate the avoidance of Disputes that might otherwise arise between the Parties; and

1.1.2 to achieve the expeditious, efficient and cost-effective resolution of any Dispute that arises between the Parties.

1.2 These Rules shall be interpreted, the DAAB's Activities shall be conducted and the DAAB shall use its powers under the Contract and these Rules, in the manner necessary to achieve the above objectives.

Rule 2 Meetings and Site(s) visit

2.1 The purpose of meetings with the Parties and Site(s) visits by the DAAB is to enable the DAAB to:

2.1.1 become and remain informed about the matters described in subparagraphs 5.1.4.1 to 5.1.4.3 of Sub-Clause 5.1 of the GCs;

2.1.2 become aware of, and remain informed about, any actual or potential issue or disagreement between the Parties; and

- 2.2 As soon as practicable after the DAAB is appointed, the DAAB shall convene a face-to-face meeting with the Parties. At this meeting, the DAAB shall establish a schedule of planned meetings and Site(s) visits in consultation with the Parties, which schedule shall reflect the requirements of Rule 2.3 below and shall be subject to adjustment by the DAAB in consultation with the Parties.
- 2.3 The DAAB shall hold face-to-face meetings with the Parties, and/or visit the Site(s), at regular intervals and/or at the written request of either Party. The frequency of such meetings and/or Site(s) visits shall be:
- 2.3.1 in all communications to and from the DAAB and the Parties (and, in the case of a three-member DAAB, between the DAAB Members);
 - 2.3.2 at intervals agreed to jointly by the Parties and the DAAB; and
 - 2.3.4 at intervals agreed to by the Parties and the DAAB, subject to Rules 2.5 and 2.6 below and except as required to conduct a hearing as described under Rule 7 below, unless otherwise agreed jointly by the Parties and the DAAB.
- 2.4 In addition to the face-to-face meetings referred to in Rules 2.2 and 2.3 above, the DAAB may also hold meetings with the Parties by telephone or video conference as agreed with the Parties (in which case each Party bears the risk of inter/adjusted or faulty telephone or video conference transmission and reception).
- 2.5 At times of critical construction events (which may include suspension of the Works or termination of the Contract), the DAAB shall visit the Site(s) at the written request of either Party. This request shall describe the critical construction event. If the DAAB becomes aware of an upcoming critical event, it may invite the Parties to make such a request.

- 2.6 Either Party may request an urgent meeting or Site(s) visit by the DAAB. This shall be a written request and shall give reasons for the urgency of the meeting or Site(s) visit. If the DAAB agrees that such a meeting or Site(s) visit is urgent, the DAAB Members shall use all reasonable endeavours to:
- 2.6.1 hold a meeting with the Parties by telephone or video conference (as agreed with the Parties under Rule 2.4 above) within 3 calendar days after receiving the request; and
 - 2.6.2 if requested and (having given the other Party opportunity at this meeting to respond to or oppose this request) the DAAB agrees that a Site(s) visit is necessary.
- 2.7 The time of, and agenda for, each meeting and Site(s) visit shall be set by the DAAB in consultation with the Parties.
- 2.8 Each meeting and Site(s) visit shall be attended by the Employer, the Contractor and the Engineer.
- 2.9 Each meeting and Site(s) visit shall be coordinated by the Contractor in co-operation with the Employer and the Engineer. The Contractor shall ensure the provision of appropriate:
- 2.9.1 personal safety equipment, security controls (if necessary) and Site(s) transport for each Site(s) visit;
 - 2.9.2 meeting room/conference facilities and secretarial and copying services for each face-to-face meeting; and

- 2.9.3 telephone conference or video conference facilities for each meeting by telephone or video conference.
- 2.10 At the conclusion of each meeting and Site(s) visit and, if possible before leaving the venue of the face-to-face meeting or the Site(s) (as the case may be) but in any event within 7 (seven) calendar days, the DAAB shall prepare a report on its activities during the meeting or Site(s) visit and shall send copies of this report to the Parties and the Engineer.

Rule 4 Plain Communications and Documentation

- 4.1 The language to be used:
 - 4.1.1 in all communications to and from the DAAB and the Parties (and, in the case of a three-member DAAB, between the DAAB Members);
 - 4.1.2 in all reports and decisions issued by the DAAB; and
 - 4.1.3 during all Site(s) visits, meetings and hearings relating to the DAAB's Activities shall be the language for communications defined in Sub-Clause 1.4 [Law and Language] of the Conditions of Contract.
- 4.2 All communications and/or documents sent between the DAAB and a Party shall simultaneously be copied to the other Party. In the case of a three-member DAAB, the sending Party shall send all communications and/ or documents to the chairman of the DAAB and simultaneously send copies of these communications and/or documents to the Other Members.
- 4.3 The Parties shall provide the DAAB with a copy of all documents which the DAAB may request, including:

- 4.3.1 the documents forming the Contract;
- 4.3.2 progress report is under Sub-Clause 4.20 [Progress Reports] of the Conditions of Contract;
- 4.3.3 the initial Programme and each revised Programme under Sub-Clause 8.3 [Programme) of the Conditions of Contract;
- 4.3.4 relevant instructions given by the Engineer, and Variations under Clause 13.3 [Variation Procedure] of the Conditions of Contract;
- 4.3.5 Statements submitted by the Contractor, and all certificates issued by the Engineer under the Contract;
- 4.3.6 relevant communications between the Parties and between either Party and the Engineer and any other document relevant to the performance of the Contract and/ or necessary to enable the DAAB to become and remain informed about the matters described in sub-paragraphs 5.1.4.1 to 5.1.4.3 of Sub-Clause 5.1 of the GCs.

Rule 5 Powers of the DAAB

- 5.1 In addition to the powers granted to the DAAB under the Conditions of Contract, the General Conditions of the DAA Agreement and elsewhere in these Rules, the Parties empower the DAAB to:
 - 5.1.1 establish the procedure to be applied in making Site(s);

- 5.1.2 establish the procedure to be applied in giving decisions under the Conditions of Contract;
- 5.1.3 decide on the DAAB's own jurisdiction, and the scope of any Dispute referred to the DAAB;
- 5.1.4 appoint one or more experts (including legal and technical expert(s)), with the agreement of the Parties;
- 5.1.5 decide whether or not there shall be a hearing (or more than one hearing, if necessary) in respect of any Dispute referred to the DAAB; (1) conduct any meeting with the Parties and/or any hearing as the DAAB thinks fit, not being bound by any rules or procedures for the hearing other than those contained in the Contract and in these Rules;
- 5.1.6 take the initiative in ascertaining the facts and matters required for a DAAB decision;
- 5.1.7 make use of a DAAB Member's own specialist knowledge, if any;
- 5.1.8 decide on the payment of financing charges in accordance with the Contract;
- 5.1.9 open up, review and revise any certificate, decision, determination, instruction, opinion or valuation of (or acceptance, agreement, approval, disapproval, No-objection, permission, or similar act by) the Engineer that is relevant to the Dispute; and
- 5.1.10 proceed with the DAAB's Activities in the absence of a Party who, after receiving a Notification from the DAAB, fails to comply with Sub-Clause 6.3 of the GCs.

- 5.2 The DAAB shall have discretion to decide whether and to what extent any powers granted to the DAAB, under the Conditions of Contract, the GCs and these Rules, may be exercised.

Rule 6 Referral of a Dispute to the DAAB

- 6.1 If any Dispute is referred to the DAAB in accordance with Sub-Clause 21.3.2 [Referral of a Dispute to the DAAB] of the Conditions of Contract, the DAAB shall proceed in accordance with Sub-Clause 21.3 [Obtaining DAAB's Decision] of the Conditions of Contract and these DAAB Rules, or as otherwise agreed by the Parties in writing.
- 6.2 The DAAB shall act fairly and impartially between the Parties and, taking due regard of the period under Sub-Clause 21.3.6 [The DAAB's decision] of the Conditions of Contract and other relevant circumstances, the DAAB shall:
- 6.2.1 give each Party a reasonable opportunity (consistent with the expedited nature of the DAAB proceeding) of putting forward its case and responding to the other Party's case; and
 - 6.2.2 adopt a procedure in coming to its decision that is suitable to the Dispute, avoiding unnecessary delay and/or expense.

Rule 7 Parties

- 7.1 In addition to the powers under Rule 5.1 above, and except as otherwise agreed in writing by the Parties, the DAAB shall have power to:
- 7.1.1 decide on the date and place (anywhere in South Africa) for any hearing, in consultation with the Parties;

- 7.1.2 decide on the duration of any hearing;
 - 7.1.3 request that written documentation and arguments from the Parties be submitted to it prior to the hearing;
 - 7.1.4 adopt an inquisitorial procedure during any hearing:
 - 7.1.5 request the production of documents, and/or oral submissions by the Parties, at any hearing that the DAAB considers may assist in exercising the DAAB's power under sub-rule 5.1.7 of Rule 5.1 above;
 - 7.1.6 request the attendance of persons at any hearing that the DAAB considers may assist in exercising the DAAB's power under sub-rule 5.1.7 of Rule 5.1 above;
 - 7.1.7 refuse admission to any hearing, or audience at any hearing, to any persons other than representatives of the Employer, the Contractor and the Engineer;
 - 7.1.8 proceed in the absence of any party who the DAAB is satisfied received timely Notice of the hearing;
 - 7.1.9 adjourn any hearing as and when the DAAB considers further investigation by one Party or both Parties would benefit resolution of the Dispute, for such time as the investigation is carried out, and resume the hearing Promptly thereafter.
- 7.2 The DAAB shall not express any opinions during any hearing concerning the merits of any arguments advanced by either Party in respect of the Dispute.

7.3 The DAAB shall not give any Informal Assistance during a hearing.

Rule 8 The DAAB's Decision

8.1 The DAAB shall make and give its decision within the time allowed under Sub-Clause 21.3 [Obtaining DAAB's Decision] of the Conditions of Contract, or other time as may be proposed by the DAAB and agreed by the Parties in writing.

8.2 In the case of a three-member DAAB:

8.2.1 it shall meet in private (after the hearing, if any) in order to have discussions and to start preparation of its decision;

8.2.2 the DAAB Members shall use all reasonable endeavours to reach a unanimous decision;

8.2.3 if it is not possible for the DAAB Members to reach a unanimous decision, the applicable decision shall be made by a majority of the DAAB Members, who may require the minority DAAB Member to prepare a separate written report (with reasons and supporting particulars) which shall be issued to the Parties; and if a DAAB Member fails to:

8.2.3.1 attend a hearing (if any) or a DAAB Members' meeting; or

8.2.3.2 fulfil any required function (other than agreeing to a unanimous decision)

8.2.4 The Other Members shall nevertheless proceed to make a decision, unless:

8.2.4.1 such failure has been caused by exceptional circumstances, of which the Other Members and the Parties have received a Notification from the DAAB Member;

8.2.4.2 the DAAB Member has suspended his services under sub-clause 9.7.1 of Sub-Clause 9.7 of the GCs; or

8.2.4.3 otherwise agreed by the Parties in writing.

8.3 If, after giving a decision, the DAAB finds (and, in the case of a three-member DAAB, they agree unanimously or by majority) that the decision contained any error:

8.3.1 of a typographical or clerical nature; or

8.3.2 of an arithmetical nature

8.4 If, within 28 (twenty-eight) calendar days of receiving a decision from the DAAB, either Party finds a typographical, clerical or arithmetical error in the decision, that Party may request the DAAB to correct such error. This shall be a written request and shall clearly identify the error.

8.5 If, within 28 (twenty-eight) calendar days of receiving a decision from the DAAB, either Party believes that such decision contains an ambiguity, that Party may request clarification from the DAAB. This shall be a written request and shall clearly identify the ambiguity.

8.6 The DAAB shall respond to a request under Rule 8.4 or Rule 8.5 above within 14 (fourteen) calendar days of receiving the request.

- 8.6.1 The DAAB may decline with a requirement to give reasons) any request for clarification under Rule 8.5.
- 8.6.2 If the DAAB agrees (in the case of a three-member DAAB they agree unanimously or by majority) that the decision did contain the error or ambiguity as described in the request, it may correct its decision by issuing an addendum to its original decision in writing to the Parties, in which case this addendum shall be issued together with the DAAB's response under this Rule.
- 8.7 If the DAAB issues an addendum to its original decision under Rule 8.3 or 8.6 above, such an addendum shall form part of the decision and the period stated in sub-clause 21.3.12.3 of Sub-Clause 21.3.12 [Dissatisfaction with DAAB's decision] of the Conditions of Contract shall be calculated from the date the Parties receive this addendum.

Rule 9 Termination of DAA Agreement

- 9.1 If, on the date of termination of a DAAB Member's DAA Agreement arising from resignation or termination under Clause 10 of the GCs, the DAAB is dealing with any Dispute under Sub-Clause 21.3 [Obtaining DAAB's Decision] of the Conditions of Contract:
- 9.1.1 the period under Sub-Clause 21.3.6 [The DAAB's decision] of the Conditions of Contract shall be temporarily suspended; and
- 9.1.2 when a replacement DAAB Member is appointed in accordance with Sub-Clause 21.1 [Constitution of the DAAB] of the Conditions of Contract, the full period under Sub-Clause 21.3.6 [The DAAB's decision] of the Conditions of Contract shall apply from the date of this replacement DAAB Member's appointment.

- 9.2 In the case of a three-member DAAB and if one DAAB Member's DAA Agreement is terminated as a result of resignation or termination under Clause 10 of the GCs, the Other Members shall continue as members of the DAAB except that they shall not conduct any hearing or make any decision prior to the replacement of the DAAB Member unless otherwise agreed jointly by the Parties and the Other Members

Rule 10 Objection Procedure

- 10.1 The following procedure shall apply to any objection against a DAAB Member:

- 10.1.1 the objecting Party shall, within 28 (twenty-eight) calendar days of becoming aware of the facts and/or events giving rise to the objection, give a Notification to the DAAB Member of its objection. This Notification shall:

10.1.1.1 state that it is given under this Rule;

10.1.1.2 state the reason(s) for the objection;

10.1.1.3 substantiate the objection by setting out the facts, and describing the events, on which the objection is based, with supporting particulars; and

10.1.1.4 be simultaneously copied to the other Party and the Other Members;

- 10.1.2 within ~~7~~14 (fourteen) calendar days after receiving a Notice under sub-rule 10.1.1 above, the objected DAAB Member shall respond to the objecting Party.

10.1.2.1 This response shall be simultaneously copied to the other Party and the Other Members.

- 10.1.2.2 If no response is given by the DAAB Member within this period of 14 (fourteen) calendar days, the DAAB Member shall be deemed to have given a response denying the matters on which the objection is based;
- 10.1.3 within 14 (fourteen) calendar days after receiving the objected DAAB Member's response under sub-rule 10.1.2 above (or, if there is no such response, after expiry of the period of 14 (fourteen) calendar days stated in sub-rule 10.1.2 above) the objecting Party may formally challenge a DAAB member in accordance with Rule 11 below;
- 10.1.4 if the challenge is not referred within the period of 14 (fourteen) calendar days stated in sub-rule 10.1.3 above, the objecting Party shall be deemed to have agreed to the DAAB Member remaining on the DAAB and shall not be entitled to object and/or challenge him/her thereafter on the basis of any of the facts and/or evidence stated in the Notice given under sub-rule 10.1.1 above;

Rule 11 Objection Challenges

- 11.1 If and when the objecting Party challenges a DAAB Member, within 28 (twenty-eight) calendar days of learning of the facts upon which the challenge is based, the provisions of this Rule shall apply.
- 11.1.1 Any challenge is to be administered and decided by AFSA in accordance with the AFSA process as published (latest available publication).